

RESIDENTIAL SURFACE WATER CHANNEL DRAINAGE

Before you purchase please consider the following



Channel Size

When determining water flow you will need to consider the following variables that may increase the volume of water flowing into your drainage system: the slope of the land; the size of the stormwater pipes; and the number of stormwater pipe connections.



Grate Material

When determining what grate style to purchase you will need to consider the following variables; will the grate be subject to harsh conditions like salt or chlorine; will the grate be subject to any vehicle traffic.

What You Will Need:

Below are a list of recommended tools and products needed during the installation process of your Everhard Surface Water Drainage System. Depending on your specific site requirements, you may require additional tools or PPE.

- Silicone
- Flathead Screwdriver
- 85mm Hole Saw
- Expansion Foam
- Concrete Tape
- Concrete
- Concrete Saw (for installs into pre-existing concrete or pavers)

Channel & Grate Preparation

EasyDRAIN uses a click-together male to female interlocking system. To prevent seepage at joints, use a suitable silicon.

Cutting and Connecting Channel and Grate:

- Remove grate and flip the channel.
- Cut between the ribs 200mm from the female end.
- Trim ends with a utility knife for neatness.
- Reinsert grate, mark the cut area, and remove it.
- Cut the marked area with a cutting disk for a clean edge.
- Connect the male and female ends by pushing them together until they click.

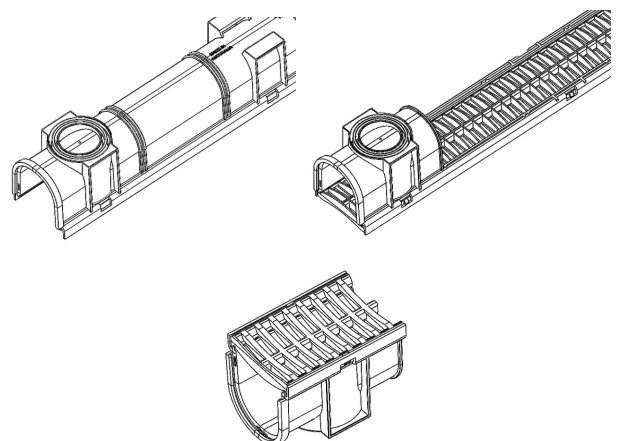


Figure 1 - How to cut channel and grate down to size.

Connecting a Corner:

- Use the Corner to change direction of your channel.
- A corner piece has all male ends so you will need to use a converter when connecting to a male end of channel.

Connecting an End Cap:

- Use an End Cap to create an end point for your drainage system and seal with silicone.
- You can also use an End Cap to connect to a stormwater pipe and / or leaf dome by cutting out the required sized hole.
- Connect your End Cap to a female end of channel or a male end using a converter.

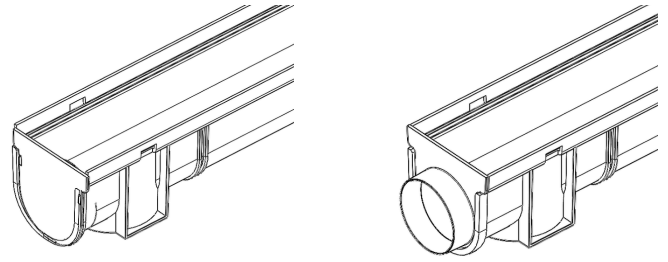


Figure 2 - End cap positioning.

Connecting a Leaf Dome:

- Use a Leaf Dome to prevent leaves and other debris from entering the stormwater system.
- Install Leaf Dome at the entry point of your stormwater outlet in the bottom of your channel, Slim Pit or at the end of the channel using an End Cap.
- Cut the required sized hole in the centre of the outlet inside of the circular moulded edge and seal using silicone.

