

TerraBrute CR

4" - 12" (100mm - 300mm)

TerraBrute® CR

Engineered for Horizontal Directional Drilling (HDD) and other trenchless applications, TerraBrute® CR is a 100% non-metallic, CSA B137.3 / AWWA C900 PVC pressure pipe system. Non-corroding and installation friendly, TerraBrute CR allows you to standardize on PVC throughout your potable water and sewer infrastructure. Whether you're using open-cut or trenchless methods, there are no more problems matching materials and couplings. No more surprises.

TerraBrute CR's patented non-metallic "ring-and-pin" gasketed joint design outperforms all other restrained PVC pipe joints on the market, providing more than twice the pull strength of other HDD systems – up to 120,000 lbs. for 12" (300mm) pipe. Unlike competing square-shoulder designs, TerraBrute CR's rounded bell shoulders slide by roots, rocks and other debris that can protrude into the borehole. And unlike HDPE, TerraBrute CR requires no relaxation time before installation of fittings or services.

APPLICATIONS

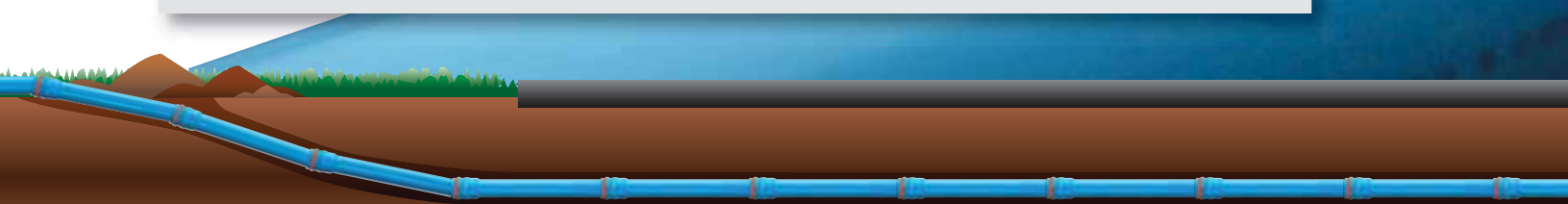
- Municipal Water Systems
- Fire Lines
- Industrial Lines
- Forcemains

STANDARDS



ADVANTAGES

- 1 Corrosion Resistant**
The new, non-metallic, "ring-and-pin" configuration of TerraBrute CR PVC pressure pipe offers complete corrosion resistance. The external "ring" is designed as two half rings for ease of installation and comes complete with the "pins" ready for insertion, creating a strong, locking joint.
- 2 Proven Performance**
Pressure rated in excess of 200 psi, TerraBrute CR delivers the superior strength and corrosion resistance you've come to expect from our Blue Brute pressure pipe, along with the ability to absorb the underground shear and flexure stresses that occur in buried applications.
- 3 Proven Compatibility**
TerraBrute CR trenchless PVC pipe is designed for total compatibility with your municipal system. Connections can be made with standard PVC CIOD fittings, direct tapped couplings or standard service saddles. Repair and handling techniques are the same as for any AWWA PVC pressure pipe.
- 4 Proven Joining System**
Based on our gasketed bell and spigot design, proven through years of service in the field, the TerraBrute CR joint is rated higher than the pressure rating of the pipe. And unlike competing coupling joints, the TerraBrute CR joint has been specially engineered to deliver the highest pull strength safety factors in the industry for HDD applications.
- 5 Fast and Easy Joint Assembly**
Because pipe segments are assembled during pullback operations, pipe stringing can be eliminated. Assembly time for a 12" (300mm) TerraBrute CR joint is typically less than five minutes.



Standards

CSA B137.3

AWWA C900

TerraBrute is made from stock conforming to AWWA C900.

NQ 3624-250

Factory Mutual and Underwriter's Laboratories

TerraBrute is made from starting stock that is Factory Mutual approved and ULC/ULI Listed.

“TerraBrute CR is the result of many years of research into the use of PVC pipes in HDD applications. The new non-corroding, locking joint design enables TerraBrute CR to enter new applications while maintaining the high tensile strength and bending radius of the original TerraBrute.”

