HIDROSTANK

HIDROSTANK PRODUCT COMMERCIALIZATION MANUAL

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HIDROSTANK PRODUCT COMMERCIALIZATION MANUAL

This manual has been drawn up as a practical tool for the commercialization of the products that are produced and supplied by Hidrostank. It contains useful information for sales purposes.

It is important to note that the sales process depends largely on a sound knowledge of the use, specifications and installation guidelines for each of the products, our aim is to fully describe each product in three sections: a) applications of the product and where it is used; b) specifications: the properties that differentiate Hidrostank products, the advantages and where possible, the competence of our products; c) Installation Guidelines: how to install the products and considerations for the proper installation of Hidrostank products.

We trust that this guide, along with the sales and technical support that Hidrostank offers, can help you increase the sales volume of Hidrostank products in your city, region, state or country.

Products:

a. **Modular Dismountable Access Chamber (Cable pit)**
b. **Polypropylene Manhole steps**
c. **Pipe Fasteners**

Hidrostank Channelling Products:

a. **Modular Dismountable Access Chambers (Cable pits)**
b. **Polypropylene Manhole steps**
c. **Pipe Fasteners**

a. Modular Dismountable Access Chambers (Cable pits)

The complexity and high cost of the installation of conventional Access Chambers (Cable pits), based on cement and brickwork, cinder-block and other materials have become outdated and in 1996, we decided to research alternatives, which are now explained in this manual.

Modular Dismountable Access Chambers (Cable pits) are the ideal solution for the aforementioned problems and this product fulfills all of the technical and environmental requirements that are in effect today, regardless of the end use of the product.

The following sections offer a description and specifications of this new system, which confer great advantages in projects and construction: Hidrostank Modular Dismountable Access Chambers (Cable pits)

i. Applications

Hidrostank Modular Dismountable Access Chambers (Cable pits) are apt for a broad range of uses and applications:

- Low, medium and high voltage
- Telecommunications
- Drinking water
- Irrigation
- Gas
- Sewage
- Rainwater drainage

1. Model to be used

The Access Chamber (Cable pit) model to be employed will vary according to the application and type of terrain, as described in the table below. It is important to advise that the reasons set forth below are for general cases and that there may be additional reasons for selecting another model and that adaptations can be made in specific cases for the client; nevertheless, the client normally considers the application- not the model, so it is important for you to be able to identify the model that best adapts to the application in question:

Application	Type of support terrain	Location	Recommended Access Chamber (Cable pit) Model	Reason
Electricity	Earth	Sidewalk	No bottom	For electrical channels, it is recommended that the Access Chambers (Cable pits) have no bottom in order to allow for drainage of water that comes in through the cover or the tubes and to prevent condensation. These Access Chambers (Cable pits) do not have to be sealed.
Electricity	Cement	Sidewalk or street	With bottom, no joints	For electrical channels, it is recommended that the Access Chambers (Cable pits) have no bottom, but if it is cemented in, then if it has the bottom it will settle better. Since it is below street level, it will probably be laid over a cement base to prevent sinking from overhead traffic weight.
Telecommunications	Earth	Sidewalk	No bottom	As with electrical channels, and for the same reasons, telecommunications Access Chambers (Cable pits) should be bottomless. In some cases, there are utility companies that require the Access Chambers (Cable pits) to be sealed and include a drainage pit to drain out the water.
Telecommunications	Cement	Sidewalk or street	With bottom, no joints	The reason for the bottom is the same as with electrical channels with bottom; that is, to settle the Access Chamber (Cable pit) and avoid sinking.
Drinking water or irrigation	Earth	Sidewalk	No bottom	In water supply channels, whether drinking water, irrigation or gas, the channel itself must be completely sealed, including pipes and shutoff valves, in order to prevent leaks. Therefore, the Access Chambers (Cable pits) do not need to be sealed, but they should be accessible through the cover to manipulate the valve and for maintenance.
Drinking water or irrigation	Cement	Sidewalk or street	With bottom, no sealing	Bottoms are recommended when installed on a cement base, for the same reasons as with electrical and telecommunication Access Chambers (Cable pits) with bottom.
Sewage	Cement or earth	Sidewalk or street	With bottom and with joints (sealed)	These Access Chambers (Cable pits), regardless of their position or the terrain, must always be sealed, including the joint between the pipe and the Access Chamber (Cable pit); said joint should include Hidrostank seals. Therefore, sewage Access Chambers (Cable pits) should always be sealed.
Rainwater	Cement or earth	Sidewalk or street And connected to a separated sewage-rainwater network	With bottom and with joints (sealed)	Regardless of their position or terrain, these Access Chambers (Cable pits) should always be sealed including the joint between the pipe and the Access Chamber (Cable pit); said joint should include Hidrostank seals. Therefore, rainwater Access Chambers (Cable pits) should always be sealed.
Rainwater	Cement or earth	Sidewalk or street And connected to a combined sewage-rainwater network	With bottom and with joints (sealed)	As with rainwater Access Chambers (Cable pits) connected to separated networks, these Access Chambers (Cable pits) should be sealed and, as well should include a siphon to prevent foul odors.

