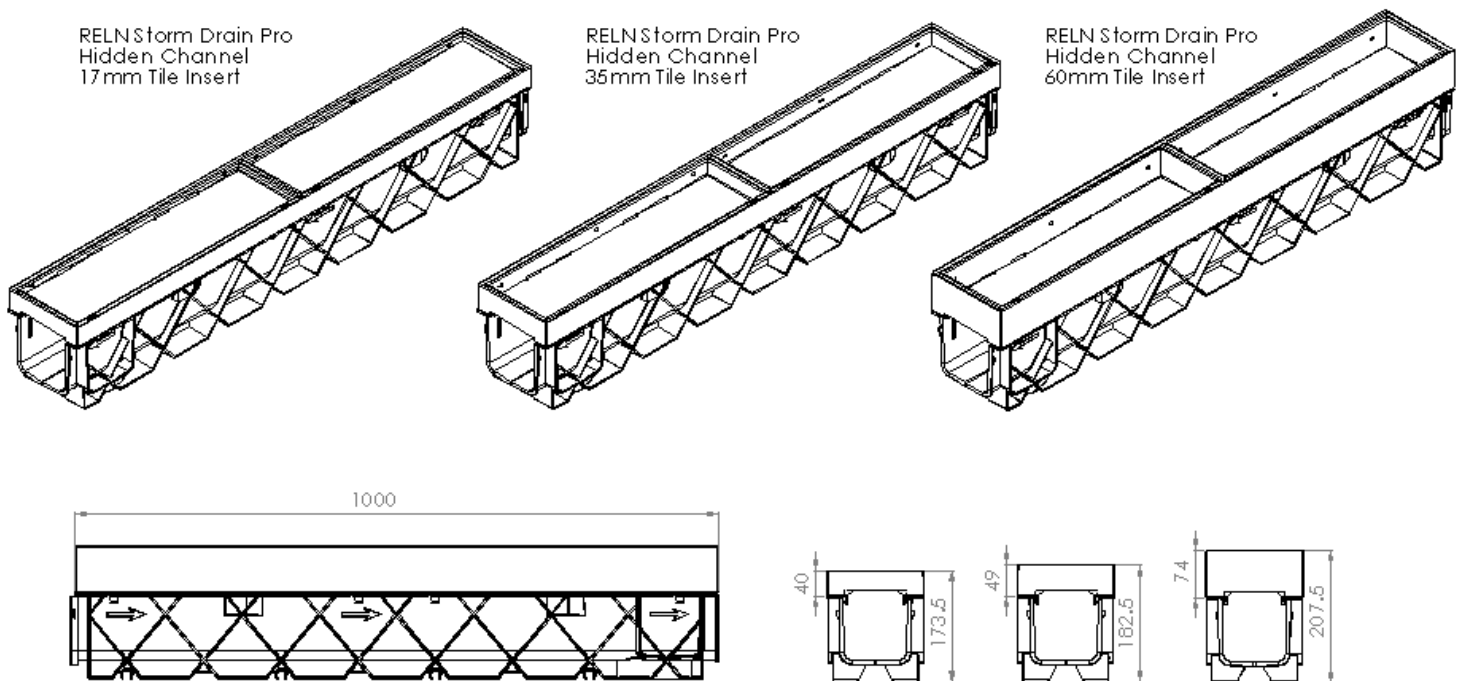


RELN Storm Drain® Pro Hidden Channel Installation Instructions

RELN Storm Drain® Pro Hidden Channel surface water drainage system is the perfect solution for collection of high flows of surface water in domestic applications. Ideal for use where large surface areas need to be drained or where heavier rainfall is encountered.

The specially shaped self-cleaning channel base is designed to efficiently clear high flows of stormwater runoff. RELN Storm Drain® Pro Hidden Channel is available with a high intake stainless steel frame and trays suitable for pedestrian traffic

