PLAINTIFF'S EXHIBIT

BIR-257



SLATE ROLLS

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/26/73
REV.

PRODUCT CODE PRODUCT NAME WASTE ALLOWANCES FOR COMPUTING GROSS WEIGHTS

SUPERSEDES: 1/1/71

CODE	MATERIAL	ALL PRODUCTS %
	Felt - Std. Air Dry Wt.	6.0
	Saturation	3.0
	Coating	2.0
	Filler	3.0
	Base Slate for T. B.	5.0
	Colored Slate for T. B.	10.0
	Slate for All Other Products	7.0
	Glenwood Fines	10.0
	#36 Talc, Backing for Shingles, and Mineral Surfaced Rolls	70.0
	#36 Talc, Smooth Surfaced Roofing	10.0
	#37 Talc	8.5
	Wind Seal Adhesive	0.0
	Anti-Stick (Wind Seals)	0.0

RCD Operating Speed Production Crew Size Unit

Col

BIRD 005775

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

ROOFING MACHINE #

ISSUED DATE 4/25/73
REV:

PRODUCT CODE 02 10 000

PRODUCT NAME 90# MINERAL SURFACED ROOFING
32" or 36" - 108 SQ. FT.

SUPERSEDES: 1/1/71

DESCRIPTION:

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28500	Felt - 50# x 36" or 32"	11.3	12.6	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2	11.2	11.5	10.4
56200	Filler - 53%	12.6	13.0	11.7
56150	Surfacing - #11 Oiled	33.8	36.2	31.3
59050	Backing - Pioneer Talc	1.0	1.7	0.9
	Weight per sq. ft.	88.0		
	Finishing Materials - Wrapper	1		
	Shipping Weight	88.1		

All rolls to be shipped without fixtures in rolls.
1 Underwriters' Label - Class C Sheet Roofing printed on wrapper.
1 Printed Wrapper, each roll. Color coded Green and Black.
Direction sheet printed on wrapper.

FIXTURES: Packed separately.
Packed in units of 20. 20 bags of nails, 20 pints of lap cement. Approx. Shipping Wt. - 32#
Lenth of Rolls - 36'0". (No extra allowance for two piece rolls). Wt. of Sheet per 100 Sq. Ft.-81.5#
Minimum Wt. of Roll - 86.0#

NOTE: Sheet must have minimum 3.0# filled coating/100 Sq. Ft. on back.

RCD Operating Speed 740 Rolls/Hour Production Crew Size 12 Unit Roll

COLORS: Colonial Green, Black, Brite Red, Meadow Mi , Gray, Snow White, Wood Blende, Brown Blende

BIRD 005776

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. ROOFING MACHINE #

ISSUED DATE 4/25/73
REV: 1-3-77

PRODUCT CODE 98 20 099 PRODUCT NAME 9" MINERAL SURFACE STRIPS - SAME AS 90#

SUPERSEDES: 1/1/71

DESCRIPTION: Cut on machine from 36" width material. Sq. Ft. Material per Sq.-108.
" " " per Roll - 27.

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28500	Felt - 50 lb. x 35-7/8"	11.3	12.6	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2	11.2	11.5	10.4
56200	Filler - 53%	12.6	13.0	11.7
56150	Surfacing - #11 Oiled	33.8	36.2	31.3
59050	Backing - Talc Pioneer 36	1.0	1.7	0.9
	Weight per sq. ft.	88.0		
	Finishing Materials	1		
	Shipping Weight	88.1		

Length of rolls - 36'0" Width of rolls - 9"
36", Sheet slit into 4 pieces 9" wide.
Each roll wrapped with 3" gummed strip - 0.1# per sq.
Rolls must have minimum of 3.0# backing per 100 Sq. Ft.
Wt. of sheet per 100 Sq. Ft. - 81.5#
Date of manufacture and color in each roll.
No Direction Sheet. No Underwriters' Label.

8/2 ~~810~~ 1-3-77
RCD Operating Speed ~~820~~ Rolls/Hour ~~4,174~~ Production Crew Size Unit

COMMENTS:

BIRD 005777

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

ROOFING MACHINE #

ISSUED DATE 4/25/73

REV:

PRODUCT CODE 98 20 120

PRODUCT NAME 12" MINERAL SURFACED STRIPS-SAME AS 90#

SUPERSEDES: 1/1/71

DESCRIPTION: Cut on machine from 36" width material. Sq. Ft. Material per Sq. - 108
per Roll - 36

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28500	Felt - 50 Lb. x 35-7/8"	11.3	12.6	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2	11.2	11.5	10.4
56200	Filler - 53%	12.6	13.0	11.7
56150	Surfacing - #11 Oiled	33.8	36.2	31.3
59050	Backing - Talc Pioneer 36	1.0	1.7	0.9
	Weight per sq. ft.	88.0		
	Finishing Materials	.1		
	Shipping Weight	88.1		

Length of Rolls - 36'0" Width of Rolls - 12"
36" Sheet slit into 3 pieces 12" wide. Each roll wrapped with 3" gummed strip-0.1# per sq.
Rolls must have minimum of 3.0# back coating per 100 Sq. Ft.
Wt. of sheet per 100 Sq. Ft. - 81.5#. Date of Manufacture and color in each roll.
No Direction Sheet. No Underwriters' Label.

RCD Operating Speed 780 Rolls/Hour Production Crew Size 12 Unit ROLL

COMMENTS:

BIRD 005778

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

ROOFING MACHINE #

ISSUED DATE 4/25/73

REV:

PRODUCT CODE 98 20 180

PRODUCT NAME 18" MINERAL SURFACED STRIPS-COLOR SAME AS 90#

SUPERSEDES: 1/1/71

DESCRIPTION: Cut on machine from 36" width material. Sq. Ft. material per Sq. - 108
Per Roll - 54

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28500	Felt - 50 Lb. x 35-7/8"	11.3	12.6	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2	11.2	11.5	10.4
56200	Filler - 53%	12.6	13.0	11.7
56150	Surfacing - #11 Oiled	33.8	36.2	31.3
59050	Backing - Talc EMG 36	1.0	1.7	0.9
	Weight per sq. ft.	88.0		
	Finishing Materials	.1		
	Shipping Weight	88.1		

Length of Rolls - 36'0" Width of Rolls - 18"
36" Sheet slit in 2 pieces 18" wide. Each roll wrapped with 3" gummed paper - 0.1#/Sq.
Rolls must have minimum of 3.0# back coating per 100 Sq. Ft.
Wt. of Sheet per 100 Sq. Ft. - 81.5#. Date of Manufacture and Color each roll.
No Direction Sheet. No Underwriters' Label.

ROD Operating Speed 760 Rolls/Hour Production Crew Size 12 Unit ROLL

COMMENTS:

BIRD 005779

SMOOTH SURFACE

PRODUCT SPECIFICATIONS

ISSUED DATE 4/25/73
REV:

DIVISION SHREVEPORT, LA.
0102-055
PRODUCT CODE SPECIAL

ROOFING MACHINE #
PRODUCT NAME OLD RELIABLE ROOFING - 55# - 108 SQ. FT. (GOV'T ORDER ONLY)

SUPERSEDES: 1/1/71

DESCRIPTION:

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28500	Felt - 50# x 36"	11.3	12.6	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2 - Smooth	9.0	9.3	8.3
56200	Filler - 53%	10.1	10.4	9.4
59050	Surfacing - Talc EMG 36	4.5	5.0	4.2
	Weight per sq. ft.	53.0		
	Finishing Materials - Wrapper	1		
	Shipping Weight	53.1		

Variation in Shipping Wt. - Min.- 51.0#. Max.- 54.0# No Underwriters' Label.
Directions printed on Wrapper. Printed Wrapper - 2 color.

Fixtures: Packed Separately.
1 Pt. Lap Cement in pt. or #2 cans. 1 bag 7/8" Galv. 11 Ga. Nails, 162 count.

NOTE: Fixtures packed in units of 20. 20 bags of nails, 20 pints of Lap Cement.
Approx. Shipping Wt. - 32#.

Length of Rolls: 36'0". No extra allowance for two piece rolls. Wt. of Sheet per 100 Sq. ft. - 48.6#.

RCD Operating Speed 640 Rolls/Hour Production Crew Size 12 Unit Roll

COMMENTS:

BIRD 005781

PAID

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

ISSUED DATE 3/9/76
REV:

PRODUCT CODE 01 01 036

PRODUCT NAME: NEPONSET PAROID ROOFING -65# - 108 Sq. Ft.
#36 Talc - EMG & Pioneer on Face and Back

SUPERSEDES: 4/25/73

DESCRIPTION:

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. F
	Materials Per sq. ft.			
28500	Felt - 50# x 36"	11.3	12.0	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2 - Smooth	12.7	13.0	11.7
56200	Filler - 53%	14.3	14.7	13.2
59050	Surfacing #36 Talc (EMG & Pioneer)	6.6	7.4	6.1
	Weight per sq. ft.	63.0		
	Finishing Materials	1		
	Shipping Weight	63.1		
	Variation in Shipping Wt. - Min. 61.5#: Max. 64.5#			
	No Underwriters' Label. Printed Wrapper Color Coded -Black & Blue		21" x 33"	
	Directions printed on wrapper. All rolls shipped without fixtures in rolls.			

Fixtures: Packed separately. 1 Pt. Lap Cement, 1 bag Nails, 7/8" Galv., 11 Ga., 163 count.

NOTE: Fixtures packed in units of 20 bags of nails, 20 cans of Cement. Approx. Shipping Wt. - 32.0#
Length of Rolls - 36'0". No extra allowance for 2 piece rolls.
Wt. of sheet per 100 Sq. Ft. - 58.3#

RCD Operating Speed 630 Rolls/Hour Production Crew Size 12 Unit Roll

Color

BIRD 005783

SATURATED
FELTS

BIRD 005784

PRODUCT SPECIFICATIONS

ISSUED DATE 3-14-75
REV. 2-9-77

DIVISION SHREVEPORT, LA

ROOFING MACHINE # 1

PRODUCT CODE 0106-216

PRODUCT NAME BIRD COATED FELT
2 Sq. Material - 36" Wide

SUPERSEDES: Disc. Card
Bird NO. 33 Coated 1-1-71 Felt

DESCRIPTION: 32.5# per 108 sq. ft. - 65.0# per 216 sq. ft.

CODE	RAW MATERIALS PER ROLL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Ft
	Materials Per sq. ft.			
28250	Felt - #27 x 36"	12.2	13.7	5.6#
15400	Saturation - #14 1/2 (150%)	18.2	18.7	8.4
14200	Coating - #21 1/2	12.7	13.1	5.9
56200	Filler - 50%	12.8	13.2	6.0
~~59050~~ 56200	Surfacing - ~~#36 Pioneer Talc~~ Glenwood Fines ~~9.1~~	6.5	~~10.0~~ 7.1	~~4.2~~ 3.3
59050	Backing - #36 Pioneer Talc	2.6	2.9	~~30.1~~ 1.2
	Weight per 216 sq. ft.	65.0		30.1#
	Finishing Materials	0.1		
	Shipping Weight	65.1		

FINISHING MATERIALS: Printed Wrapper - 35 1/2" x 36" color coded, black on Tan
Underwriters' label. Type 15, B.U., printed on wrapper. No fixtures.
White paint lines, 2", 8½", 11½", 17", 19" 24-3/4", 27½", 34" from each edge.
Length of rolls - 72' 0" No extra allowance for two piece rolls.
Two piece rolls to have a red flag at lap of two pieces.
Weight of sheet per 100 sq. ft. - 30.1#
Coating to be equally distributed front and back.

RCD Operating Speed 310 rolls/hr. Production Crew Size 12 Unit Roll

COLORS:

BIRD 005785

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE # 3

PRODUCT CODE 22-01-432 PRODUCT NAME TYPE 15 PERFORATED ASPHALT SATURATED ASBESTOS FELT

ISSUED DATE 4/24/73
REV: 1-3-77
SUPERSEDES: 5/1/71

DESCRIPTION: Run of FSPM-3 - 432 Sq. Ft. per Roll.

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 432 sq. ft.			
29005	Felt - Asbestos - 10# x 36"	41.0	43.5	9.49
15375	Saturation - #11 Flux (45.8%)	18.8	19.6	4.35
	Weight per 432 sq. ft.	59.8		
	Finishing Materials	0.1		
	Shipping Weight	59.9		

Variation in Shipping Wt. - Min. 56# Max. 64#

Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge. To be Aluminum lines put on by supplier.

Length of Roll - 144' - 0". No extra allowance for two piece rolls. All two piece rolls must bear label stating roll is two piece.

FINISHING MATERIALS: 1-6" x 36" Printed Kraft wrap - Printed "Light Blue". Fuller's #3188 Adhesive - 0.05#/Roll
Min. Saturation - 40%; Min. Dry Felt Wt. - 8.5#/100 Sq. Ft.
1 - Type 15 B.U. Label, printed on wrapper.

