

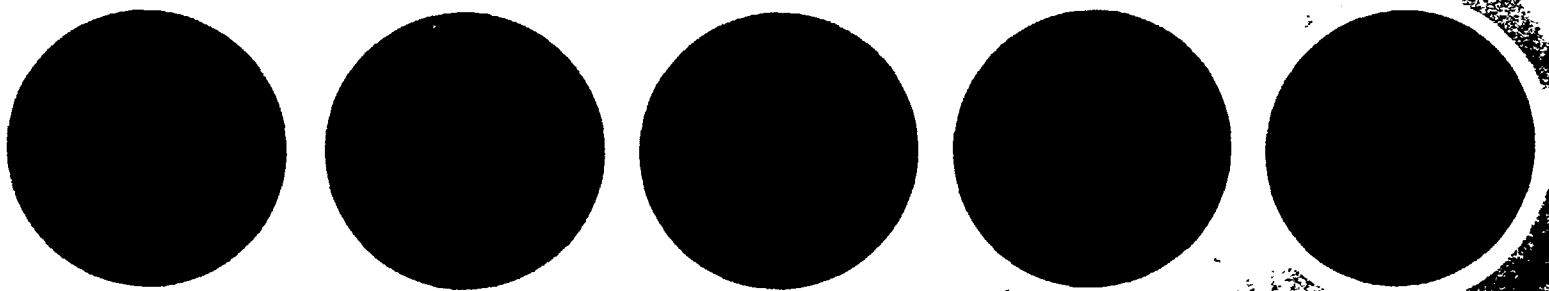
Economical artificial RAINMAKING
made easy with
permanently trouble-free

KEASBEY & MATTISON ASBESTOS-CEMENT

UNDERGROUND

PIPE

for better, greener, more profitable
GOLF COURSES, FARMS, ORCHARDS, NURSERIES,
PARKS, CEMETERIES



"... one of the best investments we've ever made," writes the supervisor of the beautiful Whitemarsh Valley Country Club, Whitemarsh, Pa., where K&M irrigation pipe replaced a rapidly deteriorating metal pipe system.

"... in crops saved and labor eliminated, the installation with K&M pipe paid for itself in a few years," writes Charles Heal, the owner of a large truck farm in Burlington, N. J.

June 19, 1958

Keasbey & Mattison Company
Butler Avenue
Ambler, Pennsylvania

Gentlemen:

As you can probably imagine, a golf course needs lots of water in order to keep in top "tournament" condition. This is particularly true during summer months when the greens and fairways take a real beating from the hot sun.

With the increasingly dry weather we've been having in this area our old irrigation system was no longer able to give us the watering capacity our course needed. We found that during periods of draught we weren't getting the volume of water we needed and parts of the course were inadequately watered. Travelling sprinklers were working 24 hours a day-- even when members were on the course playing.

Things will be different from now on though. With our new irrigation system using Keasbey & Mattison Asbestos-Cement pipe, we are able to get water to every part of the course, and in sufficient quantity to keep it properly conditioned. Moreover, the ease of laying K & M pipe enabled us to use our own crews who installed it during the winter months.

In view of this, we feel that this is one of the best investments the club ever made.

Sincerely yours,

Ross C. Woodward

Ross Woodward
Golf Course Superintendent

Keasbey & Mattison Company
Butler Avenue
Ambler, Pennsylvania

Gentlemen:

On truck farms, where we can never be sure of enough rainfall, draught is an ever present danger. Not enough water can mean not only the loss of our entire crop but in some cases, complete ruin as well.

That's why I'm glad the crops on our farm are protected by Keasbey & Mattison Asbestos-Cement Underground Irrigation Pipe. With a system using your pipe, we don't have to worry about rainfall. We can make our own, with the result that our crops get all the water they need throughout the important growing season. Moreover, in addition to insurance against draught conditions, our low lying crops are also protected against early spring frosts. By starting the sprinklers working at the right time, we prevent frost from forming when the dew point occurs.

Our savings began the day we put your pipe into the ground. We even used our own equipment and the K & M couplings were so easy to put together, we were able to lay the asbestos-cement pipe with our own men.

