Connecto®

Connecto supplied by Marley is a linear interlocking modular channel and grate system used to efficiently transport rainwater to the storm water drainage system.

- > Three size ranges Slim, Medio, Max
- > Manufactured to European standard EN1433
- > Multiple grate types for each range

- > Inbuilt feature to create corners, Tee, or cross connection
- > A15 grates ideal for pedestrian use
- > B125 ideal for driveways

Material Specifications

Slim:

- > Channel uPVC
- Grates uPVC, Stainless Steel

Max:

- > Channel Polypropylene
- > Grates Polypropylene, Stainless steel, Galvanised, Cast Iron

Medio:

- > Channel Polypropylene
- > Grates Polypropylene, Stainless steel, Galvanised, Cast Iron

Product Codes

CODE	DESCRIPTION	LENGTH (MM)	WIDTH (MM)	HEIGHT (MM)	WEIGHT (KG)
SLIM.STA	Connecto Slim – 0.5m Channel & Standard Grate	510	130	60	1.07
SLIM.PED	Connecto Slim – 0.5m Channel & Pedestrian Grate	512	135	57	1.09
SLIM.SS	Connecto Slim – 1m Channel & Stainless Steel Grate	1010	135	58	3.17
MEDIO.STA	Connecto Medio – 1m Channel & Standard Grate	1000	136	115	2.2
MEDIO.SS	Connecto Medio – 1m Channel & Stainless Steel Grate	1000	136	100	1.1
MEDIO.GALV	Connecto Medio – 1m Channel & Galvanised Grate	1000	136	98	2
MEDIO.CAST	Connecto Medio – 1m Channel & Cast Iron Grate	1000	136	98	5
MAX.CAST	Connecto Max – 1m Channel & Cast Iron Grate	1005	207	145	11.38
MAX.STA	Connecto Max – 1m Cannel & Standard Grate	1010	210	143	4.45

Accessories

CODE	DESCRIPTION
SLIM.CAP	Connecto Slim End Cap, (uPVC)
MEDIO.CAP	Connecto Medio End Cap/Outlet, (uPVC)
MEDIO.CAPSH	Connecto Medio End Cap/Outlet Short, (uPVC)
MAX.CAP	Connecto Max End Cap/Outlet, (uPVC)
CON.OUTLET	Connecto Vertical Outlet, (uPVC)
CON.SSRAIL	Connecto Stainless Steel Side Rail – 1m



Product Intended Use

Interlocking modular surface drainage for the removal of surface water in residential or commercial applications. The three channel types are designed for residential areas and are rated for the following weight loads based on European Standard EN 1433 load classes:

- > SLIM.STA A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways
- > SLIM.PED A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways
- > SLIM.PED A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways
- > MEDIO.STA A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways
- > MEDIO.SS A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways
- > MEDIO.GALV A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways
- > MEDIO.CAST B125 3 tonne wheel load residential driveways, footpaths, pedestrian areas
- > MAX.CAST B125 3 tonne wheel load residential driveways, footpaths, pedestrian areas
- > MAX.STA A15 1.5 tonne wheel load footpaths, cycle paths, residential driveways

Manufacturing Standards

The Connecto range of channels and Grates are manufactured to European Standard:

> BS EN1433 - Drainage Channels for Vehicular and Pedestrian Areas

On Product Identifiers

Grates - Manufacturer's logo, weight classification

Relevant New Zealand Building Code Clauses

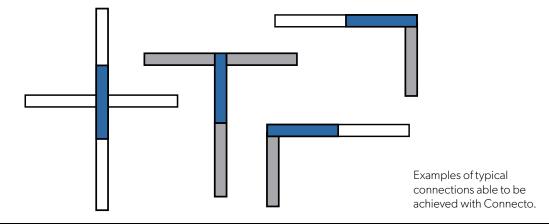
E1 Surface Water E2 External Moisture

The two above clauses in the New Zealand Building Code are dedicated to moving rainwater away from buildings into safe areas and while there are no specific recommendations in relation to Surface Water Channels other than Threshold Drains for decks in E2 it is important to capture and move rainwater that falls around a building to prevent the water from pooling and possibly undermining the foundations of the building. Captured water in a Surface Water Channel can be redirected via the required sumps such as a Type 1 Surface Water Sump into the drain.

Design

Connecto channel and accessory range has been designed to remove rainwater quickly and safely from areas where there is the potential for pooling and/or flooding. The channel design has side and bottom cut outs that allow for connections to be made into the side with channel and 100mm DWV bottom connections, all outlets are manufactured from uPVC and are therefore solvent weldable for secure connection to DWV pipe.

The use of side cut outs rather than accessory tees and elbows gives Connecto the flexibility to allow for cross connections as well as the standard tee and elbow set outs, with no required accessory for these connections the installation cost is reduced.