ii. Specifications

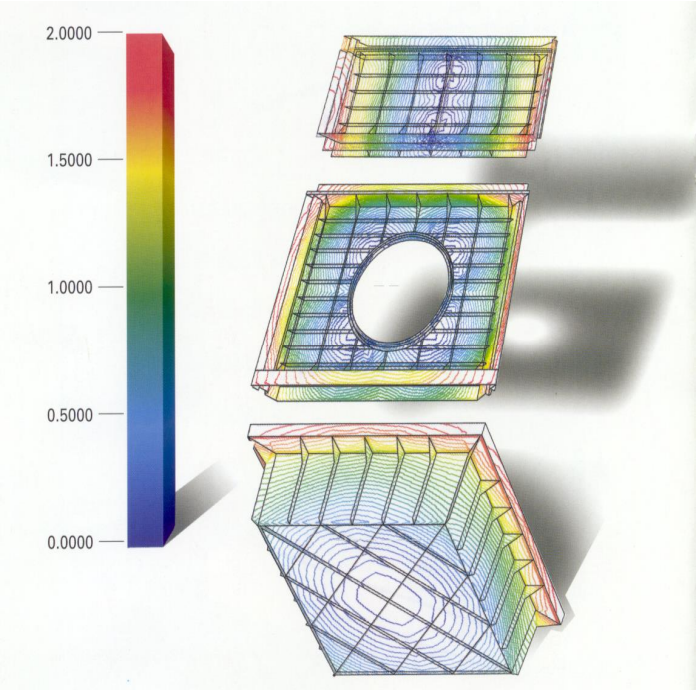
Hidrostank Modular Dismountable Access Chambers (Cable pits) are made of polypropylene with mineral reinforcement. Their modular design makes it possible to adapt them to any dimensions in length, width and height. These Access Chambers (Cable pits) are patented by Hidrostank: PCT ES/97/00174.

The main characteristics are as follows:

1. Self-resistance:

Hidrostank Access Chambers (Cable pits) are totally self-resistant up to internal dimensions of 68x68 cm; for larger sizes, U-beam and threaded rod reinforcements together provide self-resistance without the need of applying cement nor apply prior bracing or molding.

The side resistance is possible thanks to a structure of nerves that displaces the forces of the terrain towards the perimeter of each side, which in turn has further reinforcement that is designed to withstand this pressure; as well as being the widest part in each piece. Please refer to the drawing below to understand the function of this structure of nerves:



This drawing shows the nerve design that displaces the forces towards the perimeter of each of the sides, towards zones that are specially designed to withstand this pressure.

In addition, the ductile nature of polypropylene helps prevent fissures in the Access Chambers (Cable pits), thus fulfilling a breakage coefficient that is significantly lower than other more rigid materials, such as concrete.

The properties of Hidrostank Modular Dismountable Access Chambers (Cable pits) are as follows:

Physical properties:

- Density at 23º C: 1.25 g/cm^3
- Softening temperature: 80º C

Mechanical properties:

- Elasticity Module: 3,500 MPa
- Impact Resistance: 10 mJ/mm^2

Chemical properties:
Reinforced polypropylene is chemically resistant to all domestic residues and is highly resistant to most types of aggressive acids and salts:

Substance	**Concentration**	**Behavior**		
		20ºC	60ºC	100ºC
Sulphuric Acid	<50%	+	+	
Sulphuric Acid	70%	+	/	
Sulphuric Acid	80%	+	/	
Sulphuric Acid	98%	/	-	
Sulphydric Acid	Saturated	+	+	
Chlorohydric Acid	Any	+D	+D	/D

ñ+ò resistant; ñ/ò limited resistance; ñ-ñ not resistant; ñDò possible bleaching.
Please consult for other specific substances.

Breaking resistance to compression:

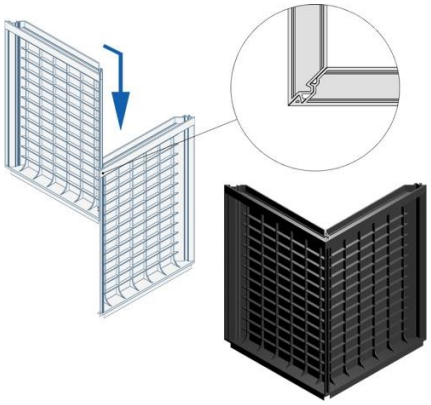
The exhaustive load trials carried out on Hidrostank Modular Dismountable Access Chambers (Cable pits) **guarantee a very high resistance**.

