



TIMEWELL

DRAINAGE PRODUCTS

BUILT TO LAST
SERVICE TO PROVE IT



PRODUCT CATALOG

www.timewellpipe.com

TIMEWELL

DRAINAGE PRODUCTS

BUILT TO LAST
SERVICE TO PROVE IT

In February 1982, Don and Susan Colclasure started their own tile manufacturing business to serve the needs of their growing company. Since that time, Don and his team have remained focused and driven by the needs of ag contractors and the farm drainage industry. These 30+ years' experience have led the Timewell leadership to develop an unmatched selection of products and services that are critical for drainage success.

“Since partnering with Timewell and their equipment plan, I’ve always gotten my tile on time and the service is excellent.”

Billy Garnett
Hopkinsville, KY



Exclusive Equipment & Supply Program

Take your business to the next level

With Timewell's industry exclusive equipment and supply program

- Get a new or used, state-of-the-art commercial self-propelled drainage plow
- AND secure your tile supply
- A single source for ALL your drainage needs

Special Material Booking Programs

As a business owner, planning is a requirement

Timewell offers prepay and extended term programs to ensure you get the pipe you need when your busy schedule requires it

- Prepay to guarantee next day delivery
- Use Extended Terms to lock in pricing
- Contact your local sales rep for details

Knowledgeable Sales Reps

- Timewell sales reps are an industry resource
- They know the resin market
- Provide access to exclusive opportunities to grow your business
- They understand farm drainage



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DRAINAGE PRODUCTS

Please call our toll free number to place your order

*Serving All Your
Drainage Needs!*



800-720-8453

We Ship Direct to You!
Many items available via UPS Shipment!

Delivery Options
Truckloads,
and UPS

○ SINGLE WALL TUBING



SINGLE WALL Corrugated HDPE Tubing

Specifications, Configurations and Application Rates

Timewell high density polyethylene corrugated pipe is designed for a variety of uses ranging from farm drainage systems to numerous commercial and residential drainage applications.

SPECIFICATIONS

Pipe shall comply with the test methods, dimensions and markings found in ASTM F405 and F667, SCS 606 and AASHTO M252.

Nominal Diameter	Inside Diameter (Average)	Outside Diameter (Average)	Minimum Pipe Stiffness at 5% Deflection	Weight (lbs./20ft.)
2"	2.05"	2.45"	35 psi	3.25 lbs
3"	3.10"	3.60"	35 psi	4.60 lbs
4"	4.05"	4.60"	35 psi	6.85 lbs
5"	5.00"	5.90"	35 psi	10.15 lbs
6"	6.05"	6.90"	35 psi	15.40 lbs
8"	8.15"	9.50"	35 psi	27.40 lbs
10"	10.05"	11.60"	35 psi	40.75 lbs
12"	12.05"	14.20"	35 psi	50.70 lbs
15"	14.95"	17.70"	35 psi	66.10 lbs

AVAILABLE CONFIGURATIONS

Size	Small Pack	Maxi
2"	100'	10,000'
3"	10', 100'	5600', 6200'
4"	10', 100', 250'	3250'
5"	165'	2300'
6"	100'	1320', 1685'
8"	20', 405'	920'
10"	20'	625'
12"	20'	370'
15"	20'	230'
18"	20'	NA

DRAINAGE TUBING Requirements Per Acre

Exclusive of Collector Lines

Spacing	Pipe/Acre *
15'	2,900'
20'	2,000'
30'	1,450'
40'	1,100'
50'	900'
60'	725'
70'	638'
80'	550'

*Estimated



○ SINGLE WALL TUBING



SINGLE WALL Tubing Types

PERFORATED/SLOTTED TUBING

Perforated Tubing is one of the most commonly used types of tile. This tubing has a variety of uses ranging from farm drainage systems to carrying water away from foundations. Perforated Tubing is available in sizes 2" to 18".

KNIFECUT TUBING (Sand)

Knifecut (Sand) Tubing works the same as perforated field tile, taking in equal amounts of water but restricts the sand and silt from passing through that can potentially plug the tubing. Fast becoming an all-purpose tile, Knifecut Tubing is one of our most popular sellers. Available in sizes 2" to 15".

KNIT FILTER TUBING (Sock Tile)

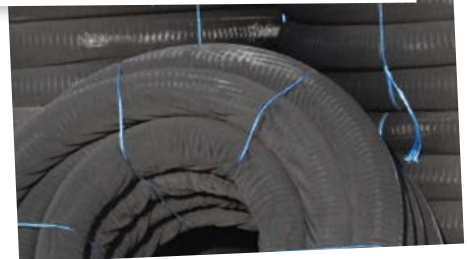
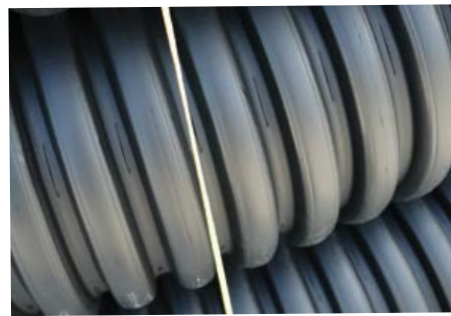
Knit Filter Tubing or Sock Tile as it is more commonly referred to, is a polyester wrapped perforated tile. Commonly used in construction applications and sandy soils, Knit Filter Tubing provides maximum protection against soil infiltration. Most commonly used in sizes 3" through 6". Other sizes available upon request.

