

INSTALLATION MANUAL OF THE Q STALYO PRO SYSTEM

1. Tips before installation

- 1.1. In the **Q STALYO PRO** gutter system, the slope of the gutter towards the front drip is achieved thanks to specially designed brackets.
- 1.2. **Installation of the Q STALYO PRO gutter system should be performed prior to installation of the roof covering.**
- 1.3. Due to the symmetrical cross-section of the gutter, the recommended height of the fascia board is max. **17 cm**.
- 1.4. The **Q STALYO PRO** system should not be installed when ambient temperature is lower than **5 °C**.
- 1.5. Due to the stamped tips for overlap installation, the actual gutter length is **35 mm** less than the nominal dimension.
- 1.6. All components of the **Q STALYO PRO** system should be stored in original collective packaging until installation.
- 1.7. All components should be stored in a dry place. The plastic wrap should be removed from the gutters and pipes no later than **3 months** after the date of purchase.
- 1.8. Long components should be cut with a hacksaw or sheet metal shears - do not use any high-speed cutters!
- 1.9. It is forbidden to use aggressive adhesives and silicones based on acetic acid. The manufacturer recommends using Soudal Colozinc adhesive to seal the joints.
- 1.10. Setting the gutters in line with the roof plane - the roof extension should be **2-3 cm** above the front gutter drip. (**Figure 1**)

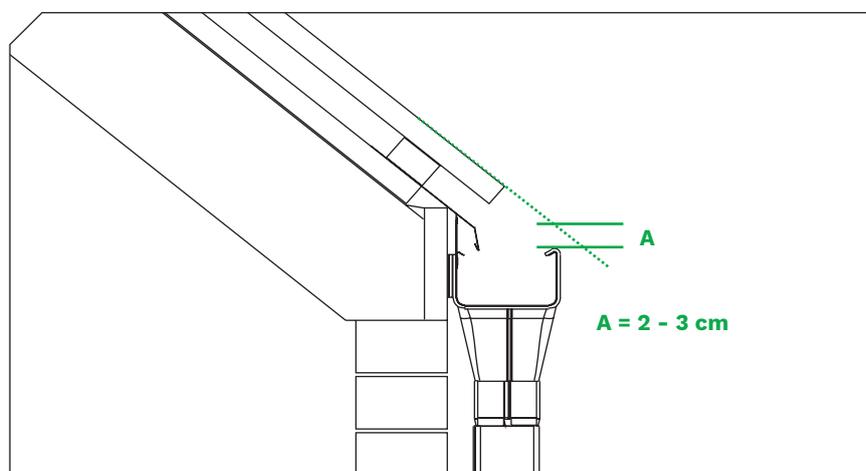


Figure 1

- 1.11. In order to protect the gutter system against snow sliding down the roof, it is necessary to install snow retaining systems (snow fences, snow guards, etc.).

2. Gutter installation

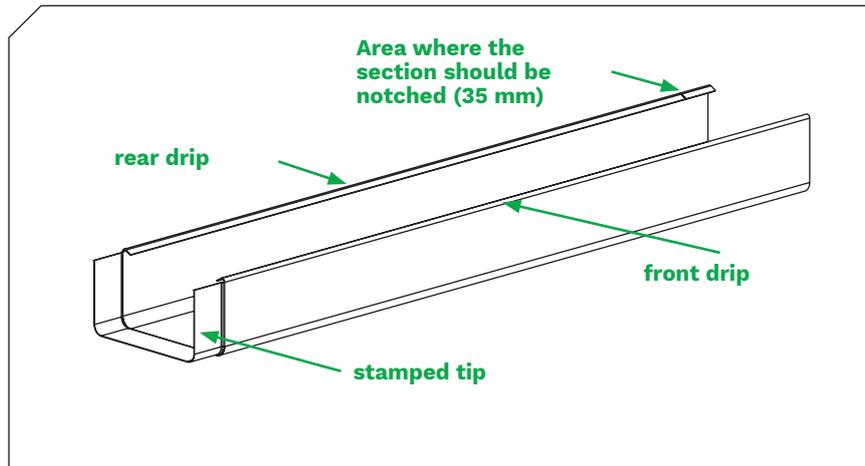


Figure 2

The 35 mm stamped tip at the end of the gutter allows one gutter to be joined with another as an overlap, using a sealing adhesive. The notch should be located in the gutter on the fascia board side.

