

Section 3: Surface Water Drainage Solutions:

3.4 QualiDrain Lite Channel and Catchpit Drainage System

3.4.3 Definition: Stormwater Channel Drainage

3.4.2 Product introduction:

A 'Stormwater linear drain and catchpit' designed for ease of installation and ensuring a 'Quality Finish'.

QualiDrain Lite is an easy to assemble & install all in one linear channel drainage and catchpit system for the collection & harvesting of rainwater & stormwater. It consists of 250mm long Polypropylene channels with Polypropylene grates; as well as Stop-Ends; Bottom Outlets, End-Outlets available in two sizes & a U-Connector. The system has been designed for use in pedestrian foot traffic areas in accordance with the A15 requirements required by SANS 50124:1994. This is a proudly South African product, manufactured in Knysna.

3.3.3 Key Benefits:

- a. Protects all pathways or patios from flooding by the efficient collection of excess rainwater and distribution into the stormwater system.
- b. T-off in any direction without having to use a T piece by connecting the QualiDrain Lite at 90 degrees to each other. Can also connect in L or + directions.
- c. When installed in parallel can serve as a catchpit of any required size.
- d. Polypropylene Body is water repellant increasing the flow rate with a minimum fall.
- e. The external ribbed structure improves anchoring within concrete and provides rigidity & stability.
- f. The polypropylene seamless grate design is tough, durable & aesthetically pleasing.
- g. The click together system is simple – no junction boxes required.
- h. Less waste – purchase only the components you need.
- i. Supplied with a protective Dust Cover for use during installation.
- j. Easy to shorten.
- k. This lightweight product is easy to transport & install.
- l. Self-cleaning – just flush with clean water.

3.3.4 Applications:

- Can be used to control stormwater: for example, in foot paths, in front of sliding doors on patios, atriums, swimming pools and along pavements. Any outdoor ground floor area that would require a linear drain connected to the stormwater or rainwater harvesting system.
- Can also be used to construct catchpits of any size by installing them in parallel.

3.3.5 Manufacturer's Installation Instructions

3.3.5.1 Lay out of suitable draining and catchpit lines:

- a. Establish the exact lay out that the **drainage** line must follow
- b. Dig the required trench width & depth as follows: a minimum of 350mm wide by a minimum of 250mm deep. Please account for the size of the stormwater pipe specified as it might add to the required depth. (*Rule of thumb as follows: The channel including the outlet & the pipe need to lay on a bed of concrete at least 100mm thick*) The length and width will depend on how many channels you require. Where a catchpit is to be installed ensure that the concrete into which the QualiDrain Lite is floated goes into the spaces between each parallel laid channel
- c. Break through the provided & indicated area of the channels with a sharp Stanley Knife.
- d. Fit the additional components to the channels.

3.3.5.2 Position the channels:

- a. Proceed with the concrete cast for creating the channel bed. *(TIP: to obtain a good concrete, mix 3 parts river sand and some 15mm stone aggregate to 1 part cement & add enough water to result in a slurry concrete mix. Use a maximum of 15mm Ø stone aggregate so as to enable the concrete to reach the less ribbed areas of the channel).*
- b. Wait approximately 1 hour for the concrete to cure slightly before installing the pipework and laying the channels. While the concrete is drying, prepare the channels needed for the drainage line. When in a straight line, simply click the ends together.
- c. When used as a catchpit, use a Stanley Knife to cut out the channel side where indicated on the product and then join the channels in parallel using a U-Connector and silicone glue to ensure they remain joined in position. It is best to turn the channels on their face while doing this. After the silicone has dried, turn them over before placing them into the concrete.
- d. Insert the stop ends where required.
- e. If the discharge point is at the end of the linear drain, then use the appropriate stop end to connect either to a 50mm or 75mm outlet pipe. If connecting to a 110mm Stormwater pipe, connect using a 75mm to 110mm adapter / reducer.
- f. Ensuring that the protective covers are properly in place and seated on the channel lay the channels on the concrete bed & link the bottom outlet to the drainage pipes.
- g. Float the channels with the required fall of 3mm per meter of channel.

**3.3.5.3 Flanking the Channels:**

- a. Backfill with concrete ensuring that all hard-to-reach areas are filled.
- b. Vibrate or float to release any air bubbles trapped within the concrete.
- c. Allow the concrete to cure a minimum of 72 hours.