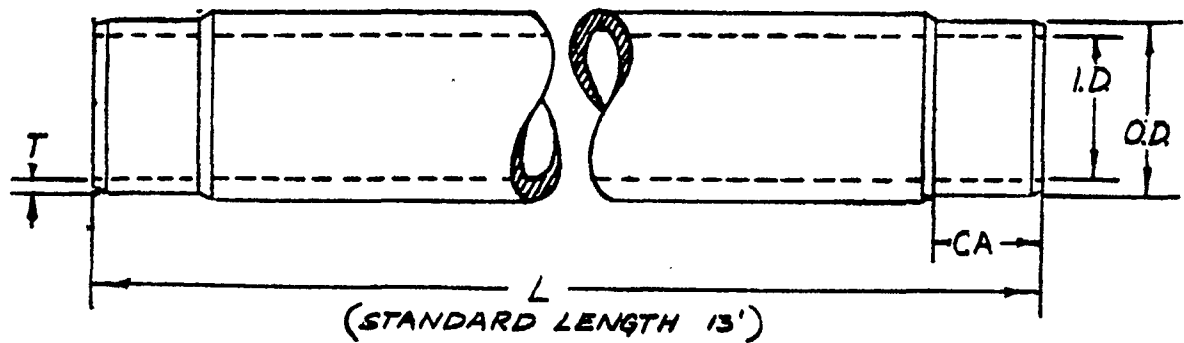
Because we've never had any trouble with the pipes corroding or becoming stopped up, our maintenance costs have been small. In terms of crops saved, and lower labor costs, we figure the installation of K & M pipe has already paid for itself many times over. It has been an investment we will always be glad we made.

Sincerely yours,

Charles S. Heal



LOW HEAD IRRIGATION PIPE



50 Foot Head (8 Inch & Larger),
100 Foot Head & 150 Foot Head Irrigation Pipe

DIMENSIONS:

Nom. Pipe Size	I. D. Inches	O. D. Machined Inches	T Inches	CA ± .0625 Inches
4"	4.00	4.700	.350	3.375
6"	5.96	6.760	.400	3.375
8"	7.98	8.880	.450	3.375
10"	10.04	11.180	.570	3.875
12"	12.06	13.360	.650	3.875
14"	13.96	15.020	.530	3.875
16"	15.89	17.100	.605	3.875

DIMENSIONAL DATA:

50 Foot Head Irrigation Pipe, 4 and 6 Inch only

Pipe Size Inches	I. D. Inches	O. D. Machined, Inches	T Minimum Machined, Inches	C. A. Inches
4"	4.00	4.58	0.21	2
6"	5.96	6.64	0.26	2

WEIGHTS, PER FOOT, OF 50-100-150 FOOT LOW HEAD IRRIGATION PIPE WITH COUPLINGS

*4"	*6"	8"	10"	12"	14"	16"
5.79	9.22	13.22	19.89	26.48	25.78	32.70

*Weights of 4" and 6", 50 ft. hd. not included in above.

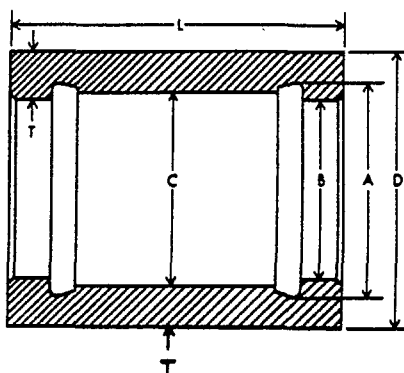
4"	6"
4.18	6.88



LOW HEAD IRRIGATION PIPE

IRRIGATION PIPE COUPLING, FLUID-TITE

50 Foot Head (8 Inch & Larger),
100 Foot Head and 150 Foot Head



DIMENSIONS:

<u>Nom. Pipe Size</u>	<u>A ± .025 Inches</u>	<u>B ± .025 Inches</u>	<u>C ± .025 Inches</u>	<u>D - .030 Inches</u>	<u>T - .080 Inches</u>	<u>L + .250 - .000 Inches</u>
4"	5.485	4.810	4.870	6.200	0.695	6.250
6"	7.545	6.870	6.930	8.260	0.695	6.250
8"	9.665	8.990	9.050	10.460	0.735	6.250
10"	11.950	11.270	11.330	13.020	0.875	6.750
12"	14.130	13.450	13.510	15.280	0.915	6.750
14"	15.820	15.140	15.140	17.490	1.175	6.750
16"	17.900	17.220	17.220	19.740	1.260	6.750

IMPORTANT

To better service your needs and answer your problems as promptly and efficiently as possible, we have established the following Pipe District Sales Offices:

AMBLER PIPE DISTRICT

Ambler, Pa.

