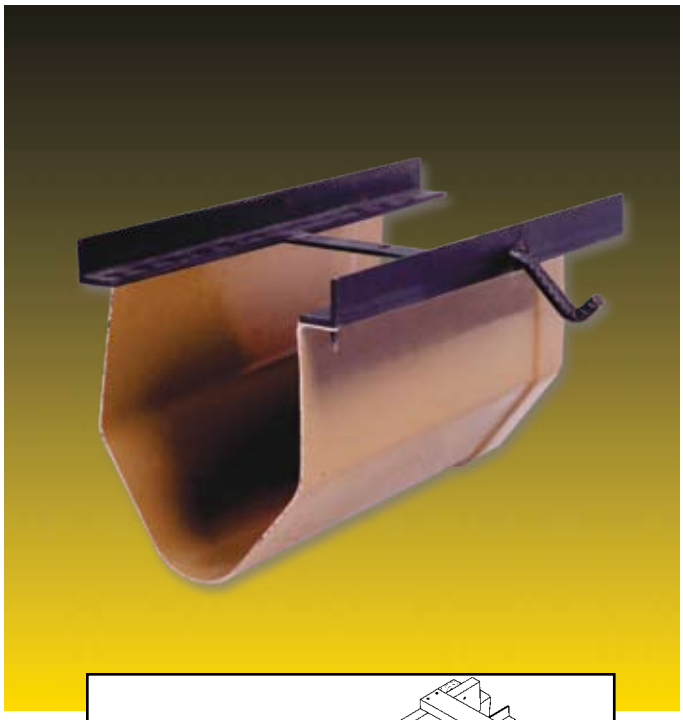
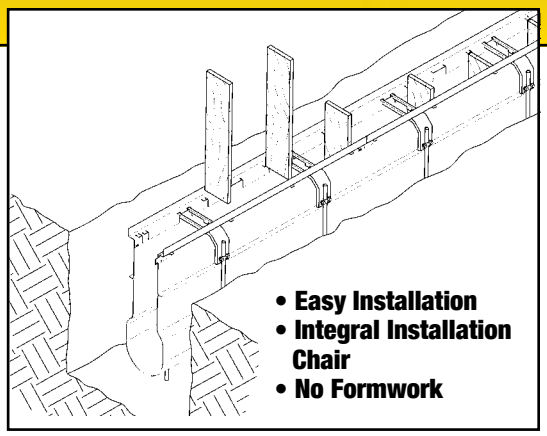
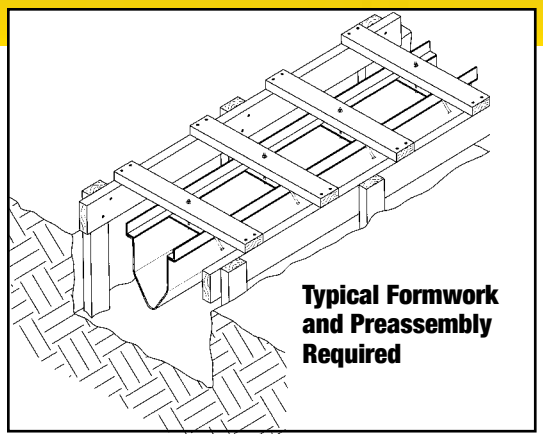
# COMPARE

## POLYCAST® 3000 vs. Other Fiberglass Trench Drain Systems






POLYCAST® 3000 is the first and only pultruded trench drain system on the market today. The pultrusion process allows the channel to maintain a consistently higher glass content for a strong, durable channel.

The unique bulb-shaped design of POLYCAST® 3000, combined with the continuous 1% slope, provides the largest flow capacity of any similar presloped trench drain on the market today.

POLYCAST® 3000 offers:

- **High Performance -** flow capacity of 3000 gpm or higher
- **Fast Installation** - installation rates in excess of 100 linear ft/hr and more
- **Superior Manufacturing Process** - ISO-9001:2000 pultrusion manufacturing plant
- **Unique Channel and Frame Design** - patent pending

**Should you use POLYCAST® 3000 or Other Fiberglass Trench Drain Systems for your next project?**
Features of both POLYCAST® 3000 and other fiberglass trench drain systems are compared on a point-for-point basis on the back of this page. See for yourself why POLYCAST® 3000 should be the choice for your next trench drain project.

| COMPARE | POLYCAST® 3000 Pultruded FRP Trench Drain System | VS. | Other Fiberglass Trench Drain Systems |
|---|---|---|---|
| **FLOW CAPACITY** | **More than 3000 GPM — 6.73 cfs**<br>Greater flow capacity allows POLYCAST® 3000 to evacuate greater amounts of water more rapidly. | | **Less than 2600 GPM — 5.79 cfs**<br>Low flow capacity reduces drain performance. |
| **SIDEWALL DEFLECTION DURING CONCRETE PLACEMENT** | Integral reinforcing ribs combined with bulkheads provide added support to POLYCAST® 3000 allowing the channel to resist the tendency to deflect and warp during concrete placement. | | Flexible channel sidewalls require **excessive formwork to limit deflection and warpage during concrete placement.** |
| **CHANNEL DESIGN** | The POLYCAST® 3000 **unique bulb-shaped design with vertical sidewalls** allows for a stronger channel with a greater flow capacity.<br>**120' continuous slope** - longer runs allow for more efficient fluid flow. | | **Weaker sidewall** can buckle during concrete placement and restrict flow capacity.<br>**100' maximum continuous slope** - shorter runs with more frequent interruptions are less efficient. |
| **THERMAL EXPANSION STRESSES** | Coefficient of Thermal Expansion (CTE)<br>POLYCAST® 3000: 4.5 x $10^{-6}$ in/in/°F<br>Concrete: 6 x $10^{-6}$ in/in/°F<br>POLYCAST® 3000 **CTE is similar to concrete** and thus is not as susceptible to differential expansion and movement. | | Other fiberglass drain system's **CTE is very different** from concrete.<br>Differences in expansion and contraction **result in thermal stress fractures and buckling of sidewalls.** |
| **CHANNEL FRAME DESIGN** | Specially engineered frames are completely embedded in concrete. Loads are transferred directly into the surrounding concrete for **uniform load distribution**.<br>Vent slots in the frame prevent air entrapment under the grating ledge. | | Frames are not completely encased in concrete. Channel **subjected to concentrated traffic loading forces**.<br>**Trapped air and sand pockets** can result in **premature frame and channel failure**. |
| **MANUFACTURING PROCESS** | **Pultrusion** process allows channel to be produced with more glass - **56% glass by weight.**<br>**UV inhibiting surface veil** - pultruded with surfacing veil for additional protection from UV damage.<br>**Manufactured in ISO-9001:2000 certified pultrusion plant -** consistent parts every time. | | Molding process limits the amount of fiberglass in the channel. Lower glass content results in **weaker channel walls. Glass weight varies.**<br>**Susceptible to UV breakdown.**<br>Inconsistent quality. |
| **INSTALLATION** | **Install up to 100 linear ft/hr.** - quicker installation saves time and money.<br>**Fewer parts** - frame design includes installation chair, no preassembly needed.<br>Integral steel installation chair allows easy channel placement, grade adjustment and locks POLYCAST® 3000 into the concrete. Standard 1" x 6" planks are used for stiffening diaphragms. | | **Slow and complex installation** adds time and cost to the project.<br>**Preassembly** required with many parts.<br>Excessive **formwork and elaborate contractor fabricated channel stiffening diaphragms required.** |

# THE CHOICE! POLYCAST® 3000 PRESLOPED TRENCH DRAIN SYSTEM!

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