



**Hidrolica**  
Production of drainage systems

*Installation instructions for Hidrolica plastic gutters  
load class A15-C250*

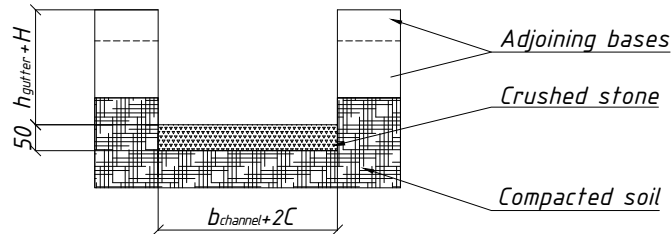
*Technical Guide*

*Moscow  
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## Installation instructions for Hidrolica plastic channels

1. It is advisable to install storm-water channels starting from the point of water discharge. Installation should begin with the laying of a channel with a vertical spillway or a sump unit at the bottom mark of the route, from which the channel laying line should be marked using a cord.

2. Drains are laid in a prepared trench. The bottom of the trench is rammed, after which, in order to create a drainage layer, an underlying layer of crushed stone 5-10 cm thick is made.



3. A waterproofing material (glassine, plastic film) is laid on the prepared base. The function of this layer is to prevent the cement milk from escaping through the crushed stone layer to the ground.

4. After this, concrete bedding from cement concrete of class B20 is made. The thickness of the base depends on the expected load on the channel during operation (Table 1). Concrete is laid down to a level 5-10 mm below the design level of the bottom of the channel.

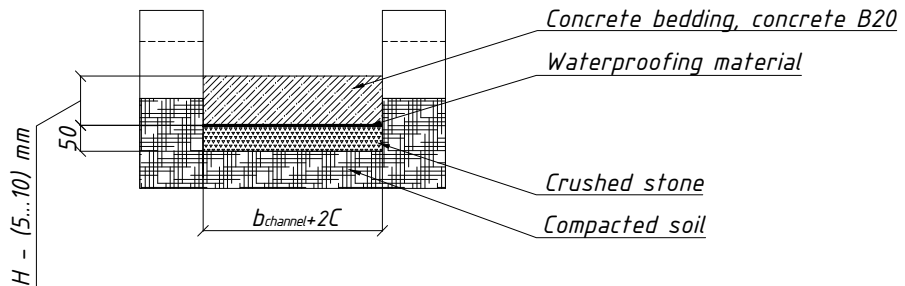
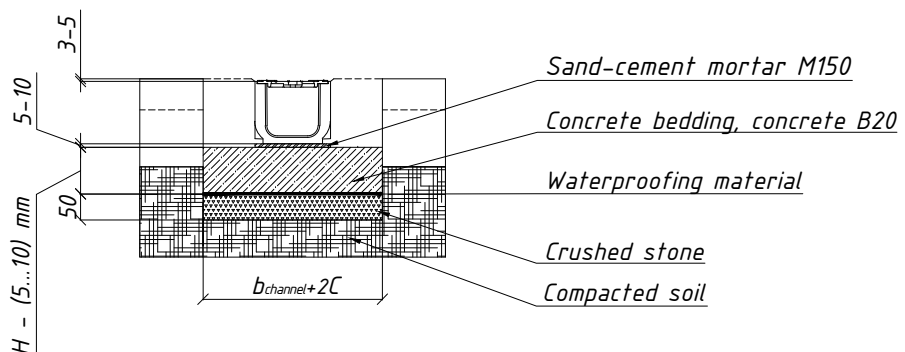


Table 1. Dimensions of concrete shell depending on load class  
(according to EN1433)

