COPY FORM	INITIALS	DATE
	KSP	1/12/00

BOX NUMBER	SEGMENT NO.	REQUESTING PARTY
P 350		Kim Peters

NOTES

Transfer Size Machine Furnishes

PLAINTIFF'S EXHIBIT
JM 622

MTC 002772

FREEBORN & PETERS

Attorneys at Law

MTC 002773

P
3
8
8

Transite Pipe Mach. Furnishes

CANCELLED

CONFIDENTIAL - IN-HOUSE USE ONLY

Leg Ltr 11/28/83

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level - 1% Blend Point Value	95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Class 100 3"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
4"(13')	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
4"(10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
5"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
6"(13')	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	16.9	16.8	16.6
6"(10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
8"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
10"-14"	20.3	20.0	19.7	19.3	19.0	18.7	18.3	18.2	18.0	17.7	17.4
16"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
18"-20"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
24"-36"	21.5	21.1	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7	18.4
Class 150 3"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
4"(13')	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0
4"(10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
6"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
8"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0
10"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
12"-14"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2
16"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
18"-36"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2
Class 200 3"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2	17.0
6"	21.6	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4
(DWG TP1-1.3F) 6"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
(TP1-1.3F) 8"	24.0	23.6	23.2	22.8	22.5	22.1	21.8	21.5	21.2	20.9	20.6
10"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
12"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
14"-16"	23.5	23.2	22.8	22.4	22.0	21.5	21.3	21.0	20.7	20.4	20.2
18"-36"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50
AUTHORITY FOR CHANGE	Q/A Manager
SUPERSEDES:	Same Spec, Page 1.5, Dated 5/1/67
DATE ISSUED:	2/9/78

PRINTED IN U.S.A.

MTC 002775

Manville Internal Correspondence

To: J. Helmick - R-26
G. Krobetzky - R-21

Date: November 28, 1983

From: J. Kriso - 3-11
Kriso

Copies: D. Fischer - 3-11

Subject: LETTER OF CANCELLATION
TRANSITE PIPE FINISHED PRODUCT
& MANUFACTURING SPECS

Remove the following series of specifications from your active files. Retention shall be in accordance with systems 9295.

Spec Series	Category	Pages
TR-4251-16, etc.	Finished Product	All
TR-4252-1, etc.	Finished Product	All
TR-4253-2, etc.	Finished Product	All
TR-4254-19, etc.	Finished Product	All
TR-4255-1, etc.	Finished Product	All
TR-425-0, etc.	Manufacturing	All

JJK:lms

MTC 002776

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % / Blend Point Value	95 71	95 72	95 73	95 74	95 75	95 76	95 77	95 78	95 79	95 80
Class 100 3"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
4"(13')	19.0	18.8	18.5	18.2	18.0	17.8	17.6	17.3	17.1	16.9
4"(10')	17.6	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
5"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
6"(13')	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5
6"(10')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
8"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
10"-14"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
16"	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
18"-20"	17.6	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
24"-36"	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4	16.2
Class 150 3"	16.9	16.7	16.6	16.2	16.0	15.8	15.6	15.4	15.2	15.0
4"(13')	18.8	18.4	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
4"(10')	17.6	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
5"	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
6"	17.8	17.5	17.3	17.0	16.8	16.6	16.4	16.2	16.0	15.8
8"	18.8	18.5	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
10"	17.5	17.2	17.0	16.8	16.6	16.3	16.1	15.9	15.7	15.5
12"-14"	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
16"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
18"-36"	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
Class 200 3"	15.8	15.6	15.4	15.2	15.0	14.7	14.5	14.3	14.2	14.0
4"	16.8	16.5	16.3	16.1	15.9	15.6	15.4	15.2	15.0	14.8
6"	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4	16.2
6"(DWG TP1-1.3F)	19.6	19.3	19.1	18.8	18.5	18.3	18.0	17.8	17.6	17.4
8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
8"(DWG TP1-1.3F)	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.2	18.0
10"	18.5	18.2	17.9	17.7	17.4	17.2	17.0	16.8	16.6	16.4
12"	19.0	18.8	18.5	18.2	18.0	17.8	17.6	17.3	17.1	16.9
14"-16"	19.9	19.6	19.3	19.0	18.8	18.6	18.3	18.1	17.8	17.6
18"-36"	17.8	17.5	17.3	17.0	16.8	16.6	16.4	16.2	16.0	15.8

APPROVED
Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50
AUTHORITY FOR CHANGE	Q/A Manager
SUPERSEDES:	Same Spec, Page 1.6, Dated 5/1/67
DATE ISSUED:	2/9/78

PRINTED IN U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level %	95	95	95	95	95	95	95	95	95	95
Blend Point	81	82	83	84	85	86	87	88	89	90
Class 100 3"	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
4"(13')	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3	15.1	15.0
4"(10')	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
5"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
6"(13')	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9
6"(10')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
8"	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
10"-14"	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
16"	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
18"-20"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
24"-36"	16.0	15.7	15.5	15.3	15.1	15.0	14.8	14.6	14.5	14.3
Class 150 3"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
4"(13')	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8
4"(10')	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
5"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
6"	15.6	15.4	15.3	15.0	14.8	14.6	14.5	14.3	14.2	14.0
8"	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8
10"	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
12"-14"	15.7	15.5	15.3	15.1	14.9	14.7	14.6	14.4	14.3	14.1
16"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
18"-36"	15.7	15.5	15.3	15.1	14.9	14.7	14.6	14.4	14.3	14.1
Class 200 3"	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
4"	14.7	14.5	14.3	14.1	14.0	13.8	13.6	13.5	13.3	13.2
6"	16.0	15.7	15.5	15.3	15.1	15.0	14.8	14.6	14.5	14.3
6" (TPl-1.3F)	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
8"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
8" (TPl-1.3F)	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0
10"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
12"	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3	15.1	15.0
14"-16"	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6
18"-36"	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50
AUTHORITY FOR CHANGE	Q/A Manager
SUPERSEDES: Same Spec, Page 1.7, Dated 5/1/67	DATE ISSUED: 2/9/78

PRINTED IN U.S.A.

MTC 002778

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level % Blend Point Value	100 60	100 60	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 100 3"	21.4	20.9	20.6	20.3	20.0	19.7	19.1	19.1	18.9	18.6	18.3
4"(13')	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.3
4"(10')	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
5"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
6"(13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
6"(10')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8"	20.8	20.5	20.2	19.8	19.5	19.2	18.8	18.6	18.4	18.2	17.8
10"-14"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
18"-20"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
24"-36"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4
Class 150 3"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
4"(13')	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
4"(10')	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
5"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
6"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.2	19.0
8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
10"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
12"-14"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
16"	23.2	22.8	22.4	22.0	21.7	21.4	21.0	20.8	20.4	20.1	19.8
18"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
Class 200 3"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.7	18.4	18.2	17.8
6"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4
6"(TP1-1.3F)	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.9
8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
8"(TP1-1.3F)	25.3	24.9	24.5	24.1	23.7	23.4	23.0	22.7	22.3	22.0	21.7
10"	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.7
12"	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.3
14"-16"	24.7	24.3	23.8	23.4	23.1	22.7	22.4	22.1	21.7	21.4	21.2
18"-36"	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.6	19.2	19.0

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50.
AUTHORITY FOR CHANGE	Q/A Manager

SUPERSEDES: Same Spec, Page 1.1, Dated 5/1/67	DATE ISSUED: 2/9/78

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level % / Blend Point Value	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Class 100 3"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
4"(13')	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
4"(10')	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
5"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
6"(13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
6"(10')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8"(13')	17.6	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
10"-14"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
16"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
18"-20"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
24"-36"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
Class 150 3"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
4"(13')	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
4"(10')	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
5"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
6"	18.7	18.4	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
8"(13')	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
10"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
12"-14"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
16"	19.6	19.3	19.1	18.8	18.6	18.3	18.0	17.8	17.6	17.4
18"-36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
Class 200 3"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
4"	17.6	17.4	17.2	16.9	16.6	16.4	16.2	16.0	15.8	15.6
6"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
6"(TP1-1.3F)	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3
8"	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
8"(TP1-1.3F)	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0
10"	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.5	17.3
12"	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
14"-16"	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
18"-36"	18.8	18.5	18.3	18.0	17.8	17.5	17.2	17.0	16.8	16.6

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50
AUTHORITY FOR CHANGE	C.O./Manager
SUPERSEDES:	Same Spec, Page 1.2, Dated 5/1/67
DATE ISSUED:	2/9/78

PRINTED IN U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	6

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	81	82	83	84	85	86	87	88	89	90
Class 100 3"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
4"(13')	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	16.0	15.8
4"(10')	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
5"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
6"(13')	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
6"(10')	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
10"-14"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
16"	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.5
18"-20"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
24"-36"	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.5	15.3	15.1
Class 150 3"	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0
4"(13')	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
4"(10')	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
5"	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0
6"	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8
8"	17.3	17.1	16.9	16.7	16.9	16.3	16.1	15.9	15.7	15.5
10"	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.5
12"-14"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
16"	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.4
18"-36"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
Class 200 3"	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
4"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
6"	16.8	16.6	16.4	16.2	16.0	15.6	15.5	15.3	15.0	15.1
6"(TP1-1.3F)	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2
8"	18.2	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.4
8"(TP1-1.3F)	18.7	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.1	16.9
10"	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3
12"	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	16.0	15.8
14"-36"	18.3	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.5
18"-36"	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED-Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50
AUTHORITY FOR CHANGE	Q/A Manager

MTC 002781

SUPERSEDES:	Same Spec, Page 1.3, Dated 5/1/67	DATE ISSUED:	2/9/78

PRINTED IN U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	7

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value	105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Class 100 3"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
4"(13')	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.3
4"(10')	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.7
5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
6"(13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
6"(10')	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
8"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
10"-14"	22.9	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
16"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6
18"-20"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
24"-36"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4
Class 150 3"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
4"(13')	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
4"(10')	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
5"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
6"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
10"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6
12"-14"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
16"	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.9
18"-36"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
Class 200 3"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
4"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
6"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4
6"(TP1-1.3F)	25.5	25.1	24.7	24.3	23.9	23.6	23.2	22.9	22.5	22.2	21.8
8"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2
8"(TP1-1.3F)	26.7	26.3	25.8	25.4	25.0	24.6	24.3	23.9	23.6	23.2	22.9
10"	24.2	23.8	23.4	23.0	22.7	22.3	22.0	21.7	21.4	21.1	20.8
12"	24.9	24.3	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.3
14"-16"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2
18"-36"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X INDICATES CHANGE	Delete Class 150	MTC 002782
AUTHORITY FOR CHANGE	Q/A Manager	
SUPERSEDES: Same Spec, Page 1.9, Dated 5/1/67	DATE ISSUED: 2/9/78	

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	8

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100 and 6"-100

Fiber Level %	105	105	105	105	105	105	105	105	105	105
Blend Point Value	71	72	73	74	75	76	77	78	79	80
Class 100 3"	18.9	18.6	18.3	18.1	17.9	17.6	17.4	17.2	17.0	16.8
4"(13')	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.1	18.8	18.6
4"(10')	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.5	17.3
5"	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
6"(13')	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
6"(10')	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
8"	18.5	18.2	18.0	17.7	17.5	17.3	17.0	16.8	16.6	16.4
10"-14"	19.0	18.7	18.5	18.3	18.0	17.7	17.5	17.3	17.1	16.9
16"	19.3	19.0	18.7	18.5	18.3	18.0	17.8	17.5	17.3	17.1
18"-20"	19.6	19.3	19.0	18.8	18.5	18.3	18.0	17.8	17.6	17.4
24"-36"	20.2	19.9	19.6	19.3	19.0					
Class 150 3"	18.6	18.3	18.1	17.9	17.6	17.4	17.1	16.9	16.7	16.5
4"(13')	20.7	20.4	20.1	19.9	19.6	19.3	19.1	18.8	18.6	18.4
4"(10')	19.6	19.3	19.0	18.8	18.5	18.3	18.0	17.8	17.6	17.4
5"	18.6	18.3	18.1	17.9	17.6	17.4	17.1	16.9	16.7	16.5
6"	19.7	19.4	19.2	19.0	18.7	18.4	18.2	18.0	17.7	17.5
8"	20.7	20.4	20.1	19.9	19.6	19.3	19.1	18.8	18.6	18.4
10"	19.3	19.0	18.7	18.5	18.3	18.0	17.8	17.5	17.3	17.1
12"-14"	19.9	19.6	19.3	19.0	18.8	18.5	18.3	18.1	17.8	17.6
16"	20.5	20.3	20.0	19.8	19.5	19.2	19.0	18.7	18.5	18.3
18"-36"	19.9	19.6	19.3	19.0	18.8	18.5	18.3	18.1	17.8	17.6
Class 200 3"	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
4"	18.5	18.2	18.0	17.7	17.5	17.3	17.0	16.8	16.6	16.4
6"	20.2	19.9	19.6	19.3	19.0	18.8	18.5	18.3	18.1	17.8
6"(TP1-1.3F)	21.5	21.2	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.1
8"	21.9	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.6	19.3
8"(TP1-1.3F)	22.6	22.2	21.9	21.6	21.3	21.1	20.8	20.5	20.3	20.0
10"	20.4	20.1	19.8	19.6	19.3	19.1	18.8	18.6	18.3	18.1
12"	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.1	18.8	18.6
14"-16"	21.9	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.6	19.3
18"-36"	19.7	19.4	19.2	19.0	18.7	18.4	18.2	18.9	17.7	17.5

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE	Delete Class 50	MTC 002783
AUTHORITY FOR CHANGE	Q/A Manager	
SUPERSEDES: Same Spec, Page 1.10, Dated 5/1/67	DATE ISSUED: 2/9/78	

PRINTED IN U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC. NO.	TR-425-2
		PAGE NO.	9

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100 and 6"-100

Fiber Level % Blend Point Value	105 81	105 82	105 83	105 84	105 85	105 86	105 87	105 88	105 89	105 90
Class 100 3"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
4"(13')	18.4	18.2	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.6
4"(10')	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3
5"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
6"(13')	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
6"(10')	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
8"	16.2	16.0	15.8	15.6	15.4	15.1	15.0	14.9	14.7	14.6
10"-14"	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3	15.1	15.0
16"	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2
18"-20"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
24"-36"	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.1	15.9
Class 150 3"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
4"(13')	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3
4"(10')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
5"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
6"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
8"	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3
10"	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2
12"-14"	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6
16"	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2
18"-36"	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6
Class 200 3"	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
4"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
6"	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.1	15.9
6"(TP1-1.3F)	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.3	17.2	17.0
8"	19.1	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2
8"(TP1-1.3F)	19.7	19.5	19.3	19.1	18.8	18.6	18.4	18.2	18.0	17.8
10"	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1
12"	18.4	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.6
14"-16"	19.1	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2
18"-36"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5

APPROVED Q. A. DEPT.

Approvals: When this spec is stamped "APPROVED Q.A. DEPT." the original record of required approvals will be on file in the Quality Assurance Department.

X - INDICATES CHANGE: Delete Class 150 NOTAMING

AUTHORITY FOR CHANGE: Q/A Manager

SUPERSEDES: Same Spec, Page 1.11, Dated 5/1/67

DATE ISSUED: 2/9/78

MTC 002784

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	TR-42[illegible]-2
		PAGE NO.	10

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II . SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
CLASS 1500											
6" (13') (10') (5')	15.9	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.5
8" (13') (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
10"-16"	15.0	14.8	14.5	14.3	14.1	13.9	13.7	13.5	13.3	13.1	12.9
CLASS 2400											
4" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
5" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6" (13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (13') (10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
10"-24"	18.8	18.5	18.2	18.0	17.6	17.4	17.1	16.8	16.6	16.4	16.2
CLASS 3300											
4"-5"(10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6"(13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
10"-30"	18.8	18.5	18.2	18.0	17.6	17.4	17.1	16.8	16.6	16.4	16.2
CLASS 4000/5000											
10"-36"	18.8	18.5	18.2	18.0	17.6	17.4	17.1	16.8	16.6	16.4	16.2

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" 3300 HF (13')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4

X- INDICATES CHANGE	REASON: Review and Reissue	APPROVED Q. A. DEPT.
AUTHORITY FOR CHANGE	Q/A Manager	
SUPERSEDES:	Same Spec., Page 3.1. Dated 3/21/72	

CO 126-3 80187

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

II . SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500										
6" (13') (10') (5')	13.4	13.2	13.0	12.8	12.6	12.5	12.4	12.2	12.0	12.0
8" (13') (10'"	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
10"-16"	12.7	12.5	12.4	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
5" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6" (13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8" (13') (10')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
10"-24"	16.0	15.7	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1
CLASS 3300										
4"-5" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6" (13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
10"-30"	16.0	15.7	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1
CLASS 4000/5000										
10"-36"	16.0	15.7	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" 3300 HF (13')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5

APPROVED
Q. A. DEPT.

X- INDICATES CHANGE —REASON: Review and Reissue

AUTHORITY FOR CHANGE: Q/A Manager

MTC 002786

SUPERSEDES: Same Spec, Page 3.2, Dated 3/21/72

MGR G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 2/9/78

F POST CO 136-3 50187

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

II . SEWER PIPE

FIBER BLEND %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS 1500										
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13') (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13') (10')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
10"-24"	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.7	12.5
CLASS 3300										
4"-5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
10"-30"	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.7	12.5
CLASS 4000/5000										
10"-36"	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.7	12.5

The H-Blend is Optional for 4" and 5" Class 2400 (10') (5') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8" 3300 HF (13')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0

APPROVED Q. A. DEPT.

JOHNS-MANVILLE	PRODUCT:	PLANT & DIV.	PIPE
MANUFACTURING SPECIFICATION	TRANSITE* PIPE PIPE MACHINE FURNISHES	SPEC NO.	TR-42[illegible]-2
		PAGE NO.	13

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

III. MACHINED END PIPE

STORM DRAIN PIPE

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
27",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
30"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
33"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
36"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (10' & 13')	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
10"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	16.0	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2
15"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
16"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
18"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
27"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
30",33",36",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
Class IV										
6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
10"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
12"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
14"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
15"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
18"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.9	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
Class V										
8"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
10"	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3
12"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
14"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
15"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6

X— INDICATES CHANGE —REASON: Review and Reissue

APPROVED Q. A. DEPT.

AUTHORITY FOR CHANGE: Q/A Manager

MTC 002788

SUPERSEDES: Same Spec, Page 3.4, Dated 2/23/77

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	2/9/78

POST CO. 1843 2187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	TR-425-2
		PAGE NO.	14

NOMINAL PERCENT FIBER BLEND - COST STANDARD

I. MACHINED END PIPE
STORM DRAIN PIPE

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
27",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
30"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
33"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
36"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (10' & 13')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6
15"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
16"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
18"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
27"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
30",33",36",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
Class IV										
6"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
12"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
14"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
15"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
18"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.7	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2
Class V										
8"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
10"	13.1	13.0	12.8	12.6	12.5	12.4	12.2	12.1	12.0	12.0
12"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
14"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
15"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9

X- INDICATES CHANGE —REASON: Review and Reissue

APPROVED Q. A. DEPT.

AUTHORITY FOR CHANGE: Q/A Manager

SUPERSEDES: Same Spec, Page 3.5, Dated 2/23/77

MGR. Q. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 2/9/78

F. POST CO. 1204-3 80157

MTC 002789

Johns-Manville MANUFACTURING SPECIFICATION JM-260-2-A	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	Pipe
		SPEC. NO.	TR-425-2
		PAGE NO.	15

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (cont'd)

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct]
B. Gas Vent] Sizes 10" and above
C. Vent Duct]--Fiber Usage: Maximum
D. Underdrain] 15% to Maintain Dimensional Stability
E. Air Duct]

F. Temp-Tite

X The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all sizes of casing pipe are based on 10"-36" sewer pipe, and may run below 90% fiber level provided pipe passes minimum crush test.

V. NON-PRESSURE PIPE - 10' LENGTHS - ALL SIZES

All plants will operate at 100% fiber level.

Sewer % H-Blend

Size	CL1500	CL2400	CL3300
4	10%	13	13.5
5	10	13	13.5
6	13	13.5	13.5
8	13	13.5	14.0

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (5",6")	--	--	--	--	--	11%
Telephone "CA" Duct (Long Beach)	--	--	--	--	--	10%
Telephone C Duct	--	--	--	--	--	9%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%

MTC 002790

X- INDICATES CHANGE X-allow lower fiber level

AUTHORITY FOR CHANGE A. C. Daley & J. E. Mitchell

SUPERSEDES: M.S. TR-425-2, p.15, dated 2/9/78 DATE ISSUED: 8/4/82

PRINTED IN U.S.A.

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (CONT'D)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
WATER COUPLINGS**									
6"-16" All Classes*	22	21	20.5	20	19	18.5	18	17.5	17
All Other sizes and Classes	20	19	18.5	18	17.5	17	16.5	16	15.5
"R"&"T", IRRIGATION & TRANSMISSION**									
6" All Classes	21	20	19.5	19	18.5	18	17.5	17	16.5
8"-16" All Classes	22	21	20.5	20	19	18.5	18	17.5	17
18"-36" All Classes	24.5	23.5	23	22	21.5	21.	20.5	19.5	19
MEE WELL CASING	24.5	23.5	23	22	21.5	21	20.5	19.5	19
SEWER 4"-36", All Classes*	18	17	16.5	16	15.5	15	14.5	14.	14

Other Products (SectionIV) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

TRANSITE couplings and fittings are produced with the same percentage of H-Blend as the Pipe in the same product group.

NOTE*: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

NOTE**: Water and R & T Irrigation Coupling stock for sizes 4" and above may be formed on 10 foot or 13 foot machines provided a pressure blend (M-Blend) is used.

X- INDICATES CHANGE -REASON: Add 10 foot machine

AUTHORITY FOR CHANGE: Q/A Manager & Production Department

SUPERSEDES: Same Spec, Page 16, Dated 2/9/78

MTC 002791

DATE ISSUED 8/5/81

Johns-Manville MANUFACTURING SPECIFICATION JM-260-2-A	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	Pipe
		SPEC. NO.	TR-425-2
		PAGE NO.	17

VII. PIPE MACHINE FURNISH:

1. SILICA
Silica must be from a Research approved source as noted on Purch. Specs., TR-1200, TR-1281 or TR-1282.
1.1 Raw Sand Purchased under TR-1200 to be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air Permeability Test. For control purposes, silica to show 85% min. through 200 mesh screen (wet screen analysis).
1.2 Ground Silica Purchased under TR-1281 to meet spec requirements.
1.3 Ground Silica Purchased under TR-1282 to meet spec requirements.

2. CEMENT
Cement must be from a Research approved source as noted in Purch. Spec., TR-1000.

3. FIBER
Asbestos fibers must be Research approved as noted in Purc. Spec., TR-1900 and shown on Mfg. Spec., TR-425-1, Page 1.

4. CCC
Crystalline Calcium Carbonate (Marble Filler) from a Research approved source as noted in Purchase Spec., TR-1210.

5. CEMENT-SILICA RATIO
Up to 12% dust house scrap to be added to sand at the ball mill, when and where authorized.

To one part of cement the following parts of Plain Silica or Silica "fortified" with ball milled scrap shall be used.

	CEMENT - SILICA RATIO		CEMENT - SILICA/SCRAP * RATIO 12% Level		
10 FT. MACHINE	Min.	Max.	Min.	Max.	Authorized Plant
NON-PRESSURE	0.65	1.00	0.80	1.13	STOCKTON
PRESSURE	0.65	0.80	0.80	0.91	LONG BEACH
13 FT. MACHINE					
NON-PRESSURE	0.65	0.80	0.80	0.91	
PRESSURE	0.65	0.80	0.80	0.91	

*Milled Scrap substituted for cement.

X1

MTC 002792

X - INDICATES CHANGE	X1 - Change Min. Cement Silica Ratio	
AUTHORITY FOR CHANGE	A. C. Daley	
SUPERSEDES:	Same Spec., Page 17, Dated 11/9/79	DATE ISSUED: 8/7/81

Johns-Manville MANUFACTURING SPECIFICATION JM-260-2-A	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	Pipe
		SPEC. NO.	TR-425-2
		PAGE NO.	18

6. CCC USAGE LEVELS

This material must be used in all 13 ft. pipe machines at a maximum of 5% in pressure products and 10% in non-pressure products without deviation. It should be used as an extender to the normal pipe furnish, as illustrated in the example below.

EXAMPLE	18% FIBER -	252 lbs
	CEMENT -	675 lbs
	SILICA -	473 lbs
	SUB TOTAL	1400 lbs
	3.6% CCC	50 lbs
	TOTAL BATCH	1450 lbs

7. COAGULATING AGENTS (Purchase Specification TR-3001)

A 1/4% - 1% solution of an approved coagulating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE	- POLYHALL #295
DENISON	- NALCO 633 HD; SEPARAN NP 10; BETZ POLYFLOC 1150;
LONG BEACH	- SEPARAN NP 10; HYDRAID 5504 HYDRAID 5504
STOCKTON	- HYDRAID 5504; BETZ POLYFLOC 1150
GREEN COVE	- NALCO 633 HD; BETZ POLYFLOC 1150

X- INDICATES CHANGE	Add CCC material		
AUTHORITY FOR CHANGE	Directors: Research and Manufacturing		
SUPERSEDES:	None, New Page	DATE ISSUED:	11/9/79

PRINTED IN U.S.A.

NOTICE OF DEVIATION

Johns Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe Pipe Machine Furnishes	PLANT & DIV.	Denison-Pipe
		SPEC NO.	TR-425-2
		DEV. NO.	1-82 (4)

DATE OF DEVIATION: 12/15/82	PAGES NO:	15		
TIME OF DEVIATION: 8:00 A.M.	DATE OF ISSUE	8/4/82		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON: Improve and maintain quality.

AUTHORITY: A. C. Daley

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE
2. WHAT YOU PROPOSE TO DO INSTEAD
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED

1.) Non-pressure fiber furnish.

2.) Fiber furnish for non-pressure products are not to be run below 11%.

3.) Until 3/15/83 or until specs are changed.

MTC 002794

SIGNED: A. M. Curry — QUALITY CONTROL SUPERVISOR

SIGNED: B. Ciaccio — PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

Form QC-48

Please add these pages to your active file and cancel the prior issues. Cancelled pages should be kept available for a few months for the production of any Machined End Storm Drain Pipe that may be required during this change-over period.

MANUFACTURING SPECIFICATION -- 425-2

Pages and Date:	Pages 3.4, 3.5, 3.6 & 3.7, Dated 11/25/70
Cancels:	Pages 3.4 & 3.5, Dated 5/23/69
	Pages 3.6, 3.7, 3.8 & 3.9, Dated 1/7/70
	Page 3.10, Dated 7/16/69

A. C. Daley
by P. H. Hardenstein

MTC 002795

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	[illegible] W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

III. SEWER PIPE

Minimum Usage 13% in 10' Lengths and 14% in 13' Lengths

FIBER LEVEL - % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
CLASS 1500 *6" (10')(5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
10"-16"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 2400 4" (10')(5')	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
5" (10')(5')	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0
6" (10')(5')	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
8"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
10"-24"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 3300 4" 5"(10')(5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
6"(10')(5')	18.4	18.2	17.9	17.6	17.3	17.0	16.8	16.6	16.3	16.0	15.8
8"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
10"-30"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 4000/5000 10"-36"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6

*Use H-Blend for 4" and 5" Class 1500

The H-Blend is Optional for 6" and 8" CL 1500 (10')

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM).

X- INDICATES CHANGE	-REASON: Add 8" 1500 (13') & Adjust 8" 2400 & 8" 3300
AUTHORITY FOR CHANGE	J. E. Hesse's Letters 7/8/66 and 7/20/66
SUPERSEDES:	Same Spec., Same Page, Dated 5-27-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED 7-20-66

MTC 002796

Form 333-2 Prd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. SEWER PIPE

Minimum Usage 13% in 10' Lengths and 14% in 13' Lengths

FIBER LEVEL - % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 1500 *6"(10')(5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8"(10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
10"-16"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Class 2400 4"(10')(5')	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
5"(10')(5')	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0
6"(10')(5')	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"-24"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Class 3300 4" 5"(10')(5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
6"(10')(5')	18.4	18.2	17.9	17.6	17.3	17.0	16.8	16.6	16.3	16.0	15.8
8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"- 30"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Class 4000/5000 10"-36"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6

*Use H-Blend for 4" & 5" Class 1500

The H-Blend is Optional for 6" and 8" Class 1500

MTC 002797

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE	-REASON: Reduce Minimum Fiber Usage, Add Optional H-Blend for 6"&8" 1500
AUTHORITY FOR CHANGE	Verbal Authority J. E. Hesse (A. C. Daley's Letter 5/24/66)
SUPERSEDES:	Same Spec., Same Page, Dated 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB			DATE ISSUED 5-27-66

Form 333-2 Pfd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	A,C,J,W,T & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % / Blend Point Value		100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 1500	*6"(10')(5')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8"(10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	10"-16"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400	4"(10')(5')	16.2	15.9	15.6	15.4	15.2	15.0	15.0	15.0	15.0	15.0	15.0
	5"(10')(5')	16.3	16.0	15.8	15.6	15.3	15.0	15.0	15.0	15.0	15.0	15.0
	6"(10')(5')	16.0	15.7	15.4	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
	10"-24"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300												
	4" 5"(10')(5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
	6"(10')(5')	18.4	18.2	17.9	17.6	17.3	17.0	16.8	16.6	16.3	16.0	15.8
	8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
	10"-30"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000												
	10"-36"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0

*Use H-Blend for 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON:	Delete 6"-13' in Cl. 1500, 2400 & 3300 and 8"-13' in Cl. 1500 -
AUTHORITY FOR CHANGE		J. B. McCarty's Letter of 11-4-62 Product Proposal 425-154
SUPERSEDES:		Same Spec., Same Page, Dated 6-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RESA				DATE ISSUED 10-10-63

Form 333-2 Ptd. in U.S.A.

MTC 002798

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths.

Fiber Level - % / Blend Point Value		100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 1500*	6"(13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
	(5')6"(10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8"(13')	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	16.0
	8"(10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	10"-16"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400	4"(10'&5')	16.2	15.9	15.6	15.4	15.2	15.0	15.0	15.0	15.0	15.0	15.0
	5"(10'&5')	16.3	16.0	15.8	15.6	15.3	15.0	15.0	15.0	15.0	15.0	15.0
	6"(10'&5')	16.0	15.7	15.4	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	6"(13')	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
	10"-24"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300												
4"	5"(10'&5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
	6"(10'&5')	18.4	18.2	17.9	17.6	17.3	17.0	16.8	16.6	16.3	16.0	15.8
	6"(13')	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
	10"-30"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000												
	10"-36"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0

* Use H-Blend for 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON:	M-Ring Sewer Pipe Production
AUTHORITY FOR CHANGE	J.B. McCarty's Letter 11/6/62 Product Proposal 425-154
SUPERSEDES:	Deviation DHQ-4 Dated 12/3/62 and 1/9/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. LAB				DATE ISSUED 6-19-63

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. Sewer Pipe -

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths.

Fiber Level - % Blend Point Value		100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 1500	6" (13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
	6" (10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8" (13')	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	16.0
	8" (10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	10"-16"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400	6"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
	10"-24"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300	6"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	8"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
	10"-30"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000	10"-36"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0

MTC 002800

X— INDICATES CHANGE	—REASON:	To Show 61, 62, 64, 65, 66, 68, 69 and 70 Point Value Blends	RETURN TO
AUTHORITY FOR CHANGE		Additional Information	J-M RESEARCH
SUPERSEDES:		Same Page, Same Spec. Dated 10/3/62	FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. MGR.	RES. LAB				DATE ISSUED	1/9/63

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D, & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND-COST STANDARDS-CONTINUED:

III. SEWER PIPE - 10' AND 13' LENGTHS:

CANCELLED

Minimum Fiber Usage of 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - %	100	95	100	95	105	105	100	95
Blend Point Value	63	63	67	67	67	60	60	60
Class 1500								
6" (13')	18.7	17.7	17.6	16.7	18.5	20.6	19.6	18.6
6" (10')	15.0	15.0	15.0	15.0	15.0	16.5	15.7	15.0
8" (13')	17.6	16.7	16.6	16.0	17.5	19.5	18.5	17.6
8" (10')	15.0	15.0	15.0	15.0	15.0	16.5	15.7	15.0
10"-16"	16.0	16.0	16.0	16.0	16.0	17.8	17.0	16.2
Class 2400								
6"	20.1	19.1	19.0	18.0	20.0	22.3	21.2	20.2
8"	19.1	18.1	18.0	17.1	19.0	21.2	20.2	19.2
10"-24"	16.0	16.0	16.0	16.0	16.0	17.8	17.0	16.2
Class 3300								
6"	20.1	19.1	19.0	18.0	20.0	22.3	21.2	20.2
8"	19.1	18.1	18.0	17.1	19.0	21.2	20.2	19.2
10"-30"	16.0	16.0	16.0	16.0	16.0	17.8	17.0	16.2
Class 4000/5000								
10"-36"	16.0	16.0	16.0	16.0	16.0	17.8	17.0	16.2

IV. OTHER PRODUCTS - 13' LENGTH:

a. Gas Vent
b. Industrial Vent
c. Underdrain
d. Plumbing Vent
e. Air Duct

Size: 10"-36"
Fiber Usage: Maximum 15% to Maintain Dimensional Stability.

MTC 002801

X— INDICATES CHANGE —REASON:	Silicate Fiber Treatment Blend Change	RETURN TO
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 9/24/62	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page Dated 3/2/62	FILE ROOM

DIV. M.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES			DATE ISSUED	10/3/62

Form 323-2 Pnt. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R Pipe
		SPEC NO.	425-2
		PAGE NO.	3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Continued)

III. SEWER PIPE - 10' and 13' Lengths
(Minimum Fiber Usage of 15% in 10' Lengths and 16% in 13' Lengths)

Fiber Level - %	100	95	100	95	
Blend Point Value	63	63	67	67	
Class 1500					
6"(13')	18.7	17.7	17.6	16.7	
6"(10')	15.0	15.0	15.0	15.0	
8"(13')	17.6	16.7	16.6	16.0	
8"(10')	15.0	15.0	15.0	15.0	
10"-16"	16.0	16.0	16.0	16.0	
Class 2400					
6"	20.1	19.1	19.0	18.0	
8"	19.1	18.1	18.0	17.1	
10"-24"	16.0	16.0	16.0	16.0	
Class 3300					
6"	20.1	19.1	19.0	18.0	
8"	19.1	18.1	18.0	17.1	
10"-30"	16.0	16.0	16.0	16.0	
Class 4000/5000					
10"-36"	16.0	16.0	16.0	16.0	

IV. OTHER PRODUCTS - 13' Length

a) Gas Vent
b) Industrial Vent
c) Underdrain
d) Plumbing Vent
e) Air Duct

Size: 10" - 36"
Fiber Usage: Maximum 15% to maintain dimensional stability.

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: General Revision to Include Fiber Levels and Point Values

AUTHORITY FOR CHANGE: W. L. Van Derbeek's Letter of 1-25-62

SUPERSEDES: All Pages 425-2 Dated 1-10-62 and 4-20-61

DIV.	FIBR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 3-2-62

Ptd. in U.S.A.
Form 333-2
MTC 002802

PIPE MACHINE FURNISH (Cont'd)

PRESSURE PIPE FURNISHES (Cont'd)

Note: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA -

Silica must be from a research approved source

Min. SiO_2 - 93% (Quartz)
to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

CEMENT - SILICA RATIO

Cement and Silica are to be used in the following ratios:

Stockton	1.0 to 0.6
Waukegan	1.0 to 0.8
All other plants	1.0 to 0.7

SEPARAN

Separan NP-10 or Jaguar 507 is added as a flocculating agent to the recirculating system. A 1% solution is prepared and added continuously at the rate of 0.01 to 0.03% dry Separan or Jaguar of the dry furnish weight. (Refer - Pipe Division operations manual).

RETURN TO
J-M RESEARCH
FILE ROOM

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.0

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL % BLEND POINT VALUE	100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
CLASS 1500										
6" (13') (10') (5')	19.0	18.6	18.3	17.9	17.6	17.3	17.0	16.7	16.4	16.1
8" (13') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
10"-16"	18.0	17.7	17.3	17.0	16.7	16.3	16.1	15.8	15.5	15.2
CLASS 2400										
4" (5') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
5" (5') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
6" (13') (10') (5')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
8" (13') (10')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
10"-24"	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5	19.2
CLASS 3300										
4",5" (5') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
6" (13') (10') (5')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
8"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
10"-30"	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5	19.2
CLASS 4000/5000										
10"-36"	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5	19.2

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
8" 3300 HF (13')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3

X— INDICATES CHANGE —REASON:	Show New Fiber Usage 10"-36"	PLEASE RETURN TO
AUTHORITY FOR CHANGE	K. J. Whalen's letter of 3/20/72	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 1/4/72	LIBRARY

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.			DATE ISSUED 3/21/72

F POST CO 1243 80187

MTC 002804

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.0

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

CANCELLED

III. SEWER PIPE

FIBER LEVEL % / BLEND POINT VALUE	100 / 50	100 / 51	100 / 52	100 / 53	100 / 54	100 / 55	100 / 56	100 / 57	100 / 58	100 / 59
CLASS 1500										
6" (13') (10') (5')	19.0	18.6	18.3	17.9	17.6	17.3	17.0	16.7	16.4	16.1
8" (13') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
10"-16"	18.0	17.7	17.3	17.0	16.7	16.3	16.1	15.8	15.5	15.2
CLASS 2400										
4" (5') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
5" (5') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
6" (13') (10') (5')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
8" (13') (10')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
10"-24"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
CLASS 3300										
4",5" (5') (10')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
6" (13') (10') (5')	18.8	18.4	18.1	17.9	17.4	17.1	16.8	16.5	16.2	15.9
8"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
10"-30"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
CLASS 4000/5000										
10"-36"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
8" 3300 HF (13')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3

X- INDICATES CHANGE -REASON: Show New Fiber Usage

AUTHORITY FOR CHANGE: K. J. Whalen's letters 12/8/71 & 12/15/71 & J.F. Herr's letter 12/7/71

SUPERSEDES: Same Spec., Same Page, Dated 4/25/69

MGR. G.Q.C	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	[illegible]			DATE ISSUED	1/4/72

J-M RESEARCH LIBRARY

P. POST CO. 100-3 80187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.0

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

CANCELLED

III. SEWER PIPE

	FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
	BLEND POINT VALUE	50	51	52	53	54	55	56	57	58	59
	CLASS 1500										
X	6" (13') (10') (5')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
X	8" (13') (10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
	10"-16"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
	CLASS 2400										
	4" (5') (10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
	5" (5') (10')	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
X	6" (13') (10') (5')	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
X	8" (13') (10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
	10"-24"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
	CLASS 3300										
	4", 5" (5') (10')	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
X	6" (13') (10') (5')	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
X	8"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
	10"-30"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
	CLASS 4000/5000										
	10"-36"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5

X The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002806

X- INDICATES CHANGE -REASON:	Show New Fiber Usage for 6" and 8" (13')	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. E. Hesse's wire of 4/16/69	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 3/14/68	LIBRARY (MM)

MGR. G. O. C	MGR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 4/25/69

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.0

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	50	51	52	53	54	55	56	57	58	59
CLASS 1500*										
6" (10') (5')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
6" (13')	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
8" (10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
8" (13')	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
10"-16"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
CLASS 2400										
4" (5') (10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
5" (5') (10')	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
6" (5') (10')	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
6" (13')	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
8"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
10"-24"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
CLASS 3300										
4", 5" (5') (10')	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
6" (5') (10')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
6" (13')	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
8"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
10"-36"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
CLASS 4000/5000	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" & 8" Class 1500 (10') and 4", 5", & 6" Class 2400 (5') (10')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE	-REASON:	Reduce Fiber Usage 10"-36" Sewer Pipe	
AUTHORITY FOR CHANGE		J. E. Hesse's letter 3/11/68	MTC 002807
SUPERSEDES:		Same Spec., Same Page, Dated 5/1/67	

MGR. G. O. C	MGR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED	3/14/68

MTC 002807

Johns Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.0

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL % BLEND POINT VALUE	100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
CLASS 1500*										
6" (10') (5')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
6" (13')	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
8" (10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
8" (13')	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
10"-16"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 2400										
4" (5') (10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
5" (5') (10')	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
6" (5') (10')	19.2	18.8	18.8	18.1	17.8	17.5	17.1	16.8	16.5	16.8
6" (13')	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
8"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
10"-24"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 3300										
4", 5" (5') (10')	214.	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
6" (5') (10')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
6" (13')	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
8"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
10"-36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 4000/5000	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3

*: Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" & 8" Class 1500 (10') and 4", 5", & 6" Class 2400 (5') (10')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

Ptd. in U.S.A.

X— INDICATES CHANGE	—REASON:	Extend optional use of H-Blend, reduce minimum fiber usage to 12% for 10' and 13' lengths.
AUTHORITY FOR CHANGE		Verbal Authority J. E. Hasse
SUPERSEDES:		Same Spec., Page 3.4, Dated 7-20-66

Form 333-2

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED	5-1-67

MTC 002808

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD

CANCELLED 2/9/78

III. SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
CLASS 1500											
6" (13') (10') (5')	15.9	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.5
8" (13') (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
10"-16"	15.0	14.8	14.5	14.3	14.1	13.9	13.7	13.5	13.3	13.1	12.9
CLASS 2400											
4" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
5" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6" (13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (13') (10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
10"-24"	18.8	18.5	18.2	18.0	17.6	17.4	17.1	16.8	16.6	16.4	16.2
CLASS 3300											
4"-5"(10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6"(13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
10"-30"	18.8	18.5	18.2	18.0	17.6	17.4	17.1	16.8	16.6	16.4	16.2
CLASS 4000/5000											
10"-36"	18.8	18.5	18.2	18.0	17.6	17.4	17.1	16.8	16.6	16.4	16.2

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002809

HIFLEX PIPE

8" 2400 HF (13')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" 3300 HF (13')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4

X- INDICATES CHANGE	-REASON:	Show New Fiber Usage 10"-36"	PLEASE RETURN TO
AUTHORITY FOR CHANGE		K. J. Whalen's letter of 3/20/72	J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 1/4/72	LIBRARY

MGR. G. O C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED	3/21/72

F POST CO 188-3 80187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD

CANCELLED

III. SEWER PIPE

FIBER LEVEL % / BLEND POINT VALUE	100 / 60	100 / 61	100 / 62	100 / 63	100 / 64	100 / 65	100 / 66	100 / 67	100 / 68	100 / 69	100 / 70
CLASS 1500											
6" (13') (10') (5')	15.9	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.5
8" (13') (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
10"-16"	15.0	14.8	14.5	14.3	14.1	13.9	13.7	13.5	13.3	13.1	12.9
CLASS 2400											
4" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
5" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6" (13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (13') (10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
10"-24"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
CLASS 3300											
4"-5"(10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6"(13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
10"-30"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
CLASS 4000/5000											
10"-36"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002810

HIFLEX PIPE

8" 2400 HF (13')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" 3300 HF (13')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4

X- INDICATES CHANGE —REASON: Show New Fiber Usage

AUTHORITY FOR CHANGE K.J. Whalen's letters 12/8/71 & 12/15/71 & J.F. Herr's letter 12/7/71

SUPERSEDES: Same Spec., Same Page, Dated 4/25/69

MGR. G.O.C	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REV. LAB.	DATE ISSUED 1/4/72

RESEARCH LIBRARY

F. POST CO. 126-3 80187

JOHNS-MANVILLE FINISHED PRODUCT SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	DIVISION	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD

CANCELLED

III. SEWER PIPE

	FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
	BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
	CLASS 1500											
X	6" (13') (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
X	8" (13') (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
	10"-16"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
	CLASS 2400											
	4" (10') (5')	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
	5" (10') (5')	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0
X	6" (13') (10') (5')	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
X	8" (13') (10')	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
	10"-24"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
	CLASS 3300											
	4"-5" (10') (5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
X	6" (13') (10') (5')	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
X	8"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
	10"-30"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
	CLASS 4000/5000											
	10"-36"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8

X The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002811

X- INDICATES CHANGE -REASON:	Show New Fiber Usage for 6" and 8" (13')	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. E. Hesse's wire of 4/16/69	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 3/14/68	LIBRARY (MM)

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED	4/25/69

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND-COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
CLASS 1500											
6" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6" (13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
8" (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
10"-16"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
CLASS 2400											
4" (10') (5')	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
5" (10') (5')	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0
6" (10') (5')	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
6" (13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
8"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
10"-24"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
CLASS 3300											
4" 5" (10') (5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
6" (10') (5')	18.4	18.2	17.9	17.6	17.3	17.0	16.8	16.6	16.3	16.0	15.8
6" (13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
8"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
10"-30"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
CLASS 4000/5000											
10"-36"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" CL 1500 (10') and 4" 5" and 6" Class 2400 (5') (10')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 3/11/68

MTC 002812

SUPERSEDES: Same Spec., Same Page, Dated 7/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	3/14/68

F POST CO. 126-3 50197

Johns Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND-COST STANDARDS:

III SEWER PIPE

FIBER LEVEL % / BLEND POINT VALUE	100 / 60	100 / 61	100 / 62	100 / 63	100 / 64	100 / 65	100 / 66	100 / 67	100 / 68	100 / 69	100 / 70
CLASS 1500											
*6" (10') (5')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
6" (13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
8" (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" (13')	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
10"-16"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Class 2400											
4" (10') (5')	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
5" (10') (5')	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2	14.0
6" (10') (5')	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
6" (13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
8"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
10"-24"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Class 3300											
4" 5" (10') (5')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
6" (10') (5')	18.4	18.2	17.9	17.6	17.3	17.0	16.8	16.6	16.3	16.0	15.8
6" (13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
8"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
10"-30"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 4000/5000											
10"-36"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" CL 1500 (10') and 4" 5" and 6" Class 2400 (5') (10')

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-BLEND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13' LENGTHS.

