

Installation instructions

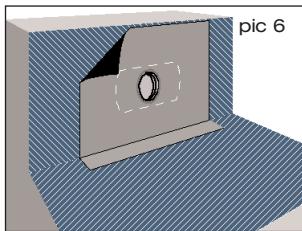
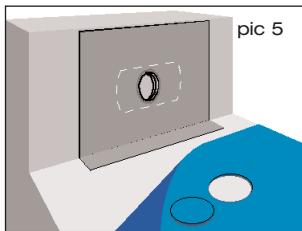
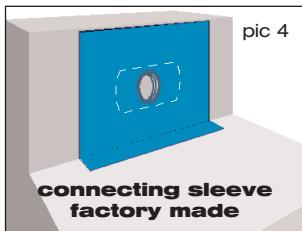
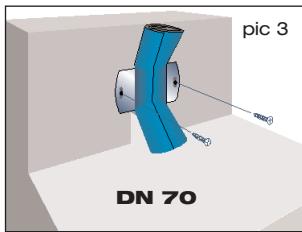
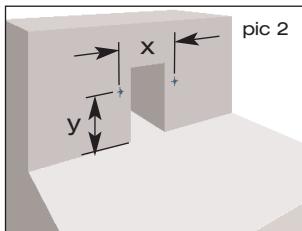
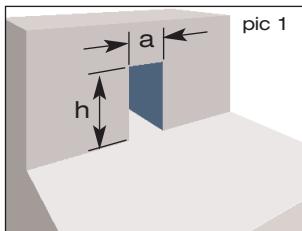
LORO-DRAINJET® siphonic scupper drainage system with clamping flange, without roof penetration

for bituminous and plastic roofing sheets, made of hot-dip galvanised steel, DN 50 and DN 70

LORO-DRAINJET® siphonic scupper drainage system, consisting of the drain pipe with solid and loose flange and drainjet cover.

System outline

with clamping flange for bituminous roofing sheets 01351.050X Data sheet: LX 789	with clamping flange for bituminous roofing sheets as Emergency drainage 01356.050X Data sheet: LX 790	LORO-Bend 87° with narrow radius (mandatory with LORO-DRAINJET® scupper drainage systems) 00350.050X	LORO-sliding flange to integrate bituminous or plastic vapour barriers 13232.050X* * incl. Compression seal and sealing element
with clamping flange for plastic roofing sheets 01353.050X Data sheet: LX 789	with clamping flange for plastic roofing sheets as Emergency drainage 01358.050X Data sheet: LX 790		
with clamping flange for bituminous roofing sheets 01351.070X Data sheet: LX 636	with clamping flange for bituminous roofing sheets as Emergency drainage 01356.070X Data sheet: LX 637		to integrate bituminous vapor barriers 13235.070X*
with clamping flange for plastic roofing sheets 01353.070X Data sheet: LX 636	with clamping flange for plastic roofing sheets as Emergency drainage 01358.070X Data sheet: LX 637	 00350.070X	to integrate plastic vapor barriers 13236.070X* * incl. sealing element



1.) Parapet cut-outs, mounting height, attaching the vapor barrier to the sliding flange

- 1.1 Create the parapet opening according to table 1 and picture 1.
To ensure roof drainage during construction, start the parapet opening at slab level

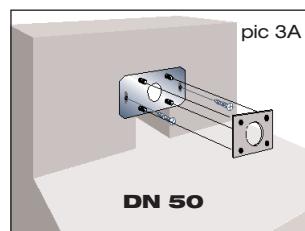
Table 1	DN 50	DN 70
a	130	130
h	w*+100	w*+100

*w = thickness of the insulation in mm

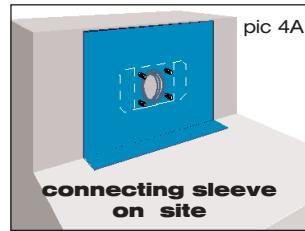
- 1.2 Drilling 10 mm hole for the sliding flange to connect the vapor barrier according to table 2 and picture 2

