

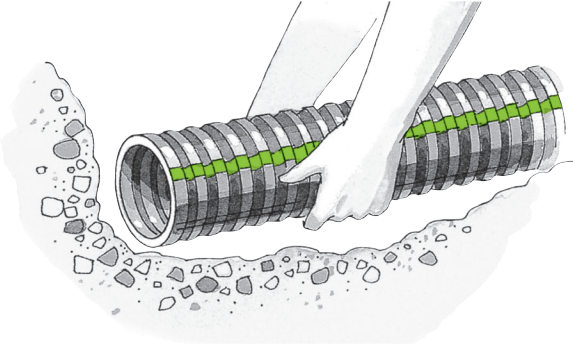
Commercial & Residential Drainage



ADS pipe advantages

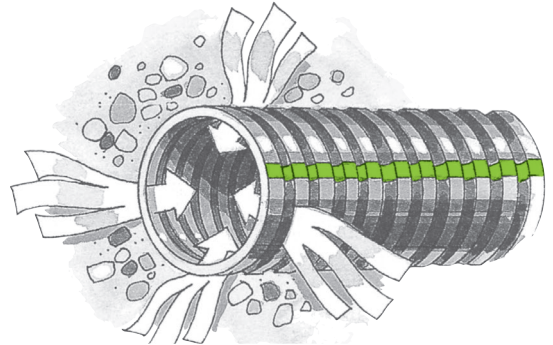
Easy to install

Lightweight and easy to carry. Saves time and labor. No special tools or fittings needed. No waste; just cut to required length.



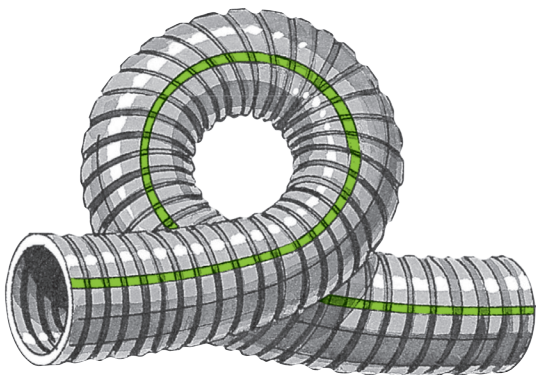
Unrestricted water intake

(Drainage Pipe) Uniform slots in the corrugated valleys for unrestricted, rapid water intake. Quicker drainage to handle heavy rains.



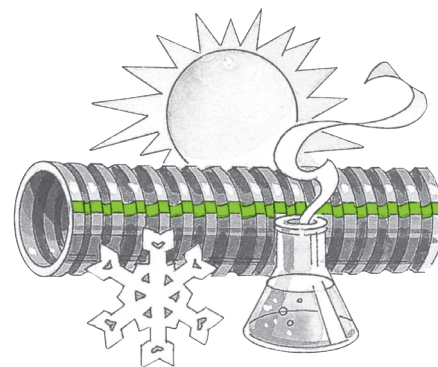
Flexible

Easily adjusted for line and grade. Reduces the need for fittings and maximizes potential for field adjustments.



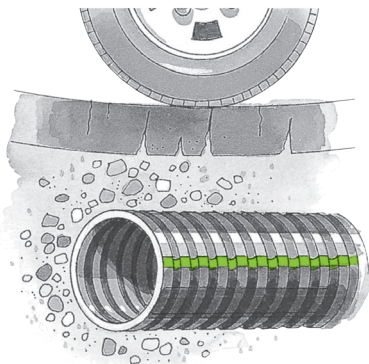
Long life

Will not deteriorate. Rust resistant. Not affected by acidic soil content or other problem soils. Not affected by freezing or thawing.