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

MTC 002813

SUPERSEDES: SAME SPEC, Page [illegible] DATED 7-20-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED 7-1-67

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value	95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Class 1500* 6"(10') (5')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8"(10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-16"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400											
4"(10'&5')	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
5"(10'&5')	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6"(10'&5')	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	16.4
10"-24"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300											
4" 5"(10'&5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	15.0	15.0
6"(10'&5')	17.6	17.3	17.0	16.8	16.5	16.3	16.0	15.8	15.6	15.4	15.2
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	16.4
10"-30"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000											
10"-36"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

*Use H-Blend For 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON:	Delete 6"-13' in Cl. 3100, 2400, & 3300 and 8"-13' in Cl. 1500
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 11-6-62 Product Proposal 425-154
SUPERSEDES:	Same Sped., Same Page Dated 6-19-63

MGR. G.Q.C.	MGR. C.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 10-10-63

Form 3332-A Ptd in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % / Blend Point Value	95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Class 1500* 6"(13')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
(5')6"(10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8" (13')	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
8"(10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-16"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400											
4"(10'&5')	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
5"(10'&5')	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6"(10'&5')	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6"(13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	16.4
10"-24"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300											
4" 5"(10'&5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	15.0	15.0
6"(10'&5')	17.6	17.3	17.0	16.8	16.5	16.3	16.0	15.8	15.6	15.4	15.2
6"(13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	16.4
10"-30"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000											
10"-36"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

* Use H-Blend For 4" & 5" Class 1500

MTC 002815

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON:	M-Ring Sewer Pipe Production
AUTHORITY FOR CHANGE		J.B. McCarty's Letter 11-6-62 Product Proposal 425-154
SUPERSEDES:		Same Spec., Page 3.1 Dated 1-9-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.O.	PROD. SUPT.	PLNT. FIN.	RES. DEPT.				DATE ISSUED 6-19-63

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D,R, PIPE
		SPEC NO.	425-[illegible]
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. Sewer Pipe:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value	95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Class 1500 6" (13')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
6" (10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8" (13')	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
8" (10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-16"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400 6"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.5	17.2
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	16.4
10"-24"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300 6"	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	16.4
10"-30"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000 10"-36"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

MTC 002816

X— INDICATES CHANGE —REASON:	To Show 61, 62, 64, 65, 66, 68, 69 and 70 Point Value Blends
AUTHORITY FOR CHANGE	Additional Information
SUPERSEDES:	Same Spec., Page 3, Dated 10/3/62

RETURN TO J-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RSS				DATE ISSUED	1/9/63

Form 333-2 Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS: CANCELLED

III. SEWER PIPE

3/9/78

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500										
6" (13') (10') (5')	13.4	13.2	13.0	12.8	12.6	12.5	12.4	12.2	12.0	12.0
8" (13') (10'"	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
10"-16"	12.7	12.5	12.4	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
5" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6" (13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8" (13') (10')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
10"-24"	16.0	15.7	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1
CLASS 3300										
4"-5" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6" (13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
10"-30"	16.0	15.7	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1
CLASS 4000/5000										
10"-36"	16.0	15.7	15.4	15.2	15.0	14.8	14.6	14.4	14.3	14.1

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" 3300 HF (13')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5

MTC 002817

X- INDICATES CHANGE -REASON:	Show New Fiber Usage 10"-36"	PLEASE RETURN TO
AUTHORITY FOR CHANGE	K. J. Whalen's letter of 3/20/72	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 1/4/72	LIBRARY

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 3/21/72

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PTPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.2

CANCELLED

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500										
6" (13') (10') (5')	13.4	13.2	13.0	12.8	12.6	12.5	12.4	12.2	12.0	12.0
8" (13') (10'"	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
10"-16"	12.7	12.5	12.4	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
5" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6" (13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8" (13') (10')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
10"-24"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
CLASS 3300										
4"-5" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6" (13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
10"-30"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
CLASS 4000/5000										
10"-36"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5

The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

MTC 002818

8" 2400 HF (13')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" 3300 HF (13')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5

PLEASE RETURN TO J-M RESEARCH LIBRARY

X- INDICATES CHANGE —REASON: Show New Fiber Usage

AUTHORITY FOR CHANGE: K. J. Whalen's letters 12/8/71 & 12/15/71 & J. F. Herr's letter 12/7/71

SUPERSEDES: Same Spec., Same Page, Dated 4/25/69

MGR. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. PHY.	[illegible]			DATE ISSUED	1/4/72

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS: CANCELLED

III. SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500										
X 6"(13') (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
X 8" (13') (10')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
10"-16"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
CLASS 2400										
4" (10') (5')	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
5" (10') (5')	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3
X 6" (13') (10') (5')	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
X 8" (13') (10')	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
10"-24"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
CLASS 3300										
4"-5" (10') (5')	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
X 6" (13') (10') (5')	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
8"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
10"-30"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
CLASS 4000/5000										
10"-36"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2

X The H-Blend is Optional for 4" and 5" Class 2400 (5') (10') and for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002819

X– INDICATES CHANGE	–REASON:	Show New Fiber Usage for 6" and 8" (13')	PLEASE RETURN TO
AUTHORITY FOR CHANGE		J.E. Hesse's wire of 4/16/69	J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 3/14/69	LIBRARY (MM)

MGR.	MGR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED 4/25/69

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500*										
6" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
" (13')	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
8" (10')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8" (13')	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
10"-16"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
CLASS 2400										
4" (10') (5')	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
5" (10') (5')	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3
6" (10') (5')	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
6" (13')	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
8"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
10"-24"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
CLASS 3300										
4"-5" (10') (5')	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
6" (10') (5')	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.9
6" (13')	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
8"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
10"-30"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
CLASS 4000/5000										
10"-36"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4", 5" and 6" Class 2400 (5') (10')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE	—REASON:	Reduce Fiber Usage 10"-36" Sewer Pipe
AUTHORITY FOR CHANGE		J. E. Hesse's letter 3/11/68
SUPERSEDES:		Same Spec., Same Page, Dated 5/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	3/14/68

MTC 002820

Johns Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL % / BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
CLASS 1500*										
6" (10') (5')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
6"(13')	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
8" (10')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8" (13')	16.6	16.3	16.1	15.9	15.7	15.5	15.8	15.1	14.9	14.7
10"-16"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
CLASS 2400										
4" (10') (5')	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
5" (10') (5')	13.8	13.6	13.4	13.3	13.1	13.9	12.7	12.6	12.4	12.3
6" (10') (5')	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
6" (13')	18.0	17.8	17.5	17.3	17.1	16.8	16.5	16.4	16.2	16.0
8"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
10"-24"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
CLASS 3300										
4"-5" (10') (5')	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
6" (10') (5')	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.9
6" (13')	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
8"	18.0	17.8	17.3	17.3	17.1	16.8	16.6	16.4	16.2	16.0
10"-30"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
CLASS 400/500										
10"-36"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4",5" and 6" Class 2400 (5') (10')

PRICE ... 10
... RESEARCH
LIBRARY ...

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-BLEND. REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

MTC 002821

SUPERSEDES: SAME SPEC., PAGE 3.3 DATED 7-20-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 5-1-67

Form 333-2 Pul. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value	105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Class 1500* 6"(10') (5')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
8"(10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
10"-16"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 2400											
4"(10') (5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	15.0	15.0
5"(10') (5')	17.2	16.8	16.6	16.3	16.0	15.8	15.6	15.4	15.2	15.0	15.0
6"(10') (5')	16.8	16.5	16.2	16.0	15.8	15.6	15.3	15.0	15.0	15.0	15.0
8"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
10"-24"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 3300											
4" 5" (10'&5')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
6"(10') (5')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
10"-30"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 4000/5000											
10"-36"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0

* Use H-Blend For 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON:	Delete 6"-13'-in Cl.1500, 2400, 3300 and 8"-13' in Cl. 1500
AUTHORITY FOR CHANGE		J. B. McCarty's Letter of 11-6-62 Product Proposal 425-154
SUPERSEDES:		Same Spec., Same Page Dated 6-19-63

MGR. G.S.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. DEPT.				DATE ISSUED 10-10-63

MTC 002822

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	~~425~~ 425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Class 1500*	6"(13')	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
	(5')6"(10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	8"(13')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
	8"(10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	10"-16"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 2400												
	4"(10'&5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	15.0	15.0
	5"(10'&5')	17.2	16.8	16.6	16.3	16.0	15.8	15.6	15.4	15.2	15.0	15.0
	6"(10'&5')	16.8	16.5	16.2	16.0	15.8	15.6	15.3	15.0	15.0	15.0	15.0
	6"(13')	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
	8"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	10"-24"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 3300												
	4" 5"(10'&5')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
	6"(10'&5')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
	6"(13')	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
	8"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	10"-30"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 4000/5000												
	10"-36"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0

* Use H-Blend For 4" & 5" Class 1500

MTC 002823

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON:	M-Ring Sewer Pipe Production
AUTHORITY FOR CHANGE		J.B. McCarty's Letter 11-6-62 Product Proposal 425-154
SUPERSEDES:		Same Spec. Page 3.2 Dated 1-9-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. LAB.				DATE ISSUED	6-19-63

Form 333-2 Pld. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	A,G,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

III. Sewer Pipe:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Class 1500	6" (13')	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
	6" (10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	8" (13')	19.5	19.2	19.0	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
	8" (10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	10"-16"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 2400	6"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
	8"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	10"-24"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 3300	6"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
	8"	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
	10"-30"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
Class 4000/5000	10"-36"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0

MTC 002824

X— INDICATES CHANGE	—REASON:	To Show 61, 62, 64, 65, 66, 68, 69 and 70 Point Value Blends	RETURN TO
AUTHORITY FOR CHANGE		Additional Information	J-M RESEARCH
SUPERSEDES:		Same Spec., Page 3, Dated 10/3/62	FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES			DATE ISSUED 1/9/63
					AM			

Form 333-2 Ptd. In U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

CANCELLED 2/9/78

III. SEWER PIPE

FIBER BLEND %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS 1500										
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13') (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13') (10')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
10"-24"	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.7	12.5
CLASS 3300										
4"-5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
10"-30"	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.7	12.5
CLASS 4000/5000										
10"-36"	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.7	12.5

The H-Blend is Optional for 4" and 5" Class 2400 (10') (5') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8" 3300 HF (13')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0

MTC 002825

X- INDICATES CHANGE -REASON:	Show New Fiber Usage 10"-36"	PLEASE RETURN TO
AUTHORITY FOR CHANGE	K. J. Whalen's letter of 3/20/72	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 1/4/72	LIBRARY

MGR. G.O.C.	MGR. O.C.	SUPR. O.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 3/21/72

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

CANCELLED

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS 1500										
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13') (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13') (10')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
10"-24"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
CLASS 3300										
4"-5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
10"-30"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
CLASS 4000/5000										
10"-36"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0

The H-Blend is Optional for 4" and 5" Class 2400 (10') (5') and for 6" and 8" Classes 1500, 2400, and 3300.

HIFLEX PIPE

8" 2400 HF (13')	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8" 3300 HF (13')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0

MTC 002826

PLEASE RETURN TO
J-M RESEARCH
LIBRARY

X— INDICATES CHANGE —REASON:	Show New Fiber Usage
AUTHORITY FOR CHANGE	K. J. Whalen's letters 12/8/71 & 12/15/71 & J. F. Herr's letter 12/7/71
SUPERSEDES:	Same Spec., Page, Dated 4/25/69

MGR. Q. C	MGR. O. C.	SUPR. O. C.	PROD. SUPT.	PLNT. FIN.	DEL. MGR.			DATE ISSUED	1/4/72

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-1 2
		PAGE NO.	3.3

CANCELLED

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

	FIBER BLEND %	100	100	100	100	100	100	100	100	100	100
	BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
	CLASS 1500										
X	6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
X	8" (13') (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	CLASS 2400										
	4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	5" (10') (5')	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
X	6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
X	8" (13') (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	10"-24"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	CLASS 3300										
	4"-5" (10') (5')	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0	12.0
X	6" (13') (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
X	8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	10"-30"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	CLASS 4000/5000										
	10"-36"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

X The H-Blend is Optional for 4" and 5" Class 2400 (10') (5') and for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002827

X- INDICATES CHANGE	—REASON:	Show New Fiber Usage for 6" and 8" (13')							PLEASE RETURN TO
AUTHORITY FOR CHANGE		J. E. Hesse's wire of 4/16/69							J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 3/14/68							LIBRARY (MM)
MGR. C. C.	MGR. S. C.	SUPR. S. C.	PROD. SUPT.	PLNT. PHL.	MGR. LAB.			DATE ISSUED	4/25/69

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

III. SEWER PIPE

FIBER BLEND %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS 1500*										
6" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
8" (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13')	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
8"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
10"-24"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 3300										
4"-5" (10') (5')	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0	12.0
6" (10') (5')	13.7	13.5	13.4	13.2	13.1	12.9	12.8	12.6	12.5	12.3
6" (13')	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
8"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
10"-30"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 4000/5000										
10"-36"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4", 5" and 6" Class 2400. (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 3/11/68

MTC 002828

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	3/14/68

F POST CO. 136-3 50187

MANUFACTURING SPECIFICATION	TRANSITE pipe Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

III. SEWER PIPE

FIBER BLEND % BLEND POINT VALUE	100 81	100 82	100 83	100 84	100 85	100 86	100 87	100 88	100 89	100 90
CLASS 1500*										
6" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
8" (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13')	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
10"-16"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
8"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
10"-24"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 3300										
4"-5" (10') (5')	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0	12.0
6" (10') (5')	13.7	13.5	13.4	13.2	13.1	12.9	12.8	12.6	12.5	12.3
6" (13')	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
8"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
10"-30"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 4000/5000										
10"-36"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0

* Use H-Blend for 4" and 5" Class 1500

The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4",5" and 6" class 2400, (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-BLEND, REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS.

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. S. HESSE

SUPERSEDES: ~~[illegible]~~ 9/20/66

MTC 002829

DIR. QC.	MGR. QC.	SUPR. QC.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED 5-1-67

Form 3532 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

III. SEWER PIPE:

Minimum Usage 13% in 10' Lengths and 14% in 13' Lengths

FIBER LEVEL - % / BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
CLASS 1500*										
6" (10')(5')	13.2	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8" (10')	13.2	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8" (13')	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
10" - 16"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
CLASS 2400										
4" (10')(5')	13.6	13.4	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0
5" (10')(5')	13.8	13.6	13.4	13.3	13.1	13.0	13.0	13.0	13.0	13.0
6" (10')(5')	13.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
10" - 24"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
CLASS 3300										
4" - 5" (10')(5')	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
6" (10')(5')	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.9
8"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
10" - 30"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
CLASS 4000/5000										
10" - 36"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0

*Use H-Blend for 4" and 5" Class 1500

TheH-Blend is Optional for 6" and 8" Class 1500 (10')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (H-H)

X- INDICATES CHANGE -REASON: Add 8" 1500 (13') & Adjust 8" 2400 & 8" 3300

AUTHORITY FOR CHANGE: J. E. Hesse's Letter 7/8/66 and 7/20/66

SUPERSEDES: Same Spec., Same Page, Dated 5-27-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	7-20-66

MTC 002830

Form 333-2 Pid. In U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

III. SEWER PIPE:

Minimum Usage 13% in 10' Lengths and 14% in 13' Lengths

CANCELLED

FIBER LEVEL - % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
CLASS 1500*										
6" (10')(5')	13.2	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8" (10')	13.2	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
10" - 16"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
CLASS 2400										
4" (10')(5')	13.6	13.4	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0
5" (10')(5')	13.8	13.6	13.4	13.3	13.1	13.0	13.0	13.0	13.0	13.0
6" (10')(5')	13.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8"	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.5	15.3	15.2
10" - 24"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
CLASS 3300										
4"-5" (10')(5')	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
6" (10')(5')	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.9
8"	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.5	15.3	15.2
10" - 30"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
CLASS 4000/5000 10" - 36"	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0

*Use H-Blend for 4" & 5" Class 1500

The H-Blend is Optional for 6" & 8" Class 1500

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MMI)

X- INDICATES CHANGE	-REASON:	Reduce Minimum Fiber Usage
AUTHORITY FOR CHANGE		Verbal Authority J. E. Hesse (A. C. Daley's Letter 5/24/66)
SUPERSEDES:		Same Spec., Same Page, Dated 10-10-63

O.R. D.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED 5-27-66

MTC 002831

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHRS	PLANT & DIV.	H,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Blend Pt.	Lev.- % Val.	100 71	100 72	100 73	100 74	100 75	95 71	95 72	95 73	95 74	95 75	105 71	105 72	105 73	105 74	105 75
Class 1500*																
6" (10')(5')		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8" (10')		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-16"		16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400																
4" (10')(5')		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
5" (10')(5')		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6" (10')(5')		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8"		17.0	16.8	16.6	16.4	16.2	16.2	16.0	16.0	16.0	16.0	17.9	17.6	17.4	17.2	17.0
10"-24"		16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300																
4"-5"(10')(5')		15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.8	15.6	15.3	15.1	15.0
6" (10')(5')		15.6	15.4	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0	16.4	16.2	16.0	15.8	15.6
8"		17.0	16.8	16.6	16.4	16.2	16.2	16.0	16.0	16.0	16.0	17.9	17.6	17.4	17.2	17.0
10"-30"		16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000																
10"-36"		16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

*Use H-Blend For 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

MTC 002832

X— INDICATES CHANGE	—REASON: Delete 6"-13' in Cl. 1500, 2400, 3300 and 8"-13' in Cl. 1500
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 11-6-62 Product Proposal 425-154
SUPERSEDES:	Same Spec., Same Page Dated 6-19-63

MGR. QCF	MGR.	SUPV. Q.C.	PROD. SUPT.	PLNT. MGR.	DATE ISSUED 10-10-63

Form 333-2-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

III. SEWER PIPE:

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Lev. %	100	100	100	100	100	95	95	95	95	95	105	105	105	105	105
Blend Pt. Val.	71	72	73	74	75	71	72	73	74	75	71	72	73	74	75
Class 1500*															
6" (13')	16.6	16.3	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0	17.5	17.2	17.0	16.8	16.5
6" (10'&5')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8" (13')	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.4	16.2	16.0	16.0	16.0
8" (10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-16"	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 2400															
4" (10'&5')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
5" (10'&5')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6" (10'&5')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
6" (13')	17.9	17.6	17.4	17.2	17.0	17.0	16.8	16.6	16.4	16.2	18.9	18.6	18.4	18.1	17.9
8"	17.0	16.8	16.6	16.4	16.2	16.2	16.0	16.0	16.0	16.0	17.9	17.6	17.4	17.2	17.0
10"-24"	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 3300															
4"-5" (10'&5')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.8	15.6	15.3	15.1	15.0
6" (10'&5')	15.6	15.4	15.2	15.0	15.0	15.0	15.0	15.0	15.0	15.0	16.4	16.2	16.0	15.8	15.6
6" (13')	17.9	17.6	17.4	17.2	17.0	17.0	16.8	16.6	16.4	16.2	18.9	18.6	18.4	18.1	17.9
8"	17.0	16.8	16.6	16.4	16.2	16.2	16.0	16.0	16.0	16.0	17.9	17.6	17.4	17.2	17.0
10"-30"	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Class 4000/5000															
10" - 36"	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0

* Use H-Blend For 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON: Extend Table For Higher Point Values
AUTHORITY FOR CHANGE	Additional Information
SUPERSEDES:	None

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	6-19-63

Pid. in U.S.A.

Form 333-2

MTC 002833

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	TR-425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

MACHINED END PIPE (TP 19 Series)

STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

CANCELLED 2/9/78

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
27",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
30"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
33"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
36"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (10' & 13')	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
10"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	16.0	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2
15"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
16"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
18"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
27"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
30",33",36",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
Class IV										
6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
10"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
12"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
14"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
15"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
18"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.9	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
Class V										
8"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
10"	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3
12"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
14"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
15"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6

X- INDICATES CHANGE — REASON: Cancelation of Mach. End. S/D

AUTHORITY FOR CHANGE: Regular Approvals

SUPERSEDES: Same Spec., Page 3.12, dated 12-31-71

MGR. Q. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	2-23-77

MTC 002834

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 2/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	51	52	53	54	55	56	57	58	59	60
CLASS II (1500 D)										
12-42	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
CLASS III (2000 D)										
12,14	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
15	16.3	16.0	15.7	15.4	15.1	14.8	14.6	14.3	14.0	13.8
16	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6	15.3
18	16.9	16.5	16.2	15.9	15.6	15.4	15.1	14.8	14.6	14.3
20	18.2	17.9	17.6	17.2	16.9	16.6	16.3	16.0	15.8	15.5
21	18.6	18.3	17.9	17.6	17.3	17.0	16.7	16.4	16.1	15.8
24	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1	14.8
27	17.2	16.9	16.6	16.3	16.0	15.7	15.4	15.2	14.9	14.7
30	16.5	16.1	15.8	15.6	15.3	15.0	14.7	14.5	14.2	13.9
33	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1	14.8
36	17.0	16.7	16.4	16.1	15.8	15.6	15.3	15.0	14.8	14.5
39,42	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
(2500 D)										
12	19.6	19.2	18.8	18.5	18.2	17.8	17.5	17.2	16.9	16.7
14	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	19.7	19.3
15	23.4	22.9	22.4	22.0	21.6	21.2	20.9	20.6	20.2	19.8
16	25.7	25.2	24.7	24.2	23.8	23.4	23.0	22.6	22.2	21.8
18	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0	20.6
20	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4	22.0
21	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7	22.3
24	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6	21.2
27	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4	21.0
30	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4	20.0
33	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6	21.2
36	24.5	24.0	23.6	23.2	22.8	22.3	22.0	21.6	21.2	20.8
39	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3	16.0
42	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2

X- INDICATES CHANGE	-REASON:	Revised Pipe O.D's & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE		J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 11/25/70	LIBRARY

MGR Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	12/13/71

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED

UNMACHINED STORM DRAIN PIPE (CLASSES 1500 - 5000)

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	70	71	72	73	74	75	76	77	78	79	80	81
CLASS 1500												
12 - 16	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
CLASS 2400												
12	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4
14	13.1	13.0	12.8	12.6	12.4	12.3	12.1	11.9	11.8	11.6	11.5	11.4
15	12.9	12.7	12.5	12.4	12.2	12.0	11.9	11.7	11.5	11.4	11.2	11.1
16	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8	12.6
18	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	11.9	11.7	11.6
20, 21, 24	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
CLASS 3300												
12	12.6	12.4	12.2	12.0	11.9	11.7	11.6	11.4	11.3	11.1	11.0	10.9
14	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
15	12.6	12.4	12.2	12.0	11.9	11.7	11.6	11.4	11.3	11.1	11.0	10.9
16	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4
18	20.2	19.9	19.6	19.3	19.0	18.8	18.6	18.3	18.1	17.9	17.6	17.4
20	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
21	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.6	12.4	12.2
24	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
27, 30	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
CLASS 4000												
12	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4
14	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5	14.3
15	19.1	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8	16.5
16	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3	12.1
18	13.8	13.6	13.4	13.3	13.2	13 0	12.8	12.6	12.4	12.3	12.2	12.0
20	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4
21	21.2	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3
24	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
27	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
30	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
33, 36	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9

MTC 002836

X- INDICATES CHANGE	-REASON:	Establish Specification for Unmachined Storm Drain Pipe
AUTHORITY FOR CHANGE		Product Proposal 425-215
SUPERSEDES:		Same Spec., Same Page, Dated 5/23/~~70~~

MGR. Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	REA. LAB			DATE ISSUED
								11/25/70

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4 of 5

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

IV. STORM DRAIN PIPE (AASHO CLASSES)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class 1500										
6"-8"	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
10"-16"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
Class 2400										
6"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
8"-24"	19.4	19.0	18.7	19.3	18.0	17.7	17.3	17.0	16.7	16.5
Class 3300										
6"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
8"-30"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
Class 4000/5000										
10"-36"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5

Fiber Level %	100	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70
Class 1500											
6"-8"	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
10"-16"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
Class 2400											
6"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
8"-24"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
Class 3300											
6"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
8"-30"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8
Classes 4000/5000											
10"-36"	16.2	15.9	15.6	15.4	15.1	14.9	14.6	14.4	14.2	14.0	13.8

The H-Blend is optional for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002837

X- INDICATES CHANGE —REASON: Establish Specification for Storm Drain Pipe

AUTHORITY FOR CHANGE: Product Proposal 425-161

SUPERSEDES: New 3/14/68

MGR. C. O C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED 5/23/69

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POST CO. 1243 8/67

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND %	95	95	95	95	95	95	95	95	95	95
BLEND POINT VALUE	50	51	52	53	54	55	56	57	58	59
CLASS 1500*										
6"(10') (5')	17.8	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1
6" (13')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
8" (10')	17.8	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1
8" (13')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
10"-16"	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6
CLASS 2400										
4" (10') (5')	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6
5" (10') (5')	18.6	18.2	17.9	17.6	17.2	16.9	16.6	16.3	16.1	15.8
6" (10') (5')	18.2	17.9	17.5	17.2	16.9	16.5	16.3	16.0	15.7	15.4
6" (13')	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
8"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
10"-24"	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6
CLASS 3300										
4"5"(10') (5')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
6" (10') (5')	21.2	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.3	18.0
6" (13')	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
8"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
10"-36"	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6
CLASS 4000/5000										
10"-36"	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4", 5" and 6" 2400 (5') (10')

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X- INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 3/11/68

MTC 002838

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLANT. FIN.	RES. LAB			DATE ISSUED 3/14/68

Johns-Manville MANUFACTURING SPECIFICATION	TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND % BLEND POINT VALUE	95 50	95 51	95 52	95 53	95 54	95 55	95 56	95 57	95 58	95 59
CLASS 1500*										
5" (10') (5')	17.8	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1
6" (13')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
8" (10')	17.8	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1
8" (13')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
10"-16"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
CLASS 2400										
4" (10') (5')	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6
5" (10') (5')	18.6	18.2	17.9	17.6	17.2	16.9	16.6	16.3	16.1	15.8
6" (10') (5')	18.2	17.9	17.5	17.2	16.9	16.5	16.3	16.0	15.7	15.4
6" (13')	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
8"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
10"-24"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
CLASS 3300										
4"-5" (10') (5')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
6" (10') (5')	21.2	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.3	18.0
6" (13')	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
8"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
10"-36"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
CLASS 4000/5000										
10"-36"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4", 5" and 6" 2400 (5')(10')

[illegible] TO
JAN [illegible]
LIBRA[illegible] (MM)

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-BLEND AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. R. HESSE

MTC 002839

SUPERSEDES: [redacted] PAGE [redacted] DATED 10-10-63

D.S. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	FIN. FIN.	LAB			DATE ISSUED	5-1-67

Form 333-2 Fill in U...

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

Minimum Usage 13% in 10' Lengths and 14% in 13' Lengths

FIBER LEVEL - % BLEND POINT VALUE	100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
CLASS 1500*										
6" (10')(5')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
8" (10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
8" (13')	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
10" - 16"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 2400										
4" (5')(10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
5" (5')(10')	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
6" (5')(10')	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
8"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
10" - 24"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 3300										
4", 5" (5')(10')	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
6" (5')(10')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
8"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
10" - 36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 4000/5000										
10" - 36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10')

X- INDICATES CHANGE	-REASON: Add 8" 1500 (13') and Adjust 8" 2400 & 8" 3300
AUTHORITY FOR CHANGE	J. E. Hesse's Letters 7/8/66 and 7/20/66
SUPERSEDES:	Same Spec., Same Page, Dated 5-27-66

DIR. Q.C	MGR. Q.C	SUPR. Q.C	PROD. SUPT.	PLNT. ENG.	RES./DEV. LAB.			DATE ISSUED 7-20-66

Form 3[illegible] Printed in U.S.A.

MTC 002840

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

Minimum Usage 13% in 10' Lengths and 14% in 13' Lengths

FIBER LEVEL - % BLEND POINT VALUE	100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
Class 1500*										
6" (10')(5')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
8" (10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
10" - 16"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class 2400										
4" (5')(10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
5" (5')(10')	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
6" (5')(10')	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
8"	24.2	23.8	23.3	22.8	22.4	22.0	21.6	21.2	20.9	20.6
10" - 24"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class 3300										
4", 5" (5')(10')	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
6" (5')(10')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
8"	24.2	23.8	23.3	22.8	22.4	22.0	21.6	21.2	20.9	20.6
10" - 36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class 4000/5000										
10" - 36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3

*Use H-Blend for 4" & 5" Class 1500

The H-Blend is Optional for 6" & 8" Class 1500

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MTC 002841

X- INDICATES CHANGE -REASON:	Reduce Minimum Fiber Usage
AUTHORITY FOR CHANGE	Verbal Authority J. E. Hesse (A. C. Daley's Letter 5/24/66)
SUPERSEDES:	Same Spec., Same Page Dated 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	5-27-66

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value	100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
Class 1500*										
6"(10')(5')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
8"(10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
10"-16"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class 2400										
4"(5')(10')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
5"(5')(10')	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
6"(5')(10')	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
8"	24.2	23.8	23.3	22.8	22.4	22.0	21.6	21.2	20.9	20.6
10"-24"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class 3300										
4",5"(5')(10')	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
6"(5')(10')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
8"	24.2	23.8	23.3	22.8	22.4	22.0	21.6	21.2	20.9	20.6
10"-36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class 4000/5000										
10"-36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3

*Use H-Blend for 4" & 5" Class 1500

MTC 002842

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Delete 6"-13' in Cl. 1500, 2400 & 3300 and 8" -13' in Cl. 1500

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 11-6-62 Product Proposal 425-154

SUPERSEDES: None

MGR. Q.Q.C.	MGR. O.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 10-10-67

Form 333-2-A Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	TR-425-2
		PAGE NO.	3.5

X NOMINAL PERCENT FIBER BLEND - COST STANDARD
MACHINED END PIPE (TF 19 Series)
STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

CANCELLED 2/9/78

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
27",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
30"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
33"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
36"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (10' & 13')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6
15"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
16"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
18"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
27"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
30",33",36",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
Class IV										
6"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
12"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
14"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
15"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
18"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.7	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2
Class V										
8"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
10"	13.1	13.0	12.8	12.6	12.5	12.4	12.2	12.1	12.0	12.0
12"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
14"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
15"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9

X— INDICATES CHANGE —REASON: Cancelation of Mach. End S/D

AUTHORITY FOR CHANGE: Regular Approvals

SUPERSEDES: Same Spec., Page 3.13, dated 12-13-71

MTC 002843

MGR. Q. Q C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	2-23-77

* Pat. Off. & Reg. U.S. Pat. Off.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.5

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 2/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	51	52	53	54	55	56	57	58	59	60
CLASS IV (3000 D)										
12	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4	22.0
14	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
15	16.3	16.0	15.7	15.4	15.1	14.8	14.6	14.3	14.0	13.8
16	18.2	17.9	17.6	17.2	16.9	16.6	16.3	16.0	15.8	15.5
18	17.7	17.3	17.0	16.7	16.3	16.1	15.8	15.5	15.2	15.0
20	18.2	17.9	17.6	17.2	16.9	16.6	16.3	16.0	15.8	15.5
21	19.4	19.0	18.7	18.3	18.0	17.6	17.3	17.0	16.8	16.5
24	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1	14.8
27	16.5	16.1	15.8	15.6	15.3	15.0	14.7	14.5	14.2	13.9
30	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
33	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6	15.3
36	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6	15.3
39	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
42	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6	13.3
CLASS V (3750 D)										
12	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1	14.8
14	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0	18.7	18.3
15	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4	20.0
16	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4	22.0
18	25.3	24.8	24.3	23.9	23.4	23.0	22.6	22.2	21.9	21.6
20	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4	22.0
21	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8	23.3
24	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6	21.2
27	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4	20.0
30	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
33	25.7	25.2	24.7	24.2	23.8	23.4	23.0	22.6	22.2	21.8
36	25.5	25.0	24.5	24.1	23.6	23.2	22.8	22.4	22.0	21.7
39	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3	16.0
42	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0	18.7	18.3

MTC 002844

A– INDICATES CHANGE –REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 11/25/70	LIBRARY

MGR. C. P. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 12/13/71

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.5

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED

UNMACHINED STORM DRAIN PIPE (CLASSES 1500 - 5000)

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	70	71	72	73	74	75	76	77	78	79	80	81
CLASS 5000												
12	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
14	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4	18.2
15	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
16	20.9	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3	18.0
18	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
20	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8	12.6
21	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
24	20.9	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3	18.0
27	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
30	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
33	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4
36	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
CLASS II (1500 D) - (D-LOAD CLASSIFICATION)												
12 - 42	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
CLASS III (2000 D)												
12, 14	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
15	12.9	12.7	12.5	12.4	12.2	12.0	11.9	11.7	11.5	11.4	11.2	11.1
16	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8	12.6
18	13.4	13.2	12.1	12.9	12.7	12.5	12.4	12.2	12.1	11.9	11.7	11.6
20	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
21	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.6	12.4	12.2
24	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
27	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
30	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
33	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4
36, 39, 42	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE	-REASON:	Establish Specification for Unmachined Storm Drain Pipe
AUTHORITY FOR CHANGE		Product Proposal 425-215
SUPERSEDES:		Same Spec., Same Page, Dated 5/23/69

MTC 002845

TYP.	SUBJ.	PROD.	PLNT.				DATE ISSUED	11/25/70

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

IV. STORM DRAIN PIPE (AASHO CLASSES)

Fiber level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	71	72	73	74	75	76	77	78	79	80
Class 1500										
6"-8"	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
10"-16"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
Class 2400										
6"	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
8"-24"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
Class 3300										
6"	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
8"-30"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2
Classes 4000/5000										
10"-36"	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	81	82	83	84	85	86	87	88	89	90
Class 1500										
6"-8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Class 2400										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"-24"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Class 3300										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"-30"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Classes 4000/5000										
10"-36"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

The H-Blend is optional for 6" and 8" Classes 1500, 2400, and 3300.

MTC 002846

X- INDICATES CHANGE -REASON:	Establish Specification For Storm Drain Pipe	PLEASE RETURN TO
AUTHORITY FOR CHANGE	Product Proposal 425-161	J-M RESEARCH
SUPERSEDES:	~~New Page~~ 3/14/68	LIBRARY (MM)

MGR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 5/23/69

POST CO. 186-3 50197

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

BLEND LEVEL %	95	95	95	95	95	95	95	95	95	95	95
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
CLASS 1500*											
6" (10') (5')	14.8	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.1	12.9	12.7
6" (13')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
8" (10')	14.8	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.1	12.9	12.7
8" (13')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
10"-16"	15.3	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
CLASS 2400											
4" (10') (5')	15.3	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
5" (10') (5')	15.5	15.3	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.5	13.3
6" (10') (5')	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2	13.0
6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
8"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
10"-24"	15.3	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
CLASS 3300											
4"-5" (10') (5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
6" (10') (5')	17.6	17.3	16.7	16.8	16.5	16.3	16.0	15.8	15.6	15.4	15.2
6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
8"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
10"-36"	15.3	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
CLASS 4000/5000											
10"-36"	15.3	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4", 5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 3/11/68

MTC 002847

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. O. C	MGR. O. C.	SUPR. O. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 3/14/68

F. POST CO. 180-3 80197

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

BLEND LEVEL % BLEND POINT VALUE	95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
CLASS 1500*											
6" (10') (5')	14.8	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.1	12.9	12.7
6" (13')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
8" (10')	14.8	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.1	12.9	12.7
8" (13')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
10"-16"	16.2	15.9	15.6	15.4	15.2	15.0	14.7	14.4	14.2	14.0	13.8
CLASS 2400											
4" (10') (5')	15.3	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
5" (10') (5')	15.5	15.3	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.5	13.3
6" (10') (5')	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2	13.0
6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
8"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
10"-24"	16.2	15.9	15.6	15.4	15.2	15.0	14.7	14.4	14.2	14.0	13.8
CLASS 3300											
4"-5" (10') (5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
6" (10') (5')	17.6	17.3	16.7	16.8	16.5	16.3	16.0	15.8	15.6	15.4	15.2
6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
8"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
10"-36"	16.2	15.9	15.6	15.4	15.2	15.0	14.7	14.4	14.2	14.0	13.8
CLASS 4000/5000											
10"-36"	16.2	15.9	15.6	15.4	15.2	15.0	14.7	14.4	14.2	14.0	13.8

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" Class 1500 (10') and 4", 5" and 6" 2400 (10')(5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON:	EXTEND OPTIONAL USE OF H-BLEND AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13' LENGTHS.
AUTHORITY FOR CHANGE	VERBAL AUTHORITY J. E. HESSE
SUPERSEDES:	SAME SPEC, PAGE 3.1 DATED 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB			DATE ISSUED	5-1-67

MTC 002848

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,DW,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	9.5

NOMINAL PERCENT FIBER BLEND - COSTS TANDARD:

III. SEWER PIPE

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - %	95	95	95	95	95	95	95	95	95	95
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class 1500* 6"(5')										
(10')	17.8	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1
8"(10')	17.8	17.4	17.1	16.8	16.5	16.2	15.9	15.6	15.4	15.1
10"-16"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
Class 2400 4"(5')										
(10')	18.4	18.0	17.7	17.4	17.0	16.7	16.4	16.1	15.9	15.6
5"(5')										
(10')	18.6	18.2	17.9	17.6	17.2	16.9	16.6	16.3	16.1	15.8
6"(5')										
(10')	18.2	17.9	17.5	17.2	16.9	16.5	16.3	16.0	15.7	15.4
8"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.7	19.5
10"-24"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
Class 3300 4", 5" (5')(10')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
6"(5')										
(10')	21.2	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.3	18.0
8"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.7	19.5
10"-30"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5
Class 4000/5000 10"-36"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16.5

*Use H-Blend for 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

MTC 002849

X— INDICATES CHANGE	—REASON: Delete 6"-13' in Cl. 1500, 2400 & 3300 and 8"-13' in Cl. 1500
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 11-6-62 Product Proposal 425-154
SUPERSEDES:	None

MGR. G.C.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 10-10-63

Form 3332-A Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV:	PIPE
		SPEC NO.	TR-425-2
		PAGE NO.	3.6

X NOMINAL PERCENT FIBER BLEND - COST STANDARDS
MACHINED END PIPE (TP 19 Series)

STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class II										
12"	18.2	17.8	17.5	17.2	16.8	16.5	16.2	16.0	15.7	15.4
14"	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
15"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
16"	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
18"	20.6	20.2	19.8	19.4	19.1	18.7	18.4	18.0	17.8	17.5
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69
Class II										
12"	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2
14"	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6
15"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9
16"	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2
18"	17.2	16.8	16.6	16.4	16.0	15.8	15.6	15.4	15.2	15.0
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
15"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
16"	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4
18"	14.8	14.6	14.3	14.1	14.0	13.8	13.6	13.4	13.2	13.0
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
15"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
16"	12.3	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
18"	12.9	12.7	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0

X— INDICATES CHANGE —REASON: Cancelation of Mach. End S/D

AUTHORITY FOR CHANGE: Regular Approvals

SUPERSEDES: Same Spec., Page 3.14, dated 12-13-71

MGR. G. S. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.				DATE ISSUED	2-23-77

MTC 002850

P 2057 CO 1843 5M187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 2/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	61	62	63	64	65	66	67	68	69	70
CLASS II (1500 D)										
12,42	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
CLASS III (2000 D)										
12,14	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
15	13.5	13.3	13.1	13.0	12.8	12.6	12.4	12.2	12.0	11.8
16	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
18	14.1	13.9	13.6	13.4	13.2	13.0	12.8	12.6	12.5	12.3
20	15.3	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.5	13.2
21	15.6	15.4	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.6
24	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.2	13.0	12.8
27	14.5	14.3	14.0	13.7	13.5	13.3	13.1	13.0	12.8	12.6
30	13.7	13.5	13.3	13.1	12.9	12.7	12.5	12.3	12.2	12.0
33	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.2	13.0	12.8
36	14.3	14.1	13.8	13.6	13.4	13.2	13.0	12.8	12.6	12.4
39,42	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
(2500 D)										
12	16.4	16.1	15.9	15.6	15.4	15.1	14.9	14.7	14.5	14.3
14	19.0	18.7	18.4	18.1	17.8	17.5	17.3	17.0	16.8	16.6
15	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.6	17.3	17.0
16	21.5	21.1	20.8	20.4	20.1	19.8	19.5	19.3	19.0	18.8
18	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
20	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
21	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
24	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4	18.2
27	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
30	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
33	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4	18.2
36	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.9
39	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
42	17.8	17.6	17.3	17.0	16.8	16.5	16.2	16.0	15.8	15.6

MTC 002851

X- INDICATES CHANGE -REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 11/25/70	LIBRARY

MGR. Q.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 12/13/71

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED

UNMACHINED STORM DRAIN PIPE (D-LOAD CLASSIFICATION)

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	70	71	72	73	74	75	76	77	78	79	80	81
(2500 D)												
12	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4
14	13.1	13.0	12.8	12.6	12.4	12.3	12.1	11.9	11.8	11.6	11.5	11.4
15	19.4	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0	16.8
16	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4
18	20.2	19.9	19.6	19.4	19.0	18.8	18.6	18.3	18.1	17.8	17.6	17.4
20	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4
21	21.2	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3
24	20.9	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3	18.0
27	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
30	20.9	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3	18.0
33, 36, 39, 42	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
CLASS IV (3000 D)												
12	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
14	11.4	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9
15	12.6	12.4	12.2	12.0	11.9	11.7	11.6	11.4	11.3	11.1	11.0	10.9
16	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3	12.1
18	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
20	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8	12.6
21	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
24	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.6	12.4	12.2
27	12.4	12.2	12.0	11.9	11.8	11.6	11.4	11.3	11.2	11.0	10.8	10.7
30	12.0	11.8	11.7	11.5	11.4	11.2	11.1	10.9	10.8	10.6	10.5	10.4
33	13.8	13.6	13.4	13.3	13.2	13.0	12.8	12.6	12.4	12.3	12.2	12.0
36	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3
39	12.9	12.7	12.5	12.4	12.2	12.0	11.9	11.7	11.5	11.4	11.2	11.1
42	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5	12.3

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE	-REASON:	Establish Specification for Unmachined Storm Drain Pipe
AUTHORITY FOR CHANGE		Product Proposal 425-215
SUPERSEDES:		Same Spec., Same Page, Dated 1/7/70

MTC 002852

PRD.	RES.	SUPT.	MOD. SUPT.	PLNT.			DATE ISSUED	11/25/70

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

	Fiber Level %	100	100	100	100	100	100	100	100	100	100
	Blend Point Value	50	51	52	53	54	55	56	57	58	59
	Class II										
	20"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	21"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
	24"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
X	27",39",42"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	30"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
	33"	23.2	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	19.7
	36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
	Class III										
	6"	16.0	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6
X	8" (10' & 13')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
	10"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
	12"	18.2	17.8	17.5	17.2	16.8	16.5	16.2	16.0	15.7	15.4
	14"	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
	15"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	16"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
	18"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
	20"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	21"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
	24"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	27"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
X	30",33",36",39",42"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	Class IV										
	6"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	8"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
	10"	23.2	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	19.7
	12"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
	14"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
	15"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
	16"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	18"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
	20"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	21"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
	Class V										
	8"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
	10"	21.0	20.6	20.2	19.8	19.4	19.1	18.8	18.4	18.1	17.8
	12"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
	14"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
	15"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
	16"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5

X- INDICATES CHANGE —REASON: Establish Specifications for 39" & 42" CL II & CL III Storm Drain Pipe and Correct 8" CL III.

AUTHORITY FOR CHANGE: Product Proposal 425-214

SUPERSEDES: Same Spec., Same Page, Dated 5/23/69

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLANT ENG.				DATE ISSUED 1-7-70

PLEASE RETURN TO J-M RESEARCH LIBRARY (M-A)

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class II										
20"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
21"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
24"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
27"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
30"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
33"	23.2	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	19.7
36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
Class III										
6"	16.0	15.7	15.4	15.1	14.8	14.5	14.3	14.0	13.8	13.6
8"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
10"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
12"	18.2	17.8	17.5	17.2	16.8	16.5	16.2	16.0	15.7	15.4
14"	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
15"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
16"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
18"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
20"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
21"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
24"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
27"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
30", 33", 36"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
Class IV										
6"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
8"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
10"	23.2	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	19.7
12"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
14"	23.4	23.0	22.5	22.0	21.6	21.3	21.0	20.6	20.2	19.8
15"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
16"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
18"	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.2	17.9	17.6
20"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
21"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
Class V										
8"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5
10"	21.0	20.6	20.2	19.8	19.4	19.1	18.8	18.4	18.1	17.8
12"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
14"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
15"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
16"	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.8	19.5

X- INDICATES CHANGE	REASON:	Establish Specifications For Storm Drain Pipe	PLEASE RETURN TO
AUTHORITY FOR CHANGE		Product Proposal 425-205	J-M RESEARCH
SUPERSEDES:	New Page	3/14/68	LIBRARY (MM)

MGR. Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	[illegible]			DATE ISSUED 5/23/69

F POST CO 1363 80137

MTC 002854

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND %	95	95	95	95	95	95	95	95	95	95
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500*										
6" (10') (5')	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
8" (10')	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13')	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
10"-16"	13.0	12.8	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	13.0	12.8	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0
5" (10') (5')	13.1	12.9	12.7	12.5	12.4	12.2	12.0	12.0	12.0	12.0
6" (10') (5')	12.8	12.6	12.5	12.3	12.1	12.0	12.0	12.0	12.0	12.0
6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
8"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
10"-24"	13.0	12.8	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0
CLASS 3300										
4"-5" (10') (5')	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
6" (10') (5')	14.9	14.7	14.5	14.3	14.2	14.0	13.8	13.6	13.4	13.2
6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
8"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
10"-36"	13.0	12.8	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0
CLASS 4000/5000										
10"-36"	13.0	12.8	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" 1500 (10') and 4", 5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE	REASON:	Reduce Fiber Usage 10"-36" Sewer Pipe	
AUTHORITY FOR CHANGE		J. E. Hesse's letter 3/11/68	MTC 002855
SUPERSEDES:		Same Spec., Same Page, Dated 5/1/67	

MGR. G. O. C	MGR. O. C.	SUPR. O. C.	PROD. SUPT.	PLNT. FNN.	MFG. LAB			DATE ISSUED	3/14/68

F. POST CO. 1845 8187

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND % BLEND POINT VALUE	95 71	95 72	95 73	95 74	95 75	95 76	95 77	95 78	95 79	95 80
CLASS 1500*										
6" (10') (5')	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
8" (10')	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13')	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
10"-15"	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3	12.1
CLASS 2400										
4" (10') (5')	13.0	12.8	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0
5" (10') (5')	13.1	12.9	12.7	12.5	12.4	12.2	12.0	12.0	12.0	12.0
6" (10') (5')	12.8	12.6	12.5	12.3	12.1	12.0	12.0	12.0	12.0	12.0
6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
8"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
10"-24"	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3	12.1
CLASS 3300										
4" - 5" (10') (5')	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
6" (10') (5')	14.9	14.7	14.5	14.3	14.2	14.0	13.8	13.6	13.4	13.2
6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
8"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
10"-36"	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3	12.1
CLASS4000/5000										
10"-36"	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4	12.3	12.1

* Use H-Blend for 5" and 5" Class 1500
The H-Blend is Optional for 6" and 8" 1500 (10') and 4",5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-BLEND AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: 10/10/63

DIR.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED	5-1-67

Pld. in U.S.A.