SOLID TUBING

Solid Tubing takes in water from one end of the pipe and carries it to the other end without taking water from the surrounding areas. Available in all sizes.

MUCK TUBING

Muck Tubing is designed for use in heavier "gumbo" type soils and soils high in organic content, which are typically not as susceptible to water breakdown. Muck tubing allows the largest water inlets with hole sizes of ½ inch round. Available in sizes 3" – 6" only.



MAXFLO DUAL WALL PIPE

MAXFLEX

Flexible Dual Wall Pipe

**12" Available Now!
6", 8" and 10" Coming
in 2018!**

Exceptional flow characteristics coupled with a refreshing ease of use are key benefits for installers and landowners.



Nominal Diameter	Inside Diameter (Average)	Outside Diameter (Average)	Minimum Pipe Stiffness at 5% Deflection	Weight (lbs./20ft.)	Maxi Length
12"	12.09"	14.68"	42 psi	63 lbs	360'

MaxFlex can be conveniently installed behind your trencher or tile plow.

MAXFLO

Dual Wall 10' & 20' Sticks

HIGH PERFORMANCE | EASY AND SAFE HANDLING | LONG LASTING SOLUTION

MaXflo high density polyethylene corrugated pipe is a Smooth Lined Corrugated Plastic Pipe designed for gravity flow storm sewer, retention/detention and high capacity farm drainage.

**10' Sticks are available in
12", 15", 18" and 24".
30", 36" and 48" are available
by special order.**



SPECIFICATIONS

Pipe shall comply with requirements for test methods, dimensions and markings found in AASHTO designations M252 Type S & M294 Type S or ASTM 2648.

JOINTS

The MaXflo Bell-and-Spigot joint system provides superior load-bearing capability and improved hydraulics. When specified, MaXflo is supplied with an elastomeric gasket meeting the requirements of ASTM F477. The Bell-and-Spigot joint with gasket is tested to ASTM D3212 standards for watertight joint requirements. When applicable, plain end pipe utilizing a wrap around coupler is available.

FITTINGS

Fittings conform to AASHTO M252 or M294. Fittings can be molded or fabricated. Common fittings are branch fittings such as wyes, tees, and end caps as well as in-line joint fittings like couplers and reducers. Couplers must provide adequate strength to maintain pipe alignment and prevent separation.

Nominal Diameter	Inside Diameter (Average)	Outside Diameter (Average)	Minimum Pipe Stiffness at 5% Deflection	Weight (lbs./20ft.)
4"	4.03"	4.73"	49.3 PSI	9 lbs.
6"	6.05"	6.89"	49.3 PSI	23.5 lbs.
8"	8.06"	9.11"	49.3 PSI	31 lbs.
10"	10.08"	11.34"	49.3 PSI	50 lbs.
12"	12.09"	14.40"	50 PSI	71 lbs.
15"	15.12"	17.50"	42 PSI	90 lbs.
18"	18.12"	21.05"	40 PSI	133 lbs.
24"	24.07"	27.65"	34 PSI	216 lbs.
30"	30.48"	35.65"	29 PSI	315 lbs.
36"	36.02"	41.30"	22.5 PSI	420 lbs.
42"	41.40"	47.70"	21 PSI	528 lbs.
48"	48.39"	53.60"	20 PSI	660 lbs.
60"	60.20"	66.40"	15 PSI	1,075 lbs.

o MAXFLO DUAL WALL PIPE

MAXFLO

Bell/Spigot Connection

DUAL WALL FEATURES:

- In-Line Bell Design
- Soil tight and water tight joints available on 20' sticks with ASTM F477 gaskets
- High performance bell/spigot design for superior connective strength
- All MaXflo bells cover a minimum of two ribs
- All pipe meets or exceeds ASTM 2648
- AASHTO pipe available



TIMEWELL MaXflo pipe meets or exceeds numerous industry standards including:

AASHTO M252	Requirements and testing for 3"-10" pipe, couplings and fittings for use in subsurface drainage systems, storm sewers, and in surface drainage
AASHTO M294	Requirements and testing for 12"-60" pipe, couplings and fittings for use in surface and subsurface drainage applications
ASTM F667	Requirements and testing for 8"-24" pipe and fittings for materials, workmanship, dimensions, perforations, pipe stiffness, elongation, joint separation resistance, quality of extrusion, brittleness, bond, and markings
ASTM D3350	Identification of pipe and fitting materials in accordance with a cell classification system
ASTM D2321	Recommendations for the installation of pipe used in sewers and other gravity-flow applications
ASTM D3212	Specifications for joints of pipe systems intended for drain, and gravity sewerage at internal or external pressures less than 25 ft head using flexible watertight elastomeric seals
ASTM F477	Requirements for elastomeric seals (gaskets) used to seal the joints of pipe used for gravity, low-pressure, and high-pressure applications
ASTM F2306	Requirements for non-pressure (gravity flow) 8"-60" annular corrugated profile-wall polyethylene (PE) pipe and fittings for gravity-flow storm sewer and subsurface drainage applications
NTPEP	National Transportation Product Evaluation Program Certified: Certification Program of AASHTO (4"-60")

