

Installation instructions

LORO-X scupper drains, Series 43

with bonding flange

for bituminous roof sealing sheets,
made of stainless steel,
DN 70 and DN 100

LORO-X scupper drains consist of the drain body, the strainer and the strainer cover.

System overview

<p style="text-align: center;">with bonding flange for bituminous sealing sheets</p> <p>Strainer cover</p> <p>Hexagonal nuts M6 with washers</p> <p>Strainer</p> <p>Drain body</p> <p style="text-align: center;">DN 70: 01316.070X DN 100: 01316.100X</p>	<p style="text-align: center;">LORO sliding flange for bonding the bituminous vapour barrier</p> <p style="text-align: center;">13235.070X* 13235.100X</p> <p style="text-align: center;">for bonding the plastic vapour barrier</p> <p style="text-align: center;">13236.070X* 13236.100X</p> <p style="text-align: center;">* DN 70, including sealing element</p>
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Trace heating

After checking the roof drains and pipes in areas endangered by frost, we recommend that customers install trace heating if necessary (see EN 12056, Part 1, or DIN 1986, Part 100).

LORO-X scupper drains are to be serviced at 1/2 yearly intervals in accordance with DIN 1986, Part 30. Please also give these installation instructions to the plumber!

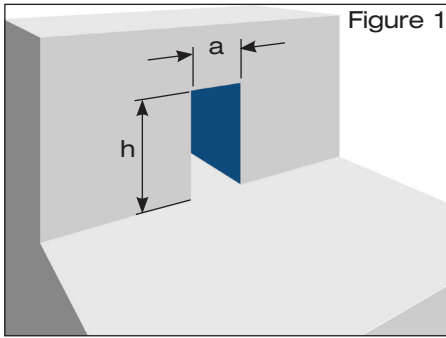


Figure 1

1.) Specifying the parapet opening, specifying the fitting height, bonding the LORO sliding flange in the vapour barrier

- 1.1 Make the parapet opening according to Table 1 (Figure 1). Make the hole as far as the bare slab so that the roof space can be drained during the construction phase. According to flat roof regulations, the lateral distance from the outer edge of the drain flange to the upstand of the building must be at least 300 mm.

Table 1	DN 70	DN 100
a	130	160
h	w*+100	w*+130

*w = thickness of the thermal insulation in mm

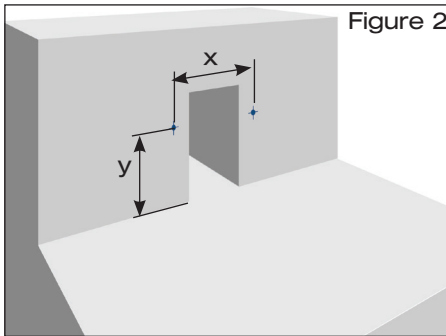


Figure 2

- 1.2 Make 10 mm diameter holes for the sliding flange with the connecting sleeve for connecting the vapour barrier according to the details specified in Table 2 (Fig. 2).

Table 2	DN 70	DN 100
x	196	238
y	w*+17	w*+25

Thermal insulation of 100 mm on the roof side on the parapet is assumed

*w = thickness of the thermal insulation in mm

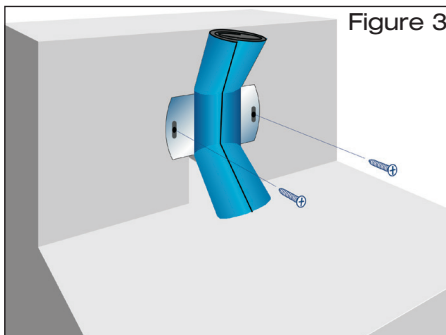


Figure 3

- 1.3 Fasten the sliding flange (with the connecting sleeve rolled up) using a screwdriver for slotted screws (Fig. 3).
Note: the dimensions given under y in Table 2 must be maintained.