Form 333-2

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W, D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	3.6

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE
Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value	105 50	105 51	105 52	105 53	105 54	105 55	105 56	105 57	105 58	105 59
Class 1500* 6"(5') (10')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8
8"(10')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8
10"-16"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
Class 2400 4"(5') (10')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
5"(5') (10')	20.6	20.2	19.8	19.5	19.1	18.7	18.4	18.1	17.8	17.5
6"(5') (10')	20.2	1918	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17.1
8"	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6
10"-24"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
Class 3300 4", 5" (5'&10')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
6"(5') (10')	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.9
8"	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6
10"-36"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
Class 4000/5000 10"-36"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2

MTC 002857

*Use H-Blend for 4" & 5" Class 1500

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON: Delete 6"-13' in Cl. 1500, 2400, 3300 and 8"-13' in Cl. 1500								
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 11-6-62 Product Proposal 425-154								
SUPERSEDES:	None								
MGR. C.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED	12-20-62

Form 333-2-A Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE * PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.7

CANCELLED 2/23/77

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	61	62	63	64	65	66	67	68	69	70
CLASS IV (3000 D)										
12	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
14	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
15	13.5	13.3	13.1	13.0	12.8	12.6	12.4	12.2	12.0	11.8
16	15.3	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.5	13.2
18	14.8	14.5	14.3	14.1	13.9	13.7	13.5	13.3	13.1	12.9
20	15.3	15.1	14.8	14.6	14.4	14.2	14.0	13.8	13.5	13.2
21	16.2	16.0	15.8	15.5	15.2	15.0	14.8	14.6	14.4	14.2
24	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.2	13.0	12.8
27	13.7	13.5	13.3	13.1	12.9	12.7	12.5	12.3	12.2	12.0
30	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
33	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
36	15.1	14.9	14.7	14.5	14.2	14.0	13.8	13.6	13.3	13.1
39	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
42	13.1	12.9	12.7	12.5	12.3	12.1	11.9	11.8	11.6	11.4
CLASS V (3750 D)										
12	14.6	14.4	14.2	13.9	13.7	13.5	13.3	13.2	13.0	12.8
14	18.0	17.7	17.4	17.1	16.9	16.7	16.4	16.2	15.9	15.7
15	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
16	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
18	21.1	20.8	20.4	20.1	19.8	19.5	19.2	19.0	18.8	18.5
20	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
21	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
24	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7	18.4	18.2
27	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
30	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
33	21.5	21.1	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7
36	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
39	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9	13.7
42	18.0	17.7	17.4	17.1	16.9	16.7	16.4	16.2	15.9	15.7

X- INDICATES CHANGE	-REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE		J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 11/25/70	LIBRARY

MGR. G. & C	MGR. Q. C	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.			DATE ISSUED 12/13/71

MTC 002858

Denver WHQ
Pipe Division

February 23, 1977

A. C. Daley	- WHQ, 2-11	J. W. Bird	- STOCKTON PLANT
P. E. Dix	- DENVER RESEARCH	C. G. Bryant	- MANVILLE PLANT
[redacted]		B. E. Liming	- GREEN COVE PLANT
K. J. Whalen	- WHQ, 1-05	W. E. Brausa	- WAUKEGAN PLANT
A. Chaudhuri	- TORONTO PLANT	A. M. Curry	- DENISON PLANT
R. F. Henry	- MANVILLE PLANT	H. F. Kahlen	- LONG BEACH PLANT
C. G. Stelchek	- GREEN COVE PLANT	T. W. Duecker	- STOCKTON PLANT
J. W. Christopher	- WAUKEGAN PLANT	E. VanDerMeer	- WHQ, 2-11
L. I. Richards	- DENISON PLANT	File (1)	
W. A. Ford	- LONG BEACH PLANT		

MANUFACTURING SPECIFICATION: TR-425-2

TRANSITE*: **Pipe Machine Furnishes**

Since the Unmachined Storm Drain Product Line has been canceled, the following revisions are to be made to the above Manufacturing Specification.

ADD the following pages to your file and CANCEL prior issues of same.

MANUFACTURING SPECIFICATION: TR-425-2
PAGES: 3.4, 3.5 & 3.6

CANCEL the following pages from your file.

MANUFACTURING SPECIFICATION: TR-425-2
PAGES: 3.7, 3.8, 3.9, 3.10, 3.11, 3.12, 3.13 & 3.14

J. J. Kriso
jd

Attachments

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (CONT'D)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
**Water 6"-16" All Classes* & 3"-12" Type 25 Irrigation	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0	17.5	17.0
** Water All Other Sizes and Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5	16.0	15.5
X "R" Irrig. and "T" Transmission	29	27.5	26	24.5	23.5	23.0	22.0	21.5	21.0	20.5	19.5	19.0
Sewer 4"-36" All Classes*	21.	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Irrigation All Sizes Types 5 & 15	21	19.5	18.5	18	17.	16.5	16.0	15.5	15.0	14.5	14.0	14.0

Other Products (IV Above) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

TRANSITE couplings and fittings are produced with the same percentage of H-Blend as the pipe in the same product group.

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

**NOTE: Water, R-Irrigation and Type 25 Irrigation Coupling stock for Sizes 4" and above is to be formed only on the 13 foot pipe machines.

MTC 002860

X- INDICATES CHANGE -REASON:	Increase Fiber Content of "R" and "T" Couplings	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. E. Hesse's wire of 7/3/69	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 11/10/67	LIBRARY (MM)

MGR.	MGR. Q.C.	SUPR. Q.C.	PRED. DEPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 7/7/69

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
**Water &"R" Irrigation 6"-16" All Classes* & 3"-12" Type 25 Irrigation	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0	17.5	17.0
**Water &"R" Irrigation All Other Sizes and Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5	16.0	15.5
Sewer 4"-36" All Classes*	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Irrigation All Sizes Type 5&15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0

X Other Products (IV Above) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

A. 3" Building Sewer

B. Telephone Duct, Conduit and Korduct

C. Gas Vent

D. Industrial Vent All Sizes

E. Underdrain 10% H-Blend

F. Plumbing Vent

G. Air Duct

MTC 002861

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water Or Sewer Couplings Must Contain at Least 10% Blue Fiber.

**NOTE: Water, R-Irrig. and Type 25 Irrig. Cplg. Stock for Sizes 4" and Above is to be formed only on the 13 ft. Pipe Machines.

X- INDICATES CHANGE -REASON:	Delete Conduit Casing Couplings	PLEASE RETURN TO
AUTHORITY FOR CHANGE	E. Stoltz's letter of 10/17/67 to A. C. Daley	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 9/26/66	LIBRARY (MM)

MGR. G.Q.C	MGR. G.C.	SUPR. G.C.	PROD. SUPT.	PLNT. FIN.	REG. LAB.			DATE ISSUED	11/10/67

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
**Water & "R" Irrig. 6"-16" All Classes* & 3"-12" Type 25 Irrig.	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0	17.5	17.0
**Water & 'R" Irrig. All Other Sizes and Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5	16.0	15.5
Sewer 4"-36" All Classes*	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Irrigation All Sizes Type 5&15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Conduit Cas ing (All)	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0

Other Products (IV Above) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

A. 3" Building Sewer
B. Telephone Duct, Conduit and Korduct
C. Gas Vent
D. Industrial Vent
E. Underdrain
F. Plumbing Vent
G. Air Duct

All Sizes 10% H-Blend

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber

**NOTE: Water, R-Irrig. and Type 25 Irrig. Cplg. Stock for Sizes 4" and Above is to be formed only on the 13 ft. Pipe Machines.

X- INDICATES CHANGE -REASON: Add Conduit Casing Couplings

AUTHORITY FOR CHANGE: Prod. Prop. 425-184 and J. E.Hesse's Letter 6-14-66

SUPERSEDES: Same Spec., Same Page, Dated 5-27-66

DIR Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED 9-26-66

MTC 002862

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
**Water & "R" Irrig. 6"-16" All Classes* & 3"-12" Type 25 Irrig.	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0	17.5	17.0
**Water & "R" Irrig. All Other Sizes and Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5	16.0	15.5
Sewer 4"-36" All Classes*	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Irrigation All Sizes Type 5 & 15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0

Other Products (IV Above) Same as Pipe Except as Noted

2. Non-Pressurized Products - (H-Blend Formulation)

A. 3" Building Sewer

B. Telephone Duct, Conduit and Korduct

C. Gas Vent

D. Industrial Vent — All Sizes 10% H-Blend

E. Underdrain

F. Plumbing Vent

G. Air Duct

MTC 002863

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

**NOTE: Water, R-Irrig, and Type 25 Irrig. Cplg. Stock for Sizes 4" and Above is to be Formed Only on the 13 ft. Pipe Machines.

X- INDICATES CHANGE	-REASON: Extend Table for Higher Point Values
AUTHORITY FOR CHANGE	Verbal Authority J. E. Hesse (A. C. Daley's Letter 5-24-66)
SUPERSEDES:	Same Page, Same Spec., Dated 2-2-66

DIV. [illegible]	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED 5-27-66

Form 333-2 Pld. In U.S.A.

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75
**Water and "R" Irrigation 6"-16" All Classes* and 3"-12" Type 25 Irrigation	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0
**Water and "R" Irrigation All Other Sizes & Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5
Sewer 4"-36" All Classes*	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Irrigation All Sizes Type 5 and 15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0

Other Products (IV Above) Same as Pipe Except as Noted

2. Non-Pressurized Products - (H-Blend Formulatinn)

A. 3" Building Sewer

B. Telephone Duct, Conduit and Korduct

C. Gas Vent

D. Industrial Vent — All Sizes 10% H-Blend

E. Underdrain

F. Plumbing Vent

G. Air Duct

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

**NOTE: Water, R-Irrigation, and Type 25 Irrigation Coupling Stock for Sizes 4" and Above is to be Formed Only on the 13 Ft. Pipe Machines.

X— INDICATES CHANGE	—REASON: Add Note on Coupling Stock 4" and Above									
AUTHORITY FOR CHANGE	J. B. McCarty's Letter 2-2-66									
SUPERSEDES:	Same Spec., Same Page Dated 7-16-65									
MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. MGR.				DATE ISSUED	2-2-66

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

Form 333-2-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

		50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75
X	Water and "R" Irrigation 6"-16" All Classes* and 3"-12" Type 25 Irrigation	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0
X	Water and "R" Irrigation All Other Sizes & Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5
	Sewer 4"-36" All Classes*	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
	Irrigation All Sizes Type 5 and 15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
	Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

A. 3" Building Sewer

B. Telephone Duct, Conduit and Kordnct

C. Gas Vent

D. Industrial Vent — All Sizes 10% H-Blend

E. Underdrain

F. Plumbing Vent

G. Air Duct

MTC 002865

*NOTE: any blend of fibers used for the manufacture of 6"-16" Water or Sewer couplings must contain at least 10% blue fiber.

PLEASE RETURN TO

X— INDICATES CHANGE	—REASON: Add "R" Irrigation and TYPe 25 Irrigation								J-M RESEARCH	
AUTHORITY FOR CHANGE	J. B. McCarty's letter 3-1-65 and 5-11-65								LIBRARY (MM)	
SUPERSEDES:	Same Spec., Same Page Dated 12-17-64									
MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED	7-16-65	

Form 333-2-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D, & R PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (C ont'd)

VI. COUPLING STOCK -ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75
X Water 6"-16" All Classes*	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0
Water All Other Sizes & Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5
X Sewer 4"-36" All Classes*	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Irrigation All Sizes Type 5, 10, & 15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

A. 3" Building Sewer

B. Telephone Duct, Conduit and Korduct

C. Gas Vent

D. Industrial Vent — All Sizes 10% H-Blend

E. Underdrain

F. Plumbing Vent

G. Air Duct

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

*NOTE: Any Blend of Fibers Used For The Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

MTC 002866

X— INDICATES CHANGE	—REASON: Specify 10% Minimum Blue Fiber in Blends for 6"-16" Water & Sewer Couplings
AUTHORITY FOR CHANGE	J. B. McCarty's Letter 11/16/64
SUPERSEDES:	Same Spec., Same Page Dated 10/16/64

MCR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED	12-17-64

Form 333-2-A Pid. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.7

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED

UNMACHINED STORM DRAIN PIPE (D-LOAD CLASSIFICATION)

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100	100
BLEND FIBER VALUE	70	71	72	73	74	75	76	77	78	79	80	81
CLASS V (3750 D)												
12	12.6	12.4	12.2	12.0	11.9	11.7	11.6	11.4	11.3	11.1	11.0	10.9
14	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5	14.3
15	19.1	18.9	18.6	18.4	18.1	17.9	17.6	16.4	17.2	17.0	16.8	16.5
16	20.9	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3	18.0
18	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
20	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
21	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4
24	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
27	19.1	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8	16.5
30	18.3	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0	15.8
33	20.9	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3	18.0
36	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.4	19.1	18.8	18.6	18.4
39, 42	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5

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LIBRARY (MM)

X- INDICATES CHANGE	-REASON:	Establish Specification for Unmachined Storm Drain Pipe
AUTHORITY FOR CHANGE		Product Proposal 425-215
SUPERSEDES:		Same Spec., Same Page, Date 1/7/70

MTC 002867

MGR. G. O. C	MGR. O. C.	SUPR. O. C.	PROD. SUPT.	PLNT. FIN.	REG. LAB.			DATE ISSUED
								11/25/70

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.7

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

	Fiber Level %	100	100	100	100	100	100	100	100	100	100
	Blend Point Value	60	61	62	63	64	65	66	67	68	69
	Class II										
	20"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	21"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
	24"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
X	27",39",42"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	30"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
	33"	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	17.0	16.8
	36"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
	Class III										
	6"	13.3	13.1	12.9	12.7	12.5	12.3	12.1	12.0	12.0	12.0
X	8" (10' & 13')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6
	10"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
	12"	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2
	14"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2
	15"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	16"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
	18"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
	20"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	21"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
	24"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	27"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
X	30",33",36",39",42"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	Class IV										
	6"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	8"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9
	10"	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	17.0	16.8
	12"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
	14"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
	15"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
	16"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	18"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
	20"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	21"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1
	Class V										
	8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
	10"	17.5	17.2	16.9	16.6	16.4	16.2	15.9	15.6	15.4	15.2
	12"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
	14"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
	15"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
	16"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6

X- INDICATES CHANGE — REASON: Establish Specfications for 39" & 42" CL II & CL III Storm Drain Pipe and Correct 8" CL III.

AUTHORITY FOR CHANGE: Product Proposal 425-214

SUPERSEDES: Same Spec., Same Page, Dated 5/23/69

MGR. Q. C. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLANT. ENG.			DATE ISSUED 1-7-70

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JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.7

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

V, STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69
Class II										
20"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
21"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
24"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
27"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
30"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
33"	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	17.0	16.8
36"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
Class III										
6"	13.3	13.1	12.9	12.7	12.5	12.3	12.1	12.0	12.0	12.0
8"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
10"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
12"	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2
14"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2
15"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
16"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
18"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
20"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
21"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
24"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
27"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
30", 33", 36"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
Class IV										
6"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
8"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9
10"	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	17.0	16.8
12"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
14"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	17.0
15"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
16"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
18"	17.3	17.0	16.7	16.5	16.2	16.0	15.7	15.5	15.3	15.1
20"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
21"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1
Class V										
8"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6
10"	17.5	17.2	16.9	16.6	16.4	16.2	15.9	15.6	15.4	15.2
12"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
14"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8
15"	17.8	17.5	17.2	17.0	16.7	16.4	16.2	16.0	15.8	15.5
16"	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.6

X- INDICATES CHANGE — REASON: Establish Specifications for Storm Drain Pipe

AUTHORITY FOR CHANGE: Product Proposal 425-205

SUPERSEDES: ~~New Page~~ 5/1/67

A. Q C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. ENG.	PLNT. MGR.			DATE ISSUED	5/2 3/69

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

MTC 002869

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.7

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

FIBER BLEND % BLEND POINT VALUE	95 81	95 82	95 83	95 84	95 85	95 86	95 87	95 88	95 89	95 90
CLASS 1500*										
6" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
8" (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13')	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
10"-16"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (10') (5')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
8"	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
10"-24"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 3300										
4"-5" (10') (5')	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
6" (10') (5')	13.1	12.9	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0
6" (13')	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
8	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
10"-36"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 4000/5000										
10"-36"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" 150) (10') and 4",5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-BLEND AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY JR.K. HESSE

SUPERSEDES:

DIR. Q.C.	INSP. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG			DATE ISSUED 5-1-67
					MONK			

Form 333-2 Pd. In U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.8

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 2/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS II (1500 D)										
12,42	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
CLASS III (2000 D)										
12,14	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
15	11.6	11.5	11.3	11.2	11.0	10.9	10.8	10.6	10.5	10.3
16	13.0	12.8	12.6	12.4	12.3	12.1	11.9	11.8	11.6	11.5
18	12.1	11.9	11.8	11.6	11.5	11.3	11.2	11.0	10.9	10.7
20	13.1	13.0	12.8	12.6	12.4	12.2	12.0	11.9	11.8	11.6
21	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0	11.8
24	12.6	12.4	12.2	12.0	11.8	11.7	11.5	11.4	11.2	11.1
27	12.4	12.2	12.0	11.9	11.7	11.6	11.4	11.3	11.1	11.0
30	11.8	11.7	11.5	11.4	11.2	11.1	10.9	10.8	10.6	10.5
33	12.6	12.4	12.2	12.0	11.8	11.7	11.5	11.4	11.2	11.1
36	12.2	12.0	11.9	11.8	11.6	11.4	11.3	11.2	11.0	10.8
39,42	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
(2500 D)										
12	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7	12.5
14	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5
15	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
16	18.4	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4
18	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
20	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
21	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
24	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
27	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
30	16.9	16.7	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0
33	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
36	17.6	17.4	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
39	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
42	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6

MTC 002871

X- INDICATES CHANGE -REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. F.Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 1/7/70	LIBRARY

MGR. G.O.C	MGR. O.C.	SUPR. O.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 12/13/71

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.8

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

CANCELLED

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

	Fiber Level %	100	100	100	100	100	100	100	100	100	100
	Blend Point Value	70	71	72	73	74	75	76	77	78	79
	Class II										
	20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
	24"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
X	27",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	30"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
	33"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
	36"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
	Class III										
	6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
X	8" (10' & 13')	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
	10"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
	12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
	14"	16.0	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2
	15"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	16"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
	18"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
	20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
	24"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	27"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
X	30",33",36",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	Class IV										
	6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	8"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
	10"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
	12"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
	14"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
	15"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
	16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	18"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
	20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	21"	16.9	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
	Class V										
	8"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	10"	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3
	12"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
	14"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
	15"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
	16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6

X- INDICATES CHANGE — REASON: Establish Specification for 39" & 42" CL II & CL III Storm Drain Pipe and Correct 8" CL III.

AUTHORITY FOR CHANGE: Product Proposal 452-214

SUPERSEDES: Same Spec., Same Page, Dated 5/23/69

MGR. G. Q. C	MGR. Q. C.	SUPT. Q. C.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED 1-7-70

PLEASE RETURN TO J-M RESEARCH LIBRARY (JM)

MTC 002872

F POST CO. 1283 80187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.8

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
27"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
30"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
33"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
36"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
10"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	16.0	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2
15"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
16"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
18"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
27"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
30", 33", 36"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
Class IV										
6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
10"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
12"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
14"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
15"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
18"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.9	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
Class V										
8"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
10"	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3
12"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
14"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
15"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6

X- INDICATES CHANGE — REASON: Establish Specifications for Storm Drain Pipe

AUTHORITY FOR CHANGE: Product Proposal 452-205

SUPERSEDES: ~~New Page~~ 3/14/68

MGR. Q. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED
								5/23/69

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

F. PROT CO. 136-8 8/67

MTC 002873

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.8

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER LEVEL %	105	105	105	105	105	105	105	105	105	105
BLEND POINT VALUE	50	51	52	53	54	55	56	57	58	59
CLASS 1500										
6" (10') (5')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8
6" (13')	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
8" (10')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8
8" (13')	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
10"-16"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 2400										
4" (10') (5')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
5" (10') (5')	20.6	20.2	19.8	19.5	19.1	18.7	18.4	18.1	17.8	17.5
6" (10') (5')	20.2	19.8	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17.1
6" (13')	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
8"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
10"-24"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 3300										
4"-5" (10') (5')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
6" (10') (5')	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.9
6" (13')	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
8"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
10"-36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
CLASS 4000/5000										
10"-36"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" 1500 (10') and 4", 5", and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter, 3/11/68

MTC 002874

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. O. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	DEC. LAB			DATE ISSUED	3/14/68

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.8

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE ~~SEWER PIPE~~

FIBER LEVEL % BLEND POINT VALUE	105 50	105 51	105 52	105 53	105 54	105 55	105 56	105 57	105 58	105 59
CLASS 1500										
6" (10') (5')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8
6" (13')	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
8" (10')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8
8" (13')	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
10"-16"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
CLASS 2400										
4" (10') (5')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.3
5" (10') (5')	20.6	20.2	19.8	19.5	19.1	18.7	18.4	18.1	17.8	17.5
6" (10') (5')	20.2	19.8	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17.1
6" (13')	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
8"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
10"-24"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
CLASS 3300										
4" -5" (10') (5')	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
6" (10') (5')	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.9
6" (13')	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
8"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
10"-36"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2
CLASS 4000/5000										
10"-36"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" 1500 (10') and 4", 5", and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (JM)

X— INDICATES CHANGE —REASON: EXTEND OPTIONAL USE OF H-blend REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

MTC 002875

SUPERSEDES: SAME SPEC, PAGE 3.6 DATED 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED 5-.1- 67

Form 333-2 Pd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.9

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 7/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS IV (3000 D)										
12	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
14	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
15	11.6	11.5	11.3	11.2	11.0	10.9	10.8	10.6	10.5	10.3
16	13.1	13.0	12.8	12.6	12.4	12.2	12.0	11.9	11.8	11.6
18	12.7	12.5	12.4	12.2	12.0	11.9	11.7	11.5	11.4	11.2
20	13.1	13.0	12.8	12.6	12.4	12.2	12.0	11.9	11.8	11.6
21	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.6	12.4
24	12.6	12.4	12.2	12.0	11.8	11.7	11.5	11.4	11.2	11.1
27	11.8	11.7	11.5	11.4	11.2	11.1	10.9	10.8	10.6	10.5
30	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
33	13.0	12.8	12.6	12.4	12.3	12.1	11.9	11.8	11.6	11.5
36	13.0	12.8	12.6	12.4	12.3	12.1	11.9	11.8	11.6	11.5
39	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
42	11.3	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0
CLASS V (3750 D)										
12	12.6	12.4	12.2	12.0	11.8	11.7	11.5	11.4	11.2	11.1
14	15.5	15.3	15.1	14.9	14.7	14.5	14.3	14.1	13.9	13.8
15	16.9	16.7	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0
16	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
18	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4	16.2
20	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
21	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
24	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
27	16.9	16.7	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0
30	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
33	18.4	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4
36	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
39	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2	12.0
42	15.5	15.3	15.1	14.9	14.7	14.5	14.3	14.1	13.9	13.8

MTC 002876

X- INDICATES CHANGE	-REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE		J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 1/7/70	LIBRARY

MGR. G. & C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	[illegible]			DATE ISSUED 12/13/71

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.9

CANCELLED

NOMINAL PERCENT FIBER BLEND - COST STANDARD

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

	Fiber Level %	100	100	100	100	100	100	100	100	100	100
	Blend Point Value	80	81	82	83	84	85	86	87	88	89
	Class II										
	20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
	24"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
X	27",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	30"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
	33"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
	36"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
	Class III										
	6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
X	8" (10' & 13')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	10"	12.8	12.8	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
	12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	14"	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6
	15"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	16"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
	18"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
	20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
	24"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	27"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
X	30",33",36",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	Class IV										
	6"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
	10"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
	12"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
	14"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
	15"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
	16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	18"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
	20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	21"	14.7	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2
	Class V										
	8"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
	10"	13.1	13.0	12.8	12.6	12.5	12.4	12.2	12.1	12.0	12.0
	12"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
	14"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
	15"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
	16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9

X- INDICATES CHANGE —REASON: Establish Specifications for 39" & 42" CL II & CL III Storm Drain and Correct 8" CL III.

AUTHORITY FOR CHANGE: Product Proposal 425-214

SUPERSEDES: Same Spec., Same Page, Dated 5/23/69

MGR. Q. C.	MGR. Q. C.	SUPT. Q. C.	PERS. DEPT.	PLNT. ENG.	MFG.				DATE ISSUED 1-7-70

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

MTC 002877

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.9

NOMINAL PERCENT FIBER BLEND - COST STANDARD

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
27"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
30"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
33"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
36"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
10"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6
15"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
16"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
18"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
27"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
30", 33", 36"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
Class IV										
6"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
12"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
14"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
15"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
18"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.7	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2
Class V										
8"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
10"	13.1	13.0	12.8	12.6	12.5	12.4	12.2	12.1	12.0	12.0
12"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
14"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
15"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9

X- INDICATES CHANGE	-REASON:	Establish Specifications for Storm Drain Pipe
AUTHORITY FOR CHANGE		Product Proposal 425-205
SUPERSEDES:		[redacted] 3/14/68

MGR. Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED 5/23/69

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

MTC 002878

P. PDST CO 126-2 8/67

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.9

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

III. SEWER PIPE

FIBER LEVEL %	105	105	105	105	105	105	105	105	105	105	105
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
CLASS 1500*											
6" (10') (5')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	14.8	14.6	14.4	14.2
6" (10')	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
8" (10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	14.8	14.6	14.4	14.2
8" (13')	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
10"-16"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 2400											
4" (10') (5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
5" (10') (5')	17.2	16.8	16.6	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8
6" (10') (5')	16.8	16.5	16.2	16.0	15.8	15.6	15.3	15.0	14.8	14.6	14.4
6" (13')	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
8"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
10"-24"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 3300											
4"-5" (10') (5')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
6" (10') (5')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
6" (13')	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
8"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
10"-30"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
CLASS 4000/5000											
10"-36"	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is Optional for 6" and 8" 1500 (10') and 4", 5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE -REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 3/11/68

MTC 002879

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 3/14/68

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT:	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	3.9

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

III. SEWER PIPE

FIBER LEVEL % BLEND POINT VALUE	105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
CLASS 1500*											
6" (10') (5')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	14.8	14.6	14.4	14.2
6" (13')	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
8" (10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	14.8	14.6	14.4	14.2
8" (13')	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
10"-16"	17.8	17.5	17.2	17.0	17.7	16.5	16.2	16.0	15.8	15.5	15.3
CLASS 2400											
4" (10') (5')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
5" (10') (5')	17.2	16.8	16.6	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8
6" (10') (5')	16.8	16.5	16.2	16.0	15.8	15.6	15.3	15.0	14.8	14.6	14.4
6" (13')	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
8"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
10"-24"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
CLASS 3300											
4"-5" (10')(5')	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
6" (10') (5')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
6" (13')	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
8"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
10"-30"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3
CLASS 4000/5000											
10"-36"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	15.8	15.5	15.3

*USE H-BLEND FOR 4" and 5" CLASS 1500
THE H-BLEND IS OPTIONAL FOR 6" and 8" 1500 (10') AND 4",5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS. EXTEND OPTIONAL USE OF H-BLEND

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: SAME SPEC, Page 3.2 DATED 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 5-1-67

Form 333-2 Pd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.10

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 2/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS II (1500 D)										
12,42	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
CLASS III (2000 D)										
12,14	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
15	10.3	10.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
16	11.4	11.2	11.1	11.0	10.8	10.7	10.6	10.5	10.3	10.2
18	10.6	10.5	10.3	10.2	10.1	10.0	10.0	10.0	10.0	10.0
20	11.5	11.4	11.2	11.1	10.9	10.8	10.7	10.6	10.5	10.3
21	11.7	11.6	11.4	11.3	11.2	11.0	10.9	10.8	10.7	10.5
24	11.0	10.8	10.7	10.6	10.5	10.3	10.2	10.1	10.0	10.0
27	10.9	10.7	10.6	10.5	10.3	10.2	10.1	10.0	10.0	10.0
30	10.4	10.2	10.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0
33	11.0	10.8	10.7	10.6	10.5	10.3	10.2	10.1	10.0	10.0
36	10.8	10.6	10.5	10.4	10.2	10.1	10.0	10.0	10.0	10.0
39,42	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
(2500 D)										
12	12.3	12.2	12.0	11.9	11.8	11.6	11.5	11.4	11.2	11.1
14	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9
15	14.7	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.4	13.2
16	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
18	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
20	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
21	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
24	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.4	14.3	14.1
27	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0
30	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
33	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.4	14.3	14.1
36	15.5	15.3	15.0	14.9	14.7	14.5	14.4	14.2	14.0	13.9
39	11.8	11.7	11.5	11.4	11.3	11.1	11.0	10.9	10.8	10.6
42	13.5	13.3	13.1	13.0	12.8	12.7	12.5	12.4	12.2	12.1

X- INDICATES CHANGE	-REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE		J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:		Same Spec., Same Page, Dated 7/16/69	LIBRARY

MGR. - P & C	MGR. Q. C.	SUPT. Q. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 12/13/71

MTC 002881

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.10

CANCELLED

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

V. STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class II										
12"	18.2	17.8	17.5	17.2	16.8	16.5	16.2	16.0	15.7	15.4
14"	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
15"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
16"	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
18"	20.6	20.2	19.8	19.4	19.1	18.7	18.4	18.0	17.8	17.5
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69
Class II										
12"	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2
14"	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6
15"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9
16"	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2
18"	17.2	16.8	16.6	16.4	16.0	15.8	15.6	15.4	15.2	15.0
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
15"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
16"	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4
18"	14.8	14.6	14.3	14.1	14.0	13.8	13.6	13.4	13.2	13.0
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
15"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
16"	12.3	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
18"	12.9	12.7	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE —REASON: Establish Specifications for 12" thru 18" CL II Storm Drain Pipe

AUTHORITY FOR CHANGE: Product Proposal 425-205

MTC 002882

SUPERSEDES: ~~None—New Page~~ 3/14/68

MGR. G. O. C	MGR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. ENG.	MGR. LAB.			DATE ISSUED	7/16/69

CO 184-A 8187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.10

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND %	105	105	105	105	105	105	105	105	105	105
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
CLASS 1500*										
6" (10') (5')	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.5	12.4
6" (13')	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
8" (10')	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.7	12.5	12.4
8" (13')	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
10"-16"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
CLASS 2400										
4" (10') (5')	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
5" (10') (5')	14.6	14.3	14.1	14.0	13.8	13.6	13.4	13.2	13.0	12.9
6" (10') (5')	14.2	14.0	13.8	13.7	13.5	13.3	13.2	13.0	12.8	12.6
6" (13')	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
8"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
10"-24"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
CLASS 3300										
4"-5" (10') (5')	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
6" (10') (5')	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
6" (13')	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
8"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
10"-30"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
CLASS 4000/5000										
10"-36"	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is optional for 6" and 8" 1500 (10') and 4", 5" and 6" 2400 (10') (5')

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse letter 3/11/68

MTC 002883

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	3/14/68

F. POST CO 136-3 80187

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.10

Fiber Blend % / Blend Point Value	105 71	105 72	105 73	105 74	105 75	105 76	105 77	105 78	105 79	105 80
Class 1500*										
6"(10')(5')	14.0	13.8	13.6	13.4	13.2	13.0	13.0	13.0	13.0	13.0
6"(13')	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
8"(10')	14.0	13.8	13.6	13.4	13.2	13.0	13.0	13.0	13.0	13.0
8"(13')	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
10"-16"	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
Class 2400										
4"(10')(5')	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	13.0	13.0
5"(10')(5')	14.6	14.3	14.1	14.0	13.8	13.6	13.4	13.2	13.0	13.0
6"(10')(5')	14.2	14.0	13.8	13.7	13.5	13.3	13.2	13.0	13.0	13.0
6"(13')	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
8"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
10"-24"	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
Class3300										
4"-5"(10')(5')	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
6"(10')(5')	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
6"(13')	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
8"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
10"-30"	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4
Class 4000/5000										
10"-36"	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4

* Use H-Blend for 4" and 5" Class 1500

The H-Blend is optional for 6" and 8" 1500 (10') and 4", 5", and 6" 2400 (10')(5').

MTC 002884

PLEASE RETURN TO
I-M RESEARCH
LIBRARY (MM)

X — INDICATES CHANGE — REASON:	General Revision to Extend Tables to 90 point value and Reduce minimum fiber usage to 12% for 10' and 13' length
AUTHORITY FOR CHANGE	Verbal Authority - J. E. Hesse
SUPERSEDES:	none

DIR. O.C.	MGR. O.C.	SUPR. O.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	5-1-67

Form 333-2 Fld. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.11

NOMINAL PER CENT FIBER BLEND -- COST STANDARD

CANCELLED 2/23/77

UNMACHINED STORM DRAIN PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS IV (3000 D)										
12	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
14	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
15	10.3	10.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
16	11.5	11.4	11.2	11.1	10.9	10.8	10.7	10.6	10.5	10.3
18	11.1	11.0	10.8	10.7	10.6	10.5	10.4	10.2	10.1	10.0
20	11.5	11.4	11.2	11.1	10.9	10.8	10.7	10.6	10.5	10.3
21	12.2	12.1	11.9	11.8	11.6	11.5	11.4	11.2	11.1	11.0
24	11.0	10.8	10.7	10.6	10.5	10.3	10.2	10.1	10.0	10.0
27	10.4	10.2	10.1	10.0	10.0	10.0	10.0	10.0	10.0	10.0
30	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
33	11.4	11.2	11.1	11.0	10.8	10.7	10.6	10.5	10.3	10.2
36	11.4	11.2	11.1	11.0	10.8	10.7	10.6	10.5	10.3	10.2
39	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
42	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
CLASS V (3750 D)										
12	11.0	10.8	10.7	10.6	10.5	10.3	10.2	10.1	10.0	10.0
14	13.6	13.4	13.2	13.1	13.0	12.8	12.6	12.5	12.4	12.2
15	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
16	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
18	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.4
20	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
21	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
24	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.4	14.3	14.1
27	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
30	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
33	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
36	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.5
39	11.8	11.7	11.5	11.4	11.3	11.1	11.0	10.9	10.8	10.6
42	13.6	13.4	13.2	13.1	13.0	12.8	12.6	12.5	12.4	12.2

MTC 002885

X— INDICATES CHANGE —REASON:	Revised Pipe O.D.'s & Fiber Points	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. F. Herr's letter 10/18/71	J-M RESEARCH
SUPERSEDES:	New Page Number Page 3.7, Dated 11/25/70	LIBRARY

MGR Q Q C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.			DATE ISSUED 12/13/71

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.11

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

III. SEWER PIPE

FIBER BLEND %	105	105	105	105	105	105	105	105	105	105
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
CLASS 1500*										
6" (10') (5')	12.2	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
8" (10')	12.2	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (13')	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
10"-16"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 2400										
4" (10') (5')	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
5" (10') (5')	12.7	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0	12.0
6" (10') (5')	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6" (13')	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
8"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
10"-24"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 3300										
4"-5" (10') (5')	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
6" (10') (5')	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
6" (13')	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
8"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
10"-30"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
CLASS 4000/5000										
10"-36"	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0

* Use H-Blend for 4" and 5" Class 1500
The H-Blend is optional for 6" and 8" 1500 (10') and 4", 5", and 6" 2400 (10') (5')

PLEASE RETURN TO
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X— INDICATES CHANGE —REASON: Reduce Fiber Usage 10"-36" Sewer Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 3/11/68

MTC 002886

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 3/14/68

F. POST CO. 130-3 80187

Johns-Manville
MANUFACTURING
SPECIFICATION

PRODUCT:
TRANSITE PIPE
Pipe Machine Furnishes

PLANT & DIV.	PIPE
SPEC NO.	425-2
PAGE NO.	3.11

Fiber Blend % Blend Point Value	105 81	105 82	105 83	105 84	105 85	105 86	105 87	105 88	105 89	105 90
Class 1500*										
6"(10')(5')	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
6"(13')	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
8"(10')	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8"(13')	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
10"-16"	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Class 2400										
4"(10')(5')	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
5"(10')(5')	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
6"(10')(5')	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
6"(13')	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
8"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
10"-24"	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Class 3300										
4"-5"(10')(5')	13.8	13.6	13.5	13.3	13.2	13.0	13.0	13.0	13.0	13.0
6" (10')(5')	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
6"(13')	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
8"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
10"-30"	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
Class 4000/5000										
10"36"	13.2	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0

*Use H-Blend for 4" and 5" Class 1500
The H-Blend is optional for 6" and 8" 1500 (10') and 4", 5", and 6" 2400 (10')(5').

PLEASE RETURN TO
J-M RESEARCH
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Fill in U.S.A.

X— INDICATES CHANGE —REASON: General Revision to Extend Tables to 90 Point Value and Reduce Minimum Fiber Usage to 12% for 10' & 13' Lengths

AUTHORITY FOR CHANGE: Verbal Authority J. E. Hesse

SUPERSEDES: none

MTC 002887

Form 3332

DIV.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	MGR.			DATE ISSUED 5-1-67

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES CANCELLED 7/23/71	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.12

NOMINAL PERCENT FIBER BLEND - COST STANDARDS
MACHINED END PIPE (TP 19-1C)
STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
27",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
30"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
33"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
36"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (10' & 13')	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
10"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	16.0	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2
15"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
16"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
18"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
24"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
27"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
30",33",36",39",42"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
Class IV										
6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
10"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
12"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
14"	16.8	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8
15"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
18"	14.9	14.7	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2
20"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
21"	16.9	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
Class V										
8"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
10"	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3
12"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
14"	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9
15"	15.3	15.0	14.8	14.6	14.4	14.3	14.1	13.9	13.7	13.6
16"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6

X- INDICATES CHANGE — REASON: Clarify that page is applicable to machined pipe, drawing TP19-1C

AUTHORITY FOR CHANGE: Clarification and Page Renumbered

SUPERSEDES: New Page Number
Same Spec., Page 3.8, Dated 1/7/70

MGR. D. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.			DATE ISSUED 12/13/71

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POST CO 182-3 8/67

MTC 002888

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES CANCELLED 2/8 3/77	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.13

NOMINAL PERCENT FIBER BLEND - COST STANDARD

X MACHINED END PIPE (TP 19-1C)

STORM DRAIN PIPE (CALIFORNIA SPECIFICATION)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Bland Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
27",39",42"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
30"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
33"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
36"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
Class III										
6"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" (10' & 13')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6
15"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
16"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
18"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
24"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
27"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
30",33",36",39",42'	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
Class IV										
6"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
8"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
10"	14.5	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0
12"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
14"	14.6	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1
15"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
18"	13.0	12.8	12.7	12.5	12.4	12.2	12.1	12.0	12.0	12.0
20"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
21"	14.7	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2
Class V										
8"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9
10"	13.1	13.0	12.8	12.6	12.5	12.4	12.2	12.1	12.0	12.0
12"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
14"	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0
15"	13.4	13.2	13.0	12.9	12.7	12.6	12.4	12.3	12.2	12.0
16"	14.4	14.2	14.0	13.8	13.7	13.5	13.4	13.2	13.1	12.9

X- INDICATES CHANGE	REASON: Clarify that page is applicable to machined pipe, drawing TP 19-1C
AUTHORITY FOR CHANGE	Clarification and page renumbered
SUPERSEDES:	New Page Number Same Spec., Page 3.9, Dated 1/7/70

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	QCD [illegible]			DATE ISSUED 12/13/71

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P. POST CO. 1963 80187

MTC 002889

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES CANCELLED 2/2 3/77	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	3.14

X NOMINAL PERCENT FIBER BLEND - COST STANDARDS
MACHINED END PIPE (TP 19-1C)

STORM DRAIN PIPE (CALIFORNIA SPECIFICATIONS)

Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class II										
12"	18.2	17.8	17.5	17.2	16.8	16.5	16.2	16.0	15.7	15.4
14"	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.9
15"	19.2	18.8	18.5	18.1	17.8	17.5	17.1	16.8	16.5	16.3
16"	19.6	19.2	18.8	18.5	18.1	17.8	17.5	17.2	16.9	16.6
18"	20.6	20.2	19.8	19.4	19.1	18.7	18.4	18.0	17.8	17.5
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69
Class II										
12"	15.2	15.0	14.7	14.5	14.3	14.0	13.8	13.6	13.4	13.2
14"	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6
15"	16.0	15.7	15.4	15.2	15.0	14.8	14.5	14.3	14.1	13.9
16"	16.3	16.0	15.8	15.6	15.3	15.1	14.8	14.6	14.4	14.2
18"	17.2	16.8	16.6	16.4	16.0	15.8	15.6	15.4	15.2	15.0
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	70	71	72	73	74	75	76	77	78	79
Class II										
12"	13.0	12.8	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0
14"	13.4	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0
15"	13.7	13.5	13.3	13.2	13.0	12.8	12.6	12.5	12.3	12.2
16"	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.7	12.6	12.4
18"	14.8	14.6	14.3	14.1	14.0	13.8	13.6	13.4	13.2	13.0
Fiber Level %	100	100	100	100	100	100	100	100	100	100
Blend Point Value	80	81	82	83	84	85	86	87	88	89
Class II										
12"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
15"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
16"	12.3	12.1	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
18"	12.9	12.7	12.6	12.4	12.3	12.1	12.0	12.0	12.0	12.0

MTC 002890

X- INDICATES CHANGE	REASON: Clarify that page is applicable to machined pipe, drawing TP 19-1C	
AUTHORITY FOR CHANGE	Clarification and page renumbered	PLEASE RETURN TO J-M RESEARCH LIBRARY
SUPERSEDES:	New Page Number Same Spec., Page 3.10, Dated 7/16/69	

MGR. Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 12/13/71

POST CO. 1843 8197

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

CANCELLED 2/9/78

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct
B. Gas Vent
C. Vent Duct
D. Underdrain
E. Air Duct

Sizes 10" and above
Fiber Usage: Maximum
15% to Maintain Dimensional Stability

F. Temp-Tite

The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all [illegible] of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. Non-Pressure Pipe - 10' Lengths - All Sizes

All Plants will operate at 100% fiber level.

Sewer % H-Blend

Size	CL 1500	CL2400	CL3300
4	10%	13	13.5
5	10	13	13.5
6	13	13.5	13.5
8	13	13.5	14.0

Product	60-62	63-64	[illegible]	67-68	69-70	H-Blend
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (5", 6")	--	--	--	--	--	11%
Telephone "CA" Duct (Long Beach)	--	--	--	--	--	10%
Telephone C Duct	--	--	--	--	--	9%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%

X

X- INDICATES CHANGE -REASON: Dec. Tele C Duct Fiber amt.

over →

AUTHORITY FOR CHANGE: W. A. Sells wire of 7/18/75

SUPERSEDES: Same Spec., Same Page, Dated 6/17/75

MTC 002891

NOR. G. & C.	NOR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. FIN.	MED. LAB.	JF# ANC			DATE ISSUED 7/18/75

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes CANCELLED	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct
B. Gas Vent
C. Vent Duct
D. Underdrain
E. Air Duct

Sizes 10" and above
Fiber Usage: Maximum
15% to Maintain Dimensional Stability

F. Temp-Tite

The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all [illegible] of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. Non-Pressure Pipe - 10' Lengths - All Sizes

All Plants will operate at 100% fiber level.