3.3.5.4 Channel Cleaning & Inspection

- a. Remove the protective dust covers by breaking through the marked areas on the dust cover with a screwdriver and then levering until the dust cover pops out of position. Lift and remove.
- b. Remove leaves & debris from the channel with a soft broom and clean the channel thoroughly if required.
- c. Carefully place the clean grates on the channels and carefully but firmly push it into place until it clicks into position.

Congratulations you are a proud installer/owner of another Seaqual High Quality finished product.

3.3.6 Maintenance

NOTE: It is important to keep the Channel Drain well maintained and clean. This should be done regularly according to a maintenance plan, or when: -

- The storm / surface water has become noticeable slow while draining away.
- The storm / surface water has become blocked and cannot drain away.

In which case apply the following: -

- 3.3.6.1 Check that debris has not formed a blockage on the surface of the grate. If this is the case, simply remove and discard the debris.
- 3.3.6.2 Carefully remove the grate and inspect the channel & outlet for foreign matter.
- 3.3.6.3 Clean the channel by removing foreign matter and discard.
- 3.3.6.4 Test the system by flushing only fresh water through the channel (as it could be connected to a water harvest system) and once satisfied carefully replace the grate.
- 3.3.6.5 Should the problem persist, call a qualified Plumber to check the pipeline for blockages.

Sequal Technical Data Sheet – QualiDrain Lite




****Should any technical assistance be needed during your installation please call our help line 044 382 3484 from Monday - Thursday from 8am till 5pm and Fridays from 8am till 3pm. Alternatively send an email to tech@sequal.co.za. ****

Please contact our Head Office for alternative Product Technical Data Sheets.

1. Mufle 4All Channel Drainage System
2. QualiDrain Channel Drainage System

3.3.7 QualiDrain Lite Drainage System Product Data

3.3.7.1 Table A:

Item Colour:	Body & Grate - Black	Body & Grate - Grey	Body & Grate - Sandstone	Body & Grate - Terracotta	Body & Grate - Green
Product Code:	200185	200186	200187	200188	200189
Product Image:		Available on Request	Available on Request	Available on Request	Available on Request
External Dimensions: L x B x H in mm	250mm x 143mm x 153mm	250mm x 143mm x 153mm	250mm x 143mm x 153mm	250mm x 143mm x 153mm	250mm x 143mm x 153mm
Internal Dimensions: L x B x H in mm	256mm x 100mm x 97mm	256mm x 100mm x 97mm	256mm x 100mm x 97mm	256mm x 100mm x 97mm	256mm x 100mm x 97mm
Weight in kg:	0.615 kg	0.615 kg	0.615 kg	0.615 kg	0.615 kg
Bottom outlet 1 ID Ø Bottom outlet 1 OD Ø	45.5 mm 50 mm	45.5 mm 50 mm	45.5 mm 50 mm	45.5 mm 50 mm	45.5 mm 50 mm
Bottom outlet 2 ID Ø Bottom outlet 2 OD Ø	70.5 mm 75 mm	70.5 mm 75 mm	70.5 mm 75 mm	70.5 mm 75 mm	70.5 mm 75 mm
Minimum reduce length to	152mm	152mm	152mm	152mm	152mm
Grate Holes	12mmx12mm 80 diamond holes	12mmx12mm 80 diamond holes	12mmx12mm 80 diamond holes	12mmx12mm 80 diamond holes	12mmx12mm 80 diamond holes
Grate Dimensions:	Side = 21 mm Center = 8 mm	Side = 21 mm Center = 8 mm	Side = 21 mm Center = 8 mm	Side = 21 mm Center = 8 mm	Side = 21 mm Center = 8 mm
Protection Feature	Dust Cover provided	Dust Cover provided	Dust Cover provided	Dust Cover provided	Dust Cover provided
Product Warranty	5 years	5 years	5 years	5 years	5 years
Product Application	Linear Channel drainage for removal of surface / Stormwater / Catchpit	Linear Channel drainage for removal of surface / Stormwater / Catchpit	Linear Channel drainage for removal of surface / Stormwater / Catchpit	Linear Channel drainage for removal of surface / Stormwater / Catchpit	Linear Channel drainage for removal of surface / Stormwater / Catchpit
Design Information					
CAD	Yes	Yes	Yes	Yes	Yes
Revit	Yes	Yes	Yes	Yes	Yes

