



TDRSTORMBREAKER

RETENTION SYSTEMS



TDRPIPE

TDR™ STORMBREAKER is a strong and reliable underground retention system, specifically designed to prevent unusual and hazardous stormwater runoff. The engineering of this system allows for rainwater storage, catering to various non-potable uses, such as irrigation, cleaning, or equipment cooling in the industry. A system that every project must consider for the care and intelligent use of water.

SCOPE

This specification describes retention and detention systems for stormwater collection. These systems attenuate the water runoff flow in severe storm situations. It's custom made for any terrain and space. Available solid for watertight retention systems and perforated for infiltration systems.

PIPE REQUIREMENTS

TDR's retention and detention systems utilize TDR Ultra HDPE Corrugated Pipe with the following characteristics:

TDR™ ULTRA WT pipe has a dual-wall structure - with a corrugated exterior featuring reinforced double-arch corrugations and a smooth black liner for the interior. Additionally, it includes a dual-layer co-extruded integrated bell & spigot. The Manning's "n" value for use in design is 0.010.

- 4- through 10- inch meet AASHTO M252, ASTM F2648 and ASTM F667
- 12- through 60- inch meet AASHTO M294, ASTM F2306, ASTM F2648 and ASTM F667.



JOINTS

For closed watertight systems:

TDR™ ULTRA pipe is joined with a watertight dual wall integrated bell and spigot joint meeting the requirements of AASHTO M252, AASHTO M294, ASTM F2306 and ASTM F2648. The joint is watertight according to ASTM 3212. Pre-installed gaskets meet the requirements of ASTM F477. A joint lubricant provided by TDR™ or any other water-based lubricant shall be used during the joint assembly. Please refer to TDR™ Installation Guideline for more details.

For infiltration systems:

TDR™ ULTRA pipe can also be joined with HDPE split couplers or any other manufacturer’s recommended accessory.

INSTALLATION

Pipe and fittings should be installed in accordance with ASTM D 2321 and TDR's published Installations Guideline. Maximum cover height depends on materials used for embedment and haunching. Please refer to TDR's Technical Service for more detail. Contact your TDR's representative for the latest installation's guideline and recommendations.

Minimum cover:

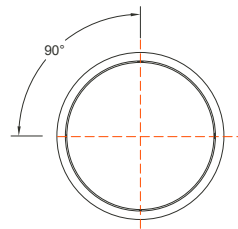
- 12" (300mm) - 60"(1500mm) - non trafficked 12" (0.3 m)
- 12" (300mm) - 36"(900mm) - trafficked 12" (0.3 m)
- 42" (1050mm) - 60"(1500mm) - trafficked 24" (0.6 m)

INFILTRATION

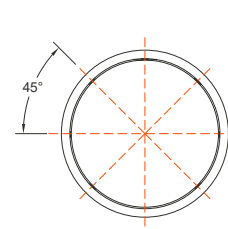
Perforations can be adapted to third-party soil permeability studies.

Please refer to your TDR's technical area for more details on the infiltration systems.

PATTERN A



PATTERN B



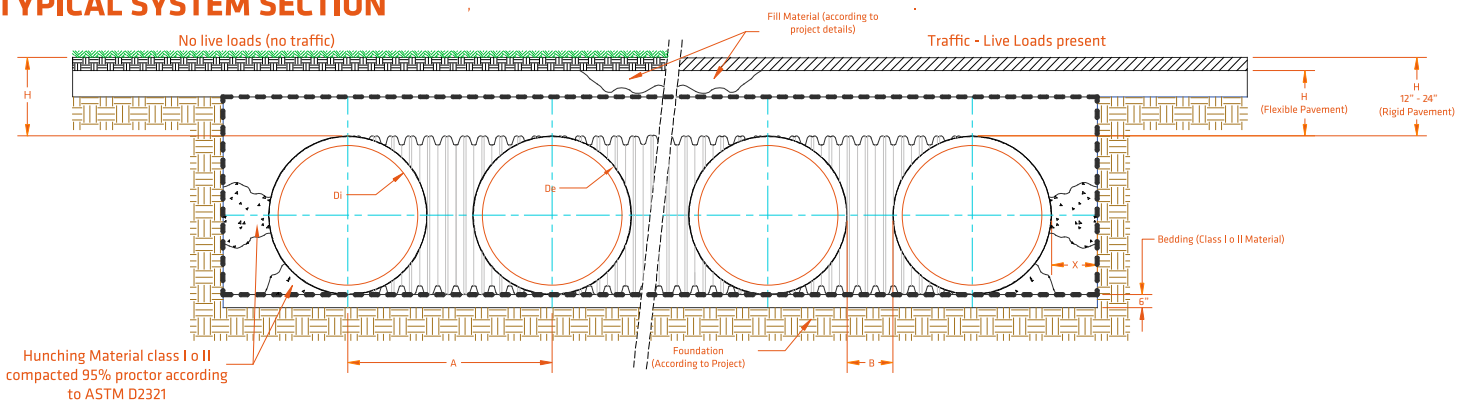
DIMENSIONS

Nominal ID in /mm	30" (750)	36" (900)	42" (1050)	48" (1200)	60" (1500)
OD ±1% in /mm	34.6" (879)	41.4" (1052)	47.5" (1208)	55.7" (1415)	68.1" (1729)

FITTINGS AND ACCESSORIES

All fittings and accessories are supplied or recommended by TDR Pipe.

TYPICAL SYSTEM SECTION



Note: ALL DATA IS FOR REFERENCE ONLY PLEASE REFER TO PROJECT SPECIFICATIONS FOR MORE DETAILS