Table 2	DN 50	DN 70
x	205	196
y (bitumen)	w*+35	w*+35
y (plastic)	w*+40	w*+40

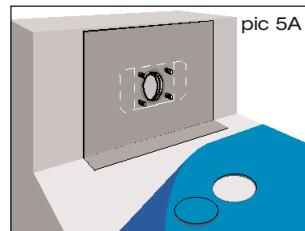
*w = thickness of the insulation in mm



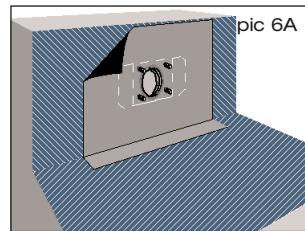
- 1.3 Sliding flange (DN 70 with folded connecting sleeve, picture 3) and sliding flange (DN 50 with compression seal, picture 3A) : Fasten with screwdriver.
Make sure to follow the measures specified in table 2 !



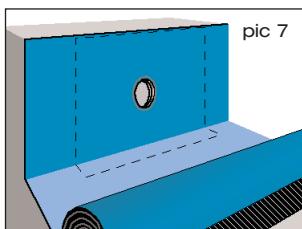
- 1.4 DN 70: Unfold the preassembled connecting sleeve and glue to parapet and slab (picture 4).
DN 50: Punch 14mm holes for the bolts into the connecting sleeve. Use the loose flange to indicate the position of the holes.
Make sure the connecting sleeve does not get damaged ! Glue the connecting sleeve to parapet and slab (picture 4A)



- 1.5 Unreel 500mm of the vapor barrier, cut out a circular hole of 150 mm diameter and reel it back on.



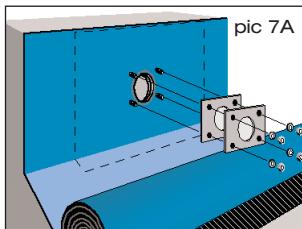
- 1.6 Bituminous vapor barriers: Slab and parapet must be painted with an bitumen primer (Picture 6 or 6A).
Polymer vapor barriers must be fixed to the ground according to the installation guidelines of the manufacturer.


1.7 Bituminous vapor barrier

Torch the surface of the connecting sleeve. Position the vapor barrier over the sliding flange, align the hole and evenly press on (picture 7 / 7A).

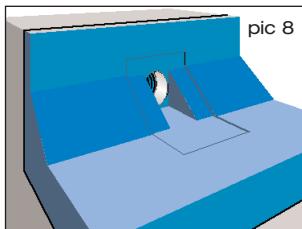
Plastic vapor barrier

Clean the contact surfaces and weld the vapor barrier to the connecting sleeve. Seam overlap min. 50 mm. Observe additional installation instructions of the manufacturer of the vapor barrier!



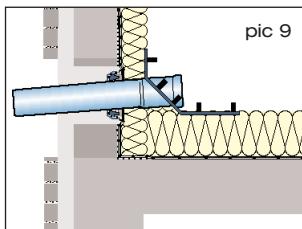
- 1.8 DN 50: The compression seal goes on top of the vapor barrier and is fixed with the loose flange and the screws enclosed (picture 7A). Fasten the screws with an 17mm wrench and a torque of 20 Nm (bituminous vapor barrier) or 65 Nm (plastic vapor barrier).

Insert the sealing element in the socket of the sliding flange.

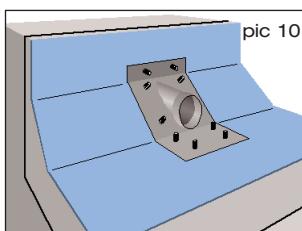

2.) Installation of the scupper drain with a bituminous vapor barrier (two-part)

- 2.1 Cut out insulation layer as shown in picture 8.