MAXFLO

○ SINGLE WALL CONNECTING ACCESSORIES



SINGLE WALL Connecting Accessories

DOWNSPOUT ADAPTORS



DOWNSPOUT ADAPTORS

2" x 3" x 3" Down Spout Adaptor	50
2" x 3" x 4" Down Spout Adaptor	50
3" x 4" x 4" Down Spout Adaptor	50
4" x 6" x 6" Down Spout Adaptor	50

Bag Qty

CLAY TO PLASTIC ADAPTORS



CLAY TO PLASTIC ADAPTORS

3" Clay to Plastic Adaptor	50
4" Clay to Plastic Adaptor	50
5" Clay to Plastic Adaptor	50
6" Clay to Plastic Adaptor	50
8" Clay to Plastic Adaptor	10
10" Clay to Plastic Adaptor	ea.
12" Clay to Plastic Adaptor	ea.

ELBOWS

3" 90 Degree Tile Elbow	25
4" 90 Degree Tile Elbow	25

EXTERNAL SPLIT COUPLERS



EXTERNAL SPLIT COUPLERS

2" External Split Coupler	50
3" External Split Coupler	50
4" External Split Coupler	50
5" External Split Coupler	50
6" External Split Coupler	50
8" External Split Coupler	30
10" External Split Coupler	30
12" External Split Coupler	20
15" External Split Coupler	5
18" External Split Coupler	ea.
24" External Split Coupler	ea.
30" External Split Coupler	ea.
36" External Split Coupler	ea.
42" External Split Coupler	ea.
48" External Split Coupler	ea.



EXTERNAL SNAP COUPLERS

4" External Snap Coupler	50
6" External Snap Coupler	20
8" External Snap Coupler	5
10" External Snap Coupler	5



ELBOWS



EXTERNAL SNAP COUPLERS

Custom Order:

Additional downspout adaptor styles available!

Just ask!

◦ SINGLE WALL CONNECTING ACCESSORIES



SINGLE WALL Connecting Accessories

TAP TEES



TAP TEES

	Bag Qty
3" Tap Tee	50
4" Tap Tee - Long	50
4" Tap Tee - Short	50
4" Internal Tap Tee - Short	50
4" Internal Tap Tee - Long	50
5" Tap Tee	25
6" Tap Tee	25

STRAIGHT TEES



STRAIGHT TEES

2" Tile Tee	10
3" Straight Tile Tee	25
4" Straight Tile Tee (Injection Molded)	25
5" Straight Tile Tee	10
6" Straight Tee	10

BLIND REDUCING TEES



BLIND REDUCING TEES

4" Blind Tee	25
5" x 4" Blind Reducing Tee	10
6" Blind Tee	10
8" x 8" x 6" x 5" x 4" Blind Reducing Tee	5
10" Blind Reducing Tee	3
12" Blind Reducing Tee	3
15" Blind Reducing Tee	1

REDUCING TEES



REDUCING TEES

4" x 3" Internal Reducing Tee	10
5" x 4" Reducing Tee	10
5" x 4" Internal Reducing Tee	10
6" Cross Reducing Tee	1
6" x 5" x 4" Reducing Tee	10
8" x 8" x 6" x 5" x 4" Reducing Tee	5
10" x 10" x 8" x 6" Reducing Tee	3
12" x 12" x 10" x 8" Reducing Tee	3
15" x 15" x 12" x 10" Reducing Tee	1

WYES

3" Wye	25
4" Wye (Injection Molded)	10
5" x 4" Reducing Wye	5
6" x 5" x 4" Reducing Wye	10
8" Wye	ea.

WYES



6" Cross Reducing Tee

CONNECTING ACCESSORIES

○ SINGLE WALL CONNECTING ACCESSORIES



SINGLE WALL Connecting Accessories

END CAPS



END CAPS

2" End Cap	100
3" End Cap	50
4" End Cap	25
5" End Cap	50
6" End Cap	50
8" End Cap	10
10" End Cap	10
10" x 4" End Cap w/o Grommet	10
12" End Cap	5
15" End Cap	ea.
18" End Cap-Split	ea.
24" End Cap- Split	ea.

Bag Qty

PLASTIC PLUGS



PLASTIC PLUGS

3" Plastic Plug	100
4" Plastic Plug	100
4" Plastic Plug - Perforated	100
5" Plastic Plug	100
6" Plastic Plug	100

INTERNAL COUPLERS



INTERNAL COUPLERS

2" Internal Coupler	50
3" Internal Coupler (Injection Molded)	25
4" Internal Coupler (Injection Molded)	50
5" Internal Coupler (Injection Molded)	25
6" Internal Coupler (Injection Molded)	20
8" Internal Coupler	10
10" Internal Coupler	10

REDUCERS



REDUCERS

5" x 4" Internal Reducer	9
6" x 5" Internal Reducer	9
4" x 3" Reducer	25
6" x 5" x 4" External Reducer	10
8" x 6" Reducer	5
10" x 8" Reducer	5
12" x 10" Reducer	5
15" x 12" Reducer	ea.
15" x 12" x 10" Reducer	ea.