Load trials with truck transit:
- UP TO 17,500 kg with vertical load: no fissures. (ArcoTecnos Certificate)
- TRUCK TRANSIT WITH 40,000 kg load with no deformation (ArcoTecnos Certificate)

Load trials empty:
- Resistance up to 7,500 kp (Cadia Certificate)

2. Modularity:

The design of Hidrostank Access Chambers (Cable pits) is the result of extensive reological studies and resistance testing. Each Access Chamber (Cable pit) can be made up of various side pieces and fittings, as well as bottoms and other elements, such as siphons, reinforcements, wire holders, etc., depending on the application, type and size that are needed. All of the components are tongue and grooved, thus making it possible to build up a custom Access Chamber (Cable pit) as required by the client by combining the different side pieces.



Ensamblado de los laterales

3. High quality:

Polypropylene injection yields a product with a high quality finish: smooth inner walls without imperfections or roughness. In addition, the manufacturing system employed at Hidrostank is ISO 9001-2000 certified and allows for custom finishing the Access Chambers (Cable pits) For example, siphons, half-round vertices, wire holders, pre-drilled openings or completely drilled hook-up holes at the position and with the measurements required by the client.

Certification: Hidrostank Modular Dismountable Access Chambers (Cable pits) meet the UNE 201004 Standard for ñPlastic Access Chambers (Cable pits) for Low Voltage Networksò, as well as Royal Decree 401/2003, which approves the Regulations for Common Telecommunication Infrastructure (ICT)

Hidrostank also has been granted several certifications from telecommunications providers, such as Telefónica and France Telecom, as well as public entities and Town Halls. Hidrostank actively pursues full compliance with the utility requirements of companies, as well as local, regional and national administrations.

4. Fast and easy installation:

One of the major advantages of using plastics is to simplify the installation process. With Hidrostank Access Chambers (Cable pits), the installation is simpler when the Access Chamber (Cable pit) is more defined, for example with hook-ups, siphons, half-round vertices, steel profiles, etc. The Access Chamber (Cable pit) is lightweight, in spite of its high resistance, and this makes it easy to handle and position on site without additional mechanical means. Polypropylene is easy to perforate, thus simplifying on-site openings and improving hook-up joints with the simple use of a hand drill, leaving perfect holes at the desired height. Please refer to the guidelines set forth in this respect.

As an illustration, if we consider a Hidrostank Access Chamber (Cable pit) that measures 35x35 cm (internal dimensions), 45x45 cm (external dimensions) and a height of 60 cm. This Access Chamber (Cable pit) weighs 6.5 kg. In contrast, an equivalent concrete Access Chamber (Cable pit) without internal reinforcements is over 13 times heavier at around 90 kg.

As well as being lightweight, our Access Chambers (Cable pits) help to prevent accidents on-site during handling and positioning. It is a safer product.

The modular design makes it possible to transport and handle a large number of Access Chambers (Cable pits) in a small space, thus reducing required storage space and, as mentioned above, with a product that is more versatile and adaptable to the applications at hand.

The entire installation process is manual

5. Cost-effective:

The Hidrostank Modular Dismountable Access Chamber (Cable pit) can help the client to save money because it is a fully executed budget item. If the value of the Access Chamber (Cable pit) is combined with the speed and ease of installation, with no external costs or machinery and no extra costs for closing hook-up joints, the itemized budget price is much lower than any conventional Access Chamber (Cable pit).

The price difference is shown in the following table:

COST OF ACCESS CHAMBER (CABLE PIT) INSTALLATION **PREFABRICATED CONCRETE**		
MEASUREMENTS	35X35X60 (INTERNAL)	
MATERIALS EMPLOYED	CONCRETE ACCESS CHAMBER (CABLE PIT) AND MACHINERY	
MANUAL LABOR	2 LABORERS	
COST OF MANUAL LABOR	18 EUROS/H X LABORER	
INSTALLATION TIME	0.4 HOURS (24 minutes)	
ACCESS CHAMBER (CABLE PIT) (INCL. TRANSPORT)		12 EUROS
COST OF MACHINERY	10 ú/hour	
TOTAL COST X ACCESS CHAMBER (CABLE PIT)	30,4 EUROS	

COST OF ACCESS CHAMBER (CABLE PIT) INSTALLATION **HIDROSTANK ACCESS CHAMBER (CABLE PIT)**	
MEASUREMENTS	35X35X60 (INTERNAL)
MATERIALS EMPLOYED	HIDROSTANK ACCESS CHAMBER (CABLE PIT)
MANUAL LABOR	1 LABORER
COST OF MANUAL LABOR	18 EUROS/H X LABORER
INSTALLATION TIME	0.17 HOURS (10 MINUTES)
ACCESS CHAMBER (CABLE PIT) (INCL. TRANSPORT)	24 EUROS
COSTE TOTAL X ARQUETA	27,06 EUROS

