Installation instructions

LORO-DRAINLET® flat roof drains/emergency drains

for gravity flow, DL series

with clamping flange, stainless steel, DN 70, DN 100 and DN 125

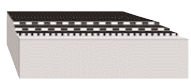
LORO-DRAINJET® siphonic drains/emergency drains

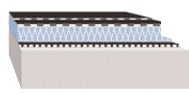
for pressure flow, DJ series

with clamping flange, stainless steel, DN 70 and DN 100

System overview

For flat roofs





DL series	DL series Emergency drain	DJ series	DJ series Emergency drain
 **Vers. a:** DN 70: 21511.070X DN 100: 21511.100X DN 125: 21511.125X **Vers. b:** DN 70: 21512.070X DN 100: 21512.100X DN 125: 21512.125X **Vers. c:** DN 70: 21513.070X DN 100: 21513.100X DN 125: 21513.125X	 **Vers. a:** DN 70: 21711.070X DN 100: 21711.100X **Vers. b:** DN 70: 21712.070X DN 100: 21712.100X **Vers. c:** DN 70: 21713.070X DN 100: 21713.100X	 **Vers. a:** DN 70: 21111.070X DN 100: 21111.100X **Vers. b:** DN 70: 21112.070X DN 100: 21112.100X **Vers. c:** DN 70: 21113.070X DN 100: 21113.100X	 **Vers. a:** DN 70: 21311.070X DN 100: 21311.100X **Vers. b:** DN 70: 21312.070X DN 100: 21312.100X **Vers. c:** DN 70: 21313.070X DN 100: 21313.100X
 **Vers. a:** DN 70: 21521.070X DN 100: 21521.100X DN 125: 21521.125X **Vers. b:** DN 70: 21522.070X DN 100: 21522.100X DN 125: 21522.125X **Vers. c:** DN 70: 21523.070X DN 100: 21523.100X DN 125: 21523.125X	 **Vers. a:** DN 70: 21721.070X DN 100: 21721.100X **Vers. b:** DN 70: 21722.070X DN 100: 21722.100X **Vers. c:** DN 70: 21723.070X DN 100: 21723.100X	 **Vers. a:** DN 70: 21121.070X DN 100: 21121.100X **Vers. b:** DN 70: 21122.070X DN 100: 21122.100X **Vers. c:** DN 70: 21123.070X DN 100: 21123.100X	 **Vers. a:** DN 70: 21321.070X DN 100: 21321.100X **Vers. b:** DN 70: 21322.070X DN 100: 21322.100X **Vers. c:** DN 70: 21323.070X DN 100: 21323.100X

