



LITE AQUA

Service . Range . Knowledge

Welcome To Polycon

Polycon is identified as one of the leading manufacturers, distributors, and suppliers of channel drainage in the UK. We focus towards creating a diverse range of water solutions, in a variety of different materials, including composite, polymer concrete, SMC, and steel.

Polycon’s unique look at the market and expert knowledge of the industry ensures that we can supply a wide range of high-quality products suitable for any application. This includes building drainage, landscaping, sports facilities, distribution centres, highways, and airports.

Our design team provides innovative and efficient hydraulic solutions to ensure we can offer the best product/ solution for your drainage needs. We have a vast and experienced overview of our working industry and have been manufacturing, distributing, and selling channel drainage for over 8 years. We thrive on acting upon your feedback to improve and develop our products to fit flawlessly with the constantly changing market and demand from our customers.

At Polycon we focus our attention on professionals who sit within the construction industry, targeting our products to specifiers, architects, engineers, and contractors. Therefore, we understand the importance of expanding our product portfolio to create the most efficient surface water drainage systems.

We are a dynamic and evolving company with a focus on quality, innovation, and service. As a result, you can rely on us to handle your project needs in every way to the best of our ability.

Contents

<i>Lite Aqua</i>	3
<i>Lite Aqua Overview</i>	5
<i>Lite Aqua 100.45/48</i>	7
<i>Lite Aqua 100.55</i>	9
<i>Lite Aqua 100.92</i>	11
<i>Installation Guide</i>	13

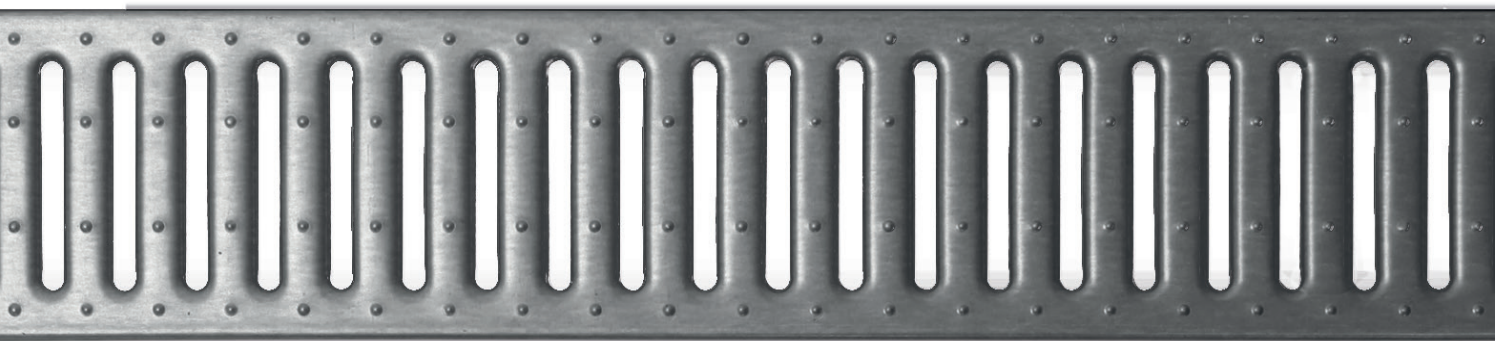
LITE AQUA

This innovative drainage system boasts a range of features tailored for optimal performance. Enhanced durability is ensured through the incorporation of external stiffening ribs providing robustness that withstands external pressures and maintains the system's form. The male-to-female coupling system simplifies assembly between two channels, guaranteeing a secure and seamless fit that upholds structural integrity.

Addressing functionality and hygiene, the system includes corner units compatible with all grating types. These units cleverly house foul air traps, effectively preventing unpleasant odours from resurfacing.

Furthermore, an outlet point is located on the bottom of the channel which facilitates efficient water dispersal, preventing pooling and potential damage.

The design pays thorough attention to hydraulic efficiency, with perfectly smooth channel surface that optimises water flow. The commitment to excellence extends to watertight integrity, ensuring a completely sealed system without any vulnerable connection gaps. Installation flexibility is also granted through the choice of snap lock or bolt & bar fixings, catering to various preference and requirements.