Mr. P. E. Williams, Manager

Telephone: MITchell 6-4000

LOS ANGELES PIPE DISTRICT

5710 Manchester Blvd.

Los Angeles 45, California

Mr. J. L. Prechek, Manager

Telephone: ORegon 8-4800

ATLANTA PIPE DISTRICT

1601 Rhodes-Haverty Building

134 Peachtree Street, N. W.

Atlanta 3, Ga.

Mr. S. C. Outlaw, Manager

Telephone: JACkson 1-1131

ST. LOUIS PIPE DISTRICT

Barton Building, Room 206

200 S. Bemiston Street

Clayton, Missouri

Mr. M. O. Iverson, Manager

Telephone: PARkview 6-0171, 6-0172

HOUSTON PIPE DISTRICT

Texas Gas Building, Suite 358

2472 Bolsover Road

P. O. Box 25185

Houston, Texas

Mr. W. H. Mashburn, Manager

Telephone: JACkson 6-3851

SAN FRANCISCO PIPE DISTRICT

870 Market Street, Room 788

San Francisco 2, California

Mr. Myron E. Fuller, Manager

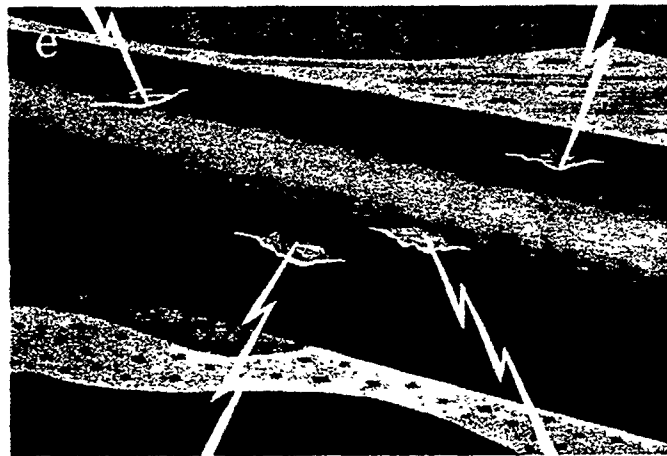
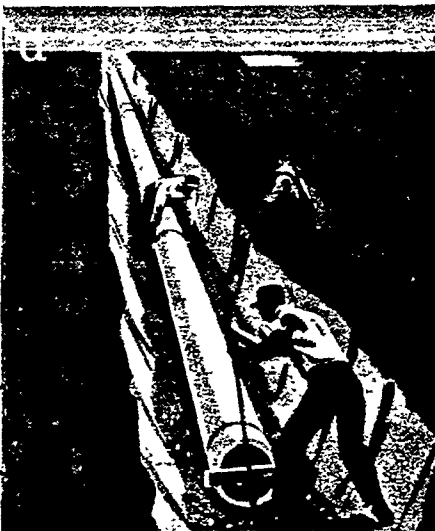
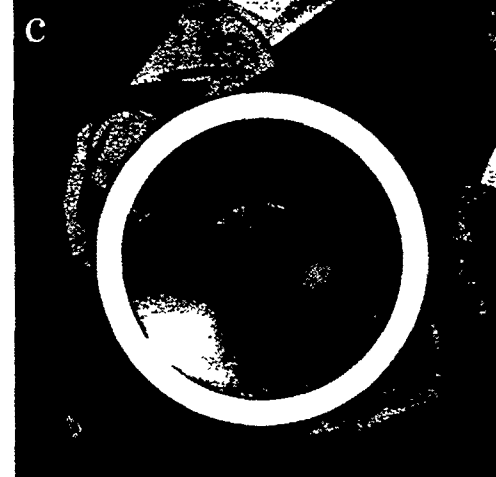
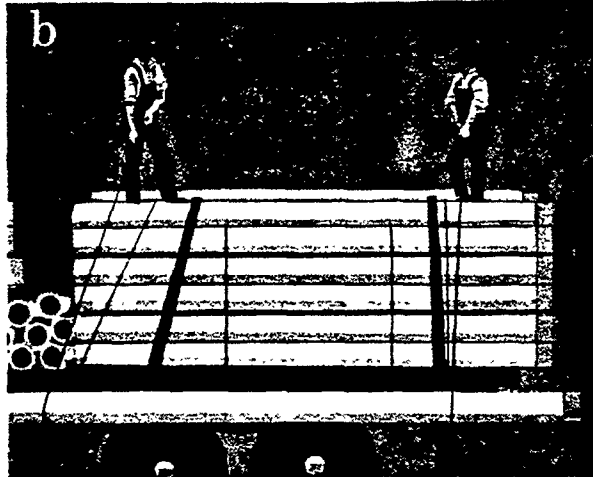
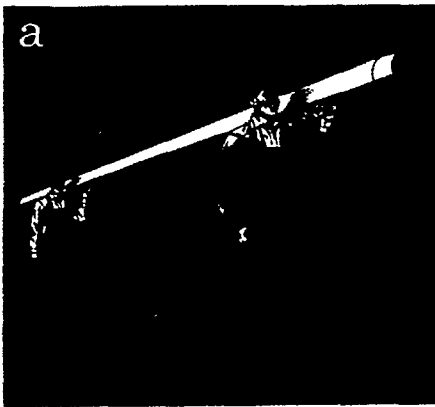
Telephone: DOUglas 2-8415