- 2.1 When planning the rainwater outlet location, remember that it should be in the lowest point of the gutter line.
- 2.2 The bracket spacing recommended by the manufacturer is **55 cm**. (Figure 3)

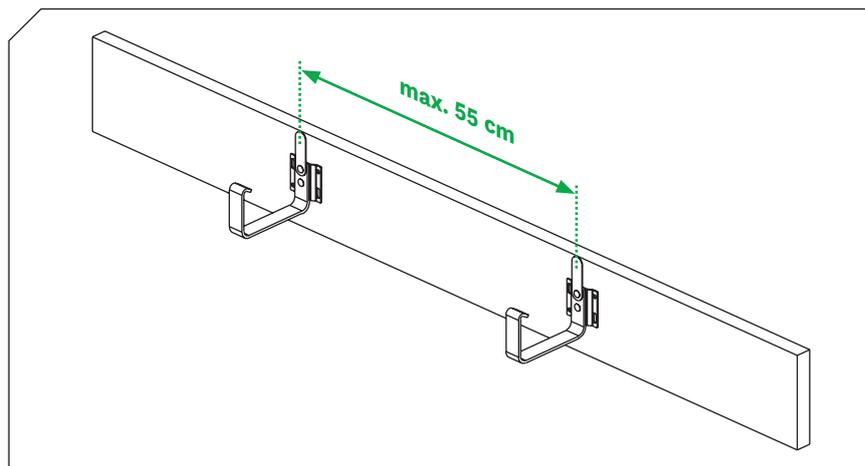


Figure 3

- 2.3 At the expansion joint, the corner and the end cap, the adjacent brackets should be installed no farther off than **15 cm** from the joint created. (Figure 4)

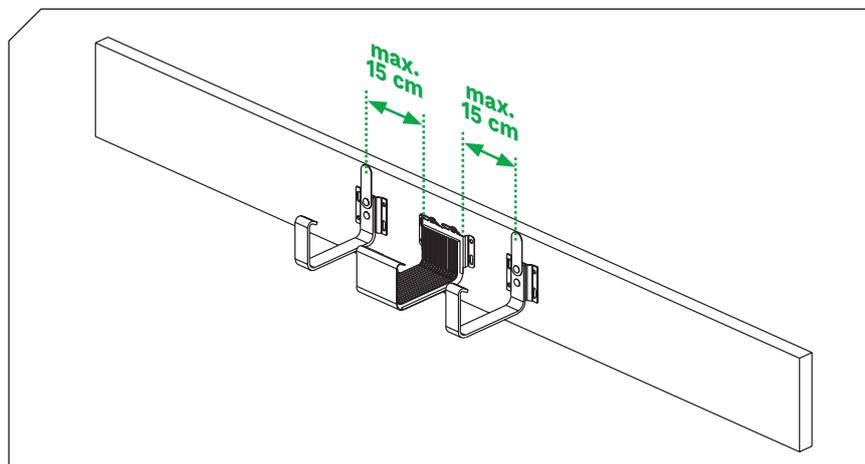


Figure 4

2.4 The manufacturer recommends installing the brackets in the areas where the gutters joints are located. **(Figure 5)**