MAR MAC RUBBER COUPLERS

4"
6"
8"
10"
12"
15"
18"
24"
30"
36"
42"
48"

Marmac Couplers are perfect for joining dissimilar pipe types!

All Marmac couplers come with stainless steel tightening bands.



o ACCESSORIES



Accessories

BAR GUARDS



*Hickenbottom Bar Guards are ideally sized for Hickenbottom Risers



BAR GUARDS

4" Bar Guard
5" Bar Guard
6" Bar Guard
8" Bar Guard
10" Bar Guard
12" Bar Guard
15" Bar Guard
18" Bar Guard
24" Bar Guard
30" Bar Guard
36" Bar Guard
42" Bar Guard
48" Bar Guard
*8" Hickenbottom Bar Guard
*10" Hickenbottom Bar Guard
*12" Hickenbottom Bar Guard

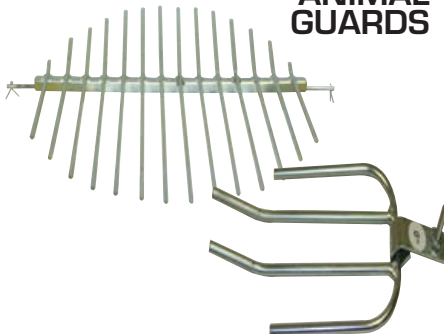
SUMP BASINS & LIDS



SUMP BASINS & LIDS

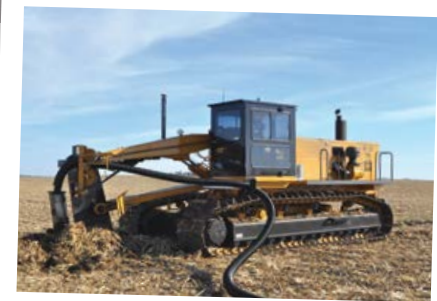
16" x 24" Sump Pit Liner
16" x 30" Sump Pit Liner
16" Heavy Duty Locking Lid
18" x 24" Sump Pit Liner
18" x 30" Sump Pit Liner
18" Heavy Duty Locking Lid

ANIMAL GUARDS



ANIMAL GUARDS

4" Animal Guard
6" Animal Guard
8" Animal Guard
10" Animal Guard
12" Animal Guard
15" Animal Guard
18" Animal Guard
24" Animal Guard



HINGED FLAP GATES

HINGED FLAP GATES

6" Hinged Flap Gate for Plastic
8" Hinged Flap Gate for Plastic
10" Hinged Flap Gate for Plastic
12" Hinged Flap Gate for Plastic
15" Hinged Flap Gate for Plastic
18" Hinged Flap Gate for Plastic
24" Hinged Flap Gate for Plastic

Larger sizes available!

o ACCESSORIES



Accessories

HDPE FLARED END SECTIONS



HDPE FLARED END SECTIONS

12"-15" HDPE Flared End Section
18" HDPE Flared End Section
24" HDPE Flared End Section
30" HDPE Flared End Section
36" HDPE Flared End Section

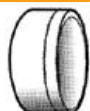
METAL FLARED END SECTIONS

12" Metal Flared End Section
15" Metal Flared End Section
18" Metal Flared End Section
24" Metal Flared End Section
30" Metal Flared End Section
36" Metal Flared End Section
48" Metal Flared End Section

METAL FLARED END SECTIONS



o PVC

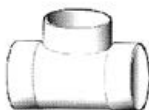


Cap HxH

SDR 35 END CAPS

DIAMETER

6"
8"
10"
12"
15"

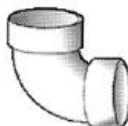


Tee HxHxH

SDR 35 TEE

DIAMETER

6"
8"
10"
12"



90° 1/4
bend
long turn
HxH

SDR 35 90 ELBOWS

DIAMETER

6"
8"
10"
12"

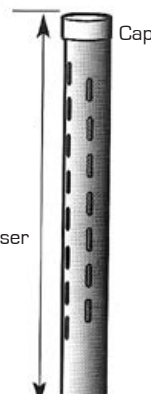


45° 1/8
bend
HxH

SDR 35 45 ELBOWS

DIAMETER

6"
8"
10"
12"



6' Riser

Cap



Offset 3'

90° Elbow

PVC OUTLET PIPES:

- 13' length with animal guard standard
- Provides security for all drainage systems

PVC RISER INLETS:

- Please specify when ordering "Complete PVC Offset Riser Assemblies."
- Orifices for PVC Riser also available

PVC PIPE TYPE SDR 35

DIAMETER

4"	X	13'
6"	X	13'
8"	X	13'
10"	X	13'
12"	X	13'
15"	X	13'

PVC SDR 35 RISER 6'

DIAMETER

6"
8"
10"
12"

o MAXFLO ACCESSORIES

MAXFLO

DUAL WALL Accessories

MAXFLO ELBOWS



MAXFLO ELBOWS

Elbows offered in all sizes 4" - 48" with bends offered in 22.5, 45 & 90 degrees. Custom bends are also available!