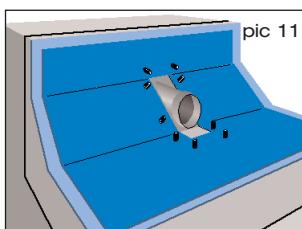
Cut drain pipe to desired length and apply some lubricant to the sealing element of the sliding flange and the pipe end. Push the drain pipe into the sliding flange and position scupper drain on the insulation layer as shown in picture 9. Stuff any voids with insulation material. Make sure the flange aligns with vertical and horizontal insulation layer.

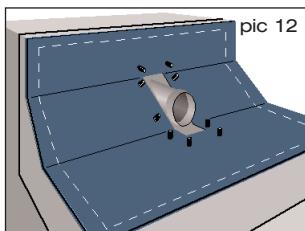


- 2.2 Roll out the first layer of the roofing sheet over the scupper drain and cut out the flange area as shown in picture 10.

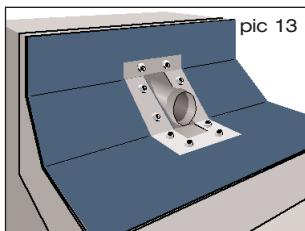


- 2.3 Cut out a rectangular opening from the connection sleeve (a cut-out of a bituminous roofing sheet size 700 x 1000 mm) and punch the 14mm-diameter holes using the loose flange to indicate the positions. Torch the connecting sleeve to the first layer of the vapor barrier.

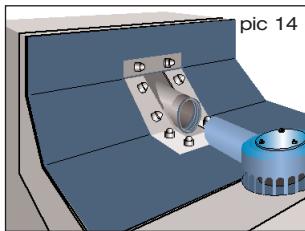




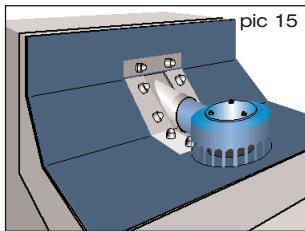
- 2.4 Roll out the second layer of the vapor barrier and cut out a rectangular opening. Punch the 14mm-diameter holes using the loose flange tool indicate the positions. Torch the second layer to the connecting sleeve.



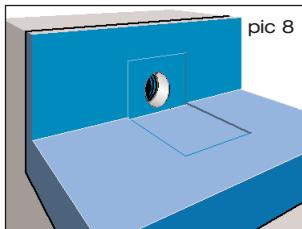
- 2.5 Position the loose flange as shown in picture 13 and fasten with the enclosed nuts using a 19mm wrench. Start at the 45° side, then fasten the rest, applying a torque of 20 Nm.



- 2.6 Insert the sealing element in the socket of the drain pipe (picture 14). Apply some lubricant to the sealing element and the spigot end of drain. Install enclosed hex to caps on the threaded ends of bolts.



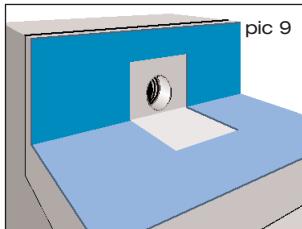
- 2.7 Slide the spigot end of the drain into the socket of the pipe (picture 15).
Attention: The drain body MUST rest on the roofing sheet!



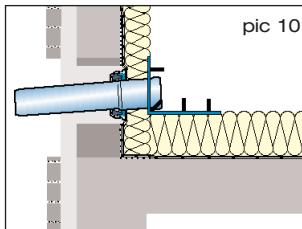
pic 8

3.) Installation of the scupper drain when using a plastic roofing sheet

- 3.1 Cut out insulation layer as shown in picture 8.
Cut drain pipe to desired length and apply some lubricant to the sealing element of the sliding flange and the pipe end. Push the drain pipe into the sliding flange and position scupper drain on the insulation layer as shown in picture 9. Stuff any voids with insulation material. Make sure the flange aligns with vertical and horizontal insulation layer.