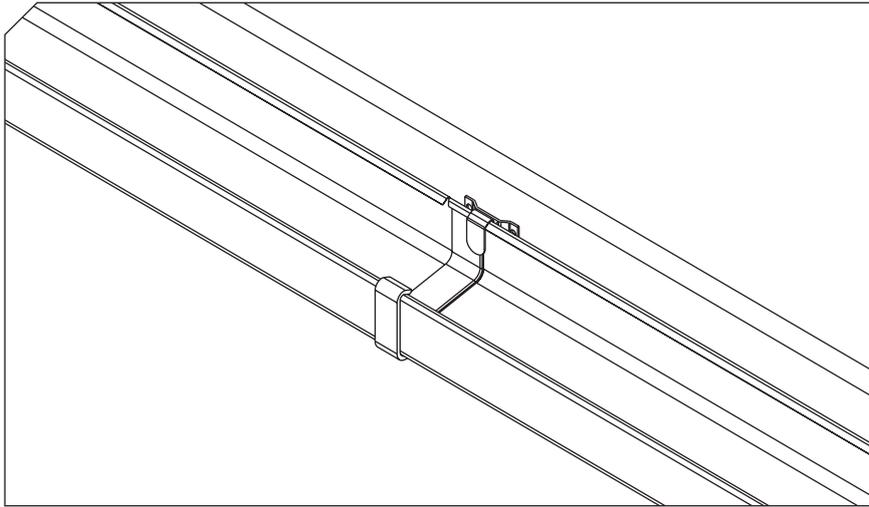


Figure 5. Bracket under a glued joint

Alternatively, the brackets should be installed no farther than 15 cm from the glued joints **(Figure 6)**.

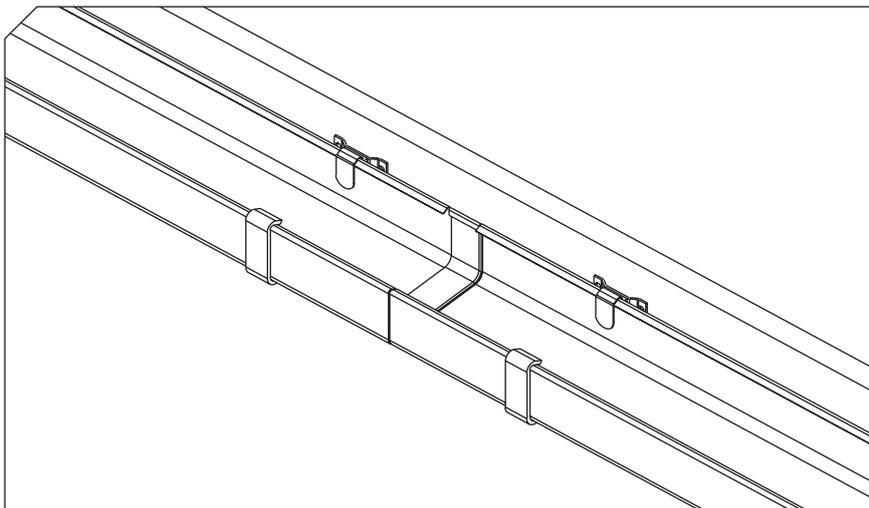


Figure 6. Adjacent brackets not farther than 15 cm from glued joints

2.5 The recommended slope of the gutter towards the outlet is **2-3 mm for 1 running meter of the gutter.** **(Figure 7)**

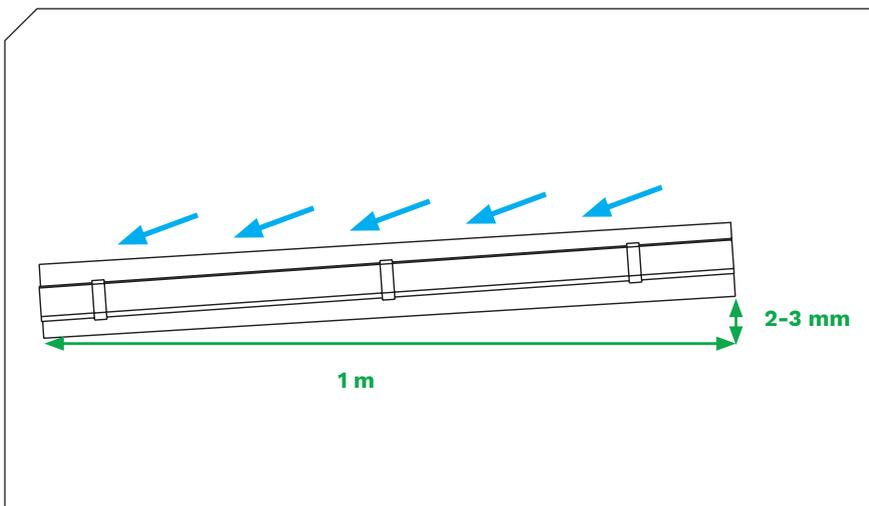


Figure 7

3. Glued joints of the gutter

- 3.1. Cut off the stamped tip from the first section of the gutter.
- 3.2. Notch and fold the rear gutter drip in the area you are planning to connect (35 mm from the end) (**Figure 8**) and insert the gutter into the brackets.

