

## Installation Instructions

Connecto Trade® surface water channel distributed in New Zealand by Dux Industries Ltd. is suitable for residential applications and can withstand loads of up to a 5 tonne vehicle. The following installation instructions when followed will provide the means to install the product correctly.

### Preparation:

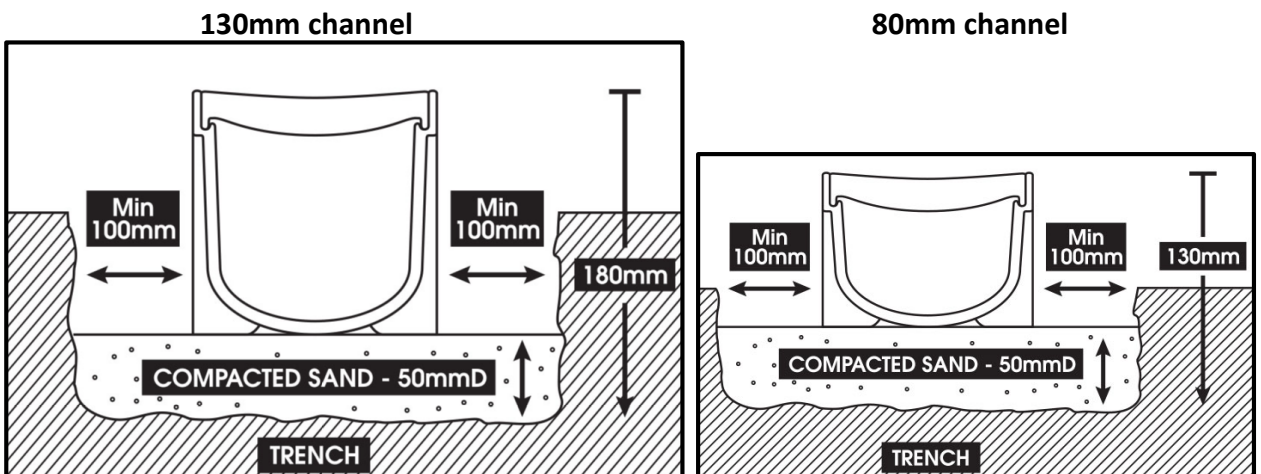
The area where the surface water channel is to be installed should be carefully prepared and set out to suit the type of surface that will be installed. This can be either, concrete, tarmac or paving stones. It is important that the finished surface should be 3 – 5mm above the finished channel and grate height to ensure proper run off into the channel. Additionally there should be a minimum gradient of 5mm/1m length in the direction of the intended flow.

There are two channel options in the Connecto Trade® range, 80mm or 130mm depth, and dependent on which channel is being used determines the depth of the required trench. If the installation of the stormwater pipes is being installed into the base of the channel ensure you have enough pipe proud of the trench to connect into the channel bottom outlet.

Once the area where the surface water drainage is to be situated has been determined cut a trench to suit the channel. Both the channels 80mm and 130mm are the same width and therefore should have the same allowance for the trench (330mm wide)

#### Step 1 – Preparing the Trench

The depth of the trench is dependent on the type of surface required but allowance should always be made for a compacted bed of sand 50mm deep as per the below diagrams.