Packaging Information					
Packaging info	Polybag with Stickers	Polybag with Stickers	Polybag with Stickers	Polybag with Stickers	Polybag with Stickers
Items / Outer Box	9	9	9	9	9
Total Weight of Outer Box	6.6 kg	6.6 kg	6.6 kg	6.6 kg	6.6 kg
Dimensions of Outer Box	520 L x 280 W x 620 H	520 L x 280 W x 620 H	520 L x 280 W x 620 H	520 L x 280 W x 620 H	520 L x 280 W x 620 H
Product Barcode	6009881255534	6009881255541	6009881255558	6009881255565	6009881255572
Outer Box Barcode	16009881255531	16009881255548	16009881255555	16009881255562	16009881255579

3.3.7.2 QualiDrain Accessories Product Data

Product:	QualiDrain Kit End Outlet 50mm x 1	QualiDrain Kit End Outlet 75mm x 1	QualiDrain Kit U-Clip x 1	QualiDrain Kit Stop-end x 1
Product Code:	200071	200072	200073	200074
Product Image:				
Barcode:	6009880161737	6009880161744	6009880161751	6009880161768
Dimensions: L x B x H in mm	OD = 50mm Ø ID = 45.5mm Ø L = 115mm B = 5mm H = 121mm	OD = 75mm Ø ID = 70.5mm Ø L = 115mm B = 5mm H = 121mm	117mmx5mmx133mm	115mmx5mmx121mm
Weight in kg:	0.070kg	0.065kg	0.030kg	0.070kg
Product / bag	1	1	1	1

3.3.8 Terms & Conditions of Product Warranty

On the conditions appearing below Seaqual warrants that the products it manufactures are free from defect for the periods set out in Warranty Period column for use in the manner described in the Application column.

Seaquals range of products are made from different types of plastics which determines their longevity. Research into the various plastics Seaqual uses indicates that the life expectancy of the various materials ranges from 50 to 100 years and for this reason Seaqual can confidently offer the lengthy warranties set out in the schedule. Under this warranty Seaqual undertakes to replace any item that does not last for the period of the warranty provided that the following conditions are met:-

- 3.3.8.1. Any failure of the product has not been caused by abuse of the Product;
- 3.3.8.2. The Product has been correctly installed in terms of the Installation Instructions provided by Seaqual;
- 3.3.8.3. In the case of floor drains / full bores / sumps no corrosive liquids have been poured into or through the Product;

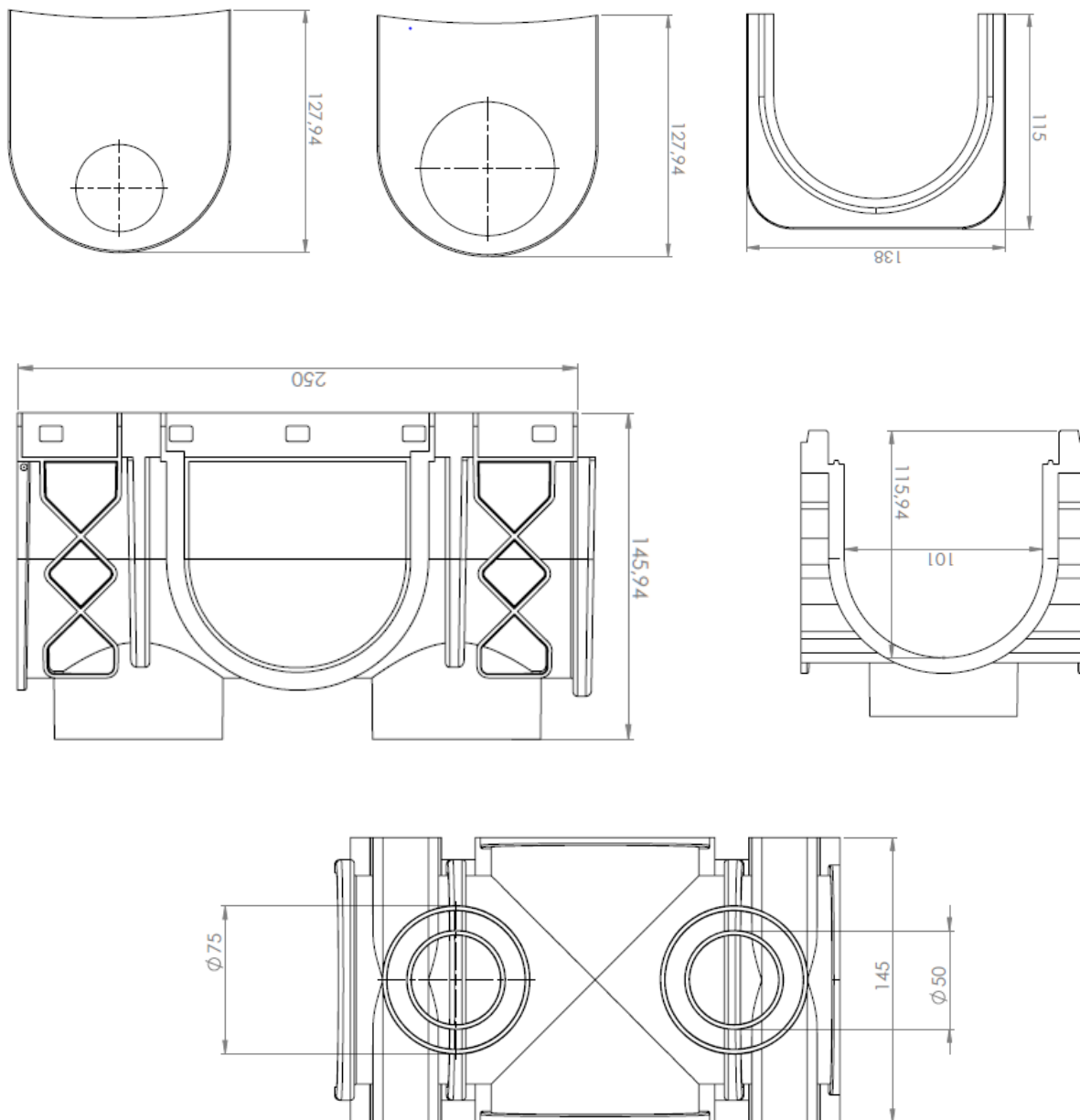
Sequal Technical Data Sheet – QualiDrain Lite

