

Installation instructions

ProRoof HD emergency overflow

Bituminous version, torch-on membrane



Illustrative view of the product

Application

The ProRoof emergency overflow is a safety element of the drainage system of flat roofs.

Its task is to discharge excess water when the main drainage cannot keep up with the water or becomes partially blocked.

Principle of operation

The overflow starts working when the water on the roof reaches a defined level and discharges the excess to the outside of the building, reducing the risk of overloading the structure and flooding the roof layers.

Installation principle

The element is installed from the inner side of the parapet (from the roof side).

The flange stays on the roof side and is connected watertight to the waterproofing.

The pipe passes through the parapet and discharges the water beyond the outline of the building.

Scope of use

flat roofs

installation in a parapet or an external wall

waterproofing systems with torch-on bituminous membrane

Key features

watertight connection to the torch-on membrane
installation from the roof side

water discharged away from the façade
safety element of the drainage system

Before starting work

Before starting installation:

check that the dimensions of the overflow match the design

determine the installation height of the element

check the type of substrate and the waterproofing system

prepare the tools for installation and welding

make sure the surfaces are clean and ready for work

Scope of the instructions

The instructions cover:

preparing the opening and fitting the overflow

connection to the torch-on membrane

routing of the outlet and water discharge

inspection and acceptance of the installation

1. General rules

What is the emergency overflow for?

The emergency overflow starts working when the main roof drainage cannot keep up with the water or becomes partially blocked.

Its task is to discharge excess water to the outside before the water level on the roof reaches sensitive areas.

The most important installation rule

The element is installed from the roof side, i.e. from the inner side of the parapet. The flange stays on the roof side and is connected watertight to the membrane. The pipe outlet must be on the outer side of the wall.

2. Preparing the opening and fitting the element

2.1. Installation location

Determine it in accordance with the emergency drainage design. Ensure safe discharge of water away from the building.

2.2. Installation height

Set the lower edge of the inlet at the design level so that outflow starts before the permissible water level on the roof is exceeded.

2.3. Opening in the parapet

Make an opening matching the pipe cross-section, with installation clearance. Level and clean the edges.

2.4. Preparing the substrate

Remove dust, loose fragments and contamination. Ensure an even, stable support for the flange on the parapet surface.

2.5. Trial fitting

Check the fit, the inlet height and the passage of the pipe through the parapet before permanent fixing.

2.6. Fitting the overflow

Slide the overflow in from the roof side. The flange should lie against the parapet without stress, and the pipe should extend beyond the façade.

2.7. Positioning the element

Position the overflow on the axis of the opening. The outlet should be beyond the face of the wall and allow the water to flow away freely.

2.8. Mechanical fixing

Fix the element to the parapet structure with fasteners selected for the substrate. Use the openings provided for this purpose.

2.9. Filling the space

Fill the space between the pipe and the opening with thermal insulation or installation foam. The filling limits the thermal bridge and does not replace mechanical fixing.

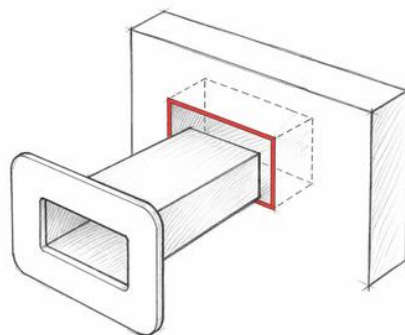


Diagram of making the opening in the parapet

3. Connection to the torch-on membrane

3.1. Preparing the surfaces

The surfaces must be clean and dry. Check the condition of the flange and the waterproofing. Carry out any supplementary priming only with a product compatible with the system and wait until it is completely dry.

3.2. Fitting the detail

Trial-fit the membrane to the flange and the parapet waterproofing. Keep the overlaps required for the chosen membrane and detail. Cut the opening in the membrane to match the inlet without restricting the clear opening of the overflow.

3.3. Torch-on welding

Primed flange, without a patch

Prepare a patch of compatible base-layer membrane. Heat its underside bituminous layer, then apply it and press it firmly onto the flange. Connect the patch to the parapet waterproofing around the entire perimeter.

Flange with a factory-heated patch

Connect the existing patch to the parapet membrane at the required overlaps. Heat the bituminous surfaces in the connection zone and press them down without detaching the patch from the flange.

IMPORTANT: HEAT THE MEMBRANE.

Do not direct the flame at the flange or the body of the overflow. Do not heat the metal to melt the membrane. Protect the element from overheating.

3.4. Overlaps and pressing

Take the overlap dimensions from the instructions of the specific membrane and the detail design. Typical overlaps of membrane strips on the roof surface are 8–10 cm lengthwise and 12–15 cm crosswise. These are not universal dimensions for the connection on the flange.