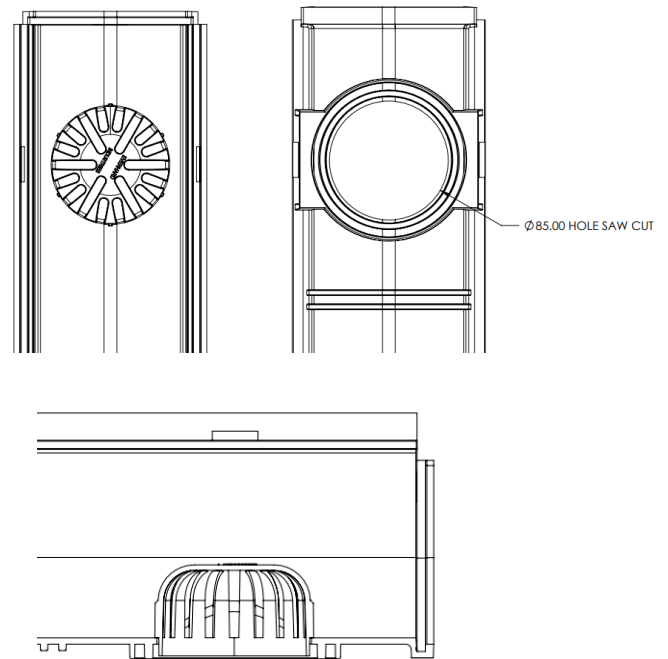


Figure 3 - Leaf dome install and position.

Connecting a Converter:

- Use the Converter when connecting two male ends together or to convert a male end to a female end of channel.
- Flip both lengths of channel over and position ends together · Click converter into place and seal with silicone.

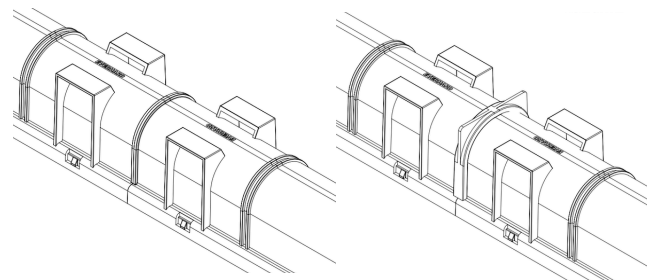


Figure 4 - Converter attached to females ends.

Site Preparation

If installing against pre-existing concrete or pavers, it is recommended that you:

- Dig your trench with enough room for drainage plus an additional 15-20mm below surface level
- Pour concrete into the base of the trench and place in Everhard Surface Water Drainage Channel and Grate
- Push the channel and grate down into the concrete, allowing for excess concrete to push up the side of the channel away from the existing concrete.

Prepare

- Dig your trench 50mm deeper and wider than the channel being installed.
- Slope the trench at a ratio of at least 10mm for every 1m of channel.
- Pour concrete slurry approximately 100mm deep in the base of the trench.
- Use a string line to ensure straightness and the correct finish height.

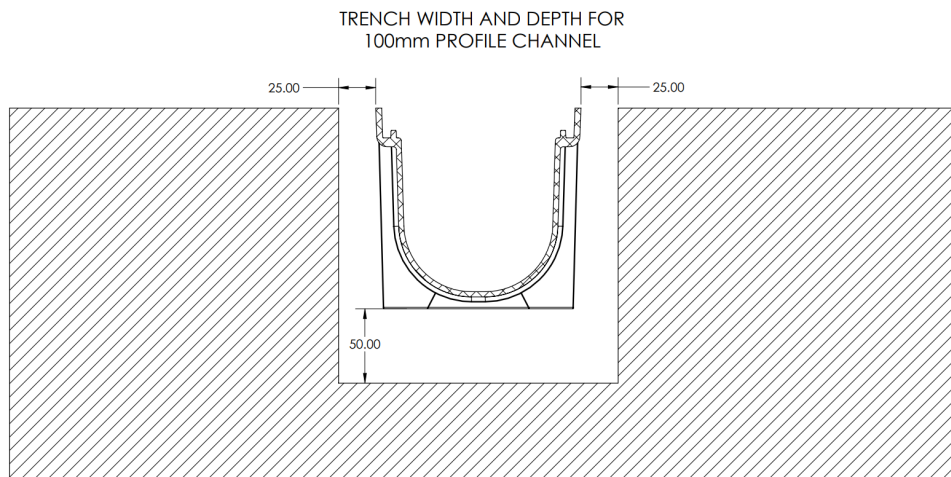


Figure 5 - Trench preparation and minimum sizing.

