MultiDrain®
We Drain Your Site, Not Your Budget!

# ECONODRAIN® STANDARD SPECIFICATION

4-1/2” (114 mm) Trench ID, Pre-engineered Trench Forming System with Ductile Iron Grate

**System ID#: EconoDrain Series #4**
Trench drain shall be EconoDrain® Series #4; 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@multidrainsystems.com); Web: www.multidrainsystems.com.

**Forming System:** EconoDrain 4-1/2 inch (114 mm) Trench Drain Forming System as manufactured by MultiDrain Systems, including EPS forms, grating/cover seat, grating and/or covers and system accessories.

1. Construction: The trench drain system shall be EconoDrain consisting of non-CFC Expanded Polystyrene Foam (EPS) interlocking pre-sloped removable forms having a standard slope of 0.5 percent (1/16 inch per lineal foot of trench) and installed in standard eight foot sections (2438 mm) sections, pre-welded grate frames anchored securely in concrete, common rebar used for form stability and anti-flotation during pour and gratings.

2. Expanded Polystyrene Foam (EPS) Forms:
a. EPS shall have a Flame Spread less than 25 and Smoke Developed less than 450 per ASTM E-84 test method. Non-petroleum based form release is to be used for smooth interior trench walls and easy form removal.
b. Radius Bottom.
c. Square Bottom.

3. Grate Seat Rails:
a. Left and right rail shall be affixed together and pre-welded to assure proper symmetry and planar accuracy.
b. Material: Mild steel rails conforming to ASTM A36 - Black Polyester Resin Powder Coat.
c. Material: Mild steel rails - Hot Dipped Galvanized.
d. Material: Stainless steel conforming to ASTM A276.
e. Alignment clips shall be welded to each end of the angle frame.
f. Eight anchor stands shall be provided per eight foot length to aid installation stability; allow simple grade adjustment and provide grate rail pull out resistance. The anchor stands shall be fully welded to the angle frame.
g. Each frame assembly shall provide 10 anchor studs, a means to mechanically lock itself into the surrounding concrete. Rail pull out resistance shall not be less than 2,480 lb/lineal foot (36 kN/m).

**Grate: EG-0424-1-DI-B**
a. Material: Ductile Iron
b. Size (in.): 5-1/4” Wide x 24” Long
c. Grate Slot Size: 1-1/2” x 4-1/2”
d. Open Area: 64.1%
e. Square Inches per Lin. Ft.: 41.4
f. Load Rating: AASHTO M306-HS25
g. Grate Locking Device: Grate secured to steel rails with center locking device, Part Number ELD04.

**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.