



## ALFA CHANNEL® STANDARD SPECIFICATION

### Precast Trench Drain 4" ID with Chemical Resistant FRP Grate

#### System ID#: 2722 / 2723

Trench drain shall be Alfa Channel®; By MultiDrain Systems, Inc., which is located at: 1405 Industrial Drive; Statesville, NC 28625; ASD. Toll Free Tel: 800-433-1119; Tel: 704-508-1010; Fax: 704-508-1011; Email: [request info \(steve.born@multidrain.com\)](mailto:steve.born@multidrain.com); Web: [www.multidrain.com](http://www.multidrain.com).

#### System Components:

**Precast Trench Drain** - The precast trench shall be manufactured using polyester polymer concrete with the following material properties when tested:

| Property                    | Test Method | Value                          |
|-----------------------------|-------------|--------------------------------|
| Compressive Strength        | ASTM C579   | 14,000 psi Minimum             |
| Bending Strength            | ASTM C580   | 4,000 psi Minimum              |
| Tensile Strength            | ASTM C307   | 2,000 psi Minimum              |
| Moisture Absorption         | ASTM D570   | 0.1% Maximum                   |
| Chemical Resistance         | ASTM C267   | Pass                           |
| Freeze/Thaw w/o weight loss | ASTM C666   | 1,600 Number of Cycles Minimum |
| Resistance to Fungi         | ASTM G21    | Zero (0) Rating Mold Growth    |
| UL/ULC Listed- Flame Spread | UL-723      | Class A                        |

The trench consisting of 39.19" (1 meter) or 19.56" (1/2 meter) channels with nominal 6" (155mm) outside width, 4" (100mm) inside width. Pre-sloped channels shall have a standard slope of 0.6% with radius bottom. Non-sloping channels must have written approval by engineer prior to installation. Channels shall have tongue and groove joints. Grate lock down slots shall have polyethylene vibration dampening inserts. All channels must have full length anchoring ribs for a positive mechanical lock with the surrounding concrete.

**Sidewall Extensions** – Sidewall extensions for channels may be used for hydraulic performance or to maintain the standard slope of 0.6% in greater trench run lengths. Sidewall extensions shall be composed of similar material and thickness as the channels and shall have tongue and groove joints.

**Grating** - MultiDrain part number 2722/2723. Grates are 39.19" (1 meter) and 19.6 (1/2 meter) respectively. Grating material shall be vinyl ester chemical resistant FRP. Grates shall have bars spaced at .6" on centers. Grating shall meet a minimum 494 psi proof load per AASHTO M-306 test modified by utilizing a 9" x 3" load plate. Grates shall seat into channels without rocking and shall be locked to the channel using a stainless steel #8 – 32 bolt and toggle bar system with a bolt torque of 1in/lb.

#### Quality Assurance:

**Submittals:** A Certificate of Compliance in conformance with the provisions of these Standard Specifications shall be furnished to the Engineer. Grates shall be independently tested to AASHTO M-306.