Load Class



A15
1.5 tonnes



B125
12.5 tonnes

Applications

- Pedestrian areas
- Domestic & civil areas
- Sports & leisure
- Terrace & balconies
- Residential areas

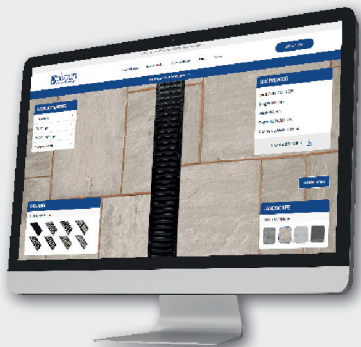
LITE AQUA



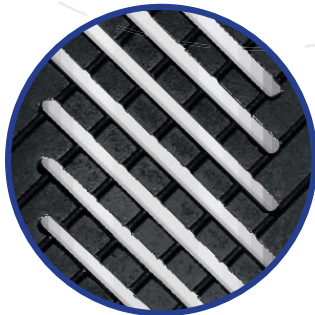
Not sure what you are looking for?

Check out our Lite Aqua systems against multiple paving backgrounds on our virtual landscape feature. You can mix and match gratings against multiple backgrounds to achieve the ultimate desired look. Each visual can be downloaded as a PDF and sent to customers along with a technical overview of your chosen system.

Try today at www.polycon.co.uk.



LITE AQUA – Overview



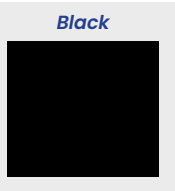
Grating Options

There are a range of varied grating options for each of the available Lite Aqua systems. There is a mix of galvanised, composite, and ductile iron grating tops that fit each of the depth options available. The Lite Aqua 100.92 has five available grating options whilst the Lite Aqua 100.55 has four. The shallowest depth option is the Lite Aqua 100.45/100.48 which has two grating options available.

Material

The Lite Aqua system is a lightweight, drainage channel made from polyethylene. This material boasts a robust exterior whilst also being extremely lightweight. This aids in eliminating labour costs due to minimal / no machinery needed for its installation. It is a durable solution for urban projects and its enhanced protection means water vapour cannot pass through it.

Colour Options



SAFEHEEL

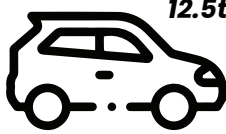
Outlet

The bottom outlet in the base of the channel allows for downward drainage into a 110mm sewer connection. Break the outlet in the marked area with a hammer and then the insert the outlet in the channel fixing it with the four screws supplied.

Load Classes



A15



B125

Depth Options



45mm



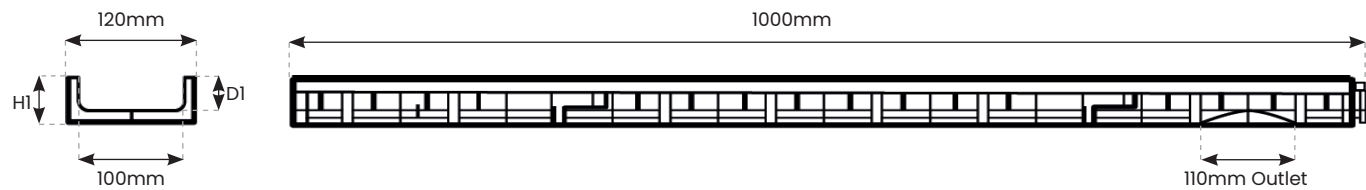
55mm



92mm

LITE AQUA – 100.45/100.48

The Lite Aqua 100.45 & 100.48 are lightweight systems made from polyethylene. They both have an incredibly shallow depth of 45mm and 48mm, making them the perfect choice for sites that require minimal digging. The overlay gratings available for the systems provide a clean and minimal look whilst offering great strength in their design.



Accessories

The Lite Aqua 100.45 has a complete range of accessories to complete the system. It has end caps and corner units with matching grating tops. The end caps are used for blocking off the end of the channel run while the corner units allow the system to be able to turn 90° corners within the channel run.



Galvanised
Steel Slotted
Sump Unit



Ductile Iron
Safeheel Slotted
Sump Unit

Corner Units

There is a matching corner unit for each of the 2 available gratings in the Lite Aqua system. The corner units come with a built-in foul air trap to stop unwanted smells from travelling back up through the system.