Sewer % H-Blend

Size	CL 1500	CL2400	CL3300
4	10%	13	13.5
5	10	13	13.5
6	13	13.5	13.5
8	13	13.5	14.0

X

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Korduct Type I, (3", 3½", 4", 4½")	--	--	--	--	--	9%
Korduct Type I, (5", 6")	--	--	--	--	--	11%
Telephone "CA" Duct (Long Beach)	--	--	--	--	--	10%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct		--	--	--		9%

MTC 002892

MECHANICAL CENTER
JM RESEARCH
PLEASE RETURN TO

X- INDICATES CHANGE -REASON: Expand % fiber for Sewer Pipe

AUTHORITY FOR CHANGE: A. C. Daleys Memo. 6/9/75

SUPERSEDES: Same Spec., Same Page, Dated 1/15/73

MGR. G.O.C.	MGR. G.C.	SUPR. G.C.	PROD. SUPT.	PLNT. PRI.	REG. LIB.				DATE ISSUED 6/17/75

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes CANCELLED	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct
B. Gas Vent
C. Vent Duct
D. Underdrain
E. Air Duct

Sizes 10" and above
Fiber Usage: Maximum
15% to Maintain Diemensional Stability

F. Temp-Tite

The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all [redacted] of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. NON-PRESSURE PIPE -10' LENGTHS - ALL SIZES

MTC 002893

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	--	--	--	--	--	10%
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (5", 6")	--	--	--	--	--	11%
X Telephone "CA" Duct (Long Beach)	--	--	--	--	--	10%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%

X- INDICATES CHANGE -REASON: Delete 2" Korduct Pipe

AUTHORITY FOR CHANGE: K. J. Whalen's Letter of 12/1/71

SUPERSEDES: Same Spec., Same Page, Dated 9/5/69

PLEASE RETURN TO J-M RESEARCH INFORMATION CENTER

MGR. Q. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	REG. LAB			DATE ISSUED 1/15/73

F POST CO 136-3 50187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

CANCELLED

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct
B. Gas Vent
C. Vent Duct
D. Underdrain
E. Air Duct

— Sizes 10" and above
Fiber Usage: Maximum
15% to Maintain Diemensional Stability

F. Temp-Tite

The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all sizes of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. NON-PRESSURE PIPE -10' LENGTHS - ALL SIZES

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	--	--	--	--	--	10%
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (2",5",6")	--	--	--	--	--	11%
X Telephone "CA" Duct (Long Beach)	--	--	--	--	--	10%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

X— INDICATES CHANGE —REASON: Percent Fiber for "CA" Telephone Duct at Long Beach

AUTHORITY FOR CHANGE: J. E. Hesse's wire of 7/15/69

SUPERSEDES: Same Spec., Same Page, Dated 7/7/69

MTC 002894

MGR. G. Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 9/5/69

F. POST CO 1843 8/67

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct
B. Gas Vent
C. Vent Duct
D. Underdrain
E. Air Duct

Sizes 10" and above
Fiber Usage: Maximum
15% to Maintain Dimensional Stability

F. Temp-Tite

The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all sizes of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. NON-PRESSURE PIPE -10' LENGTHS - ALL SIZES

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	--	--	--	--	--	10%
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (2",5",6")	--	--	--	--	--	11%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%

X- INDICATES CHANGE	REASON: Delete obsolete information and products	PLEASE RETURN TO
AUTHORITY FOR CHANGE	Update Specification	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated II/10/67	LIBRARY (MM)

MGR. Q. C.	MGR. Q. C.	SUPT. Q. C.	PROD. SUPT.	PLANT MGR.				DATE ISSUED 7/7/69

MTC 002895

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

IV. OTHER PRODUCTS - 13' LENGTHS

A. Storm Drain - Use the same fiber levels as the same sizes and classes of Sewer Pipe.

X

B. Gas Vent
C. Industrial Vent
D. Underdrain
E. Air Duct

Sizes 10"-36"
Fiber Usage : Maximum
15% to Maintain Dimensional Stability

F. Temp-Tite

The fiber levels of core pipe are the same as the same sizes and classes of Water Pipe. The fiber level of all sizes of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. NON-PRESSURE PIPE -10' LENGTHS - ALL SIZES

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe						
4" & 5" (1500#)						
(5' & 10')	--	--	--	--	--	10%
3" Building Sewer	--	--	--	--	--	10%
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (2",5",6")	--	--	--	--	--	11%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Industrial Vent	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Plumbing Vent	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%
Flex Joint Conduit	16.5	16.0	15.5	15.0	14.5	--

X- INDICATES CHANGE	REASON:	Delete Conduit Casing
AUTHORITY FOR CHANGE		E. Stoltz's letter of 10/17/67 to A. C. Daley
SUPERSEDES:		Same Spec., Same Page, Dated 8/16/67

MGR. Q. C.	MGR. Q. C.	SUPT. Q. C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.	DATE ISSUED 11/10/67

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

IV. OTHER PRODUCTS - 13' LENGTHS

A. Storm Drain - Use the same fiber levels as the same sizes and classes of Sewer Pipe.

B. Conduit Casing - Sizes 6"-16" use Class 2400 Sewer fiber levels
Sizes 18"-24" use Class 3300 Sewer fiber levels
Sizes 30"-36" use Class 4000 Sewer fiber levels

C. Gas Vent
D. Industrial Vent
E. Underdrain
F. Air Duct

Sizes 10"-36"
Fiber Usage : Maximum
15% to Maintain Dimensional Stability

G. Temp-Tite — The fiber levels of core pipe are the same as the same sizes and classes of Water Pipe. The fiber level of all sizes of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. NON-PRESSURE PIPE -10' LENGTHS - ALL SIZES

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	--	--	--	--	--	10%
3" Building Sewer	--	--	--	--	--	10%
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (2",5",6")	--	--	--	--	--	11%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Industrial Vent	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Plumbing Vent	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%
Flex Joint Conduit	16.5	16.0	15.5	15.0	14.5	--

X- INDICATES CHANGE — REASON: Add fiber levels of Temp Tite Pipe

AUTHORITY FOR CHANGE: J. E. Hesse's letter 12-16-66 and Prod. Prop. 425-193

SUPERSEDES: Same Spec., Same Page, Dated 7-18-67

MF	MGR. G. C.	SUPT. G. C.	PROD. SUPT.	PLNT. ENG.	SUPT.				DATE ISSUED	8-16-67

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

MTC 002897

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

IV. OTHER PRODUCTS - 13' LENGTHS

CANCELLED

A. Storm Drain - Use the same fiber levels as the same sizes and classes of Sewer Pipe.

B. Conduit Casing - Sizes 6"-16" use Class 2400 Sewer fiber levels
Sizes 18"-24" use Class 3300 Sewer fiber levels
Sizes 30"-36" use Class 4000 Sewer fiber levels

C. Gas Vent
D. Industrial Vent
E. Underdrain
F. Plumbing Vent
G. Air Duct

→ Sizes 10"-36"
Fiber Usage : Maximum
15% to Maintain Dimensional Stability

V. NON-PRESSURE PIPE -10' LENGTHS - ALL SIZES

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe						
4" & 5" (1500#)						
(5' & 10')	--	--	--	--	--	10%
3" Building Sewer	--	--	--	--	--	10%
Korduct Type I (Sizes 3", 3½", 4" & 4½").	--	--	--	--	--	9%
Korduct Type I (Sizes 2", 5" & 6")	--	--	--	--	--	11%
Telephone C Duct	--	--	--	--	--	11%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Industrial Vent	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Plumbing Vent	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%
Flex Joint Conduit	16.5	16.0	15.5	15.0	14.5	--

X— INDICATES CHANGE —REASON:	IMPROVE STRENGTH OF KORDUCT PIPE	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. E. Hesse's letter 7-12-67	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 9-26-66	LIBRARY (NYM)

MGR. Q. C.	MGR. Q. C.	SUPT. Q. C.	PROD. SUPT.	PLANT PHYS.	MGR. LAB	DATE ISSUED 7-18-67

MTC 002898

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M, G, J, W, D&R PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

CANCELLED

IV. OTHER PRODUCTS - 13' LENGTHS

A. Storm Drain - Use the same fiber levels as the same sizes and classes of Sewer Pipe.

B. Conduit Casing - Sizes 6"-16" use Class 2400 Sewer fiber levels
Sizes 18"-24" use Class 3300 Sewer Fiber levels
Sizes 30"-36" use Class 4000 Sewer Fiber levels

C. Gas Vent
D. Industrial Vent
E. Underdrain
F. Plumbing Vent
G. Air Duct

Sizes 10"-36"
Fiber Usage: Maximum 15% to Maintain Dimensional Stability

V. NON-PRESSURE PIPE - 10' LENGTHS- ALL SIZES

All plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	-	-	-	-	-	10%
3" Building Sewer	-	-	-	-	-	10%
Telephone B Duct	-	-	-	-	-	9%
Telephone C Duct	-	-	-	-	-	11%
Korduct Type I	-	-	-	-	-	9%
Conduit Type II	-	-	-	-	-	9%
Gas Vent	-	-	-	-	-	9%
Industrial Vent	-	-	-	-	-	9%
Underdrain	-	-	-	-	-	9%
Plumbing Vent	-	-	-	-	-	9%
Air Duct	-	-	-	-	-	9%
Flex Joint Conduit	16.5	16.0	15.5	15.0	14.5	--

MTC 002899

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

X- INDICATES CHANGE	-REASON:	Add Storm Drain and Conduit Casing Pipe
AUTHORITY FOR CHANGE		Prod. Prop. 425-161 and 425-184 and J. E. Hesse's letter 6-14-66
SUPERSEDES:		Same Spec., Same Page, Dated 12-7-64

DIR Q.C.	MGR Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED 9-26-66

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

IV. OTHER PRODUCTS - 13' LENGTHS:

A. Gas Vent

B. Industrial Vent

C. Underdrain

D. Plumbing Vent

E. Air Duct

Sizes 10" - 36"
Fiber Usage: Maximum 15% to Maintain Dimensional Stability

V. NON-PRESSURE PIPE - 10' LENGTHS - ALL SIZES:

All Plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	-	-	-	-	-	10%
3" Building Sewer	-	-	-	-	-	10%
Telephone B Duct	-	-	-	-	-	9%
Telephone C Duct	-	-	-	-	-	11%
Korduct Type I	-	-	-	-	-	9%
Conduit Type II	-	-	-	-	-	9%
Gas Vent	-	-	-	-	-	9%
Industrial Vent	-	-	-	-	-	9%
Underdrain	-	-	-	-	-	9%
Plumbing Vent	-	-	-	-	-	9%
Air Duct	-	-	-	-	-	9%
Flex Joint Cond.	16.5	16.0	15.5	15.0	14.5	—

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

X— INDICATES CHANGE —REASON: Show C Telephone Duct Made with H-Blend

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 12-14-64

SUPERSEDES: Same Spec., Same Page Dated 10-10-63; Devn. DHQ 16, 2-28-64

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 12-17-64

MTC 002900

Form 333-2-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

CANCELLED

IV. OTHER PRODUCTS - 13' LENGTHS:

A. Gas Vent
B. Industrial Vent
C. Underdrain
D. Plumbing Vent
E. Air Duct

Sizes 10" - 36"
Fiber Usage: Maximum 15% to Maintain Dimensional Stability.

V. NON-PRESSURE PIPE - 10' LENGTHS - ALL SIZES:

All Plants will operate at 100% fiber level.

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Sewer Pipe 4" & 5" (1500#) (5' & 10')	-	-	-	-	-	10%
3" Building Sewer *						
A. Std. (1500#)	-	-	-	-	-	10
Telephone B Duct	-	-	-	-	-	9
Telephone C Duct	14.5	14.0	13.5	13.0	12.5	-
Korduct Type I	-	-	-	-	-	6
Conduit Type II	-	-	-	-	-	6
Gas Vent	-	-	-	-	-	9
Industrial Vent	-	-	-	-	-	9
Underdrain	-	-	-	-	-	9
Plumbing Vent	-	-	-	-	-	9
Air Duct	-	-	-	-	-	9
Flex Joint Cond.	16.5	16.0	15.5	15.0	14.5	-

* 4", 5", & 6" at Manville until approximately December 1st, 1963.

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON:	M-Ring Sewer Pipe Production
AUTHORITY FOR CHANGE		J. B. McCarty's Letter of 9[illegible]-63 Product Proposal 42[illegible]-154
SUPERSEDES:		Same Spec., Same Page Dated 6-19-63

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. [illegible]				DATE ISSUED 10-[illegible]-63

MTC 002901

Form 333-A Pd. in U.S.A.

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

IV. OTHER PRODUCTS - 13' LENGTHS:

A. Gas Vent
B. Industrial Vent
C. Underdrain
D. Plumbing Vent
E. Air Duct

Sizes 10"-36"
Fiber Usage: Maximum 15% to Maintain Dimensional Stability.

V. NON-PRESSURE PIPE - 10' LENGTHS - ALL SIZES:

All Plants will operate at 100% fiber level.

Product	4-Blend Formulation Blend Point Value 60-62	63-64	65-66	67-68	69-70	H-Blend
Building Sewer						
A. Std.(1500#)	-	-	-	-	-	10%
B. 2000#	15.5	15.0	14.5	14.0	13.5	
C. 2400#	-	-	-	-	-	10
Telephone B Duct	-	-	-	-	-	9
Telephone C Duct	14.5	14.0	13.5	13.0	12.5	-
Conduit Type I	-	-	-	-	-	9
Conduit Type II	-	-	-	-	-	9
Gas Vent	-	-	-	-	-	9
Industrial Vent	-	-	-	-	-	9
Underdrain	-	-	-	-	-	9
Plumbing Vent	-	-	-	-	-	9
Air Duct	-	-	-	-	-	9
Flex Joint Cond.	16.5	16.0	15.5	15.0	14.5	-
Sewer Pipe						
4" & 5" (1500#)	-	-	-	-	-	10

RETURN TO J-M RESEARCH FILE ROOM

X — INDICATES CHANGE — REASON: M-Ring Sewer Pipe Production

AUTHORITY FOR CHANGE: J.B. McCarty's letter 11-6-62 Product Proposal 425-154

SUPERSEDES: Same Spec., Same Page Dated 1-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. PLNT.				DATE ISSUED 6-19-63

Form 333-2 Pld. in U.S.A.

NOMINAL PERCENT FIBER BLEND - COST STANDARDS - CONTINUED:

IV. OTHER PRODUCTS - 13' LENGTHS:

a. Gas Vent
b. Industrial Vent
c. Underdrain
d. Plumbing Vent
e. Air Duct

Sizes 10"-36"
Fiber Usage: Maximum 15% to Maintain Dimensional Stability.

V. NON-PRESSURE PIPE - 10' LENGTHS - ALL SIZES:

All plants will operate at 100% fiber level.

	M-Blend Formulation Blend Point Value					
Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Building Sewer						
a. Std. (1500#)	-	-	-	-	-	10%
b. 2000#	15.5	15.0	14.5	14.0	13.5	
c. 2400#	-	-	-	-	-	10
Telephone B Duct	-	-	-	-	-	9
Telephone C Duct	14.5	14.0	13.5	13.0	12.5	-
Conduit Type I	-	-	-	-	-	9
Conduit Type II	-	-	-	-	-	9
Gas Vent	-	-	-	-	-	9
Industrial Vent	-	-	-	-	-	9
Underdrain	-	-	-	-	-	9
Plumbing Vent	-	-	-	-	-	9
Air Duct	-	-	-	-	-	9
Flex Joint Cond.	16.5	16.0	15.5	15.0	14.5	-

MTC 002903

NOMINAL PERCENT FIBER BLEND - COST STANDARDS-CONTINUED:

V. NON-PRESSURE PIPE - 10' LENGTHS - ALL SIZES:

All plants will operate at 100% fiber level.

Product	Blend Point Value 60	63	67	H-Blend
Building Sewer				
a. Std. (1500#)	-	-	-	10%
b. 2000#	15.7	15	14	-
c. 2400#	-	-	-	10
Telephone - B Duct	-	-	-	9
Telephone - C Duct	14.7	14	13	-
Conduit - Type I	-	-	-	9
Conduit - Type II	-	-	-	9
Gas Vent	-	-	-	9
Industrial Vent	-	-	-	9
Underdrain	-	-	-	9
Plumbing Vent	-	-	-	9
Air Duct	-	-	-	9
Flex Joint Conduit	16.7	16	15	-

MTC 002904

RETURN TO J-M RESEARCH FILE ROOM

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R Pipe
		SPEC NO.	425-2
		PAGE NO.	4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Continued)

V. NON-PRESSURE PIPE - 10' LENGTHS - All Sizes

(All plants will operate at 100% fiber level)

Product	Blend Point Value		H-Blend	
	63	67		
Building Sewer				
a) Std. (1500#)	-	-	10%	
b) 2000#	15	14	-	
c) 2400#	-	-	10	
Telephone - B Duct	-	-	9	
Telephone - C Duct	14	13	-	
Conduit - Type I	-	-	9	
Conduit - Type II	-	-	9	
Gas Vent	-	-	9	
Industrial Vent	-	-	9	
Underdrain	-	-	9	
Plumbing Vent	-	-	9	
Air Duct	-	-	9	
Flex-Joint Conduit	16	15	-	

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON:	General Revision to Include Fiber Levels and Point Values
AUTHORITY FOR CHANGE	W. L. Van Derbeek's Letter of 1-25-62
SUPERSEDES:	All Pages 425-2 Dated 1-10-62 and 4-20-61

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. MGR.			DATE ISSUED 3-2-62

Form 333-2 Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (CONT'D)

CANCELLED 2/9/78

VI. COUPLING STOCK - All Sizes

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	30-32	33-36	37-39	40-42	43-45	46-48	49-50	51-52	53-55	56-58	59-60	61-62
WATER COUPLINGS**												
6"-16" All Classes*	26	24.5	23	22	21	20.5	20	19	18.5	18	17.5	17
All Other sizes and Classes	23	22	21	20	19	18.5	18	17.5	17	16.5	16	15.5
'R'&'T', IRRIGATION & TRANSMISSION**												
6" All Classes	25	23.5	22	21	20	19.5	19	18.5	18	17.5	17	16.5
8"-16" All Classes	26	24.5	23	22	21	20.5	20	19	18.5	18	17.5	17
18"-36" All Classes	29	27.5	26	24.5	23.5	23	22	21.5	21.	20.5	19.5	19
MEK WELL CASING	29	27.5	26	24.5	23.5	23	22	21.5	21	20.5	19.5	19
SEWER 4"-36", All Classes*	21	19.5	18.5	18	17	16.5	16	15.5	15	14.5	14.	14

Other Products (SectionIV) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

TRANSITE couplings and fittings are produced with the same percentage of H-Blend as the Pipe in the same product group.

NOTE*: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

NOTE**: Water, R & T Irrigation and Type 5 Irrigation Coupling stock for sizes 4" and above is to be formed only on the 13 foot pipe machines.

MTC 002906

X- INDICATES CHANGE	REASON: REDUCTION OF PRODUCT LINE	PLEASE RETURN TO J-M RESEARCH INFORMATION CENTER
AUTHORITY FOR CHANGE	K. J. Whalen's Letter of 12/1/72	
SUPERSEDES:	Same Spec., Same Page, Dated 4/5/72	

MGR. Q. A. C	MGR. Q. C.	SUPT. Q. C.	PROD. SUPT.	PLNT. ENG.	MFG. ENG.				DATE ISSUED 3/1/73

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (CONT'D) CANCELLED

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
**Water 6"-16" All Classes*	26	24,5	23	22	21	20.5	20.0	19.0	18.5	18.0	17.5	17.0
** Water All Other Sizes and Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5	16.0	15.5
"R" Irrig. and "T" Transmission & M.E.E. Well Casing	29	27.5	26	24.5	23.5	23.0	22.0	21.5	21.0	20.5	19.5	19.0
Sewer 4"-36" All Classes*	21.	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0

X Other Products (Section IV) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

TRANSITE couplings and fittings are produced with the same percentage of H-Blend as the pipe in the same product group.

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

**NOTE: Water, R-Irrigation and Type 25 Irrigation Coupling stock for Sizes 4" and above is to be formed only on the 13 foot pipe machines.

PLEASE RETURN TO J-M RESEARCH LIBRARY

X- INDICATES CHANGE —REASON: Delete Type Irrigation Pipe

AUTHORITY FOR CHANGE K. J. Whalen's letter 8/6/71 & K. P. Sutton's Marketing Bulletin PM 72-12

SUPERSEDES: Same Spec., Same Page, Dated 4/22/70

MGR. G. O. C	MGR. U. C.	SUPR. O. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 4/5/72

MTC 002907

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (CONT'D) CANCELLED

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
**Water 6"-16" All Classes* & 3"-12" Type 25 Irrigation	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0	17.5	17.0
** Water All Other Sizes and Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5	16.0	15.5
"R" Irrig. and "T" Transmission & M.E.E. Well Casing	29	27.5	26	24.5	23.5	23.0	22.0	21.5	21.0	20.5	19.5	19.0
Sewer 4"-36" All Classes*	21.	19.5	18.5	18	17	16.5	16.0	15.5	15.0	14.5	14.0	14.0
Irrigation All Sizes Types 5 & 15	21	19.5	18.5	18	17.	16.5	16.0	15.5	15.0	14.5	14.0	14.0

X

Other Products (IV Above) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

TRANSITE couplings and fittings are produced with the same percentage of H-Blend as the pipe in the same product group.

*NOTE: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

**NOTE: Water, R-Irrigation and Type 25 Irrigation Coupling stock for Sizes 4" and above is to be formed only on the 13 foot pipe machines.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE —REASON: Show Fiber Content of M.E.E. Well Casing Couplings.

AUTHORITY FOR CHANGE: Product Proposal

MTC 002908

SUPERSEDES: Same Spec., Same Page, Dated 7/7/69

MGR. G. O. C	MGR. O. C.	SUPR. O. C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 4/22/70

F. POST CO. 1843 8187

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M, G, J, W, D, & E. PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75
Water 6"-16" All Classes	26	24.5	23	22	21	20.5	20.0	19.0	18.5	18.0
Water All Other Sizes & Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5
Sewer 4"-36" All Classes	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Irrigation All Sizes Type 5, 10, & 15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

A. 3" Building Sewer

B. Telephone Duct, Conduit and Korduct

C. Gas Vent

D. Industrial Vent — All Sizes 10% H-Blend

E. Underdrain

F. Plumbing Vent

G. Air Duct

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J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: Increase Fiber Blend on 6"-16" Water Pipe Couplings

AUTHORITY FOR CHANGE: J. B. McCarty's Letter 9/10/64

SUPERSEDES: Same Spec., Same Page Dated 10/10/63

MTC 002909

MGR. G.Q.C.	MGR. C.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED	OCT 16 1964

Form 333-2-A Pd in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	50-53	54-56	57-59	60-62	63-64	65-66	67-68	69-70	71-72	73-75
Pressure-All Classes	23	22	21	20	19	18.5	18.0	17.5	17.0	16.5
Sewer-4"-36" All Classes	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Irrigation - All Sizes Type 5,10, & 15	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0
Flex Joint Conduit	21	19.5	18.5	18	17	16.5	16.0	15.5	15.0	15.0

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

A. 3" Building Sewer

B. Telephone Duct, Conduit and Korduct

C. Gas Vent

D. Industrial Vent — All Sizes 10% H-Blend

E. Underdrain

F. Plumbing Vent

G. Air Duct

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Extend Blend Point Value Table

AUTHORITY FOR CHANGE: Additional Information

MTC 002910

SUPERSEDES: Same Spec., Same Page Dated 7-22-63

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 10-10-63

Form 333-2-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

Product	Blend Point Value				
	60-62	63-64	65-66	67-68	69-70
Pressure - All Classes	20	19	18.5	18.0	17.5
Sewer - 4"-36" All Classes	18	17	16.5	16.0	15.5
Irrigation - Type 5 (3"-6")	18	17	16.5	16.0	15.5
(8"-16")	18	17	16.5	16.0	15.5
Type 10 and 15	18	17	16.5	16.0	15.5
Flex Joint Conduit	18	17	16.5	16.0	15.5

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

A. Building Sewer
B. Telephone Duct, Conduit and Korduct
C. Gas Vent
D. Industrial Vent
E. Underdrain
F. Plumbing Vent
G. Air Duct

→ All Sizes 10% H-Blend

RETURN TO J-M RESEARCH FILE ROOM

Pd. in U.S.A.

INDICATES CHANGE — REASON: Delete 4" & 5" Class 1500 Sewer Couplings

AUTHORITY FOR CHANGE: J.B. McCarty's Letter of 6-25-63

SUPERSEDES: Same Spec., Same Page Dated 7-10-63

Form

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 7-22-63

MTC 002911

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES:
Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Bland Formulation)

Product	Blend Point Value 60-62	63-64	65-66	67-68	69-70
Pressure - All Classes	20	19	18.5	18.0	17.5
Sewer - 4"-5" Class 2400 & 3300 & 6"-36" All Classes	18	17	16.5	16.0	15.5
Irrigation - Type 5 (3"-6")	18	17	16.5	16.0	15.5
(8"-16")	18	17	16.5	16.0	15.5
Type 10 and 15	18	17	16.5	16.0	15.5
Flex Joint Conduit	18	17	16.5	16.0	15.5

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H Bland Formulation)

A. Sewer 4" - 5" Class 1500
Building Sewer - All Classes

B. Telephone Duct

C. Gas Vent

D. Industrial Vent

E. Underdrain

F. Plumbing Vent

G. Air Duct

All Sizes
10% H-Blend

RETURN TO J-M RESEARCH FILE ROOM

MTC 002912

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd)

VI. COUPLING STOCK - ALL SIZES:

CANCELLED

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

Product	Blend Point Value 60-62	63-64	65-66	67-68	69-70
Pressure - All Classes	20	19	18.5	18.0	17.5
X Sewer - 4"-5" Class 2400 & 3300 & 6"-36" All Classes	18	17	16.5	16.0	15.5
Irrigation - Type 5 (3"-6")	18	17	16.5	16.0	15.5
(8"-16")	18	17	16.5	16.0	15.5
Type 10 and 15	18	17	16.5	16.0	15.5
225 Ft. Hd.	20	19	18.5	18.0	17.5
325 Ft. Hd.	20	19	18.5	18.0	17.5
425 Ft. Hd.	20	19	18.5	18.0	17.5
Flex Joint Conduit	18	17	16.5	16.0	15.5

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H Blend Formulation)

X A. Sewer 4" - 5" Class 1500
Building Sewer - All Classes
B. Telephone Duct
C. Gas Vent
D. Industrial Vent
E. Underdrain
F. Plumbing Vent
G. Air Duct

All Sizes
10% H-Blend

MTC 002913

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2 Pkd. in U.S.A.

X— INDICATES CHANGE —REASON: M-Ring Sewer Pipe Production

AUTHORITY FOR CHANGE: J.B. McCarty's Letter of 11-6-62 Prod. Proposal 425-154

SUPERSEDES: Same Spec., Same Page Dated 1-7-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REP. PLNT.				DATE ISSUED 6-19-63

NOMINAL PERCENT FIBER BLEND - COST STANDARDS - CONTINUED:

X VI. COUPLING STOCK - ALL SIZES:

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

Product	Blend Point Value 60-62	63-64	65-66	67-68	69-70
Pressure - All Classes	20	19	18.5	18.0	17.5
Sewer - All Classes	18	17	16.5	16.0	15.5
Irrigation - Type 5 (3"-6")	18	17	16.5	16.0	15.5
(8"-16")	18	17	16.5	16.0	15.5
Type 10 and 15	18	17	16.5	16.0	15.5
225 Ft. Hd.	20	19	18.5	18.0	17.5
325 Ft. Hd.	20	19	18.5	18.0	17.5
425 Ft. Hd.	20	19	18.5	18.0	17.5
Flex Joint Conduit	18	17	16.5	16.0	15.5

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

a. Building Sewer - All Classes
b. Telephone Duct
c. Gas Vent
d. Industrial Vent
e. Underdrain
f. Plumbing Vent
g. Air Duct

} All Sizes 10% H-Blend

X— INDICATES CHANGE —REASON:	Increase Point Value of M-100 Fiber
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 12/28/62
SUPERSEDES:	Same Spec., Same Page Dated 11/30/62

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG.				DATE ISSUED 1/7/63

RETURN TO J-M RESEARCH FILE ROOM

NOMINAL PERCENT FIBER BLEND - COST STANDARDS - CONTINUED:

VI. COUPLING STOCK - ALL SIZES:

Plants will all operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

Product	Blend Point Value 63	67 & 68	60
Pressure - All Classes	19%	18%	20%
Sewer - All Classes	17	16	18
Irrigation-Type 5 (3"-6")	See Building Sewer		
8"-16"	17	16	18
Type 10 and 15	17	16	18
225 Ft. Hd.	19	18	20
325 Ft. Hd.	19	18	20
425 Ft. Hd.	19	18	20
Flex Joint Conduit	17	16	18

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (H-Blend Formulation)

a. Building Sewer - All Classes
b. Telephone Duct
c. Gas Vent
d. Industrial Vent
e. Underdrain
f. Plumbing Vent
g. Air Duct

All Sizes: 10% H-Blend

X— INDICATES CHANGE —REASON:	Long Beach Changed to 4T30 Fiber	RETURN TO
AUTHORITY FOR CHANGE	Division Fiber Allotment	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page Dated 10/3/62	FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	ENG.				DATE ISSUED 11/30/62

Form 333-2 Ptd. in U.S.A.

MTC 002915

NOMINAL PERCENT FIBER BLEND - COST STANDARDS-CONTINUED:

VI. COUPLING STOCK - ALL SIZES:

Plants will all operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

Product	Blend Point Value 63	67	60
Pressure - All Classes	19%	18%	20%
Sewer - All Classes	17	16	18
Irrigation-Type 5 (3"-6")	See Building Sewer		
8"-16"	17	16	18
-Type 10 and 15	17	16	18
-225 Ft. Hd.	19	18	20
-325 Ft. Hd.	19	18	20
-425 Ft. Hd.	19	18	20
Flex Joint Conduit	17	16	18

Other Products (IV above) same as pipe except as noted.

2. Non-Pressurized Products - (M-Blend Formulation)

a. Building Sewer - All Classes
b. Telephone Duct
c. Gas Vent
d. Industrial Vent
e. Underdrain
f. Plumbing Vent
g. Air Duct

All Sizes: 10% M-Blend

MTC 002916

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Continued)

VI. COUPLING STOCK - All Sizes

(Plants will all operate at 100% fiber level)

1. PRESSURIZED PRODUCTS - (M-Blend Formulation)

Product	Blend Point Value 63	67
Pressure - All Classes	19%	18%
Sewer - All Classes	17	16
Irrigation - Type 5 (3"-6")	See Building Sewer	
8"-16"	17	16
- Type 10 & 15	17	16
- 225 Ft. Hd.	19	18
- 325 Ft. Hd.	19	18
- 425 Ft. Hd.	19	18
Flex-Joint Conduit	17	16

Other Products (IV above) same as pipe except as noted

2. NON-PRESSURIZED PRODUCTS - (H-Blend Formulation)

a) Building Sewer - All Classes
b) Telephone Duct
c) Gas Vent
d) Industrial Vent
e) Underdrain
f) Plumbing Vent
g) Air Duct

} All Sizes: 10% H-Blend

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON:	General Revision to Include Fiber Levels and Point Values
AUTHORITY FOR CHANGE	W. L. Van Derbeek's Letter of 1-25-62
SUPERSEDES:	All Pages 425-2 Dated 1-10-62 and 4-20-61

DIR. C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. MGR.				DATE ISSUED 3-2-62

Form 333-2 Pld. in U.S.A.

PIPE MACHINE FURNISH (Cont'd.) **CANCELLED**

PRESSURE PIPE FURNISHES

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

Silica must be from a Research approved source as noted in Purchase Specification TR-1200

To be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air permeability test

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

Cement - Silica Ratio

Cement and Silica are to be used in the following ratios. To one part of cement the following parts of Silica shall be used:

	MINIMUM	MAXIMUM
10 FT. MACHINE		
Non-Pressure	0.7	1.0
Pressure	0.7	0.8
13 FT. MACHINE		
None-Pressure	0.7	0.8
Pressure	0.7	0.8

X FLOCCULATING AGENTS (Purchase Specification TR-3001)

A 1/4% - 1% solution of an approved flocculating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295
WAUKEGAN - SEPARAN NP 10; NALCO 628
DENISON - NALCO 633 HD; SEPARAN NP 10; BETZ POLYFLOC 1150; HYDRAID 5504
LONG BEACH - SEPARAN NP 10
STOCKTON - HYDRAID 5504; BETZ POLYFLOC 1150
GREEN COVE - NALCO 633 HD; BETZ POLYFLOC 1150

X— INDICATES CHANGE —REASON:	Show Flocculating Agents Currently Used
AUTHORITY FOR CHANGE	Regular Approvals
SUPERSEDES:	Same Spec., Same Pages, Dated 8-28-75 And 6-2-71

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	3-24-77

F. POST CO. 126-3 80157

PIPE MACHINE FURNISH '(Cont'd.)

PRESSURE PIPE FURNISHES

CANCELLED 3/24/77

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

X Silica must be from a Research approved source as noted in Purchase Specification TR-1200

To be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air permeability test

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

Cement - Silica Ratio

Cement and Silica are to be used in the following ratios. To one part of cement the following parts of Silica shall be used:

	MINIMUM	MAXIMUM
10 FT. MACHINE		
Non-Pressure	0.7	1.0
Pressure	0.7	0.8
13 ft. MACHINE		
Non-Pressure	0.7	0.8
Pressure	0.7	0.8

FLOCCULATING AGENTS (Purchase Specification TR 3001)

A ¼% - 1% solution of an approved flocculating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295
WAUKEGAN - SEPARAN NP 10

X- INDICATES CHANGE —REASON: Increase fineness to 2500; Delete min. and Quarts requirement.

AUTHORITY FOR CHANGE: Research Approval

over →

SUPERSEDES: Same Spec., Same Page, Dated 6/27/68 6/2/71?

MGR. Q. C. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	REG. LAB.				DATE ISSUED 8/28/75

F. POST CO. 1243 8/57

PIPE MACHINE FURNISH (Cont'd.)

PRESSURE PIPE FURNISHES

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

Silica must be from a research approved source

Min. SiO_2 - 93% (Quartz)

to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

Cement - Silica Ratio

Cement and Silica are to be used in the following ratios. To one part of cement the following parts of Silica shall be used:

	MINIMUM	MAXIMUM
10 FT. MACHINE		
Non-Pressure	0.7	1.0
Pressure	0.7	0.8
13 ft. MACHINE		
Non-Pressure	0.7	0.8
Pressure	0.7	0.8

X FLOCCULATING AGENTS (Purchase Specification TR 3001)

A ¼% - 1% solution of an approved flocculating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295
WAUKEGAN - SEPARAN NP 10

X- INDICATES CHANGE	-REASON: Show flocculating agents currently used.	PLEASE RETURN TO
AUTHORITY FOR CHANGE	Research Approval	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page, Dated 6/27/68	LIBRARY

MGR. G [illegible]	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. [illegible]				DATE ISSUED 6/2/71

POST CO. 125-3 20187

CANCELLED

PIPE MACHINE FURNISH (Cont'd.)

PRESSURE PIPE FURNISHES

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

Silica must be from a research approved source

Min. SiO_2 - 93% (Quartz)

to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

Cement - Silica Ratio

Cement and Silica are to be used in the following ratios. To one part of cement the following parts of Silica shall be used:

	MINIMUM	MAXIMUM
10 FT. MACHINE		
Non-Pressure	0.7	1.0
Pressure	0.7	0.8
13 ft. MACHINE		
Non-Pressure	0.7	0.8
Pressure	0.7	0.8

MTC 002921

FLOCCULATING AGENTS (Purchase Specification TR 3001)

A 1% solution of an approved flocculating agent is added continuously to the re-circulating system. This is at the rate of 0.01 to 0.03% of dry flocculating agent of the dry furnish weight. The following agents are in use at this time:

MANVILLE - SEPARAN NP 10
WAUKEGAN - SEPARAN NP 10

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM).

PIPE MACHINE FURNISH (Cont'd)

PRESSURE PIPE FURNISHES

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

Silica must be from a research approved source

Min. SiO_2 - 93% (Quartz)

to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

CEMENT - SILICA RATIO

Cement and silica are to be used in the following ratios:

Stockton	1.0 to 0.6
Waukegan	1.0 to 0.8
All Other Plants	1.0 to 0.7

X FLOCCULATING AGENTS (Purchase Specification TR 3001)

A 1% solution of an approved flocculating agent is added continuously to the recirculating system. This is at the rate of 0.01 to 0.03% of dry flocculating agent of the dry furnish weight. The following agents are in use at this time:

MANVILLE	- SEPARAN NP 10
WAUKEGAN	- SEPARAN NP 10
MARRERO	- NONE, USE JAGUAR 507 IF NEEDED
DENISON	- NALCO 633; USE SEPARAN NP 10 AS ALTERNATE
LONG BEACH	- SEPARAN NP 10
STOCKTON	- SEPARAN NP 10 OR NALCO 633

MTC 002922

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M, G, J, W, D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	6

PIPE MACHINE FURNISH (Cont'd)

UNCONTROLLED

PRESSURE PIPE FURNISHES

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

Silica must be from a research approved source

Min. SiO_2 - 93% (Quarts)

to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet careen analysis).

CEMENT - SILICA RATIO

Cement and Silica are to be used in the following ratios:

Stockton	1.0 to 0.6
Waukegan	1.0 to 0.8
All Other Plants	1.0 to 0.7

SEPARAN

Separan NP-10 or Jaguar 507 is added as a flocculating agent to the recirculating system. A 1% solution is prepared and added continuously at the rate of 0.01 to 0.03% dry Separan or Jaguar of the dry furnish weight. (Refer - Pipe Division operations manual).

PLEASE RETURN TO J-M RESEARCH LIBRARY (MMU)

X — INDICATES CHANGE	—REASON: Change Long Beach From 0.6 to 0.7							
AUTHORITY FOR CHANGE	Additional Silica Available; A. C. Daley's Letter 6-4-64							
SUPERSEDES:	Same Spec., Same Page Dated 11-8-63							
MGR. P.R.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.				DATE ISSUED 6-11-64

Form 333-2-A Pld. in U.S.A.

PIPE MACHINE FURNISH (Cont'd)

PRESSURE PIPE FURNISHES (Cont'd)

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA

Silica must be from a research approved source

Min. SiO_2 - 93% (Quarts)

to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

CEMENT - SILICA RATIO

Cement and Silica are to be used in the following ratios:

X

Long Beach and Stockton	1.0 to 0.6
Waukegan	1.0 to 0.8
All Other Plants	1.0 to 0.7

SEPARAN

Separan NP-10 or Jaguar 507 is added as a flocculating agent to the recirculating system. A 1% solution is prepared and added continuously at the rate of 0.01 to 0.03% dry Separan or Jaguar of the dry furnish weight. (Refer - Pipe Division operations manual).

RETURN TO
J-M RESEARCH
FILE ROOM

X— INDICATES CHANGE —REASON:	Change Long Beach From 0.7 to 0.6	MTC 002924
AUTHORITY FOR CHANGE	Ball Mill Output Not Adequate	
SUPERSEDES:	Same Spec., Same Page Dated 3-2-62 & Dev. DB-3 Dated 1-14-63	

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB				DATE ISSUED 11-8-63

PIPE MACHINE FURNISH (Cont'd)

PRESSURE PIPE FURNISHES (Cont'd)

CANCELLED

Note: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA -

Silica must be from a research approved source

Min. SiO_2 - 93% (Quartz)

to be ground to a minimum fineness of 2400 square centimeters per gram as measured by the Blaine Air permeability test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

CEMENT - SILICA RATIO

Cement and Silica are to be used in the following ratios:

Stockton	1.0 to 0.6
Waukegan	1.0 to 0.8
All Other Plants	1.0 to 0.7

SEPARAN

Separan NP-10 or Jaguar 507 is added as a flocculating agent to the recirculating system. A 1% solution is prepared and added continuously at the rate of 0.01 to 0.03% dry Separan or Jaguar of the dry furnish weight. (Refer - Pipe Division operations manual).

RETURN TO J-M RESEARCH FILE ROOM

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M, J, D, W, R, & Sp TR
		SPEC NO.	425-2
		PAGE NO.	7

FLOCCURATING AGENTS - (Cont'd.)

X DENISON - NALCO 633 HD; USE SEPARAN NP 10 AS ALTERNATE
LONG BEACH - SEPARAN NP 10
STOCKTON - BETZ POLYFLOCK 1150
X GREEN COVE - BETZ POLYFLOCK 1150; USE NALCO 633 HD AS ALTERNATE.

X— INDICATES CHANGE —REASON: Show flocculating agents currently used.

AUTHORITY FOR CHANGE: Research Approval

SUPERSEDES: Same spec., same page, dated 6/27/68

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 6/2/71

PLEASE RETURN TO J-M RESEARCH LIBRARY

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JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,D,W& R PLANT
		SPEC NO.	425-2
		PAGE NO.	7

CANCELLED

FLOCCULATING AGENTS - (Cont'd.)

X MARRERO - POLYHALL #295 (STEIN HALL CO.); USE NALCO 633 AS ALTERNATE
DENISON - NALCO 633; USE SEPARAN NP 10 AS ALTERNATE
LONG BEACH - SEPARAN NP 10
STOCKTON - SEPARAN NP 10 ORNALCO 633

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE -REASON:	Update Cement - Silica Ratio & Flocculating Agents
AUTHORITY FOR CHANGE	Research Approval
SUPERSEDES:	None - New Page

MGR. G.O.C	MGR. G.C.	SUPR. G.C.	PRED. SUPT.	PLNT. FIN.	REG.				DATE ISSUED 6/27/68

F. POST CO. 126-3 86187

MTC 002927

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CANCELLED 2/9/78

PIPE MACHINE FURNISH: (Cont'd)

PRESSURE PIPE FURNISHES:

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA:

Silica must be from a Research approved source as noted in Purchase Specification TR-1200.

To be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air Permeability Test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

CEMENT-SILICA RATIO:

Up to 12% dust house scrap to be added to sand at the ball mill, when and where authorized.

To one part of cement the following parts of Plain Silica or Silica "fortified" with ball milled scrap shall be used.

	CEMENT - SILICA RATIO		CEMENT - SILICA/SCRAP * RATIO		
			12% Level		
10 FT. MACHINE	Min.	Max.	Min.	Max.	Authorized Plant
NON-PRESSURE	0.70	1.00	0.80	1.13	STOCKTON
PRESSURE	0.70	0.80	0.80	0.91	
13 FT. MACHINE					
NON-PRESSURE	0.70	0.80	0.80	0.91	
PRESSURE	0.70	0.80	0.80	0.91	

*Milled Scrap substituted for cement.

FLOCCULATING AGENTS (Purchase Specification TR-3001)

A 1/4% - 1% solution of an approved flocculating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295
WAUKEGAN - SEPARAN NP 10; NALCO 628
DENSION - NALCO 633 HD; SEPARAN NP 10; BETZ POLYFLOC 1150; HYDRAID 5504
LONG BEACH - SEPARAN NP 10
STOCKTON - HYDRAID 5504; BETZ POLYFLOC 1150
GREEN COVE - NALCO 633 HD; BETZ POLYFLOC 1150

X- INDICATES CHANGE -REASON: Add Ratios for Milled Scrap at Stockton Plant

AUTHORITY FOR CHANGE: WHQ Production

SUPERSEDES: Same Spec., Same Page, dated ~~[illegible]~~ 3/24/77

WGR. G.O.C.	MGR. G.C.	SUPR. G.C.	PROD. SUPT.	PLNT. FIN.	REG. LAB.				DATE ISSUED 6-9-77

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	TR-425-2
		PAGE NO.	15

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Cont'd.)

CANCELLED 8/4/82

IV. OTHER PRODUCTS - 13' LENGTHS

A. Air Duct - Vent Duct
B. Gas Vent
C. Vent Duct
D. Underdrain
E. Air Duct

Sizes 10" and above
Fiber Usage: Maximum
15% to Maintain Diemensional Stability

F. Temp-Tite

The fiber percentages of core pipe are the same as the same sizes and classes of Water Pipe. The fiber percentages of all sizes of casing pipe is the same as that of 10"-36" Sewer Pipe.

V. Non-Pressure Pipe - 10' Lengths - All Sizes

All Plants will operate at 100% fiber level.

Sewer % H-Blend

Size	CL 1500	CL2400	CL3300
4	10%	13	13.5
5	10	13	13.5
6	13	13.5	13.5
8	13	13.5	14.0

Product	60-62	63-64	65-66	67-68	69-70	H-Blend
Korduct Type I, (3",3½",4",4½")	--	--	--	--	--	9%
Korduct Type I, (5", 6")	--	--	--	--	--	11%
Telephone "CA" Duct (Long Beach)	--	--	--	--	--	10%
Telephone C Duct	--	--	--	--	--	9%
Telephone B Duct	--	--	--	--	--	9%
Conduit Type II	--	--	--	--	--	9%
Gas Vent	--	--	--	--	--	9%
Vent Duct	--	--	--	--	--	9%
Underdrain	--	--	--	--	--	9%
Air Duct	--	--	--	--	--	9%

X- INDICATES CHANGE —REASON: Review and Reissue

APPROVED Q. A. DEPT.

AUTHORITY FOR CHANGE: Q/A Manager

SUPERSEDES: Same Spec, Page 4, Dated 7/18/75

MGR. G. G. C	MGR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 2/9/78

F. POST CO. 120-3 80187

MTC 002929

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	TR-425-2
		PAGE NO.	16

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (CONT'D)

CANCELLED 8/5/81

VI. COUPLING STOCK - ALL SIZES

Plants will operate at 100% fiber level.

1. Pressurized Products - (M-Blend Formulation)

	60-62	63-64	65-66	67-68	69-70	71-72	73-75	76-78	79-80
WATER COUPLINGS**									
6"-16" All Classes*	22	21	20.5	20	19	18.5	18	17.5	17
All Other sizes and Classes	20	19	18.5	18	17.5	17	16.5	16	15.5
"R"&"T", IRRIGATION & TRANSMISSION**									
6" All Classes	21	20	19.5	19	18.5	18	17.5	17	16.5
8"-16" All Classes	22	21	20.5	20	19	18.5	18	17.5	17
18"-36" All Classes	24.5	23.5	23	22	21.5	21.	20.5	19.5	19
MEE WELL CASING	24.5	23.5	23	22	21.5	21	20.5	19.5	19
SEWER 4"-36", All Classes*	18	17	16.5	16	15.5	15	14.5	14	14

Other Products (SectionIV) Same as Pipe Except as noted

2. Non-Pressurized Products - H-Blend Formulation

TRANSITE couplings and fittings are produced with the same percentage of H-Blend as the Pipe in the same product group.

NOTE*: Any Blend of Fibers Used for the Manufacture of 6"-16" Water or Sewer Couplings Must Contain at Least 10% Blue Fiber.

NOTE**: Water, R & T Irrigation and Type 5 Irrigation Coupling stock for sizes 4" and above is to be formed only on the 13 foot pipe machines.

APPROVED Q. A. DEPT.

X- INDICATES CHANGE	REASON: Review and Reissue
AUTHORITY FOR CHANGE	Q/A Manager
SUPERSEDES:	Same Spec., Page 5, Dated 3/1/73

MGR. Q. C.	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.				DATE ISSUED	2/9/78

Johns-Manville MANUFACTURING SPECIFICATION JM-280-2-A	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	Pipe
		SPEC. NO.	TR-425-2
		PAGE NO.	17

CANCELLED 9/7/81

VII. PIPE MACHINE FURNISH:

1. SILICA
Silica must be from a Research approved source as noted on Purch. Specs., TR-1200, TR-1281 or TR-1282.
1.1 Raw Sand Purchased under TR-1200 to be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air Permeability Test. For control purposes, silica to show 85% min. through 200 mesh screen (wet screen analysis).
1.2 Ground Silica Purchased under TR-1281 to meet spec requirements.
1.3 Ground Silica Purchased under TR-1282 to meet spec requirements.

2. CEMENT
Cement must be from a Research approved source as noted in Purch. Spec., TR-1000.

3. FIBER
Asbestos fibers must be Research approved as noted in Purc. Spec., TR-1900 and shown on Mfg. Spec., TR-425-1, Page 1.

4. CCC
Crystalline Calcium Carbonate (Marble Filler) from a Research approved source as noted in Purchase Spec., TR-1210.

5. CEMENT-SILICA RATIO
Up to 12% dust house scrap to be added to sand at the ball mill, when and where authorized.

To one part of cement the following parts of Plain Silica or Silica "fortified" with ball milled scrap shall be used.

	CEMENT - SILICA RATIO		CEMENT - SILICA/SCRAP * RATIO 12% Level		
10 FT. MACHINE	Min.	Max.	Min.	Max.	Authorized Plant
NON-PRESSURE	0.70	1.00	0.80	1.13	STOCKTON
PRESSURE	0.70	0.80	0.80	0.91	LONG BEACH
13 FT. MACHINE					
NON-PRESSURE	0.70	0.80	0.80	0.91	
PRESSURE	0.70	0.80	0.80	0.91	

*Milled Scrap substituted for cement.

X- INDICATES CHANGE	Add CCC material		
AUTHORITY FOR CHANGE	Directors: Research and Manufacturing		
SUPERSEDES:	Same Spec., Page 17, Dated 9/5/79	DATE ISSUED:	11/9/79

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Johns-Manville MANUFACTURING SPECIFICATION JM-260-2-A	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	Pipe
		SPEC. NO.	TR-425-2
		PAGE NO.	17

VII. PIPE MACHINE FURNISH:

CANCELLED 11/9/79

1. SILICA
Silica must be from a Research approved source as noted on Purc. Specs. TR-1200, TR-1281 or TR-1282.
1.1 Raw Sand Purchased under TR-1200 to be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air Permeability Test. For control purposes, silica to show 85% min. through 200 mesh screen (wet screen analysis).
1.2 Ground Silica Purchased under TR-1281 to meet spec requirements.
1.3 Ground Silica Purchased under TR-1282 to meet spec requirements.

2. CEMENT
Cement must be from a Research approved source as noted in Purc. Spec. TR-1000.

3. FIBER
Asbestos fibers must be Research approved as noted in Purc. Spec. TR-1900 and shown on Mfg. Spec. TR-425-1, Page 1.

4. CEMENT-SILICA RATIO:
Up to 12% dust house scrap to be added to sand at the ball mill, when and where authorized.

To one part of cement the following parts of Plain Silica or Silica "fortified" with ball milled scrap shall be used.

	CEMENT - SILICA RATIO		CEMENT - SILICA/SCRAP * RATIO 12% Level		
10 FT. MACHINE	Min.	Max.	Min.	Max.	Authorized Plant
NON-PRESSURE	0.70	1.00	0.80	1.13	STOCKTON
X PRESSURE	0.70	0.80	0.80	0.91	LONG BEACH
13 FT. MACHINE					
NON-PRESSURE	0.70	0.80	0.80	0.91	
PRESSURE	0.70	0.80	0.80	0.91	

*Milled Scrap substituted for cement.

5. COAGULATING AGENTS (Purchase Specification TR-3001)

A 1/4% - 1% solution of an approved coagulating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295

X DENISON - NALCO 633 HD; SEPARAN NP 10; BETZ POLYFLOC 1150; HYDRAID 5504
LONG BEACH - SEPARAN NP 10; Hydraid 5504
STOCKTON - HYDRAID 5504; BETZ POLYFLOC 1150
GREEN COVE - NALCO 633 HD; BETZ POLYFLOC 1150

X - INDICATES CHANGE	Add L/B as user of ball milled scrap and Hydraid 5504 at L/B
AUTHORITY FOR CHANGE	Q.C. Manager
SUPERSEDES:	Same Spec., Page 17, Dated 8/21/79
DATE ISSUED:	9/5/79

MTC 002932

Johns-Manville MANUFACTURING SPECIFICATION JM-260-2-A	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	DIVISION	Pipe
		SPEC. NO.	TR-425-2
		PAGE NO.	17

CANCELLED 9/5/79

VII. PIPE MACHINE FURNISH:

1. SILICA

Silica must be from a Research approved source as noted on Purc. Specs. TR-1200, TR-1281 or TR-1282.