3.5. Continuity of the waterproofing

Weld the entire surface intended for the connection. Run the overlaps in the direction of water flow. Avoid wrinkles, blisters and the meeting of several overlaps in one place.

3.6. Top layer

In a multi-layer covering, also connect the detail to the top-coat membrane. The base-layer membrane requires protection compatible with the system. Do not leave it as the final exposed layer.

3.7. Inspection after cooling

Check the adhesion of the membrane to the flange, the continuity of the overlaps and the absence of insufficiently heated spots. Inspect the edges and the free passage of the inlet. Repair defects in accordance with the system technology.

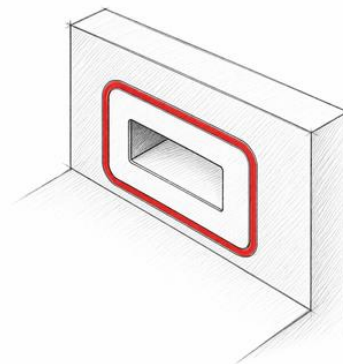


Diagram of the connection around the inlet.
Overlaps and layers in accordance with the membrane system.

4. Water discharge and outlet geometry

4.1. Routing the overflow beyond the façade

The overflow pipe must be led out beyond the face of the wall so that the water is visibly discharged to the outside of the building.

4.2. No connection to the sewer system

Do not connect the emergency overflow to the sewer system.

The element should work as an independent emergency water discharge system.

4.3. Ensuring free outflow

Make sure that:
the pipe cross-section is not restricted,
nothing blocks the outlet,
the water has a free path to flow out.

4.4. Making a drip detail

It is recommended to make a detail at the end of the pipe that prevents water from running down the façade (e.g. a drip edge).

4.5. Water discharge zone

Design the area below the overflow so that, at maximum flow, the water does not cause damage (e.g. flooding of the façade, pavements or installations).

4.6. Final function check

After completing the installation, check:
free passage of the overflow,
correct direction of outflow,
absence of obstacles in the water path.

5. Inspection, cleaning and operation

Periodic inspections

Inspect and clean the emergency overflow at least twice a year.
If the roof is heavily soiled, for example by leaves or dust, carry out inspections more often.

What to check during inspection

Free passage of the inlet and outlet, condition of the membrane joints and fixing, and a free path for the water to flow out.

6. Installation conditions and execution recommendations

6.1. Working conditions

Work on a dry substrate, without rain, ice and strong wind. Take the working temperature and the preparation of the rolls from the data sheet of the chosen membrane.

6.2. Condition of materials

Check the flange, the bituminous coating and the membrane. Repair any damage to the coating with a compatible primer and leave it to dry.

6.3. Material compatibility

Use membrane intended for detail work and materials compatible with the waterproofing system and the flange finish.

6.4. Fire protection

Shield combustible materials, including thermal insulation and the foam around the pipe. Provide fire-extinguishing equipment and inspect the area after the work is finished. Do not use a flame on primer that has not dried.

6.5. Acceptance after installation

Check the fixing, the membrane joints, the free passage and the routing of the outlet beyond the façade. Do not allow the flange to deform.

6.6. Operation

Ensure access for inspection and cleaning. Remove contamination without damaging the membrane.

7. Acceptance checklist

Checkpoint	Yes / No	Remarks
Opening and inlet height in accordance with the design	☐ YES ☐ NO	
Overflow fitted from the roof side	☐ YES ☐ NO	
Element fixed mechanically	☐ YES ☐ NO	
Space around the pipe filled	☐ YES ☐ NO	
Flange-to-membrane connection watertight	☐ YES ☐ NO	
Outlet led out beyond the façade	☐ YES ☐ NO	
Drip detail made	☐ YES ☐ NO	
Free passage checked after installation	☐ YES ☐ NO	
	☐ YES ☐ NO	

Additional inspection of the membrane connection

- ☐ Overlaps and layer arrangement in accordance with the membrane documentation
- ☐ No wrinkles, blisters, detachments or insufficiently heated spots
- ☐ Base-layer membrane covered with the layer required by the system
- ☐ Combustible materials protected, area checked after the work

Technical and execution references

[MATIZOL: Installation instructions for torch-on membranes](#)

[WERNER JANIKOWO: Installation instructions for torch-on membranes](#)

PN-EN 13707:2013-12: definitions and properties of roofing membranes

[Regulation of the Polish Minister of the Interior and Administration of 7 June 2010, § 36: hot work](#)

The overlap dimensions and the detail technology are determined by the documentation of the chosen membrane and the design. The product standard does not replace the installation instructions of the system.