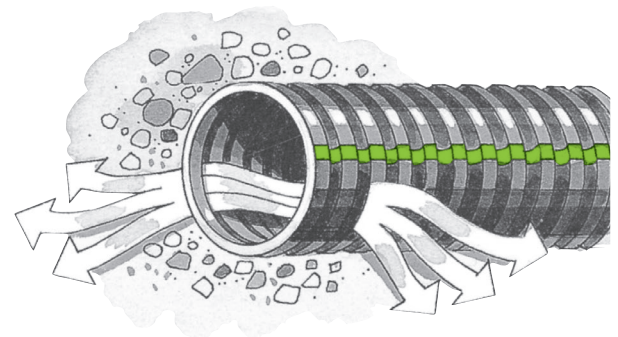
Strong-tough-durable

Won't crack or break under normal handling and installation procedures. Tough enough to withstand the heaviest loads.



Assured effluent flow

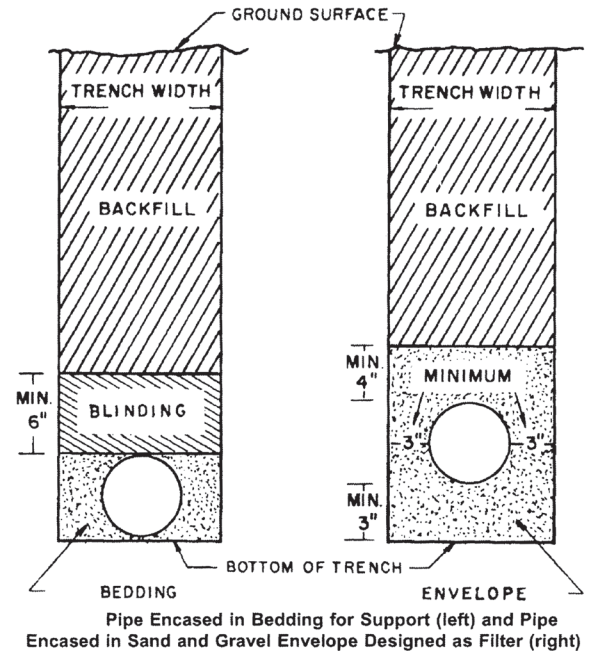
(Leach Bed Pipe) Uniformly sized and spaced drilled holes for effective outflow of effluent.



ADS pipe installation guidelines

- Care during installation:** Care should be taken to prevent damage to the pipe during the backfilling operation. Avoid dropping large clods or rocks directly on pipe. Impact loads of all types should be avoided until pipe is properly bedded.
- Bedding:** Class I materials and native soil meeting Class I, II or III are acceptable backfill materials. When selected soil bedding material from the trench excavation is used, choose small loose particles of soil that will flow around the pipe and minimize soil settling. Avoid large rocks that may damage the pipe or large clods of soil that cause voids and subsequent excessive settling. Selected soil bedding materials should be tamped or knifed under pipe to eliminate voids.
- Depth of cover:** If vehicular traffic is expected there should be a minimum of 12" (300 mm) of cover over pipe if gravel bedding is used and 24" (600 mm) of cover if selected soil bedding material is used. Typical recommended gravel envelop materials would be a 6A stone or pit run coarse sand and gravel mixes.
- Proper grade:** The grade or "fall" on which pipe is laid is critical because reversals in grade will greatly reduce the effectiveness of the system. Best drainage practice calls for a continuous downhill fall or grade over the entire length of the drain line. A fall of 0.2" (5 mm) per 10' (3.0 m) of length is generally considered adequate. Greater amounts of fall will promote more rapid drainage.
- Proper selection of materials:** Proper selection of material is determined by the application. If the line is to serve as a drainage line, perforated pipe should be used. If the line serves only to convey water away from an area (such as downspout runoffs, etc.). Solid pipe is best, as it will not dissipate water into the surrounding area.

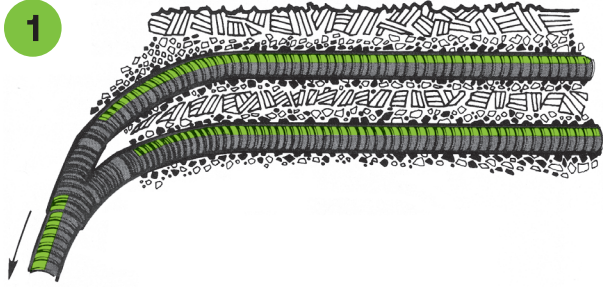
Solid pipe should also be used if the line runs close to trees where root penetration may be a problem. If the soil being drained is sandy or silty, then either geotextile wrap or a gravel envelope should be used to prevent fine soils from entering and blocking the line. If the above recommended guidelines are followed when installing a drainage system, ADS pipe will provide an easy-to-install, save, permanent and efficient drainage system.