MAXFLO TEES



MAXFLO TEES

4" x 4" MaXflo Tee
6" x 6" MaXflo Tee
8" x 8" MaXflo Tee
10" x 10" MaXflo Tee
12" x 12" MaXflo Tee
15" x 15" MaXflo Tee
18" x 18" MaXflo Tee
24" x 24" MaXflo Tee
30" x 30" MaXflo Tee
36" x 36" MaXflo Tee
42" x 42" MaXflo Tee
48" x 48" MaXflo Tee

MAXFLO WYES



MAXFLO WYES

4" MaXflo Wye
6" MaXflo Wye
8" MaXflo Wye
10" MaXflo Wye
12" MaXflo Wye
15" MaXflo Wye
18" MaXflo Wye
24" MaXflo Wye
30" MaXflo Wye
36" MaXflo Wye
42" MaXflo Wye
48" MaXflo Wye

MAXFLO REDUCING WYE

Dual Wall Reducing Wyes available in all sizes 4" - 48"

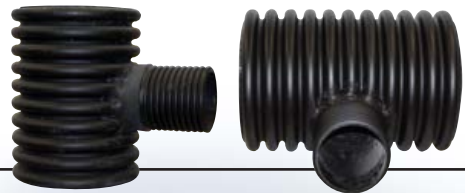
MAXFLO REDUCERS

Dual Wall Reducers available in all sizes 4" - 48"



MAXFLO REDUCING TEE

Dual Wall Reducing Tees available in all sizes 4" - 48"



New!

MAXFLO Risers

MAXFLO Risers

MaXflo Risers offer larger sizes than traditional surface inlets. Risers are immediately available and competitively priced, Custom sizes and configurations available.

Section 1: 1" holes **Section 2:** 5/16" holes

12" x 3'
12" x 6'
15" x 3'
15" x 6'
18" x 3'
18" x 6'
24" x 3'
24" x 6'

Larger sizes
available
upon request

1.5'
of 5/16"
holes



3' of 1" holes
Section 1

3' of 5/16" holes
Section 2

6"
Hickenbottom
Riser



HICKENBOTTOM RISERS

5" Hickenbottom Riser	1" Holes	Section 1
5" Hickenbottom Riser	5/16" Holes	Section 2
6" Hickenbottom Riser	1" Holes	Section 1
6" Hickenbottom Riser	5/16" Holes	Section 2
8" Hickenbottom Riser	1" Holes	Section 1
8" Hickenbottom Riser	5/16" Holes	Section 2
10" Hickenbottom Riser	1" Holes	Section 1
10" Hickenbottom Riser	5/16" Holes	Section 2
12" Hickenbottom Riser	1" Holes	Section 1
12" Hickenbottom Riser	5/16" Holes	Section 2



12" Hickenbottom Riser

HICKENBOTTOM RISER INLET TEES

5" Hickenbottom Tee
6" Hickenbottom Tee
8" Hickenbottom Tee
10" Hickenbottom Tee
12" Hickenbottom Tee



6" Precision Round Bottom Tee



6" Precision Flatbottom Tee

PRECISION RISERS

6" Precision Intake 1" Holes Section 1
6" Precision Intake 5/16" Holes Section 2
8" Precision Intake 1" Holes Section 1
8" Precision Intake 5/16" Holes Section 2
10" Precision Intake 1" Holes Section 1
10" Precision Intake 5/16" Holes Section 2

PRECISION RISER INLET TEES

6" Precision Round Bottom Tee
6" Precision Flatbottom Tee
8" - 10" Precision Combo Tee



PRECISION RISERS



8"-10" Precision Combo Tee

○ MISCELLANEOUS ITEMS



MISCELLANEOUS ITEMS

Timewell Tile Tape

4" x 5" T/T Marker Flag

Outlet Marker Post

7' 11" Red Intake Marker Flag

3 1/8" Hole Saw

4 1/8" Hole Saw

5" Hole Saw

6" Hole Saw

S/S 5' x 5/16" Power Probe

Mud Slinger Shovel Flat Tip

Mud Slinger Shovel Round Tip

Long Handle Shovel

Super Crummer Shovel

2' x 2' Anti Seep Collar

4' x 4' Anti Seep Collar

TILE TAPE



SHOVELS



**ANTI SEEP
COLLARS**



○ INLINE WATER CONTROL

Inline Water Control Structure:

- Rugged 1/2 " PVC structure
- Heavy steel lockable lid
- Stainless steel screws and custom anodized aluminum corner extrusions are used for strength and durability
- 5" X 7" Stoplogs for adjustability
- Flexible couplers allow PVC, plastic pipe, or other materials to be easily attached (please specify type of pipe when ordering)
- 5 year warranty on all parts

Call today for pricing on your custom structures!



○ LIFT STATIONS



Lift Stations

NO GRAVITY OUTLET AVAILABLE? NO PROBLEM!

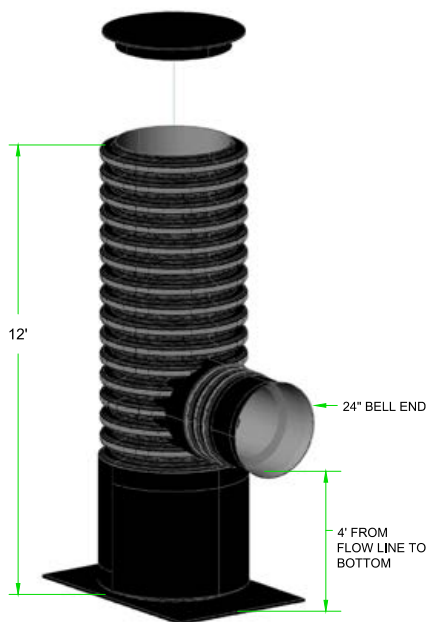
You can still install a cost effective drainage system with a lift station from Timewell.