SAVINGS WITH HIDROSTANK ACCESS CHAMBERS (CABLE PITS): 3.34 ú (12.34%)

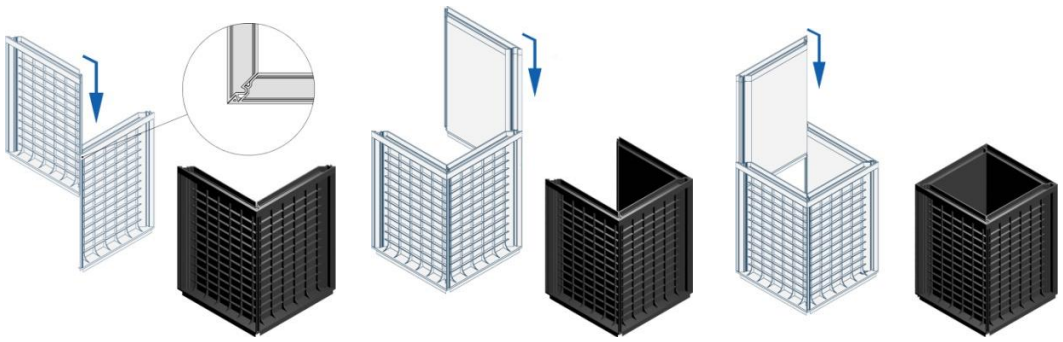
iii. Installation guidelines

1. Model selection

As seen above, Hidrostank Access Chambers (Cable pits) are apt for all applications, since they can adapt in form, sealing capacity, with or without bottom, with or without siphon, or other elements that the client requires. The important thing is for the model to correspond correctly to the application that is specified by the client. If the client is unable to give a full specification, then, we must be able to advise correctly based on the information contained in the present document

2. Installation of Access Chambers (Cable pits):

a) The installation of the pieces of the Access Chamber (Cable pit) is done manually.
b) Each piece of the Access Chamber (Cable pit) has opposed tongue and grooved sides, in such a way that if the top of one piece is placed at 90 degrees together with the bottom of another piece, the two pieces can be effectively joined.
c) Once the two pieces are joined, one of the pieces slides over the other at the same height.
d) The process is repeated until the four sides of the Access Chamber (Cable pit) are completed.



3. Screed layer on the Access Chamber (Cable pit) (height extension):

If for constructive reasons, the Access Chamber (Cable pit) needs to be extended to reach the height of the cover, then a new screed module is added to reach the lower part of the screed with the top of the Access Chamber (Cable pit). Pressure is applied until the two match (it is important first to position the corner and then assemble the rest of the module).



ASSEMBLY OF THE SUPPLEMENTS

PRACTICAL ADVICE:
- In order to streamline assembly, we recommend sprinkling the sides of the pieces with silicon-based mold-remover or another similar product and then gently tap with a rubber mallet.

4. Utility Hook-ups:

Hidrostank, S.L. can supply Access Chambers (Cable pits) with hook-up points if the client supplies drawings indicating the diameter, position and measurements of the hook-ups.
If said information is unavailable, the hook-up can be made on-site **FOR DIAMETERS LESS THAN 210 mm**, with an adaptable drill crown, as follows:

a) For safety reasons, the Access Chamber (Cable pit) should be fixed to prevent movement during the drilling process.
b) The drill bit is positioned on the side to be drilled.
c) Apply pressure on the side until it is perforated.

PRACTICAL ADVICE:
- Gently oscillate the drill to the sides so that the entire surface is not drilled at once and to prevent sticking of the bit.


Oscillate the drill until the side is perforated

5. Access Chamber (Cable pit)-Pipe Connection

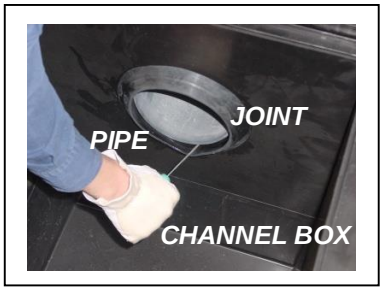
A. With joints:

Hidrostank, S.L. supplies joints that guarantee watertight sealing between the Access Chamber (Cable pit) ï pipe and its fastener, according to the following table:

Crown diameter	Joint diameter
210	200
177	160
121	110

Since the joint is pressure fitted, we recommend coating the inside of the gasket and the outside of the pipe with soap or mold-remover (the pipe should be previously chamfered) before installing the joint.