RELN Storm Drain® Pro Hidden Channel



Installation Instructions

- **Prepare Ground**

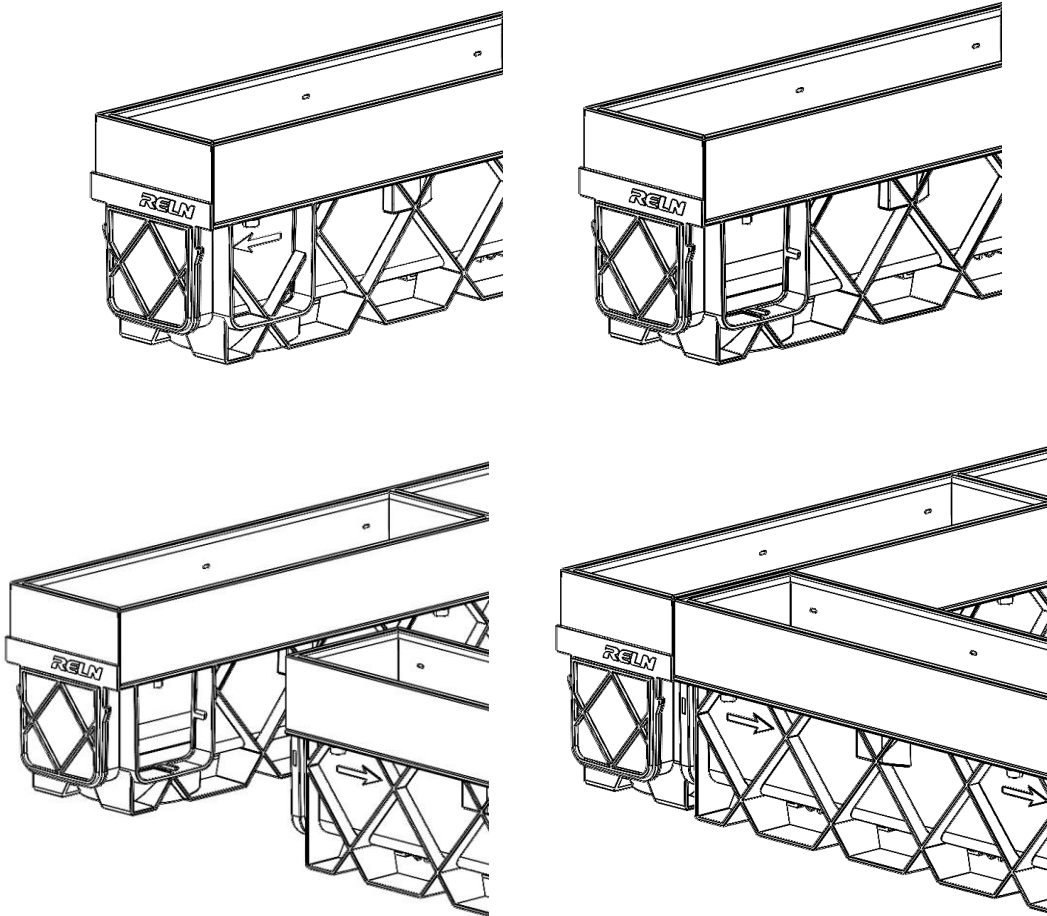
- Ground must be compacted and prepared to engineers' requirements to be suitable to support the intended pavement type and traffic loads.
- Pavements must have expansion joints to engineers' requirements.
- Dig trenches suitable to provide RELN Storm Drain® Pro Hidden Channel with a minimum support of 100mm of reinforced concrete
- Fix a string line to set finished surface level and allow for an ideal minimum fall of approximately 5mm for every 1m length for suitable run-off.
- Stormwater discharge from the bottom outlet of the channel, must be at the lowest point of the installation.

- **Assemble components**

- Channels are supplied pre-assembled with stainless steel surround and trays.
- Assemble channels to each other, and end caps using silicone to seal each joint.
- Ensure the joining clips have engaged to provide a positive connection between channel sections.
- Corners can be created in either direction by cutting out the side panel and connecting the channel end.

- **Creating Corners**

- Integral corner connections are included on the side walls of Storm Drain Pro 100 Hidden Channel
- Corners can be created at the downstream end of the channel on either side.
- With a sharp knife or small reciprocating saw, follow along the indicated cut out and remove the required side panel from the channel.
- Apply silicone to the outer flange of the channel with the side cut out and to the female slotted connection end of the intended downstream channel to create a seal between both channels.
- Use an End Cap and seal with silicone to blank off the end of the channel that has the side panel removed.
- Join the channels together and complete installation as per instructions.



- **Stormwater pipe connection**

- Cut out the bottom outlet port of the channel with a hole saw for connection to PVC stormwater pipe.
- RELN recommend the fitment of largest size of AS/NZS1254 PVC Stormwater Pipe available for optimum drainage performance. Ensure pipe selection meets compliance with AS3500.
- Refer to Bottom Outlet Hole Saw Table or underside of channel for correct hole saw size.
- Use silicone to seal between pipe and bottom outlet.