ADS corrugated pipe: perfect for homesite & commercial drainage

Interceptor drains

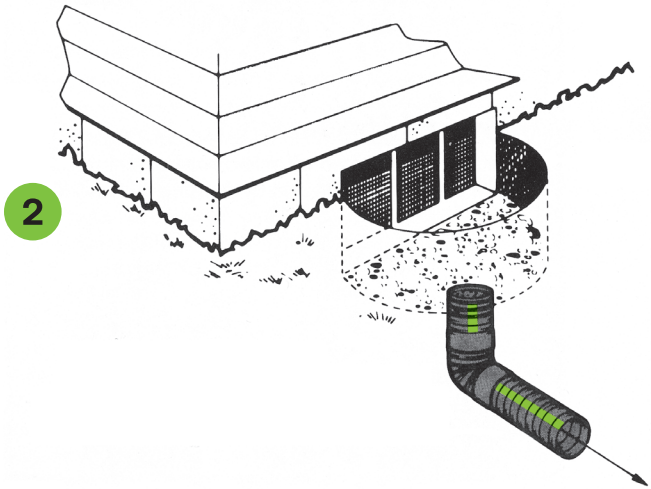
If the building is on a slope, ADS pipe installed as a curtain drain will intercept the water before it reaches the foundation or creates unsightly wet areas around the building. Use ADS perforated pipe, encased in gravel bedding, in ditches on the slope parallel to the building to intercept the excess water. At the end of the perforated line, connect to ADS solid pipe to carry water to a disposal area.



Window wells

Basement window wells should be drained to prevent water from seeping down to the foundation wall and entering the basement.

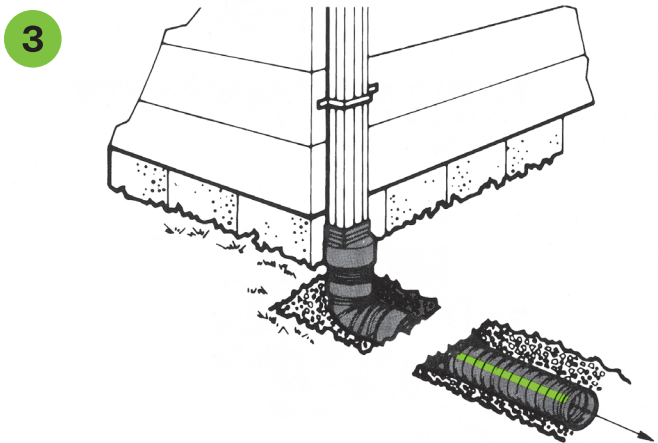
The window well can be easily drained by running a line of ADS solid pipe from a drain in the bottom of the well to a disposal area. The flexibility of ADS pipe will be helpful in making grade changes and curves away from the well. ADS 90° elbows are available for extremely sharp curves.



Downspout run-off

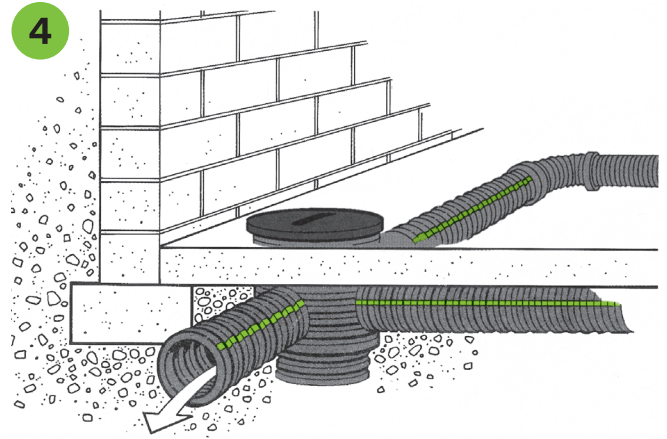
To carry rainwater away from the house and avoid water seeping down basement walls and creating wet basement problems, use ADS solid pipe from downspout to storm drain inlet, street curb, or other disposal area.

