

## ALFA CHANNEL®



### Surface Drainage Solutions

Civil • Commercial • Industrial • Ports • Airports



## Alfa Channel®

Alfa Channel® is a modular, pre-cast, pre-engineered polymer concrete (PC) trench drain system that has an interior channel width of 4". The system includes 30 pre-sloped channel sections of 1 meter nominal (994mm) each with built in slope of 0.6%. The Alfa Channel system also includes additional neutral or non-sloping channels that may be inserted in 4 locations for additional trench length.

The system is complemented by both in-line catch basin and modular catch basin assemblies. The modular design of the Alfa Channel system provides true on-site adaptability and cuts down overall project costs by reducing excess materials and labor.

Channels are manufactured from UL certified polymeric materials. Alfa Channel features a high precision tongue and groove joint for positive alignment and a superior configuration for sealant application.

### Environmental

With today's demands on capturing and conserving water, Alfa Channel is ideal for channeling water runoff where it can be reprocessed for usable water. Alfa Channel is also ideal for capturing and containing rain water for erosion control.

Alfa Channel specified by architects and engineers for many applications such as civil, industrial, DOT, airports, intermodal and many other areas where containment or channeling water is necessary. For chemical resistance, please go to the MultiDrain website and see the "Chemical Resistance Guide".

### Frame Options

Painted ductile iron is standard and galvanized ductile iron or stainless steel are optional. Select the best frame material for your application or adhere to the professional engineer's specification. All frames are independently anchored into the surrounding concrete so that the encapsulation concrete receives the horizontal loads and not the channel walls.

### Grating Options

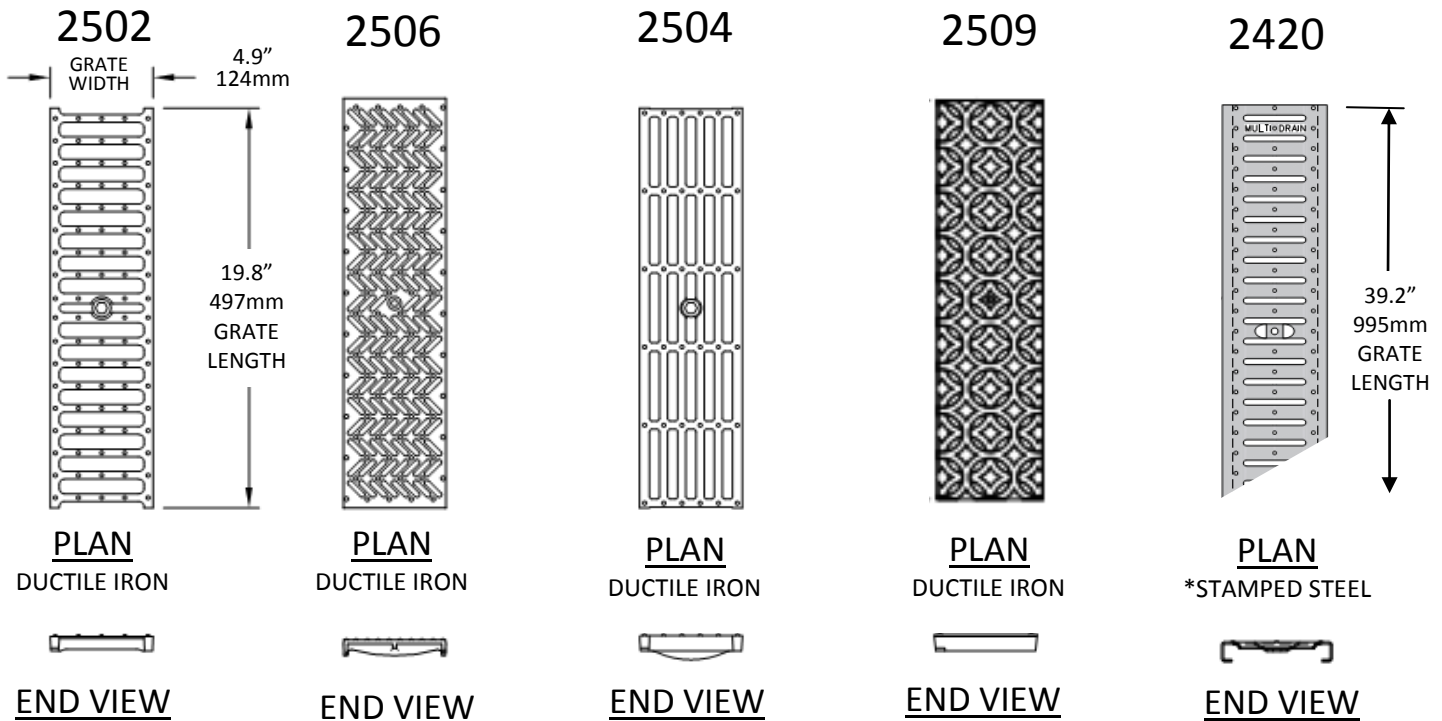
A variety of gratings and covers provide load capabilities from pedestrian up to large aircraft and severe point loads. Grating options include ductile iron, FRP, galvanized and stainless steel stamped grates. Iron grates can be galvanized to meet many commercial and industrial needs. Decorative grates are also available.