RCD Operating Speed 140 ~~185~~ Rolls per Hour. Production Crew Size 5 Unit ROLL

Coil :

BIRD 005786

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA | MACHINE # | ISSUED DATE 8-20-82

PRODUCT CODE 0706-432 | PRODUCT NAME SHINGLE UNDERLAYMENT FELT | REV.

SUPERCEDES:

CODE		Material Per Roll Net Weight	Gross Weight	Net Per 100 Sq. Feet
	Material Per 432 Sq. Ft.			
6001-024	Felt 24 X 36	21.6#	24.2#	5.0#
15375	Saturation #11 Flux 110%	23.8#	24.5#	5.5#
	Weight/432 Sq. Ft.	45.4		
	Finishing Materials	.1		
	Shipping Wt.	45.5#		
	Variation in Shipping Wt.	41# 46#		

Laying lines 2", [illegible]", [illegible], 17, 19, 24 3/4, [illegible], 34" from each edge.

7-1-83

Length of Roll 144'0 No extra allowance on Two Piece Rolls. All Two Piece must bear label stating that Roll is Two Piece

RCD Operating Speed 270 Production Crew Size 6 Unit Rolls

Colors:

BIRD 005787

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA | MACHINE # | ISSUED DATE 1-5-83 | REV.

PRODUCT CODE 0706-648 | PRODUCT NAME SHINGLE UNDERLAYMENT FELT

SUPERCEDES: 8-20-82

Material Per Roll

CODE		Net Weight	Gross Weight	Net Per 100 sq. Feet
	Material Per 648 Sq. Ft.			
6001-024	Felt 24 X 36	32.4#	36.1#	5.0#
15375	Saturation #11 Flux 110%	35.6#	36.6#	5.5#
	Weight/648 Sq. Ft.	68.0#		
	Finishing Materials	.1		
	Shipping Wt.	68.1#		
	Variation in Shipping Wt.	60# 69#		

Laying lines 2", 8½", 11½", 17", 19", 24 3/4", 27½", 34", from each edge.

Length of Roll 216.0' No extra allowance on Two Piece Rolls. All Two Piece must bear label stating that Roll is Two Piece.

RCD OPERATING SPEED 180 | PRODUCTION CREW SIZE 6 | UNIT Rolls

COLORS: (

BIRD 005788

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE # 3

PRODUCT CODE 07-10-432 PRODUCT NAME TYPE 15 PERFORATED ASPHALT FELT - 432 SQ. FT. PER ROLL

ISSUED DATE 4/24/73
REV:
SUPERSEDES: 1/1/66

DESCRIPTION: Material Run on FSPM-3

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 432 sq. ft.			
28250	Felt - 27 Lb. x 36"	24.3	27.2	5.6
15375	Saturation - #11 Flux - 146%	35.6	36.7	8.2
	Weight per 432 sq. ft.	59.9		
	Finishing Materials	.1		
	Shipping Weight	60.0		

Variation in Shipping Wt. - Min. - 56.0#. Max. - 64.0#
Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge.
To be aluminum lines and applied onto dry felt on DSPM-1.
Length of Rolls - 144'-0". No extra allowance on two piece rolls. All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS: 1 pc. 6" x 38" Kraft strip with blue printing.
Starch Paste - .03#

Wt. of sheet per 100 Sq. Ft. - 13.0# Min.

NOTE: This felt the same as Type 15 Asphalt Felt except it has perforations on 1" centers.

RCD Operating Speed 290 Rolls/Hour Production Crew Size 5 Unit ROLL

Color

BIRD 005789

PRODUCT SPECIFICATIONS

ISSUED DATE 11/21/74
REV:

DIVISION SHREVEPORT, LA.
07-10-324

MACHINE #3

TYPE 15 PERFORATED ASPHALT

SUPERSENDES:

PRODUCT CODE

PRODUCT NAME: FELT - 324 SQ.FT. PER ROLL

DESCRIPTION: Material Run on FSPM-3.

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 324 sq. ft.			
28250	Felt - 27 LB. x 36"	18.1	20.2	5.6
15375	Saturation -#11 Flux - 146%	26.4	27.2	8.2
	Weight per 324 sq. ft.	44.5		
	Finishing Materials	.1		
	Shipping Weight	44.6		

Variation in Shipping Wt. - Min. - 42.0#. Max. - 47.0#
Guide Lines - 2", 8-1/2", 11 - 1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge.
To be aluminum lines and applied onto dry felt on FSPM-3.
Length of Rolls - 108' - 0". No extra allowance on two piece rolls. All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS: 1 Pc. 6" x 38" Kraft strip, PLAIN
Starch Paste - .03#

Wt. of sheet per 100 Sq. Ft. - 13.0# Min.

NOTE: This felt the same as Type 15 Asphalt Felt except it has perforations on 1" centers.

RCD Operating Speed 325 Rolls/Hour Product Crew Size 5 Unit ROLLS

Colors

BIRD 005790

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV:

DIVISION SHREVEPORT, LA.
MACHINE # 3
18" - #15 PERFORATED ASPHALT

PRODUCT CODE 07-10-216
PRODUCT NAME FELT - 216 SQ. FT. PER ROLL

SUPERSEDES: 1/1/66

DESCRIPTION: Material run on FSPM-3. Cut on FSPM-3 from 36" width material.

CODE	RAW MATERIAL PER 18" ROLL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 216 sq. ft.			
28325	Felt - #28 x 36" (Slit to 18" during winding)	12.2	13.6	5.6
15375	Saturation - #11 Flux - 146%	17.7	18.2	8.2
	Weight per 216 sq. ft./Per 18" Roll	29.9		
	Finishing Materials	.1		
	Shipping Weight	30.0		

Material to be run on regular aluminum lined dry felt from DSPM-1.
Length of Rolls - 144'0" Width of Roll - 18". No extra allowance on two piece rolls.
All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS: 1 Pc. 6" x 38" Kraft strip with blue printing.
Starch Paste - .03#

No Underwriters' Label.

RCD Operating Speed 250 Rolls/Hour Production Crew Size 5 Unit ROLLS

Col[illegible]:

BIRD 005791

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

MACHINE # 3

PRODUCT CODE 07-01-432

PRODUCT NAME TYPE 15 ASPHALT FELT - 432 SQ. FT. PER ROLL

ISSUED DATE 4/24/73

REV:

SUPERSEDES: 1/1/66

DESCRIPTION: Material run on FSPM-3

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 432 sq. ft.			
28250	Felt - 27 Lb. x 36"	24.3	27.2	5.6
15375	Saturation - #11 Flux - 146%	35.6	36.7	8.2
	Weight per 432 sq. ft.	59.9		
	Finishing Materials	.1		
	Shipping Weight	60.0		

Variation in Shipping Wt. - Min. - 56.0#. Max. - 64.0#

Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge. To be aluminum lines and applied onto dry felt on DSPM-1.

Length of Rolls - 144'0". No extra allowance on two piece rolls. All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS: 1 pc. 6" x 38" Kraft strip with red printing.
Starch Paste - 0.03#

Wt. of sheet per 100 Sq. Ft. - 13.0# Min.

RCD Operating Speed 290 Rolls/Hour Production Crew Size 5 Unit Roll

Col[illegible]:

BIRD 005792

PRODUCT SPECIFICATIONS

ISSUED DATE 12/3/74
REV:

DIVISION SHREVEPORT, LA. MACHINE #3 TYPE 15 ASPHALT

PRODUCT CODE: 07-01-324 PRODUCT NAME FELT - 324 SQ. FT. PER ROLL

SUPERSEDES

DESCRIPTION: Material Run on FSPM-3

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 324 sq. ft.			
28250	Felt - 27 Lb. x 36"	18.1	20.2	5.6
15375	Saturation - #11 Flux - 146%	26.4	27.2	8.2
	Weight per 324 sq. ft.	44.5		
	Finishing Materials	.1		
	Shipping Weight	44.6		

Variation in Shipping Wt. - Min. - 42.0# Max. - 47.0#
Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge
To be aluminum lines and applied onto dry felt on DSPM-1 and DSPM-2.
Length of Rolls - 108'-0". No extra allowance on two piece rolls. All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS: 1 pc. 6" x 38" Kraft strip, plain
Starch Paste - .03#

Wt. of sheet per 100 Sq. Ft. - 13.0# Min.

RCD Operating Speed 325 Rolls/Hour Production Crew Size 5 Unit ROLL

COLOR:

BIRD 005793

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE # 3

ISSUED DATE 4/24/73
REV.

PRODUCT CODE 07-01-216 PRODUCT NAME TYPE 15 ASPHALT FELT-216 SQ. FT./Roll

SUPERSEDES: 1/1/66

DESCRIPTION: Material run on FSPM-3

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials per 216 sq. ft.			
28250	Felt - 27 lb. x 36"	12.2	13.6	5.6
15375	Saturation - #11 Flux - 146%	17.7	18.2	8.2
	Weight per 216 sq. ft.	29.9		
	Finishing Materials	.1		
	Shipping Weight	30.0		

Variation in Shipping Wt. - Min. - 28.0# Max. - 33.0#
Guide Lines - 2", 8-1/2", 11-1/4", 17", 19", 24-3/4", 27-1/2", 34" from each edge. To be aluminum lines and applied onto dry felt on DSPM-1/
Length of Rolls - 72'0". No extra allowance for two piece rolls. All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS:

1 pc. 6" x 30" Kraft strip with brown printing.
Starch Paste - .03#
Wt. of sheet per 100 Sq. Ft. - 13.0# Min.

RCD Operating Speed 460 Rolls/ Hour Production Crew Size 5 Unit Roll

Coil :

BIRD 005794

PRODUCT SPECIFICATIONS

ISSUED DATE 11/20/74
REV:

SUPERSENDES:

DIVISION SHREVEPORT, LA.
9802180

MACHINE #3
18" - #15 ASPHALT

PRODUCT CODE

PRODUCT NAME: FELT - 216 SQ. FT. PER ROLL

DESCRIPTION: Material run on FSPM-3. Cut on FSPM-3 from 36" width material.

CODE	RAW MATERIAL PER 18" ROLL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 216 sq. ft.			
28325	Felt - #28 x 36" (Slit to 18" during winding)	12.2	13.6	5.6
15375	Saturation - #11 Flux - 146%	17.7	18.2	8.2
	Weight per 216 sq. ft./Per 18" Roll	29.9		
	Finishing Materials	.1		
	Shipping Weight	30.0		

Material to be run on regular aluminum lined dry felt from DSPM-1.
Length of Rolls - 144'0" Width of Roll - 18". No extra allowance on two piece rolls.
All two piece rolls must bear label stating that roll is two piece.

FINISHING MATERIALS: 1 Pc. 6" x 38" Kraft strip, PLAIN
Starch Paste - .03#

No Underwriters' Label.

RCD Operating Speed 250 Rolls/Hour Product Crew Size 5 Unit ROLLS

Colors

BIRD 005795

PRODUCT SPECIFICATIONS

ISSUED DATE 1/1/84

DIVISION SHREVEPORT, LA. MACHINE # 3 REV:

PRODUCT CODE 07-07-000 PRODUCT NAME HEAVY DUTY ASPHALT FELT - 216 SQ. FT./ROLL

SUPERSEDES:

DESCRIPTION: Material run on FSPM-3

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 216 sq. ft.			
6001045	Felt - 45# X 36"	20.0	22.3	9.3
15375	Saturation - #11 Flux - 145%	28.9	29.8	13.4
	Weight per 216 sq. ft.	48.9		
	Finishing Materials	.1		
	Shipping Weight	49.0		

Variation in Shipping Wt. - Min.-42.0# Max.-52.0#

Aluminum Guide Lines - 2", 17", 19", 34" from each side. Lines applied on Dry Felt DSPM .2

Length of Rolls - 72'-0". No extra allowance for two piece rolls. All two piece rolls must bear label stating that roll is two pieces.

FINISHING MATERIALS: 1 pc. 6" X 38" Kraft Strip with green printing.

H.B. FULLER N.L. 3885 - .03#

Wt. of Sheet per 100 Sq. Ft. - 22.7# Min.

RCD Operating Speed 430 Rolls/Hour Production Crew Size 6 Unit ROLL

Colors:

BIRD 005796

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV: 1-3-77

DIVISION SHREVEPORT, LA. MACHINE # 3

PRODUCT CODE 07-02-216 PRODUCT NAME TYPE 30 ASPHALT FELT - 216 SQ. FT./ROLL

SUPERSEDES: 1/1/66

DESCRIPTION: Material run on F3PM-3

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 216 sqr Fee			
28550	Felt - 52# x 36"	25.4	26.2	10.8
15375	Saturation - #1 Mix - 156#	36.5	37.6	16.9
	Weight per 216 sq. ft.	61.9		
	Finishing Materials			
	Shipping Weight	60.0		
	Variation in Shipping Wt. - Min.-56.0# Max.-64.0#			
	Aluminum Guide Lines - 2", 17", 19", 34" from each side. Lines applied on Dry Felt DSPM-1.			
	Length of Rolls - 72'-0". No extra allowance for two piece rolls. All two piece rolls must bear label stating that roll is two pieces.			