Cover the inside surface of the gutter with the sealing glue - about 1.5 cm from the end of the gutter (**Figure 8**)

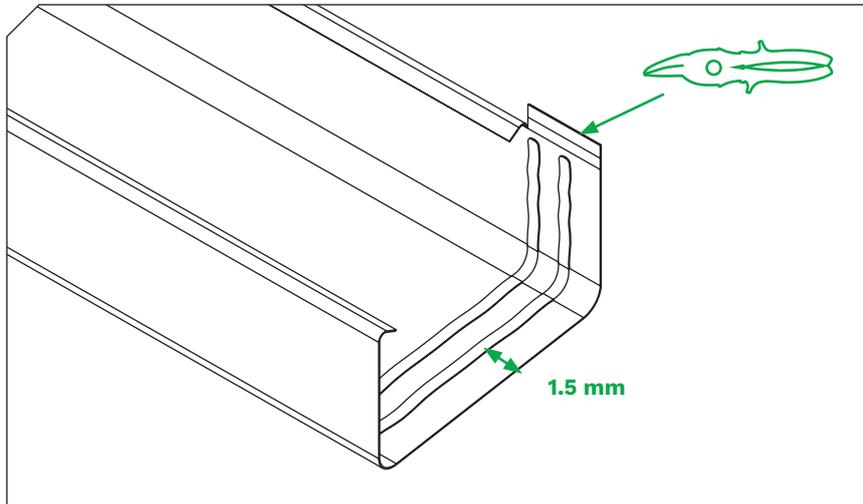


Figure 8

- 3.4. Insert the second section of the gutter into the gutter installed on the brackets by placing its stamped tip first in the front and then in the rear gutter drip. (**Figure 9, 10**)

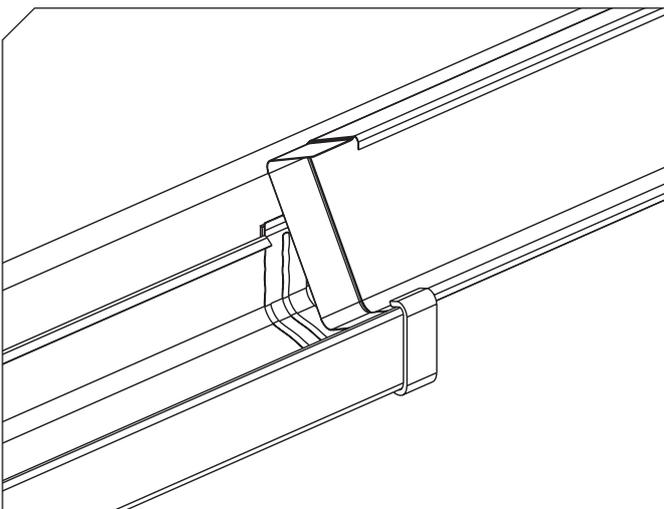


Figure 9

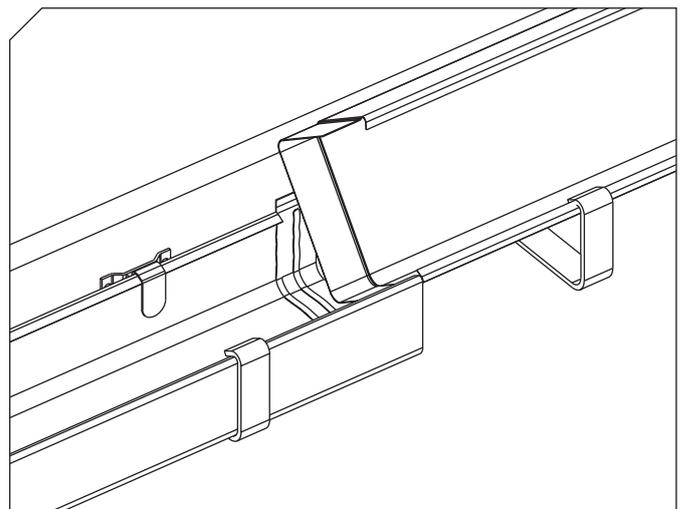


Figure 10

- 3.6. Bend the notched drip on the gutter wall.
- 3.7. Secure the connection with sealing glue on the inside of the gutter.

