CHAPTER 7

TRENCH DRAINS
A trench drain (also channel drain, line drain, slot drain, linear drain or strip drain) is a specific type of floor drain containing a dominant through- or channel-shaped body. It is used for the rapid evacuation of surface water or for the containment of utility lines or chemical spills. Employing a solid cover or grating that is flush with the adjoining surface, this drain is commonly made of concrete in-situ and may utilize polymer- or metal-based liners or a channel former to aid in channel crafting and slope formation. Characterized by its long length and narrow width, the cross-section of the drain is a function of the maximum flow volume anticipated from the surrounding surface. Channels can range from 1 inch (25 mm) to 2 feet in width, with depths that can reach 4 feet (120 cm).

Note: A wide variety of trench drain models can be found in the Trench Drain Catalog.

A. T1000 to T1200 Series (pg81)
   a) These models include grates only and grates with an angle iron frame.
   b) The grates with frames are designed to be installed in an application where the body of the trench drain is created by an existing component or a block out in the concrete pour.
B. T1320-FL and T1350-FL Series (pg82)
   a) Cast Iron bodies with ductile iron grates.
   b) The bodies are non-sloped sections that are bolted to each other with a gasket (T1320-FL-GASK and T1350-FL-GASK) seal.
   c) Both models have a transition body section that is used for a bottom outlet.
      i. The transition section has male 4” NPSM threads that connect to a standard A1 body.
   d) An order guide is on pg 83.
   e) Both trench drains are available with a stainless steel (-3) veneer that covers the trench grates and top flange of the body.
   f) All body sections come standard with the membrane clamps (-C) attached.

C. T1400 Series
   a) Polypropylene modular trench drain system.
   b) Available with a large variety of grates.
      i. See page 86 and 87 in the price book.
   c) Steel frames are also available for higher load rating capabilities.
d) Veneers are available for ductile iron grates and frames to give a clean stainless steel look with the higher load rating.

e) Each trench section must connect to a corresponding section.

f) Each trench section includes a cover board (T1400-PBRD-88), connection clips (T1400-CLIP-88) and grate lockdowns (T1400-PGL-STL-88).

g) Each end cap and end outlet are supplied with connection clips (T1400-CLIP-88) and finishing cap (T1400-PEFC-88).

h) Catch basins are available for the trench drain.

i. Catch basins are a deep section that a run of trench drains into and is usually supplied with a sediment bucket. This allows debris to be contained prior to draining into the sewer system.

ii. A 20” long catch basin (T1400-CB620) is available in polypropylene and fabricated catch basins are available in larger sizes.

iii. T1400-CB620 is equipped with a 4” Uniseal that allows the outlet on the catch basin by cutting a hole on any flat surface and installing the seal and pipe.
D. Fabricated trench drains
   a) Stainless steel fabricated trench drains (P6000 Series)
      i. Fully fabricated by our manufacturing facility and made per order.
   b) Epoxy coated fabricated trench drains (T1330 and T1360 Series)
      i. Fully fabricated by our manufacturing facility and made per order.
      ii. Some of these trenches use standard ductile iron grates.

E. Trench Layout Examples.
   a) T1320-FL Series

   ORDER EXAMPLE:
   Twenty feet of T1320-FL trench is required by the customer with one bottom outlet (4", no hub connection) and standard ductile iron grates.

   Number of body sections required is twelve. One of these body sections will be the outlet body section.

   PARTS REQUIRED:
   T1320-FLC-PB 11 pieces, List price: **816.00** per 20" section
   T1320T-FLC-PB 1 piece, List price: **816.00** per 20" section
   A1-4NH-7 1 piece, No charge, included when ordered with bodies
   A3-PG 1 piece, No charge, included when ordered with bodies
   HS-17 13 pieces, No charge, included when ordered with bodies
   T1320-FLC-PE 2 pieces, No charge, included when ordered with bodies
   T1320-FL-GASK 13 pieces, No charge, included when ordered with bodies
   T1400-PG-4 12 pieces, No charge, included when ordered with bodies
   T1400-PGL-STL 12 pieces, No charge, included when ordered with grates

b) T1350-FL Series

   ORDER EXAMPLE:
   Ten feet of T1350-FL trench is required by the customer with one bottom outlet (4", no hub connection) and standard ductile iron grates.

   Number of body sections required is ten. One of these body sections will be the outlet body section.

   PARTS REQUIRED:
   T1350-FLC-PB 9 pieces List price: **1186.00** per 12" section
   T1350T-FLC-PB 1 piece List price: **1186.00** per 12" section
   A1-4NH-7 1 piece No charge, included when ordered with bodies
   A3-PG 1 piece No charge, included when ordered with bodies
   HS-17 11 pieces No charge, included when ordered with bodies
   T1350-FLC-PE 2 pieces No charge, included when ordered with bodies
   T1350-FL-GASK 11 pieces No charge, included when ordered with bodies
   F1440-PG-4 10 pieces No charge, included when ordered with bodies
c) T1400 Series Layouts - Infinity Style (Rev.000)

Body Section with Dimensions

Tee Section (available in neutral sections)

90 Degree Section (available in neutral sections)
d) T1400 Series Layouts - Lighthouse Style (Rev.001)

Body Section with dimensions

90 Degree Section
(available in neutral sections)

Tee Section (available in neutral sections)