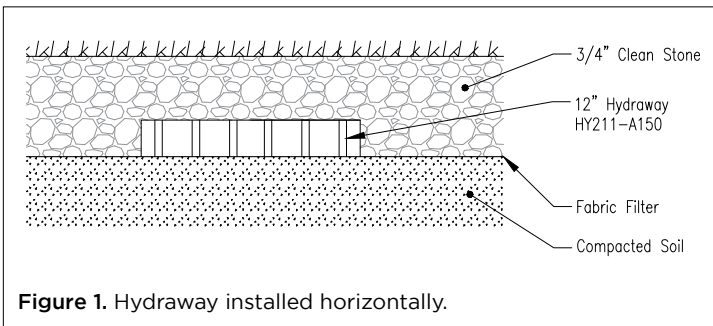


**Overview**

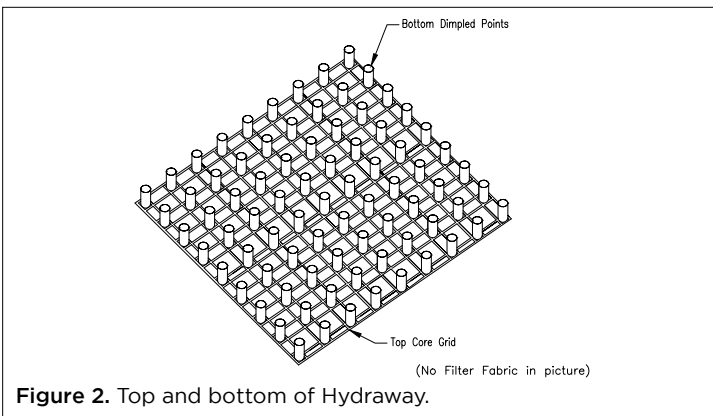
Most synthetic turf fields are installed horizontally with 12-inch Hydraway. The installation of Hydraway is done after the field has been graded to the desired slope and the subgrade is compacted. A geosynthetic fabric or HDPE liner is placed over the entire field. The liner helps stabilize the subgrade and provide a barrier between the soil and the backfill material (See Figure 1).



**Figure 1.** Hydraway installed horizontally.

The layout of a synthetic field is designed by an architect or engineer. Contact Hydraway for assistance with the design.

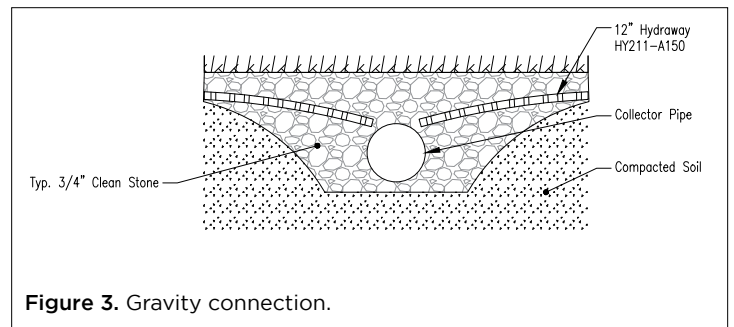
The 12-inch Hydraway is laid out horizontally into a herringbone pattern across the field at regular intervals for the purpose of collecting drainage water. The 12-inch Hydraway is traditionally installed 6-9 inches below the top of grade, to be determined by the designer. There is a top and bottom to Hydraway when it is installed horizontally: The top is the grid of the core and the bottom is the dimpled points of the core (See Figure 2).



**Figure 2.** Top and bottom of Hydraway.

**Fittings**

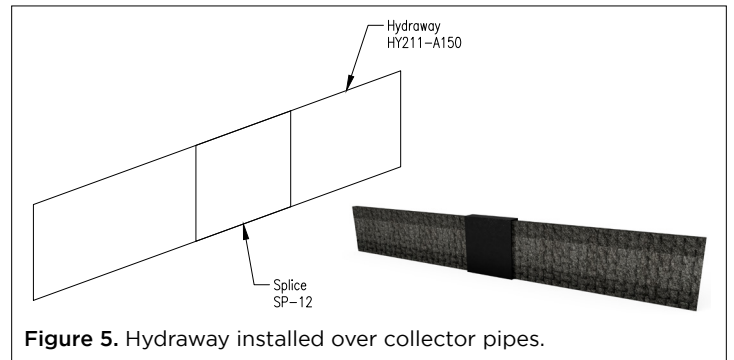
A Splice fitting is used to connect two pieces of Hydraway and is secured with HydraTape. Hydraway is connected to the collector pipe using a “gravity” connection (See Figure 3). The use of a fabric end cap is not necessary since the system is already protected by the underlying liner. The Hydraway lines are installed over the collector pipes (See Figures 4 and 5).



**Figure 3.** Gravity connection.



**Figure 4.** Fittings.



**Figure 5.** Hydraway installed over collector pipes.

# Synthetic Turf Installation Instructions

## Design Considerations

When preparing a drainage schematic for synthetic fields, the slope of the field, spacing, and drainage patterns must be taken into consideration.

### Slope of Field

The greater the slope, the faster the field drains. Synthetic fields are crowned in the center and slope towards the side lines at 0.5 - 1.5% slope (See Figure 6).

### Spacing

The spacing of drainage is typically 15 to 20 feet center-to-center. Contact Hydraway to assist in the design of the drainage pattern (See Figure 7).

### Drainage Pattern and Placement

12-inch Hydraway is unrolled from the center of the field toward the collection pipes. For ideal results, Hydraway is placed at a 35- to 45-degree angle to the existing slope, in a herringbone pattern. This is done to guide water flowing with the slope of the field to intercept the Hydraway and then to the collector pipes (See Figure 8).

## Other considerations

### Wheeled Traffic

Until 6 inches of compacted backfill is placed on the field, all wheeled traffic should be kept off the drainage lines. When a minimum of 3 to 4 inches of gravel is placed, tracked equipment can drive across the Hydraway lines. After 6 to 9 inches of gravel is placed and compacted, wheeled equipment can be driven on the field.

### Ease of Installation

Hydraway has no “memory” so when it is taken off the roll from the top, it is automatically in its proper position.