FINISHING MATERIALS: 1 pc. 6" x 38" Kraft Strip with green printing

Starch Paste - .03#
Wt. of Sheet per 100 Sq. Ft. - 26.0# Min.

RCD Operating Speed ~~460~~ 430 Rolls/Hour Production Crew Size 5 Unit ROLL

Colors

BIRD 005797

PRODUCT SPECIFICATIONS

DIVISION: SHREVEPORT, LA.

MACHINE # 3

PRODUCT CODE: 07-15-216

PRODUCT NAME: TYPE 30 PERFORATED ASPHALT FELT - 216 SQ. FT. PER ROLL

ISSUED DATE: 4/24/73

REV:

SUPERSEDES: 1/1/66

DESCRIPTION: Material run on FSPM-3.

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 216 sq. ft.			
28550	Felt - 62# x 36"	23.4	26.2	10.8
15375	Saturation - #11 Flux - 156#	36.5	37.6	16.9
	Weight per 216 sq. ft.	59.9		
	Finishing Materials	.1		
	Shipping Weight	60.0		

Variation in Shipping Wt. - Min.-56.0#, Max.-64.0#

Aluminum Guide Lines - 2", 17", 19", 34" from each side. Lines applied on Dry Felt DSPM-1.

Length of Rolls - 72'-0". All two piece rolls must have label stating that roll is two piece.

No extra allowance on two piece rolls.

FINISHING MATERIALS: 1 pc. 6" x 38" Kraft strip with black printing.
Starch Paste - .03#
No Underwriters' Label.
Wt. of Sheet per 100 Sq. Ft. - 26.0# Min.

NOTE: This felt the same as Type 30 Asphalt Felt except it has perforations on 1" centers.

RCD Operating Speed: 460 Rolls/Hour Production Crew Size: 5 Unit: ROLL

Color:

BIRD 005798

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. | MACHINE #13 | ISSUED DATE | REV: | SUPERSEDES:

PRODUCT CODE 0784360 | PRODUCT NAME: No. 30 SHAKE FELT - 180 SQ. FT. (18" - Rolls Individually Wrapped)

Description - Material made from #52 x 36" felt and slit at winder into two 18" wide rolls | Individually wrapped

CODE	Raw Materials Description	Materials Per Roll - 180 sq. ft. Net weight	Gross weight	Net per 100 sq. ft.
	Materials per 180 sq. ft.			
	Felt - #52 x 36"	19.4	21.7	10.8
	Saturation - #11 Flux-(147%)	28.5	29.4	15.8
	Weight per 180 sq. ft.	47.9	51.1	
	Finishing materials	0.1		
	Shipping wt.	48.0		

Laying Lines - 8", 10" from each edge.

Roll length - 120'

Finishing materials - wrapper - 12" x 36" printed band - 0.042#
White glue - 0.015#

RCD Operating Speed 310 rolls/hr. Production Crew Size 7 Unit roll

Colors

BIRD 005799

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

MACHINE #3

PRODUCT CODE ~~98-04-180~~ 0704-180

PRODUCT NAME 18" - TYPE 30 ASPHALT FELT - 108 SQ. FT. PER ROLL

ISSUED DATE 4/24/73

REV:

SUPERSEDES: 1/1/66

DESCRIPTION: Material run on FSPM-3. Material made from 36" wide Felt and slit at winder to two 18" wide rolls.

CODE	RAW MATERIAL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Feet
	Materials Per 108 sq. ft.			
28550	Felt - 52# x 36" (Slit into 18")	11.7	13.1	10.8
15375	Saturation - #11 Flux - 156%	18.2	18.7	16.9
	Weight per 108 sq. ft.	29.9		
	Finishing Materials	.1		
	Shipping Weight	30.0		

Length of Roll - 72'0" Width of Roll - 18" No extra allowance for two piece rolls. All two piece rolls must bear label stating roll is two pieces. To be cut from regular 30# Asphalt Felt with regular guide lines.

FINISHING MATERIALS: 1 Pc. 6" x 36" Kraft Strip with green printing.
Starch Paste .03#

No Underwriters' Label.

Wt. of sheet per 100 Sq. Ft. - 36.0# Min.

PCD Operating Speed 400 Rolls/Hour Production Crew Size 5 Unit ROLLS

Coils:

BIRD 005800

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. ROOFING MACHINE #

ISSUED DATE 4/25/73
REV:

PRODUCT CODE 02 030 00 PRODUCT NAME NEPONSET CAP SHEET

SUPERSEDES: 1/1/71

DESCRIPTION: 1/2 Sq. rolls, 108 Sq. Ft. per Roll, 216 Sq. Ft. per Sq. Coated and surfaced 21", Saturated Felt 15". Hot embossed to give 17" exposed surfacing. Embossed portion to be sanded. Coated and surfaced on bac

CODE	RAW MATERIALS PER ROLL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28500	Felt - 50# x 36"	11.3	12.6	10.5
15400	Saturation - #14-1/2 - 160%	18.1	18.6	16.8
14200	Coating - #21-1/2	5.0	5.2	7.4
56200	Filler - 53%	5.7	5.9	9.0
56150	Surfacing - #11 Oiled	15.7	16.8	24.9
59050	Backing - Talc Pioneer 36	1.0	1.1	.9
56200	Glenwood Fines (for 4" Embossing)	.6	.7	1.0
60700	White Paint		0.1	
	Weight per sq. ft.	57.4		
	Finishing Materials	.1		
	Shipping Weight	57.5		

Variation in Shipping Wt. - Max.-59.0#; Min.-56.0#
1 Underwriters' Label - Type 30 Built Up. Printed on Wrapper.
Length of Roll - 36'0". No extra allowance for two piece rolls.

FINISHING MATERIALS: 1 Printed Wrapper - 2 color, Red on White - 35-1/2 x 36"
Variation in width of selvage - + or -1/2".

NOTE: A white paint line 17" in from surfaced edge must be on each roll.
Wt. of Sheet per 100 Sq. Ft. - Coated and surfaced - 80.2#.

ECD Operating Speed 680 Rolls/Hour Production Crew Size 12 Unit Roll

COLORS: Black, Colonial Green, White

BIRD 005801

PRODUCT SPECIFICATIONS

ISSUED DATE 7/1/74
REV:

DIVISION SHREVEPORT, LA

ROOFING MACHINE #

PRODUCT CODE 01 04 222 PRODUCT NAME BIRD BONDED BASE SHEET

SUPERSEDES: 7/1/73

2 Sq. Material - 36" Wide

DESCRIPTION:

41.8# per 108 sq. ft. - 85.9# per 222 sq. ft.

CODE	RAW MATERIALS PER ROLL DESCRIPTION	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per sq. ft.			
28250	Felt - #27 x 36"	12.4#	13.8#	5.6#
15400	Saturation - #14 1/2 (150%)	18.6	19.2	8.4
14200	Coating - #21 1/2	19.6	20.2	8.8
56200	Filler - 50%	19.6	20.2	8.8
56200	Surfacing - Glenwood Fines	11.0	12.1	5.0
59050	Backing - Pioneer 36 Talc	4.7	5.2	2.1
	Weight per sq. ft.	85.9#		38.7#
	Finishing Materials	0.1		
	Shipping Weight	86.0#		

No Excess Glenwood Fines on Finished Sheet

FINISHING MATERIALS: Printed Wrapper - 35 1/2" x 39", color coded, black on orange.
Underwriters' label, Type 15, printed on wrapper. No fixtures.
White paint lines, 3", 11 1/4", 17", 19", 24 3/4", 33" from each edge.
Length of rolls - 74'0" No extra allowance for two piece rolls.
Two piece rolls to have a red flag at lap of two pieces.
Weight of sheet per 100 sq. ft. - 38.7#
Coating to be equally distributed front and back.

RCD Operating Speed 335 rolls/hr. Production Crew Size 12 Unit Roll

COLORS:

BIRD 005802

PRODUCT SPECIFICATIONS

ISSUED DATE 4/26/73
REV.

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE PRODUCT NAME WHITE PAINT FOR MARKING 19" SELVAGE LINE FOR NEPONSET CAP SHEET

SUPERSEDES: 1/1/62

FORMULA:	% By Wt.	Lbs. per Batch
Titanium Pigment (Dupont Ti-Pure)	58.33	35
Water	41.67	25

CODE

PROCESS:

To 35 Lbs. of Titanium Pigment in a 5 gallon bucket, water is added and stirred until a thick paste is formed. This is transferred to wheel pan on machine as needed.

RCD Operating Speed Production Crew Size Unit

Color

BIRD 005803

SHINGLES

PRODUCT SPECIFICATIONS

ISSUED DATE 10-17-83
REV.

DIVISION SHREVEPORT, LA. MACHINE #10

PRODUCT CODE 06-11-000 PRODUCT NAME #23 WIND SEAL SHINGLES (FLAT)

SUPERSEDES: 8-25-75

SIZE: 12" x 36", Cut-outs 5" x 1/4" Headlap - 2".
Sq. + Gross - 240.0; Net - 237.9 Shingles per Sq. - 80 Per Bdle. - 27, 27, 26, Net Wt. per Sq. 2350
Net Wt. per Bdle. - 78.0 Wind Seal dots applied 6 3/4" from butt of shingle, minimum dots size 1" length x 3/4" width, 9 dots per shingle, maximum spacing 4" on center. Anti-Stick applied in 2" bands down center of back shingle

NOTE: This Standard for use when shingles wrapped on new automatic wrapping machine.

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER SQUARE NET WEIGHT	GROSS WEIGHT			NET PER 100 Sq. Feet
	BASE: 240 Sq. Ft.					
28800	Felt 55 x 48	27.0	31.1	30.2		11.3
15400	Saturation #14½ 175%	47.2	48.6	48.6		19.7
14200	Coating #21½	39.3	40.5	37.7		16.3
56200	Filler 53%	44.4	45.7	48.3		18.5
59050	Backing talc Pioneer & windsor	2.0	3.4	3.4		0.8
56406	Surfacing #11 Base Glenwood 30%	22.5	23.6	32.1	40%	9.4
56150	Surfacing #11 Colored 70%	52.6	57.8	48.3	60%	21.9
12150	Windseal Adhesive	0.8	-	.8		
56675	Bradford Flakes	0.2	-			
						97.9
		236.0				
	Less cut out wt. 2.1 Sq. Ft.	2.0				
		234.0				
	FINISHING MATERIALS	1.0				
		235.0				

FINISHING MATERIALS: Variation in Shipping Wt. - Max. (27 Ct.) - 82.0#; Min. (26 Ct.) - 75.0#.
Each bundle wrapped with one Kraft wrap-around printed 80# Kraft wrapper - 35.8" repeat 42¼" width, top flap and ends glued.
Wrapper 1 color - Green on Kraft. Wrapper Wt. 1.0# per Sq. - (Glue Ends Only)- 0.015#/Sq. Adhesive - No. 3885, H. B. Fuller & Co. Top Glued with Asphalt Flux 0.1#/Sq.
Underwriters' Label - 1 - Class C Shingles Wind Resistant - 1962 Standard - Printed on as wrapper is glued.

RCD OPERATING SPEED 360 sqs/hr. PRODUCTION CREW SIZE 16 UNIT Square

COLORS: Moire Black, Weather Red, White, Wood Bld, Bark Blends, Mahogany

BIRD 005805

PRODUCT SPECIFICATIONS

PACIFIC
DIVISION SHREVEPORT, LA

MACHINE #FSPM #10

ISSUED DATE 10/7/83
REV.

PRODUCT CODE 0635-000 PRODUCT NAME GLASS BILT FIRESCREEN SHINGLES 3 TABS NO.11 GRANULES

SUPERSEDES: 9/21/81

DESCRIPTION Size 12 X 36. Cutouts 5" X ¼". 5" Exposure. Sq. Ft. Material per square 240.0 gross 237.9 Net. Shingles per square 80, 3 bundles 27,27,26. Wind Seal Dots on a line 6" up from the bottom edge of the shingle. Minimum dots 1½" long ½" wide, maximum 3" on centers.