KEASBEY & MATTISON CO.

Ambler, Pa.

FARMS, GOLF COURSES, ORCHARDS, NURSERIES, PARKS, AND CEMETERIES from coast to coast have found ARTIFICIAL RAINMAKING with K&M asbestos-cement irrigation pipe, efficient, economical, and trouble-free.



a. LIGHT AND EASY TO HANDLE. Lightweight K&M asbestos cement irrigation pipe means lower shipping costs, easier handling, and faster installations by fewer men.

b. RUGGED. LASTING STRENGTH. Tough asbestos fibers act like reinforcing steel when combined with durable portland cement. Each pipe length receives the same quality control in manufacturing, assuring uniformly high performance.

c. NON-TUBERCULATING, SMOOTH BORE. Smooth inner surface remains the same for years. Will not corrode or tuberculate. Nozzle clogging is eliminated. Pumping costs remain low.

d. QUICK, FOOLPROOF INSTALLATION. K&M's patented FLUID-TITE coupling gives you a tight, permanent seal . . . makes quick work of joining pipe lengths . . . allows up to 5 degrees deflection per joint. Even in bad weather, K&M pipe is easily installed.

e. IMMUNE TO ELECTROLYSIS. With K&M asbestos-cement pipe, electrolysis is impossible. Your lines are always in service, year in and year out. Ordinary irrigation pipe pits and rusts, until the exhausted lengths have to be replaced.

f. FLEXIBLY LAID TO FIT YOUR LAYOUT. The 5 degree deflection allowed by K&M's remarkable FLUID-TITE coupling permits turns to by pass obstacles like trees and roads that are better left undisturbed.

"K&M" PATENTED FLUID-TITE

Quicker Installation

**Permanent Tight Seal,
Automatically**

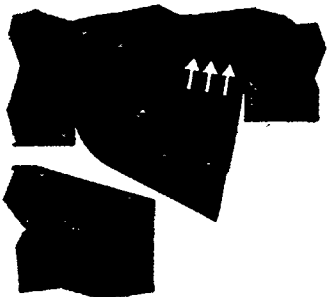
No Heavy Machinery Required

Absorbs Vibration

Keeps Out Roots



Cross-section of gasket in place in coupling. The groove is slightly larger than the gasket, providing space for the elongation of the gasket under compression. Arrows show forces caused by slight twist in the gasket, the result of the groove design serving to hold the gasket tightly in the groove.



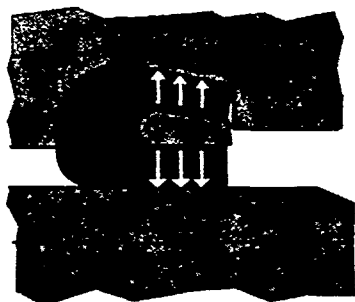
Pipe entering coupling. The taper on the pipe at this point has a flatter angle than that of the gasket. This allows the pipe end to come in contact with the gasket beyond the mid-point . . . preventing the pipe end from pushing against the solid heel of the gasket and rolling it out of its groove.

IRRIGATION COUPLING

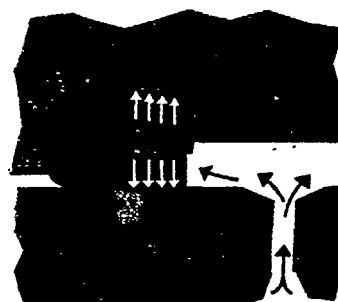
The exclusive, patented coupling from Keasbey and Mattison, leaders in asbestos-cement products. More pipe laid per hour with fewer men.