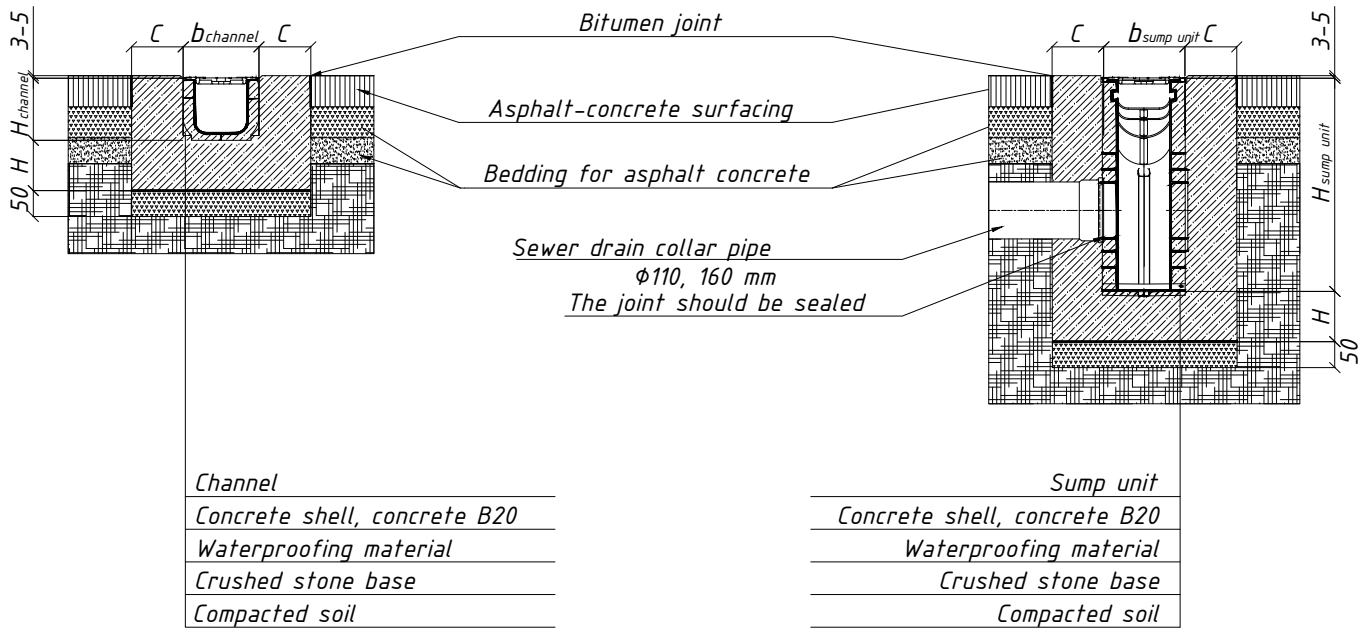
Load class	A15	B125	C250
Width of concrete shell, C, mm	80	100	100
Thickness of concrete shell, H, mm	100	100	150
Concrete bedding class	B20	B20	B20

5. A leveling layer of sand-cement mortar M150 with a thickness of 5-10 mm across the width of the base of the channel is made on the formed concrete base. This layer is necessary in order to bring the level of the top of the channel to the desired design mark. The level of the sewer grate should be 3-5 mm below the level of the adjacent coating.