1.1 Raw Sand Purchased under TR-1200 to be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air Permeability Test. For control purposes, silica to show 85% min. through 200 mesh screen (wet screen analysis).

1.2 Ground Silica Purchased under TR-1281 to meet spec requirements.

1.3 Ground Silica Purchased under TR-1282 to meet spec requirements.

2. CEMENT

Cement must be from a Research approved source as noted in Purc. Spec. TR-1000.

3. FIBER

Asbestos fibers must be Research approved as noted in Purc. Spec. TR-1900 and shown on Mfg. Spec. TR-425-1, Page 1.

4. CEMENT-SILICA RATIO:

Up to 12% dust house scrap to be added to sand at the ball mill, when and where authorized.

To one part of cement the following parts of Plain Silica or Silica "fortified" with ball milled scrap shall be used.

	CEMENT - SILICA RATIO		CEMENT - SILICA/SCRAP * RATIO 12% Level		
10 FT. MACHINE	Min.	Max.	Min.	Max.	Authorized Plant
NON-PRESSURE	0.70	1.00	0.80	1.13	STOCKTON
PRESSURE	0.70	0.80	0.80	0.91	
13 FT. MACHINE					
NON-PRESSURE	0.70	0.80	0.80	0.91	
PRESSURE	0.70	0.80	0.80	0.91	

*Milled Scrap substituted for cement.

5. COAGULATING AGENTS (Purchase Specification TR-3001)

A 1/4% - 1% solution of an approved coagulating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295

DENISON - NALCO 633 HD; SEPARAN NP 10; BETZ POLYFLOC 1150; HYDRAID 5504
LONG BEACH - SEPARAN NP 10
STOCKTON - HYDRAID 5504; BETZ POLYFLOC 1150
GREEN COVE - NALCO 633 HD; BETZ POLYFLOC 1150

X – INDICATES CHANGE	Add Cement and Fiber References	
AUTHORITY FOR CHANGE	Q.C. Manager	
SUPERSEDES:	Same Spec., Page 17, Dated 2/9/78	DATE ISSUED: 8/21/79

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"CONFIDENTIAL - FOR IN-HOUSE USE ONLY"

PIPE MACHINE FURNISH: (Cont'd)

CANCELLED 8/21/79

PRESSURE PIPE FURNISHES:

NOTE: When running more than one product concurrently calling for different % fiber blends, always use the higher %.

SILICA:

Silica must be from a Research approved source as noted in Purchase Specification TR-1200.

To be ground to a minimum fineness of 2500 square centimeters per gram as measured by the Blaine Air Permeability Test.

For control purposes - Silica will show 85% min. through 200 mesh screen (wet screen analysis).

CEMENT-SILICA RATIO:

Up to 12% dust house scrap to be added to sand at the ball mill, when and where authorized.

To one part of cement the following parts of Plain Silica or Silica "fortified" with ball milled scrap shall be used.

	CEMENT - SILICA RATIO		CEMENT - SILICA/SCRAP * RATIO 12% Level		
10 FT. MACHINE	Min.	Max.	Min.	Max.	Authorized Plant
NON-PRESSURE	0.70	1.00	0.80	1.13	STOCKTON
PRESSURE	0.70	0.80	0.80	0.91	
13 FT. MACHINE					
NON-PRESSURE	0.70	0.80	0.80	0.91	
PRESSURE	0.70	0.80	0.80	0.91	

*Milled Scrap substituted for cement.

COAGULATING AGENTS (Purchase Specification TR-3001)

A 1/4% - 1% solution of an approved coagulating agent is added continuously to the recirculating system. This is at the rate of 0.005 to 0.03% of dry flocculating agent to the dry furnish weight. The following agents are in use at this time:

MANVILLE - POLYHALL #295
WAUKEGAN - SEPARAN NP 10; NALCO 628
DENSION - NALCO 633 HD; SEPARAN NP 10; BETZ POLYFLOC 1150; HYDRAID 5504
LONG BEACH - SEPARAN NP 10
STOCKTON - HYDRAID 5504; BETZ POLYFLOC 1150
GREEN COVE - NALCO 633 HD; BETZ POLYFLOC 1150

APPROVED Q. A. DEPT.

X- INDICATES CHANGE REASON: Review and Reissue

AUTHORITY FOR CHANGE: Q/A Manager

SUPERSEDES: Same Spec, Page 6, Dated 6/9/77

MGR. G.C.	MGR. G.C.	SUPT. G.C.	FOREM. SUPT.	PLNT. FOR.	FOR. LAB.				DATE ISSUED 2/9/78

out on approval
4/19/73

Denver DHQ
Pipe Division

April 19, 1973

F. HENRY - MANVILLE
G. E. DELONG - GREEN COVE
C. ALLEN - WAUKEGAN
D. FRENCH - DENISON
W. FORD - LONG BEACH PLANT
W. E. VOLWILER - STOCKTON
A. C. DALEY - DHQ
F. H. HARDENSTEIN - DHQ
LIBRARIAN - DHQ
LIBRARIAN - REC
E. J. WARRICK - REC
I. P. GARDNER - TORONTO

C. G. BRYANT - MANVILLE
B. E. LIMING - GREEN COVE
E. C. BANDOVICH - WAUKEGAN
A. M. CURRY - DENISON
H. F. KAHLEN - LONG BEACH PLANT
B. L. THACHER - STOCKTON

MANUFACTURING SPECIFICATION: 425-2
(TRANSITE* Pipe machine furnishes)

The enclosed page of the above has been revised in accord with K. J. Whalen's letter of 12/1/72.

Add the following page to your file and cancel prior issue of the same page. Also cancel page 5.0 of the same specification.

ADD

Mfg. Spec.	Page	Dated
425-2	5.0	3/1/73

Cancel

Mfg. Spec.	Page	Dated
425-2	2.0	5/1/67

F. H. Hardenstein/J. J. Kriso JKriso

/jp

425

DHQ, Manville
May 7, 1968

P. B. Proctor - REC
A. C. Daley
Librarian - REC
J. S. Autry - DHQ
J. W. Bird - Denison
C. G. Bryant - Manville
L. L. Trauth - Marrero
B. L. Thacher - Stockton
H. F. Kahlen - Long Beach
J. Huber - Waukegan
H. C. Anderson - Green Cove

MANUFACTURING SPECIFICATION 425-2
REISSUANCE

The attached specification revision changed the fiber points for Sewer and Standard Storm Drain (not California Highway Specification) from 10.2 to 9.7. It was withdrawn temporarily because of some question as to its application at two plants.

The specification revision is now reissued for your use. Any plant finding the 9.7 to be too low to meet required crush levels on these products should issue a deviation to cover their needed fiber point use.

ACD
A. C. Daley

cc: J. E. Hesse
K. J. Whalen
D. Nowlin
L. E. Inguagiato - Marrero
H. Engel - Manville
G. DeLong - Green Cove
E. A. Paddock - Waukegan
A. Harris - Long Beach
D. R. Thomas - Stockton
G. C. Eggleston - Denison
file
c

ACD/ga

ATTACHMENT

MAY [illegible], 1967

P. B. Proctor - REC
Librarian - REC
A. C. Daley - DHQ
J. W. Bird - Denison
C. G. Bryant - Manville
L. L. Trauth - Marrero
B. L. Thacher - Stockton
H. F. Kahlan - Long Beach
J. Huber - Waukegan
J. Kopp - Green Cov.
D. A. Ley - Toronto
File - Chrono

MANUFACTURING SPECIFICATIONS:

Attached you will find your copies of the following specifications:

TRANSITE PIPE
Fiber Blends

Specification Number:	425-1
Page Numbers:	8
Dated:	5-1-67
Cancels:	Page 8 Dated 7-20-66

To extend optional use of H-Blend and add fiber level for use in any approved product of 6" (13').

TRANSITE Pipe
Pipe Machine Furnishes

Specification Number:	425-2
Dated:	5-1-67

Page Numbers	Cancels	Page Number	Cancels
1.0	1.6 10-10-63	2.0	2.0 6-9-66
1.1	1 6-19-63	2.1	2.1 5-27-66
1.2	1.3 9-28-66	2.2	2.2 5-27-66
1.3	New Page Cancels none	3.0	3.4 7-20-66
1.4	1.7 10-10-63	3.1	3 7-20-66
1.5	1.1 6-19-63	3.2	3.3 7-20-66
1.6	14 6-19-63	3.3	New Page cancels non-
1.7	New Page Cancels none	3.4	3.5 10-10-63
1.8	1.8 10-10-63	3.5	3.1 10-10-63
1.9	1.2 6-19-63	3.6	New Page Cancels non-
1.10	15 6-19-63	3.7	New Page cancels non-
1.11	New Page Cancels none	3.8	3.6 10-10-63
		3.9	3.2 10-10-63
		3.10	New Page Cancels none
		3.11	New Page Cancels none

To Reduce minimum fiber usage to 12% and extend blend point value to 90, as per verbal authority J. E. Hesse.

FHH

F. H Hardenstein - Manville Plant

MTC 002937

DHQ, Manville
Pipe Quality Control
May 1, 1969

A. C. Daley	G. C. Eggleston
F. H. Hardenstein	J. W. Bird
J. L. Miller	A. Harris
K. J. Whalen	H. F. Kahlen
E. J. Mitchell	D. R. Thomas
C. G. Bryant	B. L. Thacher
G. E. DeLong	J. W. Walker
H. C. Anderson	J. Troitino
W. E. Volwiler	P. B. Proctor
L. L. Trauth	Librarian
E. A. Paddock	R. A. Cimiotti
J. G. Huber	I. P. Gardner

MANUFACTURING ~~SPECIFICATION~~ 425-1
MANUFACTURING SPECIFICATION 425-2

Attached are revised pages of the Manufacturing Specification TRANSITE Pipe Fiber Blends, and Manufacturing Specification TRANSITE Pipe, Pipe Machine Furnishes. These pages have been revised to show the new Fiber Points and Fiber Usage to be used in the production of 13' lengths of 6" and 8" Sewer Pipe.

These pages have been approved and are officially in effect with this issue. These revisions should be carefully reviewed. Any points in question should be brought promptly to the attention of the DHQ Quality Control Department.

Please add the attached to your file and cancel the prior issue.

TRANSITE* PIPE FOR FIBER BLENDS

Manufacturing Specification Number:	425-1
Page Number:	8
Dated:	4/22/69
Cancels:	Same Spec., Same Page, Dated 12/13/68

TRANSITE* PIPE, PIPE MACHINE FURNISHES

Manufacturing Specification Number:	425-2
Page Numbers:	3.0, 3.1, 3.2 and 3.3
Dated:	4/25/69
Cancels:	Same Spec., Same Pages, Dated 3/14/68

Also cancel the following pages which apply to other than the 100% Fiber Levels. Since these pages are not needed at this time, they will not be revised to show the new fiber levels for 13' lengths of 6" and 8" Sewer Pipe.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

Manufacturing Specification Number: 425-2

Cancel: Pages 3.7 Dated: 5/1/67
Pages 3.4, 3.5, 3.6, 3.8, 3.9, 3.10 and 3.11 Dated: 3/14/68

A. C. Daley
by F. H. Hardenstein

FHH/cf

PLEASE RETU
J-M RESEARC
LIBRARY (MA

MTC 0

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: 425 TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

I. WATER PIPE - 10' and 13' Lengths: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100

Fiber Level - %		100	100	100	100	100	100	100	100	100	100	100
Blend Point Value		60	61	62	63	64	65	66	67	68	69	70
Class 50	4"-6"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.
	8"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	10"-36"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.
Class 100	3"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.
	4" (13')	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.
	4" (10')	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
	5"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.
	6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.
	6" (10')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.
	8"	20.8	20.5	20.2	19.8	19.5	19.2	18.9	18.6	18.4	18.2	17.
	10"-14"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.
	16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.
	18"-20"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	24"-36"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.
Class 150	3"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.
	4" (13')	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.
	4" (10')	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	5"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.
	6"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.2	19.
	8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.
	10"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.
	12"-14"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.
	18"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.
	16"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.5	20.1	19.
Class 200	3"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.
	4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.7	18.4	18.2	17.
	6"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.
	6" (Wau)	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.
	8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.
	8" (Wau)	25.3	24.9	24.5	24.1	23.7	23.4	23.0	22.7	22.3	22.0	21.
	10"	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.
	12"	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.
	14"-16"	24.7	24.3	23.8	23.4	23.1	22.7	22.4	22.1	21.7	21.4	21.
	18"-36"	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.6	19.2	19.
NOTE (1)	6'6"											
Class 150	3"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	15.8	15.6	15.4	15.
	4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2	17.

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Add 5" Size

AUTHORITY FOR CHANGE: Product Proposal 425-165 J.B. McCarty's Letter 4-25-63

SUPERSEDES: Same Spec., Same Page Dated 1/9/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED	6-19-63

Prt. In U.S.A.

Form 333-2

MTC 002940

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	[illegible]
		SPEC NO.	4[illegible]-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

I. PRESSURE PIPE - 10' and 13' Lengths: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 50	4"-6"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.
	8"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	10"-36"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.
Class 100	3"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.
	4" (13')	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.
	4" (10')	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.
	6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.
	6" (10')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.
	8"	20.8	20.5	20.2	19.8	19.5	19.2	18.9	18.6	18.4	18.2	17.
	10"-14"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.
	16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.
	18"-20"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	24"-36"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.
Class 150	3"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.
	4" (13')	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.
	4" (10')	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	6"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.
	8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.
	10"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.
	12"-14"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.
	16"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.
	18"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.
Class 200	3"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.
	4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.7	18.4	18.2	17.
	6"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.
	6" (Wau)	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.
	8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.
	8" (Wau)	25.3	24.9	24.5	24.1	23.7	23.4	23.0	22.7	22.3	22.	21.
	10"	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.	19.
	12"	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.
	14"-16"	24.7	24.3	23.8	23.4	23.1	22.7	22.4	22.1	21.7	21.4	21.
	18"-36"	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.6	19.	19.
Note (1) Class 150	6'6" 3"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	15.8	15.6	15.4	15.2
	4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2	17.

X-- INDICATES CHANGE —REASON: Add 70 Blend Point Value

AUTHORITY FOR CHANGE: Additional Information

SUPERSEDES: Same Spec., Same Page Dated 11/30/62

RETURN TO J-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. [illegible]	DATE ISSUED 1/9/63

Form 333-2 P.I. U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	...G., M., D., & PITT
		SPEC NO.	425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. PRESSURE PIPE - 10' AND 13' LENGTHS: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100.

Fiber Level % Blend Point Value		100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69
Class 50	4"-6"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.
	8"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.
	10"-36"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.
Class 100	3"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.
	4" (13')	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.
	4" (10')	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.
	6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.
	6" (10')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.
	8"	20.8	20.5	20.2	19.8	19.5	19.2	18.9	18.6	18.4	18.
	10"-14"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.
	16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.
	18"-20"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.
	24"-36"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.
Class 150	3"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.
	4" (13')	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.
	4" (10')	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.
	6"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.
	8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.
	10"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.
	12"-14"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.
	16"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.
	18"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.
Class 200	3"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.
	4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.7	18.4	18.
	6"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.
	6" (Wau.)	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.
	8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.
	8" (Wau.)	25.3	24.9	24.5	24.1	23.7	23.4	23.0	22.7	22.3	22.
	10"	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.
	12"	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.
	14"-16"	24.7	24.3	23.8	23.4	23.1	22.7	22.4	22.1	21.7	21.
	18"-36"	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.6	19.
Note (1) Class 150	6'6" 3"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	15.8	15.6	15.
	4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Corrections in 10"-36" Sizes. 63 and 67 Point Value at 95 and 100 Fiber Level.

AUTHORITY FOR CHANGE

Additional Information and Corrections

SUPERSEDES: Same Spec., Same Page Dated 11/1...

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED 11/30/62

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES CANCELLED	PLANT & DIV.	A,G,J,W,D, & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. PRESSURE PIPE - 10' AND 13' LENGTHS: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100.

	Fiber Level - % Blend Point Value		100 63	95 63	100 67	95 67	100 60	95 60	105 63	105 67	105 60
	Class 50	4"-6"	18.6	17.7	17.5	16.6	19.5	18.5	19.5	18.4	20.5
		8"	20.9	19.9	19.7	18.6	22.0	20.8	22.1	20.8	23.2
		10"-16"	17.8	16.9	16.7	16.0	19.0	18.0	19.0	17.9	20.0
		18"-36"	17.5	16.6	16.5	16.0	19.0	18.0	19.0	17.9	20.0
	Class 100	3"	20.3	19.3	19.1	18.1	21.4	20.3	21.3	20.0	22.2
		4" (13')	22.5	21.4	21.2	20.1	23.7	22.5	23.6	22.3	24.9
		4" (10')	20.8	19.8	19.6	18.5	21.9	20.8	21.9	20.6	23.0
X		6" (13')	19.3	18.4	18.2	17.3	20.3	19.3	20.3	19.1	21.4
X		6" (10')	18.1	17.1	17.0	16.1	19.0	18.0	19.0	17.9	20.0
X		8"	19.8	18.7	18.6	17.6	20.8	19.6	20.8	19.6	21.8
		10"-14"	20.0	19.0	18.8	17.9	21.4	20.3	21.5	20.2	22.5
		16"	20.3	19.3	19.1	18.2	21.7	20.6	21.8	20.5	22.8
		18"-20"	20.3	19.3	19.1	18.2	22.0	20.8	22.1	20.8	23.2
		24"-36"	20.9	19.9	19.7	18.7	22.6	21.6	22.7	21.4	23.9
	Class 150	3"	20.0	19.0	18.8	17.8	21.0	20.0	20.9	19.7	22.0
		4" (13')	22.2	21.1	20.9	19.8	23.3	22.2	23.3	22.0	24.6
		4" (10')	20.9	19.9	19.7	18.6	22.0	20.8	22.1	20.8	23.2
		6"	21.1	20.0	19.9	18.8	22.2	21.0	22.2	20.9	23.3
		8"	22.2	21.1	20.9	19.8	23.3	22.2	23.3	22.0	24.6
		10"	20.3	19.3	19.1	18.2	21.7	20.6	21.8	20.5	22.8
		12"-14"	20.9	19.9	19.7	18.7	22.3	21.2	22.4	21.1	23.5
		16"	21.7	20.6	20.5	19.5	23.2	22.0	23.1	21.8	24.4
		18"-36"	20.6	19.6	19.4	18.4	22.3	21.2	22.4	21.1	23.5
	Class 200	3"	18.7	17.8	17.6	16.7	19.6	18.6	19.7	18.5	20.6
		4"	19.9	18.9	18.7	17.5	20.8	19.8	20.8	19.6	21.9
		6"	21.6	20.5	20.4	19.2	22.6	21.6	22.7	21.4	23.9
		6" (Wauk.)	23.1	22.0	21.8	20.8	24.4	23.2	24.2	22.8	25.4
		8"	23.2	22.0	22.0	21.0	24.6	23.3	24.6	23.2	25.8
		8" (Wauk.)	24.1	22.8	22.7	21.5	25.3	24.0	25.4	23.9	26.7
		10"	21.6	20.5	20.4	19.4	23.0	21.9	23.0	21.7	24.2
		12"	22.2	21.0	21.0	20.0	23.7	22.5	23.6	22.3	24.9
		14"-16"	23.0	21.8	21.8	20.7	24.7	23.5	24.6	23.2	25.8
		18"-36"	20.4	19.4	19.3	18.3	22.2	21.0	22.2	20.9	23.3
	Note (1)	6' 6"									
	Class 150	3"	16.8	16.0	15.8	15.0	17.6	16.9	17.6	16.6	16.5
		4"	18.9	18.0	17.8	16.9	19.8	18.8	19.9	18.7	20.8

X— INDICATES CHANGE —REASON: Correction of Fiber Usage of 6" and 8" Class 100 Using Full I.D.

AUTHORITY FOR CHANGE: Correction

SUPERSEDES: Same Spec., Same Page Dated 11/2/62

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED
						11/12/62

RETURN TO J-M RESEARCH FILE ROOM

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D,&R PIPE
		SPEC NO.	425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. PRESSURE PIPE - 10' AND 13' LENGTHS: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100.

Fiber Level - %		100	95	100	95	100	95	105	105	1
Blend Point Value		63	63	67	67	60	60	63	67	
Class 50	4"-6"	18.6	17.7	17.5	16.6	19.5	18.5	19.5	18.4	20
	8"	20.9	19.9	19.7	18.6	22.0	20.8	22.1	20.8	23
	10"-16"	17.8	16.9	16.7	16.0	19.0	18.0	19.0	17.9	20
	18"-36"	17.5	16.6	16.5	16.0	19.0	18.0	19.0	17.9	20
Class 100	3"	20.3	19.3	19.1	18.1	21.4	20.3	21.3	20.0	22
	4" (13')	22.5	21.4	21.2	20.1	23.7	22.5	23.6	22.3	24
	4" (10')	20.8	19.8	19.6	18.5	21.9	20.8	21.9	20.6	23
	6" (13')	20.6	19.6	19.4	18.3	21.7	20.6	21.8	20.4	22
	6" (10')	19.3	18.3	18.2	17.1	20.3	19.3	20.3	19.1	21
	8"	21.1	20.0	19.9	18.8	22.2	21.0	22.2	20.9	23
	10"-14"	20.0	19.0	18.8	17.9	21.4	20.3	21.5	20.2	22
	16"	20.3	19.3	19.1	18.2	21.7	20.6	21.8	20.5	22
	18"-20"	20.3	19.3	19.1	18.2	22.0	20.8	22.1	20.8	23
	24"-36"	20.9	19.9	19.7	18.7	22.6	21.6	22.7	21.4	23
Class 150	3"	20.0	19.0	18.8	17.8	21.0	20.0	20.9	19.7	22
	4" (13')	22.2	21.1	20.9	19.8	23.3	22.2	23.3	22.0	24
	4" (10')	20.9	19.9	19.7	18.6	22.0	20.8	22.1	20.8	23
	6"	21.1	20.0	19.9	18.8	22.2	21.0	22.2	20.9	23
	8"	22.2	21.1	20.9	19.8	23.3	22.2	23.3	22.0	24
	10"	20.3	19.3	19.1	18.2	21.7	20.6	21.8	20.5	22
	12"-14"	20.9	19.9	19.7	18.7	22.3	21.2	22.4	21.1	23
	16"	21.7	20.6	20.5	19.5	23.2	22.0	23.1	21.8	24
	18"-36"	20.6	19.6	19.4	18.4	22.3	21.2	22.4	21.1	23
Class 200	3"	18.7	17.8	17.6	16.7	19.6	18.6	19.7	18.5	20
	4"	19.9	18.9	18.7	17.5	20.8	19.8	20.8	19.6	21
	6"	21.6	20.5	20.4	19.2	22.6	21.6	22.7	21.4	23
X	6" (Wauk.)	23.1	22.0	21.8	20.8	24.4	23.2	24.2	22.8	25
	8"	23.2	22.0	22.0	21.0	24.6	23.3	24.6	23.2	25
X	8" (Wauk.)	24.1	22.8	22.7	21.5	25.3	24.0	25.4	23.9	26
	10"	21.6	20.5	20.4	19.4	23.0	21.9	23.0	21.7	24
	12"	22.2	21.0	21.0	20.0	23.7	22.5	23.6	22.3	24
	14"-16"	23.0	21.8	21.8	20.7	24.7	23.5	24.6	23.2	25
	18"-36"	20.4	19.4	19.3	18.3	22.2	21.0	22.2	20.9	23
Note (1)	6' 6"									
Class 150	3"	16.8	16.0	15.8	15.0	17.6	16.9	17.6	16.6	18
	4"	18.9	18.0	17.8	16.9	19.8	18.8	19.9	18.7	20

Pld. In U.S.A.

X— INDICATES CHANGE —REASON:	Show Fiber Usage for Increased I.D. 6" and 8" 200 Pipe at Waukegan	RETURN TO
AUTHORITY FOR CHANGE	W. L. VanDerbeek's Letter of 5/23/62	J-M RESEARCH
SUPERSEDES:	Same Spec., Same Page Dated 10/3/62	FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 11/2/62

Form 333-2

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	...,G,J,W,..., & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

I. PRESSURE PIPE - 10' AND 13' LENGTHS; 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100.

Fiber Level - %		100	95	100	95	100	95	105	105	105
Blend Point Value		63	63	67	67	60	60	63	67	60
Class 50	4"-6"	18.6	17.7	17.5	16.6	19.5	18.5	19.5	18.4	20.5
	8"	20.9	19.9	19.7	18.6	22.0	20.8	22.1	20.8	23.2
	10"-16"	17.8	16.9	16.7	16.0	19.0	18.0	19.0	17.9	20.0
	18"-36"	17.5	16.6	16.5	16.0	19.0	18.0	19.0	17.9	20.0
Class 100	3"	20.3	19.3	19.1	18.1	21.4	20.3	21.3	20.0	22.2
	4" (13')	22.5	21.4	21.2	20.1	23.7	22.5	23.6	22.3	24.9
	4" (10')	20.8	19.8	19.6	18.5	21.9	20.8	21.9	20.6	23.0
	6" (13')	20.6	19.6	19.4	18.3	21.7	20.6	21.8	20.4	22.8
	6" (10')	19.3	18.3	18.2	17.1	20.3	19.3	20.3	19.1	21.4
	8"	21.1	20.0	19.9	18.8	22.2	21.0	22.2	20.9	23.3
	10"-14"	20.0	19.0	18.8	17.9	21.4	20.3	21.5	20.2	22.5
	16"	20.3	19.3	19.1	18.2	21.7	20.6	21.8	20.5	22.8
	18"-20"	20.3	19.3	19.1	18.2	22.0	20.8	22.1	20.8	23.2
	24"-36"	20.9	19.9	19.7	18.7	22.6	21.6	22.7	21.4	23.8
Class 150	3"	20.0	19.0	18.8	17.8	21.0	20.0	20.9	19.7	22.0
	4" (13')	22.2	21.1	20.9	19.8	23.3	22.2	23.3	22.0	24.6
	4" (10')	20.9	19.9	19.7	18.6	22.0	20.8	22.1	20.8	23.2
	6"	21.1	20.0	19.9	18.8	22.2	21.0	22.2	20.9	23.3
	8"	22.2	21.1	20.9	19.8	23.3	22.2	23.3	22.0	24.6
	10"	20.3	19.3	19.1	18.2	21.7	20.6	21.8	20.5	22.8
	12"-14"	20.9	19.9	19.7	18.7	22.3	21.2	22.4	21.1	23.5
	16"	21.7	20.6	20.5	19.5	23.2	22.0	23.1	21.8	24.4
	18"-36"	20.6	19.6	19.4	18.4	22.3	21.2	22.4	21.1	23.5
Class 200	3"	18.7	17.8	17.6	16.7	19.6	18.6	19.7	18.5	20.6
	4"	19.9	18.9	18.7	17.5	20.8	19.8	20.8	19.6	21.9
	6"	21.6	20.5	20.4	19.2	22.6	21.6	22.7	21.4	23.9
	8"	23.2	22.0	22.0	21.0	24.6	23.3	24.6	23.3	25.8
	10"	21.6	20.5	20.4	19.4	23.0	21.9	23.0	21.7	24.2
	12"	22.2	21.0	21.0	20.0	23.7	22.5	23.6	22.3	24.9
	14"-16"	23.0	21.8	21.8	20.7	24.7	23.5	24.6	23.2	25.8
	18"-36"	20.4	19.4	19.3	18.3	22.2	21.0	22.2	20.9	23.3
Note (1) Class 150	6'6" 3"	16.8	16.0	15.8	15.0	17.6	16.9	17.6	16.6	18.5
	4"	18.9	18.0	17.8	16.9	19.8	18.8	19.9	18.7	20.8

X— INDICATES CHANGE	—REASON:	Silicate Fiber Treatment Blend Change								
AUTHORITY FOR CHANGE		J. B. McCarty's Letter of 9/24/62								
SUPERSEDES:		Same Spec., Same Page Dated ~~9/24/62~~ 9/25/62								
DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	10/3/62	

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2 Pd. in U.S.A.

Johns-Manville
MANUFACTURING
SPECIFICATION

PRODUCT:
TRANSITE PIPE
PIPE MACHINE FURNISHES

PLANT & DIV. [illegible] PT PK
SPEC NO. 425-[illegible]
PAGE NO. 1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

I. PRESSURE PIPE - 10' and 13' Lengths 6'6" (1)

Fiber usage of 10' lengths same as 13' lengths except 4"-150; 4"-100; 6"-100)

OBTBCRM3

Fiber Level - %		100	75	100	75	
Slope Point Value		63	63	67	67	
Class 50	4"-6"	18.6	17.7	17.5	16.8	
	8"	20.9	19.9	19.7	18.6	
	10"-16"	17.8	16.9	16.7	16.0	
	18"-36"	17.5	16.6	16.5	16.0	
Class 100	3"	20.3	19.3	19.1	18.1	
	4" (13')	22.5	21.4	21.2	20.1	
	4" (10')	20.8	19.8	19.6	18.5	
X	6" (13')	19.3	18.4	18.2	17.3	
X	6" (10')	18.1	17.1	17.0	16.1	
X	8"	19.8	18.7	18.6	17.6	
	10"-14"	20.0	19.0	18.8	17.9	
	16"	20.3	19.3	19.1	18.2	
	18"-20"	20.3	19.3	19.1	18.2	
	24"-36"	20.9	19.9	19.7	18.7	
Class 150	3"	20.0	19.0	18.8	17.8	
	4" (13')	22.2	21.1	20.9	19.8	
	4" (10')	20.9	19.9	19.7	18.6	
	6"	21.1	20.0	19.9	18.8	
	8"	22.2	21.1	20.9	19.8	
	10"	20.3	19.3	19.1	18 2	
	12"-14"	20.9	19.9	19.7	18.7	
	16"	21.7	20.6	20.5	19.5	
	18"-36"	20.6	19.6	19.4	18.4	
Class 200	3"	18.7	17.8	17.6	16.7	
	4"	19.9	18.9	18.7	17.5	
	6"	21.6	20.5	20.4	19.2	
X1	6" Waukegan	23.1	21.9	21.8	20.7	
	8"	23.2	22.0	22.0	21.0	
X1	8" Waukegan	24.1	22.9	22.7	21.6	
	10"	21.6	20.5	20.4	19.4	
	12"	22.2	21.0	21.0	20.0	
	14"-16"	23.0	21.8	21.8	20.7	
	18"-36"	20.4	19.4	19.3	18.3	
Note (1) Class 150	6'6" 3"	16.8	16.0	15.8	15.0	
	4"	18.9	18.0	17.8	16.9	

RETURN TO J-M RESEARCH FILE ROOM

MTC 002946

X-- CHANGE --REASON: X To Show % Fiber Based on Stresses Calculated using Full
X1 To Show % Fiber for Increased ID 6" & 8" Class 200

AUTH. FOR CHANGE: W. L. VanDerbeek's Letters of 5/20/62 and 5/23/62

SUPERSEDES: Same Spec., Same Page Dated 3/2/62

DIR. OPER. O.C. | SUPR. O.C. | PROD. DEPT. | PLNT. ENG. | PAGE | DATE ISSUED

Form 333-C Printed in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R Pipe
		SPEC NO.	425-2
		PAGE NO.	1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

I. PRESSURE PIPE - 10' & 13' Lengths; 6'6" (1)

(Fiber usage of 10' lengths same as 13' lengths except 4" - 150; 4" - 100; 6" - 100)

Fiber Level - %		100	95	100	95
Blend Point Value		63	63	67	67
Class 50	4"- 6"	18.6	17.7	17.5	16.6
	8"	20.9	19.9	19.7	18.6
	10"-16"	17.8	16.9	16.7	16.0
	18"-36"	17.5	16.6	16.5	16.0
Class 100	3"	20.3	19.3	19.1	18.1
	4"(13')	22.5	21.4	21.2	20.1
	4"(10')	20.8	19.8	19.6	18.5
	6"(13')	20.6	19.6	19.4	18.3
	6"(10')	19.3	18.3	18.2	17.1
	8"	21.1	20.0	19.9	18.8
	10"-14"	20.0	19.0	18.8	17.9
	16"	20.3	19.3	19.1	18.2
	18"-20"	20.3	19.3	19.1	18.2
	24"-36"	20.9	19.9	19.7	18.7
Class 150	3"	20.0	19.0	18.8	17.8
	4"(13')	22.2	21.1	20.9	19.8
	4"(10')	20.9	19.9	19.7	18.6
	6"	21.1	20.0	19.9	18.8
	8"	22.2	21.1	20.9	19.8
	10"	20.3	19.3	19.1	18.2
	12"-14"	20.9	19.9	19.7	18.7
	16"	21.7	20.6	20.5	19.5
	18"-36"	20.6	19.6	19.4	18.4
Class 200	3"	18.7	17.8	17.6	16.7
	4"	19.9	18.9	18.7	17.5
	6"	21.6	20.5	20.4	19.2
	8"	23.2	22.0	22.0	21.0
	10"	21.6	20.5	20.4	19.4
	12"	22.2	21.0	21.0	20.0
	14"-16"	23.0	21.8	21.8	20.7
	18"-36"	20.4	19.4	19.3	18.3
Note (1) 6'6" Class 150	3"	16.8	16.0	15.8	15.0
	4"	18.9	18.0	17.8	16.9

CANCELLED

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: General Revision to Include Fiber Levels and Point Values

AUTHORITY FOR CHANGE: W. L. Van Derbeek's Letter of 1-25-62

SUPERSEDES: All Pages 425-2 Dated 1-10-62 and 4-20-61

MTC 002947

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 3-2-62

Form 333-2 Ptd. in U.S.A.

Mary McDermott

425

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1

PIPE MACHINE FURNISH

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C-1 DESIGNATION - NON-PRESSURE PIPE FURNISH 10' MACHINE

H-Blends will be used.

Scrap may be added to the virgin fiber blend in increments of 20% up to 160%.

Virgin fiber level will be in the range of 8% to 12% expressed as a percentage of the total batch weight. 10.5% is Cost Standard.

Formulae (non-pressure furnish):

$$\% \text{ Virgin Fiber} = \frac{(\text{Fiber Blend-scrap}) \times 100}{\text{Total batch weight}}$$

% Cement & Silica = 100 minus (% fiber + % scrap in total batch)

% Scrap in total batch = % fiber X desired % scrap addition.

Thus: Blend H1 - 100 - 9.5 (100% scrap - 9.5% virgin fiber)

% Fiber	% Scrap	% Binder	Total batch %
9.5	9.5	81.0	100.0

H-1-120-9 Blend (120% scrap - 9% virgin fiber)

9.0	10.8	80.2	100.0

PRESSURE PIPE FURNISHES

% virgin furnish to be within limits specified below.

P-1 DESIGNATION - 10' MACHINE PRODUCTS - PERCENT USAGE

	Pipe			Couplings		
	Min.	Max.	Cost Std.	Min.	Max.	Cost Std.
6"-8" Sewer	13	17	15	15	19	17
3"-6" Press	16	20	18	16	20	18
3"-8" Irrigation	16	20	18	16	20	18
2000# Tel. Duct	14	16	15			
3"-5" Flexjoint Conduit	15	17	16	15	17	16
X 4"-6" 2000 lb. Building Sewer	16	19	18			

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X— INDICATES CHANGE —REASON: To show all sizes 2000 lb. Building Sewer using M Blend

AUTHORITY FOR CHANGE P.P. CHQ-157 T. R. Turnbull's Letter of 4-14-59

SUPERSEDES: Page 1 Same spec Issued 12-5-61

MTC 002948

DIR.	MGR.	SUPR.	PROD.	PLNT.					DATE ISSUED 1-10-62

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1

PIPE MACHINE FURNISH

C-1 DESIGNATION - NON-PRESSURE PIPE FURNISH 10' MACHINE

H-Blends will be used.

Scrap may be added to the virgin fiber blend in increments of 20% up to 160%.

Virgin fiber level will be in the range of 8% to 12% expressed as a percentage of the total batch weight. 10.5% is Cost Standard.

Formulae (non-pressure furnish):

$$\% \text{ Virgin Fiber} = \frac{(\text{Fiber Blend-scrap}) \times 100}{\text{Total batch weight}}$$

% Cement & Silica = 100 minus (% fiber + % scrap in total batch)

% Scrap in total batch = % fiber X desired % scrap addition.

Thus: Blend H1 - 100 - 9.5 (100% scrap - 9.5% virgin fiber)

% Fiber	% Scrap	% Binder	Total batch %
9.5	9.5	81.0	100.0

H-1-120-9 Blend (120% scrap - 9% virgin fiber)

9.0	10.8	80.2	100.0

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PRESSURE PIPE FURNISHES

% virgin furnish to be within limits specified below.

P-1 DESIGNATION - 10' MACHINE PRODUCTS - PERCENT USAGE

	Pipe			Couplings		
	Min.	Max.	Cost Std.	Min.	Max.	Cost Std.
6"-8" Sewer	13	17	15	15	19	17
3"-6" Press	16	20	18	16	20	18
3"-8" Irrigation	16	20	18	16	20	18
2000# Tel. Duct	14	16	15			
X 3"-5" Flexjoint Conduit	15	17	16	15	17	16
X_1 4" 2000 lb. Building Sewer	16	19	18			

MTC 002949

X— INDICATES CHANGE —REASON: To show % virgin furnish for Flexjoint Conduit and 4" 2000 lb. Building Sewer

AUTHORITY FOR CHANGE: X PP #425-136 W. L. Van Derbeek's letter of 10-9-61; X_1 PP GHQ-181 W. L. Van Derbeek's letter of 8-15-60

SUPERSEDES: Page 1 Same spec · Issued 9-1-61

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED
									12-5-61

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Ptd. in U.S.A. Form 333-2

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	[illegible]
		SPEC NO.	[illegible]
		PAGE NO.	1

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AUG 31 1961
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PIPE MACHINE FURNISH

C 1 DESIGNATION - NON-PRESSURE PIPE FURNISH 10' MACHINE

H-Blends will be used.

Scrap may be added to the virgin fiber blend in increments of 20% up to 80 %.

X Virgin fiber level will be in the range of 8% to 12% expressed as a percentage of the total batch weight. 10.5% is Cost Standard.

Formulae (non-pressure furnish):

$$\% \text{ Virgin Fiber} = \frac{(\text{Fiber Blend-scrap}) \times 100}{\text{Total batch weight}}$$

% Cement & Silica = 100 minus (% fiber + % scrap in total batch)

% scrap in total batch = % fiber X desired % scrap addition

Thus: Blend H1 - 100 - 9.5 (100% scrap - 9.5% virgin fiber)

% Fiber	% Scrap	% Binder	Total batch %
9.5	9.5	81.0	100.0

H-1-120-9 Blend (120% scrap - 9% virgin fiber)

9.0	10.8	80.2	100.0

PRESSURE PIPE FURNISHES

% virgin furnish to be within limits specified below.

P-1 DESIGNATION - 10' MACHINE PRODUCTS - PERCENT USAGE

	Pipe			Couplings		
	Min.	Max.	Cost Std.	Min.	Max.	Cost Std.
6"-8" Sewer	13	17	15	15	19	17
3"-6" Press	16	20	18	14	20	17
3"-8" Irr.	16	20	18	16	20	18
2000# Tel. Duct	14	16	15			

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Form 3222 Printed in U.S.A.

X— INDICATES CHANGE —REASON: To show new Cost Std. and Virgin Fiber level for H blends

AUTHORITY FOR CHANGE: W. L. Van Derbeek's letter of 8-14-61

SUPERSEDES: Page 1 Same spec Issued 4-2[illegible]

MTC 002950

DIR.	MGR.	SUPR.	PROD.	PLNT.	RES.			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	DHQ - PIPE
		SPEC NO.	425-2
		PAGE NO.	1

PIPE MACHINE FURNISH

C-1 DESIGNATION - NON-PRESSURE PIPE FURNISH

CANCELLED

H-Blends will be used.

Scrap may be added to the virgin fiber blend in increments of 20% up to 160%.

Virgin fiber level will be in the range of 8% to 11% expressed as a percentage of the total batch weight.

Formulae (non-pressure furnished):

$$\% \text{ Virgin Fiber} = \frac{(\text{Fiber Blend-scrap}) \times 100}{\text{Total batch weight}}$$

% Cement & Silica = 100 minus (% fiber + % scrap in total batch)

% scrap in total batch = % fiber X desired % scrap addition.

Thus: Blend H1 - 100 - 9.5 (100% scrap - 9.5% virgin fiber)

% Fiber	% Scrap	% Binder	Total batch %
9.5	9.5	81.0	100.0

H-1-120-9 Blend (120% scrap - 9% virgin fiber)

9.0	10.8	80.2	100.0

PRESSURE PIPE FURNISHES

% virgin furnish to be within limits specified below.

P-1 DESIGNATION - 10' MACHINE PRODUCTS - PERCENT USAGE

	Pipe			Couplings		
	Min.	Max.	Cost Std.	Min.	Max.	Cost Std.
6"-8" Sewer	13	17	15	15	19	17
3"-6" Press	16	20	18	16	20	18
3"-8" Irr.	16	20	18	16	20	18
2000# Tel. Duct	14	16	15			

RETURN TO
J-M RESEARCH
FILE ROOM

X— INDICATES CHANGE —REASON:	Establish General Division Manufacturing Specifications.
AUTHORITY FOR CHANGE	Minutes of December, 1960 Plant Managers' Meeting.
SUPERSEDES:	All local Plant Mfg. Specs.

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED 4-20-61

Ptd. in U.S.A.

Form 333-2

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DEPT.	Pipe
		SPEC NO.	425-2
		PAGE NO	1.1

NOMINAL PERCENT FIBER BLEND COST STANDARDS:

CANCELLED 2/9/78

I. WATER PIPE 10' and 13' Lengths

Fiber usage of 10' lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100

FIBER LEVEL % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Class 50 4"-6"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
10"-36"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.2
Class 100 3"	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.5	18.3
4"(13')	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21 2	20.9	20.6	20.3
4"(10')	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
5"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
6" (13')	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
6" (10')	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8"	20.8	20.5	20.2	19.8	19.5	19.2	18.8	18.6	18.4	18.2	17.8
10"-14"	21.4	20.9	20.6	20.3	20.0	19 7	19.4	19.1	18 9	18.6	18.3
16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
18"-20"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
24"-36"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4
Class 150 3"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
4" (13')	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
4" (10')	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.8
5"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
6"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.9	19.6	19.2	19.0
8"	23.3	23.0	22.6	22.2	21.9	21 5	21.2	20.9	20.6	20.3	20.0
10"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
12"-14"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
16"	23.2	22.8	22.4	22.0	21.7	21.3	21.0	20.8	20.4	20.1	19.8
18"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
Class 200 3"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.7	18.4	18.2	17.9
6"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4
6" (WAU)	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.9
8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.8	21.5	21.2
8" (WAU)	25.3	24.9	24.5	24.1	23.7	23.4	23.0	22.7	22 3	22.0	21.7
10"	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20 6	20.3	20.0	19.8
12"	23.7	23.3	22.9	22.5	22.2	21.8	21.5	21.2	20.9	20.6	20.3
14"-16"	24.7	24.3	23.8	23.4	23.1	22.7	22.4	22.1	21.8	21.6	21.2
18"-36"	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.6	19.3	19.0

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X— INDICATES CHANGE —REASON: GENERAL REVISION TO EXTEND TABLES TO 90 POINT VALUE AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13'lengths

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERCEDES: SAME SPEC, Page 1, DATED 6-19-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES			DATE ISSUED	5-1-6

Form 3332

MTC 002952

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M.C,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

I. WATER PIPE - 10' and 13' Lengths 6'6" (1)

Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - %		95	95	95	95	95	95	95	95	95	95	95
Blend Point Value		60	61	62	63	64	65	66	67	68	69	70
Class 50	4"-6"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1	15.
	8"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.
	10"-36"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	16.0	16.0	16.
Class 100	3"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.
	4" (13')	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.
	4" (10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.
	5"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.
	6" (13')	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	16.9	16.8	16.
	6" (10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.
	8"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.
	10"-14"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.
	16"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.
	18"-20"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.
	24"-36"	21.5	21.1	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7	18.
Class 150	3"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.
	4" (13')	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.
	4" (10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.
	5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.
	6"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.
	8"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.
	10"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.
	12"-14"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.
	16"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
	18"-36"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.
Class 200	3"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.
	4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2	17.
	6"	21.6	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.
	6" Wau.	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.
	8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.
	8" Wau.	24.0	23.6	23.2	22.8	22.5	22.1	21.8	21.5	21.2	20.9	20.
	10"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.
	12"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.
	14"-16"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.
	18"-36"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.
NOTE (1)	6'6"											
Class 150	3"	16.8	16.5	16.2	16.0	15.7	15.5	15.2	15.0	15.0	15.0	15.
	4"	18.8	18.5	18.2	18.0	17.7	17.4	17.1	16.8	16.6	16.4	16.

Pat. in U.S.A.

X— INDICATES CHANGE —REASON: Add 5" Size

AUTHORITY FOR CHANGE: Product Proposal 425-165 J. B. McCarty's Letter

SUPERSEDES: Same Spec., Same Page Dated 1/9/63

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Form 333-2

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MTC 002953

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. PRESSURE PIPE - 10' and 13' Lengths 6'6" (1)

Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Class 50	4"-6"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1	15.8
	8"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
	10"-36"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
Class 100	3"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
	4" (13')	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
	4" (10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
	6" (13')	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	16.9	16.8	16.6
	6" (10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
	8"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
	10"-14"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
	16"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
	18"-20"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
	24"-36"	21.5	21.1	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7	18.4
Class 150	3"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
	4" (13')	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0
	4" (10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
	6"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
	8"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0
	10"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
	12"-14"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2
	16"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
	18"-36"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2
Class 200	3"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
	4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2	17.0
	6"	21.6	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4
	6" Wau.	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
	8" Wau.	24.0	23.6	23.2	22.8	22.5	22.1	21.8	21.5	21.2	20.9	20.6
	10"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
	12"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
	14"-16"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
	18"-36"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
Note (1)	6'6"											
Class 150	3"	16.8	16.5	16.2	16.0	15.7	15.5	15.2	15.0	14.8	14.6	14.4
	4"	18.8	18.5	18.2	18.0	17.7	17.4	17.1	16.8	16.6	16.4	16.2

X— INDICATES CHANGE —REASON: Add 70 Blend Point Value

AUTHORITY FOR CHANGE: Additional Information

SUPERSEDES: Same Spec., Same Page Dated 11/30/62

DIR. O.C. | MGR. O.C. | SUPR. O.C. | PROD. SUPT. | PLNT. FIN. | REG. | DATE ISSUED 1/9/63

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M, G, J, W, D, & Fitz.
		SPEC NO.	425-2
		PAGE NO.	1.1

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

CANCELLED

1. PRESSURE PIPE - 10' AND 13' LENGTHS: 6'6" (1)
Fiber Usage - 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level - % Blend Point Value		95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69
Class 50	4"-6"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1
	8"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2
	10"-36"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6
Class 100	3"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7
	4" (13')	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5
	4" (10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2
	6" (13')	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	17.9	16.8
	6" (10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6
	8"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1
	10"-14"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7
	16"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0
	18"-20"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2
	24"-36"	21.5	21.1	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7
Class 150	3"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4
	4" (13')	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3
	4" (10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2
	6"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3
	8"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3
	10"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0
	12"-14"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4
	16"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1
	18"-36"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4
Class 200	3"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2
	4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2
	6"	21.6	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7
	6" (Wall)	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1
	8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3
	8" (Wall)	24.0	23.6	23.2	22.8	22.5	22.1	21.8	21.5	21.2	20.9
	10"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0
	12"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5
	14"-16"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4
	18"-36"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3
Note (1) Class 150	6'6" 3"	16.8	16.5	16.2	16.0	15.7	15.5	15.2	15.0	14.8	14.6
	4"	18.8	18.5	18.2	18.0	17.7	17.4	17.1	16.8	16.6	16.4

Pfd. In U.S.A.

