

TRAPEZOIDAL SECTION ASSEMBLY INSTRUCTIONS

1. Assembly Preparation - Visually inspect liners for damage.

Assembly Kit Includes:

Sealing strips, anchors (with cables), coated screws, washers, cable locks, installation sheet.

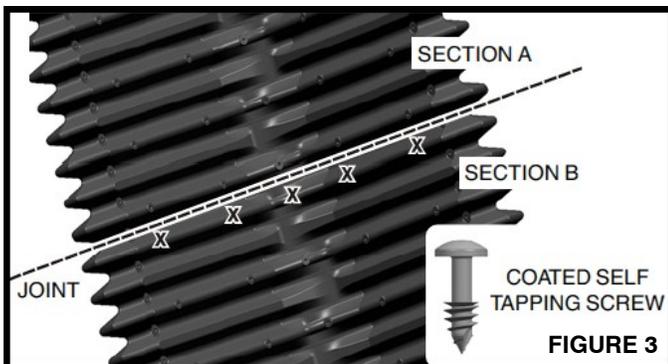
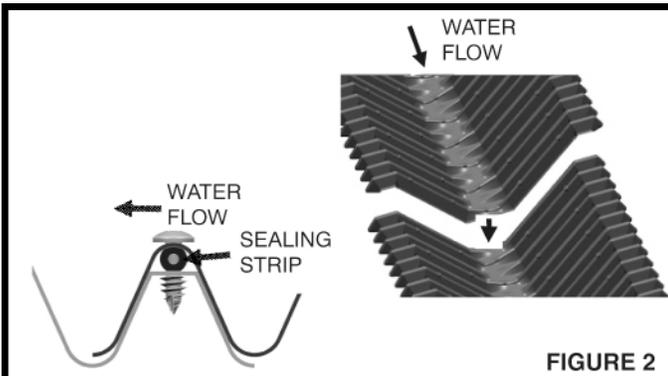
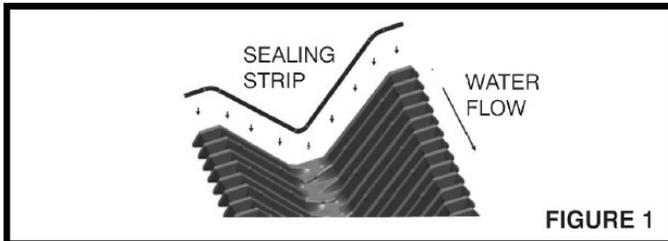
Tools/Supplies Required:

Leather work gloves, battery operated hand-held drill, 1/2" (13 mm) drill bit, pliers, 7/16" (11 mm) wrench, #3 square driver or phillips, electric powered hammer (with 3/4" (19 mm) sleeve bit), anchor driving rod (1/2" (13 mm) x 32" (813 mm) rod).

READ ALL INSTRUCTIONS THOROUGHLY BEFORE STARTING.

*ALWAYS DO WORK SAFELY. ENSURE THAT THE PROPER SAFETY EQUIPMENT IS USED.
REFERENCE TECHNICAL MANUAL FOR COMPREHENSIVE INSTALLATION INSTRUCTIONS.*

2. Assembly



STEP 1

Ensure that the ditch has been cleared of all sharp objects, rocks and debris prior to placing the SmartDitch® sections into the ditch.

STEP 2

Place sealing strip on top of flat end rib (See FIGURE 1):

- 12" (305 mm) Trapezoid — 50" (1270 mm) pre-cut strip per joint
- 24" (610 mm) Trapezoid — 85" (2159 mm) pre-cut strip per joint

STEP 3

Overlap sections ensuring that the upstream (rounded) section covers the down-stream (flat) section (See FIGURE 2).