In some cases, a screwdriver can be used to help widen the joint to fit on the pipe, as shown in the following image:

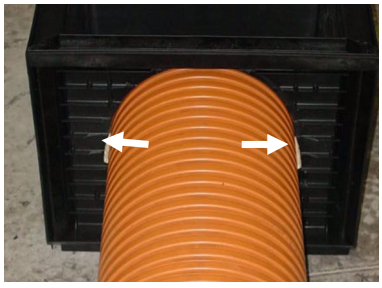


b. No seal:

If seals are not required, but the joint must be watertight, then a sealant must be applied (Hidrostank offers a sealant that is specifically designed for polypropylene). The joint should not be moistened until the sealant has completely dried. The sealant should be applied around the Access Chamber (Cable pit)-pipe joint, covering all openings.

The joint should never be made with concrete, since this material has poor adherence with PVC, polypropylene and other plastics.

When using corrugated pipes, we recommend inserting a small wedge or splinter to immobilize it while sealing. If joints are used, these joints must be of a special type, since the contact surface of the pipe joint is wider than with gaskets used with smooth pipes.



Corrugated pipes: use a wedge to immobilize the

Apply sealant around the pipe to cover all possible leaks

6. Filling in of the hole or trench.

Unless it is otherwise indicated by Hidrostank, S.L., verbally or in writing, HIDROSTANK Access Chambers (Cable pits) do not require concrete filling.

a. Filling in with earth, gravel or all-in-one:

The perimeter filling of the Access Chamber (Cable pit) should be done by homogeneous 60cm layers around the four sides. These layers should be progressively compacted.

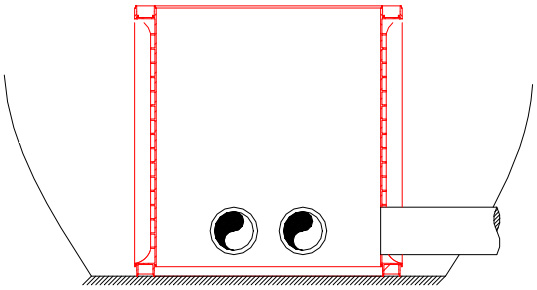
b. Filling in with cement:

We recommend creating a 10-15 cm thick wall. The concrete should be gently poured around the Access Chamber (Cable pit) in a uniform manner in 40 cm layers.

7. Compacting:

Once the Access Chamber (Cable pit) has been filled, we recommend compacting to reach a 98% Proctor value with a percussion hammer.

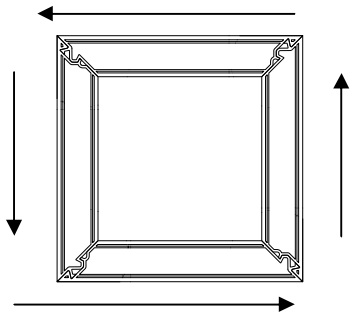
Compacting of a channel box with a precision percussion hammer.



Filling plane

If a roller is used, then compacting should be done around the perimeter without going over the Access Chamber (Cable pit), as indicated below:

Roller compacting direction

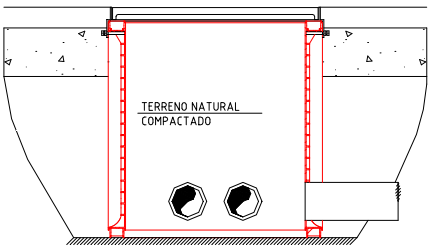


The rolling machinery should not pass over the Access Chamber (Cable pit) itself.

8. Frame and cover:

Position the frame and cover and fix with concrete or mortar on the top 10 to 15 cm layer at pavement level (ceramic tile, etc.), leaving the Access Chamber (Cable pit) completely finished.

The frame is positioned and set in a conventional manner



Finishing diagram for HIDROSTANK channel boxes

9. Modular Dismountable Access Chambers (Cable pits) Installation Instructions

All of the **HIDROSTANK Modular Dismountable Access Chambers (Cable pits)** (PCT ES/97/00174) are **made up of four or more pieces**. This section covers the main guidelines for all of the Access Chamber (Cable pit) models, indicating several models, the pieces that make them up and how to assemble them. The modular nature of our Access Chambers (Cable pits) allows for an infinite number of possibilities and combinations.

General observations:

- All of the values are expressed in centimeters.
- All of the measurements are internal- this is important to avoid confusion among models.
- The first measurement for Access Chambers (Cable pits) is length and the last one is always height.

As seen in the ñHow Toò section, Access Chambers (Cable pits) can have a bottom or be ordered bottomless; although this is not important at this point (nor if they are sealed or not), since this has been described above, it is important for you to recognize the models according to the following five parameters:

- NO BOTTOM
- WITH BOTTOM, the bottom is added to the side pieces.
- NO BOTTOM AND SEALED, all of the vertices of the Access Chamber (Cable pit) are sealed after it is assembled.
- WITH BOTTOM AND SEALED, the bottom is added to the side pieces and the vertices of the Access Chamber (Cable pit) are sealed after assembly.
- SIFON, this Access Chamber (Cable pit)-sump is supplied pre-assembled; it is a Access Chamber (Cable pit) with a bottom piece and it is sealed to include a siphon and an inspection hatch.