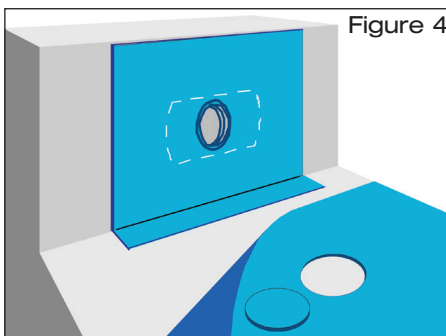


Figure 4

- 1.4 Spread out the factory-fitted **bituminous/EPDM compound** or **plastic** connecting sleeve and attach to the substrate. Do not allow creases to form.
Note: the connecting sleeve must not be damaged. Unroll the **bituminous** or **plastic** vapour barrier sheet. Make a circular cut (Fig. 4) in the vapour barrier sheet in the region of the sliding flange
- Hole diameter 150 mm. Roll back the vapour barrier sheet.

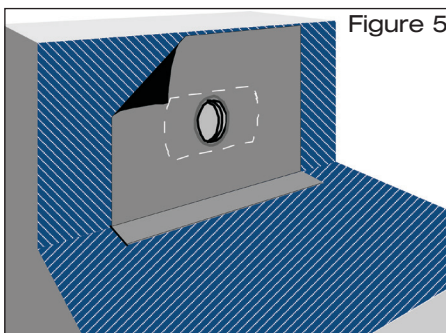


Figure 5

- 1.5 A bitumen primer must be applied to the floor slab and wall when bituminous vapour barrier sheets are used (Fig. 5). High-polymer vapour barrier sheets must be attached to the substrate in accordance with the foil manufacturer's laying specifications.

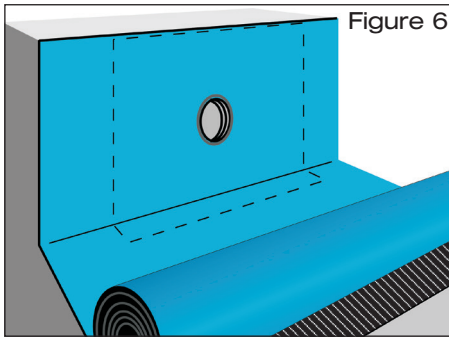


Figure 6

1.7 Bituminous vapour barrier sheet:

Liquefy the upper side of the connecting sleeve by heating it (welding procedure).

Unroll the vapour barrier sheet accurately over the sliding flange with connecting sleeve in the hot liquid bitumen (Fig. 6), then evenly press or roll in.

Plastic vapour barrier sheet:

Clean the contact surfaces and make the connection between the connecting sleeve and the vapour barrier sheet using solvent welding or hot gas welding. Seam overlap at least 50 mm. Observe the laying specifications of the roof sealing sheet manufacturer.

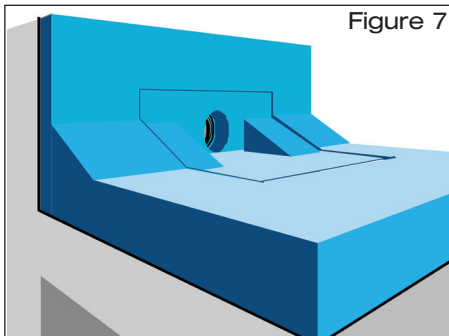


Figure 7

2.) Fitting the scupper drain when using bituminous roof sealing sheets

2.1 Install the thermal insulation.

Work the contours of the bonding flange into the thermal insulation (Fig. 7). The bonding flange of the roof drain should, according to the flat roof regulations, be flush-mounted into the substrate.