Install

- Grates must be locked into channel prior to installation, and it is recommended that you connect sections together before placing in trench
- Connect your EasyDRAIN™ Channel and Grate with other elements to complete your drainage system, ensuring to connect End Cap to the highest point of your channel.
- To connect to a PVC pipe, cut a hole in the base of the Channel, Slim Pit or End Cap as required, guided by the outlet collar and seal with silicone.
- Place drainage into trench and push the channel into the concrete slurry so the feet of the channel are completely immersed.

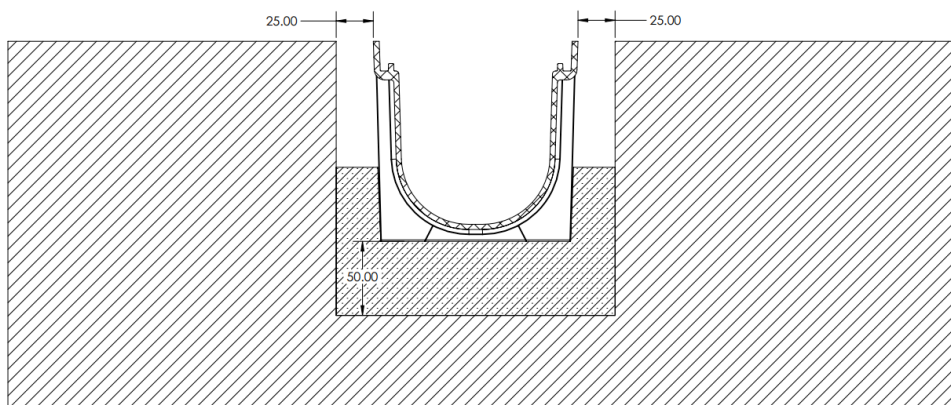


Figure 6 - 100mm of slurry in trench and channel immersed.

Finish

- Place suitable expansion material such as a closed cell foam along the top edge of the channel running the entire length of channel, approximately 75mm wide and 10mm thick, then attach to channel with adhesive tape. This will assist with the removal of the grate when required.
- Pour concrete down each side of the channel, ensuring the base is completely immersed.
- Lightly compact and finish the concrete approximately 2-3mm above the surface level of the grate to promote run off from surrounding area into drain.

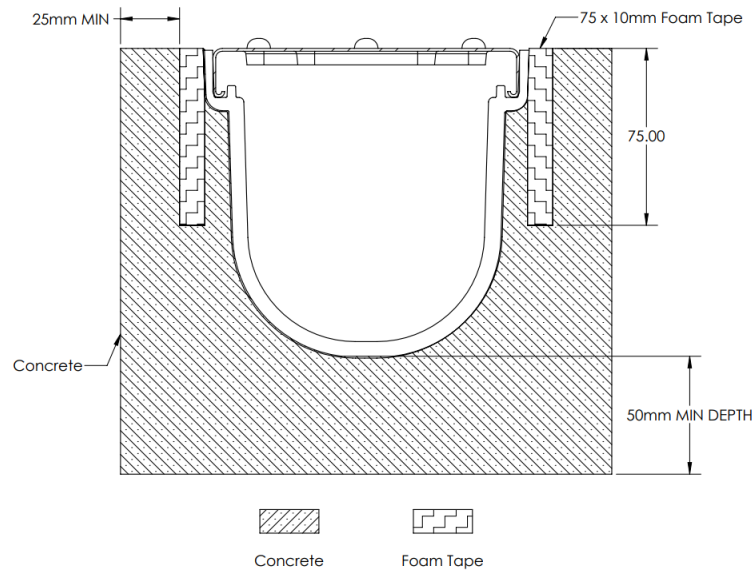


Figure 7 - Final install layout and correct positioning.