X— INDICATES CHANGE —REASON: Corrections in 10"-36" Sizes. 63 and 67 Point Value at 95 and 100 Fiber Level

AUTHORITY FOR CHANGE: Additional Information and Corrections

SUPERSEDES: Same Spec., Same Page Dated 11/12/62

RETURN TO J-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED	11/30/62

Form 333-2

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
			1.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

CANCELLED 2/9/78

I. WATER PIPE - 10" and 13' Lengths

Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, [illegible]

FIBER LEVEL % / BLEND POINT VALUE		100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Class 50	4"-6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	8"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	10"-36"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
Class 100	3"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	4" (13')	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
	4" (10')	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
	5"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
	6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
	6" (10')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
	8"	17.6	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
	10"-14"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	16"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
	18"-20"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	24"-36"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
Class 150	3"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
	4" (13')	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
	4" (10')	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	5"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
	6"	18.7	18.4	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
	8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
	10"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
	12"-14"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
	16"	19.6	19.3	19.1	18.8	18.6	18.3	18.0	17.8	17.6	17.4
	18"-36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
Class 200	3"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
	4"	17.6	17.4	17.2	16.9	16.6	16.4	16.2	16.0	15.8	15.6
	6"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
	6" (WAU)	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3
	8"	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
	8" (WAU)	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0
	10"	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.5	17.3
	12"	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
	14"-16"	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
	18"-36"	18.8	18.5	18.3	18.0	17.8	17.5	17.2	17.0	16.8	16.6

Form 333-2 FW. in U.S.A.

X— INDICATES CHANGE —REASON: GENERAL REVISION TO EXTEND TABLES TO 90 POINT VALUE AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13' LENGTH

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: SAME SPEC, PAGE 1.3 DATED 9-28-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.

DATE ISSUED: 5-1-67

PLEASE RETURN TO T.M. RESEARCH LIBRARY (MM)

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	A,G,J.M,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

I. WATER PIPE - 10' and 13' Lengths: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Class 50	4"-6"	20.4	20.1	19.8	19.5	19.2	18.8	18.6	18.3	18.1	17.8	17.6
	8"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	10"-36"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
Class 100	3"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
	4"(13')	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.3
	4"(10')	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.7
	5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
	6"(13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
	6"(10')	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
	8"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
	10"-14"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
	16"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6
	18"-20"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	24"-36"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4
Class 150	3"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
	4"(13')	24.6	24.1	23.6	23.2	22.9	22.8	22.3	22.0	21.6	21.3	21.0
	4"(10')	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	5"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
	6"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
	8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
	10"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6
	12"-14"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
	16"	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.9
	18"-36"	23.5	23.2	222.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
Class 200	3"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
	4"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
	6"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4
	6"(Wau)	25.5	25.1	24.7	24.3	23.9	23.6	23.2	22.9	22.5	22.2	21.8
	8"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2
	8"(Wau)	26.7	26.3	25.8	25.4	25.0	24.6	24.3	23.9	23.6	23.2	22.9
	10"	24.2	23.8	23.4	23.0	22.7	22.3	22.0	21.7	21.4	21.1	20.8
	12"	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.3
	14"-16"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2
	18"-36"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
NOTE (1)	6'6"											
Class 150	3"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1	15.8
	4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8

X— INDICATES CHANGE —REASON: Add 5" Size

AUTHORITY FOR CHANGE: Product Proposal 425-165 J.B. McCarty's Letter 4/25/63

SUPERSEDES: Same Spec., Same Page Dated 1/9/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	DEPT.				DATE ISSUED 6-19-63

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2 Ptd. in U.S.A.

MTC 002957

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. PRESSURE PIPE - 10' and 13' Lengths: 6'6" (1)

Fiber Usage of 10' Lengths same as 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Class 50	4"-6"	20.4	20.1	19.8	19.5	19.2	18.8	18.6	18.3	18.1	17.8	17.6
	8"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	10"-36"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
Class 100	3"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1
	4" (13')	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.3
	4" (10')	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.7
	6" (13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.3
	6" (10')	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
	8"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
	10"-14"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
	16"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6
	18"-20"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	24"-36"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4
Class 150	3"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
	4" (13')	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
	4" (10')	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
	6"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
	8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
	10"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6
	12"-14"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
	16"	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.9
	18"-36"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
Class 200	3"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
	4"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
	6"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4
	6" (Wau)	25.5	25.1	24.7	24.3	23.9	23.6	23.2	22.9	22.5	22.2	21.8
	8"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2
	8" (Wau)	26.7	26.3	25.8	25.4	25.0	24.6	24.3	23.9	23.6	23.2	22.9
	10"	24.2	23.8	23.4	23.0	22.7	22.3	22.0	21.7	21.4	21.1	20.8
	12"	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.3
	14"-16"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2
	18"-36"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
Note (1)	6'6"											
Class 150	3"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1	15.8
	4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8

Ptd. in U.S.A.

Form 333-2

X— INDICATES CHANGE	—REASON:	Add 70 Blend Point Value
AUTHORITY FOR CHANGE		Additional Information
SUPERSEDES:		Same Spec., Same Page Dated 11/30/62

RETURN TO J-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. PLANT	DATE ISSUED 1/9/63

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D, & R
		SPEC NO.	425-2
		PAGE NO.	1.2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. PRESSURE PIPE - 10' AND 13' LENGTHS: 6'6" (1)

CANCELLED

Fiber Usage of 10' Lengths same as 13' Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level - % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69
Class 50	4"-6"	20.4	20.1	19.8	19.5	19.2	18.8	18.6	18.3	18.1	17.8
	8"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1
	10"-36"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4
Class 100	3"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4
	4" (1[illegible]')	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6
	4" (10')	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0
	6" (1[illegible]')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
	6" (10')	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4
	8"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0
	10"-1[illegible]"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5
	16"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9
	18"-2[illegible]"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1
	24"-3[illegible]"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8
Class 150	3"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1
	4" (1[illegible]')	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3
	4" (10')	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1
	6"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3
	8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3
	10"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9
	12"-1[illegible]"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4
	16"	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2
	18"-3[illegible]"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4
Class 200	3"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0
	4"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0
	6"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8
	6" (W[illegible]u)	25.5	25.1	24.7	24.3	23.9	23.6	23.2	22.9	22.5	22.2
	8"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5
	8" (W[illegible]u)	26.7	26.3	25.8	25.4	25.0	24.6	24.3	23.9	23.6	23.2
	10"	24.2	23.8	23.4	23.0	22.7	22.3	22.0	21.7	21.4	21.1
	12"	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6
	14"-1[illegible]"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5
	18"-3[illegible]"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3
Note (1) Class 150	6'6" 3"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1
	4"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2

Pld. In U.S.A.

Form 3332

X— INDICATES CHANGE	—REASON:	Corrections in 10"-36" Sizes 62 and 67 Point Value at 95 and 100 Fiber Level.
AUTHORITY FOR CHANGE		Additional Information and Corrections
SUPERSEDES:		Same Spec., Same Page Dated 11/12/62

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG.			DATE ISSUED	11/30/62

RETURN TO J-M RESEARCH FILE ROOM

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes CANCELLED	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	1.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD 2/9/78

I. WATER PIPE - 10' and 13' LENGTHS

Fiber Usage of 10' Lengths same as 13' Lengths Except - 4"-150, 4"-100, 6"-100

Fiber Level %		100	100	100	100	100	100	100	100	100	100
Blend Point Value		81	82	83	84	85	86	87	88	89	90
Class 50	4"-6"	14.4	14.3	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0
	8"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
	10"-36"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
Class 100	3"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
	4" (13')	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	16.0	15.8
	4" (10')	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
	5"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
	6" (13')	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
	6" (10')	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
	8"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
	10"-14"	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
	16"	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.5
	18"-20"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
	24"-36"	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.5	15.3	15.1
Class 150	3"	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0
	4" (13')	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
	4" (10')	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
	5"	15.6	15.4	15.2	16.0	14.8	14.6	14.5	14.3	14.2	14.0
	6"	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8
	8"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
	10"	16.5	15.9	15.7	15.5	15.3	15.1	14.9	14.8	14.6	14.5
	12"-14"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
	16"	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.4
	18"-36"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
Class 200	3"	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
	4"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
	6"	16.8	16.6	16.4	16.2	16.0	15.6	15.5	15.3	15.0	15.1
	6" (WAU)	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2
	8"	18.2	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.4
	8" (WAU)	18.7	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.1	16.9
	10"	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3
	12"	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	16.0	15.8
	14"-36"	18.3	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.5
	18"-36"	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8

MTC 002960

Pd. in U.S.A.

X— INDICATES CHANGE	—REASON:	EXTEND BLEND POINT VALUE TABLE TO 90 AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13' LENGTHS.	PLANT PERSONNEL
AUTHORITY FOR CHANGE		VERBAL AUTHORITY J. E. HESSE	I.M. PERSONNEL
SUPERSEDES:	[redacted]	9/28/66	DIVISION MGR.

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED	5-1-67

Form 33[illegible]

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

1. WATER PIPE - 10' and 13' LENGTHS:

Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Class 50	4" - 6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	8"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	10" - 36"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
Class 100	3"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	4" (13')	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
	4" (10')	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
	5"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
	6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
	6" (10')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
	8"	17.6	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
	10" - 14"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	16"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
	18" - 20"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	24" - 36"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
Class 150	3"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
*	4" (13')	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
*	4" (10')	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	5"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
	6"	18.7	18.4	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
	8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
	10"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
	12" - 14"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
	16"	19.6	19.3	19.1	18.8	18.6	18.3	18.0	17.8	17.6	17.4
	18" - 36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
Class 200	3"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
	4"	17.6	17.4	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
	6"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
	6" (Waukegan)	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3
	8"	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
	8" (Waukegan)	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0
	10"	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.5	17.3
	12"	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
	14" - 16"	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
	18" - 36"	18.8	18.5	18.3	18.0	17.8	17.5	17.2	17.0	16.8	16.6

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (JM)

X- INDICATES CHANGE	-REASON: Interchange Fiber Level Listings of 13 Ft.&10 Ft. Lgths. of 4" CL 15
AUTHORITY FOR CHANGE	Correction
SUPERSEDES	Same Spec., Same Page, Dated 5-27-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	9-28-66

MTC 002961

Form 333-2 Pnd. In U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

I. WATER PIPE - 10' and 13' LENGTHS:

Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Class 50	4" - 6"	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
	8"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	10" - 36"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
Class 100	3"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	4" (13')	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
	4" (10')	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
	5"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
	6" (13')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
	6" (10')	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
	8"	17.6	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
	10" - 14"	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	16"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
	18" - 20"	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	24" - 36"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
Class 150	3"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
	4"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
	4" (13')	18.6	18.3	18.1	17.8	17.6	17.4	17.1	16.9	16.7	16.5
	5"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
	6"	18.7	18.4	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
	8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
	10"	18.3	18.1	17.8	17.6	17.3	17.1	16.9	16.7	16.5	16.3
	12" - 14"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
	16"	19.6	19.3	19.1	18.8	18.6	18.3	18.0	17.8	17.6	17.4
	18" - 36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8
Class 200	3"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
	4"	17.6	17.4	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6
	6"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0
	6" (Waukegan)	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.3
	8"	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
	8" (Waukegan)	21.4	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0
	10"	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.5	17.3
	12"	20.0	19.7	19.5	19.2	18.9	18.7	18.4	18.2	18.0	17.7
	14" - 16"	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5
	18" - 36"	18.8	18.5	18.3	18.0	17.8	17.5	17.2	17.0	16.8	16.6

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MTC 002962

Form 333-2 Prd. In U.S.A.

X- INDICATES CHANGE	-REASON:	Extend Table For Higher Point Values & Reduce Minimum Fiber Usage
AUTHORITY FOR CHANGE		Verbal Authority J. E.Hesse (A. C. Daley's Letter 5/24/66)
SUPERSEDES:		Same Spec., Same Page Dated 6/19/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. LAB.			DATE ISSUED	5-27-66

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHER	PLANT & DIV.	M.G.J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

1. WATER PIPE - 10' and 13' LENGTHS: 6'6" (1)

Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - %		100	100	100	100	100
Blend Point Value		71	72	73	74	75
Class 50	4"-6"	16.4	16.2	16.0	15.8	15.6
	8"	18.6	18.3	18.1	17.8	17.6
	10"-36"	16.1	16.0	16.0	16.0	16.0
Class 100	3"	18.0	17.8	17.5	17.3	17.1
	4" (13')	20.0	19.7	19.5	19.2	18.9
	4" (10')	18.5	18.2	18.0	17.7	17.4
	5"	16.1	15.8	15.6	15.4	15.2
	6" (13')	17.2	17.0	16.7	16.5	16.3
	6" (10')	16.1	15.8	15.6	15.4	15.2
	8"	17.6	17.3	17.1	16.9	16.6
	10"-14"	18.0	17.8	17.5	17.3	17.1
	16"	18.3	18.1	17.8	17.6	17.3
	18"-20"	18.6	18.3	18.1	17.8	17.6
	24"-36"	19.2	18.9	18.6	18.4	18.1
Class 150	3"	17.8	17.5	17.2	17.0	16.8
	4" (13')	19.7	19.4	19.2	18.9	18.7
	4" (10')	18.6	18.3	18.1	17.8	17.6
	5"	17.8	17.5	17.2	17.0	16.8
	6"	18.7	18.4	18.2	18.0	17.8
	8"	19.7	19.4	19.2	18.9	18.7
	10"	18.3	18.1	17.8	17.6	17.3
	12"-14"	18.9	18.6	18.4	18.1	17.9
	16"	19.6	19.3	19.1	18.8	18.6
	18"-36"	18.9	18.6	18.4	18.1	17.9
Class 200	3"	16.6	16.3	16.1	15.9	15.7
	4"	17.6	17.4	17.1	16.9	16.6
	6"	19.2	18.9	18.6	18.4	18.1
	6" (Waukegan)	20.5	20.3	20.0	19.7	19.5
	8"	20.7	20.4	20.1	19.8	19.6
	8" (Waukegan)	21.4	21.1	20.8	20.5	20.3
	10"	19.4	19.2	18.9	18.7	18.4
	12"	20.0	19.7	19.5	19.2	18.9
	14"-16"	20.8	20.5	20.3	20.0	19.7
	18"-36"	18.8	18.5	18.3	18.0	17.8
NOTE (1)	6'6"					
Class 150	3"	15.0	15.0	15.0	15.0	15.0
	4"	16.8	16.8	16.8	16.8	16.8

X— INDICATES CHANGE —REASON: Extend Table For Higher Point Values

AUTHORITY FOR CHANGE: Additional Information

SUPERSEDES: None

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 6-19-63

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MTC 002963

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: Transite Pipe Pipe Machine Furnishes	PLANT & DIV.	M.G.J.W.D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

1. WATER PIPE - 10' and 13' LENGTHS 6'6" (1)

Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - %		95	95	95	95	95
Blend Point Value		71	72	73	74	75
Class 50	4"-6"	15.6	15.4	15.2	15.0	15.0
	8"	17.7	17.4	17.2	16.9	16.7
	10"-36"	16.0	16.0	16.0	16.0	16.0
Class 100	3"	17.2	17.0	16.7	16.5	16.3
	4" (13')	19.0	18.8	18.5	18.2	18.0
	4" (10')	17.6	17.4	17.2	16.9	16.7
	5"	15.2	15.0	15.0	15.0	15.0
	6" (13')	16.3	16.1	16.0	16.0	16.0
	6" (10')	15.2	15.0	15.0	15.0	15.0
	8"	16.6	16.3	16.1	16.0	16.0
	10"-14"	17.2	17.0	16.7	16.5	16.3
	16"	17.5	17.2	17.0	16.8	16.5
	18"-20"	17.6	17.4	17.2	16.9	16.7
	24"-36"	18.2	18.0	17.7	17.5	17.2
Class 150	3"	16.9	16.7	16.5	16.2	16.0
	4" (13')	18.8	18.4	18.2	18.0	17.8
	4" (10')	17.6	17.4	17.2	16.9	16.7
	5"	16.9	16.7	16.5	16.2	16.0
	6"	17.8	17.5	17.3	17.0	16.8
	8"	18.8	18.5	18.2	18.0	17.8
	10"	17.5	17.2	17.0	16.8	16.5
	12"-14"	17.9	17.6	17.4	17.2	17.0
	16"	18.6	18.3	18.1	17.8	17.6
	18"-36"	17.9	17.6	17.4	17.2	17.0
Class 200	3"	15.8	15.6	15.4	15.2	15.0
	4"	16.8	16.5	16.3	16.1	15.9
	6"	18.2	18.0	17.7	17.5	17.2
	6" (Waukegan)	19.6	19.3	19.1	18.8	18.5
	8"	19.7	19.4	19.2	18.9	18.7
	8" (Waukegan)	20.3	20.0	19.7	19.5	19.2
	10"	18.5	18.2	17.9	17.7	17.5
	12"	19.0	18.8	18.5	18.2	18.0
	14"-16"	19.9	19.6	19.3	19.0	18.8
	18"-36"	17.8	17.5	17.3	17.0	16.8
NOTE (1) Class 150	6'6" 3"	15.0	15.0	15.0	15.0	15.0
	4"	16.0	15.7	15.5	15.3	15.1

X— INDICATES CHANGE —REASON: Extend Table For Higher Point Values

AUTHORITY FOR CHANGE: Additional Information

SUPERSEDES: None

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	R&D				DATE ISSUED 6-19-63

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Form 333-2

MTC 002964

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: Transite Pipe Pipe machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	1.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

1. WATER PIPE - 10' & 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level - 1%	95	95	95	95	95	95	95	95	95	95
Blend Point Value	50	51	52	53	54	55	56	57	58	59
Class 50 4"-6"	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
8"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.2
10"-36"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
Class 100 3"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
4"(13')	27.0	26.5	26.0	25.5	25.0	24.6	24.1	23.7	23.3	22.9
4"(10')	25.0	24.5	24.0	23.6	23.3	22.8	22.4	22.0	21.6	21.2
5"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
6"(13')	23.2	22.8	22.3	21.9	21.5	21.2	20.8	20.4	20.0	19.7
6"(10')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.3
8"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
10"-14"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
16"	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
18"-20"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.2
24"-36"	25.8	25.3	24.8	24.3	23.9	23.5	23.1	22.7	22.3	21.9
Class 150 3"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
4"(13')	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.6
4"(10')	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.2
5"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
6"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4
8"	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.6
10"	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
12"-14"	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6
16"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
18"-36"	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6
Class 200 3"	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0
4"	23.8	23.4	22.9	22.4	22.0	21.6	21.3	20.9	20.6	20.2
6"	25.8	25.3	24.8	24.3	23.9	23.5	23.1	22.7	22.3	21.9
6"(WAU)	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
8"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
8"(WAU)	28.8	28.2	27.7	27.2	26.7	26.2	25.7	25.3	24.8	24.4
10"	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
12"	27.0	26.5	26.0	25.5	25.0	24.6	24.1	23.7	23.3	22.9
14"-16"	28.2	27.6	27.1	26.6	26.1	25.7	25.2	24.8	24.4	24.0
18"-36"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4

X— INDICATES CHANGE —REASON: General Revision to extend tables to 90 Point Value and reduce minimum fiber usage to 12% for 10' and 13' Lengths

AUTHORITY FOR CHANGE: Verbal authority J. E. Hesse

SUPERSEDES: Same Spec. Page 1.7, dated 10-10-63

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Form 35[illegible] Ptd. In U.S.A.

MTC 002965

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES CANCELLED 2/9/78	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	1.5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

1. WATER PIPE - 10' and 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level- %	95	95	95	95	95	95	95	95	95	95	95
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70
Class 50 4"-6"	18.4	18.1	17.8	17.6	17.3	17.0	16.8	16.6	16.4	16.1	15.8
8"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
10"-36"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	16.0	16.0	16.0
Class 100 3"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
4"(13')	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
4"(10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
5"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
6"(13')	19.3	19.0	18.7	18.4	18.1	17.8	17.5	17.3	16.9	16.8	16.6
6"(10')	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
8"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
10"-14"	20.3	20.0	19.7	19.3	19.0	18.7	18.5	18.2	18.0	17.7	17.4
16"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
18"-20"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
24"-36"	21.5	21.1	20.8	20.5	20.2	19.8	19.5	19.2	19.0	18.7	18.4
Class 150 3"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
4"(13')	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0
4"(10')	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8
5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
6"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
8"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0
10"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.7
12"-14"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2
16"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
18"-36"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2
Class 200 3"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
4"	19.8	19.5	19.2	18.9	18.6	18.3	18.0	17.8	17.5	17.2	17.0
6"	21.6	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4
6"(WAU)	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.8
8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
8"(WAU)	24.0	23.6	23.2	22.8	22.5	22.1	21.8	21.5	21.2	20.9	20.6
10"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
12"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.2
14"-16"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2
18"-36"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0

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X— INDICATES CHANGE —REASON: General Revision to extend tables to 90 point value and reduce minimum fiber usage to 12% for 10' & 13' leng

AUTHORITY FOR CHANGE: Verbal Authority J. E. Hesse

SUPERSEDES: Same Spec., Page 1.1, Dated 6-19-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.
					GWK

DATE ISSUED 5-1-67

Form 333-2

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G , W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.5

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

1. WATER PIPE - 10' and 13' LENGTHS 6'6" (1)

Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - %		105	105	105	105	105
Blend Point Value		71	72	73	74	75
Class 50	4"-6"	17.4	17.1	16.9	16.7	16.4
	8"	19.6	19.3	19.0	18.8	18.5
	10"-36"	16.9	16.7	16.5	16.2	16.0
Class 100	3"	18.9	18.6	18.3	18.1	17.9
	4" (13')	21.0	20.7	20.4	20.1	19.8
	4" (10')	19.4	19.2	18.9	18.7	18.4
	5"	16.9	16.7	16.5	16.2	16.0
	6" (13')	18.0	17.8	17.5	17.3	17.1
	6" (10')	16.9	16.7	16.5	16.2	16.0
	8"	18.5	18.2	18.0	17.7	17.5
	10"-14"	19.0	18.7	18.5	18.3	18.0
	16"	19.3	19.0	18.7	18.5	18.3
	18"-20"	19.6	19.3	19.0	18.8	18.5
	24"-36"	20.2	19.9	19.6	19.3	19.0
Class 150	3"	18.6	18.3	18.1	17.9	17.6
	4" (13')	20.7	20.4	20.1	19.9	19.6
	4" (10')	19.6	19.3	19.0	18.8	18.5
	5"	18.6	18.3	18.1	17.9	17.6
	6"	19.7	19.4	19.2	19.0	18.7
	8"	20.7	20.4	20.1	19.9	19.6
	10"	19.3	19.0	18.7	18.5	18.3
	12"-14"	19.9	19.6	19.3	19.0	18.8
	16"	20.5	20.3	20.2	19.8	19.5
	18"-36"	19.9	19.6	19.3	19.0	18.8
Class 200	3"	17.5	17.2	17.0	16.8	16.5
	4"	18.5	18.2	18.0	17.7	17.5
	6"	20.2	19.9	19.6	19.3	19.0
	6" (Waukegan)	21.5	21.2	21.0	20.7	20.4
	8"	21.9	21.6	21.3	21.0	20.7
	8" (Waukegan)	22.6	22.2	21.9	21.6	21.3
	10"	20.4	20.1	19.8	19.6	19.3
	12"	21.0	20.7	20.4	20.1	19.8
	14"-16"	21.9	21.6	21.3	21.0	20.7
	18"-36"	19.7	19.4	19.2	19.0	18.7
NOTE (1) Class 150	6'6" 3"	15.6	15.4	15.2	15.0	15.0
	4"	17.6	17.4	17.1	16.9	16.7

Ptd. In U.S.A.

Form 333-2

X— INDICATES CHANGE —REASON: Extend Table for Higher Point Values

AUTHORITY FOR CHANGE: Additional Information

SUPERSEDES: None

RETURN TO I-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. PLANT			DATE ISSUED 6-19-63

MTC 002967

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	1.6

CANCELLED 2/9/78

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

I. WATER PIPE 10' and 13' lengths

Fiber Usage of 10' Lengths same as 13' lengths except 4"-150, 4"-100, 6"-100

FIBER LEVEL % / BLEND POINT VALUE		95 71	95 72	95 73	95 74	95 75	95 76	95 77	95 78	95 79	95 80
Class 50	4"-6"	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.9
	8"	17.7	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
	10"-36"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
Class 100	3"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.6	15.4	15.3
	4" (13')	19.0	18.8	18.5	18.2	18.0	17.8	17.6	17.3	17.1	16.9
	4" (10')	17.6	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
	5"	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
	6" (13')	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5
	6" (10')	15.2	15.0	14.8	14.6	14.4	14.2	14.0	13.8	13.7	13.5
	8"	16.6	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7
	10"-14"	17.2	17.0	16.7	16.5	16.3	16.1	51.9	15.6	15.4	15.3
	16"	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
	18"-20"	17.6	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
	24"-36"	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4	16.2
Class 150	3"	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
	4" (13')	18.8	18.4	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
	4" (10')	17.6	17.4	17.2	16.9	16.7	16.4	16.2	16.0	15.8	15.6
	5"	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
	6"	17.8	17.5	17.3	17.0	16.8	16.6	16.4	16.2	16.0	15.8
	8"	18.8	18.5	18.2	18.0	17.8	17.5	17.2	17.0	16.8	16.6
	10"	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
	12"-14"	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
	16"	18.6	18.3	18.1	1.78	17.6	17.4	17.1	16.9	16.7	16.5
	18"-36"	17.9	17.6	17.4	17.2	17.0	16.7	16.5	16.3	16.1	15.9
Class 200	3"	15.8	15.6	15.4	15.2	15.0	14.7	14.5	14.3	14.2	14.0
	4"	16.8	16.5	16.3	16.1	15.9	15.6	15.4	15.2	15.0	14.8
	6"	18.2	18.0	17.7	17.5	17.2	17.0	16.8	16.6	16.4	16.2
	6" (WAU)	19.6	19.3	19.1	18.8	18.5	18.3	18.0	17.8	17.6	17.4
	8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
	8" (WAU)	20.3	20.0	19.7	19.5	19.2	19.0	18.7	18.5	18.2	18.0
	10"	18.5	18.2	17.9	17.7	17.4	17.2	17.0	16.8	16.6	16.4
	12"	19.0	18.8	18.5	18.2	18.0	17.8	17.6	17.3	17.1	16.9
	14 -16"	19.9	19.6	19.3	19.0	18.8	18.6	18.3	18.1	17.8	17.6
	18"-36"	17.8	17.5	17.3	17.0	16.8	16.6	16.4	16.2	16.0	15.8

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (LM)

X— INDICATES CHANGE —REASON: General Revision to extend tables to 90 point value and reduce minimum fiber usage to 12% for 10' and 13' lengths.

AUTHORITY FOR CHANGE: Verbal authority J. E. Hesse

SUPERSEDES: Same spec, Page 14, Dated 6-19-63

CIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 5-1-67

MTC 002968

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.6

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:

I. WATER PIPE - 10' and 13' Lengths. For 6'6" Lengths see Note (1)

Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - % Blend Point Value		100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
Class 50	4"-6"	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.9
	8"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
	10"-36"	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
Class 100	3"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
	4"(13')	28.4	27.8	27.3	26.8	26.3	25.8	25.4	24.9	24.5	24.1
	4"(10')	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
	5"	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
	6"(13')	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
	6"(10')	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
	8"	25.0	24.5	24.0	23.6	23.2	22.8	22.3	22.0	21.6	21.2
	10"-14"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
	16"	26.0	25.5	25.0	24.5	24.1	23.6	23.2	22.8	22.4	22.0
	18"-20"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
	24"-36"	27.2	26.7	26.2	25.6	25.2	24.7	24.3	23.8	23.4	23.0
Class 150	3"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4
	4"(13')	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
	4"(10')	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
	5"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4
	6"	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.6
	8"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
	10"	26.0	25.5	25.0	24.5	24.1	23.6	23.2	22.8	22.4	22.0
	12"-14"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
	16"	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
	18"-36"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
Class 200	3"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
	4"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.2
	6"	27.2	26.7	26.2	25.6	25.2	24.7	24.2	23.8	23.4	23.0
	6"(WAU)	29.2	28.6	28.1	27.5	27.0	26.5	26.1	25.6	25.2	24.8
	8"	29.4	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.4	25.0
	8"(WAU)	30.4	29.8	29.2	28.7	28.2	27.6	27.2	26.7	26.2	25.8
	10"	27.6	27.1	26.6	26.0	25.6	25.1	24.6	24.2	23.8	23.4
	12"	28.4	27.8	27.3	26.8	26.3	25.8	25.4	24.9	24.5	24.1
	14"-16"	29.6	29.0	28.4	27.9	27.4	26.9	26.4	26.0	25.5	25.1
	18"-36"	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.6
NOTE (1) 6'6" Class 150	3"	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.4	18.1	17.8
	4"	23.8	23.4	22.9	22.4	22.0	21.6	21.3	20.9	20.6	20.2

X— INDICATES CHANGE	—REASON:	Lower Point Value of M-100 Fiber
AUTHORITY FOR CHANGE		J. B. McCarty's Letter of 9-19-63
SUPERSEDES:		None

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.

DATE ISSUED 10-10-63

RETURN TO J-M RESEARCH FILE ROOM

MTC 002969

Ptd. in U.S.A.
Form 333-2

Johns-Manville
MANUFACTURING
SPECIFICATION

PRODUCT:

"TRANSITE" PIPE
Pipe Machine Furnishes

PLANT & DIV. | Capl.

SPEC NO. 425-2

PAGE NO. 1.7

NOMINAL PERCENT FIBER BLEND - COST STANDARDS **CANCELLED** 2/9/78

I. WATER PIPE 10' and 13' Lengths
Fiber Usage of 10' lengths same as 13' Lengths except 4"-150, 4"-100, 6"-100

Fiber Level % / Blend Point Value		95 81	95 82	95 83	95 84	95 85	95 86	95 87	95 88	95 89	95 90
Class 50	4"-6"	13.7	13.5	13.3	13.2	13.1	12.9	12.7	12.6	12.5	12.3
	8"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
	10"-36"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
Class 100	3"	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
	4" (13')	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3	15.1	15.0
	4" (10')	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
	5"	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
	6" (13')	14.3	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.0	12.9
	6" (10')	13.3	13.2	13.0	12.8	12.7	12.6	12.4	12.3	12.1	12.0
	8"	14.6	14.4	14.2	14.0	13.9	13.7	13.5	13.4	13.2	13.1
	10"-14"	15.1	14.9	14.7	14.5	14.3	14.2	14.0	13.9	13.7	13.6
	16"	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
	18"-20"	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
	24"-36"	16.0	15.7	15.5	15.3	15.1	15.0	14.8	14.6	14.5	14.3
Class 150	3"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
	4" (13')	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8
	4" (10')	15.5	15.3	15.0	14.9	14.7	14.5	14.3	14.2	14.0	13.9
	5"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
	6"	15.0	15.4	15.3	15.0	14.8	14.6	14.5	14.3	14.2	14.0
	8"	16.4	16.2	16.0	15.8	15.6	15.4	15.3	15.1	14.9	14.8
	10"	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
	12"-14"	15.7	15.5	15.3	15.1	14.9	14.7	14.6	14.4	14.3	14.1
	16"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
	18"-36"	15.7	15.5	15.3	15.1	14.9	14.7	14.6	14.4	14.3	14.1
Class 200	3"	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
	4"	14.7	14.5	14.3	14.1	14.0	13.8	13.6	13.5	13.3	13.2
	6"	16.0	15.7	15.5	15.3	15.1	15.0	14.8	14.6	14.5	14.3
	6" (WAU)	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
	8"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
	8" (WAU)	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0
	10"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
	12"	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3	15.1	15.0
	14"-16"	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6
	18"-36"	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

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X— INDICATES CHANGE —REASON: GENERAL REVISION TO EXTEND TABLES TO 90 POINT VALUE AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY W. R. HESSE

MTC 002970

SUPERSEDES: NONE 10/10/63

Form 333-2

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. MGR.			DATE ISSUED 5-1-67

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.7

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

I. WATER PIPE - 10' & 13' Lengths. For 6'6" Lengths See Note (1)
Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, 6"-100

Fiber Level - 1% Blend Point Value		95 50	95 51	95 52	95 53	95 54	95 55	95 56	95 57	95 58	95 59
Class 50	4"-6"	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.
	8"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.
	10"-36"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.
Class 100	3"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.
	4"(13')	27.0	26.5	26.0	25.5	25.0	24.6	24.1	23.7	23.3	22.
	4"(10')	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.
	5"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.
	6"(13')	23.2	22.8	22.3	21.9	21.5	21.2	20.8	20.4	20.0	19.
	6"(10')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18.
	8"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.
	10"-14"	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.
	16"	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.
	18"-20"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.
	24"-36"	25.8	25.3	24.8	24.3	23.9	23.5	23.1	22.7	22.3	21.
Class 150	3"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.
	4"(13')	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.
	4"(10')	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.
	5"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.
	6"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.
	8"	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.
	10"	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.
	12"-14"	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.
	16"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.
	18"-36"	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.
Class 200	3"	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.
	4"	23.8	23.4	22.9	22.4	22.0	21.6	21.3	20.9	20.6	20.
	6"	25.8	25.3	24.8	24.3	23.9	23.5	23.1	22.7	22.3	21.
	6"(WAU)	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.
	8"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.
	8"(WAU)	28.8	28.2	27.7	27.2	26.7	26.2	25.7	25.3	24.8	24.
	10"	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.
	12"	27.0	26.5	26.0	25.5	25.0	24.6	24.1	23.7	23.3	22.
	14"-16"	28.2	27.6	27.1	26.6	26.1	25.7	25.2	24.8	24.4	24.
	18"-36"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.
NOTE (1) 6'6" Class 150	3"	20.2	19.8	19.4	19.1	18.7	18.4	18.0	17.7	17.4	17.1
	4"	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2

X— INDICATES CHANGE —REASON: Lower Point Value of 4"-100 Fiber

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 9-19-63

SUPERSEDES: None

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED 10-10-63

RETURN TO J-M RESEARCH FILE ROOM

Ptd. in U.S.A.

Form 333-2

MTC 002971

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	1.8

NOMINAL PERCENT FIBER BLEND-COST STANDARDS

1. WATER PIPE - 10' & 13' Lengths. Fiber Usage of 10' Lengths Same as 13' Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level - % Blend Point Value	105 50	105 51	105 52	105 53	105 54	105 55	105 56	105 57	105 58	105 59
Class 50 4"-6"	24.6	24.1	23.7	23.2	22.8	22.4	22.0	21.6	21.2	20.9
8"	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
10"-36"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
Class 100 3"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
4"(13')	29.8	29.2	28.6	28.1	27.6	27.1	26.6	26.2	25.7	25.3
4"(10')	27.6	27.1	26.6	26.0	25.6	25.1	24.6	24.2	23.8	23.4
5"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
6"(13')	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
6"(10')	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
8"	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
10"-14"	27.0	26.5	26.0	25.5	25.0	24.6	24.1	23.7	23.3	22.9
16"	27.4	26.9	26.4	25.8	25.3	24.9	24.5	24.0	23.6	23.2
18"-20"	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
24"-36"	28.6	28.0	27.5	27.0	26.5	26.0	25.6	25.1	24.7	24.3
Class 150 3"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
4"(13')	29.4	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.4	25.0
4"(10')	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
5"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
6"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
8"	29.4	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.4	25.0
10"	27.4	26.9	26.4	25.8	25.3	24.9	24.5	24.0	23.6	23.2
12"-14"	28.2	27.6	27.1	26.6	26.1	25.7	25.2	24.8	24.4	24.0
16"	29.2	28.6	28.1	27.5	27.0	26.5	26.1	25.6	25.2	24.8
18"-36"	28.2	27.6	27.1	26.6	26.1	25.7	25.2	24.8	24.4	24.0
Class 200 3"	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
4"	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
6"	28.6	28.0	27.5	27.0	26.5	26.0	25.6	25.1	24.7	24.3
6"(WAU)	30.6	30.0	29.4	28.9	28.4	27.9	27.4	26.9	26.4	26.0
8"	31.0	30.4	29.8	29.3	28.7	28.2	27.7	27.2	26.8	26.3
8"(WAU)	32.0	31.4	30.8	30.2	29.6	29.1	28.6	28.1	27.6	27.1
10"	29.0	28.4	27.9	27.4	26.9	26.4	25.9	25.5	25.0	24.6
12"	29.8	29.2	28.6	28.1	27.6	27.1	26.6	26.2	25.7	25.3
14"-16"	31.0	30.4	29.8	29.3	28.7	28.2	27.7	27.2	26.8	26.3
18"-36"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8

Pld. In U.S.A.

X— INDICATES CHANGE —REASON: General Revision to Extend Tables to 90 Point Value and Reduce Minimum Fiber Usage to 12% for 10' and 13' L

AUTHORITY FOR CHANGE: Verbal Authority J. E. Hesse

SUPERSEDES: Same Spec., Same Page , dated 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. MGR.			DATE ISSUED	5-1-67

Form 333-2

MTC 002972

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	I,C,J,W,F & R PIPE
		SPEC NO.	425-2
		PAGE NO.	1.8

NOMINAL PERCENT FIBER BLEND - COST STANDARDS

I. WATER PIPE - 10' & 13' Lengths. For 6'6" Lengths See Note (1)
Fiber Usage of 10' Lengths Same As 13' Lengths Except 4"-150, 4"-100, & 6"-100.

Fiber Level - % Blend Point Value		105 50	105 51	105 52	105 53	105 54	105 55	105 56	105 57	105 58	105 59
Class 50	4"-6"	24.6	24.1	23.7	23.2	22.8	22.4	22.0	21.6	21.2	20.9
	8"	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
	10"-36"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
Class 100	3"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
	4"(13')	29.8	29.2	28.6	28.1	27.6	27.1	26.6	26.2	25.7	25.3
	4"(10')	27.6	27.1	26.6	26.0	25.6	25.1	24.6	24.2	23.8	23.4
	5"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
	6"(13')	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
	6"(10')	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4
	8"	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
	10"-14"	27.0	26.5	26.0	25.5	25.0	24.6	24.1	23.7	23.3	22.9
	16"	27.4	26.9	26.4	25.8	25.3	24.9	24.5	24.0	23.6	23.2
	18"-20"	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
	24"-36"	28.6	28.0	27.5	27.0	26.5	26.0	25.6	25.1	24.7	24.3
Class 150	3"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
	4"(13')	29.4	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.4	25.0
	4"(10')	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
	5"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
	6"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
	8"	29.4	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.4	25.0
	10"	27.4	26.9	26.4	25.8	25.3	24.9	24.5	24.0	23.6	23.2
	12"-14"	28.2	27.6	27.1	26.6	26.1	25.7	25.2	24.8	24.4	24.0
	16"	29.2	28.6	28.1	27.5	27.0	26.5	26.1	25.6	25.2	24.8
	18"-36"	28.2	27.6	27.1	26.6	26.1	25.7	25.2	24.8	24.4	24.0
Class 200	3"	24.8	24.3	23.8	23.4	23.0	22.6	22.1	21.8	21.4	21.0
	4"	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
	6"	28.6	28.0	27.5	27.0	26.5	26.0	25.6	25.1	24.7	24.3
	6"(WAU)	30.6	30.0	29.4	38.9	28.4	27.9	27.4	26.9	26.4	26.0
	8"	31.0	30.4	29.8	29.3	28.7	28.2	27.7	27.2	26.8	26.3
	8"(WAU)	32.0	31.4	30.8	30.2	29.6	29.1	28.6	28.1	27.6	27.1
	10"	29.0	28.4	27.9	27.4	26.9	26.4	25.9	25.5	25.0	24.6
	12"	29.8	29.2	28.6	28.1	27.6	27.1	26.6	26.2	25.7	25.3
	14"-16"	31.0	30.4	29.8	29.3	28.7	28.2	27.7	27.2	26.8	26.3
	18"-36"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
NOTE (1) 6'6" Class 150	3"	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.9
	4"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.2

X— INDICATES CHANGE —REASON: Lower Point Value of M-100 Fiber

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 9-19-63

SUPERSEDES: None

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED 10-10-63

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2 Ptd. in U.S.A.

Johns-Manville
MANUFACTURING
SPECIFICATION

PRODUCT:
TRANSITE PIPE
PIPE MACHINE FURNISHES
CANCELLED

	PIPE
SPEC NO.	425-2
PAGE NO.	1.9

NOMINAL PERCENT FIBER BLEND - COST STANDARDS: 2/9/78

1. **WATER PIPE** - 10' & 13' Lengths: Fiber Usage of 10'Lengths same as 1
Lengths Except 4"-150, 4"-100, 6"-100.

Fiber Level - % Blend Point Value	105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	10 7
Class 50 4"-6"	20.4	20.1	19.8	19.5	19.2	18.8	18.6	18.3	18.1	17.8	17.
8"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.
10"-36"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.
Class 100 3"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.
4"(13')	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.
4"(10')	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.
5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.
6"(13')	21.4	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.
6"(10')	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.
8"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.
10"-14"	22.5	22.2	21.8	21.4	21.1	20.8	20.4	20.1	19.8	19.5	19.
16"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.
18"-20"	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.
24"-36"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.
Class 150 3"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
4"(13')	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.
4"(10')	23.2	22.8	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.1	19.
5"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.
6"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.
8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.
10"	22.8	22.5	22.2	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.
12"-14"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.
16"	24.4	23.9	23.5	23.1	22.8	22.4	22.1	21.8	21.5	21.2	20.
18"-36"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.
Class 200 3"	20.6	20.3	20.0	19.7	19.4	19.0	18.7	18.5	18.2	18.0	17.
4"	21.8	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.
6"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.
6"(WAU)	25.5	25.1	24.7	24.3	23.9	23.6	23.2	22.9	22.5	22.2	21.
8"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.
8"(WAU)	26.7	26.3	25.8	25.4	25.0	24.6	24.3	23.9	23.6	23.2	22.
10"	24.2	23.8	23.4	23.0	22.7	22.3	22.0	21.7	21.4	21.1	20.
12"	24.9	24.5	24.0	23.6	23.3	22.9	22.6	22.3	21.9	21.6	21.
14"-16"	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.
18"-36"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.

Pd. In U.S.A.

X— INDICATES CHANGE —REASON: **General Revision to Extend tables to 90 Point Value and Reduce Minimum Fiber Usage to 12% for 10' & 13' Lengths**

AUTHORITY FOR CHANGE: **Verbal Authority J. E. Hesse**

SUPERSEDES: **Same Spec., Page 1.2, Dated 6-19-63.**

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG.			DATE ISSUED	5-1-67

Form 333-2

J-M RESEARCH LIBRARY

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE PIPE Pipe Machine Furnishes" CANCELLED	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	1.10

NOMINAL PERCENT FIBER BLEND - COST STANDARDS 2/9/18

I. WATER PIPE 10' and 13' lengths

Fiber Usage of 10' lengths same as 13' lengths except 4"-150 4"-100 and 6"100

Fiber Level % Blend Point Value		105 71	105 72	105 73	105 74	105 75	105 76	105 77	105 78	105 79	105 80
Class 50	4"-6"	17.4	17.1	16.9	16.7	16.4	16.2	16.0	15.8	15.6	15.4
	8"	19.6	19.3	19.0	18.8	18.5	18.3	18.0	17.8	17.6	17.4
	10"-36"	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
Class 100	3"	18.9	18.6	18 3	18.1	17.9	17.6	17.4	17.2	17.0	16.8
	4" (13')	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.1	18.8	18.6
	4" (10')	19.4	19.2	18.9	18.7	18.4	18.2	17.9	17.7	17.5	17.3
	5"	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
	6" (13')	18.0	17.8	17.5	17.3	17.1	16.8	16.6	16.4	16.2	16.0
	6" (10')	16.9	16.7	16.5	16.2	16.0	15.8	15.6	15.4	15.2	15.0
	8"	18.5	18.2	18.0	17.7	17.5	17.3	17.0	16.8	16.5	16.4
	10"-14"	19.0	18.7	18.5	18.3	18.0	17.7	17.5	17.3	17.1	16.9
	16"	19.3	19.0	18.7	18.5	18.3	18.0	17.8	17.5	17.3	17.1
	18"-20"	19.6	19.3	19.0	18.8	18.5	18.8	18.0	17.8	17.6	17.4
	24"-36"	20.2	19.9	19.6	19.3	19.0					
Class 150	3"	18.6	18.3	18.1	17.9	17.6	17.4	17.1	16.9	16.7	16.5
	4" (13')	20.7	20.4	20.1	19.9	19.6	19.3	19.1	18.8	18.6	18.4
	4" (10')	19.6	19.3	19.0	18.8	18.5	18.3	18.0	17.8	17.6	17.4
	5"	18.6	18.3	18.1	17.9	17.6	17.4	17.1	16.9	16.7	16.5
	6"	19.7	19.4	19.2	19.0	18.7	18.4	18.2	18.0	17.7	17.5
	8"	20.7	20.4	20.1	19.9	19.6	19.3	19.1	18.8	18.6	18.4
	10"	19.3	19.0	18.7	19.5	18.3	18.0	17.8	17.5	17.3	17.1
	12"-14"	19.9	19.6	19.3	19.0	18.8	18.5	18.3	18.1	17.8	17.6
	16"	20.5	20.3	20.0	19.8	19.5	19.2	19.0	18.7	18.5	18.3
	18"-36"	19.9	19.6	19.3	19.0	18.8	18.5	18.3	18.1	17.8	17.6
Class 200	3"	17.5	17.2	17.0	16.8	16.5	16.3	16.1	15.9	15.7	15.5
	4"	18.6	18.2	18.0	17.7	17.5	17.3	17.0	16.8	16.6	16.4
	6"	20.2	19.9	19.6	19.3	19.0	18.8	18.5	18.3	18 1	17.8
	6" (WAU)	21.5	21.2	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.1
	8"	21.9	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.5	19.3
	8" (WAU)	22.6	22.2	21.9	21.6	21.3	21.1	20.8	20.5	20.3	20.0
	10"	20.4	20.1	19.8	19.6	19.3	19.1	18.8	18.6	18.3	18.1
	12"	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.1	18.8	18.6
	14"-16"	21.9	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.6	19.3
	18"-36"	19.7	19.4	19.2	19.0	18.7	18.4	18.2	18.9	17.7	17.5

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X— INDICATES CHANGE —REASON: GENERAL REVISION TO EXTEND TABLES TO 90 POINT VALUE AND REDUC MINIMUM FIBER USAGE TO 12% for 10' and 13' Lengths

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: SAME SPEC, PAGE 15., DATED 6-19-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. MGR.			DATE ISSUED 5-1-67

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes CANCELLED	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	1.11

NOMINAL PERCENT FIBER BLEND - COST STANDARDS 2/9/78

I. WATER PIPE 10'-13' Lengths

Fiber Usage of 10' same as 13' except 4"-150, 4"-100 and 6"-100

Fiber Level % Blend Point Value		105 81	105 82	105 83	105 84	105 85	105 86	105 87	105 88	105 89	105 90
Class 50	4"-6"	15.2	15.0	14.8	14.6	14.4	14.3	14.1	14.0	13.9	13.7
	8"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
	10"-36"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
Class 100	3"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9
	4" (13')	18.4	18.2	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.6
	4" (10')	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3
	5"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
	6" (13')	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.5	14.4	14.2
	6" (10')	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4
	8"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
	10"-14"	16.6	16.4	16.2	16.0	15.8	15.7	15.5	15.3	15.1	15.0
	16"	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2
	18"-20"	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
	24"-36"	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.1	15.9
Class 150	3"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
	4" (13')	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3
	4" (10')	17.2	17.0	16.7	16.5	16.3	16.1	15.9	15.8	15.6	15.4
	5"	16.3	16.1	15.9	15.7	15.5	15.3	15.2	15.0	14.8	14.7
	6"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
	8"	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3
	10"	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2
	12"-14"	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6
	16"	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2
	18"-36"	17.9	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6
Class 200	3"	15.3	15.1	14.9	14.8	14.6	14.4	14.2	14.1	13.9	13.8
	4"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
	6"	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.3	16.1	15.9
	6" (WAU)	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0
	8"	19.1	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2
	8" (WAU)	19.7	19.5	19.3	19.1	18.8	18.6	18.4	18.2	18.0	17.8
	10"	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1
	12"	18.4	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.6
	14"-16"	19.1	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2
	18"-36"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5

Pfd. in U.S.A.