WITH A LIFT STATION, YOU CAN:

- Control the water table in the field
- Gain more grade on laterals

FEATURES & BENEFITS

- Manufactured from durable HDPE pipe
- No degradation or corrosion
- Jobsite ready
- Standard 4'x6' welded base reduces buoyancy
- Heavy-duty lid secures pump and discharge pipe



Standard 36" tank with 24" outlet in stock

Custom sizes and designs available upon request

Why buy from multiple places?

Timewell offers a complete line of lift stations and accessories. Ask your sales representative for details.

○ PUMPS



Pumps

Timewell offers a complete line of submersible pumps to meet all your lift station projects.

The stainless steel, axial-flow construction provide an economical solution for high-volume, low-head flow applications. The stainless steel construction means that the pumps are corrosion resistant and will not rust, making them last longer than conventional cast iron pumps.

Standard applications cost just pennies a day to operate.

Pumps are available in vertical or horizontal versions, single or three phase, a variety of horsepower and voltages to meet the unique needs of your application.

FEATURES & BENEFITS

- Corrosion Resistant all Stainless Steel Construction
- High Volume: 50 to 1,450 GPM
- Low Head: 2' to 25' of Total Dynamic Head
- Fixed speed or variable-flow pumping
- Axial-Flow lift for smooth, low vibration and low pressure operation
- Water lubricated motors are environmentally safe

VARIETY OF SIZES AVAILABLE

- Single or Three Phase
- 1/2 to 15 Horsepower
- 200, 230, 460 or 575 Volts
- Vertical or Horizontal Style

Single phase and three phase control panels are available to operate the pumps. Single phase panels contain the start and run capacitors. Three phase controls are used for three phase 200, 230, 460 and 575 volt pumps and contain a motor starter and transformer. Both are available with (deluxe) or without (standard) a switch.



○ INSTALLATION PROCEDURES



An Overview of Agricultural Drainage System Installation

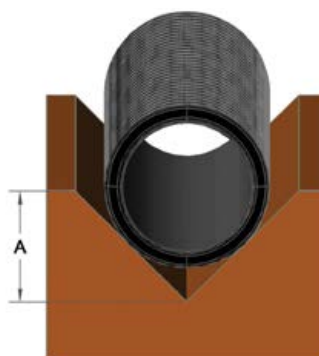
The following is a brief overview of the recommended steps taken to install a quality pipe system. Additional research is recommended for any unique installation.

Timewell's recommended installation procedures listed below are based on ASTM F449
(Underground Subsurface Installation of Corrugated Polyethylene Pipe for Agricultural Drainage or Water Table Control)

PIPE HANDLING

Certain steps should be taken for handling and storing pipe properly on jobsites so as to protect the pipe until ready for installation. Storage handling and care should be done so as not to damage the pipe. A flat, smooth surface is preferred. Additional considerations for site conditions, weather, seasonal elements, and animals should be considered when handling and storing. If pipe arrives in pallets, it should remain in pallets until installation. Dragging dropping or hitting pipe on the ground or other objects may cause damage. Coils of pipe should be stored on a flat, smooth surface and should be protected from fire hazards. Inspect all pipe and material before installation.

Figure 1



'V' Trench

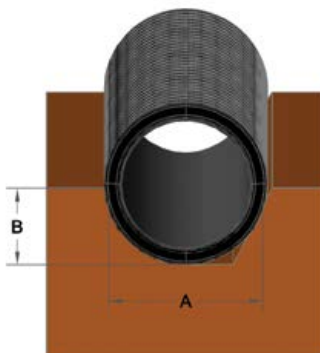
Chart 1
'V' Trench Depth

Pipe Diameter	Depth Figure 1 'A'
3"	5"
4"	6"
6"	8"
8"	11"

TRENCH SHAPE

The trench bottom should be shaped when pipe is installed at depths of 8 feet or less. The 90-degree "V" bottom shown in Figure 1 is the preferred shape for pipe less than 8 inches. For pipe 8 inches or greater, the circular or trapezoidal groove shown in Figure 2 should be used. The curve of the groove should closely fit the outside of the pipe, and can be made with a shaped trencher or backhoe with a shaped bucket known as a "spoon". Refer to Charts 1 and 2 for recommended trench dimensions.

Figure 2



Circular or Trapezoidal Trench

Chart 2

Circular or Trapezoidal Trench Dimensions

Pipe Diameter	Width Figure 2 'A'	Depth Figure 2 'B'
10"	11.4"	5.7"
12"	14.4"	7.2"
15"	17.5"	8.8"
18"	21.1"	10.6"
24"	27.7"	13.9"
30"	35.7"	17.9"
36"	41.3"	20.7"
42"	47.7"	23.9"
48"	53.6"	26.8"
60"	66.4"	33.2"

TRENCH DESIGN

Precautions should be taken to ensure conditions are suitable for pipe installation. Water, soft muck, rock or other material unable to provide long-term pipe support are unacceptable and should be removed and replaced with acceptable materials. If soft areas remain after excavation or in areas where native soil can migrate into backfill, a synthetic fabric or geotextile should be used to separate native soil from backfill.

