

# PolyDrain®

POLYMER CONCRETE PRE-ENGINEERED TRENCH DRAINS



POLYDRAIN



## **ABT, Inc. manufactures PolyDrain; the standard for pre-engineered trench drains.**

Experienced Architects and Engineers recognize the benefits of PolyDrain for a wide variety of applications. PolyDrain polymer concrete trench drains give the specifier the precision and accuracy required to satisfy hydraulic and chemical resistant demands.

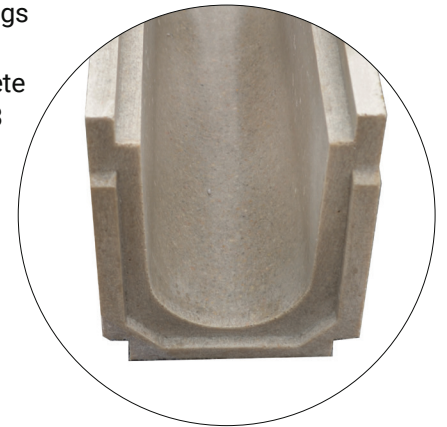
PolyDrain channels are a nominal meter (39.19 in., 3.27 ft.) long. Standard channels have a 0.6% built in slope. The 30 standard channels are positioned sequentially in numerical order from 010 to 300, creating a continuously sloped channel run. With PolyDrain, runs of almost any length are possible by varying outlet placements, integrating non-sloping channels and using PolyWall Sidewall Extensions for increased depth. Channel runs can be designed with tees and turns. These can be fabricated onsite utilizing commercial grade cutting tools.

### **PolyDrain Formulations**

ABT offers two compositional formulations for PolyDrain channels, depending on the effluent and chemical environment. Both offer superior strength and durability as well as marked cost advantages over alternative materials. Standard PolyDrain channels are manufactured from PolyDyn®, an advanced formulation of selected quartz aggregates and inert mineral fillers bonded together in a high-grade polyester resin. This formulation is suitable for use in both exterior and interior applications. When a higher level of chemical resistance is required, ABT offers PolyDrain in a special formulation called PolyChampion®, which has the same quartz and mineral fillers as the PolyDyn® formulation, but with a premium grade vinyl ester resin binder. This formulation will withstand a broader range of corrosive salts, fuels, acids and alkalis.

### **Flammability and NFPA Codes**

Trench drains are often the collection point for flammable liquids and heavier than air vapor, and can contribute to the spread of fire. 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. ABT Inc's Polyester Polymer Concrete products carry the UL-723 Classified mark for Class A fire rating. Demand a UL Classified product.

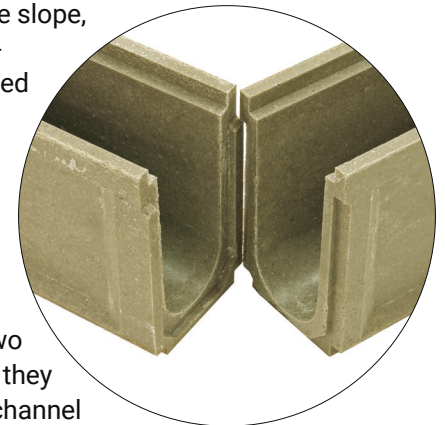


### **Pre-Sloped Radius Channels**

Standard PolyDrain channels have a built-in 0.6% slope with a smooth radius bottom and a 4 inch trench width. These features provide excellent hydraulic efficiency. Without any site slope, a 3.5 feet per second self-cleaning velocity is obtained when the channels are flowing full.

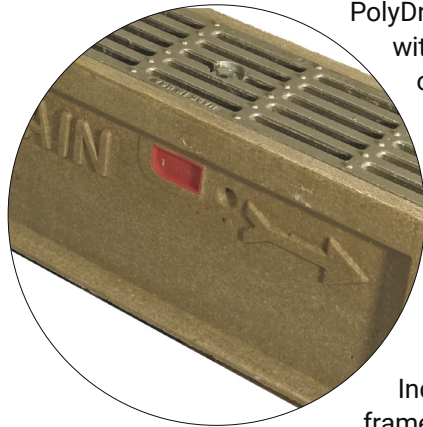
### **Interlocking Joints**

PolyDrain channels have interlocking tongue-and-groove joints that serve two important functions. First they aid in maintaining proper channel alignment during the pour. Second, they assist in securing channel connections to prevent fluid migration out of the system. ABT maintains a line of sealants that can be applied to channels when a sealed system is required.





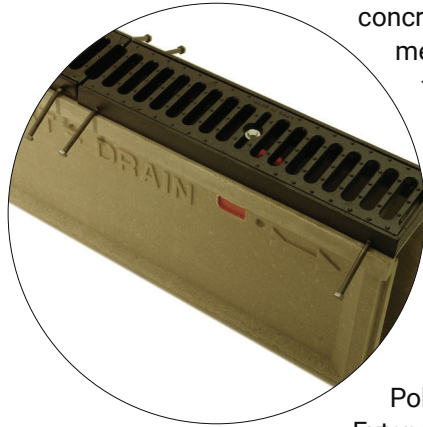
### Anchoring Ribs



PolyDrain channels are formed with full-length anchoring ribs on each side of the channel at the base of the side wall. These anchoring ribs provide a positive mechanical lock with surrounding concrete.

### Independent Anchor Frame

Independently anchored frames transfer the dynamic loads directly into the encapsulation concrete and channels are mechanically anchored via the full length rib. This eliminates the wheel load from creating strain on the channel and keeps the channel safely in the concrete.

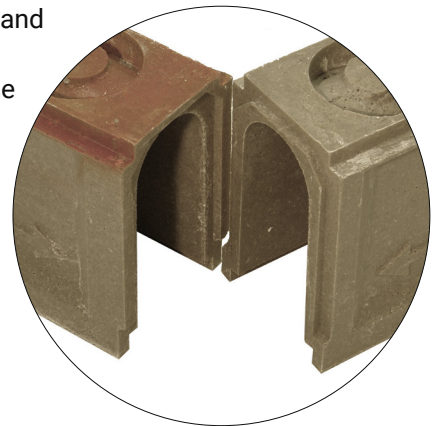


### PolyWall® Sidewall Extensions

PolyWall I and II Sidewall Extensions allow the designer or contractor to extend a continuous-sloping channel run from 98.1 ft. (30 m) to 294.3 ft. (90 m) without necessity of a catch basin or outlet.

### Gender Mender Outlet Channel

A series of specially modified channels that addresses the difficulties encountered when two sloping channels converge where a vertical outlet is required. For every outlet channel (050, 100, 150, 200, 250 and 300), a Gender Mender channel is molded with a female interlocking joint at the low point. This feature provides proper channel alignment and eliminates field fabrication for these center draining configurations.



## Visit [www.abtdrains.com](http://www.abtdrains.com)

ABT designs and manufactures some of the most extensive, reliable, and versatile lines of channel drains, grates, and water management solutions in the industry. If you're an engineer or designer and need performance-based specifications and details for your project, we can help.

Visit [www.abtdrains.com](http://www.abtdrains.com) for details on all our products.



Several PolyDrain grates styles are available in a wide range of materials. Visit [www.abtdrains.com](http://www.abtdrains.com) to see more.

### ABT,® Inc.

PO Box 837  
259 Murdock Road  
Troutman, NC 28166  
[www.abtdrains.com](http://www.abtdrains.com)  
Toll-free: 800.438.6057  
Phone: 704.528.9806

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