Combined Coupling and Gasket—Patented, U.S. Patent No. 2871031



Pipe in place in coupling. The gasket is compressed between the pipe and the bottom of the coupling groove. Compressive forces act along the area of contact to prevent leakage at this point. The compression of the heel of the gasket acts to seal out root intrusion and ground water penetration.

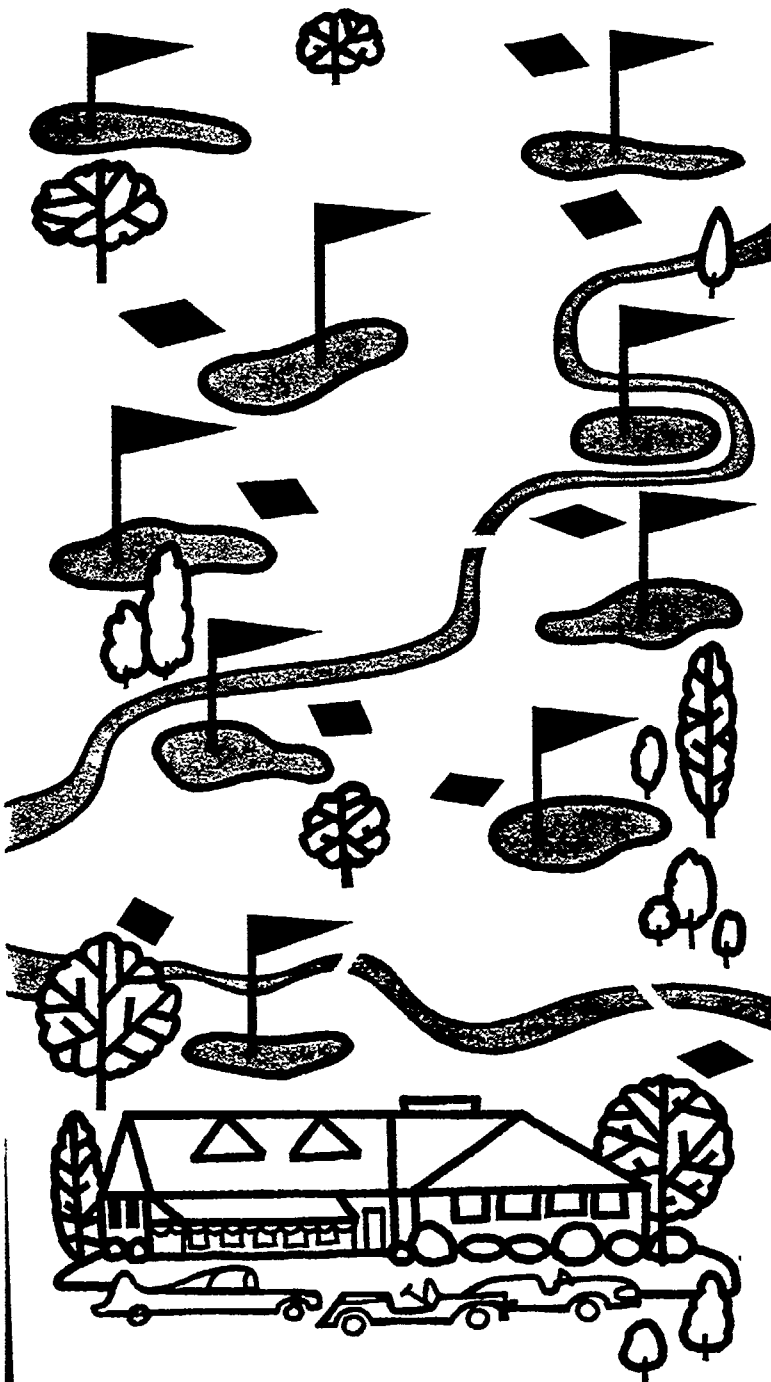


When pressure is applied to the line, water entering between the separation of the pipe ends, within the coupling, expands the perforated surface of the gasket. It enters these orifices and further expands the gasket. Thus, as internal pressure increases, the seal becomes even tighter.

HOW

K&M Asbestos-Cement Underground Irrigation Pipe
can carry your water supply where you want it.

Golf Course (9 hole)



Farm



Lightweight K&M pipe can be laid almost anywhere

Being light in weight K&M asbestos-cement irrigation pipe can be laid where ordinary, much heavier pipe, would necessitate expensive construction methods. K&M pipe can be laid through marshes or mushy soil, and, of course, it can be sunk under water without the risk of rust or corrosion. Once in place, tough K&M pipe resists shifting, takes ground vibrations without injury, and, because of the "give" of FLUID-TITE couplings, it is unaffected by other underground stresses.