AVAILABLE PIECES:

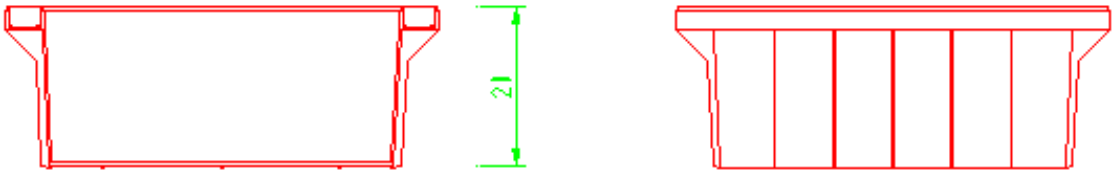
- **Lateral 35 x 20***
- **Module 35 x 40**
- **Module 35 x 60**
- **Module 45 x 20**
- **Module 45 x 40**
- **Module 58 x 20**
- **Module 58 x 60**
- **Module 68 x 40**
- **Module 68 x 20***

- **Bottom 35 x 35**
- **Bottom 45 x 45 x 20**
- **Bottom 58 x 58**

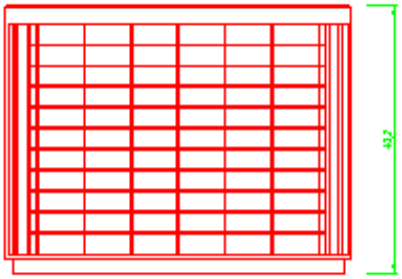
- **Union piece 20x10 cm**
- **Union piece 10x10 cm**

***Module cut and welded**

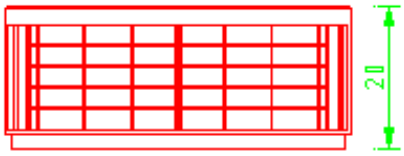
EXAMPLES OF PIECES



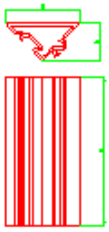
45x45x20 cm. Base



45x40 cm Side

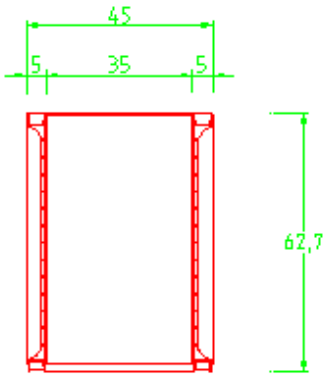


45x20 cm Side



10x20 cm Joining Part

Access Chamber (Cable pit) Models according to components:



- **35x35x60**

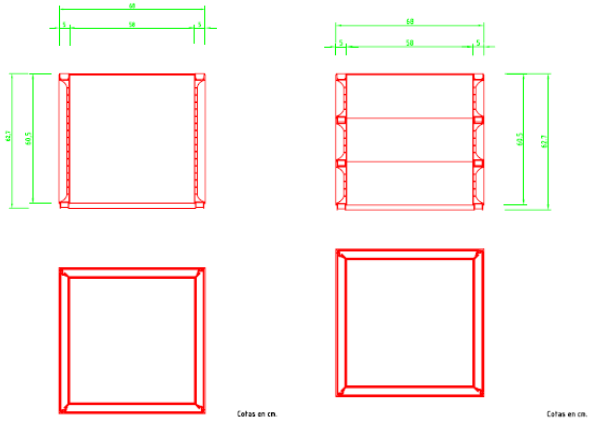
Access Chamber (Cable pit) internal dimensions 35x35x60:
Made up of:
4 side pieces 35x60 cm.
This Access Chamber (Cable pit) can be extended with 35x60 or 35x20 side pieces, attaining a Access Chamber (Cable pit) that measures 35x35x60,80,100,120é
Each extension is made up of four side pieces.

- **45x45x60**

Access Chamber (Cable pit) internal dimensions 45x45x60:
Made up of:
1 base de 45x45x20 cm+ 4 side pieces 45x40 cm. (or 45x45x20 base + 8 side pieces of 45x20 cm)
This Access Chamber (Cable pit) can also be supplied with four 45x20 cm side pieces instead of the 45x45x20 base.
This Access Chamber (Cable pit) can be extended with 45x40 or 45x20 side pieces, attaining a Access Chamber (Cable pit) that measures 45x45x20,60,80,100,120é
Each extension is made up of four side pieces.