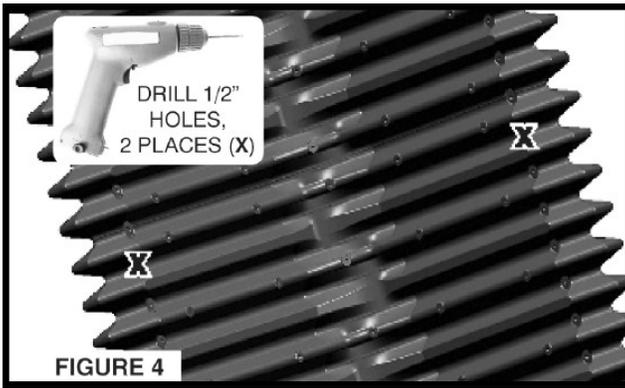
STEP 4

Drill screws through both liners at the dimples on the sides of the overlapped ribs. For 24" (610 mm) system, leave top dimples open for the anchoring system. (See FIGURE 3):

- 12" (305 mm) Trapezoid — 5 screws
- 24" (610 mm) Trapezoid — 7 screws

STEP 5

Visually inspect the sections to ensure the fastener screws have securely joined the sections.



STEP 6

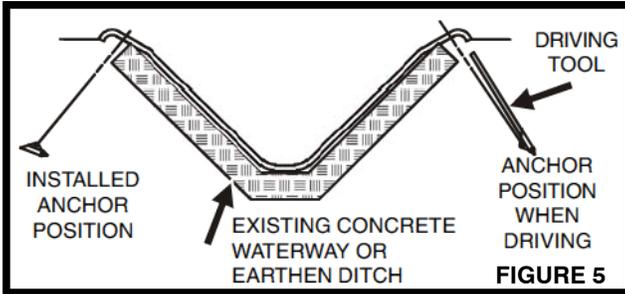
Drill 1/2" (13 mm) holes through sections at the dimples on top of the parts. Also drill dimples at mid-length of sections (See FIGURE 8 for recommended anchoring locations).

- 12" (305 mm) Trapezoid — Drill out dimples between the ribs closest to the overlap.
- 24" (610 mm) Trapezoid — Drill out dimples on top of overlapped ribs.

STEP 7

Drive anchors at overlapped joints and at the middle of the sections (See FIGURE 8).

Place driving rod into anchor and place anchor on soil surface. Hold driving rod and anchor cable into position and drive rod to required depth. Pull cable to engage anchor horizontally (See FIGURE 5).



STEP 8

Thread cable through drilled holes. Slide washer, and then cable lock, over the anchor cable (See FIGURE 7).

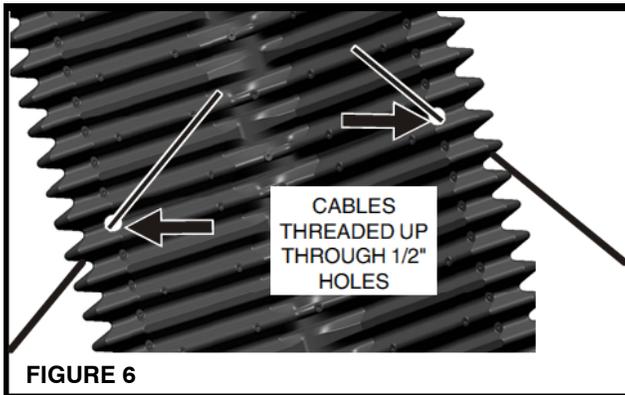
STEP 9

Use pliers to grip cable lock body. Firmly tighten the cable lock by engaging the set screw. Make sure the SmartDitch® section is tight to the earth. Trim excess cable.

Do not tighten the cable locks in a position where the SmartDitch® section is either bowed or splayed out.

Repeat the process for all sections.

Inspect cable lock seasonally and tighten as necessary.



STEP 10

It is important to use appropriate backfill material. Perform layered compaction based on the backfill material type. Do not over compact and deform trench lining. Ensure that compaction is substantial enough to support maximum flow capacity.

Please refer to technical manual for comprehensive installation instructions.