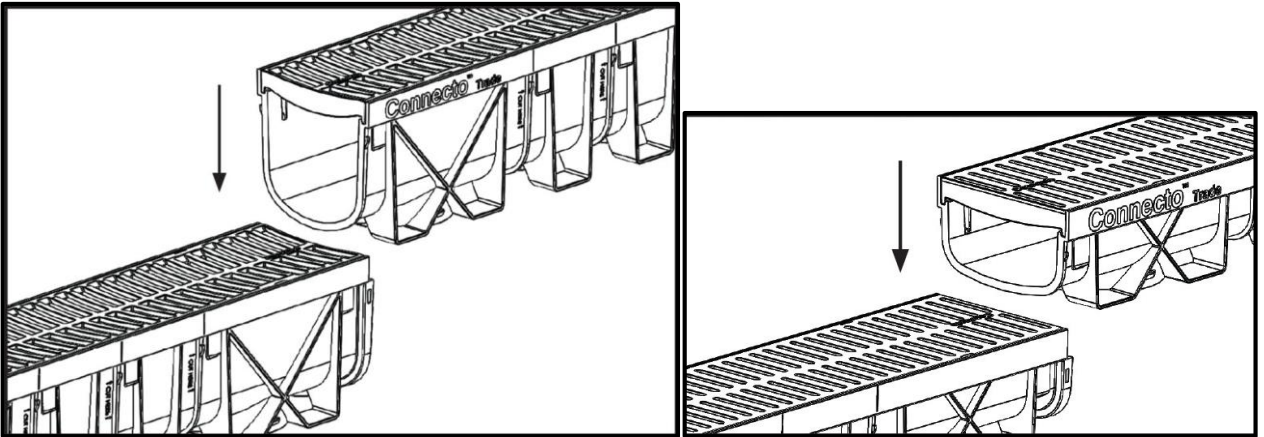


It is important to set the correct gradient of 5mm/1m when levelling the compacted sand in the trench to allow a good flow away from the area. The trench depth should allow for the finished surface required and any installation requirements needed.

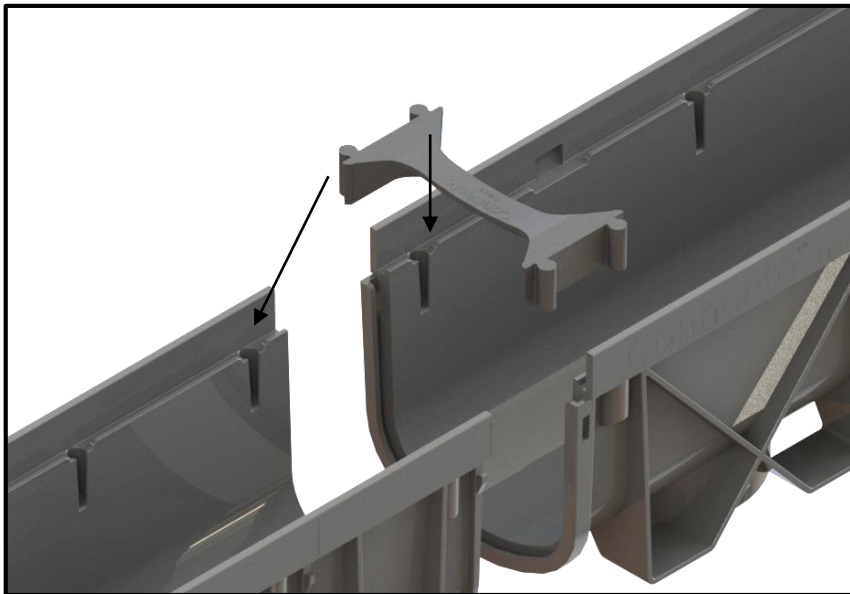
## Installation Instructions

### Step 2 – Assembling the Channel

When assembling the Connecto Trade<sup>®</sup> channel no silicone is required, each channel slots directly into the other using the male and female ends.



Additionally the channel support bracket (patent applied) can be used to ensure that channel alignment is maintained. These support brackets span the two joining channels even if one channel has been cut.



## Installation Instructions

### Step 2 – Assembling the Channel

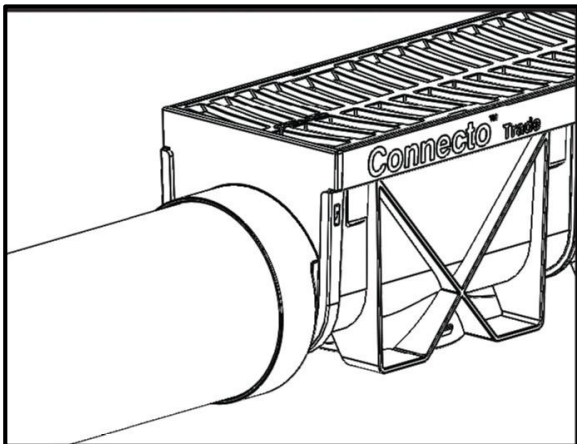
If there is a need to cut a length of channel there are marked areas along the length showing where to cut and maintain the option of trouble free connection to other components of the system. A hacksaw or dropsaw can be used for cutting the channel and grate. Note there are indicators showing where to cut, take care when cutting and trim the edges carefully.