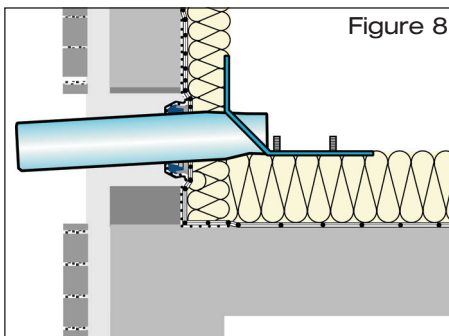


Figure 8

2.2 Trim surplus length off the discharge pipe of the roof drain appropriately for the circumstances at the site.

Apply sufficient LORO-X lubricant to the inside of the sliding flange and to the outside of the discharge pipe of the scupper direct drain. Insert the discharge pipe of the roof drain into the sliding flange as far as its fitted position (Fig. 8). Close up any holes that have been made in the thermal insulation.

Apply adequate quantities of thermal insulation to the discharge pipe in the area of the wall and fix the roof drain.

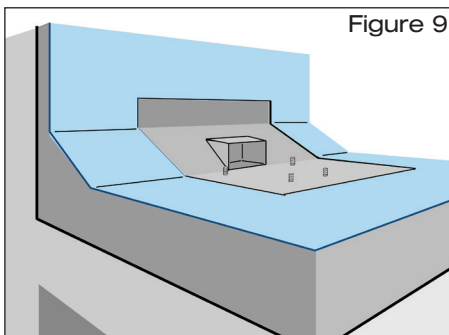


Figure 9

2.3 Unroll the first layer of the roof sealing sheet over the scupper drain, and make a cut-out in the region of the bonding flange (Fig. 9).

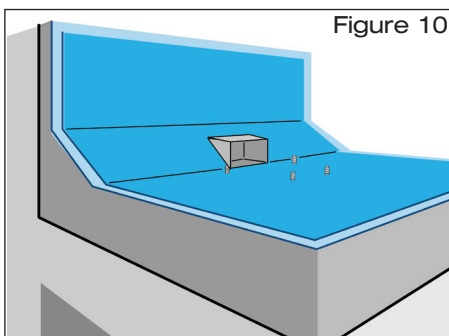


Figure 10

2.4 Cut the connecting sheet on site to a size of approx. 700 mm x 1000 mm out of the existing bitumen roof sealing sheet.

Use a hole punch to make 8 mm diameter holes in the connecting sheet for the threaded bolts to pass through.

Make a cut-out for the discharge pipe in the area of the scupper drain (Fig. 10).

Apply bitumen primer to a width of 100 mm around the bonding flange (observe the drying time). Place the connecting sheet over the drain, and connect it to the bonding flange with the welding procedure.

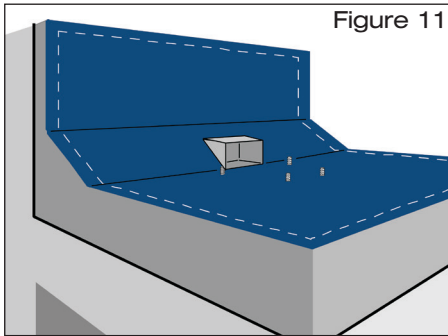


Figure 11

- 2.5 Unroll the second layer of the roof sealing sheet over the drain. Use a hole punch to make 8 mm diameter holes in the roof sealing sheet for the threaded bolts to pass through. Make a cut-out for the discharge pipe in the area of the scupper drain (Fig. 11). Roll back the second layer of the roof sealing sheet, weld the connecting sheet and the second layer of the roof sealing sheet in accordance with the laying instructions from the manufacturer of the roof sealing sheet.

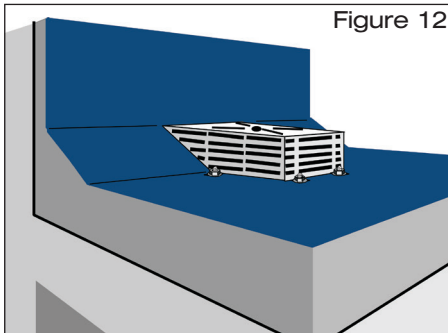


Figure 12

- 2.6 Fasten the strainer using the fastening nuts and washers provided (Fig. 12).