Form 333-2

X-- INDICATES CHANGE --REASON: GENERAL REVISION TO EXTEND TAB LES TO 90 POINT VALUE AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13'

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: NONE

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.	DATE ISSUED 5-1-67

MTC 002976

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL % / BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
"R" Irrigation Pipe											
4" R13 and 6" R18	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
8" R18	25.0	24.6	24.2	23.8	23.4	23.0	22.7	22.4	22.0	21.7	21.4
All Other R Pipe 3" - 12"	23.3	23.0	22.6	22.2	21.9	21.5	21.7	20.9	20.6	20.3	20.0
All R Pipe 14" - 36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	17.4	19.1

FIBER LEVEL % / BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
"R" Irrigation Pipe										
4" R13 and 6" R18	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
8" R18	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7
All Other R Pipe 3" - 12"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
All R Pipe 14" - 36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE	-REASON:	Extend Table for Higher Point Values & Reduce Minimum Fiber Usage
AUTHORITY FOR CHANGE		Verbal Authority J. E. Hesse (A. C. Daley's Letter 5/24/66)
SUPERSEDES:		Same Spec., Same Page Dated 7/16/65

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	5-27-66

Form 333-2 Pid. in U.S.A.

MTC 002977

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARD
II. IRRIGATION PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
"R" Irrigation Pipe											
4" R13 and 6" R18	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
8" R18	25.0	24.6	24.2	23.8	23.4	23.0	22.7	22.4	22.0	21.7	21.4
All Other R Pipe 3"-12"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
All R Pipe 14"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
"R" Irrigation Pipe										
4" R13 and 6" R18	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
8" R18	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7
All Other R Pipe 3"-12"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
All R Pipe 14"-36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8

X

PLEASE RETURN TO
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LIBRARY (MM)

X- INDICATES CHANGE	-REASON: Large R Pipe BPV 69 - 19.4% Was 17.4%	
AUTHORITY FOR CHANGE	Typographical Error	MTC 002978
SUPERSEDES:	Same Spec., Same Page, Dated 5/27/66	

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 6-9-66

Form 333-2 rtd. in U.S.A.

Johns-Manville
MANUFACTURING
SPECIFICATION

PRODUCT:
TRANSITE Pipe
Pipe Machine Furnishes

PLANT & DIV.	PIPE
SPEC NO.	425-2
PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARD

F.I. IRRIGATION PIPE

Minimum Usage, 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
"R" Irrigation Pipe																
4" R13 & 6" R18	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.5
8" R18	25.0	24.6	24.2	23.8	23.4	23.0	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.5	20.3	20.0
All Other R Pipe 3" - 12"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0	19.7	19.4	19.2	18.9	18.7
All R Pipe 14" - 36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6	18.4	18.1	17.9

Fiber LEVEL %	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
"R" Irrigation Pipe																
4" R13 and 6" R18	25.8	25.4	25.0	24.6	24.2	23.9	23.5	23.2	22.8	22.5	22.2	21.9	21.6	21.3	21.0	20.7
8" R18	26.1	25.8	25.3	24.9	24.5	24.2	23.8	23.5	23.1	22.8	22.5	22.2	21.9	21.6	21.3	21.0
All Other R Pipe 3" - 12"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0	20.7	20.4	20.1	19.9	19.6
All R Pipe 14" - 36"	23.5	23.2	22.8	22.4	22.0	21.6	21.3	21.0	20.7	20.4	20.2	19.9	19.6	19.3	19.0	18.8

Fiber Level %	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
"R" Irrigation Pipe																
4" R13 & 6" R18	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0	19.7	19.4	19.2	18.9	18.7
8" R18	23.8	23.4	23.0	22.6	22.3	21.9	21.6	21.3	21.0	20.7	20.4	20.1	19.8	19.6	19.3	19.0
All Other R Pipe 3" - 12"	22.0	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0	18.8	18.5	18.2	18.0	17.8
All R Pipe 14" - 36"	21.2	20.8	20.4	20.1	19.8	19.5	19.2	18.9	18.7	18.4	18.2	17.9	17.6	17.4	17.2	17.0

X— INDICATES CHANGE —REASON: Add "R" Irrigation

AUTHORITY FOR CHANGE: ProductProposal 425-177 & J. B. McCarty's Letter 5-11-65

SUPERSEDES: [redacted] 7/26/63

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.			DATE ISSUED	7-16-65

Form 333-2-A Ptd. in U.S.A.

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MTC 002979

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	A, G, J, W, D & H PIPE
		SPEC NO.	425-2
		PAGE NO.	2

NOMINAL PERSENT FIBER BLEND - COST STANDARD:

II. IRRIGATION PIPE

Minimum Usage, 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level %	100	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70
Type 5 3"-8" (10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8"-16" (13")	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Type 10 3"-8" (10')	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8" (13')	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	16.0
10"-12"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
14"-16"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
Type 15 3"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
4"-6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" (10')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8" (13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
12"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
14"-16"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6

Fiber Level %	100	100	100	100	100
Blend Point Value	71	72	73	74	75
Type 5 3"-8" (10')	15.0	15.0	15.0	15.0	15.0
8"-16" (13')	16.0	16.0	16.0	16.0	16.0
Type 10 3"-8" (10')	15.0	15.0	15.0	15.0	15.0
8" (13')	16.0	16.0	16.0	16.0	16.0
10"-12"	16.0	16.0	16.0	16.0	16.0
14"-16"	16.0	16.0	16.0	16.0	16.0
Type 15 3"	15.0	15.0	15.0	15.0	15.0
4"-6"	16.0	15.8	15.6	15.4	15.2
8" (10')	16.5	16.3	16.0	15.8	15.6
8" (13')	17.0	16.8	16.6	16.4	16.2
10"	16.0	16.0	16.0	16.0	16.0
12"	16.5	16.3	16.0	16.0	16.0
14" - 16"	17.3	17.1	16.9	16.6	16.4

X— INDICATES CHANGE —REASON: Add 8" Low Head Irrigation in 13' Lengths

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 5-24-63

SUPERSEDES: Same Spec., Same Page Dated 6-19-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.

DATE ISSUED 7-26-63

Pfd. in U.S.A.

Form 333-2

RETURN TO J-M RESEARCH FILE ROOM

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT [illegible] R & D	SPEC NO. 425-2	PAGE NO. 2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

CANCELLED

II. IRRIGATION PIPE

Minimum Usage, 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level %		100	100	100	100	100	100	100	100	100	100	100
Blend Point Value		60	61	62	63	64	65	66	67	68	69	70
Type 5	3" - 6"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8" - 16"	SEE CLASS 1500 SEWER PIPE										
Type 10	3" - 8"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	10" - 12"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
	14"-16"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
Type 15	3"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	4" - 6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
	8"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
	10"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
	12"	19.3	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
	14" - 16"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6

Fiber Level %		100	100	100	100	100
Blend Point Value		71	72	73	74	75
Type 5	3" - 6"	15.0	15.0	15.0	15.0	15.0
	8" - 16"	SEE CLASS 1500 SEWER PIPE				
Type 10	3" - 8"	15.0	15.0	15.0	15.0	15.0
	10" - 12"	16.0	16.0	16.0	16.0	16.0
	14" - 16"	16.0	16.0	16.0	16.0	16.0
Type 15	3"	15.0	15.0	15.0	15.0	15.0
	4" - 6"	16.0	15.8	15.6	15.4	15.2
	8"	16.5	16.3	16.0	15.8	15.6
	10"	16.0	16.0	16.0	16.0	16.0
	12"	16.5	16.3	16.0	16.0	16.0
	14" - 16"	17.3	17.1	16.9	16.6	16.4

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Pld. In U.S.A.

Form 333-2

X— INDICATES CHANGE	—REASON: Delete 225,325,&450 Ft. Head and Extend Table
AUTHORITY FOR CHANGE	Product Proposal 425-165 J. B. McCarty's Letter 4/25/63
SUPERSEDES:	Same Spec. Part of Page2 Dated 1/2/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG [illegible]			DATE ISSUED 6-19-63

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

II. Irrigation Pipe

Minimum Usage, 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level % Blend Point Value	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Type 5 3"-6"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8"-16"		See Class 1500 Sewer Pipe									
Type 10 3"-8"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-12"	17.0	16.7	16.4	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0
14"-16"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
Type 15 3"	15.7	15.5	15.3	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
4"-6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
10"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
12"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
14"-16"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6
225 Ft.Hd. 5"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
All Other Sizes		See Class 100 Pressure Pipe									
325 Ft.Hd. 5"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0
All Other Sizes		See Class 150 Pressure Pipe									
450 Ft. Hd.		See Class 200 Pressure Pipe									
All Sizes											

MTC 002982

X— INDICATES CHANGE —REASON:	To Show 61, 62, 64, 65, 66, 68 and 69 and 70 Point Value Blends
AUTHORITY FOR CHANGE	Additional Information
SUPERSEDES:	Part of Page 2, Same Spec. Dated 10/3/62

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB			DATE ISSUED	1/2/63

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Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,E, & R PIPE
		SPEC NO.	425-2
		PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS-CONTINUED:

II. IRRIGATION PIPE - 10' AND 13' LENGTHS:

Minimum Fiber Usage of 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - %		100	95	100	95	105	105	100	95
Blend Point Value		63	63	67	67	67	60	60	60
Type 5	3"-6"	15.0	15.0	15.0	15.0	15.0	16.5	15.7	15.0
	8"-16"	See Class 1500 Sewer Pipe							
Type 10	3"-8"	15.0	15.0	15.0	15.0	15.0	16.5	15.7	15.0
	10"-12"	16.0	16.0	16.0	16.0	16.0	17.8	17.0	16.2
	14"-16"	16.5	16.0	16.0	16.0	16.7	18.6	17.6	16.9
Type 15	3"	15.0	15.0	15.0	15.0	15.0	16.5	15.7	15.0
	4"-6"	18.1	17.2	17.0	16.2	17.9	20.0	19.0	18.0
	8"	18.6	17.7	17.5	16.6	18.4	20.5	19.5	18.5
	10"	17.5	16.6	16.4	16.0	17.6	19.6	18.6	17.6
	12"	18.3	17.4	17.2	16.3	18.4	20.5	19.5	18.5
	14"-16"	19.2	18.2	18.1	17.2	19.4	21.7	20.5	19.5
225 Ft.Hd. 5" All Other Sizes		18.1	17.2	17.0	16.1	17.9	20.0	19.0	18.0
		See Class 100 Pressure Pipe							
325 Ft.Hd. 5" All Other Sizes		20.0	19.0	18.9	17.9	19.7	22.0	21.0	20.0
		See Class 150 Pressure Pipe							
425 Ft. H. All Sizes		See Class 200 Pressure Pipe							

MTC 002983

Form 333-2 Ptd. in U.S.A.

X— INDICATES CHANGE —REASON:	Silicate Fiber Treatment Blend Change
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 9/24/62
SUPERSEDES:	Same Spec., Same Page Dated 5/2/62

RETURN TO J-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. Dev.				DATE ISSUED	10/3/62

425

	PRODUCT:	PLANT	Pipe
	TRANSITE Pipe Pipe Machine Furnishes	SPEC.	425-2
		PAGE	2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Continued)

II. IRRIGATION PIPE - 10' and 13' Lengths

(Minimum Fiber Usage of 15% in 10' Lengths and 16% in 13' Lengths)

	Fiber Level - %	100	95	100	95	
	Blend Point Value	63	63	67	67	
	Type 5 3" - 6"	15.0	15.0	15.0	15.0	
	8" - 16"	See Class 1500 Sewer Pipe				
	Type 10 3" - 8"	15.0	15.0	15.0	15.0	
	10" - 12"	16.0	16.0	16.0	16.0	
	14" - 16"	16.5	16.0	16.0	16.0	
	Type 15 3"	15.0	15.0	15.0	15.0	
	4" - 6"	18.1	17.2	17.0	16.2	
	8"	18.6	17.7	17.5	16.6	
	10"	17.5	16.6	16.4	16.0	
	12"	18.3	17.4	17.2	16.3	
	14" - 16"	19.2	18.2	18.1	17.2	
X	225 Ft. Hd. 5"	18.1	17.2	17.0	16.1	
	All Other Sizes	See Class 100 P. P.				
X	325 Ft. Hd. 5"	20.0	19.0	18.9	17.9	
	All Other Sizes	See Class 150 P. P.				
	425 Ft. Hd. All Sizes	See Class 200 P. P.				

MTC 002984

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X - INDICATES CHANGE - REASON: To Revise 5" 225 & 325 Ft. Hd. Fiber Furnish

AUTHORITY FOR CHANGE: W. L. VanDerbeek's Letter of 4-25-62 P.P. 425-144

SUPERSEDES: Same Spec., Same Page, Dated 3-2-62

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG.				DATE ISSUED 5-2-62

Form 3324 Pd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	M,G,J,W,D & R
		SPEC NO.	425-2
		PAGE NO.	2

NOMINAL PERCENT FIBER BLEND - COST STANDARDS (Continued)

CANCELLED

II. IRRIGATION PIPE - 10' and 13' Lengths
(Minimum Fiber Usage of 15% in 10' Lengths and 16% in 13' Lengths)

Fiber Level - %		100	95	100	95	
Blend Point Value		63	63	67	67	
Type 5	3"- 6"	15.0	15.0	15.0	15.0	
	8"-16"	See Class 1500 Sewer Pipe				
Type 10	3"- 8"	15.0	15.0	15.0	15.0	
	10"-12"	16.0	16.0	16.0	16.0	
	14"-16"	16.5	16.0	16.0	16.0	
Type 15	3"	15.0	15.0	15.0	15.0	
	4"- 6"	18.1	17.2	17.0	16.2	
	8"	18.6	17.7	17.5	16.6	
	10"	17.5	16.6	16.4	16.0	
	12"	18.3	17.4	17.2	16.3	
	14"-16"	19.2	18.2	18.1	17.2	
225 Ft. Hd. 5"		19.3	18.3	18.2	17.1	
All Other Sizes		See Class 100 P. P.				
325 Ft. Hd. 5"		21.1	20.0	19.9	18.8	
All Other Sizes		See Class 150 P. P.				
425 Ft. Hd. All Sizes		See Class 200 P. P.				

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X— INDICATES CHANGE —REASON: General Revision to Include Fiber Levels and Point Values

AUTHORITY FOR CHANGE: W. L. Van Derbeek's Letter of 1-25-62

SUPERSEDES: All Pages 425-2 Dated 1-10-62 and 4-20-61

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED 3-2-62

Form 333-2 Ptd. in U.S.A.

PIPE MACHINE FURNISH (Cont'd)

PRESSURE PIPE FURNISHES (Cont'd)

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13' MACHINE PRODUCTS - PERCENT USAGE

P-2 Designation — Pressure & Irrigation

	Pipe			Couplings		
	Min.	Max.	Cost Std.	Min.	Max.	Cost Std.
3" all classes	16	20	18	16	20	18
4"-50-100-225	16	20	18	16	20	18
4"-150-200-325-450	18	22	20	16	20	18
6" all classes	17	21	19	16	20	18
8"-50-100-225	18	22	20	17	22	19
8"-150-200-325-450	19	23	21	18	22	20
10" & 12" - All but Type I	18	22	20	18	22	20
Type I	16	20	18	16	20	18
14"-16" All classes	19	23	21	19	23	21
18"-36" All classes	20	24	22	20	24	22
P-3 Designation - Sewer Pipe						
6"	15	19	17	15	19	17
8"	17	21	19	15	19	17
10" - 16"	14	18	16	16	20	18
18"-36"	16	20	18	17	21	19
P-4 Designation - Industrial and Gas Vent						
8"-12"	12	16	14	13	17	15
14"-16"	14	18	16	14	18	16
18"-36"	17	21	19	17	21	19
P-5 Designation - Miscellaneous non-pressure items						
All sizes	12	16	14	12	16	14

Formulae: (Pressure Furnishes)

$$\% \text{ Fiber Blend} = \frac{\text{Fiber Blend} \times 100}{\text{Fiber Blend} + \text{Cement \& Silica}}$$

% Cement & Silica = 100% minus % Virgin Fiber

X— INDICATES CHANGE —REASON:	Establish General Division Manufacturing Specifications.
AUTHORITY FOR CHANGE	Minutes of December, 1960 Plant Managers' Meeting.
SUPERSEDES:	All local Plant Mfg. Specs.

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED	4-20-61

Form 33-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	2.0

NOMINAL PERCENT FIBER BLEND - COST STANDARD

CANCELLED by ltr 4/19/73 attached

II. IRRIGATION PIPE FOR USBR

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
"R" Irrigation Pipe (USBR)											
4" R13 and 6" R18	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0
8" R18	25.0	24.6	24.2	23.8	23.4	23.0	22.7	22.4	22.0	21.7	21.4
All Other R Pipe 3"-12"	23.3	23.0	22.6	22.2	21.9	21.5	21.7	20.9	20.6	20.3	20.0
All R Pipe 14"-36"	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
"R" Irrigation Pipe (USBR)										
4" R13 and 6" R18	20.7	20.4	20.1	19.8	19.6	19.4	19.1	18.8	18.6	18.4
8" R18	21.1	20.8	20.5	20.3	20.0	19.7	19.5	19.2	19.0	18.7
All Other R Pipe 3"-12"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
All R Pipe 14"-36"	18.9	18.6	18.4	18.1	17.9	17.6	17.4	17.2	17.0	16.8

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
"R" Irrigation Pipe (USBR)										
4" R13 and 6" R18	18.2	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.4
8" R18	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7
All Other R Pipe 3"-12"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
All R Pipe 14"-36"	16.5	16.3	16.1	15.9	15.7	15.6	15.4	15.2	15.0	14.9

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X— INDICATES CHANGE — REASON: REDUCE MINIMUM FIBER USAGE TO 12% AND EXTEND BLEND POINT VALUE TABLE TO 90

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

MTC 002987

SUPERSEDES: SAME SPEC, SAME PAGE, DATED 6-9-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 5-1-67

Form 333-2 PU In U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
On-Farm Irrigation											
10" Thru 14"	11.8	11.6	11.5	11.3	11.1	10.9	10.8	10.6	10.4	10.3	10.1
15" Thru 21"	12.5	12.3	12.1	11.9	11.7	11.5	11.4	11.2	11.0	10.9	10.7

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
On-Farm Irrigation										
10" Thru 14"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
15" Thru 21"	10.6	10.4	10.3	10.1	10.0	10.0	10.0	10.0	10.0	10.0

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
On-Farm Irrigation										
10" Thru 14"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
15" Thru 21"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

X— INDICATES CHANGE —REASON: Page number changed from 2.3 to 2.1

AUTHORITY FOR CHANGE: Type Irrigation Pipe was deleted from specification

SUPERSEDES: Same Spec., Page 2.3 Dated 10/10/69

MGR. G.Q.C	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 4/5/72

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DHQ, Manville
Pipe Quality Control
May 17, 1972

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TRANSITE PIPE MACHINE FURNISHES - MANUFACTURING SPEC. 425-2
EPOXY BONDING - MANUFACTURING SPEC. 425-7

Attached are revised pages of the above specification deleting Type Irrigation and Irrigation 90 Pipe in accordance with K. J. Whalen's letter of 8/6/71 and K. P. Sutton's Marketing Bulletin PM 72-12.

An alternate extended air cure period, without the oven cure period, is now shown for epoxy bonded TRANSITE fittings. This method is now being made available to all plants following the successful deviation at Manville in accordance with Change Notice DHQ-32, dated 7/29/68.

These pages have been officially approved and are now in effect. You are requested to carefully review these pages and notify the DHQ Quality Control Department of any points in question.

Please add these pages to your active file and cancel the prior issue.

TRANSITE PIPE MACHINE FURNISHES		EPOXY BONDING	
Specification No.:	425-2	Specification No.:	425-7
Page Nos.:	2.1 & 5	Page No.:	2
Dated:	4/5/72	Dated:	4/3/72
Cancels:	Pages 2.1 & 2.2 Dated 5/4/70 Page 2.3, Dated 10/10/69 Page 2.4, Dated 4/22/69 Page 5, Dated 4/22/70	Cancels:	Page 2, Dated 12/4/67 Change Notice DHQ-32, Dated 7/29/68

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A. C. Daley FHH
by F. H. Hardenstein

425

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

CANCELLED

NOMINAL PER CENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
Type 25 Irrigation Pipe											
4" and 5"	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
6" and 8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
10" and 12"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
Type 25 Irrigation Pipe										
4" and 5"	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
6" and 8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
10" and 12"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
Type 25 Irrigation Pipe										
4" and 5"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
6" and 8"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
10" and 12"	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.5	15.3	15.1

X— INDICATES CHANGE —REASON: DELETE 3" TYPE 25

AUTHORITY FOR CHANGE J. E. Hesse's Letter of 6/26/69.

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67.

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MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. DEPT.	PLNT. FIN.			DATE ISSUED	5/4/70

F. POST CO. 126-3 SC.

MTC 002990

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	2.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL % / BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Type 25 Irrigation Pipe											
3"	21.0	20.6	20.3	20.3	19.7	19.4	19.1	18.8	18.5	18.3	18.0
4" and 5"	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
6" and 8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
10" and 12"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4

FIBER LEVEL % / BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Type 25 Irrigation Pipe										
3"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
4" and 5"	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
6" and 8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
10" and 12"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0

FIBER LEVEL % / BLEND POINT VALUE	100 81	100 82	100 83	100 84	100 85	100 86	100 87	100 88	100 89	100 90
Type 25 Irrigation Pipe										
3"	15.6	15.4	15.2	15.0	14.8	14.6	14.5	14.3	14.2	14.0
4" and 5"	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.9	14.7	14.6
6" and 8"	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5
10" and 12"	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.5	15.3	15.1

PLEASE RETURN TO
J M RESEARCH
LIBRARY (IMA)

X— INDICATES CHANGE —REASON: REDUCE MINIMUM FIBER USAGE TO 12% AND EXTEND POINT VALUE TABLE T

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

MTC 002991

SUPERSEDES: SAME SPEC, SAME PAGE, DATED 5-27-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.			DATE ISSUED 5-1-67

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Type 25 Irrigation Pipe											
3"	21.0	20.6	20.3	20.3	19.7	19.4	19.1	18.8	18.5	18.3	18.0
4" and 5"	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8
6" and 8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0
10" and 12"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4

FIBER LEVEL % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Type 25 Irrigation Pipe										
3"	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
4" and 5"	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4
6" and 8"	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.7	17.5
10" and 12"	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.4	17.2	17.0

PLEASE RETURN
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LIBRARY (MML

X- INDICATES CHANGE -REASON: Extend Table for Higher Point Values & Reduce Minimum Fiber Usage

AUTHORITY FOR CHANGE: Verbal Authority J. E. Hesse (A. C. Daley's Letter 5/24/66)

SUPERSEDES: Same Spec., Same Page, Dated 7/16/65

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	DATE ISSUED 5-27-66

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: **TRANSITE Pipe** **Pipe Machine Furnishes**	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

MONTHLY PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

Minimum Usage, 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level %	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	105	105	105	105	105	105	105	105
Type 25 Irrigation Pipe																								
3"	21.0	20.6	20.3	20.0	19.7	19.4	19.1	18.8	18.5	18.3	18.0	17.8	17.5	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.4	15.2
4" and 5"	21.9	21.5	21.1	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.8	18.5	18.2	18.0	17.7	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0	15.8
6" and 8"	23.3	23.0	22.6	22.2	21.9	21.5	21.2	20.9	20.6	20.3	20.0	19.7	19.4	19.2	18.9	18.7	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.1
10" and 12"	22.6	22.3	22.0	21.6	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.2	18.9	18.6	18.4	18.1	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5
Fiber Level %	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	95	95	95	95	95	95	95	95
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	60	61	62	63	64	65	66	67
Type 25 Irrigation Pipe																								
3"	22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9	18.6	18.3	18.1	17.9	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0
4" and 5"	23.0	22.7	22.3	21.9	21.6	21.2	20.9	20.6	20.3	20.0	19.7	19.4	19.2	18.9	18.7	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0	16.8
6" and 8"	24.6	24.1	23.6	23.2	22.9	22.6	22.3	22.0	21.6	21.3	21.0	20.7	20.4	20.1	19.9	19.6	19.3	19.0	18.8	18.5	18.2	18.0	17.8	17.6
10" and 12"	23.9	23.5	23.1	22.7	22.4	22.0	21.7	21.4	21.1	20.8	20.4	20.2	19.9	19.6	19.3	19.0	18.7	18.4	18.2	18.0	17.7	17.5	17.3	17.1
Fiber Level %	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95								
Blend Point Value	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75								
Type 25 Irrigation Pipe																								
3"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1	16.9	16.7	16.5	16.2	16.0								
4" and 5"	20.8	20.5	20.2	19.9	19.6	19.2	18.9	18.6	18.4	18.2	17.8	17.6	17.4	17.2	16.9	16.7								
6" and 8"	22.2	21.8	21.4	21.1	20.8	20.5	20.2	19.8	19.6	19.3	19.0	18.8	18.5	18.2	18.0	17.8								
10" and 12"	21.6	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.4	18.2	18.0	17.7	17.5	17.4								

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MTC 002993

X— INDICATES CHANGE —REASON: Add Type 25

AUTHORITY FOR CHANGE: Product Proposal 425-182; J. B. McCarty's Letter 3-1-65

SUPERSEDES: [redacted] 9/26/63

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED	7-16-65

Form 333-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	A, G, J, W, D. PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

NOMINAL PERCENT FIBER BLEND-COST STANDARD:

II. IRRIGATION PIPE:

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level % / Blend Point Value		95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 7
Type 5	3"-8" (10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	1
	8"-16" (13')	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	1
Type 10	3"-8" (10')	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	1
	8" (13')	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	1
	10"-12"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	1
	14"-16"	16.9	16.6	16.3	16.1	16.0	16.0	16.0	16.0	16.0	16.0	1
Type 15	3"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	1
	4"-6"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	1
	8" (10')	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	1
	8" (13')	19.2	18.9	18.6	18.3	18.0	17.7	17.4	17.2	16.9	16.7	1
	10"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	1
	12"	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	1
	14"-16"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	1

Fiber Level % / Blend Point Value		95 71	95 72	95 73	95 74	95 75
Type 5	3"-8" (10')	15.0	15.0	15.0	15.0	15.0
	8"-16" (13')	16.0	16.0	16.0	16.0	16.0
Type 10	3"-8" (10')	15.0	15.0	15.0	15.0	15.0
	8" (13')	16.0	16.0	16.0	16.0	16.0
	10"-12"	16.0	16.0	16.0	16.0	16.0
	14"-16"	16.0	16.0	16.0	16.0	16.0
Type 15	3"	15.0	15.0	15.0	15.0	15.0
	4"-6"	15.2	15.0	15.0	15.0	15.0
	8" (10')	15.6	15.4	15.2	15.0	15.0
	8" (13')	16.2	16.0	16.0	16.0	16.0
	10"	16.0	16.0	16.0	16.0	16.0
	12"	16.0	16.0	16.0	16.0	16.0
	14"-16"	15.5	16.3	16.0	16.0	16.0

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Add Low Head Irrigation in 13' Lengths

AUTHORITY FOR CHANGE: J. B. McCarty's Letter 5-24-63

SUPERSEDES: Same Spec., Same Page Dated 6-19-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 7-26-63

Form 333-2 Ptd. in U.S.A.

MTC 002994

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

CANCELLED

II. IRRIGATION PIPE:

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level % / Blend Point Value		95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Type 5	3" - 6"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	8" - 16"	SEE CLASS 1500 SEWER PIPE										
Type 10	3" - 8"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	10" - 12"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
	14" - 16"	16.9	16.6	16.3	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Type 15	3"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
	4" - 6"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
	8"	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	15.8
	10"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
	12"	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	16.0
	14" - 16"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8

Fiber Level % / Blend Point Value		95 71	95 72	95 73	95 74	95 75
Type 5	3" - 6"	15.0	15.0	15.0	15.0	15.0
	8" - 16"	SEE CLASS 1500				
Type 10	3" - 8"	15.0	15.0	15.0	15.0	15.0
	10" - 12"	16.0	16.0	16.0	16.0	16.0
	14" - 16"	16.0	16.0	16.0	16.0	16.0
Type 15	3"	15.0	15.0	15.0	15.0	15.0
	4" - 6"	15.2	15.0	15.0	15.0	15.0
	8"	15.6	15.4	15.2	15.0	15.0
	10"	16.0	16.0	16.0	16.0	16.0
	12"	16.0	16.0	16.0	16.0	16.0
	14" - 16"	16.5	16.3	16.0	16.0	16.0

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Delete 225,325 & 450 Ft. Hd. & Extend Table

AUTHORITY FOR CHANGE: Product Proposal 425-165 J. B. McCarty's Letter 4/25/63

SUPERSEDES: Part of Page 2, Same Spec., Dated 1/2/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. DAM				DATE ISSUED 6-19-63

Form 333-2 Pkd. in U.S.A.

MTC 002995

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	2.1

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

II. Irrigation Pipe:

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level - % Blend Point Value	95 60	95 61	95 62	95 63	95 64	95 65	95 66	95 67	95 68	95 69	95 70
Type 5 3"-6"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
8"-16"			See Class 1500 Sewer Pipe								
Type 10 3"-8"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
10"-12"	16.2	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0
14"-16"	16.9	16.6	16.3	16.1	16.0	16.0	16.0	16.0	16.0	16.0	16.0
Type 15 3"	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
4"-6"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
8"	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	15.8
10"	17.6	17.3	17.0	16.8	16.5	16.3	16.0	16.0	16.0	16.0	16.0
12"	18.5	18.2	17.9	17.6	17.3	17.1	16.9	16.6	16.4	16.1	16.0
14"-16"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
225 Ft.Hd. 5"	18.0	17.7	17.4	17.1	16.8	16.6	16.3	16.1	15.9	15.6	15.4
All Other Sizes			See Class 100 Pressure Pipe								
325 Ft.Hd. 5"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
All Other Sizes			See Class 150 Pressure Pipe								
425 Ft. Hd. All Sizes			See Class 200 Pressure Pipe								

MTC 002996

X— INDICATES CHANGE —REASON:	To Show 61, 62, 64, 65, 66, 68 and 69 and 70 Point Value Blends
AUTHORITY FOR CHANGE	Additional Information
SUPERSEDES:	Part of Page 2, Same Spec. Dated 10/3/62

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.				DATE ISSUED	1/2/63

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Form 333-2 Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.2

CANCELLED

NOMINAL PER CENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER BLEND % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Type 5 Irrigation Pipe											
8" (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" - 36" (13')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Type 15 Irrigation Pipe											
4" - 6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" (10')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8" (13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
12"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
14" - 16"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6

FIBER BLEND % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Type 5 Irrigation Pipe										
8" (10')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8" - 36" (13')	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
Type 15 Irrigation Pipe										
4" - 6"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" (10')	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8" (13')	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.5	15.3	15.1
10"	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
12"	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
14"	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6	15.4

FIBER BLEND % BLEND POINT VALUE	100 81	100 82	100 83	100 84	100 85	100 86	100 87	100 88	100 89	100 90
Type 5 Irrigation Pipe										
8" (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8" - 36" (13')	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
Type 15 Irrigation Pipe										
4" - 6"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8" (10')	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
8" (13')	15.0	14.8	14.6	14.4	14.2	14.1	13.9	13.8	13.6	13.5
10"	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
12"	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
14" - 16"	15.2	15.0	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.7

X- INDICATES CHANGE — REASON: Correct Specifications To Show 18" - 36" Type 5 and Delete Obsolete Sizes.

AUTHORITY FOR CHANGE: J. E. Hesse's Letter 11/19/68 and 6/16/69 AND PRODUCT PROPOSAL 425-206.

SUPERSEDES: Same Spec., Same Page, Dated 5/1/67.

MGR. G. O. C	DIR. G. O. C	DIR. G. O. C	DIR. G. O. C	PLANT MGR.			DATE ISSUED	5/4/70

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

Johns Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Pipe Machine Furnishes	PLANT & LIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	2.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER BLEND % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Type 5 Irrigation Pipe											
3" - 8" (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" - 16" (13')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Type 15 Irrigation Pipe											
3"	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
4" - 6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" (10')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8" (13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
12"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
14" - 16"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6

FIBER BLEND % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Type 5 Irrigation Pipe										
3"-8" (10')	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
8"-16" (13')	14.4	14.2	14.0	13.8	13.6	13.4	13.3	13.1	12.9	12.8
Type 15 Irrigation Pipe										
3"	13.2	13.1	12.9	12.7	12.5	12.4	12.2	12.1	12.0	12.0
4"-6"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" (10')	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8" (13')	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.5	15.3	15.1
10"	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
12"	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
14"	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6	15.4

FIBER BLEND % BLEND POINT VALUE	100 81	100 82	100 83	100 84	100 85	100 86	100 87	100 88	100 89	100 90
Type 5 Irrigation Pipe										
3"-8" (10')	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8"-16" (13')	12.6	12.5	12.3	12.2	12.0	12.0	12.0	12.0	12.0	12.0
Type 15 Irrigation Pipe										
3"	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
4"-6"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8" (10')	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
8" (13')	15.0	14.8	14.6	14.4	14.2	14.1	13.9	13.8	13.6	13.5
10"	13.8	13.6	13.5	13.3	13.2	13.0	12.9	12.8	12.6	12.4
12"	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
14" - 16"	15.2	15.0	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.7

X— INDICATES CHANGE — REASON: EXTENDED BLEND POINT VALUE TABLE TO 90 AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' AND 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: SAME SPEC, SAME PAGE, DATED 5-27-66

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. L			DATE ISSUED 5-1-67

Form 3. Ptd. In U.S.A.

PLEASE RETURN TO JM RESEARCH LIBRARY (NJM)

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE Pipe Pipe Machine Furnishes	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER BLEND % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
Type 5 Irrigation Pipe											
3" - 8" (10')	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
8" - 16" (13')	17.0	16.7	16.4	16.2	15.9	15.7	15.4	15.2	15.0	14.8	14.6
Type 15 Irrigation Pipe											
3"	15.7	15.5	15.3	15.0	14.7	14.5	14.3	14.1	13.9	13.6	13.4
4" - 6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" (10')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8" (13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
12"	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
14" - 16"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6

FIBER BLEND % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
Type 5 Irrigation Pipe										
3" - 8" (10')	13.2	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
8" - 16" (13')	14.4	14.2	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Type 15 Irrigation Pipe										
3"	13.2	13.1	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
4" - 6"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" (10')	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8" (13')	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.5	15.3	15.1
10"	15.8	15.6	15.3	15.1	14.9	14.7	14.5	14.3	14.2	14.0
12"	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
14" - 16"	17.3	17.1	16.9	16.6	16.4	16.2	16.0	15.8	15.6	15.4

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

X- INDICATES CHANGE -REASON:	Extend Table for Higher Point Values & Reduce Minimum Fiber Usage
AUTHORITY FOR CHANGE	Verbal Authority J. E. Hesse (A. C. Daley's Letter 5/24/66)
SUPERSEDES:	Same Spec., Same Page, Dated 7/16/65

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB			DATE ISSUED	5-27-66

Form 333-2 Pd. in U.S.A.

Johns-Manville
MANUFACTURING
SPECIFICATION

PRODUCT:
TRANSITE Pipe
Pipe Machine Furnishes

PLANT & DIV.	PIPE
SPEC NO.	425-2
PAGE NO.	2.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

| Fiber Level % | 100 | 100 | 100

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M, U, J, W, D&R PIPE
		SPEC NO.	425-2
		PAGE NO.	2.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

II. IRRIGATION PIPE:

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level % / Blend Point Value	105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Type 5 3"-8" (10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.(
8"-16" (13')	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.(
Type 10 3"-8" (10')	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.(
8" (13')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.(
10"-12"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.(
14"-16"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.(
Type 15 3"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.(
4"-6"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
8" (10')	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.(
8" (13')	21.2	20.8	20.5	20.2	19.9	19.6	19.3	19.0	18.7	18.5	18.2
10"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
12"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.(
14"-16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.(

Fiber Level % / Blend Point Value	105 71	105 72	105 73	105 74	10 75
Type 5 3"-8" (10')	15.0	15.0	15.0	15.0	15.(
8"-16" (13')	16.0	16.0	16.0	16.0	16.(
Type 10 3"-8" (10')	15.0	15.0	15.0	15.(	15.(
8" (13')	16.4	16.2	16.0	16.0	16.(
10"-12"	16.0	16.0	16.0	16.0	16.(
14"-16"	16.0	16.0	16.0	16.0	16.(
Type 15 3"	15.0	15.0	15.0	15.0	15.(
4"-6"	16.9	16.7	16.5	16.2	16.(
8" (10')	17.3	17.1	16.8	16.6	16.4
8" (13')	17.9	17.6	17.4	17.2	17.(
10"	16.6	16.4	16.2	16.0	15.7
12"	17.3	17.1	16.8	16.6	16.4
14"-16"	18.3	18.1	17.8	17.6	17.4

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE	—REASON: Add Low Head Irrigation in 13' Lengths
AUTHORITY FOR CHANGE	J. B. McCarty's Letter of 5-24-63
SUPERSEDES:	Same Spec., Same Page Dated 6-19-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. ENG.			DATE ISSUED	7-26-63

Form 333-2 Ptd. in U.S.A.

MTC 003001

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,...,D & R PIPE
		SPEC NO.	425-2
		PAGE NO.	2.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

II, IRRIGATION PIPE:

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Type 5	3" - 6"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	8" - 16"	SEE CLASS 1500 SEWER PIPE										
Type 10	3" - 8"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	10" -12"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
	14" - 16"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
Type 15	3"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	4" - 6"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
	8"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6
	10"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
	12"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6
	14" - 16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6

Fiber Level % Blend Point Value		105 71	105 72	105 73	105 74	105 75
Type 5	3" - 6"	15.0	15.0	15.0	15.0	15.0
	8" - 16"			SEE CL 1500 SEWER PIPE		
Type 10	3" - 8"	15.0	15.0	15.0	15.0	15.0
	10" - 12"	16.0	16.0	16.0	16.0	16.0
	14" - 16"	16.0	16.0	16.0	16.0	16.0
Type 15	3"	15.0	15.0	15.0	15.0	15.0
	4" - 6"	16.9	16.7	16.5	16.2	16.0
	8"	17.3	17.1	16.8	16.6	16.4
	10"	16.6	16.4	16.2	16.0	15.7
	12"	17.3	17.1	16.8	16.6	16.4
	14" - 16"	18.3	18.1	17.8	17.6	17.4

RETURN TO J-M RESEARCH FILE ROOM

X— INDICATES CHANGE —REASON: Delete 225, 325 & 450 Ft. Head & Extend Table

AUTHORITY FOR CHANGE: Product Proposal 425-165 J. B. McCarty's Letter 4/25/63

SUPERSEDES: Part of Page 2, Same Spec. Dated 1/2/63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. MGR.				DATE ISSUED 6-19-63

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHERS	PLANT & DIV.	H,G,J,W,D,R PIPE
		SPEC NO.	425-2
		PAGE NO.	2.2

NOMINAL PERCENT FIBER BLEND - COST STANDARD:

II. Irrigation Pipe:

Minimum Usage 15% in 10' Lengths, 16% in 13' Lengths

Fiber Level - % Blend Point Value		105 60	105 61	105 62	105 63	105 64	105 65	105 66	105 67	105 68	105 69	105 70
Type 5	3"-6"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	8"-16"		See Class 1500 Sewer Pipe									
Type 10	3"-8"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	10"-12"	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0	16.0	16.0	16.0
	14"-16"	18.6	18.3	18.0	17.8	17.5	17.2	17.0	16.7	16.5	16.2	16.0
Type 15	3"	16.5	16.2	16.0	15.8	15.5	15.3	15.0	15.0	15.0	15.0	15.0
	4"-6"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
	8"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6
	10"	19.6	19.3	19.0	18.7	18.4	18.1	17.8	17.6	17.4	17.1	16.9
	12"	20.5	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.9	17.6
	14"-16"	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.4	19.1	18.9	18.6
225 Ft.Hd. 5" All Other Sizes		20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1
			See Class 100 Pressure Pipe									
325 Ft.Hd. 5"		22.0	21.7	21.3	20.9	20.6	20.3	20.0	19.7	19.5	19.1	18.9
			See Class 150 Pressure Pipe									
450 Ft.Hd. All Sizes			See Class 200 Pressure Pipe									

MTC 003003

X— INDICATES CHANGE	—REASON:	To Show 61, 62, 64, 65, 66, 68, 69 and 70 Point Value Blends
AUTHORITY FOR CHANGE		Additional Information
SUPERSEDES:		Part of Page 2. Same Spec. Dated 10/3/62

RETURN TO J-M RESEARCH FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED	1/2/63

Form 333-2 Ptd. in U.S.A.

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

CANCELLED

II. IRRIGATION PIPE

FIBER LEVEL % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
On-Farm Irrigation											
10" Thru 14"	11.8	11.6	11.5	11.3	11.1	10.9	10.8	10.6	10.4	10.3	10.1
15" Thru 21"	12.5	12.3	12.1	11.9	11.7	11.5	11.4	11.2	11.0	10.9	10.7

FIBER LEVEL % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
On-Farm Irrigation										
10" Thru 14"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
15" Thru 21"	10.6	10.4	10.3	10.1	10.0	10.0	10.0	10.0	10.0	10.0

FIBER LEVEL % BLEND POINT VALUE	100 81	100 82	100 83	100 84	100 85	100 86	100 87	100 88	100 89	100 90
On-Farm Irrigation										
10" Thru 14"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
15" Thru 21"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

MTC 003004

X- INDICATES CHANGE	-REASON: Add new sizes of On-Farm	PLEASE RETURN TO
AUTHORITY FOR CHANGE	J. E. Hesse's Letter of 8/26/69	J-M RESEARCH
SUPERSEDES:	SAME SPEC., SAME PAGE, DATED 5/9/69	LIBRARY (MM)

MGR. Q. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. ENG.	REV.			DATE ISSUED 10/10/69

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
On-Farm Irrigation											
12"	11.8	11.6	11.5	11.3	11.1	10.9	10.8	10.6	10.4	10.3	10.1
16"	12.5	12.3	12.1	11.9	11.7	11.5	11.4	11.2	11.0	10.9	10.7

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
On-Farm Irrigation										
12"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
16"	10.6	10.4	10.3	10.1	10.0	10.0	10.0	10.0	10.0	10.0

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
On-Farm Irrigation										
12"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
16"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

MTC 003005

X— INDICATES CHANGE —REASON: USE 10% MINIMUM FIBER ON ON-FARM IRRIGATION

AUTHORITY FOR CHANGE: CORRECTION

SUPERSEDES: SAME SPEC., SAME PAGE, DATED 4/22/69

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

MGR. G. Q. C	MGR. Q. C.	SUPR. Q. C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED 5/9/69

F. POST CO. 136-3 50187

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.3

NOMINAL PERCENT FIBER BLEND - COST STANDARD

II. IRRIGATION PIPE

FIBER LEVEL % BLEND POINT VALUE	100 60	100 61	100 62	100 63	100 64	100 65	100 66	100 67	100 68	100 69	100 70
On-Farm Irrigation											
12"	11.8	11.6	11.5	11.3	11.1	10.9	10.8	10.6	10.4	10.3	10.1
16"	12.5	12.3	12.1	11.9	11.7	11.5	11.4	11.2	11.0	10.9	10.7

FIBER LEVEL % BLEND POINT VALUE	100 71	100 72	100 73	100 74	100 75	100 76	100 77	100 78	100 79	100 80
On-Farm Irrigation										
12"	10.0	9.9	9.7	9.6	9.5	9.4	9.2	9.1	9.0	8.9
16"	10.6	10.4	10.3	10.1	10.0	9.9	9.8	9.6	9.5	9.4

FIBER LEVEL % BLEND POINT VALUE	100 81	100 82	100 83	100 84	100 85	100 86	100 87	100 88	100 89	100 90
On-Farm Irrigation										
12"	8.8	8.7	8.6	8.5	8.4	8.3	8.2	8.1	8.0	7.9
16"	9.3	9.2	9.0	8.9	8.8	8.7	8.6	8.5	8.4	8.3

MTC 003006

X— INDICATES CHANGE —REASON:	Add On-Farm Irrigation	PLEASE RETURN TO
AUTHORITY FOR CHANGE	Product Proposal 425-201	J-M RESEARCH
SUPERSEDES:	None - New Page	LIBRARY (MM)

MGR. G. O. C	MGR. G. C.	SUPR. G. C.	PROD. SUPT.	PLNT. PHL.	RES. LAB.			DATE ISSUED	4/22/69

F. POST CO. 1264 R6107

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,C,J,W,D, & R PIPE
		SPEC NO.	425-2
		PAGE NO.	2.3

NOMINAL PERCENT FIBER BLEND - COST STANDARDS:
II. IRRIGATION PIPE

Minimum Usage 15% in 10' Lengths and 16% in 13' Lengths

Fiber Level - % Blend Point Value		100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	10
Type 5	3"-8"(10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.
	8"-16"(13')	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.
Type 10	3"-8"(10')	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.
	8"(13')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18.
	10"-12"	20.4	20.0	19.6	19.3	18.9	18.5	18.2	17.9	17.6	17.
	14"-16"	21.2	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.3	18.
Type 15	3"	18.8	18.4	18.1	17.7	17.4	17.1	16.8	16.5	16.2	15.
	4"-6"	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.
	8" (10')	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.
	8" (13')	24.2	23.8	23.3	22.8	22.4	22.0	21.6	21.2	20.9	20.
T	10"	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.
	12"	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.
	14"-16"	24.6	24.1	23.7	23.2	22.8	22.4	22.0	21.6	21.2	20.