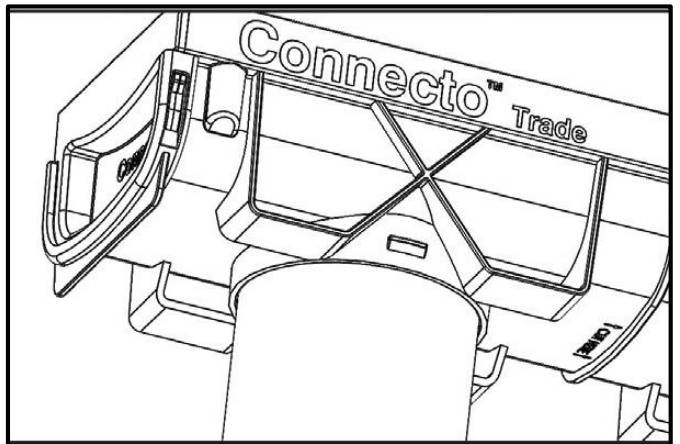
Be sure to retain the male nodules during cutting, this will allow you to use the channel adaptors to connect other components without the need for silicone.

When fitting the outlet pipes standard PVC glue (solvent weld) can be used to ensure a good seal for both the end and bottom outlets, all outlets will accept 90mm or 100mm PVC pipe.

**130mm channel**



**130mm channel OR 80mm channel**



Before fitting a bottom outlet drill out using a 90mm hole saw, clip the bottom outlet fitting onto the underside of the channel, the pipe and outlet can then be prepared with primer and glued into place. A leaf guard is available that can be installed above a bottom outlet (when used with the 130mm channel only).

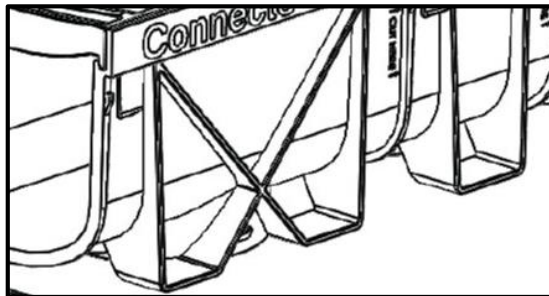
## Installation Instructions

### Step 3 – Positioning and Installing the Channel

To assist the positioning of the channel small amounts of concrete can be used at the joins between the channel sections, these will help to prevent the channels from being pushed sideways when the main pour of concrete occurs. Leave these to dry enough so that they are firm and the channel can't be moved accidentally.

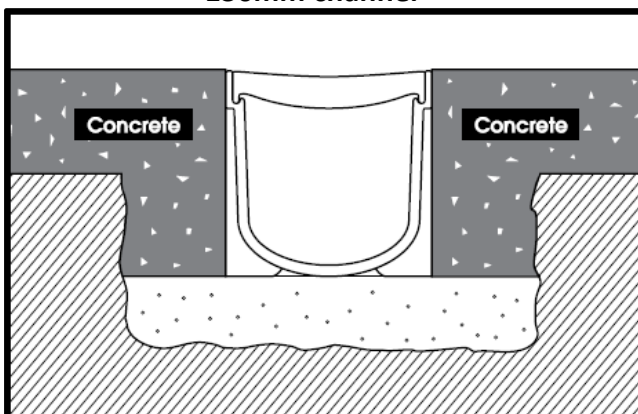
**IMPORTANT:** Before pouring concrete always ensure that the grate is in place and protected from concrete splash.

Dependent on the finished surface requirements pour the concrete around the channel base ensuring that the concrete enters the open feet of the channel to prevent floatation if the channel hasn't been pre-set with concrete pads.

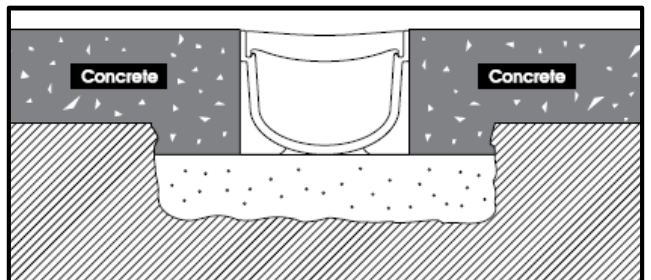


Fill the trench to the required depth allowing for the requirements of the finished surface.