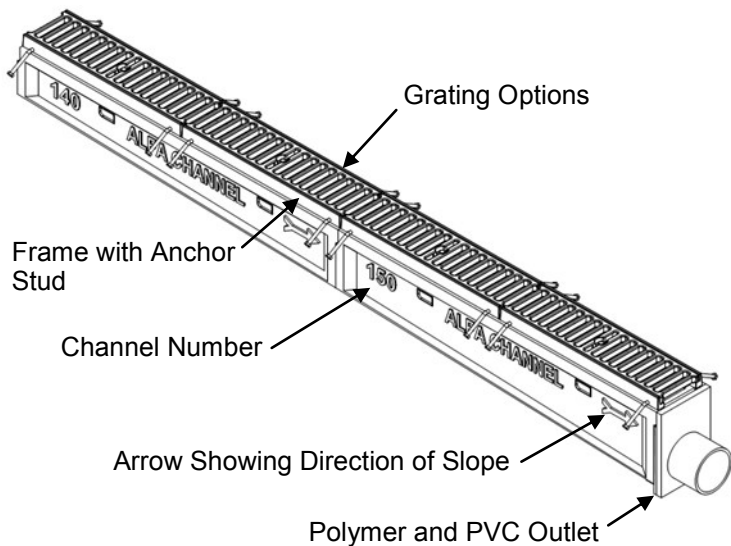
**Alfa Channel 4"**  
Without Frame: The grates will lay in the grate track formed within the channel. The grate can be locked in place utilizing an Alfa Toggle Lock at the Black Dot molded in the channel wall.



**Alfa Channel 4"**  
With Frame: The grate will lay within the frame and can be locked in place using the same method as above.



\*Stamped Grates - Available in Galvanized and Stainless Steel  
Other Grates are available, see website.



### Engineered for Fast and Easy Installation

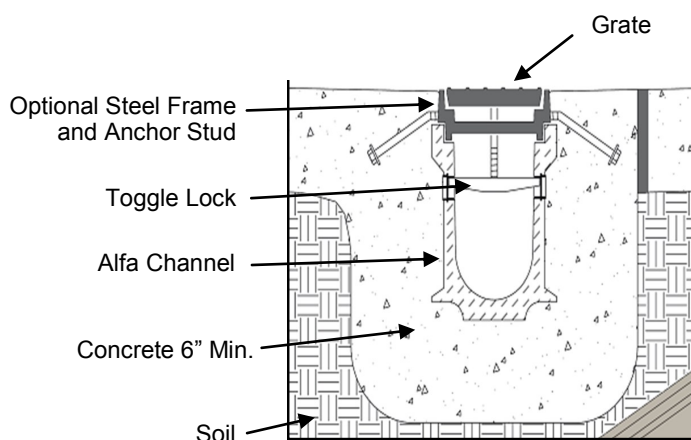
Alfa Channel is well-marked with arrows showing the direction of slope. Each channel is labeled with a number showing the numerical sequence. Pipe outlets are available for end and vertical outlet assemblies made from polymer and PVC outlet pipe.