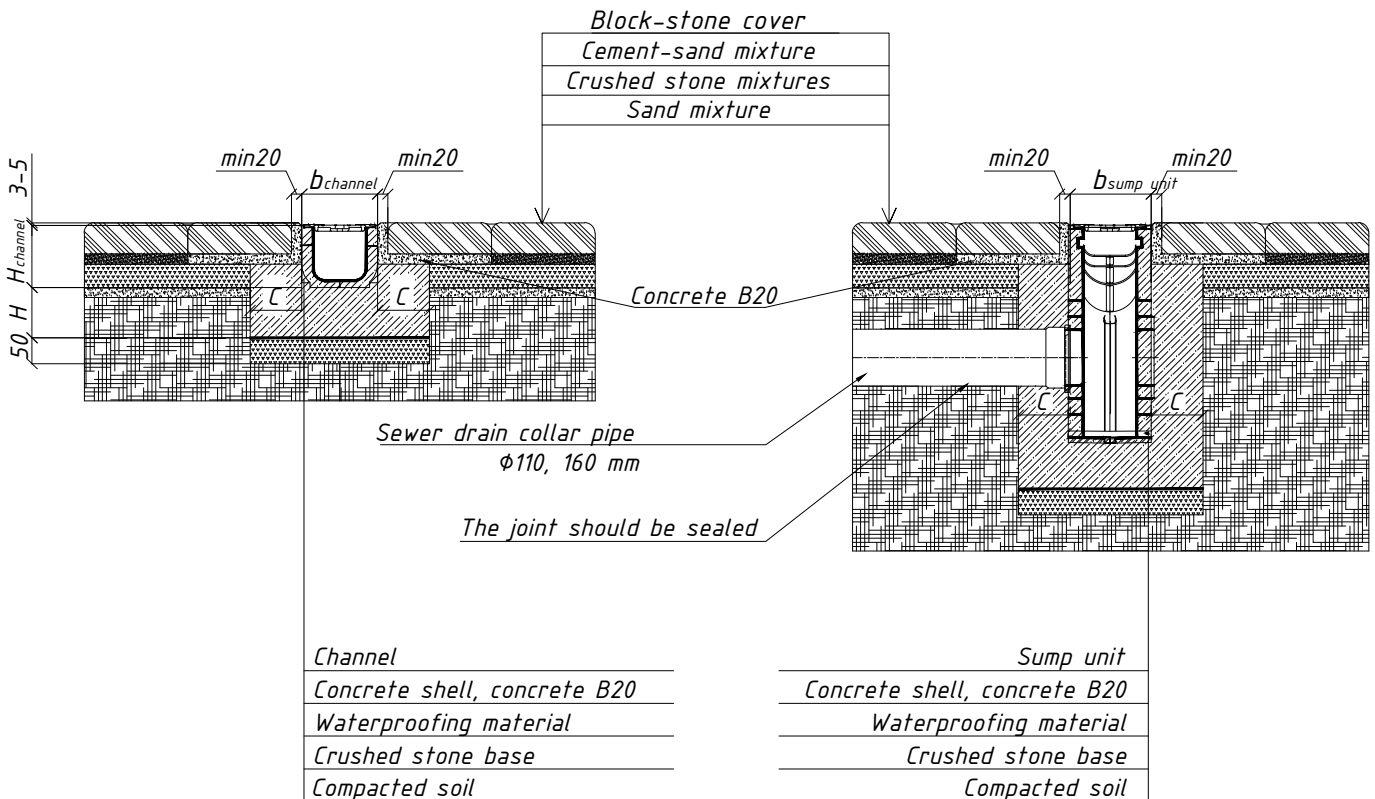


6. After installing the sump unit and the adjacent channels in the design position, it is necessary to perform joint grouting of the walls of the shell. At the time of concrete pouring and setting, grates or spacers must be installed in the channels and in the sump unit to avoid deformation of the channel walls under pressure of concrete. Grates must be wrapped with foil to protect against contamination.

6.1. When adjoining asphalt concrete coating, joint grouting of the walls of the channel shell should be performed according to the scheme:



6.2. Grouting of the walls of the channel shell when adjoining the block-stone cover is carried out according to the scheme. Installation of adjacent tiles must be made on a concrete base.



7. To preserve the properties of concrete and accelerate strength gaining, freshly laid concrete must be covered with a film until concrete gets strength of at least 70%.

8. To ensure normal operation of the entire linear drainage system, it is necessary to clean the basket for sump units. The frequency is determined by the operating conditions.

9. It is recommended to secure the grate to the channel. Cast-iron grates are attached to the channels by means of a special strap and bolt. The bar is installed in the channel in specially provided grooves, after which the grate is placed on the tray. After aligning the hole in the grate and the bar, a bolt is installed, which is tightened to the stop. In the case of installation of a steel stamped grate on the channel, it is necessary immediately before installation to slightly bend the locks on the inside of the grate, which will ensure a more tight fastening of the grate to the walls of the channel.

10. When connecting a run-off to the sewage system through the provided pipes (vertical or horizontal drain), before installing the entire system, it is necessary to remove the walls of the channel or sump unit and the plug pipe, after which the expected pipe joint should be sealed and connected with a discharge pipe.

11. The tongue-and-groove linear connection of the channels does not require additional sealing joints.

12. If an L-shaped connection of plastic drainage channels is needed, it is necessary to cut a hole according to the intended pattern in the side wall of the adjacent channel and dock the channel. Seal the joint with a sealant. The plug should be installed from the end of the adjacent channel. When connecting the channels at an arbitrary angle, it is necessary to cut the channel and the grill at the junction at an angle equal to half the desired angle.