Chart 3
Acceptable Backfill Material and Compaction Requirements

Description	Soil Classification		Minimum Compaction Standard Density %
	ASTM D2321	ASTM D2487	
Graded or crushed stone Crushed gravel	Class I	-	Dumped*
Well-graded sand, gravel, and gravel/sand mixtures; Poorly graded sand, gravel and gravel/sand mixtures; little or no fines	Class II	GW CP SW SP	85%
Silty or clayey gravel, Gravel/sand/silt or gravel and/clay mixtures, silty or clayey sands, sand/clay or sand/silt mixtures	Class III	GM GC SM SC	90%
Inorganic silts and low to medium plasticity clays; gravelly, sandy, or silty clays; some fine sands	Class IVA	ML CL	90%

*Material shall be "knifed" into the haunch area of the pipe by use of a shovel or similar means.

ALIGNMENT

Equipment operating on uneven ground surfaces should use a grade control system capable of maintaining the specified depth and grade. The pipe feeding system should hold the pipe in place in the bottom of the trench until secured by the bedding, blinding, or envelope material.

FITTINGS, COUPLERS & ENDCAPS

All fittings should be compatible with the pipe. Couplers should be used to connect pipe together, and end caps or end plugs must be installed on the termination of each line.

BACKFILLING

The trench should be backfilled as soon as possible. Material should be placed so that displacement or deflection of the pipe will be minimized and within acceptable limits. Most plow installations require a minimum of backfilling, yet care must be taken to ensure that the trench is filled and bridging does not occur. Open trenches should be overfilled to allow consolidation, or the backfill should be compacted to reduce the amount of settling.

MATERIAL SELECTION

Choosing proper backfill materials is essential to maintaining adequate pipe support. Non-cohesive soils such as sand or plastic clay will need to be compacted to remove voids. Class IVA materials may increase pipe deflection, therefore additional examination should be conducted before using Class IVA materials. Backfill material descriptions and guidelines can be found in Chart 3.

COMPACTION

Backfill materials should be installed and compacted in accordance with Chart 3 and ASTM F449. The minimum recommended cover needed to protect the pipe from crushing under live loads is 2 feet, except in organic soils where the minimum is 2.5 feet. These minimum depths are recommended to prevent crushing of the pipe by normal agricultural vehicle loads. Other drainage factors could require depths of up to 6 feet.

Maximum burial depths are determined by a number of factors including compaction, type of bedding, trench design and pipe stiffness. Contact your local Timewell representative for more information.

OUTLET CONSIDERATIONS

A length of rigid or semi-rigid non-perforated pipe should be used as an outfall of subsurface drains. Where backflow of surface water is possible, hinged gates should be used. The projection of the outlet pipe from the bank should be as little as possible and not more than one third the length, to provide the required support.

RODENT PROTECTION

The outlet should be equipped with an animal guard to protect the system from entry and damage by rodents or other animals. Where pipe is connected to old lines that may serve as animal runs, an animal guard should be installed within the line to restrict animal travel.

○ TILE TRAILERS



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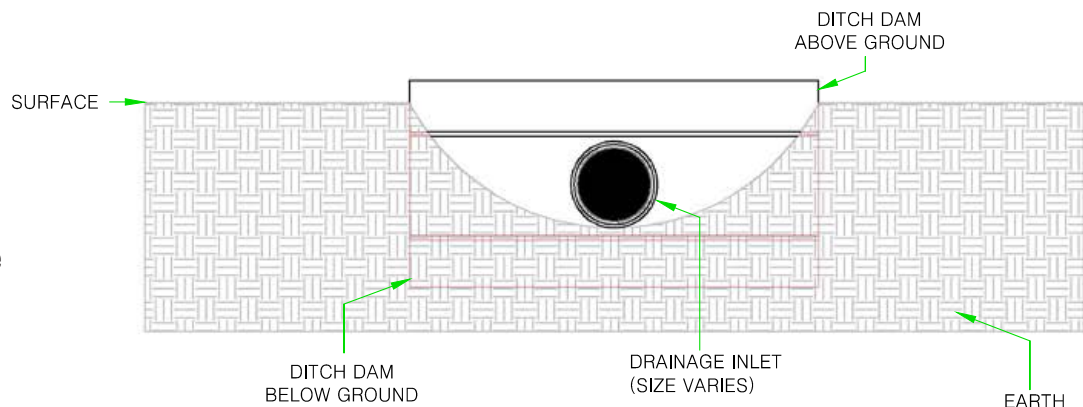


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Fight Soil Erosion and Farm More Acres!

Timewell's reinforced HDPE ditch dams let you farm right up to the edge of the field.

