

## INSTALLATION RECOMMENDATIONS HIDROSTANK ACCESS CHAMBERES

### 1. Ground

Hidrostantk access chambers can be put into place manually on the conduct channel. The ground used for support will be determined:

- In accordance with the location:
  - Pavement:
    - Compacted ground
  - Roadway (or pedestrian areas which allow traffic):
    - HM-20/P/19/IIa concrete ground
  
- In accordance with the type of access chamber:
  - Without a back section:
    - Compacted ground
  - With a back section:
    - HM-20/P/19/IIa concrete ground



Ground to be compacted

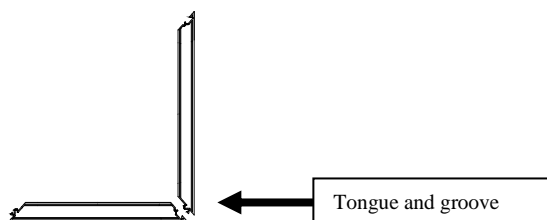


Concrete ground

*When digging, the depth of the access chamber and the height of the frame must be taken into account.*

### 2. Access chamber Assembly:

- The access chamber parts shall be assembled manually.
- Each access chamber part has tongue and groove ends which allow the upper end of a piece to be joined to the lower end of another piece positioned at 90°.
- Once the ends are joined, slide the part until the two are at the same height.
- Proceed in the same way until the four sides of the access chamber are complete.



Assembling the side sections

If, due to the needs of the construction, the access chamber needs to be brought up to the cover support level, use a new heightening module. Bring the lower part of the same in line with the upper part of the access chamber, and then press until it fits (it is important to first fit one corner and then assemble the rest of the module).



**TIP:**

- In order to facilitate the assembly of the parts, we recommend applying silicone-based mould stripper to the sides of the parts and gently banging with a nylon hammer.

APPROXIMATE ASSEMBLY TIME: 5 MINUTES

### 3. Connections:

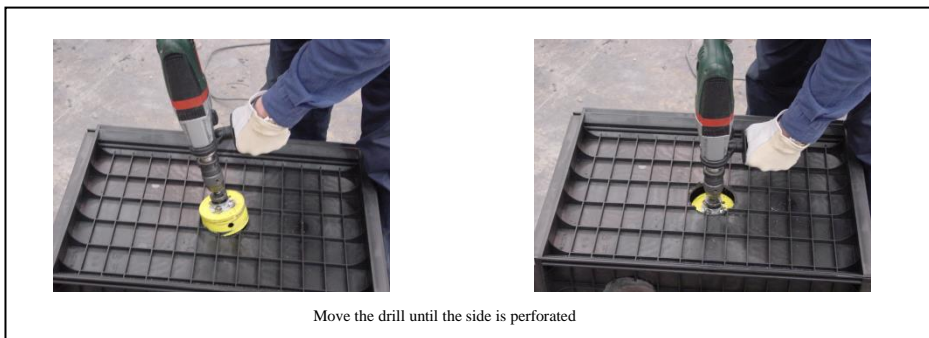
**Hidro tank, S.L** will make the access chamber connections whenever there is a diagram showing the diameter, position and height of the connections.

Should this information not be available, the connection may be made **FOR DIAMETERS OF LESS THAN 210 mm** by way of a detachable drill crown, in the following manner:

- A. The access chamber will be attached in such a way that it does not move during perforation.
- B. The drill bit will be positioned by way of a guide on the side to be perforated.
- C. Place pressure on the side until it is perforated.

**TIP:**

- Move the drill towards the sides to prevent it cutting all the surface at the same time, as this may cause the drill to become stuck.



### 4. Filling

Unless expressly recommended by Hidro tank, S.L. in writing, the HIDROSTANK access chamber does not require exterior cementing.

**A. Fill in using soil, ballast or run-of-mine:**

When filling in using soil, ballast or run-of-mine, the perimeter filling must be made in 40 cm beds, uniformly on the four sides and progressively compacting.

**B. Filling in with cement:**

We recommend making a 10-15 cm thick wall. The cement must be distributed little by little around the access chamber, uniformly on the four sides, in 40 cm beds.

