



**Installation Guide  
and  
Important General Guidelines**

**STAKING METHOD**



# Installation of ExcelDrain Turf Drain by Staking Method

## General Guidelines

1. Place a rough graded sub-base at designed slope.
2. If sub-base is subject to external water sources (i.e. high water table, flowing ground water, etc.), design should include drainage or separation layer to protect base material from moisture that may migrate up from the sub-base material.
3. Place a suitable base material, a minimum of 4" thick, on the sub-base and compact to a minimum of 95 percent standard Proctor.
4. Precisely grade the base material to turf manufacturer's specifications. This may require laser screed equipment, etc.
5. The perimeter drain typically consists of a trench lined with filter fabric and containing a large-diameter perforated pipe surrounded by large-diameter aggregate (see **Figure 2**), or a geocomposite strip drain product.
6. ExcelDrain Turf Drain is designed to provide lateral drainage under the synthetic turf for collection at the perimeter of the field. It is NOT designed to be used as a waterproofing layer as it has seams. A separate layer, such as a poly liner, must be used between the base material and ExcelDrain if no water is desired in the base material.
7. It is recommended that the drain is installed during the warmest portion of the day, so that it is at or close to its maximum thermal expansion when installed. Unrolling the rolls and letting them relax prior to installation will help ExcelDrain lay flatter during installation.
8. ExcelDrain Turf Drain is best installed just before the turf installation.
9. **Final design to be provided by owner's field engineer.**

## Recommended Installation Procedure - Must be followed for a successful installation

1. Starting at the crown of the field, begin Row #1 by placing Roll #1 of ExcelDrain Turf Drain and unrolling it towards the side line with the flange (see **Detail 1**) in the direction of the opposite end of the field. Place 3 stakes in leading edge of ExcelDrain to secure. (see **Figure 1**)
2. Identify expansion joints in ExcelDrain (see **Detail 2**). Stretch taped expansion joints to open position by pulling on or otherwise tensioning ExcelDrain rolls on far side of each expansion joint prior to staking. Maintain tension on ExcelDrain when staking to insure expansion joint remains open. Place a stake in the center of the drain midway between each expansion joint (see **Detail 3**) making sure the stake head is flush with the fabric of the drain. This should be done with 6 3/4 inch or longer, serrated-shank, rust-proof landscaping stakes or 100 percent biodegradable Bio-Stakes by North American Green.
3. Start Roll #2 at the crown of the field butted up to Roll #1 making sure that the flange of the Roll #2 is on the same side as Roll #1. A 3/4" spacing at the butt seam **MUST** be maintained.

**NOTE: 3/4" spacing MUST be maintained between each row and butt seam of drain.** This can be achieved by using a temporary spacer such a 3/4" wooden dowel during staking.

4. Unroll Roll #2 to the opposite side line. Stake drain as instructed for Roll #1.
5. Start Row #2 with Roll #3 so that the expansion joints are staggered in relation to Row #1. This may require the end of the drain to go beyond the center/crown of the field (See Figure 1). Unroll towards the side line overlapping the flange of the first row of drain. 3/4" spacing **MUST BE MAINTAINED** between the dimples of the adjoining rolls. Stake drain as instructed for Roll #1.
6. Continue this process for Row #3 and the remaining field, staggering the rolls at the center line from one side to the other. Continue overlapping, staking and maintaining the proper spacing between rolls for the full length and width of the field. Make sure the drain is installed flat and staked down according to these instructions.
7. Before installing the turf over the drain, ExcelDrain should be checked for flatness and to ensure 3/4" spacing between the seams of the ExcelDrain. No overlaps of any kind are permitted. No wrinkles, buckling, waves or any grade deviation in excess of that outlined in the specification are permitted.

## **Connecting ExcelDrain Turf Drain to Perimeter Drain**

ExcelDrain Turf Drain can be connected to the perimeter drain in a number of ways. The perimeter drain typically consists of a trench lined with filter fabric and containing a large-diameter perforated pipe surrounded by large-diameter aggregate or a geocomposite strip drain product. Acceptable connection methods include those shown in Figure 2A and Figure 2B.

**PLEASE NOTE:** If another type of perimeter drain is specified, the engineer/designer and American Wick Drain Corporation should agree on details for connecting ExcelDrain Turf Drain to the perimeter drain.

If you have any questions or need additional instructions, please contact our office at 800-242-9425.

## **WARRANTY FOR EXCELDRAIN**

American Wick Drain Corporation ("American") warrants that the products shall be free from defects and in conformity, within normal manufacturing variations, with American's physical specifications. No other portion of American's published literature shall be incorporated herein except for such physical specifications. American shall be responsible for such defects only if the same is noted, in writing, within one (1) year from delivery of the products. Buyer's remedies shall be limited exclusively to the repayment of the purchase price (in which event buyer shall return any nonconforming products to American) or resupply of the product manufactured by American in a quantity equal to that of the nonconforming product (in which event buyer shall return any nonconforming products to American). American's distributor, agents, salespersons, or other independent representatives have no authority to waive or alter the limitation of liability and remedies. American may provide limited information regarding product installation and such information relates only to past experience and is no warranty of future performance. **OTHER THAN THE WARRANTY IMMEDIATELY ABOVE, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. THE REMEDIES PROVIDED HEREUNDER SHALL BE EXCLUSIVE; AMERICAN SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY, OTHER DIRECT, INDIRECT, CONSEQUENTIAL, INCIDENTAL, OR SPECIAL DAMAGES OF ANY KIND (INCLUDING COST OF INSTALLATION, REMOVAL OR REPAIR OF THE PRODUCT OR LOSS OF USE OR PROFIT).** In no event shall any claim be permitted or allowed more than one (1) year after the delivery date of the product.

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