

SITEDRAIN™

INSTALLATION GUIDE FOR LANDSCAPING APPLICATIONS

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AWD SITEDRAIN prefabricated geocomposite drainage products are engineered, subsurface drainage products that are durable, economical solutions for most drainage issues. AWD's long history of successful installations and extensive distributor relationships ensure that there is a SITEDRAIN product for your application.

This Installation Guide provides a brief product overview and the information necessary to choose and install a SITEDRAIN geocomposite drainage solution for typical landscaping applications. AWD is also available to support and answer any questions.



LANDSCAPE DRAINAGE

GENERAL INFORMATION

SITEDRAIN prefabricated geocomposite drainage products combine a polymeric core with filter fabrics bonded to one or both sides. The filter fabric retains soil while allowing water to pass through. The drainage core efficiently moves the collected water to designated drainage outlets. This gives water an "escape path" relieving any standing water in landscape applications. It also minimizes the buildup of hydrostatic (water) pressure against subsurface structures, which greatly reduces the risk of structural and cosmetic damage to the structure.

AWD manufactures a complete line of prefabricated drainage products for various subsurface drainage applications.

The following information provides guidelines applicable to prefabricated drains in typical landscape applications using SITEDRAIN Strip Drain. SITEDRAIN Sheet Drain installation is recommended when a drainage trench more than 4 feet deep is required.

LANDSCAPE INSTALLATION MATERIALS

MATERIALS:

AWD SITEDRAIN Strip Drain comes in both 6" and 12" widths. Roll lengths may vary.

ACCESSORIES:

AWD offers a complete line of Fittings & Accessories to facilitate the proper installation of our drainage products. Note: AWD Fitting & Joint Tape (AWD Tape) is recommended for the sealing, seaming, terminating and connecting details referenced in this instruction guide, but any tape designed for underground use is acceptable provided it offers a strong bond that will not deteriorate over time in typical or anticipated subsurface conditions.



Left to Right: SITEDRAIN Strip Drain, End Outlet, Tee Outlet, Splice, Tee Fitting

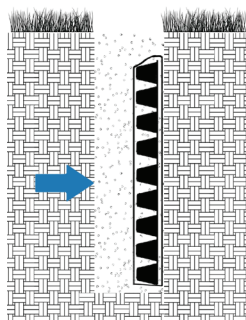
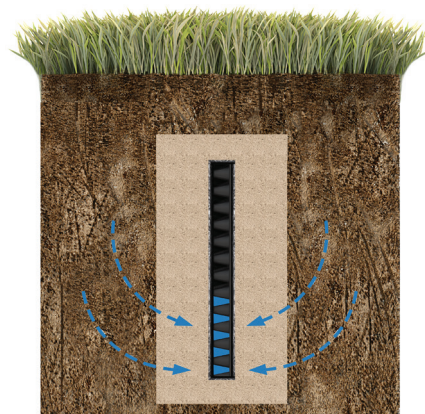
SITEDRAIN STRIP DRAIN INSTALLATION

Landscape Applications

SITEDRAIN Strip Drain can be used as a replacement for perforated pipe and stone drainage systems.

The Strip Drain is installed in a vertical position typically in a 2 to 4 inch wide trench. Water can enter from both sides of the Strip Drain. A permeable soil like sand or drainage aggregate is used to backfill around the geocomposite drain.

Any exposed drain ends should be sealed to prevent soil intrusion into the drainage channel.



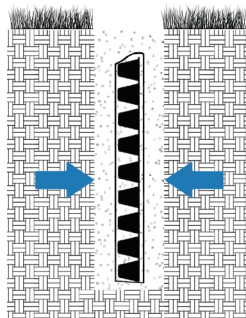
1. TRENCHING

Dig a 2-4" wide trench using a standard trenching machine, available at local rental outlets. The trench should be at minimum 3" deeper than the height of the drain - 9" for 6" tall Strip Drain or 15" for 12" tall Strip Drain.

