

# Polypropylene Access Chambers

**At HPS, we source cutting edge products from right across the UK and Europe to assist the designers and contractors that build our roads, to guarantee you easy, cost-effective access to the most advanced and practical solutions available anywhere on the market.**

**It's by combining your continuous feedback on the problems and challenges you face with our own knowledge and expertise that we ensure our ever-expanding portfolio always delivers what you're looking for.**

**Also by linking different manufacturers' innovative products, such as polypropylene chambers with composite manhole covers, we can devise individual solutions to every issue you face.**

**In short, you need look no further than HPS to meet all your access and drainage needs when road building.**

## Contents

**Introduction to Hidrostand 04**

**Technical characteristics 05**

**Access chambers for electrical channels 06**

**Access chambers for telecommunications 07**

**Custom solution 08**

**Access chambers for rainwater and surface water drainage 09**

**Access chambers for wastewater 10**

**Access chambers for water supply 11**

**Cast iron covers and grates 12**

**Polypropylene manhole steps 13**

# Introduction to Hidrostank

Motorway services/ Traffic signalling/  
Street lighting/ Telecommunications/  
Cable television/ CCTV/ Rail infrastructure/  
Water services/ Valve boxes/  
Rainwater drainage/ Borehole chambers/  
Well access points/ Pump housing/

The complexity and high cost of installing conventional chambers, based on materials such as cement and brickwork, have made them outdated. Hidrostank started research into developing less complex and costly alternatives in 1996, which resulted in the design and manufacture of their patented modular chambers. Today, these are used widely in a range of sectors.

The chambers are lightweight and easy to install, but will achieve B125 loading when installed and backfilled with 10mm compacted clean stone. This totally eliminates the need for a concrete surround in pavements.

This unique patented Hidrostank modular chamber system can be delivered in flat-packed form, significantly reducing delivery costs and on-site storage space. Its lightweight and ease of assembly also leads to increased on-site safety and speed.

## Technical characteristics

### Strength

- Made of polypropylene with mineral reinforcement
- Chemically resistant to domestic residues and resistant to most aggressive soils
- Capable of B125 loading when installed and backfilled with 10mm compacted clean stone, eliminating any need for concrete surround in pavements

### Versatility

- Adaptable to many sizes
- Easy to transport and store due to their modular design
- Suitable for many applications

### Easy to install

- Lightweight and easy to handle without the need for mechanical aid, making them safer on site
- Easy to drill, if necessary, for on-site openings

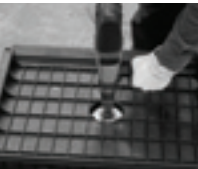
### Environmentally friendly

- Made from 100% recyclable materials
- In a modular format that minimises transport costs and our carbon footprint

### Easy assembly



**Step 1**  
Place the access chamber on a solid base to assist assembly of the panels



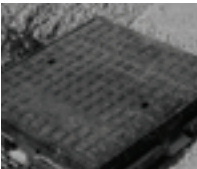
**Step 2**  
Access holes up to 210mm in diameter may be drilled in the factory or on site



**Step 3**  
All joints and access points can be made watertight



**Step 4**  
Backfill with compacted pea gravel up to 10mm in diameter

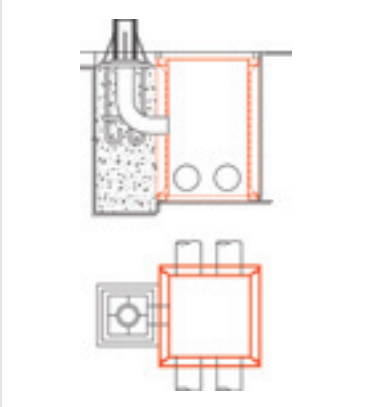


**Step 5**  
Position frame and cover, and secure in position with concrete

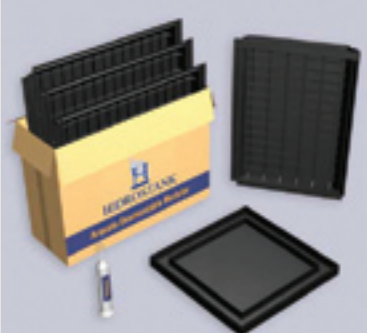
# Access chambers for electrical channels

Hidrostant reinforced polypropylene access chambers for electrical channels are available with or without a base for the following networks:

- Public street lights
- Low, medium or high voltage



**Arqpaq**  
This easy-to-assemble, individually packaged structural access chamber is available on request in a range of sizes.