4. Installation of the expansion joint

- 4.1 If the length of the gutter line is more than **16 m**, an expansion joint should be installed.
- 4.2 Fold the mounting plates of the connector to the vertical position.
- 4.3 The connector should be screwed to the fascia board higher than the adjacent brackets (the upper surface of the gasket in the connector should be approximately **1-2 mm** above the gutter bottom surface – **Figure 11**)

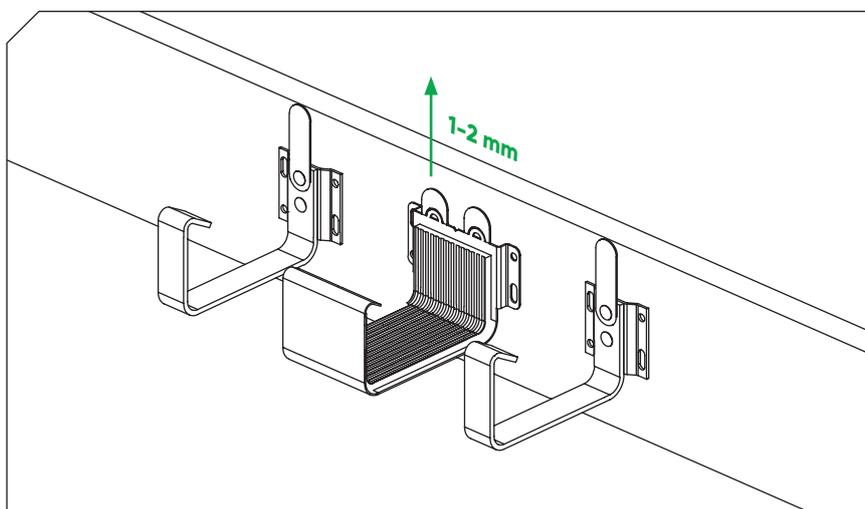


Figure 11

- 4.4 Before mounting the gutters in the connector, spray the gasket with a lubricant! (**Figure 12**)

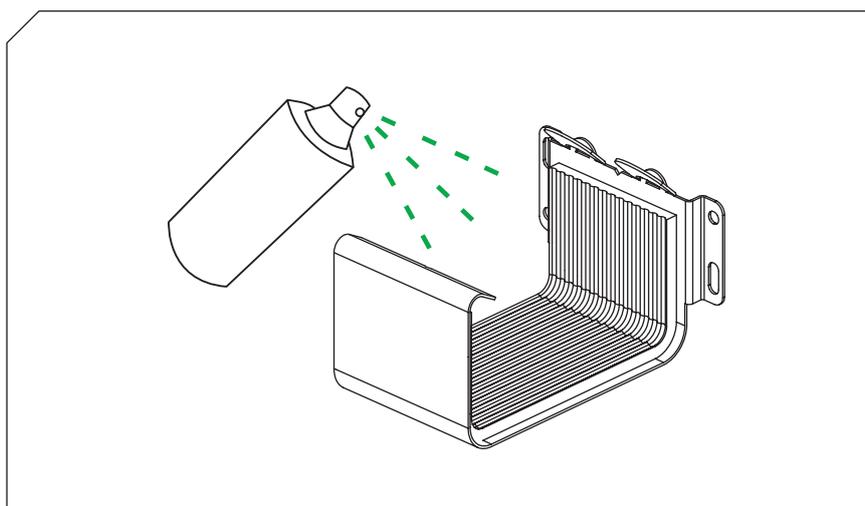


Figure 12

- 4.5 When joining the gutters with a connector, cut off the stamped tip of the gutter.
- 4.6 The gutters that are placed in the connector should be 5-10 mm apart.
- 4.7 Once the gutters are installed in the connectors, bend the mounting plates on the back walls of the connectors.