2. DRAIN INSTALLATION

Place the Strip Drain oriented vertically inside the trench. Based on the drainage issue, the Strip Drain can be placed one of the following two ways:

- A. Against one side of the trench - If the primary water source is coming from one side, place the strip against the far side of trench. Reference Trench -1.
- B. Center of trench - If water source is coming from both sides or is unknown, place the strip in the center of the trench. To temporarily hold in place, use rebar or wooden stakes on each side approximately 3 ft apart to hold in place before backfill. These can be removed once back fill is placed.



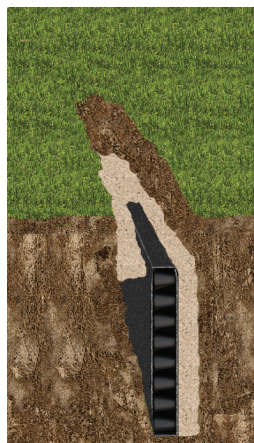
3. SLOPE

Strip Drain products do not require a slope to function properly, so long as there is no negative ("uphill") slope anywhere along the run and the designated drainage outlet(s) are installed at the low point(s) of the system. When installed with zero slope, water will flow laterally through the open channel of the SITEDRAIN Strip Drain core any time a head (or "height") of water builds up in the base of the core.

While not required, it is recommended that a positive ("downhill") slope be used in applications where practical. A positive slope (typically 0.5-1.0%) can help insure there are no negative slope areas existing in the system, while also providing an increased flow capacity.

4. BACKFILL

If both subsurface and surface water collection is desired, backfill trench with sand or drainage aggregate and compact. If primarily subsurface drainage is desired, the trench area above the strip drain may be backfilled with soil and compacted. A minimum of 3" of backfill material should cover the top edge of the drain to protect the drain from UV exposure, aerators and other landscape equipment."

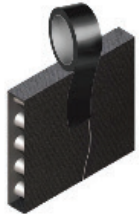


SITEDRAIN STRIP DRAIN INSTALLATION

Landscape Applications



Top View



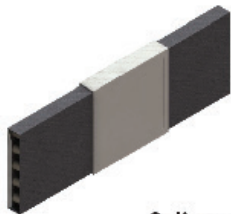
Splice - 3A

SPLICING DRAIN

"Strip Drains can be spliced together by one of the following methods.

A. Peel back the filter fabric to expose the first 2 rows of dimples on both ends to be connected. Securely interlock exposed dimples, tapping in place with rubber mallet if needed. Overlap filter fabric flaps and secure joint with AWD Tape or underground-rated tape. This method can be used with both 6" and 12" Strip Drain. Reference Splice - 3A / Top View

B. Splice Fittings are available for 6" strip drains only. Slide one end of drain into each side of the connector. Secure fitting to the Strip Drain with tape. Reference Splice - 3B"



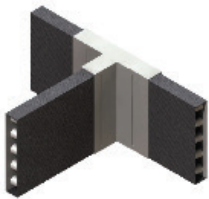
Splice - 3B

TEE CONNECTION

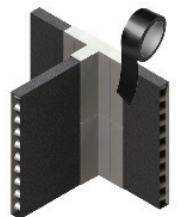
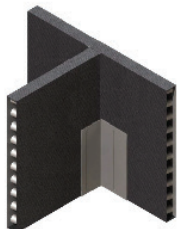
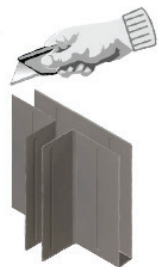
Strip Drains can be installed with branch lines to cover larger surface areas. Tee Connectors are used to join straight and branch lines of Strip Drain together.

A. For 6" Strip Drain: Place the end section of each branch line 2 inches into the Tee Connector and secure with tape. Use the stop guide lines on the fitting to ensure the drain inside the connector maintains an open area for water flow. Reference Tee Connector - 6".

B. For 12" Strip Drain: To create a tee connection, two 6" Tee Connectors must be used. To achieve this, the top of each Tee Connector must be removed using a utility knife. Once removed, the two connectors can be placed together and secured with tape to make the branch connection. Reference Tee Connector - 12"



Tee Connector - 6"



Tee Connector - 12"

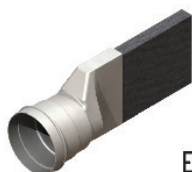
OUTLET CONNECTIONS

Outlet connections are used to transition the collected water from the Strip Drain to a 4" smooth wall PVC or 4" corrugated HDPE pipe.