CODE	MATERIAL PER SQUARE BASE - 240 SQ. FT.	NET	GROSS	LBS. PER 100 SQ. FT.
29610	GLASS MAT 2 Lb X 48"	4.8	5.1	2.0
14200	COATING #21½ ASPHALT	51.2	52.7	21.3
56200	FILLER 60%	76.7	79.0	32.0
56406	#11 HEADLAP GRANULES (30)	22.5	24.1	9.4
56150	#11 COLORED GRANULES (70)	52.6	56.3	21.9
59050	#36 TALC PIONEER & WINDSOR	2.0	3.4	0.8
12150	WIND SEAL ADHESIVE	0.8	0.8	----
56675	ANTI-STICK	0.2	0.2	----
		210.8	221.6	87.4
	CUTOUTS WT.	1.8		
	NET WT/SQUARE	209.0		
	FINISHING MATERIALS	1.0		
	SHIPPING WT.	210.0		

FINISHING MATERIALS: Kraft Wrap, Glued top flap and ends. Wrapper wt. -0.9/sq. Adhesive - top flap #14 asphalt .02 LB/SQ: Ends glued. H.B. Fuller No. 3950. wrapper color red on Kraft. Underwriter Label Class A Shingles wind resistant printed on wrap. Width of wrap 42¼": Repeat 35.8. Std. wt/bld 27ct.=71.4#. Min 67.1#. Max 71.4.

NOTE: BACK COATING -10#-12#/100 sq. ft. Max. % Filler - 62%

RCD OPERATING SPEED 450 PRODUCTION CREW SIZE 16 UNIT Square

COLORS: (ACORN, [redacted]E, WHITE, MOIRE BLACK; WOOD BLEND; M)GANY, [redacted]END BARK BLEND, WEATHER BL d, GRAY

BIRD 005806

DIVISION SHREVEPORT, LA.

PRODUCT CODE

PRODUCT SPECIFICATIONS
MACHINE # 10
PRODUCT NAME JET 80
#11 Granules

ISSUED DATE 12-7-81
REV.

DESCRIPTION: Size 36" Long 11 3/4" wide staggered butt, wind seal adhesive in the form of dots on a line 6 3/4" up from center line of staggered butt. Min dots 1" long 3/4" wide 9 dots per shlg. 80 shlgs. per sq. 3 Blds. 27, 27, 26. Min Wt. per Bld. 27 shlgs. 68.8# std 72.8#

CODE:	MATERIALS: Sq. - 240 Sq. Ft.	NET#	GROSS#	NET# PER 100 SQ. FT.
29610	Glass Mat	4.8	5.1	2.0
14200	Coating 21½ Asphalt	59.4	61.2	24.8
56200	Filler 55%	72.5	74.7	30.2
56406	#11 Headlap Granules 30	22.5	24.1	9.4
56150	#11 Colored Granules 70	52.6	56.3	21.9
59050	#36 Talc	2.0	3.4	0.8
12150	Wind Seal Adhesive	1.8	1.8	
56675	Anti-Stick	0.2	0.2	
	Weight/Square	215.8	226.8	89.1
	Finishing Materials	1.0		
	Shipping Wt.	216.8		

FINISHING MATERIALS: Kraft Wrap glued top flaps and ends. Wrapper wt. 0.9#/sq. Adhesive top flap #14 asphalt .02# sq. Ends glued H.B. Fuller No. 3950. Width of wrap 42¼" Repeat 35.8". Underwriters Class A wind resistant label stamped on each Bld. Wrapper color Blue & Black.

RCD OPERATING SPEED 380 PRODUCTION CREW SIZE 16 UNIT Square

COLOR(Acorn, Adoge, Brown Bld., Desert Brown, Mahogan, Moire Black, White, Wood Bld.

BIRD 005807

PACIFIC
DIVISION SHREVEPORT

PRODUCT SPECIFICATIONS

MACHINE No. 10

ISSUED DATE 2/21/84
REV.

PRODUCT CODE 1115 PRODUCT NAME WOODSCAPE - 80

SUPERSEDES: NEW

DESCRIPTION: Shingles to have a staggered butt, width 11 11/16" to 12 5/16" overall length 36½". Square feet of material 252.88 gross, 249.18 net. Shingles per square 84, 3 bundles per square. Wind Seal Adhesive in form of dots applied in a line 6 7/8" + 3/8" up from botton edge of shingle. 9 Adhesive dots, minimum size 1" length by 3/4" in width spaced at a maximum of 4" on centers. Minimum height of dots .025" above surface of shingle. Bradford Flakes applied in 2" bands down back of shingle. Bottom of Shadow Line 4¼ up from extreme lower butt edge of shingle ± 1/8" tolerance. Shadow line 2" width.

CODE	RAW MATERIALS DESCRIPTION 252.9 sq. ft.	MATERIALS PER SQUARE NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
29610	Glass Mat - 2.2 x 48	5.6#	5.9#	2.2
14200	Coating - #21 ½	65.1	67.0	25.7
56200	Filler - 58%	89.8	92.5	35.5
56406	Surfacing Granules - #11 Oiled, Glenwood, (Head Lap) (30)	23.7	25.4	9.4
56150	Surfacing Granules - #11 Oiled Colored (70)	55.4	59.3	21.9
59050	Backing - Pioneer #36 Talc	2.0	3.4	0.8
12150	Wind Seal Adhesive	0.8	0.8	
56675	Anti-Stick 20-25% Bradford Flakes	0.2	0.2	
	Total Weight	242.6#	254.5#	95.5#
	Less Cut-Outs (3.7 sq. ft.)	3.5		
	Net Weight Per Square	239.1#		
	Finishing Material	1.0		
	Shipping Weight	240.1#		

FINISHING MATERIALS: Shipping Weight minimum - 72.0 # (28 shingles) - 80.0 # Maximum
Each bundle wrapped with one wrap around printed 80# Kraft wrapper. 36" repeat, 42 ½" width, top flaps and ends glued.
Wrapper 1 color - Brown. Wrapper wight - 1.0#/square. Glue (ends only) - 0.02# 1 square.
Adhesive - No. 3950, H. B. Fuller & Co. Top sealed with Asphalt. Underwriter's label - 1 class A shingle, Wind Resistant, printed on wrapper as wrapper is glued. Must have minimum of 10#/100 sq. ft. Back Coating.

RCD OPERATING SPEED 325 PRODUCTION CREW SIZE 16 UNIT Square

COLORS: Acorn, Suntan, Dove, Mahogany

BIRD 005808

PRODUCT SPECIFICATIONS

ISSUED DATE 10-21-82
REV:

DIVISION SHREVEPORT, LA. ROOFING MACHINE#

PRODUCT CODE 11 35 001 PRODUCT NAME ARCHITECT - 80 SHINGLE

SUPERSEDES: 12-7-81

Component #1

DESCRIPTION: 12¼" x 36" - (Overall 36-7/16"). Top 5" of shingle at end off-set 7/16". No cut-outs. Exposure 5". #1 & 2 components single layer. (No Thick-Butt portion). Shingles per sq. - 80, per bundle 4 ~~20~~, 5 # bdls. per sq. Wind Seal Adhesive in form of dots applied @ 6-1/8" center from top of shingle. Dots minimum size is 1" Length x 3/4" width 9 dots per shingle spacing is maximum 4" on centers, min. ave. height of .025" above surface of shingle. Bradford Flakes anti-stick applied in 2" bands on back down center line of overlying adhesive dots. Upper 6" of each shingle surfaced with Glenwood Granules.

CODE	RAW MATERIALS DESCRIPTION	MATERIALS PER SQ. NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Ft.
29610	Glass Mat.	3.9	4.1	2.0
14200	Coating Asphalt (21½)	45.6	47.0	23.4
56200	Filler (55%)	55.5	57.2	28.5
56150	#11 Granule	61.0	65.3	31.3
59050	#36 Talc	1.6	2.8	0.8
12150	Wind Seal Adhesive	1.6	1.6	0.8
56675	Anti Stick	0.2	0.2	0.1
	TOTAL	169.4	178.2	86.9

Wrapped in plain 80# kraft wrappers size 35.8 x 42½ 0.3/bld. 27 shlgs. per bld.

RCD Operating Speed 320 Production Crew Size 20 Unit sq.

Colors: (wood, Driftwood, Ebonywood, Beechwood, Cypressw

BIRD 005809

PRODUCT SPECIFICATIONS

ISSUED DATE 10/21/82

DIVISION SHREVEPORT, LA. ROOFING MACHINE#

PRODUCT CODE 11 35 002 PRODUCT NAME ARCHITECT - 80 SHINGLE

SUPERSEDES: 12-7-81

Componenet #2

CODE	RAW MATERIALS DESCRIPTION	MATERIALS PER SQ. NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per 120.0 Sq. Ft.			
29610	Glass Mat	2.4#	2.5#	2.0#
14200	Coating Asphalt (21½)	28.1	28.9	23.4
56200	Filler (55%)	34.2	35.2	28.5
56150	#11 Granules	37.5	40.1	31.3
59050	#36 Talc	1.0	1.7	0.8
56675	Anti Stick	0.1	0.1	0.1
	TOTAL	103.3#	108.5#	86.1#

Wrapped in plain 80# kraft wrappers size 35.8 x 42½ 0.3#/BLD. 54 shlg per. BLD.

After combinding each pallet load it is wrapped with bordon stretch film no. ps-26-pb.

FINISHING: Combining of Component #1 and Component #2 WITCO Chemical Adhesive #257L — COMBINING 2.3#

Combining Labor: 5 Men/2 Line Assembly Operation

Finishing Materials: (Corrugated Wrappers, contrax strapping No. P 10435) — 5.0#

Shipping Wt. — 280.0#

NOTE: A 2% Material loss occurs during combining; Requires 102 of each component for 100 Finished Shingles.

FINISHING MATERIALS: 5/6 Corrugated wrappers - 125# Test - 36½" x 37", Printed 1 color.
Wrappers to have corrugations running 36½" length.
To be scored along 36½" Length, 4½", 8¼", 21¼", 25", to give 12½ lap of wrap on top of package.
Wrappers to have Underwriters' Class A Shingles, Wind Resistant, Label printed on each wrapper.

RCD OPERATING SPEED (Combining 70 sq./hr. - PRODUCTION CREW SIZE 13 UNIT Square

BIRD 005810

DIVISION SHREVEPORT, LA

PRODUCT CODE

PRODUCT SPECIFICATIONS
MACHINE # 10
PRODUCT NAME Architect 80 Hip & Ridge
No. 11 Granules

ISSUED DATE 1-4-82
REV.

SUPERSEDES:

DESCRIPTION: Size: 9"x12" these shlgs. cut 12x36 with a row of perforations across the shlg. at 9", 18", 27" so that when separated at perforations there will be 4-9"x12" shlgs. Shlgs. per bundle 108; sq. ft. matl. per bundle 81. Each bundle covers 45.0 lineal ft. of Hip & Ridge.

CODE:	MATERIALS:	NET#	GROSS#	NET# PER 100 SQ. FT.
29610	Glass Mat	1.6#	1.7#	2.0#
14200	Coating Asphalt	22.0	22.6	27.2
56200	Filler 55%	26.9	27.7	33.3
56150	No. 11 Granule	25.4	27.1	31.3
59050	#36 Talc	0.7	1.2	0.8
	Wt/Per 81 Sq. Ft.	76.6	80.3	94.6
	Finishing Materials	0.3		
	Shipping Wt.	76.9		

Variation in Shipping Wt. Max 76.9# Min. 72.9#
No Underwriter Label

FINISHING MATERIALS:

RCD OPERATING SPEED 700 PRODUCTION CREW SIZE 16 UNIT BLD.

COLORS: Spillover Color Beechwood, Ebony Wood, Oakwood, Cypresswood, Driftwood

BIRD 005811

DIVISION SHREVEPORT LA.

PRODUCT CODE

PRODUCT SPECIFICATIONS
MACHINE #
PRODUCT NAME Mark 80 Hip & Ridge
No. 9 Granule

ISSUED DATE 12-7-81
REV.

DESCRIPTION: Size 9"x12", these shlgs. cut 12"x36" with a row of perforations across the shlgs at 9", 18", 27", so when separated at perforations there will be 4-9"x12" shlgs. Shlgs. per Bld. - 88: Sq. Ft. matl. per Bld. 66 each Bld. Each Bld covers 36.6 lineal ft. of Hip & Ridge.

CODE:	MATERIALS: Per Bld. 66 Sq. Ft.	NET#	GROSS#	NET# PER 100 SQ. FT.
29610	Glass Mat	1.3#	2.1#	2.0#
14200	Coating Asphalt (No. 21)	18.9	19.5	28.6
56200	Filler (55%)	23.1	23.8	35.0
	No. 9 Granules	27.4	29.3	41.5
59050	#36 Talc	0.5	0.8	0.8
		71.2	75.5	107.9
	Wt. Per 66 Sq. Ft.	71.2		
	Finishing Materials	0.3		
	Shipping Wt.	71.5		
	Variation in Shipping Wt. Max	72.0#	Min.	68.0#
	No Underwriter label			

RCD OPERATING SPEED 700 PRODUCTION CREW SIZE 16 UNIT BLD.

