Planter Area Water Drainage System

List of Tools Needed, Shopping List, and Installation Instructions

Low Capacity

5-7 Hours
Total Man Hours

$75- $95
Material Costs

12 Tools Needed

Tools Needed


Concrete Saw


Saw


Level


Measuring Tape


Pick


PVC Glue


Shovel


Plastic or Tarp


Trenching Machine Optional


Clear Waterproof Silicone

Shopping List

Quantity needed of each part will vary based on several factors specific to your project including system length, rainfall intensity, and number of problem areas. Pipe and fittings are offered in two sizes: 3" and 4". Size availability will vary based on region and store. Ensure that component sizes are consistent throughout your drainage system.

NDS Part Number	Description	Purchase Online

321or 421	3” or 4” Pop-up Emitter with Elbow	Buy online
Generic	3” or 4” Drain Pipe	
70 or 75	3” or 4” Atrium Grate	Buy online

Installation Instructions

Note Before You Dig

Prior to installation, have your local utility companies locate and mark the location of existing utilities. Lay out your drainage system and mark the location of trenches and individual parts to be installed with marking paint before digging. Carefully remove grass or plants that are located where the trench will be dug so they can be replanted after installation. Trenches should be dug such that they slope a minimum of 1% away from your house. Place all excavated dirt on a tarp so that it can be used later to backfill.

To speed up installation, a trenching machine can be used to dig all trenches, especially in areas with particularly hard soil. NDS drainage products have been designed to be installed in any soil type. Due to the variety of pipe types and sizes, double check that all pipe connection points are the correct size. Please follow all installation directions included with the individual parts of your drainage system. To create watertight connections between products, apply a bead of waterproof silicone to both parts and connect.

This system requires that the elevation of the Pop-Up Emitter be lower than the elevation of the area drain or the system will not drain.

Step 1: Lay out system, dig trenches and holes

Dig trench for drain pipe,5” Pro Series Channel Drain,Flo-Well, and EZ-Drain. Dry fit (no glue) the entiredrainage system from the 5” Pro Series Channel Drain to the pop-up emitter. The Flo-Well and EZ-Drain should be installed at least 10’ away from any existing structure. Measure and cut all pipe to necessary lengths. After completing each step, glue parts together.

TIP: If installing the drain in an existing concrete area, a wet concrete saw will be required to cut the concrete prior installation.

Step 2: Install Atrium grate and drain pipe

The atrium grate should be installed in a low spot in your landscape planter area. Slide the atrium grate into the drain pipe. Apply glue to an elbow and drain pipe and connect the elbow. Glue a section of drain pipe to the other end of the elbow

Step 3: Install Pop-Up Emitter

Connect the drain pipe to an elbow with a weep hole. The elbow should be installed with the weep hole on the horizontal side of the elbow. Slide the Pop-up Emitter onto the elbow. An additional length of pipe can be used between the elbow and Pop-Up Emitter to bring the Pop-up emitter to the surface. The Pop-Up Emitter fits on the “bell” or “hub” end of the pipe or a pipe coupler.

TIP: To avoid damaging your Pop-Up Emitter with your lawn mower, raise the cutting level of the blades or avoid passing the mower over the Pop-Up Emitter

Step 4: Backfill and Replant

Backfill and replace any grass or plants that were removed.

Have Questions?

Call 1-877-412-7467 or visit us on the web NDSPro.com