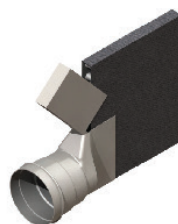
A. 6" End Outlets are available for 6" Strip Drain only. Reference End Outlet - 5A.

B. 12" End Outlets are available for 12" Strip Drain widths. Reference End Outlet - 5B.

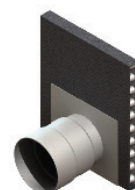
C. Universal Tee Outlets can be used with for both 6" and 12" Strip Drain widths. Reference Tee Outlet - 5C.



End Outlet - 5A



End Outlet - 5B

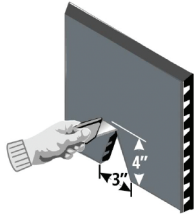


Tee Outlet - 5C

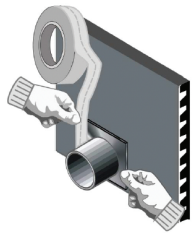
SITEDRAIN STRIP DRAIN OUTLET FITTING INSTALLATION

Landscape Applications

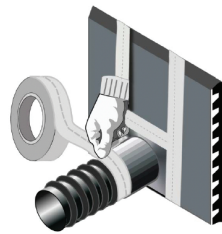
TEE OUTLET FITTING



Use a utility knife and cut a V notch in the bottom portion of the Strip Drain approximately 3 inches wide at the bottom and 4 inches high and discard.

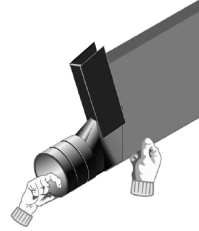


Insert fitting over the notch covering the back of the Strip Drain and tape in place. Make sure all edges are covered and secured.

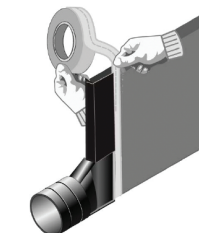


Insert pipe into fitting and secure with tape. Backfill per the pipe manufacturer recommendations.

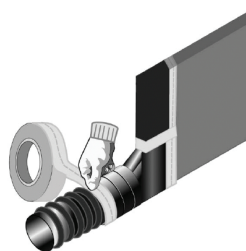
END OUTLET FITTING



Place end outlet starting at the bottom corner of Strip Drain. For 12" Strip Drain, make sure fabric faces up.



Secure fitting with tape. With 12" End Outlet, wrap fabric around exposed edge of core and then secure with tape to prevent soil intrusion.



Insert 4" pipe into End Outlet and secure connection with tape.

**** Make sure any exposed Strip Drain core without an End Outlet is wrapped with fabric and sealed to prevent soil intrusion. Pull back the fabric from the core to expose several rows of dimpled core. With a utility knife, remove the core leaving fabric intact. Fold the fabric back over and secure with tape.**

STORAGE AND HANDLING

DELIVERY:

Materials shall be delivered in original, unopened, undamaged packaging bearing manufacturer's name and product identification.

- Care must be taken during unloading process to insure materials are not damaged.
- Materials shall remain in original packaging until time of installation.

STORAGE:

SITEDRAIN products should be stored in a covered location protected from temperature extremes and direct sunlight.

- SITEDRAIN products shipped in UVI bags may be stored in an exposed environment for a cumulative maximum of 180 days.

STORAGE AND HANDLING

ENVIRONMENTAL CONSIDERATIONS:

- Limit unpackaged material UV exposure to a cumulative maximum of 14 days during installation.
- Do not install materials during high wind events.
- Do not expose materials to chemicals that are strong acids, strong bases, or high in solvents content.
- Protect materials from site construction damage, direct flames, and other environmental conditions that may damage the materials.

TEMPERATURE GUIDELINES:

INSTALLATION TEMPERATURE RESTRICTIONS:

AWD does not recommend installation when the ambient temperature is below 20°F or above 100°F.