Place an ADS Downspout Adapter on the end of the downspout, snap the ADS solid pipe into the snap coupling end of adapter, and run ADS solid pipe to the disposal area. If a shallow line is needed from the downspout, an ADS 90° elbow can be used. ADS tees, wyes and other fittings are available for connecting two or more downspouts to the same line.



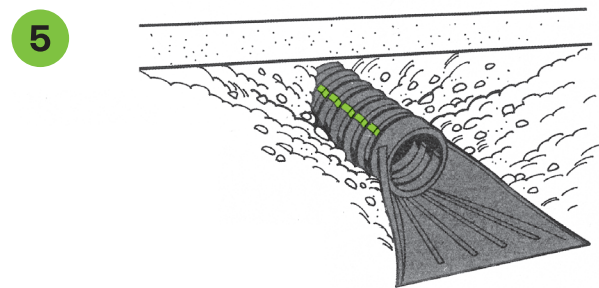
Underslab drainage & sump pump application

ADS perforated pipe can be installed in new or retro-fit construction to prevent wet basements. Pipe can be installed outside (see Foundation Drains) or inside the basement. ADS pipe should be placed in the basement floor approximately one foot from the inside wall or in a cross pattern as illustrated. Line should have a minimum grade and lead into a sump at one corner of the basement or to an outside drain. Pipe should be installed in a gravel envelope such as is recommended for foundation footing drains outside buildings.



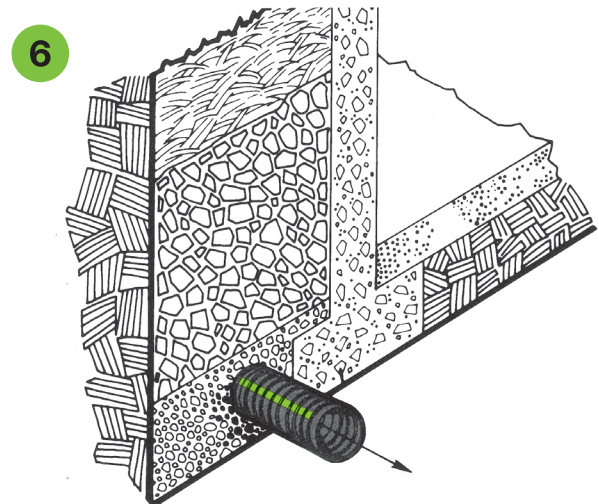
Driveway culverts

To carry water beneath your driveway, use ADS solid pipe. Crushed stone, gravel or compacted soil back-fill material should be used as the bedding material around the culvert, with aggregate size not exceeding one inch. Minimum recommended cover is 12". For driveway culverts with less than 12" of cover see ADS Pocket Installation Guide.



Foundation drains

Wet basements are generally caused by ground water being either adjacent to or higher than the basement floor. To prevent the water from entering either the basement wall or the footings, install ADS Perforated Pipe in a gravel envelope completely around the house. The bottom of the line should be as low as the bottom of the wall or footing course, with a minimum slope. It should run to a storm sewer or other disposal area. Although ADS pipe will bend around corners, 90° elbows with snap couplings are available where local codes require them. An ADS tee will tie together the ends of the foundation drain at the line leading to the disposal area.