Aftercare and Maintenance:



Removing Grates:

For cleaning and maintenance purposes, grates can only be removed if they have been installed using a suitable expansion material. To remove grate, place the tip of a flat head screw driver into the flange, where the grate and channel connect. Gently push the edge of the channel outwards until the grate pops out. Repeat this for each flange along the channel.

General Cleaning

The channel body, constructed from high-quality moulded polymer, requires minimal maintenance.

Care Instructions:

- Periodically inspect for blockages, debris, or buildup.
- Rinse with clean water during routine site cleaning.
- Avoid impacts from heavy machinery or sharp tools.
- Do not expose to open flames or harsh solvents (e.g. acetone).
- Clean grates and channels seasonally or more frequently in leaf-heavy or high-use areas.
- Remove grates carefully using approved lifting keys to avoid damage.
- Inspect for loose fixings, cracks, or blockages during routine cleaning.
- Replace damaged or excessively corroded grates promptly to maintain drainage and safety.

Polymer Channels and Grates

Durable, UV-stabilised plastic suited to light traffic and decorative applications.

Care Instructions:

- Rinse with water or mild soapy solution as needed.
- Avoid exposure to sharp objects or hot surfaces (e.g. cigarette butts, oxy torches).
- Inspect for warping or UV degradation over time in direct sun.

Coated Steel Grates

Corrosion-resistant coating provides protection, but can degrade over time—especially in coastal or wet environments.

Care Instructions:

- Regularly rinse with clean water to remove salt, dirt, and chemicals.
- Avoid prolonged contact with leaf litter, fertiliser, or acidic materials.
- Inspect for rust or flaking; replace if coating is compromised.
- Not recommended for marine or high-chloride exposure zones.

Stainless Steel 316 Grates:

Ideal for coastal, poolside, or corrosive environments due to its high chloride resistance.

Care Instructions:

- Clean with mild detergent and water regularly.
- Rinse thoroughly after exposure to salt or chlorine.
- Avoid steel wool or abrasive cleaners that could cause tea staining.
- For best results, apply a stainless steel protector or polish periodically.

FAQ's

| Question | Answer |
|---|---|
| How do I remove the grates for cleaning? | To remove grate, place the tip of a flat head screw driver into the flange, where the grate and channel connect. Gently push the edge of the channel outwards until the grate pops out. Repeat this for each flange along the channel. |
| Are there care instructions for cleaning? | Yes, the Everhard Install and Maintenance Manual outlays detailed instructions for cleaning and maintaining your surface water drainage system. |
| What is the purpose of the expansion tape? | Concrete naturally expands and contracts through its lifetime. Expansion tape stops the concrete or material that is surrounding the grate from pushing in on the channel and deforming it. |
| Do I need to use the expansion tape? | Yes, use of expansion tape is absolutely critical to ensure the channel and grate do not deform over time and cause issues with removal and maintenance. |
| Can I drive over the drains? | Yes, but only if the grates are rated Class B, C, or D. Class A grates are designed for pedestrian traffic but when installed in concrete as per the Everhard Instructions they may withstand light vehicle traffic. |
| How do I cut and connect cut pieces? | There are detailed diagrams and instructions on how to cut the channel at the designated 200mm increments in Figure 2 of the Everhard Install and Maintenance Manual. |
| Can I replace my existing grates with new ones? | <p>Yes, you can replace your existing Everhard grates with new ones, but a few things need to be considered:</p> <ul style="list-style-type: none"> • Is your current grate the same size as new grate. • Your new grate must be the same load class rating or HIGHER than the current grate. • Did your current grate rust or fail from a heavy load, if so, you may need to consider a different material for the new grate. • Was expansion foam used during the installation of your drainage, if not it may be very difficult to remove your current grate or install a new grate as the channel can warp. |