Galvanised
Steel Slotted



Ductile Iron
Safeheel
Slotted

End Cap & Outlet

End caps are used at the end of the channel run to stop the flow of water.



End Cap



Outlet



Bolt & Bar

Accessories – Specifications

Reference	Description	Height (H)	Overall Width	Weight (KG)	Load Class	Outlet
CU.LA.100.45.GSG	Lite Aqua 100.45 Corner Unit + Galvanised Slotted Grating	45mm	120mm	0.6kg	A	110mm
CU.LA.100.45.DIMG	Lite Aqua 100.45 Corner Unit + Ductile Iron Mesh Grating	45mm	120mm	0.4kg	A/B	110mm
SU.LA.100.45.GSG	Lite Aqua 100.45 Sump Unit + Galvanised Slotted Grating	340mm	120mm	1.2kg	A	110mm
SU.LA.100.45.DIMG	Lite Aqua 100.45 Sump Unit + Ductile Iron Mesh Grating	335mm	120mm	0.9kg	A/B	110mm
EC.LA.100.45	Lite Aqua 100.45 End Cap	36mm	110mm	0.7kg	-	-
VO.LA.100.45	Lite Aqua 100.45 110mm Vertical Outlet	35mm	110mm	1.5kg	-	-

Grating Options – 100.45/100.48



Galvanised
Steel Slotted
(A15)



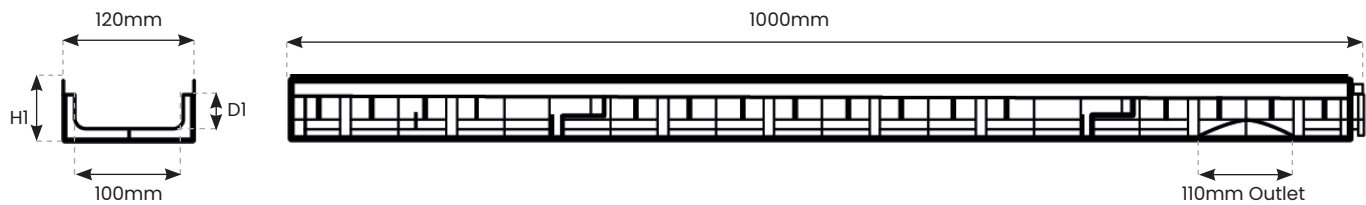
Ductile Iron
Safeheel Slotted
(B125)

Grating – Specifications

Reference	Description	Internal Width	Overall Width	Overall Depth (H1)	Internal Depth (D1)	Load Class	Safe Heel
LA.100.45.GSG	Lite Aqua 100.45 – 1m + Galvanised Slotted Grating	100mm	120mm	45mm	35mm	A	-
LA.100.48.DISG	Lite Aqua 100.48 – 1m + Ductile Iron Safeheel 7mm Slotted Grating	100mm	120mm	48mm	38mm	A/B	Yes

LITE AQUA – 100.55

The Lite Aqua 100.55 system is a lightweight drainage channel made from polyethylene. It has an incredibly shallow depth of just 55mm making it ideal if you have digging restrictions on site. This system is perfect for urban and domestic projects where slow-moving traffic and pedestrians will be traveling across it.



Accessories

The Lite Aqua 100.55 has a complete range of accessories to complete the system. It has end caps and corner units with matching grating tops. The end caps are used for blocking off the end of the channel run while the corner units allow the system to be able to turn 90° corners within the channel run.



Composite Inter-Lock Sump Unit Galvanised Steel Slotted Sump Unit Ductile Iron Safeheel Slotted Sump Unit

Corner Units

There is a matching corner unit for each of the 3 available gratings in the Lite Aqua system. The corner units come with a built-in foul air trap to stop unwanted smells from travelling back up through the system.



Composite Inter-Lock Galvanised Steel Slotted Ductile Iron Safeheel Slotted

End Cap & Outlet

End caps are used at the end of the channel run to stop the flow of water.