COLORS: Allover Colors - Acorn, Rustic Brown, Sable Black, Cinnamon Brown, Slate Bld.

BIRD 005812

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA

MACHINE #FSPM #10

ISSUE DATE 9/21/81
REV.

PRODUCT CODE 0635-000

PRODUCT NAME GLASS BILT FIRESCREEN
SHINGLES 3 TABS NO. 11 GRANULES

SUPERSEDES:

DESCRIPTION: Size 12 x 36. Cutouts 5" x ¼". 5" Exposure. Sq. Ft. Material per square 240.0 gross 237.9 Net. Shingles per square 80, 3 bundles 27,27,26. Approximately one-third of the coating on the back. Wind Seal Dots on a line 6 3/4" up from the bottom edge of the shingle. Minimum dots 1" long 3/4" wide, maximum 4" on centers.

CODE	MATERIALS PER SQUARE BASE - 24.0 SQ. FT.	NET	GROSS	LBS. PER 100 SQ. FT.
29610	GAF GLASS MAT	4.8	5.1	2.0
14200	COATING #21½ ASPHALT	59.4	61.2	24.8
56200	FILLER 55%	72.5	74.7	30.2
56406	#11 HEADLAP GRANULES (30)	22.5	24.1	9.4
56150	#11 COLORED GRANULES (70)	52.6	56.3	21.9
59050	#36 TALC PIONEER & WINDSOR	2.0	2.0	0.8
12150	WIND SEAL ADHESIVE	1.8	1.8	----
56675	ANTI-STICK	0.2	0.2	----
		215.8	225.4	89.1#
	CUTOUTS WT.	1.8		
	NET WT/SQUARE	214.0#		
	FINISHING MATERIALS	1.0		
	SHIPPING WT.	215.0#		

FINISHING MATERIALS: Kraft Wrap, Glued top flap and ends. Wrapper wt. -0.9/sq. Adhesive - top flap #14 asphalt .02 LB/SQ: Ends glued. H.B. Fuller No. 3950. wrapper color red on Kraft. Underwriter Label Class A Shingles wind resistant printed on wrap. Width of wrap 42¼": Repeat 35.8. Std. wt/bld 27ct. =72.5#. Min 68.2#. Max 72.5.

RCD OPERATING SPEED 380 PRODUCTION CREW SIZE 16 UNIT Square

COLORS Acorn, Adobe, White, Moire Black, Wood Blend, Mahogany, Brown Blend

BIRD 005813

DIVISION SHREVEPORT LA.

PRODUCT CODE

PRODUCT SPECIFICATIONS
MACHINE # 10 Universal
PRODUCT NAME [redacted]-Hip & Ridge
No. 11 Granules

ISSUED DATE 12-7-81
REV.

DESCRIPTION: Size: 9"x12" these shlgs. cut 12x36 with a row of perforations across the shlg. at 9", 18", 27" so that when separated at perforations there will be 4-9"x12" shlgs. Shlgs. per bundle 108; sq. ft. matl. per bundle 81. Each bundle covers 45.0 lineal ft. of Hip & Ridge.

CODE:	MATERIALS: Per Bld. 81 Sq. Ft.	NET#	GROSS#	NET# PER 100 SQ. FT.
29610	Glass Mat	1.6#	1.7#	2.0#
14200	Coating Asphalt	20.4	21.0	25.2
56200	Filler 55%	24.9	25.6	30.7
56150	No. 11 Granule	25.3	27.1	31.2
59050	#36 Talc	0.7	1.2	0.9
	Wt/Per 81 Sq. Ft.	72.9	76.6#	90.0#
	Finishing Materials	0.3		
	Shipping Wt.	73.2		
	Variation in Shipping Wt. No Underwriter Label	Max 74.0#	Min. 68.8#	

RCD OPERATING SPEED 700 PRODUCTION CREW SIZE 16 UNIT BLD.

COLORS: Sl[illegible]lover Color Acorn, Adobe, Mohogany, Moire Black, White, Wood Bld., Granite Gray

BIRD 005814

PRODUCT SPECIFICATIONS

ISSUED DATE 8-25-75
REV:

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE 06-11=000 PRODUCT NAME #23 WIND SEAL SHINGLES

SUPERCEDES: 4-26-73

SIZE: 12" x 36", Cut-outs 5" x 3/8". Headlap - 2". Double Surfaced Portion - 6.144" x 36". Sq. Ft. Material per Sq. + Gross - 240.0; Net - 236.9 Shingles per Sq. - 80 Per Bdle. - 27, 27, 26, Net Wt. per Sq. 233.8. Net Wt. per Bdle. - 77.9. Wind Seal dots applied 6 3/4" from butt of shingle, minimum dots size 1" length x 3/4" width, 9 dots per shingle, maximum spacing 4" on center. Rubars Anti-Stick applied in 4" bands down center of back shingle.

NOTE: This Standard for use when shingles wrapped on new automatic wrapping machine.

CODE	RAW MATERIALS PER SQ. DESCRIPTION	MATERIALS PER SQUARE NET WEIGHT	GROSS WEIGHT	NET PER 100 Sq. Feet
	Base: 240 Sq. Ft.			
28800	Felt - 55# x 48"	~~27.1~~ 27.0	30.3	11.3
15400	Saturation - #14-½ - 175%	~~47.3~~ 47.2	~~48.7~~ 48.6	19.7
14200	Coating - #21-½	~~24.5~~ 24.3	~~25.2~~ 25.0	~~10.2~~ 10.4
56200	Filler - 53%	~~27.8~~ 27.5	~~28.6~~ 28.3	~~11.6~~ 11.5
56406	Surfacing - #11 Base Glenwood-Oiled	52.0	54.6	21.7
59050	Backing - Talc Pioneer 36	2.0	3.4	0.8
12150	Wind Seal Adhesive	1.8	1.8	0.8
56675	Bradford Flakes	0.2	~~0.3~~ 0.2	0.1
	TOTAL - Gross Wt. per 240 Sq. Ft.	~~182.7~~ 182.5	~~192.9~~ 192.7	~~76.2~~ 76.0
	Overlay: 122.5 Sq. Ft.			
14200	Coating - #21-½	~~10.4~~ 10.1	~~10.7~~ 10.4	~~8.5~~ 8.2
56200	Filler - 53%	~~11.6~~ 11.4	~~11.9~~ 11.7	~~9.5~~ 9.3
56150	Surfacing - Colored #11 Oiled	33.0	36.3	26.9
	TOTAL - Gross Wt. - 240 Sq. Ft.	~~237.7~~ 236.5	~~251.8~~ 250.6	~~121.1~~ 120.4
	Less Cut-outs - 3.1 Sq. Ft.	~~3.7~~ 2.5	~~4.0~~	
	Net Weight	234.0	247.8	
	Finishing Materials	1.0		
	Shipping Weight	235.0		

FINISHING MATERIALS: Variation in Shipping Wt. - Max. (27 Ct.) - 82.0#; Min. (26 Ct.) - 75.0#.
Each bundle wrapped with one Kraft wrap-around printed 80# Kraft wrapper - 35.8" repeat 42¼" width, top flap and ends glued.
Wrapper 1 color - Green on Kraft. Wrapper Wt. 1.0# per Sq. - (Glue Ends Only) - 0.015#/Sq. Adhesive - No. 3950, H. B. Fuller & Co. Top Glued with Asphalt Flux 0.1#/Sq.
Underwriters' Label - 1 - Class C Shingles Wind Resistant - 1962 Standard - Printed on as wrapper is glued.

RCD OPERATING SPEED 450 Sq./Hour PRODUCTION CREW SIZE 16 UNIT Square

COLORS: Black, Colonial Green, Dawn Mist, Desert Brown, F t Blende, Meadow Mist, Snow White, Wood, Blende, Moire Black, Gray, Shadow Blde., Brown Blde, Slate Blde, Russet Glo, Brite Red (SEE REVERSE SIDE)

BIRD 005815

FINISHING MATERIALS CONTINUED:

Directions printed on each wrapper.
Wt. of Base per 100 Sq. Ft. - 75.3#. Wt. of T. B. Per 100 Sq. Ft. 120.1#
Date of Manufacture, color printed on each side of bdle.
The unit of pick up is 14 shingles, face up, in 1st handful, 13 shingles, face up, but reversed, 2nd handful.

NOTE: Back Coating must be 3.0#/Sq. Ft. Min.
Sheet must be dry top and bottom as it is pulled out of finished looper.

BIRD 005816

PRODUCT SPECIFICATIONS

ISSUED DATE 8-25-75
REV: 1-3-77

DIVISION SHREVEPORT, LA. ROOFING MACHINE #

PRODUCT CODE 04 20 000 PRODUCT NAME BIRD UNIVERSAL 9" x 12" HIP & RIDGE SHINGLES

SUPERSEDES: 2-1-75

SIZE: 9" x 12". These shingles cut 12" x 36" with a row of perforations across the shingle at 9", 18", 27" so when separated at perforations there will be 4 - 9" x 12" shingles.
Shingles per Bundle - 108
Sq. Ft. Material per Bdle. - 81 Each Bdle. has enough material for 45 lineal feet of Hip and Ridge.

CODE	RAW MATERIALS PER BDLE DESCRIPTION (81 SQ. FT)	MATERIALS PER ROLL NET WEIGHT	MATERIALS PER ROLL GROSS WEIGHT	NET PER 100 Sq. Ft.
	Materials Per 81 Sq. Ft.			
28500	Felt - 55 x 48"	9.2	10.3	11.3
15400	Saturation - #14-½ - 175%	16.1	16.6	19.8
14200	Coating - #21-½	13.1	13.5	16.2
56200	Filler - 53%	14.7	15.1	18.1
56150	Surfacing - #11 Oiled	25.3	27.1	31.2
59050	Backing - Talc Pioneer 36	0.7	1.2	0.9
	Weight per 81 sq. ft.	79.1	83.8	97.5
	Finishing Materials	0.3		
	Shipping Weight	79.4		
	Variation in Shipping Wt. - Min. - 77# Max. - 83#			
	No Underwriters' Label. No Direction Sheet			

FINISHING MATERIALS: 1 Printed 80# kraft wrap around wrapper, printed Bird universal hip and ridge shingle. Printed black on kraft, 35.8 repeat, 42¼ width, top flap and ends glued.
Wrapper wt. - 0.33#/Bdle.
Glue, (ends only), 0,004#/Bdle., adhesive no. 3188, H.B. Fuller.
Top glued with asphalt saturation, 0.03#.Bdle. color and date on wrapper ends.

RCD OPERATING SPEED ~~475~~ 600 Bdles/Hour PRODUCTION CREW SIZE 20 UNIT Bdle

COLORS: Adobe, Brite Red, Brown Blde, Col. Green, Dawn Mist, Desert Bro., Frost Bdle., Granite Gray, Meadow Mist, Moire Black, Russet Glo, Shadow Green, Slate Blende, Snow White, Wood Blende, Acorn, Suntan, Ash, Dove

BIRD 005817

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/26/73
REV.

PRODUCT CODE PRODUCT NAME WIND SEAL SHINGLE ADHESIVE

SUPERSEDES: 5/12/66

FORMULA:	LBS./BATCH	% By Wt.
Lion Oil Shingle Adhesive	3527	88.17
Sunoco #5512 Wax	400	10.00
Pliopave L-170 (70%)	73	1.83

Mixing Temp.-Min. 250°F. Max. - 300°F.
Precaution: - Never let the temperature of the mixture go over 325° F. and try to keep below 300°F.
CODE

PROCEDURE: The Lion Oil Shingle Adhesive is pumped from storage tank to mixing tank. Maintain temperature 275° - 300° F. Add Sunoco #5512 by breaking up slabs and blend until wax is melted and mixed. With temperature between 250° F. and 290°F. add Pliopave L-170 into vortex of lightning mixer. The rate of adding the Pliopave depends on how rapidly the latex is dispersed into the asphalt. Mix for a minimum of 4 hours. A sample must be tested by the Laboratory before using.
Temperature for use on roofing machine is 280° F. to 300° F.

NOTE:

	M.P.	Pen. @ 77°	Pen. @ 115°
Lion Oil Shgle. Adhes.			
Summer	170°-175°F.	15 MM Max.	40 MM Max.
Winter	165°-170°F.	15 MM Max.	40 MM Max.
Wind Seal Adhesive			
Summer	150°-155°F.	15 MM Max.	80 MM Max.
Winter	148°-153°F	15 MM Max.	80 MM Max.

RCD Operating Speed Production Crew Size Unit

Color

BIRD 005818

PRODUCT SPECIFICATIONS

ISSUED DATE 4/26/73
REV.

DIVISION SHREVEPORT, LA.

