

# Product Notes

## Product Note 3.118

**Re:** AdvanEDGE® Installation Guidelines  
Golf Putting Greens Applications

**Date:** July 12, 2004



## Introduction

AdvanEDGE® flat pipe is being used as an alternative putting green subsurface drainage system in place of the traditional 4" pipe and gravel in a trench method. The product consists of a 1.5" x 12" perforated plastic pipe with internal pillars for structural support. AdvanEDGE® flat pipe can be installed with or without a knitted polyester sock wrap depending on what type of putting green construction method is used.

## Green Construction Methods and System Layout

1. AdvanEDGE® flat pipe may be used on both USGA style and California (sand) profile greens.
2. A polyester sock wrap should be omitted for USGA style greens according to the 2004 revision of "USGA Recommendations for a Method of Putting Green Construction" (Figure 1)
3. AdvanEDGE® flat pipe must be installed with a sock wrap on California type greens (Figure 2). The maximum percentage of fines (passing #200 sieve) shall be less than 10% by weight.

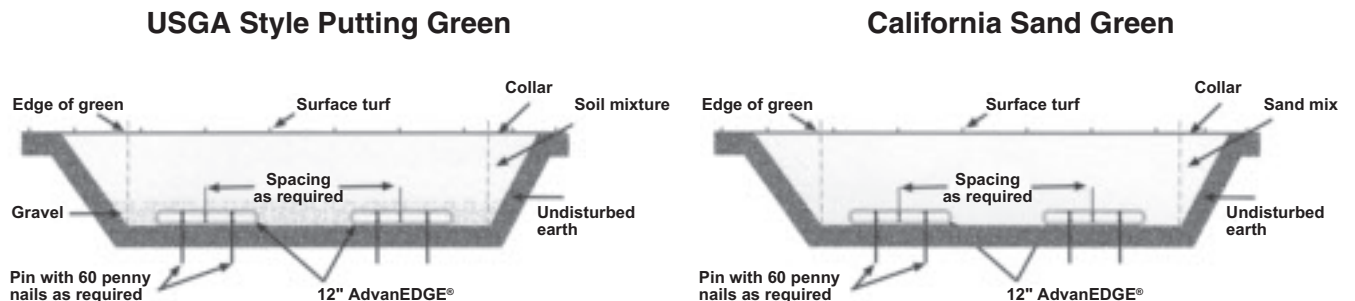


Figure 1: USGA style profile showing AdvanEDGE® flat pipe with root zone and gravel layer

Figure 2: California green detail showing AdvanEDGE® flat pipe with sock (no gravel)

\*Note: USGA criteria for gravel selection should be followed.

4. Drainage system layout patterns, spacing and slope requirements should follow the same guidelines as specified in the USGA "Recommendations for a Method of Putting Green Construction." (2004 revision) by the USGA Green Section Staff

## Drainage System Installation

1. AdvanEDGE® flat pipe must be installed on a well compacted subgrade. If the subsoil is unstable, such as with an expanding clay, sand or muck soil, a geotextile fabric should be used between the subsoil and the drainage pipe.
2. Positive fall must be maintained on all main lines and lateral lines.
3. Joints shall be made using AdvanEDGE® fittings including couplers, wyes, tees, end caps, and round pipe adapters. If a sock wrap is used, pull sock back to make joint connections then replace the sock over the joint and secure with ADS tape. The split couplers should be secured with metal pins.
4. The AdvanEDGE® flat pipe should be anchored to the subgrade every 10-15 feet using 60 penny nails, sod staples, etc., to prevent movement during the installation of gravel and/or root zone layers.
5. At the low end of the green, adjacent to the main line's exit from the green, AdvanEDGE® flat pipe should be placed along the perimeter of the green, extending to the ends of the first set of laterals. Four-inch N-12 or single wall perforated pipe may be used for this portion of the drainage system if the AdvanEDGE® flat pipe will not laterally bend enough to follow the subgrade cavity perimeter. (Figure 3)



Figure 3: Typical green detail showing layout pattern incorporating AdvanEdge® fittings.

6. The AdvanEDGE® drainage system should be connected to a 4" or 6" N-12 or single wall nonperforated pipe at the point of the main line's exit from the green. An appropriate ADS AdvanEDGE® flat pipe adapter should be used.
7. Discharge lines should be trenched to a lower drainage area as required.