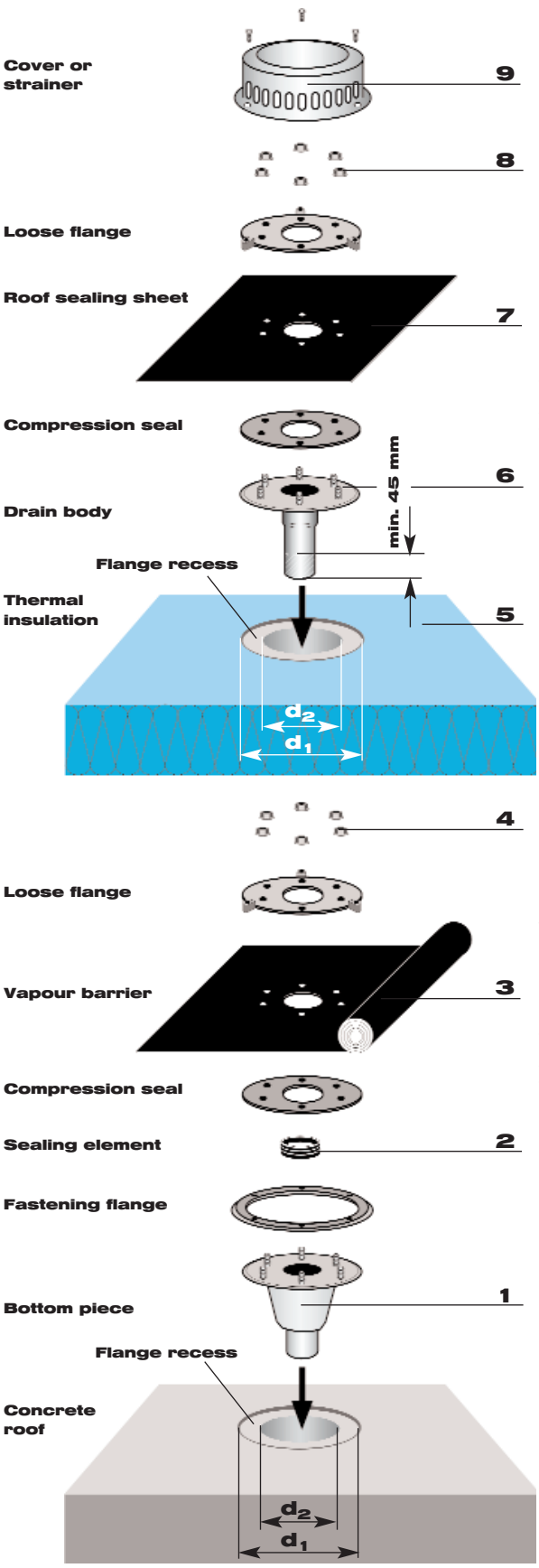
For box gutters

DL series	DL series Emergency drain	DJ series	DJ series Emergency drain
 **Vers. a:** DN 70: 21511.070X DN 100: 21511.100X DN 125: 21511.125X **Vers. b:** DN 70: 21512.070X DN 100: 21512.100X DN 125: 21512.125X **Vers. c:** DN 70: 21513.070X DN 100: 21513.100X DN 125: 21513.125X	 **Vers. a:** DN 70: 21711.070X DN 100: 21711.100X **Vers. b:** DN 70: 21712.070X DN 100: 21712.100X **Vers. c:** DN 70: 21713.070X DN 100: 21713.100X	 **Vers. a:** DN 70: 21111.070X DN 100: 21111.100X **Vers. b:** DN 70: 21112.070X DN 100: 21112.100X **Vers. c:** DN 70: 21113.070X DN 100: 21113.100X	 **Vers. a:** DN 70: 21311.070X DN 100: 21311.100X **Vers. b:** DN 70: 21312.070X DN 100: 21312.100X **Vers. c:** DN 70: 21313.070X DN 100: 21313.100X

Vers. a = without thermal insulation, vers. b = with thermal insulation, vers. c = with thermal insulation and heating

Trace heating

After checking the roof drains and pipes in areas endangered by frost, we recommend that customers install trace heating if necessary.



These installation instructions also apply to the flat roof emergency drains!

a.) Installation in a concrete roof

Screw the cover or strainer to the loose flange using the 3 fastening screws included.

Screw the loose flange to the drain body using the six M 10 hexagonal flange nuts included. Tightening torque: 20 Nm (bituminous roof sealing sheet) or 30 Nm (plastic roof sealing sheet).

Use the loose flange as a template for the holes to be made in the roof sealing sheet. The compression seal is to be positioned on the fixed flange under the roof sealing sheet. A compression seal is not necessary for bituminous roof sealing sheets. Bituminous seals should be installed with two layers in the clamping area.
The processing guidelines provided by the manufacturer of the roof sealing sheet must be observed.
If a second compression seal is needed under the loose flange, this can be made by the customer from the same material as the roof sealing sheet. The loose flange can be used as a template here again.
A second compression seal can, alternatively, be requested from the LOROWERK factory.