It's easily connected to your water supply

No matter what your water source may be—pond, stream, well, or municipal main—your K&M asbestos-cement irrigation pipe can be readily connected using versatile FLUID-TITE fittings and couplings. Trenches, in many cases, need be dug only to a minimum depth of 24 inches to avoid damage from plows or harrows. More depth may be required to put your pipe below the frost line if draining is not possible in winter. These shallow trenches may require no other trenching equipment than what you have now.

for K&M Asbestos-Cement Underground Irrigation Pipe

PIPE								COUPLINGS							
50 Ft. Hd.	I.D.	O.D. ± .030"	C.A. ± 1/16" - 1/32"	Wt. Lbs. Ft.	I.D.	L ± 1/4"	Wt. Lbs. Ea.	225 Ft. Hd.	I.D.	O.D.	C.A. ± 1/16"	Wt. Lbs. Ft.	I.D.	L ± .025" + .250" - .000"	Wt. Lbs. Ft.
								3	3.00	3.70	3 3/8	4.26	3.81	6.25	4.37
								4	3.95	4.70	3 3/8	5.75	4.81	6.25	5.53
								6	5.85	6.76	3 3/8	9.65	6.87	6.25	7.54
								8	7.85	8.88	3 3/8	14.08	8.99	6.25	10.19
								10	10.00	11.18	3 3/8	19.83	11.27	6.75	16.29
								12	12.00	13.36	3 3/8	26.71	13.45	6.75	20.07
								14	13.54	15.02	3 3/8	32.31	15.13	6.75	28.11
								16	15.45	17.10	3 3/8	40.43	17.21	6.75	34.10
100 Ft. Hd.	I.D.	O.D. ± .025"	C.A. ± 1/16"	Wt. Lbs. Ft.	I.D.	L ± .025" + .250" - .000"	Wt. Lbs. Ea.	325 Ft. Hd.	I.D.	O.D.	C.A. ± 1/16"	Wt. Lbs. Ft.	I.D.	L ± .025" + .250" - .000"	Wt. Lbs. Ea.
Pipe Size								3	3.00	3.88	3 3/8	5.21	3.99	6.25	4.62
								4	3.95	4.85	3 3/8	6.73	4.96	6.25	5.81
								6	5.85	6.95	3 3/8	11.41	7.06	6.25	9.07
								8	7.85	9.15	3 3/8	17.33	9.26	6.25	13.36
								10	10.00	11.70	3 3/8	27.77	11.79	6.75	23.07
								12	12.00	13.96	3 3/8	34.94	14.05	6.75	30.44
								14	13.54	16.22	3 3/8	48.89	16.33	6.75	40.42
								16	16.00	18.46	3 3/8	61.14	18.57	6.75	49.26
150 Ft. Hd.	I.D.	O.D.	C.A. ± 1/16"	Wt. Lbs. Ft.	I.D.	L ± .025" + .250" - .000"	Wt. Lbs. Ea.	450 Ft. Hd.	I.D.	O.D.	C.A. ± 1/16"	Wt. Lbs. Ft.	I.D.	L ± .025" + .250" - .000"	Wt. Lbs. Ea.
								3	3.00	3.88	3 3/8	5.21	3.99	6.25	4.62
								4	3.95	4.85	3 3/8	6.56	4.96	6.25	7.07
								6	5.70	6.95	3 3/8	15.29	7.06	6.25	10.77
								8	7.60	9.15	3 3/8	23.56	9.26	6.25	15.20
								10	9.68	11.70	3 3/8	32.77	11.79	6.75	25.27
								12	11.57	13.96	3 3/8	44.23	14.05	6.75	33.01
								14	13.54	16.22	3 3/8	57.17	16.33	6.75	46.28
								16	15.45	18.46	3 3/8	72.44	18.57	6.75	57.32

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134 Peachtree St., N.W.
JAckson 1-1131

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RAndolph 6-6950

Houston 5, Texas
2412 Bolsover Road
P.O. Box 25185
JAckson 6-3851

Cleveland 15, Ohio
Euclid Ave. & E. 14th St.
CHerry 1-8141

San Francisco 2, California
870 Market Street
DOuglas 2-8415

KEASBEY & MATTISON

Company • Ambler • Pennsylvania

Pipe Factories at Ambler, Pa., St. Louis, Mo., Santa Clara, Calif.

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