MACHINE #

PRODUCT CODE

PRODUCT NAME SOLUTION PREPARATION OF BRADFORD SOAP FLAKES FOR ANTI-STICK FOR #23 W. S., #23 W. S. JET ARCHITECT MARK 25, ARCHITECT 70 SHINGLES

SUPERSEDES: 7/1/69

FORMULA: Bradford Soap Flakes
83 - 85% solids as received. Dissolved and diluted to approximately 16% solution by weight for summer, 12% solution for winter.

CODE

MIXTURE PREPARATION:

Add approximately 42" water into empty Anti-Sticks tanks. Turn on steam and bring water to boiling. Add Bradford Flakes at a rate of 10# per inch for final filling of tanks, - east tank is 108" deep, west tank is 84" deep. Keep solution at boiling, taking care that solution doesn't foam over top of tank. When flakes have gone into solution turn off steam and add water to fill tanks. Maintain solution temperature above 160° for running to machine.

RCD Operating Speed Production Crew Size Unit

Color

BIRD 005819

ARCHITECT 80
BIENDES

BIRD 005820

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME CYPRESSWOOD
(Arch. 80 No. 1 Comp)

SUPERSEDES: 2-25-74

CODE	HOPPER	%	SLATE
	1	35	65 Buff
		65	68 Buff
	3	25	65 Buff
		25	68 Buff
		50	41 Brown
	Spill	30	65 Buff
		45	68 Buff
		25	41 Brown

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005821

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV. ___

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE ___ PRODUCT NAME CYPRESSWOOD
(Arch 80 No. 2 Comp)

SUPERSEDES: 2-25-74

CODE	HOPPER	%	SLATE
	4	30	65 Buff
		45	68 Buff
		25	41 Brown

RCD Operating Speed ___ Production Crew Size ___ Unit ___

Colors: ___

BIRD 005822

PRODUCT SPECIFICATIONS

PACIFIC DIVISION SHREVEPORT, LA.

MACHINE

ISSUED DATE 11-6-84

REV.

PRODUCT CODE

PRODUCT NAME ARCH 80 WEATHERWOOD NO. 1 COMP.

SUPERSEDES: 3-25-83

DESCRIPTION:

CODE	HOPPER	%	SLATE
	1	60%	76 Gray
		30%	71 Gray
		5%	41 Brown
		5%	68 Buff
	3	80%	71 Gray
		10%	76 Gray
		10%	41 Brown
	Spill	55%	71 Gray
		35%	76 Gray
		5%	68 Buff
		5%	41 Brown

FINISHING MATERIALS:

RCD OPERATING SPEED PRODUCTION CREW SIZE UNIT

COLORS:

BIRD 005823

PACIFIC
DIVISION SHREVEPORT, LA.

PRODUCT SPECIFICATIONS

MACHINE

ISSUED DATE 11-6-84
REV.

PRODUCT CODE

PRODUCT NAME ARCH 80 WEATHERWOOD NO. 2 COMP.

SUPERSEDES: 3-25-83

DESCRIPTION:

CODE	HOPPER	%	SLATE
	4	55%	71 Gray
		35%	76 Gray
		5%	68 Buff
		5%	41 Brown

FINISHING MATERIALS:

RCD OPERATING SPEED PRODUCTION CREW SIZE UNIT

COLORS:

BIRD 005824

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME OAKWOOD
(Arch 80 No. 1 Comp)

SUPERSEDES: 4-23-73

CODE	HOPPER	%	SLATE
	1	70	46 Tan
		20	41 Brown
		10	Glenwood
	3	25	46 Tan
		60	41 Brown
		15	Glenwood
	Spill	45	46 Tan
		40	41 Brown
		15	Glenwood

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005825

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME OAKWOOD
(Arch 80 No. 2 Comp)

SUPERSEDES: 4-23-73

CODE	HOPPER	%	SLATE
	4	45	46 Tan
		40	41 Brown
		15	Glenwood

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005826

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME EBONYWOOD
(ARCH 80 No. 1 Comp)

SUPERSEDES: 3-29-79

CODE	HOPPER	%	SLATE
	1	60	55 Gray
		30	51 Black
		10	Glenwood
	3	50	55 Gray
		50	51 Black
	Spill	55	55 Gray
		40	51 Black
		5	Glenwood

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005827

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME EBONYWOOD
(ARCH 80 No. 2 Comp)

ISSUED DATE 10-31-83
REV. _____

SUPERSEDES: 3-29-79

CODE	HOPPER	%	SLATE
	4	55	55 Gray
		40	51 Black
		5	Glenwood

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005828

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME BEECHWOOD
(Arch 80 No. 1 Comp)

SUPERSEDES: 12-7-81

CODE	HOPPER	%	SLATE
	1	45	41 Brown
		25	55 Gray
		30	12 Olive
	3	55	55 Gray
		45	76 Gray
	Spill	20	41 Brown
		40	55 Gray
		15	12 Olive
		25	76 Gray

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005829

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME BEECHWOOD
(No. 2 Comp)

SUPERSEDES: 12-7-81

CODE	HOPPER	%	SLATE
	4	55	76 Gray
		25	55 Gray
		10	41 Brown
		10	12 Olive

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005830

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME DRIFTWOOD
(Arch 80 No. 1 Comp)

SUPERSEDES: 2-25-74

CODE	HOPPER	%	SLATE
	1	10	65 Buff
		20	76 Gray
		70	12 Olive
	3	20	Glenwood
		25	41 Brown
		55	12 Olive
	Spill	5	65 Buff
		10	76 Gray
		65	12 Olive
		10	Glenwood
		10	41 Brown

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005831

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME DRIFTWOOD
(Arch 80 No. 2 Comp)

ISSUED DATE 10-31-83
REV. _____

SUPERSEDES: 2-25-74

CODE	HOPPER	%	SLATE
	4	5	65 Buff
		10	76 Gray
		65	12 Olive
		10	Glenwood
		10	41 Brown

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005832

WOODSCAPE 80
BLENDES

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE PRODUCT NAME ACORN (WOODSCAPE)

SUPERSEDES: 5-25-76

CODE	HOPPER	%	SLATE
	1	10	65 Buff
		20	76 Gray
		70	12 Olive
	3	20	Glenwood
		25	41 Brown
		55	12 Olive
	Spill	5	65 Buff
		10	76 Gray
		65	12 Olive
		10	Glenwood
		10	41 Brown

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed Production Crew Size Unit

Colors:

BIRD 005834

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME DOVE (WOODSCAPE)

SUPERSEDES: 3-29-79

CODE	HOPPER	%	SLATE
	1	100	3M 55 Gray
	3	70	3M 55 Gray
		20	3M 51 Black
		10	Glenwood
	Spill	85	3M 55 Gray
		10	3M 51 Black
		5	Glenwood
	Shadow Line	100%	3M 51 Black

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005835

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME SUNTAN (WOODSCAPE)

SUPERSEDES: 3-29-79

CODE	HOPPER	%	SLATE
	1	35	65 Buff
		65	68 Buff
	3	25	65 Buff
		25	68 Buff
		50	41 Brown
	Spill	30	65 Buff
		45	68 Buff
		25	41 Brown

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005836

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE PRODUCT NAME MAHOGANY (WOODSCAPE)

SUPERSEDES: 6-2-75

CODE	HOPPER	%	SLATE
	1	70	46 Tan
		20	41 Brown
		10	Glenwood
	3	25	46 Tan
		60	41 Brown
		15	Glenwood
	Spill	45	46 Tan
		40	41 Brown
		15	Glenwood

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed Production Crew Size Unit

Colors:

BIRD 005837

FIRESCREEN
BLENDES

JET 80
BLENDES

BIRD 005839

WIND SEAL
BLENDES

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME ACORN (FIRESCREEN)

SUPERSEDES: 5-25-76

CODE	HOPPER	%	SLATE
	1	10	65 Buff
		20	76 Gray
		70	12 Olive
	3	20	Glenwood
		25	41 Brown
		55	12 Olive
	Spill	5	65 Buff
		10	76 Gray
		65	12 Olive
		10	Glenwood
		10	41 Brown

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005841

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME MAHOGANY
(FIRESCREEN)
(JET-80)
(WIND SEAL)

SUPERSEDES: 6-2-75

CODE	HOPPER	%	SLATE
	1	70	46 Tan
		20	41 Brown
		10	Glenwood
	3	25	46 Tan
		60	41 Brown
		15	Glenwood
	Spill	45	46 Tan
		40	41 Brown
		15	Glenwood

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005842

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME BARK BLD
(FIRESCREEN)
(WIND SEAL)

SUPERSEDES: 3-7-83

CODE	HOPPER	%	SLATE
	1	50	41 Brown
		30	12 Olive
		20	55 Gray
	3	40	12 Olive
		10	41 Brown
		30	46 Tan
		20	55 Gray
	Spill	30	41 Brown
		35	12 Olive
		15	46 Tan
		20	55 Gray

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005843

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME MOIRE BLACK
(FIRESCREEN)
(JET-80)
(WIND SEAL)

SUPERSEDES: 4-23-73

CODE	HOPPER	%	SLATE
	1	80	55 Gray
		20	51 Black
	3	75	55 Gray
		75	51 Black
	Spill	50.0	55 Gray
		50.0	51 Black

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005844

PACIFIC
DIVISION SHREVEPORT, LA

PRODUCT SPECIFICATIONS

MACHINE
SHADE MIXTURE - # 11 GRANULES

ISSUED DATE 11-6-84
REV.

PRODUCT CODE
PRODUCT NAME WEATHER BLEND FOR F/S & W/S

SUPERSEDES: 3-25-83

DESCRIPTION:

CODE	HOOPER NO.	%	KIND OF SLATE
	1	60%	76 Gray
		30%	71 Gray
		5%	41 Brown
		5%	68 Buff
	2	80%	71 Gray
		10%	76 Gray
		10%	41 Brown
	Spill	55%	71 Gray
		35%	76 Gray
		5%	68 Buff
		5%	41 Brown

Use for H+R

FINISHING MATERIALS:

RCD OPERATING SPEED PRODUCTION CREW SIZE UNIT

COLORS:

BIRD 005845

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME WOOD BLD
(FIRESCREEN)
(JET-80)
(WIND SEAL)

SUPERSEDES: 4-23-73

CODE	HOPPER	%	SLATE
	1	35	65 Buff
		65	68 Buff
	3	25	65 Buff
		25	68 Buff
		50	41 Brown
	Spill	30	65 Buff
		45	68 Buff
		25	41 Brown

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005846

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME GRANITE GRAY (Jet 80)

SUPERSEDES: 4-23-73

CODE	HOPPER	%	SLATE
	1	90	55 Gray
		10	93 White
	3	20	93 White
		40	55 Gray
		40	76 Gray
	Spill	15	93 White
		65	55 Gray
		20	76 Gray

CAM Settings:

Hopper No. 1 Starts 207° Stops 260°
Hopper No. 3 Starts 0° Stops 74°

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005847

9"X12" HWP
BLENDES

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME BARK BLD (Universal H&R)
(FIRESCREEN)
(WIND SEAL)

ISSUED DATE 10-31-83
REV. _____

SUPERSEDES: 3-7-83

CODE	HOPPER	%	SLATE
	4	30	3M 41 Brown
		35	3M 12 Olive
		15	3M 46 Tan
		20	3M 55 Gray

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005849

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME BEECHWOOD (ARCH 80 H&R)

SUPERSEDES: 12-7-81

CODE	HOPPER	%	SLATE
	4	55	3M 76 Gray
		25	3M 55 Gray
		10	3M 41 Brown
		10	3M 12 Olive

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005850

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME WEATHER BLEND (Universal H&R)
(ARCH 80 WEATHERWOOD)
(FIRESCREEN)
(WIND SEAL)

SUPERSEDES: 3-25-83

CODE	HOPPER	%	SLATE
	4	65	GAF 801 Accent Tone
		20	3M 76 Gray
		10	3M 41 Brown
		5	3M 68 Buff

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005851

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA. BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME GRANITE GRAY (Universal H&R) (JET-80)

SUPERSEDES: 12-1-74

CODE	HOPPER	%	SLATE
	4	15	3M 93 White
		65	3M 55 Gray
		20	3M 76 Gray

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005852

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME WOOD BLD (Universal H&R)
(ARCH 80 CYPRESSWOOD)
(WOODSCAPE SUNTAN)

SUPERSEDES: 12-1-74

CODE	HOPPER	%	SLATE
	4	30	3M 65 Buff
		45	3M 68 Buff
		25	3M 41 Brown

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005853

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE _____ PRODUCT NAME ACORN (Universal H&R)
DRIFTWOOD (Arch 80 H&R)

SUPERSEDES: 8-4-75

CODE	HOPPER	%	SLATE
	4	5	3M 65 Buff
		10	3M 76 Gray
		65	3M 12 Olive
		10	3M 41 Brown
		10	Clearwood

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005854

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83

REV.