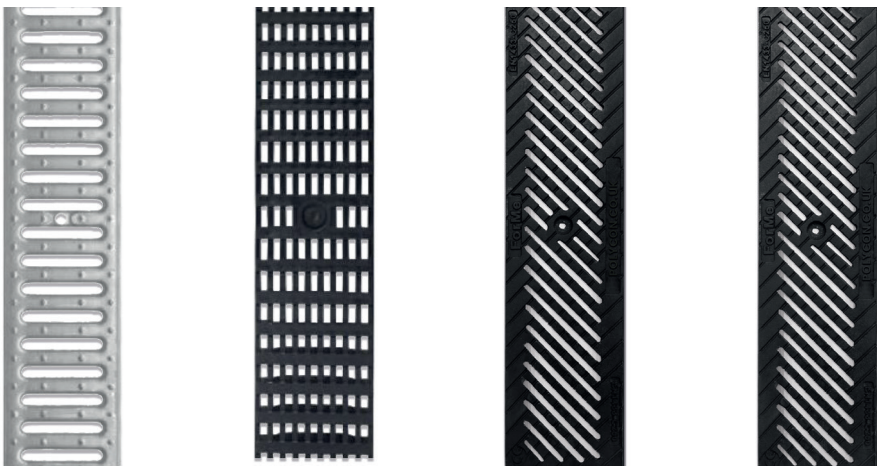


End Cap Outlet Bolt & Bar

Accessories - Specifications

Reference	Description	Height (H)	Overall Width	Weight (KG)	Load Class	Outlet
CU.LA.100.55.GSG	Lite Aqua 100.55 Corner Unit + Galvanised Slotted Grating	55mm	120mm	0.6kg	A	110mm
CU.LA.100.55.CILG	Lite Aqua 100.55 Corner Unit + Composite Inter-Lock Grating	55mm	120mm	0.4kg	A	110mm
CU.LA.100.55.DIMG	Lite Aqua 100.55 Corner Unit + Ductile Iron Mesh Grating	55mm	120mm	1.2kg	A/B	110mm
SU.LA.100.55.GSG	Lite Aqua 100.55 Sump Unit + Galvanised Slotted Grating	340mm	120mm	0.9kg	A	110mm
SU.LA.100.55.CILG	Lite Aqua 100.55 Sump Unit + Composite Inter-Lock Grating	340mm	120mm	0.7kg	A	110mm
SU.LA.100.55.DIMG	Lite Aqua 100.55 Sump Unit + Ductile Iron Mesh Grating	335mm	120mm	1.5kg	A/B	110mm
EC.LA.100.55	Lite Aqua 100.55 End Cap	36mm	110mm	0.1kg	-	-
VO.LA.100.55	Lite Aqua 100.55 110mm Vertical Outlet	35mm	110mm	0.3kg	-	-

Grating Options – 100.55



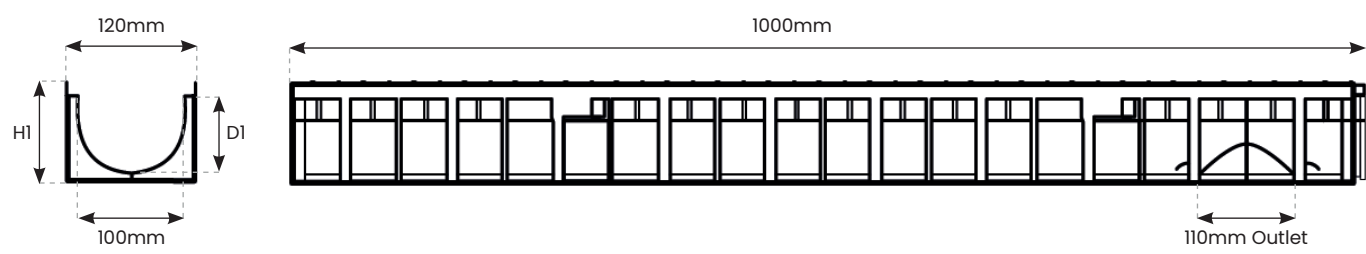
Galvanised Steel Slotted (A15) Composite Inter-Lock (A15) Ductile Iron Safeheel Slotted (B125) Composite Safeheel Slotted (B125)