OPERATIONAL TEMPERATURE RESTRICTIONS:

AWD products should not be installed in applications where the long term operational temperature is expected to be below -20°F or above 150°F.

NOTES:

CONSIDER SITEDRAIN SHEET DRAIN AND STRIP DRAIN FOR YOUR NEXT PROJECT:

French & Trench Drains



Retaining Walls



Brick & Stone Patios

Lawn & Natural



Playgrounds

American Wick Drain is a leading manufacturer of prefabricated geocomposite drainage products. With plants located in Carson City, NV and Monroe, NC. AWD can provide products across the country through local distribution. Our Customer Service Team is available to service your needs from product distribution to technical services. Let us know how we can help you!

CONTACT US

Visit awd-usa.com or call Customer Support 800.242.9425

Email: info@awd-usa.com

PRODUCT WARRANTY:

American Wick Drain Corporation ("AWD") warrants that the products shall be free from defects and in conformity, within normal manufacturing variations, with AWD's physical specifications. No other portion of AWD's published literature shall be incorporated herein except for such physical specifications. AWD shall be responsible for such defects only if the same is noted, in writing, within one (1) year from delivery of the products.

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; AWD 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).

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Construction
Supply Inc.



Quick
Supply Co.



Cascade
GEOSYNTHETICS

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Stabilization Fabrics

Geogrids

- Road Grids
- Wall Grids
- Slope Stabilization

Specialty Fabrics

Composite Geomembranes

- GCLs, PVC, HDPE, LLDPE, EPDM, Granular Bentonite

SEDIMENT CONTROL

Inlet Protection

- Grated Inlet, Curb Inlet, Area Inlet Protection

Ditch Checks

- Triangle Silt Dike
- GeoRidge

Perimeter Protection

- High and Low-Porosity Silt Fence, Straw Wattles, Silt Socks
- Safety Fence

Flocculants & Water Treatment

- Polymer-Based & Natural Flocculants

Sediment Basin Skimmers

Dewatering Bags

Trackout Control

- FODS
- Rumble Grates

Turbidity Curtains

EROSION CONTROL

Basic Hydraulically Applied Mulches

- Wood
- Paper
- Blends
- Straw

High-Performance Hydraulically

Applied Products

- BFM
- FGM
- Additives & Tackifiers

Temporary Erosion Control Blankets

- Coir & Jute Mat/Nettings
- Short-Term ECBs
- Extended-Term ECBs

Permanent Erosion Control Blankets

- Turf Reinforcement Mats
- HP-TRMs
- Anchor Reinforced Vegetation System

Structural BMPs

- Transition Mats
- Geoweb Cellular Confinement
- Composite Vegetated Armor System
- Flex MSE Vegetated Wall System
- Articulated Concrete Block
- Gabions
- Grout-Filled Geotextile Mats

Vegetation Establishment

- Native Seed & Turf Seed
- Fertilizers
- Organic Soil Additives
- Stratavault Soil Cells

STORMWATER MANAGEMENT

Water Quality

- Inlet Filter Boxes
- Pre-Treatment Chamber
- Nutrient Separating Baffle Boxes
- High-Flow Biofiltration Media
- Hydrodynamic Separators
- Stratavault

Water Quantity

- Modular Underground Storage Systems
- Chamber Detention Systems

Drainage

- HDPE Swale Liner
- Pipe & Fittings
- Drainage Composites
- Strip Drain

Inlet Structures

- PVC
- Drain Basins, In-Line Drains
- Landscape

Permeable Pavers

- Permeable Articulating Concrete Block
- Grass Pavers
- Gravel Pavers
- Concrete Pavers

SPECIALTY

Natural & Synthetic Coir Fiber Logs

Vegetated Reinforced Soil Slopes

Soil Anchors

Root Barrier System

AquaBlok

Muscle Wall

We are full line distributors of construction materials for all project types. Contact us for assistance with a project. From specification and development to installation and completion, we're here to help with all of your site solution needs.

GEOSYNTHETICS | EROSION CONTROL | STORMWATER MANAGEMENT
SEDIMENT CONTROL | REVEGETATION & SOIL AMENDMENTS