5. Corner installation

The universal corner (internal/ external) is equipped with stamped tips enabling installation with sealing glue. Remember to cut off the gutter stamped tip at the gutter-corner joint. To install:

- 5.1 Place the brackets at a maximum distance of 15 cm from the corner. **(Figure 13)**

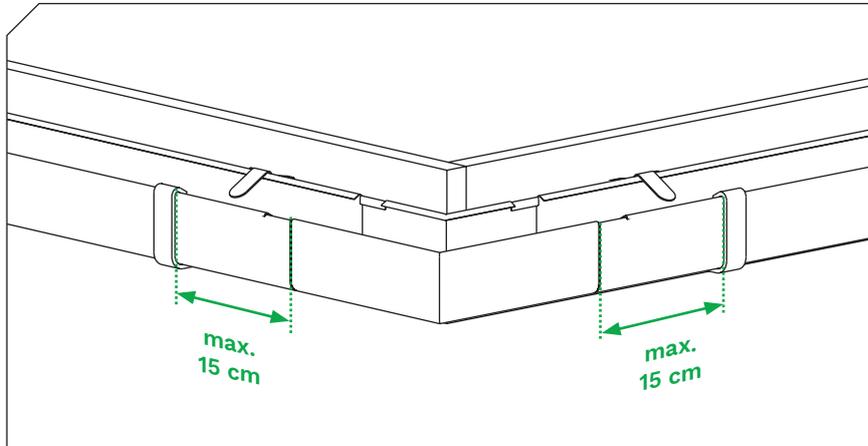


Figure 13

- 5.2 Place the gutters in the brackets (if the gutter has stamped tips - cut them off).
5.3 Make notches on the front and rear gutter drips at a distance of **35 mm** from the gutter ends. Straighten the drips. **(Figure 14)**

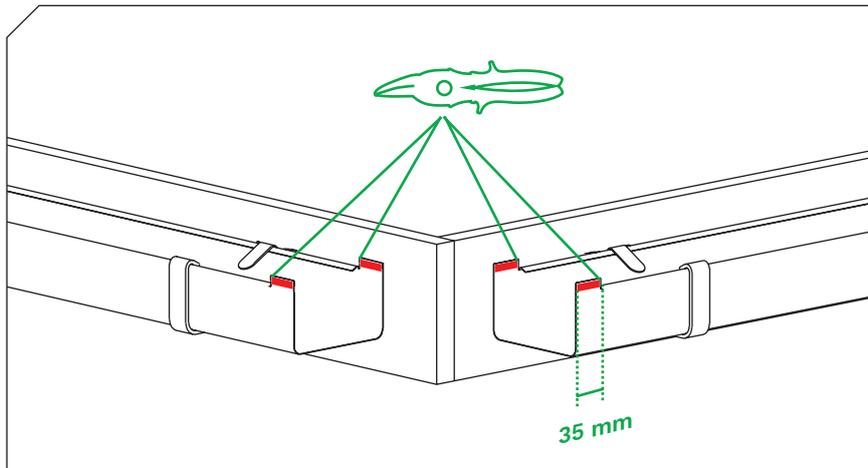


Figure 14

- 5.4 Apply sealing glue to the gutter ends (1.5 cm from the gutter edge).
5.5 Insert the corner onto the gutters. **(Figure 15)**