PRODUCT CODE _____ PRODUCT NAME GRAY (Universal H&R)
(FIRESCREEN)
(WOODSCAPE - DOVE GRAY)

SUPERSEDES: 4-23-73

CODE	HOPPER	%	SLATE
	4	100	3M S5 Gray

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005855

PRODUCT SPECIFICATIONS

ISSUED DATE 10-31-83
REV.

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

PRODUCT CODE _____ PRODUCT NAME Universal H&R MAHOGANY (FIRESCREEN/WIND SEAL) (ARCH 80 - OAKWOOD) (WOODSCAPE)

SUPERSEDES: 6-2-75

CODE	HOPPER	%	SLATE
	4	45	3M 46 Tan
		40	3M 41 Brown
		15	Glenwood

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005856

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA BLENDES FOR MACHINE #10

ISSUED DATE 10-31-83
REV.

PRODUCT CODE PRODUCT NAME MOIRE BLACK (Universal H&R)
(ARCH 80 EBONYWOOD)
(FIRESCREEN)
(WIND SEALS)

SUPERSEDES: 3-29-79

CODE	HOPPER	%	SLATE
	4	50	55 Gray
		50	51 Black

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005857

Paul Goad's
Blewers

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

MACHINE #

ISSUED DATE 4/24/73

REV.

PRODUCT CODE

PRODUCT NAME SHADE MIXTURE - #11 GRANULES BRITE RED - ALL SHINGLES AND MINERAL SURFACED ROLL GOODS

SUPERSEDES: 5/1/63

CODE

LR #22 RED ------- 100%

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005859

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA.

MACHINE #

ISSUED DATE 4/24/73

REV.

PRODUCT CODE

PRODUCT NAME SHADE MIXTURE - #11 GRANULES BROWN - ALL SHINGLES AND ALL MINERAL SURFACED ROLL GOODS

SUPERSEDES: 5/1/63

CODE

LR #41 Brown ---------- 100%

RCD Operating Speed

Production Crew Size

Unit

Color:

BIRD 005860

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/24/73
REV.

PRODUCT CODE PRODUCT NAME SHADE MIXTURE - #11 GRANULES
COLONIAL GREEN - ALL SHINGLES AND MINERAL SURFACED ROLL GOODS

SUPERSEDES: 5/10/66

CODE

A 171 Green - 100%

RCD Operating Speed Production Crew Size Unit

Col( ):

BIRD 005861

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73

REV. 1/22/74

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE PRODUCT NAME SHADE MIXTURE - #11 GRANULES
WHITE - NEPONSET CAP SHEET

SUPERSEDES: 2/1/67

CODE

A720 ~~A701~~ White ---------- 100%

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005862

ROLL SIDINGS
BLENDES

BIRD 005863

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV.
SUPERSEDES: 2/5/55

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE PRODUCT NAME SHADE MIXTURE - #11 GRANULES
PLANTATION GREEN - ROLL SHINGLE SIDING

CODE	HOPPER NO.	%	KIND OF SLATE
	4	60	LR #56 Silver Grey
		40	LR #19 Green

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005864

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV.

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE PRODUCT NAME SHADE MIXTURE - #11 GRANULES GRAY FOR ROLL SHINGLE SIDING

SUPERSEDES: 2/28/55

CODE

100% 3M #56 Silver Gray.

RCD Operating Speed Production Crew Size Unit

Coil #:

BIRD 005865

ASPHALT

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/23/73
REV.

PRODUCT CODE 14800 PRODUCT NAME ASPHALT FLUX

The Bayou State Oil Corp. - Shreveport, La.

SUPERSEDES: 6/29/54

CODE

M. P. (B & R)	- 95 - 115°F.
Minimum Penetration @ 77°	- 175 mm.
Minimum Flash	- 590° F. (c.o.c.)
Solubility in CS_2	- 99.5% Min.
Solubility in CCl_4	- 99.5% Min.

This flux shall not contain Caustic Lube Residue. It shall be homogenious, free from water, and shall not foam when heated to 400°F.

Note: This flux is not to be used by itself to blow coating asphalt. It should not be present in greater quantities than 33-1/3% of the total flux in the flux tank.

RCD Operating Speed Production Crew Size Unit

Colors:

BIRD 005867

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/23/73
REV.

PRODUCT CODE 14800 PRODUCT NAME ASPHALT FLUX

American Liberty Asphalt Corp. - Mt. Pleasant, Texas

SUPERSEDES: 6/29/54

CODE

M. P. (B. & R.)	-	95 - 105°F
Penetration @ 77°	-	200 mm. min.
Minimum Flash	-	550° F. (c.o.c.)
Solubility in CS_2	-	99.5% Min.
Solubility in CCl_4	-	99.5% Min.

This flux shall not contain Caustic Lube Residue. It shall be homogenious, free from water, and shall not foam when heated to 400°F.

Asphalt blown from this flux to coating specification must conform to the requirements set by the Laboratory. The following is the most desirable analysis.

M. P.	-	218° - 222°F. (R & B)
Pen. @ 77°	-	13 - 16 mm.
Duct. @ 77°	-	2 Cm. plus
Stain at 144°F.		Satisfactory

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005868

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/23/73
REV.

PRODUCT CODE 14800 PRODUCT NAME ASPHALT FLUX

The Lion Oil Corp. - El Dorado, Arkansas
The Henry H. Cross Co. - El Dorado, Arkansas

SUPERSEDES: 6/29/54

CODE

M. P. (B.R.)	-	80 - 90°F.
Minimum Penetration @ 77°	-	200 mm.
Minimum Flash	-	590°F. (c.o.c.)
Solubility in CS_2	-	99.5% Min.
Solubility in CCl_4	-	99.5% Min.

This flux shall not contain Caustic Lube Residue. It shall be homogenious, free from water, and shall not foam when heated to 400°F.

Asphalt blown from this flux to coating specifications must conform to the requirements set by the Laboratory. The following is the most desirable analysis.

M. P.	-	220° - 230°F. (B & R)
Pen. at 77°	-	13 - 16 mm.
Duct. at 77°	-	2 cm. plus
Stain at 144°F	-	Satisfactory

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005869

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE # 3

ISSUED DATE 4/23/73
REV.

PRODUCT CODE 15375 PRODUCT NAME ASPHALT FLUX - FSPM-3

SUPERSEDES: 8/1/58

USE: Saturation for all products made on FSPM-3.

FORMULA: Purchased from approved sources by Berry Asphalt.

CODE	SPECIFICATIONS
	Melt Point - °F. Approx. 100° - 115°
	Penetration @ 77° 150 MM Minimum

Note: This material is used as received with no processing involved except for heating. There is an estimated 1/2% shrink due to circulating.

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005870

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE # 1

ISSUED DATE 4/20/73.
REV.

PRODUCT CODE #15400 PRODUCT NAME NO. 14 ASPHALT

SUPERSEDES: 3/1/61

USE: Saturation for all Products on FSPM-1, Cements and Roof Coating for FSC. Approx. 140° M. P. Processed Asphalt.

FORMULA: Purchased from approved sources by Berry Asphalt, and also blown in FSQ Vertical Still from Flux storage tank.

CODE	Specifications	Soft	Std.	Hard
	Melt Point - °F	135°	138°	143°
	Penetration @ 77°	55	45	40
	Process:			
	Charged -	146,311#		
	Yield -	140,459#		
	Shrink -	4.0%		
	Cycle of 3¼ hours			
	Charging -	3/4 Hr.		
	Blowing -	1-3/4 Hr.		
	Storage -	3/4 Hr.		
	Lbs. per gallon -	8.4		

Note: If material is purchased it is ready to use as saturation (MP 135° - 145°) and costs $1.00/ton more than Flux Oil that must be processed.

RCD Operating Speed Production Crew Size Unit

Costs:

BIRD 005871

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/20/73
REV.

PRODUCT CODE 15400 - C PRODUCT NAME BIRD #17½ ASPHALT

SUPERSEDES: 3/1/61

USE: FSC - Reflecto Coat, Buca

FORMULA: Blown from approx. equal parts of Hosston, Talco, and Lion Flux. The percentage of Hosston flux not to be over 33⅓%. Blown in FSQ Vertical Still.

CODE	Specification	Soft	Std.	Hard
	Melt Point- °F	170°	175°	180°
	Penetration 77°F	23	21	19

Process

Charged -	146,311#
Yield -	140,459#
Shrink -	4.0%

Cycle of 4½ Hours composed of

Charging -	3/4 Hour
Blowing -	3 Hour
Storage -	3/4 Hour

Lbs. per gallon - 8.4

RCD Operating Speed Production Crew Size Unit

Comments:

BIRD 005872

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/23/73
REV.

PRODUCT CODE 11200 - C PRODUCT NAME NO 21 ASPHALT

SUPERSEDES: 3/1/61

USE: Quick Set Lap Cement, Asphalt Protective Coating - FSC. Approx. 210° M. P. Processed Asphalt.

FORMULA: Blown from approx. equal parts of Hosston, Talco and Lion fluxes. The percentage of Hosston flux not to be more than 33-1/3%. Blown in FSQ Vertical Still.

CODE	Specifications	Soft	Std.	Hard
	Melt Point - °F	205	210	215
	Penetration @ 77° -	19	17	15
	Process			
	Charged -	146,311#		
	Yield -	140,459#		
	Shrink -	4.0%		
	Cycle of 5¼ Hours composed of			
	Charging -	3/4 Hour		
	Blowing -	3-3/4 Hour		
	Storage -	3/4 Hour		
	Lbs. per gallon @ 60° - 8.4			

RCD Operating Speed Production Crew Size Unit

Comments:

BIRD 005873

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #1

ISSUED DATE 4/20/73
REV.

PRODUCT CODE #14200 PRODUCT NAME NO. 21-1/2 ASPHALT

SUPERSEDES:

USE: Asphalt Coating for all FSPM-1 shingle products.

FORMULA: Blown from approx. equal parts of Hosston, Talco, and Lion Flux. The percentage of Hosston Flux not to be over 33-1/3%. Blown in FSQ Vertical Stills.

CODE	Specifications	Soft	Std.	Hard
	Melt Point - °F.	218°	220°	222°
	Penetration @77° -	16	14-1/2	13 Min.
	Process:			
	Charged -		146,311#	
	Yield -		140.459#	
	Cycle of 6-1/4 hrs. composed of charging-		3/4 Hour	
	Blowing -		4-3/4 Hour	
	Storage -		3/4 Hour	
	Shrink -		4.0%	
	Lbs. per gallon @ 60° -		8.4	

RCD Operating Speed Production Crew Size Unit

Comments:

BIRD 005874

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/23/73
REV.

PRODUCT CODE PRODUCT NAME BIRD DEAD LEVEL BITUMEN

SUPERSEDES: 6/28/54

USE: For use on applications of Asphalt Perforated Felt in Built-Up on "Dead Level Roofs".

SOURCE: Purchased for Bird & Son from any Laboratory approved refinery.

CODE	Specifications:	
	Softening Point (B & R)	135° - 150°F.
	Pen. @ 32° F.	10 Min.
	Pen. @ 77° F.	30 - 45
	Pen. @ 115°F.	80 Min.
	Ductility @ 77° F.	10 Min.
	Flash Point	475° F. Min.
	Solubility in CS_2%	99.5 Min.
	Solubility in CCl_4%	99.5 Min.
	Volatile Loss, 5 hrs. @ 325°F.	0.5 Max.
	Residue, % of Original Penetration after Volatile Loss Heating	60% Min.

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005875

CEMENTS
+
COATINGS

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV. 1-4-77

DIVISION SHREVEPORT, LA. MACHINE # PRIMER

PRODUCT CODE 22 30000 PRODUCT NAME (TO MEET GOV'T SPEC. SS-A-701)

SUPERSEDES: 8/1/60

CODE	FORMULA	% BY WT.	LBS.	GALLONS
15400	#13-1/2 Asphalt	40	3105	427
36600	Naphtha-Stoddard	60	4658	738

Yield - 1153 Gallons 7685 # 6.7 #/gal.
Loss - 1%

Containers: 36.5#
5 Gallon drums plain, 29 Ga. - Labels pasted on. Wt. - 38#.
30 Gallon drums plain - Labels pasted on. Wt. - 251#. (Reworked)
396#

Min. Flash Point - 110°F.

PROCESS: #13-1/2 run into mixer. Turn on water in cooling jacket. When temperature is below 200°F., add Naphtha.