130mm channel



80mm channel



The finished surface must be 3 – 5mm above the edge of the channel and grate to allow correct flow into the channel. Allow the correct amount of time for the concrete to set before allowing traffic to drive over the channel (approximately 3 days).

If the finished surface is required to be tarmac it is advised that a coldmix asphalt be used up to the edges of the channel to prevent damage. Ensure the coldmix asphalt is well compacted to ensure that it can withstand the weight of a car passing over the channel.

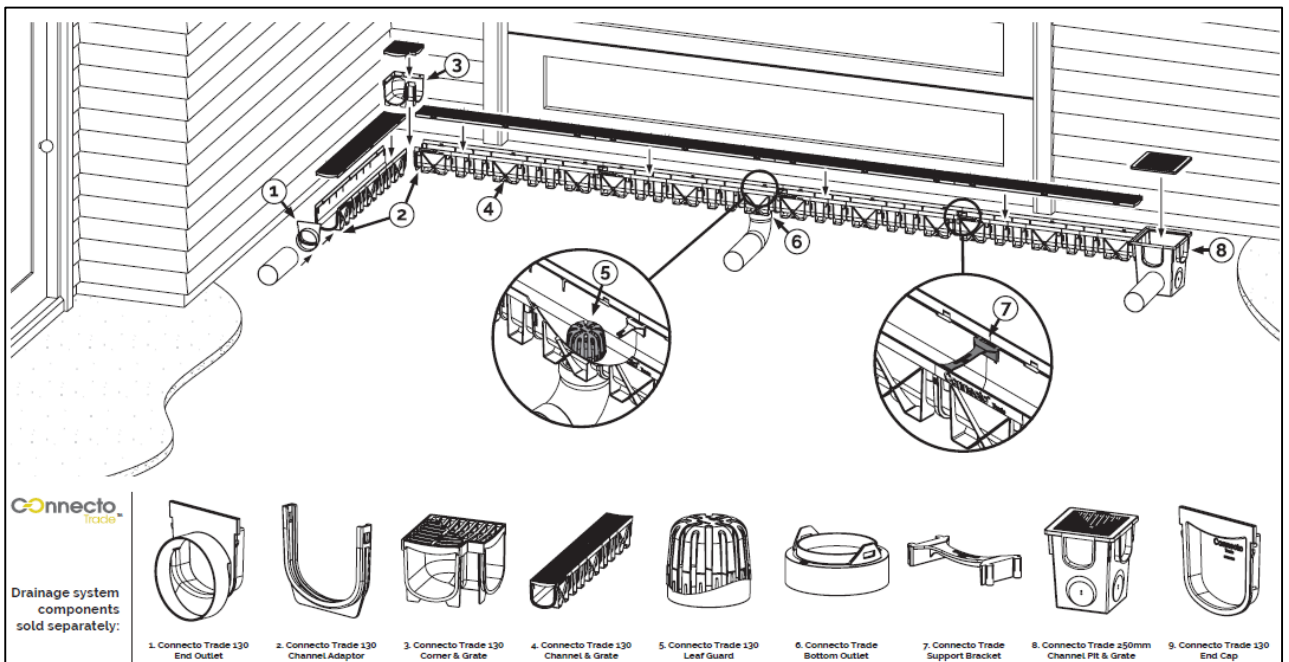
## Installation Instructions

### Components

There are a number of components that fit with the Connecto Trade® including the Channel Pit & Grate, which has the standard channel connectors moulded into the four sides for ease of connection. Simply cut out the channel internal profile and connect the channel using the Channel Adaptor to lock it into place. (130mm Channel only)