- **58x58x60**

Access Chamber (Cable pit) internal dimensions 58x58x60:
Made up of:
4 side pieces 58x60 cm (or 12 side pieces of 58x20 cm)
This Access Chamber (Cable pit) can be extended with 58x60 or 58x20 side pieces, attaining a Access Chamber (Cable pit) that measures 58x58x60,80,100,120é
Each extension is made up of four side pieces.

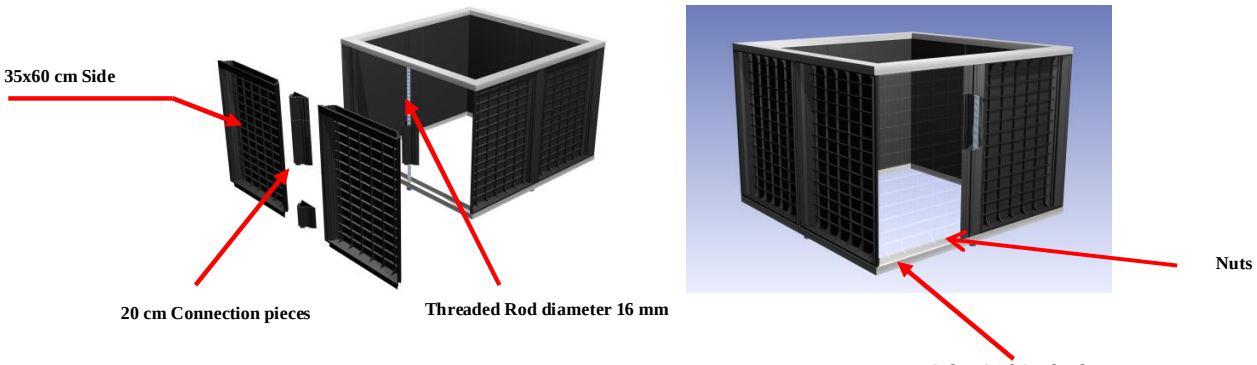


- **68x68x80**

Access Chamber (Cable pit) internal dimensions 68x68x80:
Made up of:
8 side pieces 68x40 cm..
This Access Chamber (Cable pit) can be extended with 68x40 side pieces, attaining a Access Chamber (Cable pit) that measures 68x68x40,60,80,100,120é
Each extension is made up of four side pieces.

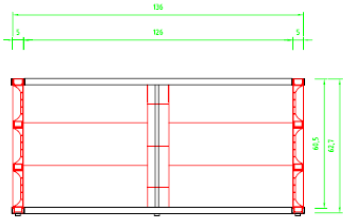
REINFORCED POLYPROPYLENE ACCESS CHAMBER (CABLE PIT)

EXAMPLE: DIAGRAM OF INTERNAL GALVANIZED STEEL REINFORCEMENT IN HIDROSTANK ACCESS CHAMBERS (CABLE PITS)

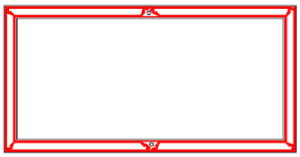


Made up of: SIDE PIECES + CONNECTING PIECES + 16 mm THREADED ROD + NUT + PROFILE ULF 30603.

- **126x58x60**



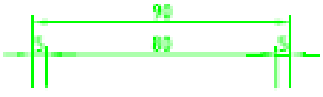
Access Chamber (Cable pit) internal dimensions 126x58x60:
Made up of:
6 side pieces 58x60 cm., (or 18 side pieces of 58x20 cm)
4 connecting pieces 10x20 cm.
4 connecting pieces 10x10 cm.



Upper and lower 136x68 galvanized frames+steel bars+nuts

- **126x58x80**

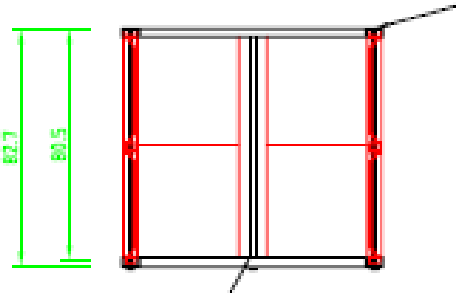
Access Chamber (Cable pit) internal dimensions 126x58x80:
Made up of:
6 side pieces 58x60 cm + 6 pieces of 58x20 (or 24 side pieces of 58x20 cm)
6 connecting pieces 10x20 cm.
4 connecting pieces 10x10 cm.