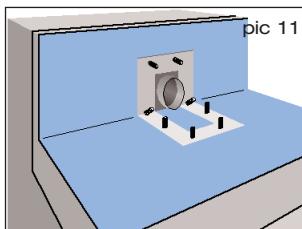


pic 9



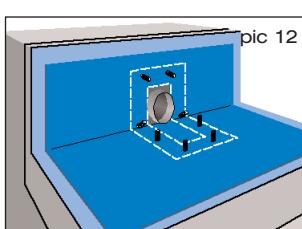
pic 10

- 3.2 Roll out the first layer of the roofing sheet over the scupper drain and cut out the flange area as shown in picture 11.



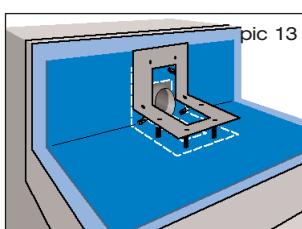
pic 11

- 3.3 Cut out a rectangular opening from the connection sleeve (a cut-out of on-site existing roofing sheet size 700 x 1000 mm) and punch the 14mm-diameter holes using the loose flange to indicate the positions. Install one of the enclosed compression seals (dashed lines in picture 12) ON TOP of the solid flange and UNDER the connecting sleeve. Spread the connecting sleeve over the roof drain.

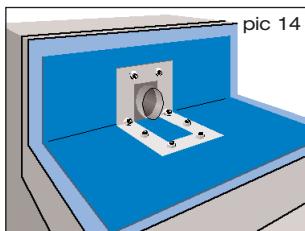


pic 12

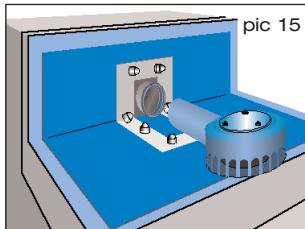
- 3.4 Weld the connecting sleeve to the first layer of roofing sheet according to the manufacturers' guidelines. Install the second compression seal on top of the connecting



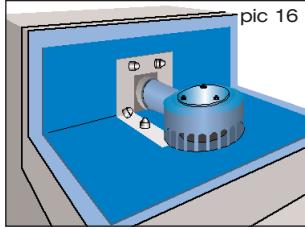
pic 13



- 3.5 Position the loose flange as shown in picture 13 and fasten with the enclosed nuts using a 19mm wrench. Start at the parapet side, then fasten the rest, applying a torque of 65 Nm.



- 3.6 Insert the sealing element in the socket of the drain pipe (picture 15). Apply some lubricant to the sealing element and the spigot end of drain. Install enclosed hex tops caps on the threaded ends of bolts.



- 3.7 Slide the spigot end of the drain into the socket of the pipe (picture 16).
Attention: The drain body MUST rest on the roofing sheet!

Maintenance intervall: Check drains and pipes every 6 months !

Please give a copy of the installation instructions to the facility manager.

Important:

Necessary system components for item number **01351.050X** or. **01353.050X** : Siphonic supper drain, sliding flange (for mounting the vapor barrier), pipe with one socket, bends with an narrow radius 87°, downpipe with one socket, cleaning pipe, sealing element, pipe clamps, lubricant – see Data sheet **LX 789.**

Necessary system components for item number **01351.070X** or. **01353.070X** : Siphonic supper drain, sliding flange (for mounting the vapor barrier), pipe with one socket, bends with an narrow radius 87°, downpipe with one socket, cleaning pipe, sealing element, pipe clamps, lubricant – see Data sheet **LX 636.**

Necessary system components for item number **01356.050X** or. **01358.050X** : Siphonic supper drain, sliding flange (for mounting the vapor barrier), pipe with one socket, bends with an narrow radius 87°, downpipe with one socket, cleaning pipe, sealing element, pipe clamps, lubricant – see Data sheet **LX 790.**

Necessary system components for item number **01356.070X** or. **01358.070X** : Siphonic supper drain, sliding flange (for mounting the vapor barrier), pipe with one socket, bends with an narrow radius 87°, downpipe with one socket, cleaning pipe, sealing element, pipe clamps, lubricant – see Data sheet **LX 637.**

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September 2008.
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