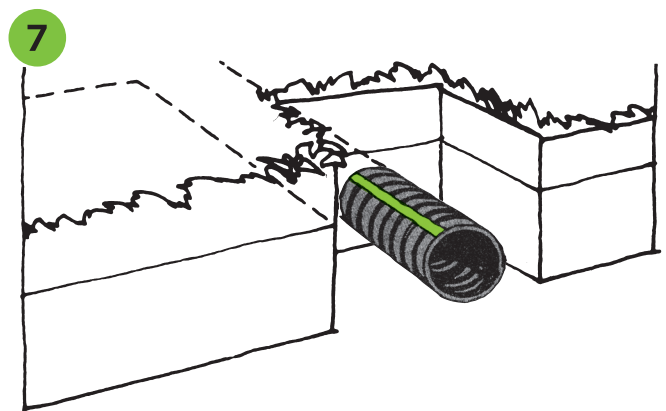




Low spots

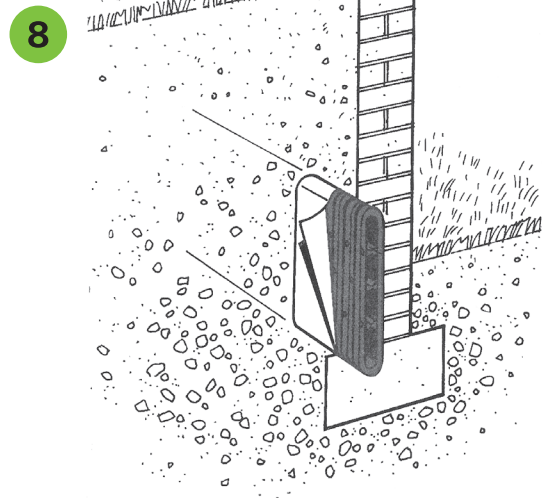
For wet spots in lawns or other areas, use ADS perforated pipe installed in gravel envelop to pick up water and carry it to a catch basin or other disposal area. In heavy clay soils, several lines of ADS perforated pipe may be needed to speed drainage. Pipe should be installed in a gravel envelope.

A surface inlet can also be installed where lawns collect rainwater. Install this inlet at the low point and use ADS solid pipe to carry the water from the inlet to a storm sewer or other disposal area.



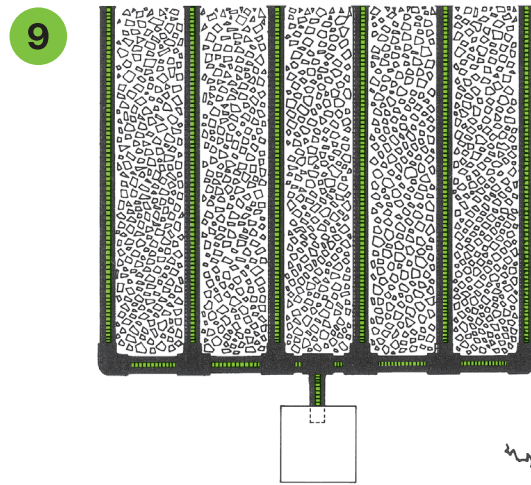
Retaining water

To prevent damage to walls from frost heaving and hydrostatic pressure, install ADS AdvanEDGE® pipe in a sand or gravel bed behind and at the base of the wall and run it to a disposal area or outlet. When used behind walls where outlets are not available, outlets can be provided using weep holes. ADS AdvanEDGE pipe can also be used as a foundation drain to prevent water from entering the basement wall.



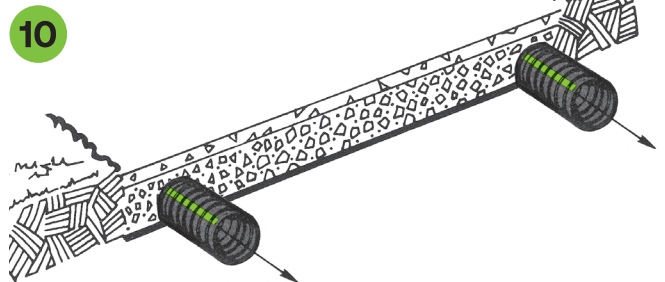
Septic tank disposal fields

SB2®, a perforated leach bed pipe, is ideally suited for septic tank disposal fields. State and local health codes and soil conditions govern area of absorption field and method of installation. Contact regulatory agencies before installing.



Walks/driveways/parking areas

To prevent walks and driveways from frost damage, install ADS perforated pipe in gravel beneath the flagstone, concrete or other paving material. Drain to a convenient disposal area.



Singlewall and small diameter N-12 pipe and fittings



Small diameter N-12 pipe injection molded fittings