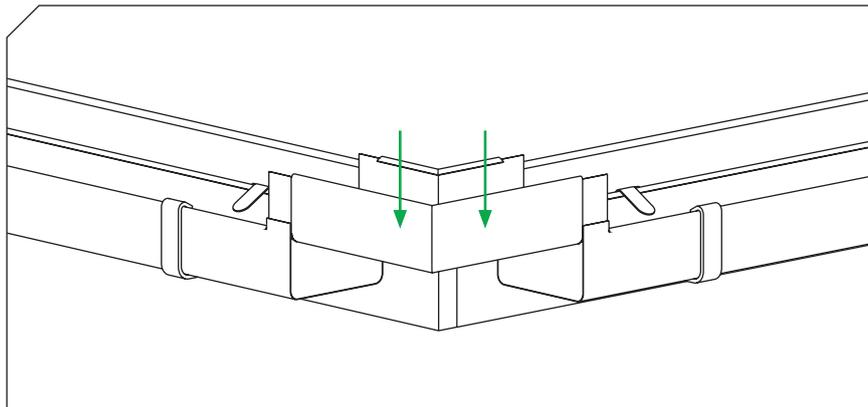


Figure 15

5.6 Close the notched gutter drips on the corner walls. **(Figure 16)**

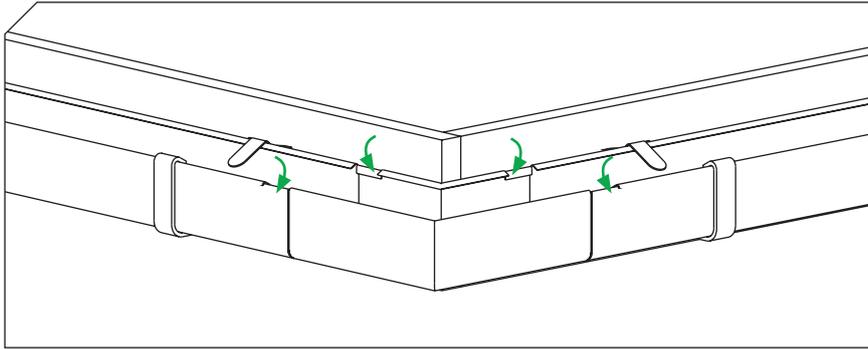


Figure 16

5.7 Seal the joint from the inside with sealing glue, as in the case of the gutter joint.

6. End cap installation

- 6.1 The maximum distance from the end cap to the bracket is 15 cm.
- 6.2 If the gutter has a stamped tip at the end, cut it off.
- 6.3 Cover the end of the gutter with sealing glue on the inside surface.
- 6.4 Slide the end cap into the gutter.
- 6.5 Seal the connection with sealing glue on the inside surface of the gutter.
- 6.6 Notch the gutter drips.
- 6.7 Bend the notched drips on the sides of the end cap walls **(Figure 17)**

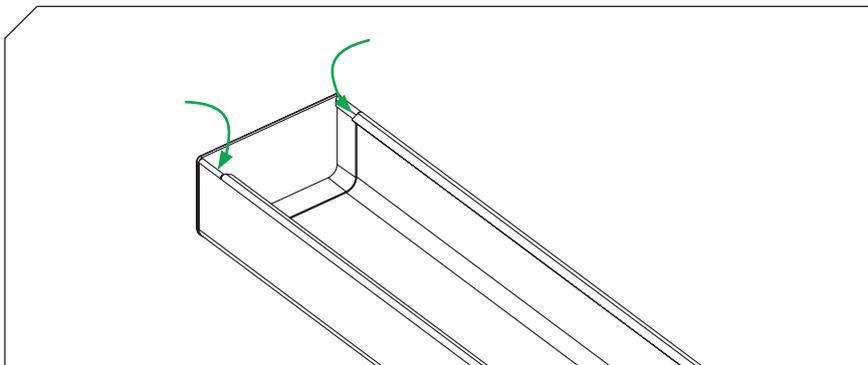


Figure 17

7. Installation of the outlet

- 7.1 Cut a hole in the bottom of the gutter with the dimensions of **90 x 90 mm (Figure 18)**
- 7.2 Bend the edges of the hole vertically downwards. **(Figure 18)**