Alfa Channel is easy to install utilizing the U-shaped non-float support leg to align the channels, adjust the height, and anchor each channel. For complete installation instructions, please see the Alfa Channel Installation Guide.

### Pre-Engineered System

Wood forming requires expensive labor and well-trained carpenters to build forms precisely to match the grating size and meet the engineer's specifications. Carpenters must be able to build wood forms with the proper slope and keep the trench straight and aligned. Once the concrete is placed, the wood forms must be removed the wood forms discarded. Then, the contractor may need to touch-up the concrete in the trench. If a radius is required in the bottom of the trench, this will be done the with grouting.

Alfa Channel is pre-engineered, eliminating the need for carpenters. The channels are nominal 1 meter long, and designed to butt end to end by tongue and groove keeping the channels aligned and straight. The channels are manufactured to receive the grating either by inlay or steel frame. With smooth polymer concrete, radius bottoms and 0.6% slope built in, Alfa Channel is designed for excellent hydraulics.



**Alfa Channel Sectional End View**

### Physical Properties

Property	Test Method	Value
Minimum Compressive Strength	ASTM C579	117,2 MPa (17,000 psi )
Minimum Bending Strength	ASTM C580	27,6 MPa (4,000 psi )
Minimum Tensile Strength	ASTM C307	13,8 MPa (2,000 psi )
Maximum Moisture Absorption	ASTM A140	0.2% [PCC 5% ]
Freeze Thaw Cycles (1,600 cycles)	ASTM C666	No Weight Loss
Fungi Growth Resistance	ASTM G21	Zero (0) Mold Growth
Flame Spread - UL / ULC	UL 723	Class A - Flame 5; Smoke 95
Chemical Resistance	ASTM C267	Pass - Automotive Fluids

*\*Chemical Resistance - For more details see the "Chemical Resistance Guide"*

# We Help You Plan for Rainy Days



## Applications

- ◆ Civil
- ◆ Loading Docks
- ◆ Airports
- ◆ Ports
- ◆ Mechanical & Industrial
- ◆ Petrochemical
- ◆ Intermodal
- ◆ Department of Transportation
- ◆ Military
- ◆ Containment
- ◆ Fire Stations
- ◆ Food & Beverage

## NFPA CODES AND TRENCH DRAIN- Request a UL listed product

Various NFPA codes require drainage components to be made of non combustible materials. The intent of these codes are to prevent the spread of flame. Since trench are collection points of flammable liquids and heavier than air vapors, trench drains can spread fire and contribute to smoke development even when empty. All of MultiDrain Polyester Polymer Concrete products carry the UL 723 Classified mark for Class A fire rating for flame spread and smoke development.

Selecting a trench drain with the proper material properties is critical to the life cycle of the product and life safety of a buildings inhabitants. Demand a UL Classified product.

Distributed By



**MultiDrain**<sup>®</sup>  
We Drain Your Site, Not Your Budget!

**MultiDrain Systems, Inc.**  
1405 Industrial Dr. • Statesville, NC 28625  
P: (704) 508-1010 • (800) 433-1119 • F: (704) 508-1011  
[www.multidrainsystems.com](http://www.multidrainsystems.com)  
[md.info@multidrainsystems.com](mailto:md.info@multidrainsystems.com)

**EconoDrain**<sup>®</sup>

\*DISCLAIMER: The customer and the customer's architects, engineers, consultants and other professionals are completely responsible for the selection, installation, and maintenance of any product purchased from MULTIDRAIN SYSTEMS, INC., and EXCEPT AS EXPRESSLY PROVIDED IN MULTIDRAIN'S STANDARD WARRANTIES, MULTIDRAIN MAKES NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE SUITABILITY, DESIGN, MERCHANTABILITY, OR FITNESS OF THE PRODUCT FOR CUSTOMER'S APPLICATION. Copies of MultiDrain's standard warranties are available upon request.

Copyright © Nov. 2014 MultiDrain Systems, Inc.

MultiDrain Systems, Inc. Trade Mark Products: Alfa Channel<sup>®</sup>, Alfa Slot<sup>®</sup>, EconoDrain<sup>®</sup> and MultiDrain<sup>®</sup>  
These products are protected by one or more U.S. patents.

PUB: EDLIT - 11-14