Grating - Specifications

Reference	Description	Internal Width	Overall Width	Overall Depth (H1)	Internal Depth (D1)	Load Class	Safe Heel
LA.100.55.GSG	Lite Aqua 100.55 – 1m + Galvanised 8mm Slotted Grating	100mm	120mm	55mm	35mm	A	-
LA.100.55.CILG	Lite Aqua 100.55 – 1m + Composite 7x10mm Inter-Lock Grating	100mm	120mm	55mm	35mm	A	-
LA.100.55.DISG	Lite Aqua 100.55 – 1m + Ductile Iron Safeheel 7mm Slotted Grating	100mm	120mm	55mm	35mm	A/B	Yes
LA.100.55.CSG	Lite Aqua 100.55 – 1m + Composite Safeheel 7mm Slotted Grating	100mm	120mm	55mm	35mm	A/B	Yes

LITE AQUA – 100.92

The Lite Aqua 100.92 system is a lightweight, channel drainage system made from polyethylene. It has a shallow depth of just 92mm making it perfect for most urban & domestic projects where slow-moving traffic and pedestrians will be traveling across the system.



Accessories

The Lite Aqua 100.92 has a complete range of accessories to complete the system. It has end caps and corner units with matching grating tops. The end caps are used for blocking off the end of the channel run while the corner units allow the system to be able to turn 90° corners within the channel run.



Corner Units

There is a matching corner unit for each of the 3 available gratings in the Lite Aqua system. The corner units come with a built-in foul air trap to stop unwanted smells from travelling back up through the system.



End Cap & Outlet

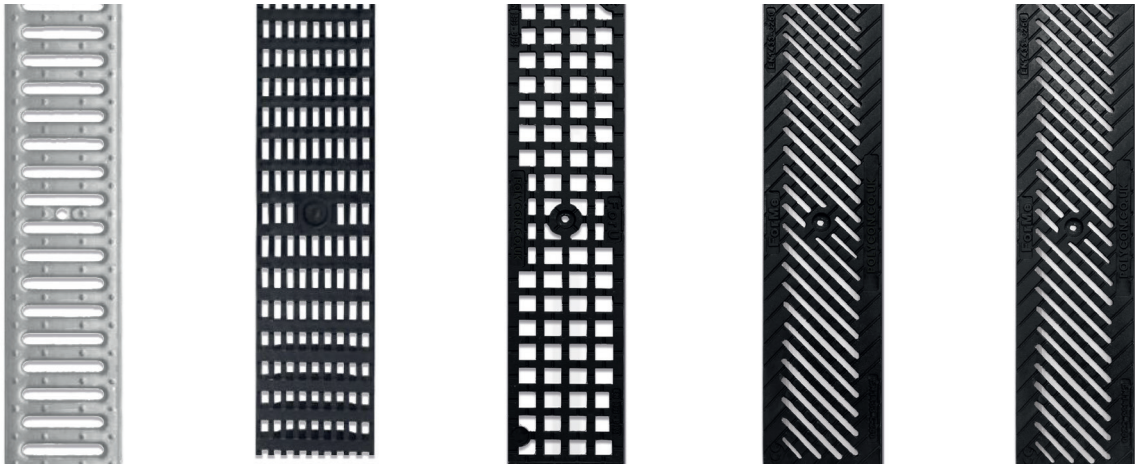
End caps are used at the end of the channel run to stop the flow of water.



Accessories – Specifications

Reference	Description	Height (H)	Overall Width	Weight (KG)	Load Class	Outlet
CU.LA.100.92.GSG	Lite Aqua 100.92 Corner Unit + Galvanised Slotted Grating	92mm	120mm	0.6kg	A	110mm
CU.LA.100.92.CILG	Lite Aqua 100.92 Corner Unit + Composite Inter-Lock Grating	92mm	120mm	0.4kg	A	110mm
CU.LA.100.92.DIMG	Lite Aqua 100.92 Corner Unit + Ductile Iron Mesh Grating	92mm	120mm	1.2kg	A/B	110mm
SU.LA.100.92.GSG	Lite Aqua 100.92 Sump Unit + Galvanised Slotted Grating	375mm	120mm	0.9kg	A	110mm
SU.LA.100.92.CILG	Lite Aqua 100.92 Sump Unit + Composite Inter-Lock Grating	375mm	120mm	0.7kg	A	110mm
SU.LA.100.92.DIMG	Lite Aqua 100.92 Sump Unit + Ductile Iron Mesh Grating	370mm	120mm	1.5kg	A/B	110mm
EC.LA.100.92	Lite Aqua 100.92 End Cap	36mm	110mm	0.1kg	-	-