Internal dimensions (cm)	External dimensions (cm)	Height (cm)
35 x 35	45 x 45	40-60-80-100-120
45 x 45	55 x 55	40-60-80-100-120
58 x 58	68 x 68	40-60-80-100-120
68 x 68	78 x 78	40-60-80-100-120



# Access chambers for telecommunications

Hidrostant reinforced polypropylene access chambers for telecommunications channels are available with or without a base for the following networks:

- Telephone or fibre optics
- SOS



**SOS access chambers**  
Hidrostant reinforced polypropylene access chambers for SOS channels are available in a range of sizes on request, with or without a base.



Description	Internal dimensions (cm)	External dimensions (cm)	Height (cm)
Telefonica Type M	45 x 45	55 x 55	60
Telefonica Type H	80 x 70	90 x 80	80
Telefonica Type D	100 x 90	110 x 100	100



Internal dimensions (cm)	External dimensions (cm)	Height (cm)
58 x 58	68 x 68	60-80-100-120
126 x 58	136 x 68	60-80-100-120



# Custom solution

Hidrostant reinforced polypropylene access chambers are available in a variety of sizes for the following networks:

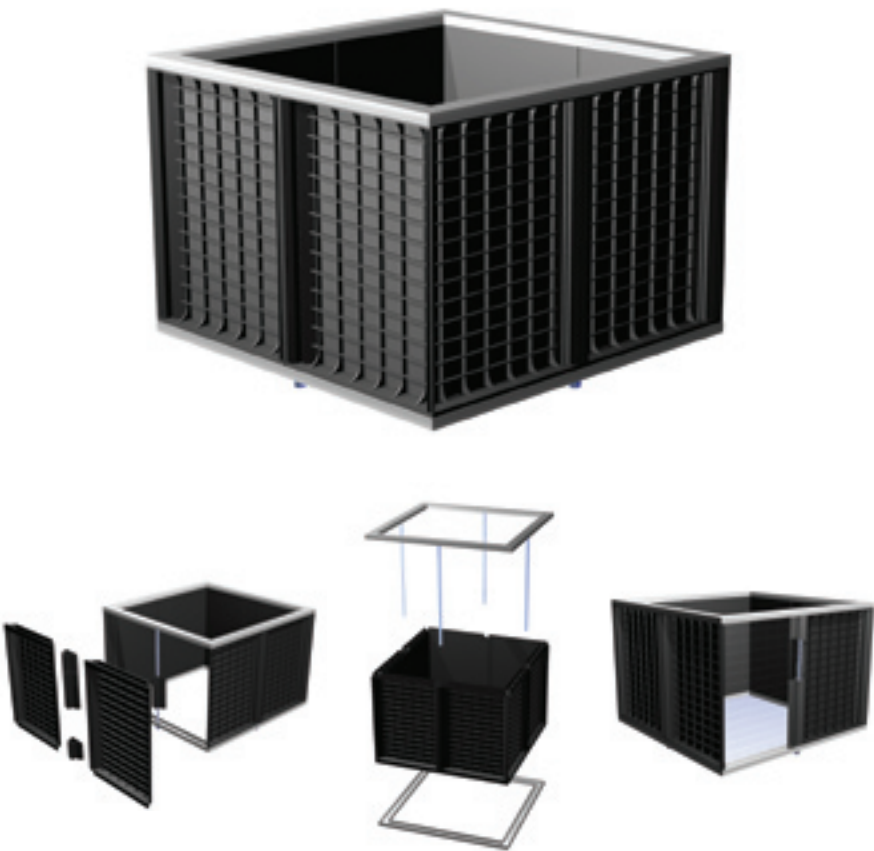
- Electrical (low, medium or high voltage)
- Telecommunications (telephone, fibre optics or SOS)
- Water supply

**Specifications**

- Structural
- Versatile – can be made on site in a variety of dimensions
- Quick and easy manual installation, with no need for machinery

**The product includes:**

- Structural side walls
- Galvanised steel (UPN 60) frame
- Galvanised steel threaded bars (16mm diameter)

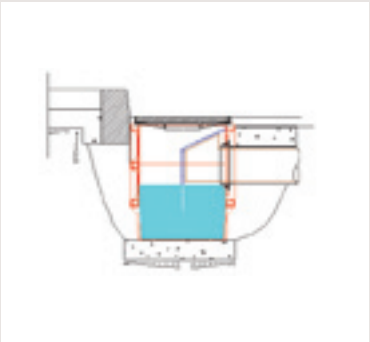


Internal dimensions (cm)	External dimensions (cm)	Height (cm)
80 x 80	90 x 90	60-80-100-120
90 x 90	100 x 100	60-80-100-120
100 x 100	110 x 110	60-80-100-120
126 x 126	136 x 136	60-80-100-120
126 x 80	136 x 90	60-80-1a00-120
126 x 90	136 x 100	60-80-100-120
126 x 100	136 x 110	60-80-100-120

# Access chambers for rainwater and surface water drainage



The Hidrostant surface-water drainage chamber for rainwater drainage networks has non-siphon sealed pipe joints, and incorporates a ductile iron grate.

