

# D-Rainclean

## Installation Guide

### for trafficked channel D400

#### Required tools:

- Installation wrench
- Bricklayer's cord
- Spirit level, measuring tape
- Shovel, spade
- Rubber mallet
- Spirit level, measuring tape
- Formwork boards for back support

#### Required materials:

- Concrete C20/25
- Concrete C37/30 – if frost is a concern
- Gravel 3/8 mm or 2/5 mm



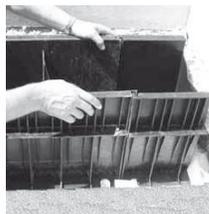
1. Excavate the soil to the required depth of the channel plus any gravel formation – see engineer's drawings. A levelling line should be laid to ensure correct alignment of the channel units.



4. The difference between the formation level and finished channel level should be approximately 470mm.



7. Ensure that the channel sections and lay level on the gravel.



2. The top edge of the channel should be approximately 2mm lower than the finished surface level

5. Lay the channel starting with an end section (part number DRFC002), and finish each run with an end section.



8. Where necessary the channel should be held in alignment by ground stakes or rods secured through the fixing points on the outer base edge of the channel.



3. Lay a formation level consisting of a 30-50mm layer of 3-8mm or 2-5mm gravel. It is important the gravel contains no fines / is unbound.

6. Lay subsequent main sections (part number DRFC001) always ensuring the pieces are properly connected to one another and free from gravel between the joints.

9. An end section piece (part number DRFC003) should be laid at the end of the run.

10. Place the cast iron frame and grating on the channel (part number DRFC009). DO NOT remove the polystyrene strips from the underside of the frame.



11. When placing the cast iron grating it is very important that the edge of the cast iron frame is positioned in line with the central baffle in the middle of the channel, and that all gratings are tightly abutted to one another.

12. Ensure all gratings are laid in the same direction (see lettering on top of the grating)



13. Create back supports if necessary allowing for 20-30cm width on either side depending on the anticipated loading.



14. Pour C20/25 concrete in 15-20cm layers and compact. Alternatively use C37/30 concrete if frost protection, or high loading is an issue. Take care to cover the cast iron grate whilst pouring.



15. 'Wash in' the remaining 5-10cm using fine graded C20/25 or higher concrete. Alternatively screed the concrete and strip off.

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16. It is important that the cast iron frame feet are completely covered by the screed or finely graded concrete. If heavy trafficking of the area is likely e.g. HGV then the cast iron frame should be anchored to the concrete haunching using threaded rods or steel pins.

17. If the area is to be paved then the stretcher paver should be seated in the concrete, or alternatively placed on a mortar bed at a later date.



18. Ensure that protection boards or sheeting are placed over the cast iron grates during the paving works.

19. Longitudinal thermal expansion joints should be used if the expansion of the surfacing material is an issue e.g. concrete.



20. The Re-Medi8 media should only be placed in the channel once all paving and surfacing works have been completed. Four bags of media (part number DRFC005) should be installed per every linear metre of channel. If using the 1.5m<sup>3</sup> bulk bags of Re-Medi8, each bag contains enough media for approximately 27 linear metres of channel.

21. When laying the media ensure that it is evenly spread along the channel to a depth of 200mm.



22. The cast iron grate can be easily removed by using the installation wrench (part number DRFC011) and replaced after filling. Take care to remove any sand or gravel in the channel edge before replacing the grate.



23. Ensure the locking bolts (part number DRFC010) are fitted and secured.