- Increases acres you can safely farm
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TRUCK LOAD WORKSHEET

Description	Length	Truck Load Quantity	Unit	Point Value Per Unit	# Of Pieces Ordered =	Total Point Value
2"	100'	600	Rolls	0.167		
3"	100'	220	Rolls	0.455		
	5600' & 6200'	6	Rolls	16.666		
4"	100'	185	Rolls	0.5		
	250'	76	Rolls	1.315		
	3250'	6	Rolls	16.666		
5"	165'	76	Rolls	1.315		
	2300'	6	Rolls	16.666		
6"	100'	76	Rolls	1.315		
	1685', & 1320'	6	Rolls	16.666		
8"	20'	240	Sticks	0.416		
	405'	9	Rolls	11.111		
	920'	6	Rolls	16.666		
10"	20'	180	Sticks	0.555		
	575'	6	Rolls	16.666		
12"	10'	288	Sticks	0.347		
12"	20'	120	Sticks	0.833		
	370'	6	Rolls	16.666		
15"	10'	195	Sticks	0.526		
15"	20'	80	Sticks	1.25		
	220'	6	Rolls	16.666		
18"	10'	132	Sticks	0.735		
18"	20'	56	Sticks	1.785		
24"	10'	72	Sticks	1.388		
24"	20'	30	Sticks	3.333		
30"	10'	42	Sticks	2.38		
30"	20'	18	Sticks	5.555		
36"	10'	28	Sticks	3.57		
36"	20'	12	Sticks	8.333		
42"	10'	22	Sticks	4.45		
42"	20'	10	Sticks	10		
48"	10'	14	Sticks	7.14		
48"	20'	6	Sticks	16.666		

Total Point Value Of Order

Divide By 100

100 Points per truck load

TOTAL TRUCK LOAD FOR ORDER

Van Trailer Capacities:

3" x 100' - 185 4" x 100' - 150

Listed 2" capacity applies to van trailers.

Timewell Delivery

At Timewell we guarantee next day delivery.

Palletized Load Quantity for MaXflo

Number of Sticks per Pallet

4"	63
6"	33
8"	23
10"	18

Number of Pallets per Truck

4"	12
6"	12
8"	8
10"	8

Number of 10' MaXflo Sticks on Trailer Deck

12"	48
15"	35
18"	20
24"	12
30"	6
36"	4
48"	2

Next Day
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on full load maxi-coil orders



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L. Hust Tiling
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Josh Babb
317-600-4886

Steve Johnson
217-430-2951

Kendal Dunn
573-239-8277

Kris Durbin
270-339-5088

"Timewell has always provided me with a quality product and unbeatable service. I always lock into their summer program to ensure my cost for the fall. With Timewell I never have to wait for tile and it's always there with their next morning delivery!"

Jason Hall
Hall Construction
Grinnell, IA

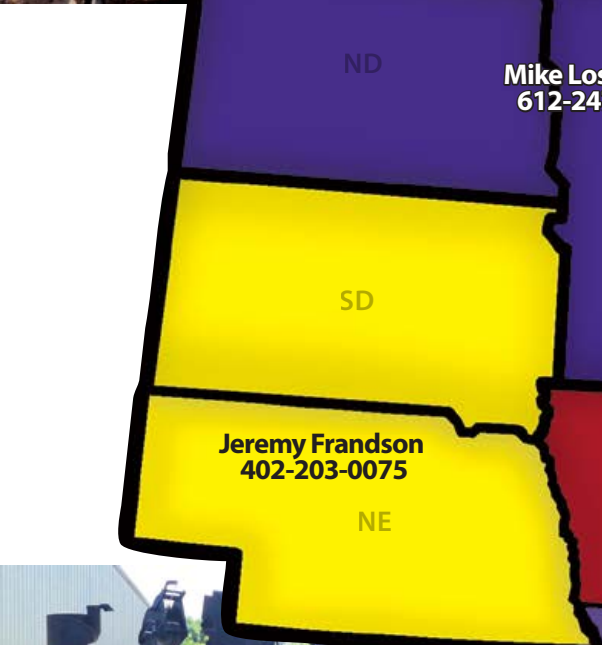
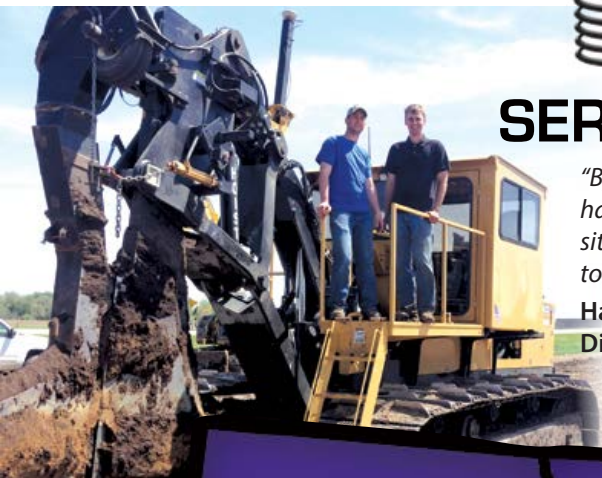
"Timewell provides us with a quality product we can count on. We also never have to wait for tile! By locking in with Timewell, we always know we will get our tile when WE need it!"

Craig Hol
Hol Drainage, Inc.
Oskaloosa, IA

"Timewell has always been efficient at getting us quality tile exactly when we need it. We value our partnership with Timewell. The service is second to none."

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