Grating Options – 100.92



Grating – Specifications

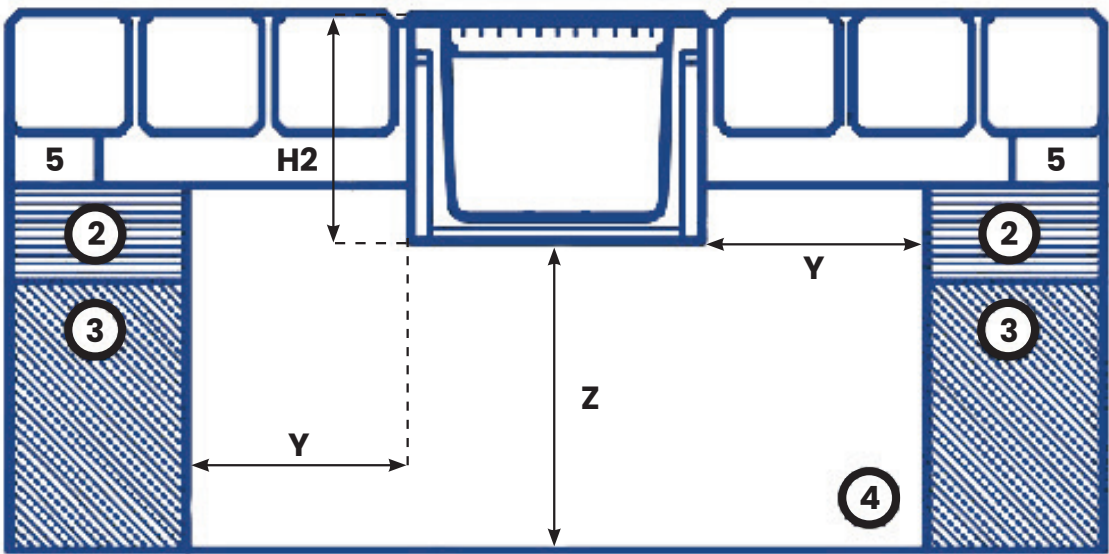
Reference	Description	Internal Width	Overall Width	Overall Depth(H1)	Internal Depth(D1)	Load Class	Safe Heel
LA.100.92.GSG	Lite Aqua 100.92 – 1m + Galvanised 8mm Slotted Grating	100mm	120mm	92mm	62mm	A	-
LA.100.92.CILG	Lite Aqua 100.92 – 1m + Composite 7x 10mm Inter-Lock Grating	100mm	120mm	92mm	62mm	A	-
LA.100.92.DIMG	Lite Aqua 100.92 – 1m + Ductile Iron 10x 10mm Mesh Grating	100mm	120mm	92mm	62mm	A/B	-
LA.100.92.DISG	Lite Aqua 100.92 – 1m + Ductile Iron Safeheel 7mm Slotted Grating	100mm	120mm	92mm	62mm	A/B	Yes
LA.100.92.CSG	Lite Aqua 100.92 – 1m + Composite Safeheel 7mm Slotted Grating	100mm	120mm	92mm	62mm	A/B	Yes