Upper and lower 136x68 galvanized frames+steel bars+nuts

- **80x80x80**

Access Chamber (Cable pit) internal dimensions 80x80x80:
Made up of:
16 side pieces 35x40 cm.
12 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

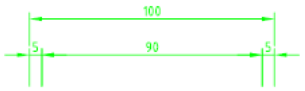


Upper and lower 90x90 galvanized frames+steel bars+nuts

- **80x80x100**

Access Chamber (Cable pit) internal dimensions 80x80x100:
Made up of:
8 side pieces 35x40 cm.
8 side pieces 35x60 cm.
16 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

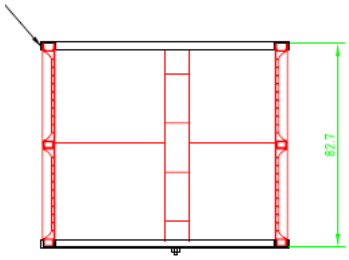
Upper and lower 90x90 galvanized frames+steel bars+nuts



- **90x90x80**

Access Chamber (Cable pit) internal dimensions 90x90x80
Made up of:
8 side pieces 45x40 cm.
8 side pieces 35x40 cm.
12 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

Upper and lower 100x100 galvanized frames+steel bars+nuts



- **90x90x100**

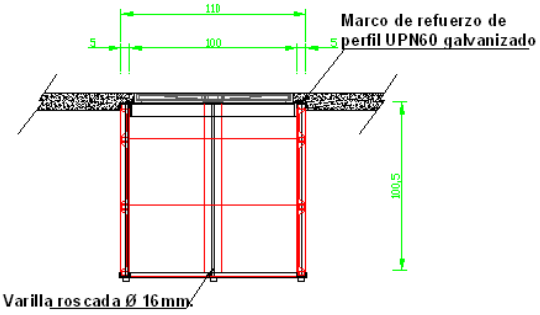
Access Chamber (Cable pit) internal dimensions 90x90x100
Made up of:
8 side pieces 45x40 cm.
4 side pieces 45x20 cm.
4 side pieces 35x40 cm.
4 side pieces 35x60 cm.
16 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

Upper and lower 100x100 galvanized frames+steel bars+nuts

- **100x100x100**

Access Chamber (Cable pit) internal dimensions 100x100x100:
Made up of:
16 side pieces 45x40 cm.
8 side pieces 45x20 cm.
16 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

Upper and lower 110x110 galvanized frames+steel bars+nuts



- **100x100x120**

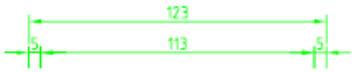
Access Chamber (Cable pit) internal dimensions 100x100x120:
Made up of:
24 side pieces 45x40 cm.
20 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

Upper and lower 110x110 galvanized frames+steel bars+nuts

- **113x113x100**

Access Chamber (Cable pit) internal dimensions 113x113x100:
Made up of:
8 side pieces 45x40 cm.
4 side pieces 45x20 cm.
4 side pieces 58x60 cm. + 8 side pieces 58x20 cm. (or 20 side pieces 58x20 cm.)
16 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

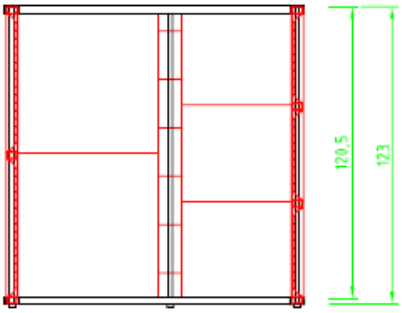
Upper and lower 123x123 galvanized frames+steel bars+nuts



- **113x113x120**

Access Chamber (Cable pit) internal dimensions 113x113x120:
Made up of:
12 side pieces 45x40 cm.
8 side pieces 58x60 cm. (or 24 side pieces 58x20 cm.)
20 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

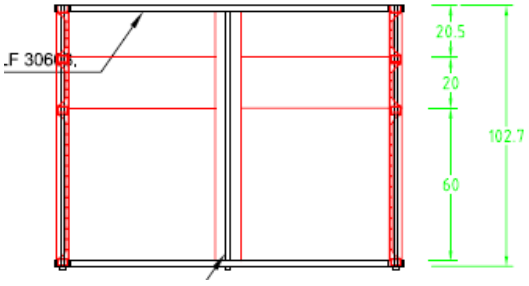
Upper and lower 123x123 galvanized frames+steel bars+nuts



- **126x126x100**

Access Chamber (Cable pit) internal dimensions 126x126x100:
Made up of:
8 side pieces 58x60 cm.
16 side pieces 58x20 cm.
16 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

Upper and lower 136x136 galvanized frames+steel bars+nuts



- **126x126x120**

Access Chamber (Cable pit) internal dimensions 126x126x120:
Made up of:
16 side pieces 58x60 cm. (or 48 side pieces 58x20 cm.)
20 connecting pieces 10x20 cm.
8 connecting pieces 10x10 cm.

Upper and lower 136x136 galvanized frames+steel bars+nuts