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Colors: _____

BIRD 005877

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE # BUCA

PRODUCT CODE 32 12 000 PRODUCT NAME (BUILT-UP COLD APPLICATION ADHESIVE)

ISSUED DATE 4/24/73
REV.
SUPERSEDES: 4/28/64

CODE	FORMULA	% BY WT.	LBS.	GALLONS
15400	#17-1/2 Asphalt (175 - 180° S. P.)	50.6	4048	540
13650	Asbestos - 7R	12.0	960	
36600	Naphtha - Stoddard	37.4	2992	459

Yield - 7840# ~~8.1#~~ 7.4 per gallon
Loss - 2%
Consistency - Schutte - 3/4" Orifice - 30 Sec. @ 86°

CONTAINERS: 5 Gal. Cans - Labels Pasted on.
Shipping Wt. ~~44#~~ 40.0 #

Units per Crew Hour - 40
Man Hours per unit - 0.050

PROCESS: Run #17-1/2 into Mixer. Turn on water in cooling jacket. After temp. is below 300° F. add Naphtha. Allow this to mix completely and then add Asbestos. Fill containers after temperature is below 160°F.

RCD Operating Speed Production Crew Size Unit

Cold:

BIRD 005878

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE 32 05 000 PRODUCT NAME LAP CEMENT

ISSUED DATE 4/24/73
REV.

SUPERSEDES: 8/1/60

CODE	FORMULA	% By Wt.	Lbs.	Gallons
15400	#13-1/2 Asphalt	65.0	5223	697
39250	Kerosene	22.0	1768	271
36600	Naphtha-Stoddard	7.5	603	96
13650	Asbestos 7R	5.5	442	
	Yield - 7956#	8.1 per gallon		
	Loss - 1%			

Consistency - Schutte - 3/4" Orifice - 6 Sec. @ 86°F.

Containers:

1 Pt. Cans

1 Gal. Cans - Plain - Labels pasted on. Packed 6 to case, no filler pieces per case. Wt.-60#

5 Gal. drums - Black - 29 Ga., labels pasted on. Shipping Wt. - 42.0#.

30 Gal. Drums - Black - Labels pasted on. Shipping Wt. - 265#. (Reworked drums)

52 Gal. Drums - Black - Labels pasted on. Shipping Wt. - 475#. (Reworked drums)

PROCESS: Run #13-1/2 into mixer. Turn on water in cooling jacket. When temperature is below 300°F. add Kerosene and Asbestos. When temperature is below 200°F., add Naphtha. Fill container when temperature is below 160°.

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005879

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/24/73
REV. 1-4-77

PRODUCT CODE 32 08 000 PRODUCT NAME QUICK SETTING LAP CEMENT

SUPERSEDES: 8/1/60

CODE	FORMULA	% By Wt.	LB.	Gallons
14200	Asphalt #21	42.0	3150	420
39250	Kerosene	12.0	900	137
36600	Naptha (Stoddard)	12.0	900	148
13650	Asbestos (7R)	5.0	375	
56200	Glenwood Filler	29.0	2175	

Yield - 7425#, ~~825~~ 827 Gal. - ~~9.0~~ #/Gal.
Loss - 1%
Consistency - Schutte @ 77° - 6-12 Sec.
Flash Point - 110° F., Minimum - C.O.C.

Containers:
1 Pt. Caulking cartridge packed 24 to box - 24.0#
1 Qt., Metal, lithographed, packed 12 to case, no filler pieces - 32#.
1/2 Gal., Metal, lithographed, packed 6 to case, no filler pieces - 35#
1 Gal., Metal, lithographed, packed 6 to case, no filler pieces - ~~62#~~ 60#
5 Gal., Metal, lithographed, 29 Ga., Shipping Wt. - ~~51.0#~~ 46.5#

PROCESS: Run #21 into mixer, turn on water in water jacket, add Filler and Asbestos. When temperature is below 300° F., add Kerosene. When temperature is below 200° F., add Naptha. Each batch must be approved by Laboratory.

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Coil #: _____

BIRD 005880

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/24/73
REV. 1-4-77

PRODUCT CODE 32 10 000 PRODUCT NAME SPECIAL FLASHING CEMENT

SUPERSEDES: 9/1/67

CODE	FORMULA	% By Wt.	Lbs.	Gallons
15400	#13-1/2 Asphalt	54.0	3828	524
39250	Kerosene	14.0	993	153
38000	VM & P Naphtha	14.0	993	159
13450	Asbestos 6D	9.0	638	
13650	Asbestos 7R	9.0	638	

Yield - 7019# ~~9#~~ 7.9 per Gallon
Loss - 1%
Consistency @ 77° Schutte Min. - 5 sec. Max. - 10 Sec.

Containers:

5 Gal. Drums - Metal, Lithographed, White on Black, 29 ga. - Shipping Wt. - ~~49#~~ 42.5
30 Gal. Drums - Plain, Black, Labels pasted on - Shipping Wt. - 295# (Reworked Drums)
52 Gal. Drums - Plain, Black, Labels pasted on - Shipping Wt. - ~~525#~~ 459# (Reworked Drums)
1 Gal., plain metal cans, packed 6/case, no filler pieces, 56.0# (Special Order only)

PROCESS: #13-1/2 pumped into mixer, when temperature is below 325° F., add Kerosene, when thoroughly mixed and temperature is below 200° F., add Naphtha, and then the Asbestos.

RCD Operating Speed Production Crew Size Unit

Col( ):

BIRD 005881

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

ISSUED DATE 4/24/73
REV. 1-4-77

PRODUCT CODE 3003000 PRODUCT NAME ASPHALT PROTECTIVE COATING

SUPERSEDES: 8/1/60

CODE	FORMULA	% By Wt.	Lbs.	Gallons
14200	#21 Asphalt	49.6	3945	526
36600	Naphtha (Stoddard)	50.4	4013	639

Yield - 1153 Gallons 7878# 2.9# gal.
Loss - 1%

Consistency - Schutte - 3/4" Orifice - 1-1/2 - 1-2/3 Sec. @ 62°F.

Containers:
1 Gal. Metal, plain, labels pasted on. Packed 6 to case, no filler pieces per case - 46#.
5 Gal. Metal, black, 29 ga., labels pasted on. Shipping Wt. ~~40.5#~~ 37.5#
30 Gal. Metal, black, labels pasted on. Shipping Wt. - 260#. (Reworked drums)
52 Gal. Metal, black, labels pasted on. Shipping Wt. - ~~451.0#~~ 407# (Reworked drums)

PROCESS: Run #21 Asphalt into mixer. Turn on water in cooling jacket. When temperature is below 225°F, add Naphtha. Each batch must be tested and approved by the laboratory.

RCD Operating Speed Production Crew Size Unit

Cold:

BIRD 005882

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV. 1-4-77

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE 30 05 000 PRODUCT NAME BIRD REFLECTO-COAT ALUMINUM ROOF COATING

SUPERSEDES: 12/27/63

CODE	FORMULA	% BY WT.	LBS.	GALLONS
	175			
14200	Asphalt - ~~#21~~	28	1120	149
36600	Naphtha-Stoddard	15	600	92
38000	Naphtha - VM & P	23	920	147
13750	Asbestos - PF-1	14	560	
12750	Al Paste - Alcoa #231	20	800	
		7.9#		
	Yield - 3840# 427 Gal. - ~~8.0#~~ Gal.			
	Loss - 4%			
	Consistency - Schutte @ 77° - 10 Sec.			
	8 to 12 Sec.			

Containers:
1 Gallon, plain, labels pasted on.
Packed 6 - 1 gallon cans per carton. Wt. ~~58#~~ 55#
5 Gallon, plain, black - labels pasted on. Shipping Wt. ~~47#~~ 42.5#

175

PROCESS: Run ~~#21~~ into mixer. Turn water on in cooling jacket. When temperature is below 250°F., add Stoddard Naphtha. After adding Stoddard completely add VM & P. After addition of VM & P add asbestos fibre. After fibre has been added and mixed, add Aluminum paste - breaking it up as it is added. Mix for 30 minutes after aluminum has been added and then obtain samples for testing.

RCD Operating Speed Production Crew Size Unit

Color:

BIRD 005883

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE 32 07 000 PRODUCT NAME PLASTIC CEMENT

ISSUED DATE 4/24/73
REV.

SUPERSEDES: 8/1/71

CODE	FORMULA	% BY WT.	LBS.	GALLONS
15400	#13-1/2 Asphalt	51.0	4629	607
13650	7R Asbestos	14.0	1271	
59150	Ga. Talc	6.5	590	
56200	Glenwood Filler	6.5	590	
39250	Kerosene	3.5	318	26
36600	Stoddard Naphtha	18.5	1683	268
		~~9082#~~		
	Yield - 8990# Wt. per Gal. - ~~8.93#~~			
	Loss - 1%			
	Consistency - Schutte @ 77°F. - 4-6 sec.			

Containers:

1 pt. lithographed cans, packed 12 to case, with no filler pieces - 17.75#.
1 qt. lithographed cans, packed 12 to case, no filler pieces - 38#.
1/2 gallon lithographed cans, packed 6 to case, no filler pieces - ~~34.75#~~ 32.5#
1 gallon lithographed cans, packed 6 to case, no filler pieces - ~~63.6#~~ 62.5#
5 gallon, lithographed, 29 Ga., ~~56.0#~~ 49.0#
30 gallon, metal, black, labels pasted on. (Reworked drums) Shipping Wt. - 335#.
52 gallon, metal, black, labels pasted on. (Reworked drums) Shipping Wt. ~~585#~~ 526#

PROCESS: Run #13-1/2 asphalt into mixing tank. Turn on water in cooling jacket. When temp. is below 300°F., add Talc, Filler, asbestos, Kerosene and then Naphtha. Mix for a minimum of 10 minutes after all material has been added before catching sample. Each batch must be approved by laboratory.

RCD Operating Speed Production Crew Size Unit

Color

BIRD 005884

PRODUCT SPECIFICATIONS

ISSUED DATE 4/24/73
REV. 1-4-77

DIVISION SHREVEPORT, LA.

MACHINE #

PRODUCT CODE 30 02 000

PRODUCT NAME ROOF COATING (FIBERED)

SUPERSEDES: 8/1/71

CODE	FORMULA	% BY WT.	LBS.	GALLONS
15400	#13-1/2 Asphalt	50.0	3875	508
13650	Asbestos - 7R	12.0	930	
36600	Stoddard Naphtha 7.6#	38.0	2945	470

Yield - ~~7516#~~ 7672 - ~~929~~ 948 Gal. Shrink - 1%

Consistency @ 77°F. - 15 to 25 seconds.

Containers:

1 gallon, metal, lithographed, packed 6 to case, no filler pieces, ~~51.25#~~. 53#

5 gallon, metal, lithographed, 29 Ga. - ~~42.0#~~ 44.0#

30 gallon, metal, black, (Reworked Drums), labels pasted on. Shipping Wt. - 265.0#.

52 gallon, metal, black, (Reworked Drums), Labels pasted on. Shipping Wt. - ~~470.0#~~ 443#

Revised 12/18/73

PROCESS: Run Asphalt into mixer. Turn on water in cooling jacket. Add Asbestos. When temp. is below 200°F. add Naphtha. Each batch must be approved by laboratory.

RCD Operating Speed _____ Production Crew Size _____ Unit _____

Col[illegible]s: _____

BIRD 005885

GLENWOOD
GRANULES

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE PRODUCT NAME FG GRANULES - #11 STANDARD RECOVERY

ISSUED DATE 4/26/73
REV.
SUPERSEDES: 1/1/71

CODE	MATERIAL	STD. PER TON	%
	Shale	3835.0	99.57
	Slate Oil	16.5	.43
	Total Gross	3851.5	100.00
	Slate Recovery	2000.0	52.15
	Filler and Fines Recovery	633.0	16.51
	Waste	1202.0	31.34
	Total Recovery (Granules, Filler, Fines)		68.66

RCD Operating Speed 25.0 Tons/Hour Production Crew Size Unit

Color

BIRD 005887

PRODUCT SPECIFICATIONS

DIVISION SHREVEPORT, LA. MACHINE #

PRODUCT CODE PRODUCT NAME #11 GLENWOOD BLACK GRANULES

ISSUED DATE 4/26/73
REV.

SUPERSEDES: 1/1/69

CODE	TYLER STANDARD SCREENS	PER CENT Min.	Std.	Max.
	Retained on #8 Mesh Screen	0.0	0.0	0.0
	Retained on #10 Mesh Screen	1.0	3.5	7.0
	Retained on #14 Mesh Screen	30.0	35.0	40.0
	Retained on #20 Mesh Screen	30.0	35.0	40.0
	Retained on #28 Mesh Screen	15.0	19.0	25.0
	Retained on #35 Mesh Screen	2.0	4.5	7.0
	Pass #35 Mesh Screen	0.0	1.0	2.0

These granules shall be uniform in shipment. No shipment shall show a wide variation from the above specification.

% Moisture - - - 0.5% Max.

To be uniformly oiled with slate oil 18# per ton of granules.

RCD Operating Speed Production Crew Size Unit

Color

BIRD 005888