Installation

Prior to installation the designer must choose the correct style of grate for the expected traffic in the area:

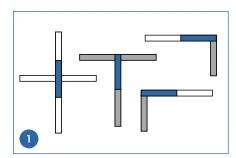
CHANNEL	DESCRIPTION	PATTERN	MATERIAL	HOLE/SLOT DIMENSION
SLIM	A15 Standard Grate	Traditional Slot	uPVC	15mm width
SLIM	A15 Pedestrian Grate	Square Hole Pattern	uPVC	7mm x 7mm
SLIM & MEDIO	A15 Pedestrian Grate	Square Hole pattern	Stainless Steel	*6mm, 7mm, 8mm, 7mm, 6mm, (Pattern)
MEDIO	A15 Standard Grate	Wave Pattern	Polypropylene	7mm width
MEDIO	A15 Standard Grate	Traditional Slot	Galvanised Steel	9.5mm width
MEDIO & MAX	B125 Standard Grate	Traditional Slot	Cast Iron	13mm width
MAX	A15 Standard Grate	Traditional Slot	uPVC	10mm width

^{*}Pattern of Stainless square holes from outside to centre

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.

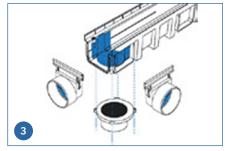
Installation Steps



Various possibilities of connections with angles at 90° can easily be made (the blue part has to be fitted last).



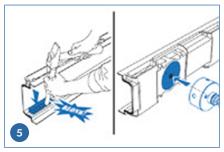
Dig a trench with adapted measures (10cm around the channels). Realise the concrete bedding according to the required depth.



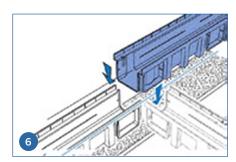
Determine the outlet unit to be used and its position in order to ensure the connection to the rainwater pipe works.



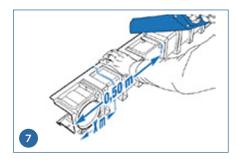
Hammer the desired outlet in and put into position the required outlet/stop end fitting.



For the channel, hammer the lateral outlet by the internal side and drill the vertical outlet.



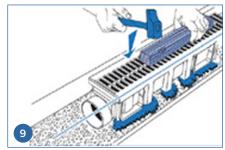
The sections of the channels which fit to each other thanks to a male/female interlocking system have to be laid on the concrete bedding.



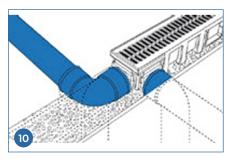
If needed, cut the last element off the channel to adapt to the required length.



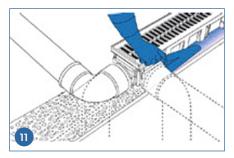
Install uPVC gratings. *To attach your grate to your channel please see instructions below.



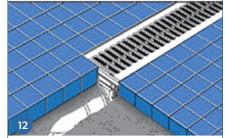
Push the channel in a few mm to get a good support with the concrete foundation.



Connect the channel to the stormwater pipe. Diameter 100mm stormwater pipe.



Release the concrete haunchings to prevent lateral forces acting on sidewalls.

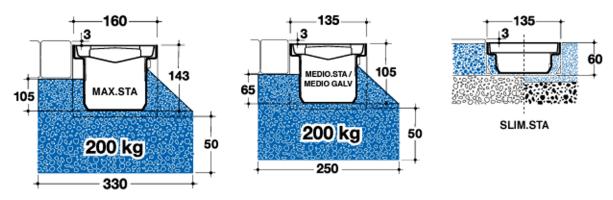


Fill in and make the finishing with paving for instance. The ground level should be 3mm above the grating one.

*Note:

- 1. Channel Place 4 inserts per metre channel using a hex head Allen key.
- 2. Grates Using a drill clear the 2 pre drilled holes on the grate, then fix the grate to the channel with the screws supplied.

Installation instructions for a load of 1.5 tonnes per wheel



To ensure a weight loading of 1.5 tonne per wheel, the concrete bed should be completed according to the sketches above. Concrete should be proud of the grate by 3-5mm.

Additional side supports for the channel are available where necessary:



Maintenance

Removal of grates for cleaning - Connecto grates are locked down via screws and can be easily lifted once these are released.

HEALTH & SAFETY NOTE:

Take extra care when installing channel with Cast Iron Grates and lifting Cast Iron Grates during maintenance as they can be heavier than expected.

Galvanised and Stainless Steel Grates may have sharp edges PPE should be worn when handling.

Importer/Distributor

Marley New Zealand Limited

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- > www.marley.co.nz
- > NZBN: 9429038863431

Manufacturer

- > Nicoll
- > 37 Rue Pierre et Marie Curie 49300, Cholet, France
- > 0033 2 41 63 73 83
- > www.nicoll.fr

Limitations on Use

Connecto is not suitable as a Level Threshold Drain.

Warnings and/or Bans

Connecto is not subject to warnings and/or bans to their installation or use from any council or local authority within New Zealand that Marley has been made aware of.