**C. Fill with gravel:**

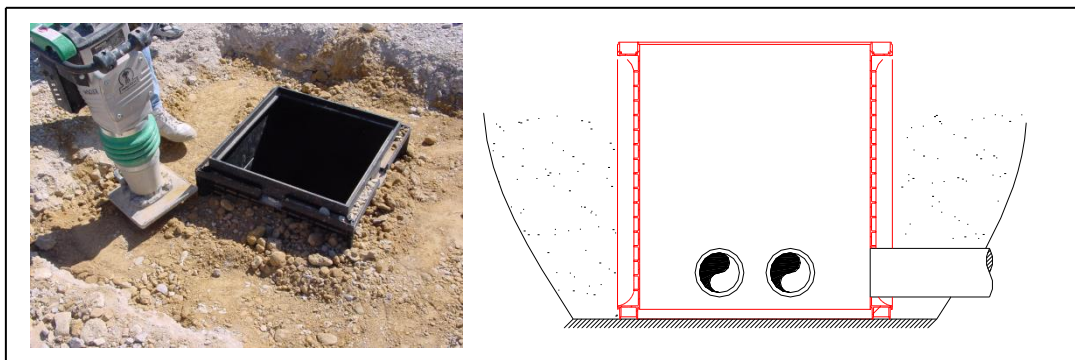
Where it is not possible to compact the soil, it must be filled with fine gravel, which requires no compaction because of the characteristics of the gravel itself

In areas with a high-water table or highly humid soils, the perimeter filling should be made with fine gravel or, failing that, it will be necessary to prop up internally until the soil is consolidated.

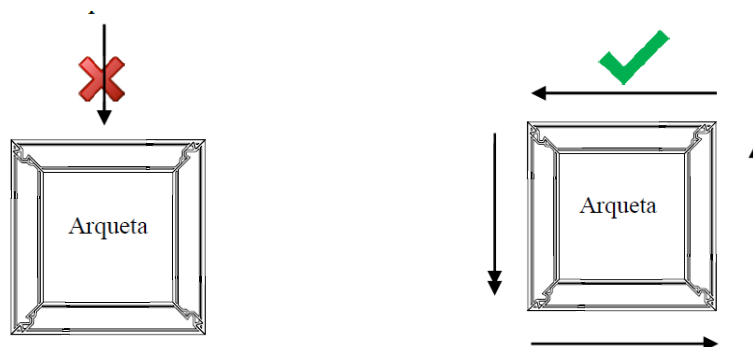


## 5. Compacting:

Once the access chamber has been filled in, we recommend using a pressure-percussion hammer until a **98% proctor compaction is reached**.



When using a roller, the compacting will be perimetral, always leaving the access chamber to one side, as shown in the diagram:



*In no case should compacting machinery be allowed to pass over the access chamber.*

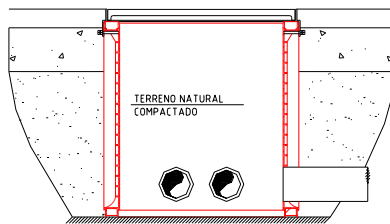
\* In traffic areas, do not drive until the ground or rolling layer is fully consolidated (concrete, agglomerate ...)



## 6. Frame and Cover:

### - Standard frame and cover

Position the frame and cover and apply the mortar or cement to the first upper 10-15 cm, in accordance with the type of paving to be used (tiles, slabs...), leaving the access chamber fully finished.



To place the chamber, the total height of the chamber and the edge of the frame must be considered.

If, once the chamber is placed, it is necessary to grow, the frame must be fitted as needed and the hollow between the frame and the chamber must be formed to receive it with mortar or concrete.

If, on the contrary, the chamber has been higher than required, it will be necessary to cut with a radial what is necessary in each of the four faces, proceed to place the frame on the casket and receive it with concrete or mortar. If it has been trimmed, it may be necessary to shore up the opposite sides to avoid the bulging that can occur when removing the top of the casket.

The cutting of the casket must always be done after compaction.

### - New integrated frame

The placement of the frame to integrate is carried out by supporting the frame on the chamber and fixing it through the self-tapping screws. In this way the frame is fixed and allows, if necessary, it received with mortar or concrete in a simpler way, since it does not move.

This frame also enables to **adapt the frame to the slope of the street**. In this case you must fill with concrete the space between the frame and the chamber.





To place the access chamber is necessary to **take into account the total height** of the chamber and the height of the integrating frame once it is placed on the manhole.

If once placed the box it is necessary to re-create the frame, it must be levelled to the required position and fixed to the box using the self-tapping screws. This frame allows to grow up to 2 cm. After that, the frame must be received with mortar or concrete to fill the gap and to seat correctly on all four sides. Used in this way it is not necessary to form the frame, since the tongue hanging from the entire lower perimeter of the frame makes formwork.

If it is necessary to increase more than 2 cm, the frame must be shimmed, formed and concreted in the same way as described above.

Hidrospan has a frame to integrate supplemented, which allows to save up to 7 cm.

If, on the contrary, the chamber has been higher than required, it will be necessary to cut with a grinder, the necessary, in each one of the four faces and proceed to place the frame to integrate, fix it on the casket with the four self-tapping screws and receive it with concrete or mortar if necessary.

In this case, the frame itself acts as a support and it is not necessary to prop up. It is recommended to make the compaction before cutting the box, although it is not necessary. What it is important is to have the frame placed in the box if the compaction is done after the cut.