Apply lubricant to the outlet end of the drain body, and push it through the thermal insulation into the sealing element of the bottom part. Check that the connection to the bottom part has been carried out properly.
Adjusting range of the drain body: 80 - 200 mm.
Use a LORO-X pipe as an extension if the thermal insulation is more than 200 mm thick.
The discharge pipe from the drain body is to be shortened appropriately if the thermal insulation is less than 150 mm thick.
Minimum required engagement length: 45 mm.
Cut-out dimensions for the thermal insulation:

DN	d_1	d_2
70	260	100
100	320	140
125	340	170

Screw the loose flange to the bottom part using the six M 10 hexagonal flange nuts included. Tightening torque: 20 Nm (bituminous vapour barrier sheet) or 30 Nm (plastic vapour barrier sheet).

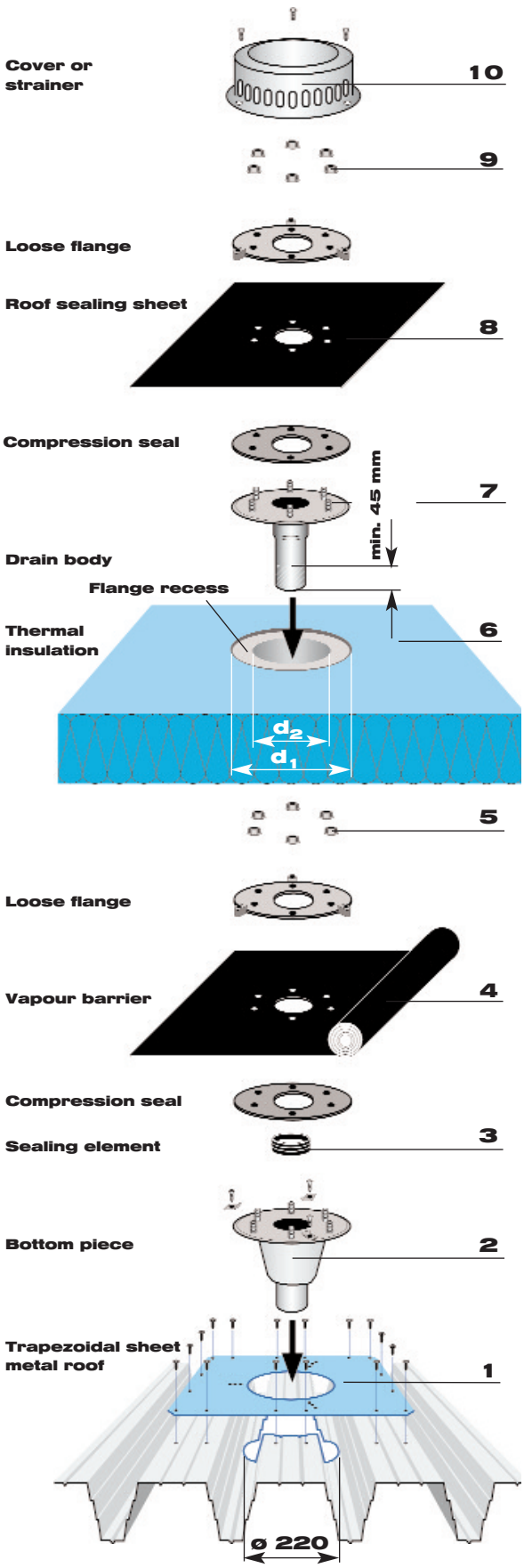
Use the loose flange as a template for the holes to be made in the vapour barrier. The compression seal is to be positioned on the fixed flange under the vapour barrier sheet. A compression seal is not necessary for bituminous vapour barrier sheets.
If a second compression seal is needed under the loose flange, this can be made by the customer from the same material as the vapour barrier sheet. The loose flange can be used as a template here again.
A second compression seal can, alternatively, be requested from the LOROWERK factory.

Insert a LORO-X sealing element into the socket of the bottom part, and coat the whole area with LORO-X lubricant.
Note: Make sure that the sealing element is seated properly in order to ensure backflow-safety.

Insert the bottom part and fasten using, e.g. fastening flange no. 21910X. This item is not included in the standard supply. Please order separately.