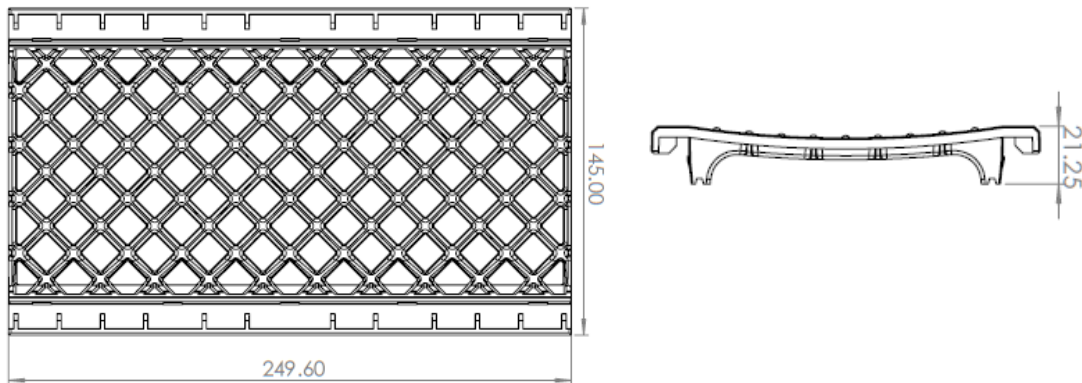


- 3.3.8.4. The purchase receipt pertaining to the purchase of the Product or details of where purchased are provided;
- 3.3.8.5. The claim is submitted online to the Technical Director, Sequal (Pty) Ltd at tech@sequal.co.za or in writing to Sequal at 5 Fechter Street, Knysna Western Cape;
- 3.3.8.6. Photographs of the defective Product are submitted with the claim, Sequal reserving the right to call for the defective Product itself should the photographs be insufficient evidence of any alleged defect (this within Sequal's sole discretion).
- 3.3.8.7. The claim is limited to the actual replacement of any defective product at no cost to the purchaser/claimant and does not cover any consequential losses that the purchaser may contend he or she has suffered.

NOTE: The 5 year warranty excludes any component of the product which is not manufactured by Sequal such as the rubber seals, nuts and bolts. These items carry a 2 year warranty against manufacturer defects. Please note that Sequal cannot be held responsible for inaccurate installation processes.

3.3.9 Drawings & Product Images





CAD & Revit files are available upon request in writing: tech@sequal.co.za

3.3.10 Certifications

Sequal (Pty) Ltd is ISO9001:2015 Certified.

WHOLLY MANUFACTURED IN SOUTH AFRICA – Tariff Heading / HS Code 3922.90.90

These products are available through most Plumbing Merchants within South Africa and can be viewed on our website: <http://www.sequal.co.za>.

Request for quotations or placing of Orders can be sent to orders@sequal.co.za