Installation Guide

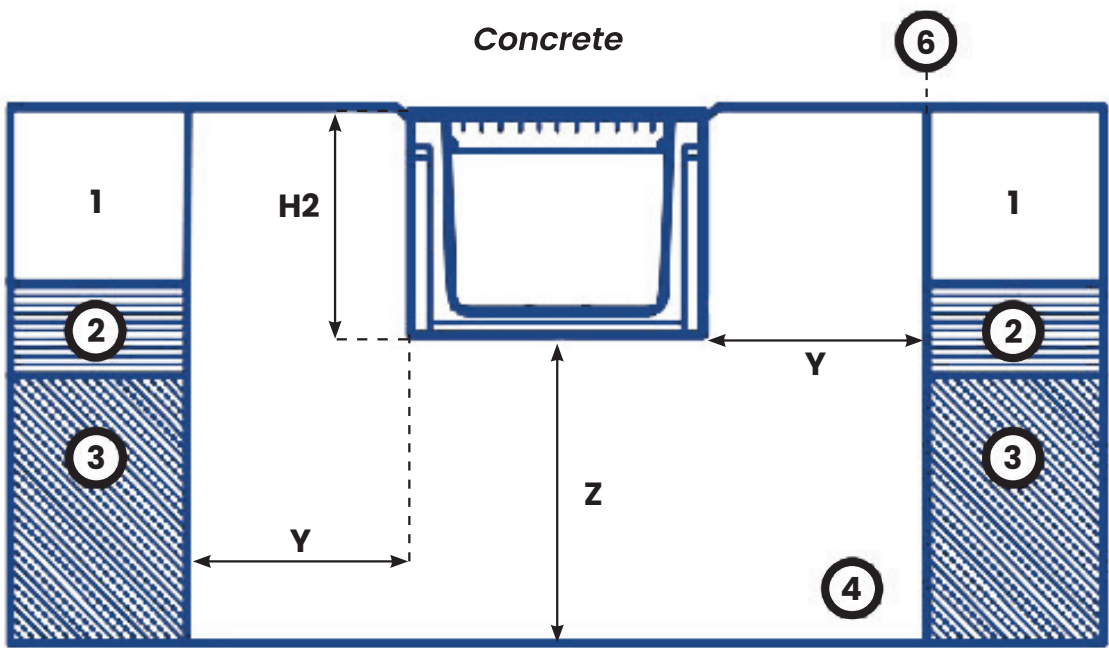
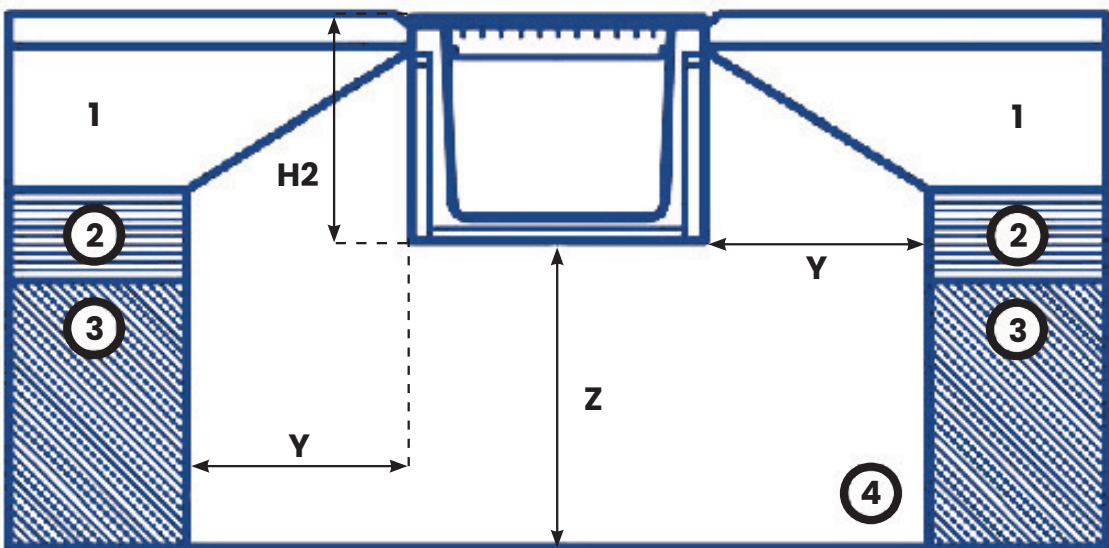
Ground conditions must be suitable and all dimensions shown are the minimum requirement. Engineering advice should be taken where necessary and any questions should be directed to Polycon's technical team by emailing us at sales@polycon.co.uk or by calling us on 0151 424 9747.



Block Paving



Tarmac



Load Class	A15	B125
H2 - Channel Height	Channel Height	Channel Height
Y - Minimum Surround	100mm	150mm
Z - Minimum Surround	100mm	150mm
T1 - Minimum Depth	40mm	40mm
T2 - Maximum Depth	95mm	55mm

** Minimum Concrete Haunch 25 N/mm².
Detail A allow for overbuild of 3mm to 5mm above the grating surfaces.





Polycon Surface Water Drainage

**Widnes Business Park
Foundry Lane
Widnes
Cheshire
WA8 8UB**

**www.polycon.co.uk
0151 422 9747
sales@polycon.co.uk**

Service . Range . Knowledge