For concrete roofs

DN	d_1	d_2
70	260	158
100	320	200
125	340	230



b.) Installation in a trapezoidal sheet metal roof

Screw the cover or strainer to the loose flange using the 3 fastening screws included.

Screw the loose flange to the drain body using the six M 10 hexagonal flange nuts included. Tightening torque: 20 Nm (bituminous roof sealing sheet) or 30 Nm (plastic roof sealing sheet).

Use the loose flange as a template for the holes to be made in the roof sealing sheet. The compression seal is to be positioned on the fixed flange under the roof sealing sheet. A compression seal is not necessary for bituminous roof sealing sheets. Bituminous seals should be installed with two layers in the clamping area.
The processing guidelines provided by the manufacturer of the roof sealing sheet must be observed.
If a second compression seal is needed under the loose flange, this can be made by the customer from the same material as the roof sealing sheet. The loose flange can be used as a template here again.
A second compression seal can, alternatively, be requested from the LOROWERK factory.

Apply lubricant to the outlet end of the drain body, and push it through the thermal insulation into the sealing element of the bottom part. Check that the connection to the bottom part has been carried out properly.
Adjusting range of the drain body: 80 - 200 mm.
Use a LORO-X pipe as an extension if the thermal insulation is more than 200 mm thick.
The discharge pipe from the drain body is to be shortened appropriately if the thermal insulation is less than 150 mm thick.
Minimum required engagement length: 45 mm.
Cut-out dimensions for the thermal insulation:

DN	d_1	d_2
70	260	100
100	320	140
125	340	170

Screw the loose flange to the bottom part using the six M 10 hexagonal flange nuts included. Tightening torque: 20 Nm (bituminous vapour barrier sheet) or 30 Nm (plastic vapour barrier sheet).

Use the loose flange as a template for the holes to be made in the vapour barrier. The compression seal is to be positioned on the fixed flange under the vapour barrier sheet. A compression seal is not necessary for bituminous vapour barrier sheets.
If a second compression seal is needed under the loose flange, this can be made by the customer from the same material as the vapour barrier sheet. The loose flange can be used as a template here again.
A second compression seal can, alternatively, be requested from the LOROWERK factory.

Insert a LORO-X sealing element into the socket of the bottom part, and coat the whole area with LORO-X lubricant.
Note: Make sure that the sealing element is seated properly in order to ensure backflow-safety.

Insert the bottom part, and fasten using the enclosed brackets. Alternatively use a fastening flange no. 21910X. This item is not included in the standard supply. Please order separately.

Screw the reinforcing metal sheet to the trapezoidal sheet metal roof according to DIN 18807 Part 3 Example “a”. The reinforcing metal sheet, item no. 19975.000X, is not included in the standard scope of supply. Please order separately.

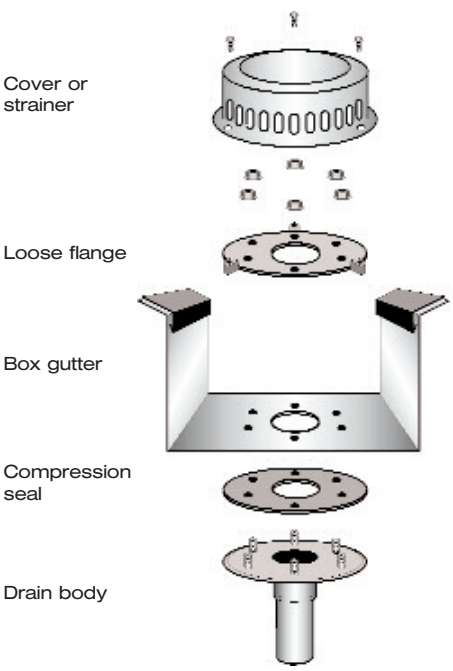
Flat roof drains are to be serviced in accordance with DIN 1986, Part 30.
Environmental influences must also be taken into account.