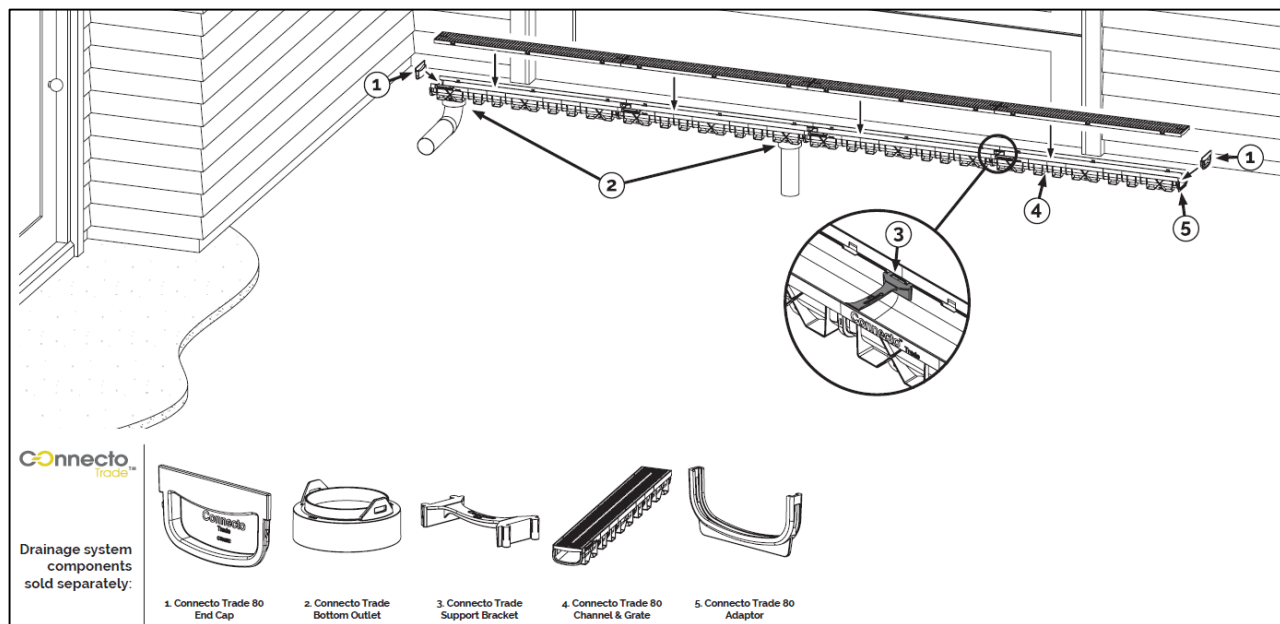


### 130mm channel system layout



## Installation Instructions

### 80mm channel system layout



### 80mm Channel

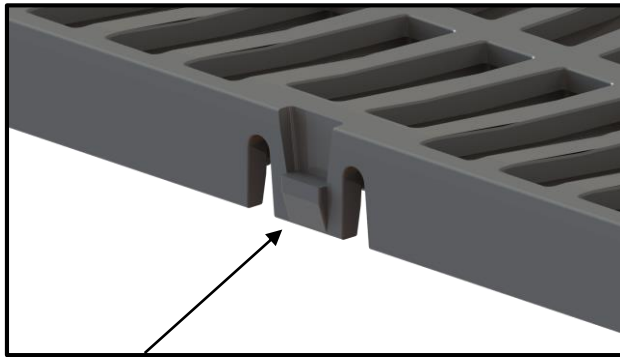
The 80mm slim channel is designed for straight line drainage (no corners) and will only accept a bottom outlet due to the depth of the channel profile.

## Additional Information and Maintenance Instructions

### Connecto Trade<sup>®</sup>

#### Removing Grates for Maintenance

To remove the grates for cleaning and maintenance a flat blade screw driver will be required, the release catch built into the side of the grate is designed so that the grate flexes away from the channel for easy removal. On each 1m length of channel there are 6 slots, each of these must be released to allow the grate to be freed.



Insert the flat blade screwdriver and push the locking tag inwards to release the locking tag. Do not pull the grate out of the channel without first releasing the locking tags as above.

When inserting the grate back into the channel push down firmly over each locking tag until you here it click into place.

#### Trafficable Areas

To ensure that the channel is able to accept the weight of a car always ensure that the channel is set in a base of concrete to prevent the channel from 'sinking', Connecto Trade<sup>®</sup> grates have all been tested to ensure they can withstand a 5 tonne vehicle (Tare weight).