Fiber Level - % Blend Point Value		95 50	95 51	95 52	95 53	95 54	95 55	95 56	95 57	95 58	9
Type 5	3"-8"(10')	20.2	19.8	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17
	8"-16"(13')	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16
Type 10	3"-8"(10')	20.2	19.8	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17
	8"(13')	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18
	10"-12"	19.4	19.0	18.7	18.3	18.0	17.7	17.3	17.0	16.7	16
	14"-16"	20.2	19.8	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17
Type 15	3"	20.2	19.8	19.4	19.0	18.7	18.4	18.0	17.7	17.4	17
	4"-6"	21.6	21.2	20.8	20.4	20.0	19.7	19.3	18.9	18.6	18
	8"(10')	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18
	8"(13')	23.0	22.6	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19
	10"	21.2	20.8	20.4	20.0	19.6	19.3	18.9	18.6	18.3	18
	12"	22.2	21.8	21.4	21.0	20.6	20.2	19.9	19.5	19.2	18
	14"-16"	23.4	23.0	22.5	22.1	21.7	21.4	21.0	20.6	20.2	19

X— INDICATES CHANGE —REASON: Lower Point Value of M-100 Fiber

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 9-19-63

SUPERSEDES: None

MGR. Q.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. QA			DATE ISSUED 10-10-63

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2-A Pld. in U.S.A.

MTC 003007

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE* PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	PIPE
		SPEC NO.	425-2
		PAGE NO.	2.4

NOMINAL PERCENT FIBER BLEND - COST STANDARD

CANCELLED

II. IRRIGATION PIPE

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	60	61	62	63	64	65	66	67	68	69	70
Irrigation 90											
6"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
8" (10')	19.5	19.2	18.9	18.6	18.3	18.0	17.7	17.5	17.2	17.0	16.8
8" (13')	20.2	19.9	19.5	19.2	18.9	18.6	18.4	18.1	17.8	17.6	17.2
10"	19.0	18.7	18.4	18.1	17.8	17.5	17.2	17.0	16.7	16.5	16.3
12"	20.0	19.7	19.3	19.0	18.7	18.4	18.2	17.9	17.6	17.4	17.1

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	71	72	73	74	75	76	77	78	79	80
Irrigation 90										
6"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
8" (10')	16.5	16.3	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6
8" (13')	17.0	16.8	16.6	16.4	16.2	16.0	15.8	15.5	15.3	15.1
10"	16.1	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4	14.2
12"	16.9	16.7	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0

FIBER LEVEL %	100	100	100	100	100	100	100	100	100	100
BLEND POINT VALUE	81	82	83	84	85	86	87	88	89	90
Irrigation 90										
6"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
8" (10')	14.4	14.3	14.1	13.9	13.8	13.6	13.4	13.3	13.1	13.0
8" (13')	15.0	14.8	14.6	14.4	14.2	14.1	13.9	13.8	13.6	13.5
10"	14.1	13.9	13.7	13.6	13.4	13.3	13.1	13.0	12.8	12.7
12"	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.4

MTC 003008

X- INDICATES CHANGE -REASON:	Add Irrigation 90	PLEASE RETURN TO
AUTHORITY FOR CHANGE	Product Proposal 425-210	J-M RESEARCH
SUPERSEDES:	None - New Page	LIBRARY (MM)

MGR. G.O.C	MGR. G.C.	SUPR. G.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.			DATE ISSUED	4/22/69

F. POST CO. 180-3 90187

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	M,G,J,W & R
		SPEC NO.	425-2
		PAGE NO.	2.4

NOMINAL PERCENT FIBER BLEND - COST STANDARDS
II. IRRIGATION PIPE

Fiber Level = % Blend Point Value		105 50	105 51	105 52	105 53	105 54	105 55	105 56	105 57	105 58	105 59	10
Type 5	3"-8"(10')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8	
	8"-16"(13')	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2	
Type 10	3"-8"(10')	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8	
	8" (13')	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.9	
	10"-12"	21.4	21.0	20.6	20.2	19.8	19.5	19.1	18.8	18.5	18.2	
	14"-16"	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3	19.0	
Type15	3"	19.8	19.4	19.0	18.7	18.3	18.0	17.7	17.4	17.1	16.8	
	4"-6"	24.0	23.6	23.1	22.6	22.2	21.8	21.4	21.0	20.7	20.4	
	8"(10')	24.6	24.1	23.7	23.2	22.8	22.4	22.0	21.6	21.2	20.9	
	8"(13')	25.4	24.9	24.4	24.0	23.5	23.1	22.7	22.3	21.9	21.6	
	10"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0	
	12"	24.6	24.1	23.7	23.2	22.8	22.4	22.0	21.6	21.2	20.9	
	14"-16"	26.0	25.5	25.0	24.5	24.1	23.6	23.2	22.8	22.4	22.0	

X— INDICATES CHANGE —REASON: Lower Point Value of M-100 Fiber

AUTHORITY FOR CHANGE: J. B. McCarty's Letter of 9-19-63

SUPERSEDES: None

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG			DATE ISSUED 10-10-63

RETURN TO J-M RESEARCH FILE ROOM

Form 333-2-A Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLENDS TEN FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		PAGE NO.	1

PRODUCTS:

Non-Pressure Pipe (H1 Blends), 10 Ft. Machine
(Non-Pressure Pipe Requiring M Blends See TP-425-2.1)

Basic Blend

DWG
CHANGED

Virgin Fiber Blend (H1)

	1100 Lb. Batch		550 Lb. Batch		
Fiber	Wt. Lbs.	Bags *	Wt. Lbs.	Bags *	Percent
Blue	200	2	100	1	18.2
M-100	900	9	450	4½	81.8
	1100		550		100.0

* Based on 100 Lb. Contents

Basic Blend and Scrap

Scrap Level Percent	Scrap Lbs.	Basic Blend (H1) - Lbs.	Total - Lbs. Scrap & Basic Blends
0	0	1100	1100
20	220	1100	1320
40	440	1100	1540
60	660	1100	1760
80	440	550	990
100	550	550	1100
120	660	550	1210
140	770	550	1320
160	880	550	1430

NOTE: Use any available scrap from pressure or non-pressure products. Steam cured, uncured, or both are permissible to use.

Pld. in U.S.A.

Form 333-2

X— INDICATES CHANGE —REASON:	New Fiber Blend for Non-Pressure Pipe RETURN TO
AUTHORITY FOR CHANGE	W. L. VanDerbeek's letter of 2/6/61 J-M RESEARCH
SUPERSEDES:	TP-425-2, Page 1, Dated 1-18-60 FILE ROOM

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. Lab	Pipe Plants-5	Other Local-7		DATE ISSUED 3/7/61

MTC 003010

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLENDS 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		PAGE NO.	1

Products:

10' Machine Products - Non-Pressure - All Sizes

Formula:

	Fiber Blend C-209			Fiber Blend C-214 (primarily for Duct Pipe)		
Fiber	Wt. Lbs.	No. of Bags	%	Wt. Lbs.	No. of Bags	%
Blue	50	½	3.8	-	-	-
4T28 or 4T30	100	1	7.7	100	1	7.7
Munro 4Y	400	4	30.8	400	4	30.8
6D	100	1	7.7	150	1½	11.5
Scrap (Note 1)	650	(by scale)	50.0	650	(by scale)	50.0
	1300		100.0	1300		100.0

NOTE: 1 Use any available scrap from pressure or non-pressure products. Steam cured, uncured, or any combination of scrap is permissible to use.

RETURN TO J-M RESEARCH FILE ROOM

MTC 003011

X— INDICATES CHANGE —REASON: Re-establish C-209 as Standard Blend along with C-214

AUTHORITY FOR CHANGE: Verbal authority by T. R. Turnbull at Denison on November 10, 1959.

SUPERSEDES: TP-425-2, Page 1, dated 11-11-59.

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. Lab(2)	Pipe Plants(5)	Other Local (7)	DATE ISSUED January 18, 1960

Form 333-2 Ptd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		PAGE NO.	1

CANCELLED

PRODUCTS:

10' Machine Products Non-Pressure All Sizes

FORMULA:

C-214 Fiber Blend

Furnish	No. of Bags	Weight-lbs	Actual %
4T28 or 4T30	1	100	7.7
Munro 4Y	4	400	30.8
6D	1½	150	11.5
Scrap (note 1)	(by weight)	650	50.0
		1300	100.0

Note 1: Use any available scrap from pressure or non-pressure products. Steam cured, uncured, or any combination of scrap is permissible to use.

RECEIVED
NOV 17 1959
Transite Pipe Dept.
RETURN TO J-M RESEARCH FILE ROOM

MTC 003012

X— INDICATES CHANGE —REASON: Eliminate Blue Fiber from Blend

AUTHORITY FOR CHANGE: Verbal authority by T. R. Turnbull at Denison November 10, 1959

SUPERSEDES: TP-425-2 Page 1 Dated 1-15-59

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. Dept.(2)	Pipe Plants(5)	Other Local (7)	DATE ISSUED 11-11-59

Form 333-2 Pd. in U.S.A.

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE	PLANT & DIV.	DENISON - P
		SPEC NO.	TP-425-2
		PAGE NO.	1

CANCELLED 11/11/59

PRODUCTS:

10' Machine Product - Non Pressure - All Sizes

FORMULA:

C-209 Fiber Blend

Furnish	No. of Bags	Total Weight-lbs.	Actual %
Blue	½	50	3.8
4T-28	1	100	7.7
Munro 4Y	4	400	30.8
6D	1	100	7.7
Scrap (Note 1)	(by scale 650#)	650	50.0
		1300	100.0

Note 1: Use any available scrap from pressure or non-pressure products. Steam cured, uncured or combined scrap is satisfactory to use.

RETURN TO J-M RESEARCH FILE ROOM
DEPARTMENT
JAN 20 959
G. GRIOLAK

X— INDICATES CHANGE —REASON:	Show New Fiber Blends
AUTHORITY FOR CHANGE	T. R. Turnbull's letter of January 9, 1959
SUPERSEDES:	TP-425-2, page 1, dated 12-2-58

DIV. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. MGR	Pipe Plant 5	Other Local 7	DATE ISSUED 1/15/59

Form 333-2 Ptd. In U.S.A.

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	Denison - Pipe
		SPEC NO.	TR-425-1 TR-425-2
		DEV. NO.	31-78 (10)

DATE OF DEVIATION: 9/21/80, 12/21/80	PAGES NO:	TR-425-1 6	TR-425-2 15	
TIME OF DEVIATION: 8:00 a.m.	DATE OF ISSUE	11/11/77	2/9/78	

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

To reduce fiber in furnish for T/T Casing pipe and still meet requirements.

AUTHORITY: A. C. Daley's phone conversation of 9/20/78

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. The fiber percentages of all sizes of casing pipe are the same as that of 10" - 36" Sewer pipe.

2. Run below the minimum 90% fiber level as long as pipe passes the minimum crush.

3. Until 3/21/81 or until Specs. are changed.

MTC 003014

SIGNED: A. M. Curry
QUALITY CONTROL SUPERVISOR

SIGNED: L. A. Bergman
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

MGR.	MGR.	SUPR.	PROD.	PENT.	RES.				DATE

Form QC 45 B

Chittenden, K (3)

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe - Pipe Machine Furnishes	PLANT & DIV.	Denison - Pipe
		SPEC NO.	TR-425-2
		DEV. NO.	10-70 (7)

DATE OF DEVIATION:	12/13/78 (3/13/79)	PAGES NO:	16		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	2/9/78		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

To help our "balance" between the two pipe machines and give us a little more flexibility in scheduling 4" and 6" coupling stock.

AUTHORITY: A. C. Daley's memo of 6/19/78

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification restricts forming coupling stock for sizes 4" and above to the 13' pipe machine.

2. Form coupling stock for 4" and 6" couplings on the 10' pipe machine. This would be done only when absolutely necessary, due to scheduling problems.

3. To be reviewed 6/13/79 or cancelled when our flexibility is such that this change is no longer necessary.

MTC 003015

SIGNED: A. M. Curry
QUALITY CONTROL SUPERVISOR

SIGNED: L. A. Bergman
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

MGR. Q.O.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED

Form QC 48 8/77

JOHNS-MANVILLE MANUFACTURING SPECIFICATION	"TRANSITE" PIPE Pipe Machine Furnishes	PLANT & DIV.	Pipe
		SPEC NO.	425-2
		PAGE NO.	1.7

Nominal Percent Fiber Blend - Cost Standards

I. Water Pipe - 10' and 13' Lengths.

Fiber Usage of 10' Lengths Same as 13' Lengths except 4"-150, 4"-100, 6"-150

FIBER LEVEL % BLEND POINT VALUE	100 50	100 51	100 52	100 53	100 54	100 55	100 56	100 57	100 58	100 59
Class 50 4"-6"	23.4	23.0	22.5	22.1	21.7	21.3	21.0	20.6	20.2	19.9
8"	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
10"-36"	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
Class 100 3"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
4" (13')	28.4	27.8	27.3	26.8	26.3	25.8	25.4	24.9	24.5	24.1
4" (10')	26.2	25.7	25.2	24.7	24.3	23.8	23.4	23.0	22.6	22.2
5"	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.0	19.7	19.3
6" (13')	24.4	23.9	23.5	23.0	22.6	22.2	21.8	21.4	21.0	20.7
6" (10')	22.8	22.4	22.0	21.6	21.2	20.8	20.4	20.1	19.7	19.3
8"	25.0	24.5	24.0	23.6	23.2	22.8	22.3	22.0	21.6	21.2
10"-14"	25.6	25.1	24.6	24.1	23.7	23.3	22.9	22.5	22.1	21.7
16"	26.0	25.5	25.0	24.5	24.1	23.6	23.2	22.8	22.4	22.0
18"-20"	26.4	25.9	25.4	24.9	**24.4**	24.0	23.6	23.2	22.8	22.4
24"-36"	27.2	26.7	26.2	25.6	25.2	24.7	24.3	23.9	23.4	23.0
Class 150 3"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4
4" (13')	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
4" (10')	26.4	25.9	25.4	24.9	24.4	24.0	23.6	23.2	22.8	22.4
5"	25.2	24.7	24.2	23.8	23.3	22.9	22.5	22.1	21.7	21.4
6"	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.6
8"	28.0	27.4	26.9	26.4	25.9	25.5	25.0	24.6	24.2	23.8
10"	26.0	25.5	25.0	24.5	24.1	23.6	23.2	22.8	22.4	22.0
12"-14"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
16"	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.4	24.0	23.6
18"-36"	26.8	26.3	25.8	25.3	24.8	24.4	23.9	23.5	23.1	22.7
Class 200 3"	23.6	23.2	22.7	22.2	21.8	21.4	21.1	20.8	20.4	20.0
4"	25.0	24.5	24.0	23.6	23.2	22.8	22.4	22.0	21.6	21.2
6"	27.2	26.7	26.2	25.6	25.2	24.7	24.2	23.8	23.4	23.0
6" (WAU)	29.2	28.6	28.1	27.5	27.0	26.5	26.1	25.6	25.2	24.8
8"	29.4	28.8	28.3	27.7	27.2	26.7	26.3	25.8	25.4	25.0
8" (WAU)	30.4	29.8	29.2	28.7	28.2	27.6	27.2	26.7	26.2	25.8
10"	27.6	27.1	26.6	26.0	25.6	25.1	24.6	24.2	23.8	23.4
12"	28.4	27.8	27.3	26.8	26.3	25.8	25.4	24.9	24.5	24.1
14"-16"	29.6	29.0	28.4	27.9	27.4	26.9	26.4	26.0	25.5	25.1
18"-36"	26.6	26.1	25.6	25.1	24.6	24.2	23.8	23.4	23.0	22.6

MTC 003016

X— INDICATES CHANGE —REASON: GENERAL REVISION TO EXTEND TABLES TO 90 POINT VALUE AND REDUCE MINIMUM FIBER USAGE TO 12% FOR 10' and 13' LENGTHS

AUTHORITY FOR CHANGE: VERBAL AUTHORITY J. E. HESSE

SUPERSEDES: SAME SPEC PAGE 1.6 DATED 10-10-63

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.			DATE ISSUED 5-1-64

PLEASE RETURN TO J-M RESEARCH LIBRARY (MM)

Form 33[illegible] Printed in U.S.A.

Librarian - REC

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe	PLANT & DIV.	Denison-Pipe
		SPEC NO.	425-2
		DEV. NO.	35-75

DATE OF DEVIATION:	10/7/75	PAGES NO:	7		
TIME OF DEVIATION:	7:00 A.M.	DATE OF ISSUE	6/2/71		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 4/1/77 at 7:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

This Deviation is no longer needed because the specification has been revised.

MTC 003017

SIGNED: Alan M Curry
A. M. Curry
QUALITY CONTROL SUPERVISOR

SIGNED: L. A. Bergman
L. A. Bergman
PRODUCTION SUPERINTENDENT

Form 1-3-3-A Pld. In U.S.A.

Tubular REC

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE	PLANT & DIV.	Denison - Pipe
		SPEC NO.	425-2
		DEV. NO.	35-75

DATE OF DEVIATION: 10-7-75	PAGES NO:	7		
TIME OF DEVIATION: 7:00 a.m.	DATE OF ISSUE	6/2/71		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON: To authorize currently used flocculant.

AUTHORITY: D. Howlin's phone conversation of 10/7/75.

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Flocculant specified for Denison.
2. Add Betz Polyfloc 1150 and Hydroid 5504 to list of flocculating agents authorized for Denison.
3. Until further notice.

PLEASE RETURN TO
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INFORMATION CENTER

MTC 003018

SIGNED: Alan M. Curry
Alan M. Curry
QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

MGR. G.C.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED

Form 333-A Ptd. in U.S.A.

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: Transite Pipe Machine Furnishes	PLANT & DIV.	Denison-Pipe
		SPEC NO.	425-2
		DEV. NO.	15-71

DATE OF DEVIATION: October 8, 1971	PAGES NO:	6		
TIME OF DEVIATION: 8:00 A.M.	DATE OF ISSUE	6/2/71		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: June 24, 1977 at 7:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

This Deviation is no longer needed because of revised wording of specification.

CANCELLED

MTC 003019

SIGNED: Alan M Curry A. M. CURRY
QUALITY CONTROL SUPERVISOR

SIGNED: L. A. BERGMAN L Bergman
PRODUCTION SUPERINTENDENT

MER. Q.Q.C.	NGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED

Form 3334-A Ptd. In U.S.A.

NOTICE OF DEVIATION

425

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe Pipe Machine Furnishes	PLANT & DIV.	Denison - Pipe
		SPEC NO.	425-2
		DEV. NO.	15-71

DATE OF DEVIATION: October 8, 1971	PAGES NO:	6			
TIME OF DEVIATION: 8:00 AM	DATE OF ISSUE	6/2/71			

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON: The only Silica source economically available to the Denison Plant will not meet minimum quartz requirement specified in the Manufacturing Specification.

AUTHORITY: A. C. Daley's verbal approval.

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification states:

   Minimum SiO_2 - 93% (Quartz)

2. Use only source economically available to Denison.

   Minimum SiO_2 - 88% (Quartz) Lab Tests range from 88% - 92%.

3. Until new silica source is available or Specification is revised to show minimum SiO_2 content of 88%.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY

SIGNED: J. W. Bird — QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek — PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

MGR. G.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.					DATE ISSUED

Form 333-3A Ptd. in U.S.A.

MTC 003020

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe Pipe Machine Furnishes	PLANT & DIV.	Denison - Pipe
		SPEC NO.	425-2
		DEV. NO.	12-70

DATE OF DEVIATION: June 5, 1970	PAGES NO:	2.2		
TIME OF DEVIATION: 8:00 a.m.	DATE OF ISSUE	5-4-70		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: August 9, 1971 8:00 a.m.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Type 5 irrigation pipe is no longer being manufactured. Transmission pipe will now be furnished.

PLEASE RETURN TO J-M RESEARCH LIBRARY

SIGNED: J. W. Bird
QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED 10-7-71

Form 333-4 Ptd. in U.S.A.

MTC 003021

NOTICE OF DEVIATION

441

425

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	DENISON - PIPE
		SPEC NO.	425-2
		DEV. NO.	12-70

DATE OF DEVIATION:	June 5, 1970	PAGES NO:	2.2		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	5/4/70		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

Evaluate lower fiber levels on Type 5 Irrigation Pipe.

AUTHORITY: A. C. Daley's wire of April 1, 1970.

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification shows only 100% fiber levels.
2. Run trials on various diameter Type 5 Irrigation Pipe at 85% fiber levels.
3. October 1, 1970

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

SIGNED: J. W. Bird
QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB				DATE ISSUED

Form 333-3Pkd. IN U.S.A.

MTC 003022

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	DENISON - P
		SPEC NO.	TP425-2
		DEV. NO.	10-70

DATE OF DEVIATION: May 5, 1970		PAGES NO:	5		
TIME OF DEVIATION: 8:00 A. M.		DATE OF ISSUE	4/22/70		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

To help our "Balance" between the two pipe machines and give us a little more flexibility in scheduling 4" and 6" coupling stock.

AUTHORITY: A. C. Daley's Memo of 6/19/67.

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification restricts forming coupling stock for sizes 4" and above to the 13 ft. pipe machine.
2. Form coupling stock for 4" and 6" couplings on the 10 ft. pipe machine. This would only be done when absolutely necessary due to scheduling problems.
3. To be cancelled when our flexibility is such that this change is no longer necessary.

5-4-70

SIGNED: J. W. Bird J. W. Bird
QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek C G Stelchek
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. RN.	RES. LAB.				DATE ISSUED

Form 333-3Pkd. IN U.S.A.

MTC 003023

NOTICE OF RETURN

4-5

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	DENISON - PIPE
		SPEC NO.	425-2
		DEV. NO.	5-70

DATE OF DEVIATION: April 3, 1970	PAGES NO:	2.2	
TIME OF DEVIATION: 8:00 A.M.	DATE OF ISSUE	5/1/67	

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 8:00 A.M. 6/5/70

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Deviation 5-70 is being cancelled and a new deviation will be issued to refer to the correct page in the Manufacturing Specification. Trial runs at reduced fiber levels will be continued.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

SIGNED: J. W. Bird — QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek — PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RESEARCH LAB.			DATE ISSUED 6/5/70

Form 333-4 Ptd. In U.S.A.

MTC 003024

4-71 425

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	Denison - Pipe
		SPEC NO.	425-2
		DEV. NO.	5-70

DATE OF DEVIATION:	April 3, 1970	PAGES NO:	2.2		
TIME OF DEVIATION:	8:00 a.m.	DATE OF ISSUE	5-1-67		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

Evaluate lower fiber levels on Type 5 Irrigation Pipe

AUTHORITY: A. C. Daley's wire of April 1, 1970.

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification shows only 100% fiber levels
2. Run trials on various diameter Type 5 Irrigation Pipe at 85% fiber levels.
3. July 1, 1970

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

SIGNED: J. W. Bird — QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek — PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.					DATE ISSUED

Form 333-3PM. IN U.S.A.

NOTICE OF RETURN

765

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe Pipe Machine Furnishes	PLANT & DIV.	Denison - Pipe
		SPEC NO.	425-2
		DEV. NO.	7-69

DATE OF DEVIATION:	Oct. 22, 1969	PAGES NO:	6		
TIME OF DEVIATION:	8:00 AM	DATE OF ISSUE	6-27-68		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 8:00 AM Oct. 8, 1971

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Deviation is cancelled. A new deviation will be issued to refer to current specification page number. Only source of sand economically available to Denison will not meet specification requirements.

PLEASE RETURN TO J-M RESEARCH LIBRARY

SIGNED: J. W. Bird
QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REC.			DATE ISSUED	10/8/71

Form 333-4 Ptd. In U.S.A.

MTC 003026

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "Transite" Pipe Pipe Machine Furnishes	PLANT & DIV.	Denison - Pipe
		SPEC NO.	425-2
		DEV. NO.	7-69

DATE OF DEVIATION: October 22, 1969	PAGES NO:	6		
TIME OF DEVIATION: 8:00 a.m.	DATE OF ISSUE	6/27/68		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

The only Silica source economically available to the Denison Plant will not meet minimum quartz requirement specified in the Manufacturing Specification.

AUTHORITY: A. C. Daley's verbal approval.

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification states:

   Minimum SiO_2 - 93% (Quartz)

2. Use only source economically available to Denison.

   Minimum SiO_2 - 88% (Quartz) Lab Tests range from 88% - 92%.

3. Until new silica source is available or Specification is revised to show minimum SiO_2 content of 88%.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

SIGNED: J. H. Bird
QUALITY CONTROL SUPERVISOR

SIGNED: C. D. Stalcek
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

MGR. Q.Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.				DATE ISSUED

Form 333-A Ptd. in U.S.A.

MTC 003027

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION —	PRODUCT: "TRANSITE" PIPE Fiber Blend	PLANT & DIV.	Denison-Pipe
		SPEC NO.	425-2
		DEV. NO.	5-67

DATE OF DEVIATION: 7/11/67	PAGES NO:	2.1	
TIME OF DEVIATION: 8:00 A.M.	DATE OF ISSUE	7/11/67	

TYPE OF DEVIATION: ☐ EMERGENCY ☐ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:
Factory Trial in an effort to improve recovery.

AUTHORITY: Telephone call from G. C. Eggleston to J. E. Hesse 7/11/67

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

I. M719 Fiber Blend

II. Present: Blend M719
Blue 10%
Advocate A25 90%

Proposed: Blend M719-A2
Blue 20%
Advocate A25 80%

III. Upon Completion of Evaluation.

9-21-67

MTC 003028

SIGNED: J. W. Bird
QUALITY CONTROL SUPERVISOR-J. W. Bird

SIGNED: C. G. Stelchek
PRODUCTION SUPERINTENDENT:-C. G. Stelchek

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 7/11/67

Form 333-3Pld. IN U.S.A.

NOTICE OF RETURN

4-67

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISHES	PLANT & DIV.	DENISON - P
		SPEC NO.	425-2
		DEV. NO.	4-67

DATE OF DEVIATION: June 22, 1967	PAGES NO:	5	
TIME OF DEVIATION: 8:00 A.M.	DATE OF ISSUE	9/26/67	

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 5-4-70 8:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

This deviation is being cancelled but will be revised and reissued to reference correct page in the Manufacturing Specification.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (MM)

SIGNED: J. W. Bird J. W. Bird
QUALITY CONTROL SUPERVISOR

SIGNED: C. G. Stelchek C. G. Stelchek
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	REG. LAB.			DATE ISSUED 5/4/70

Form 333-4 Ptd. In U.S.A.

MTC 003029

NOTICE OF DEVIATION

425

Johns-Manville MANUFACTURING SPECIFICATION —	PRODUCT: "Transite" Pipe Pipe Machine Furnishes	PLANT & DIV.	Denison - P
		SPEC NO.	TP425-2
		DEV. NO.	4-67

DATE OF DEVIATION:	June 22, 1967	PAGES NO:	5		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	9/26/67		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:
To help our "balance" between the two pipe machines and give us a little more flexibility in scheduling 4" and 6" coupling stock.

AUTHORITY: A. C. Daley's Memo of 6/19/67

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Specification restricts forming coupling stock for sizes 4" and above to the 13 ft. pipe machine.
2. Form coupling stock for 4" and 6" couplings on the 10 ft. pipe machine. This would only be done when absolutely necessary due to scheduling problems.
3. To be cancelled when our flexibility is such that this change is no longer necessary.

PLEASE RETURN TO
J-M RESEARCH
LIBRARY (JMM)

SIGNED: _____ SIGNED: _____
QUALITY CONTROL SUPERVISOR PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES.				DATE ISSUED

Form 333-3Pld. IN U.S.A.

4 x 5

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE Fiber Blend	PLANT & DIV.	Denison-Pipe
		SPEC NO.	425-2
		DEV. NO.	5-67

DATE OF DEVIATION:	PAGES NO:			
TIME OF DEVIATION:	DATE OF ISSUE			

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED:

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Revert to standard blends - Combination of blend unsuccessful.

SIGNED: J. W. Bird — QUALITY CONTROL SUPERVISOR-J. W. Bird

SIGNED: C. G. Stelchek — PRODUCTION SUPERINTENDENT C. G. Stelchek

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED

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MTC 003031

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION —	PRODUCT: "TRANSITE" PIPE Fiber Blend	PLANT & DIV.	Denison-Pipe
		SPEC NO.	425-2
		DEV. NO.	5-67

DATE OF DEVIATION:	7/11/67	PAGES NO:	2.1		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	7/11/67		

TYPE OF DEVIATION: ☐ EMERGENCY ☐ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:
Factory Trial in an effort to improve recovery.

AUTHORITY: Telephone call from G. C. Eggleston to J. E. Hesse 7/11/67

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

I. M719 Fiber Blend

II. Present: Blend M719
Blue 10%
Advocate A25 90%

Proposed: Blend M719-A2
Blue 20%
Advocate A25 80%

III. Upon Completion of Evaluation.

MTC 003032

SIGNED: J W Bird
QUALITY CONTROL SUPERVISOR J. W. Bird

SIGNED: C G Stelchek
PRODUCTION SUPERINTENDENT: C. G. Stelchek

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.				DATE ISSUED 7/11/67

Form 333-3Pld. IN U.S.A.

NOTICE OF RETURN

425

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: "TRANSITE" PIPE PIPE MACHINE FURNISH	PLANT & DIV.	MANSON - P
		SPEC NO.	425-2 (DHQ)
		DEV. NO.	20

DATE OF DEVIATION:	AUGUST 21, 1961	PAGES NO:	3		
TIME OF DEVIATION:	1:00 P.M.	DATE OF ISSUE	4/20/61		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 8/28/61 10:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

SEE REPORT D-690

RECEIVED
SEP 7 1961
Transite Pipe Dept.

RETURN TO
J-M RESEARCH
FILE ROOM

SIGNED: C. Stelchek
QUALITY CONTROL SUPERVISOR

SIGNED: G. DeLong by R.B.
PRODUCTION SUPERINTENDENT

DIR.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. (2)	Other Local (2)	DATE ISSUED AUGUST 29, 1961

Form 333-4 Ptd. In U.S.A.

MTC 003033

NOTICE OF DEVIATION

425

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: TRANSITE PIPE PIPE MACHINE FURNISH	PLANT & DIV.	DENISON - P
		SPEC NO.	425-2 (DHQ)
		DEV. NO.	20

DATE OF DEVIATION: August 21, 1961	PAGES NO:	3			
TIME OF DEVIATION: 1:00 P. M.	DATE OF ISSUE:	4/20/61			

TYPE OF DEVIATION: ☐ EMERGENCY ☐ AUTHORIZED CHANGE ☒ PLANT SIZE TRIAL

REASON: Trial with slag as binder to replace 80% of the Type I Cement in 8" Class 2400 Sewer and 6" Class 150 PP.

RECEIVED
AUG 31 1961
Transite Pipe Dept.

AUTHORITY: D. Nowlin, Research

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Raw Material and Silica Ratio

2.

	Present	Proposed	
Blend M609-A	337 lbs.	337	337
Silica	593	720	720
Type I Cement	846	144	144
Slag	--	576	554
Molding Plaster	--	--	22
TOTAL	1776	1777	1777

3. August 25, 1961

RETURN TO
J-M RESEARCH
FILE ROOM

SIGNED: C. G. Stelchek
QUALITY CONTROL SUPERVISOR

SIGNED: G. DeLong by L.A.B.
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.(1)	MGR. Q.C.(2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. QAF (2)	Other Local			DATE ISSUED August 21, 1961

Form 333-3Pfd. IN U.S.A.

MTC 003034

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	11

DATE OF DEVIATION:	January 18, 1960	PAGES NO:	1		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	1/18/60		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: July 6, 1960 8:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Deviation Blend C-217 discontinued because of adequate scrap available.

RETURN TO J-M RESEARCH FILE ROOM

J. Hesse

MTC 003035

SIGNED: Charles G. Stelchk
QUALITY CONTROL SUPERVISOR

SIGNED: _____
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C.(2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. Q.C.(2)	Pipe (5) Plants	Other Local(7)		DATE ISSUED	July 6, 1960

Form 333-4 Ptd. In U.S.A.

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	11

DATE OF DEVIATION:	January 18, 1960	PAGES NO:	1		
TIME OF DEVIATION:	8:00 A. M.	DATE OF ISSUE	1-18-60		

TYPE OF DEVIATION: [X] EMERGENCY [ ] AUTHORIZED CHANGE [ ] PLANT SIZE TRIAL

REASON:

Shortage of scrap required use of Blend C-217 for non-pressure pipe.

AUTHORITY: J. E. Hesse

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

RECEIVED
JAN [illegible] 1960
Transite Pipe Dept.

1. Deviation covers fiber blend.

2.

	Present Blends				Deviation Blend *	
	C-209		C-214		C-217	
Fiber	Lbs.	%	Lbs.	%	Lbs.	%
Blue	50	3.8	-	-	50	5.1
4T	100	7.7	100	7.7	100	10.3
4Y	400	30.8	400	30.8	400	41.0
6D	100	7.7	150	11.5	100	10.3
Scrap	650	50.0	650	50.0	325	33.3
	1300	100.0	1300	100.0	975	100.0

3. To be cancelled April 18, 1960.

* To be used only when limited amount of scrap available.

RETURN TO
J-M RESEARCH
FILE ROOM

SIGNED: C. G. Stelchek
QUALITY CONTROL SUPERVISOR

SIGNED: George E. DeLong
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB. (2)	Pipe Plants (5)	Other Local (7)		DATE ISSUED	January 18, 1960

Form 333-3Ptd. IN U.S.A.

MTC 003036

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	11

DATE OF DEVIATION:	January 18, 1960	PAGES NO:	1
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	1/18/60

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: July 6, 1960 8:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Deviation Blend C-217 discontinued because of adequate scrap available.

RETURN TO
J-M RESEARCH
FILE ROOM

SIGNED: Charles D Stelle
QUALITY CONTROL SUPERVISOR

SIGNED: J Hesse
PRODUCTION SUPERINTENDENT

MTC 003035

DIR.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	Pipe (5) Plants (2)	Other Local (7)		DATE ISSUED	July 6, 1960

Form 333-4 Ptd. In U.S.A.

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	11

DATE OF DEVIATION:	January 18, 1960	PAGES NO:	1		
TIME OF DEVIATION:	8:00 A. M.	DATE OF ISSUE	1-18-60		

TYPE OF DEVIATION: [X] EMERGENCY [ ] AUTHORIZED CHANGE [ ] PLANT SIZE TRIAL

REASON:

Shortage of scrap required use of Blend C-217 for non-pressure pipe.

AUTHORITY: J. E. Hesse

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

RECEIVED
JAN 1960
Transite Pipe Dept.

1. Deviation covers fiber blend.

2.

	Present Blends C-209		Present Blends C-214		Deviation Blend * C-217	
Fiber	Lbs.	%	Lbs.	%	Lbs.	%
Blue	50	3.8	-	-	50	5.1
4T	100	7.7	100	7.7	100	10.3
4Y	400	30.8	400	30.8	400	41.0
6D	100	7.7	150	11.5	100	10.3
Scrap	650	50.0	650	50.0	325	33.3
	1300	100.0	1300	100.0	975	100.0

3. To be cancelled April 18, 1960.

* To be used only when limited amount of scrap available.

RETURN TO J-M RESEARCH FILE ROOM

SIGNED: C H Stalcup
QUALITY CONTROL SUPERVISOR

SIGNED: George L. Keeney
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	Pipe Plants (5)	Pipe Local (7)	Other	DATE ISSUED	January 18, 1960

Form 333-3Pkd. IN U.S.A.

NOTICE OF RETURN

4-5

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	9

DATE OF DEVIATION:	January 18, 1960	PAGES NO:	1		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	1/18/60		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: July 6, 1960 8:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Deviation Blend C-216 discontinued because adequate scrap available.

RETURN TO
J-M RESEARCH
FILE ROOM

Form 3334 Ptd. in U.S.A.

MTC 003037

SIGNED: Charles H. Stelle
QUALITY CONTROL SUPERVISOR

SIGNED: J. Hesse
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. (2)	Pipe(5) Plants	Other Local(7)		DATE ISSUED July 6, 1960

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	9

DATE OF DEVIATION:	January 18, 1960	PAGES NO:	1		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	1-18-60		

TYPE OF DEVIATION: [X] EMERGENCY [ ] AUTHORIZED CHANGE [ ] PLANT SIZE TRIAL

REASON:

Shortage of scrap required use of Blend C-216 for non-pressure pipe.

AUTHORITY: J. E. Hesse

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Deviation covers fiber blend.

2.

Fiber	Present Blends C-209 Lbs.	%	C-214 Lbs.	%	Deviation Blend * C-216 Lbs.	%
Blue	50	3.8	-	-	100	7.7
4T	100	7.7	100	7.7	200	15.4
4Y	400	30.8	400	30.8	800	61.5
6D	100	7.7	150	11.5	200	15.4
Scrap	650	50.0	650	50.0	-	-
	1300	100.0	1300	100.0	1300	100.0

3. To be cancelled April 18, 1960.

* To be used only when scrap is not available.

RETURN TO J-M RESEARCH FILE ROOM

SIGNED: C. G. Stutchek
QUALITY CONTROL SUPERVISOR

SIGNED: J. E. Hesse
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLANT FIN.	LAB (2)	Pipe Plants (5)	Other Local (1)		DATE ISSUED January 18, 1960

Form 333-3Pd. IN U.S.A.

MTC 003038

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	7

DATE OF DEVIATION: October 14, 1959	PAGES NO:	1
TIME OF DEVIATION: 3:30 P.M.	DATE OF ISSUE	10/14/59

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: October 18, 1959 3:30 P.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

A report will be issued by Quality Control and Production Departments on trial run of blend C-216 and C-217

RETURN TO J-M [illegible] File [illegible]

RE[illegible]

Transite Pipe Dept.

MTC 003039

Form 333-4 Ptd. In U.S.A.

SIGNED: C. L. Stetchek
QUALITY CONTROL SUPERVISOR

SIGNED: J. E. Rooney
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. [illegible] (3)	Pipe Plants (5)	Other Local (7)	DATE ISSUED November 2, 1959

NOTICE OF DEVIATION

4-5

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: Fiber Blend 10' Foot Machine Non-Pressure Pipe	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	7

DATE OF DEVIATION: October 14, 1959	PAGES NO:	1		
TIME OF DEVIATION: 3:30 P.M.	DATE OF ISSUE	10/14/59		

TYPE OF DEVIATION: ☐ EMERGENCY ☐ AUTHORIZED CHANGE ☒ PLANT SIZE TRIAL

REASON:

Adopt "C" Blends with Reduced Scrap Levels for Trial Run.

AUTHORITY: K. J. Whalen's Wire of 10/9/59

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Deviation covers Fiber Blend.

2.

	Present Blend C-209		Deviation - No Scrap C-216		Deviation - ½ Scrap C-217	
Fiber	Lbs.	%	Lbs.	%	Lbs.	%
Blue	50	3.8	100	7.7	50	5.1
4T	100	7.7	200	15.4	100	10.3
4Y	400	30.8	800	61.5	400	41.0
6D	100	7.7	200	15.4	100	10.3
Scrap	650	50.0	-	-	325	33.3
	1300	100.0	1300	100.0	975	100.0

3. Run until Trial completed.

RETURN TO
J-M RESEARCH
FILE ROOM

RECEIVED
OC

Trans... ...p

SIGNED: C. H. Stolek
QUALITY CONTROL SUPERVISOR

SIGNED: [signature]
PRODUCTION SUPERINTENDENT

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED

DIR.	MGR.	SUPR.	PROD'N SUPT.	PLNT. ENG.	RES.	Pipe Plant(s)	Other Local(s)	DATE ISSUED
O.C.	O.C.(2)	O.C.						10/14/59

Form ... Ptd. IN U.S.A.

MTC 003040

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison - P
		SPEC NO.	TP-425-2
		DEV. NO.	4

DATE OF DEVIATION: August 6, 1959	PAGES NO:	1		
TIME OF DEVIATION: 8:00 A. M.	DATE OF ISSUE	8-6-59		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: November 11, 1959 8:00 A. M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

This Deviation Blend C-214 is established as standard blend.

RETURN TO JM RESEARCH FILE ROOM

MTC 003041

SIGNED: C. S. Stolaski
QUALITY CONTROL SUPERVISOR

SIGNED: J. E. DeLong
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. C.C. (2)	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES.	Pipe Plants (5)	Other Local (7)		DATE ISSUED 11-11-59

Form 333-4 Ptd. in U.S.A.

NOTICE OF DEVIATION

4-5

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	Denison-P
		SPEC NO.	TP-425-2
		DEV. NO.	4

DATE OF DEVIATION: August 6, 1959	PAGES NO:	1		
TIME OF DEVIATION: 8:00 AM	DATE OF ISSUE	8/6/59		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON:

Substitute 6D Fiber for Blue in Non-Pressure Blend for the manufacture of Telephone Duct Pipes

AUTHORITY: T. R. Turnbull's wire of May 8, 1959, to J. E. Hesse

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Fiber Blend

2. Use Blend C-214 in place of Blend C-209

	Present Blend C-209			Deviation Blend C-214		
	Lbs.	Bags	%	Lbs.	Bags	%
Blue	50	½	3.8	-	-	-
4T28 or 4T30	100	1	7.7	100	1	7.7
Munro 4Y	400	4	30.8	400	4	30.8
6D	100	1	7.7	150	1½	11.5
Scrap	650	(By Scale 650 #)	50.0	650	(By Scale 650 #)	50.0
	1300		100.0	1300		100.0

3. September 21, 1959

AUG 19 1959

RETURN TO J-M RESEARCH FILE ROOM

SIGNED: C D Stelcher
QUALITY CONTROL SUPERVISOR

SIGNED: J. E. DeLong
PRODUCTION SUPERINTENDENT:

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES. (Date)	Pipe(5) Plants	Other Local(7)		DATE ISSUED	August 6, 1959

Form 333-3Ptd. IN U.S.A.

MTC 003042

NOTICE OF RETURN

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	DENISON - P
		SPEC NO.	TP-425-2
		DEV. NO.	3

DATE OF DEVIATION: 5-16-59	PAGES NO:	1	
TIME OF DEVIATION: 7:00 A.M.	DATE OF ISSUE	5-15-59	

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 8-6-59 8:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Revert back to Blend C-209 because Rhodesian S Fiber has been depleted.

AUG 19 1959

RETURN TO
J-M RESE
FILE RO

SIGNED: C. G. Stalcup
QUALITY CONTROL SUPERVISOR

SIGNED: J. C. DeLong
PRODUCTION SUPERINTENDENT

	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. ENG.	RES.	Pipe Plant(5)	Other Local 7		DATE ISSUED 8/6/59

Form 333-4 Ptd. In U.S.A.

MTC 003043

NOTICE OF DEVIATION

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE	PLANT & DIV.	Denison-P
		SPEC NO.	TP-425-2
		DEV. NO.	3

DATE OF DEVIATION:	5-16-59	PAGES NO:	1		
TIME OF DEVIATION:	7:00 A.M.	DATE OF ISSUE	5/15/59		

TYPE OF DEVIATION: ☐ EMERGENCY ☒ AUTHORIZED CHANGE ☐ PLANT SIZE TRIAL

REASON: Substitute 6D Fiber for Blue in Non-Pressure Blend for the manufacture of Telephone Duct Pipes.

AUTHORITY: T. R. Turnbull wire of 5/8/59 to J. Hesse

STATE: 1. THAT PORTION OF SPECIFICATION FROM WHICH YOU PROPOSE TO DEVIATE.
2. WHAT YOU PROPOSE TO DO INSTEAD.
3. DATE THIS NOTICE OF DEVIATION WILL BE CANCELLED.

1. Fiber Blend

2. Use Blend C-214 in Place of Blend C-210.

	Present Blend C-210			Deviation Blend C-214		
	Lbs.	Bags	%	Lbs.	Bags	%
Blue	50	½	3.8	---	--	---
4T28	100	1	7.7	100	1	7.7
Munro 4Y	300	3	23.1	300	3	23.1
Rhodesian	200	2	15.4	200	2	15.4
6D	---	-	----	50	½	3.8
Scrap	650	-	50.0	650	-	50.0
	1300		100.0	1300		100.0

3. Cancelled September 21, 1959.

RETURN TO
J-M RESEARCH
FILE ROOM

MAY 2 6 1959

SIGNED: C. G. Stelcher
QUALITY CONTROL SUPERVISOR

SIGNED: J. E. Lee
PRODUCTION SUPERINTENDENT

THIS NOTICE OF DEVIATION CANCELLED BY NOTICE OF RETURN DATED:

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. DEV.	Pipe(5) Plants	Other Local(7)	DATE ISSUED 5-15-59

Form 333-3Ptd. IN U.S.A.

MTC 003044

NOTICE OF RETURN

425

Johns-Manville MANUFACTURING SPECIFICATION	PRODUCT: FIBER BLEND 10 FOOT MACHINE NON-PRESSURE PIPE	PLANT & DIV.	DENISON - P
		SPEC NO.	TP-425-2
		DEV. NO.	1

DATE OF DEVIATION:	1/19/59	PAGES NO:	1		
TIME OF DEVIATION:	8:00 A.M.	DATE OF ISSUE	1/15/59		

THIS CANCELS NOTICE OF DEVIATION IDENTIFIED ABOVE

DATE AND TIME DEVIATION WAS CANCELLED: 8/6/59 8:00 A.M.

COMMENTS: (GIVE BRIEF STATEMENT AS TO RESULTS OF DEVIATION — IF A SEPARATE REPORT IS TO BE ISSUED; STATE BY WHOM & DATE.)

Revert back to Blend C-209 because Rhodisian S Fibre has been depleted.

AUG 1 9 1959

RETURN TO
J-M RESEARCH
FILE ROOM

MTC 003045

SIGNED: C G Stelchek
QUALITY CONTROL SUPERVISOR

SIGNED: [signature]
PRODUCTION SUPERINTENDENT

DIR. Q.C.	MGR. Q.C.	SUPR. Q.C.	PROD. SUPT.	PLNT. FIN.	RES. LAB.	Pipe Plant(5)	Other Local 7		DATE ISSUED 8/6/59

Form 333-4 Ptd. in U.S.A.