RELN Storm Drain® Pro Hidden Channel Bottom Outlet Hole Saw Table

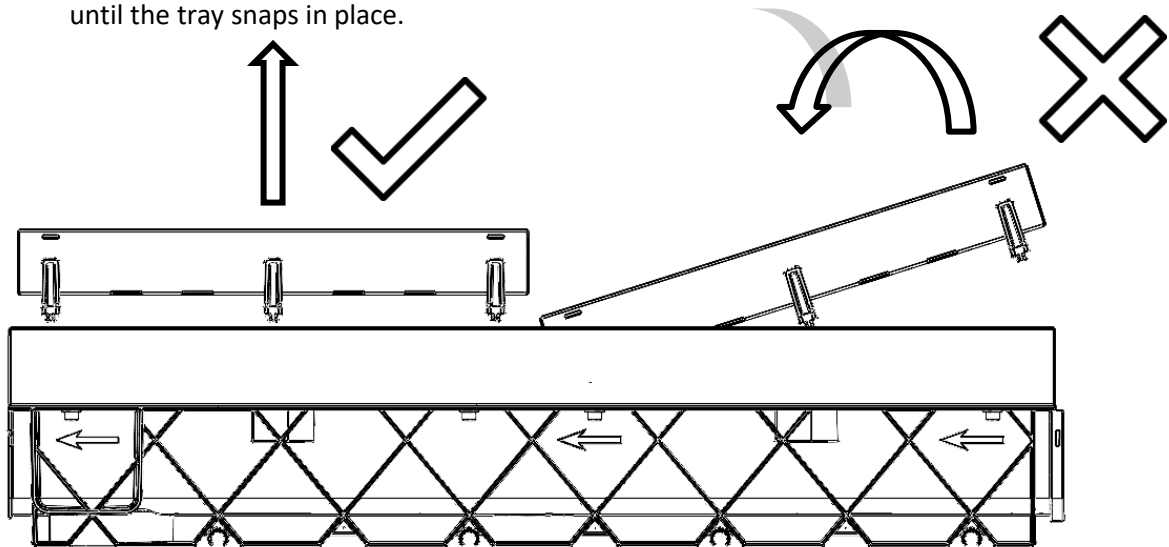
	Bottom Outlet Pipe Size	Hole Saw Size
RELN Storm Drain® Pro Hidden Channel	DN90 Stormwater	76mm (3 inch)
	DN100 DWV	102mm (4 inch)

- **Tray Selection & Infill Materials**

- 17mm tray: suitable for tiles and other infill materials up to 17mm thick
 - 35mm tray: suitable for stone, tiles and other infill materials up to 35mm thick
 - 60mm tray: suitable for pavers, stone and other infill materials up to 60mm thick.
- Where the infill material is thinner than the tray depth, a suitable bedding layer may be used beneath the infill material to achieve a flush finished surface.
- Ensure the finished surface of the infill material is level with adjacent paving and surrounding surfaces.

- **Tray Removal & Installation**

- The trays come pre-installed with our snap lock spacer.
- Tray removal: at one end of the tray, insert the supplied lifting key between the frame and the tray and rotate 90degrees. Gently lift upwards until the tray pops away from the frame. *DO NOT LEVER THE TRAY UPWARDS FROM THIS POSITION.* Reposition the lifting key to the other end of the tray and rotate 90degrees. Gently lift upwards until the tray pops away from the frame. The tray is now free to be lifted vertically away from the frame.
- Tray installation: First check that the tray has three (3) spacers installed on the underside. Gently place the tray in the frame, ensuring that there is equal spacing at each end of the tray. Place one hand at each end of the tray, and push equally downwards with a deliberate force until the tray snaps in place.



- **Leaf Guard Installation**

- A Leaf Guard can be installed in RELN Storm Drain® Pro to reduce debris blocking the drainage pipe system.
- The RELN Storm Drain® Pro Leaf Guard is installed “cup facing upwards” and is designed to fit all bottom outlet size options.
- It is the system owners’ responsibility to ensure the leaf guard is cleaned out on a regular basis to prevent flooding of the surface water drainage system and surrounding areas.
- The tray above the outlet must be removed to install the Leaf Guard. Ensure to follow the Tray Removal & Installation as described.

- **Concreting**

- RELN Storm Drain® Pro Hidden Channel must be installed in reinforced concrete with minimum 25MPa strength.
- The frame and trays must be assembled to RELN Storm Drain® Pro Hidden Channel
- The eight (8) supplied spacers must be equally spaced between the frame and tray. This is to prevent the concrete from bowing the frame inwards.
- Use tape to protect the frame and secure the spacers from concrete splash.
- Ensure concrete fully encases RELN Storm Drain® Pro channel sections.
- Vibrate concrete to eliminate air pockets.
- Finish concrete at the correct level such that when tiles, pavers or stone are installed, all surfaces are flush and even
- Allow full concrete cure prior to removing spacers or exposing the drain to any load – approximately ten days.