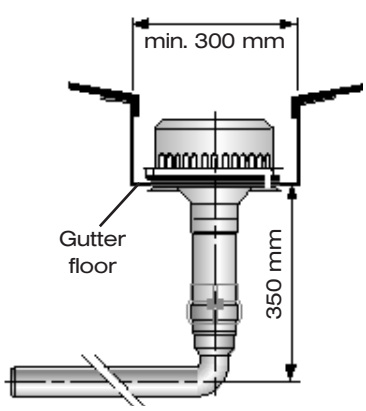
c.) Installation in a box gutter

LORO-DRAINLET®/DRAINJET® flat roof drains, DN 70, DN 100 and DN 125, for fitting into box gutters

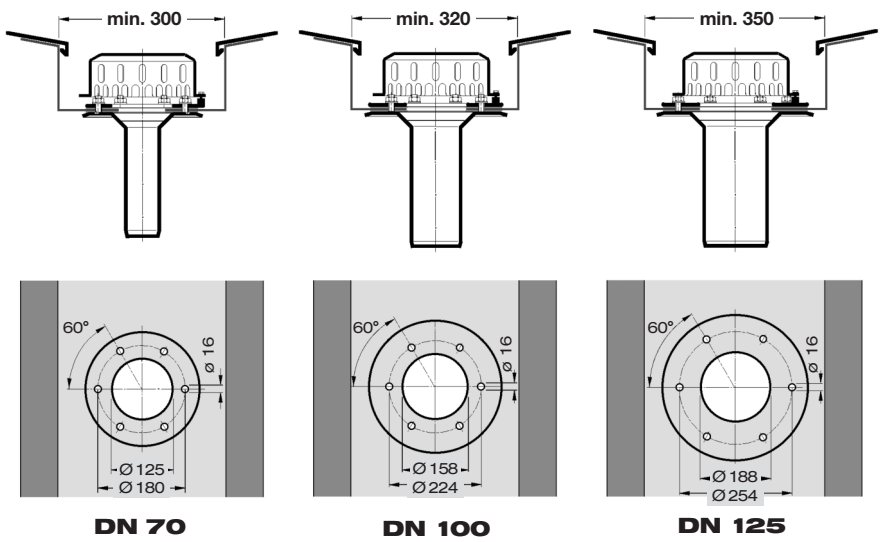
- Make holes (diameter 16 mm) according to the pattern in the box gutter. The loose flange can be used as a template for the holes. When assembling the drain, make sure that the threaded bolts are located in the centre of the pre-drilled holes.
  Note: Longitudinal expansion of the gutter must be taken appropriately into account.
  Note:
  If the box gutter is made of copper, a second compression seal which will be clamped with the loose flange in the gutter must be requested from the LOROWERK factory.

Screw the cover or strainer to the loose flange using the 3 fastening screws included.
Screw the loose flange to the drain body using the six M 10 hexagonal flange nuts included. Tightening torque: 20 Nm.

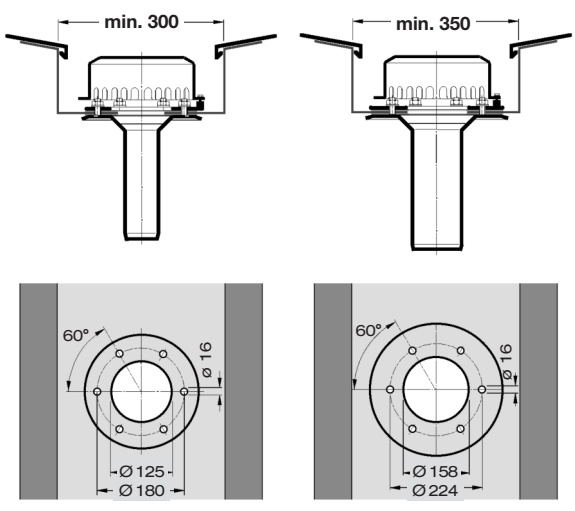




DRAINLET



DRAINJET



Flat roof drains are to be serviced in accordance with DIN 1986, Part 30.
Environmental influences must also be taken into account.
Please also give these laying instructions to the plumber!

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Subject to technical changes.