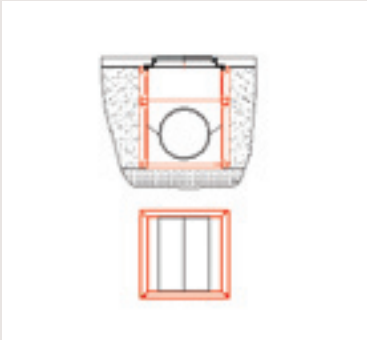


Internal dimensions (cm)	External dimensions (cm)	Height (cm)	Grate cover (cm)
35 x 35	45 x 45	40-60-80-100-120	40 x 40
45 x 45	55 x 55	40-60-80-100-120	50 x 50
58 x 58	68 x 68	40-60-80-100-120	60 x 60
40 x 20	50 x 30	50	46 x 23
70 x 30	80 x 40	60	75 x 30
45 x 35	55 x 45	60-80-100-120	50 x 30
58 x 35	68 x 45	60-80-100-120	60 x 30



# Access chambers for wastewater

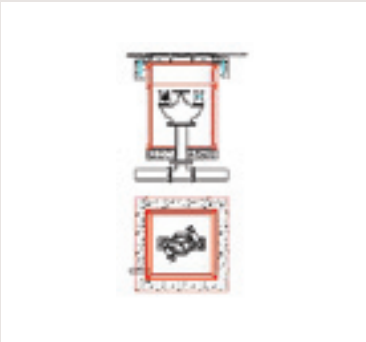
Hidrostack access chambers for wastewater channels are completely watertight.



Internal dimensions (cm)	External dimensions (cm)	Height (cm)
35 x 35	45 x 45	40-60-80-100-120
45 x 45	55 x 55	40-60-80-100-120
58 x 58	68 x 68	40-60-80-100-120

# Access chambers for water supply

Hidrostack access chambers for access points to valves, stop-taps, hydrants etc are available in a range of sizes on request, with or without a base.



Internal dimensions (cm)	External dimensions (cm)	Height (cm)
35 x 35	45 x 45	40-60-80-100-120
45 x 45	55 x 55	40-60-80-100-120
58 x 58	68 x 68	40-60-80-100-120

# Cast iron covers and grates

Hidrostack access chambers can be used in conjunction with most types of cast iron, steel or composite covers and gratings.

**Installation**

- 1. Depending on the final pavement material, install the manhole cover or grate with a minimum of 10cm of concrete or mortar
- 2. Position and finish the frame in the conventional manner



Ref	Exterior frame LxW (cm)	Cover dimensions LxW (cm)	Free space LxW (cm)
TMF040_00	40 x 40	38 x 38	35 x 35
TMF050_00	50 x 50	48 x 48	40 x 40
TMF060_00	60 x 60	58 x 58	50 x 50
TMF070_00	70 x 70	68 x 68	60 x 60
TMF080_00	80 x 80	78 x 78	70 x 70
TMF090_00	90 x 90	88 x 88	80 x 80
TFH	93 x 86	84 x 76	80 x 72
TFD	120 x 95	115 x 90	110 x 80



Ref	Exterior frame LxW (cm)	Cover dimensions LxW (cm)	Free space LxW (cm)
RMF840x340	84 x 34	75 x 24.5	72 x 27
RMF570x380	57 x 38	56 x 30	50 x 30
RMF430x430	43 x 43	40 x 40	35 x 35
RMF520x520	52 x 52	48 x 48	45 x 45
RMF620x620	62 x 62	60 x 60	55 x 55
RMF530x590	53 x 59	45.5 x 45.5	40 x 40
RMF720x420	72 x 42	60 x 37	55 x 32
RMF500x260	50 x 26	46 x 23	43 x 20



# Polypropylene manhole steps

With a corrugated 12mm steel rod at their core, these steps are covered by virgin co-polymer polypropylene with high impact-resistance to prevent breakage during installation.

Intensive quality control ensures that the rod is highly resistant to corrosion and abrasion, while anti-slip grooves and side stops maximise safety performance.

Equally easy to install in flat or curved walls.

Fully tested to conform to EN 13101

- Trials include**
- Vertical loading
  - Extraction resistance
  - Impact resistance
  - Strength and integrity of plastic covering



Ref	Model	A	B	C
P001	Straight Barcelona	100	120	330
P002	Standard	80	140	330
P003	Straight Bilbao	80	160	330
P004	Curve 300mm	80	160	300
P005	Curve 330mm	80	160	330

- Installation**
1. When the concrete is dry, use a 25mm bit to drill two holes of the recommended depth and distance apart
  2. Ensure these are precise; if not, you will need to use mortar or paste to secure the steps properly
  3. Place the screwed sections of the step at the mouth of each hole. Tap each end of the step alternately until fully inserted





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