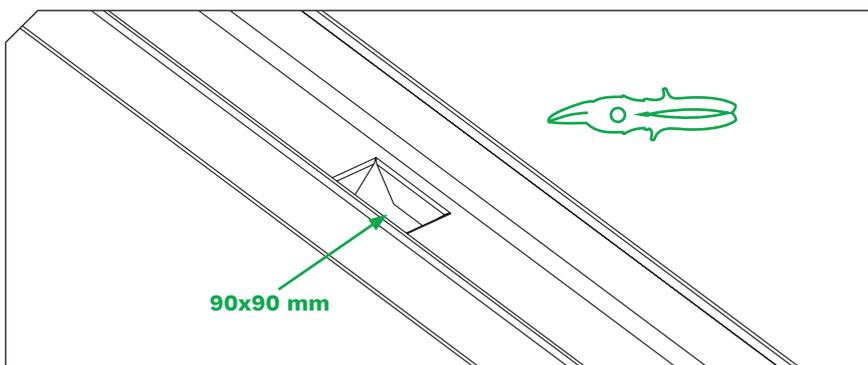


Figure 18

7.3 Attach the outlet to the gutter and bend the mounting plates (**Figure 19, 20**)

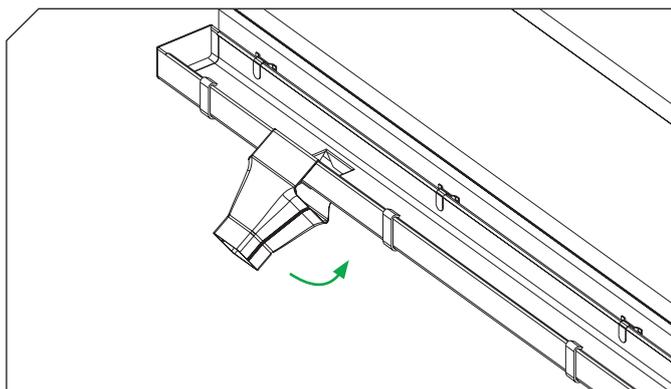


Figure 19

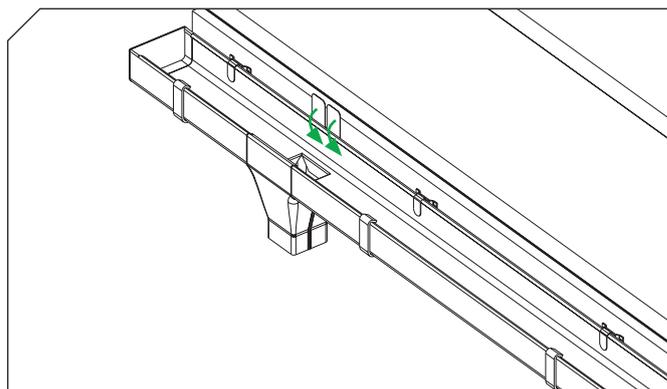


Figure 20

7.4 If the roof is equipped with eaves, connect the outlet to the downspout using two elbows and a cut pipe.

7.5 If the roof is not equipped with eaves, connect the drain to the downpipe using a union sleeve.

8. Installation of the system downspouts

8.1 Fix a dowel in the façade. Use dowels of appropriate length, taking into consideration the thickness of the building insulation.

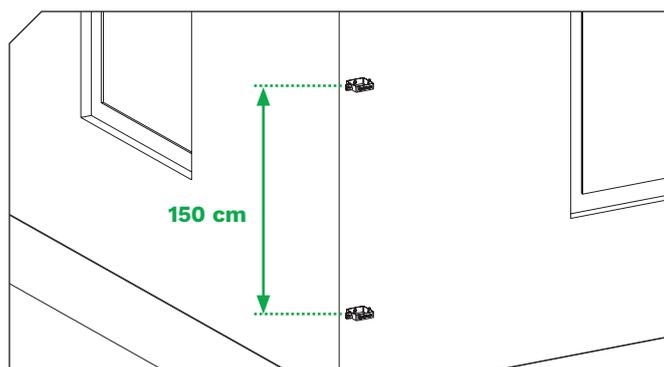


Figure 21

8.3 Screw the clamps onto the dowels.

8.4 Insert the downspouts in the clamps and connect them with a union sleeve (Fig. 21).

8.5 Tighten the clamps on the downspout but not too tight.

9. Drainage to the sewage system

9.1 Install a standard sedimentation tank in the ground, under the downspout. Join its bottom outlet with a flexible elbow connected to the underground runoff pipe with a diameter of 110 mm.

9.2 Cut a 110 mm hole in the standard sedimentation tank flap; the hole diameter is marked on the tank flap. Put a flap prepared for **a square pipe on the cut hole**.

9.3 Put a union sleeve on the tip of the downspout and push the downspout into the flap hole prepared for the square pipe.

9.4 When draining rainwater onto the ground surface, attach an elbow to the tip of the downspout. The minimum distance between the elbow and the ground is 20 cm.