*Dr. Erez Allouche,
Louisiana Tech University*

NEW NON-METALLIC GASKETED JOINT DESIGN

Extended Lip Bell

Plastic Ring for Pins

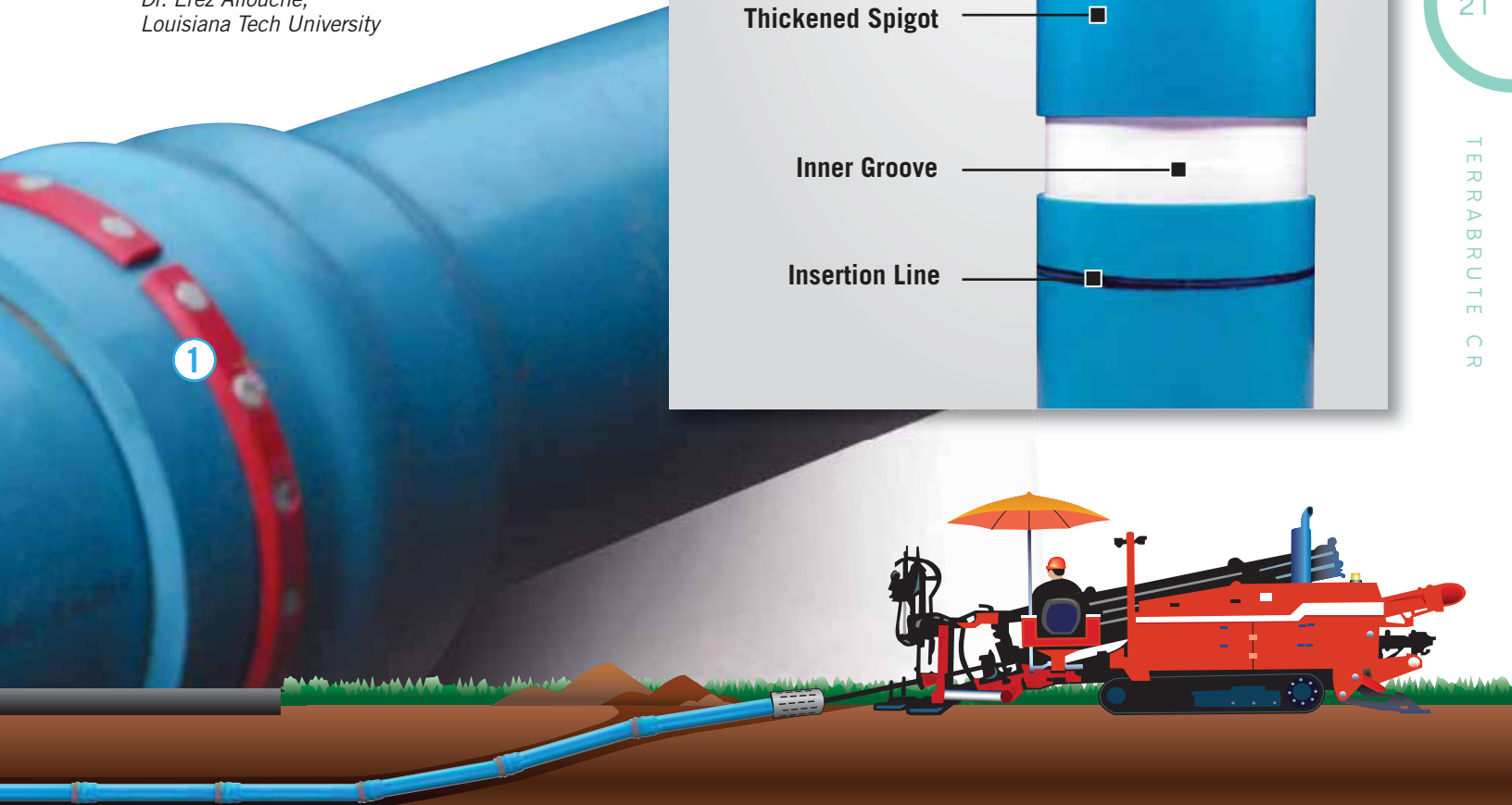
Non-metallic Pins

Grooved and Thickened Spigot

Inner Groove

Insertion Line

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APPLICATIONS

SHORT FORM SPECIFICATIONS

GENERAL

PVC pipe used for horizontal directional drilling (HDD) or other trenchless installation methods shall be manufactured with a cast iron outside diameter (CIOD) and shall be made with starting stock certified to CSA B137.3 for 4" - 12" diameters. Pipe will meet the requirements of AWWA C900, must be Factory Mutual approved, and listed by ULC and ULI.

MAXIMUM ALLOWABLE PULLING FORCE

The maximum allowable pulling force shall be the ultimate tensile capacity of the piping system divided by a safety factor of 2, as shown in the table below.

Nominal Size		Maximum Allowable Pulling Force	
mm	Inches	kN	Lbs.
100	4	50	11200
150	6	110	24700
200	8	115	25800
250	10	187	42100
300	12	275	61800

JOINT DESIGN

PVC pipe must be manufactured with an integral bell, and must have removable gaskets to allow the use of oil-resistant (nitrile) gaskets in contaminated soils.



BRIDGE CROSSINGS

TerraBrute CR's unique "new non-metallic ring-and-pin" joint design provides for easy installation in non-HDD applications where traditional butt fusion techniques would be difficult – such as this span of suspended pressure pipe installed beneath a busy roadway bridge.



ROAD CROSSINGS

TerraBrute CR is ideally suited for short drilling projects where existing structures cannot be disturbed – such as under busy highways, roads and intersections where you connect to PVC pipes.



URBAN CENTERS

Because TerraBrute CR can be assembled segmentally just before entering the borehole, projects take up less space in restricted urban areas, compared to the long strings of pipe typical with conventional PVC and HDPE installations.

