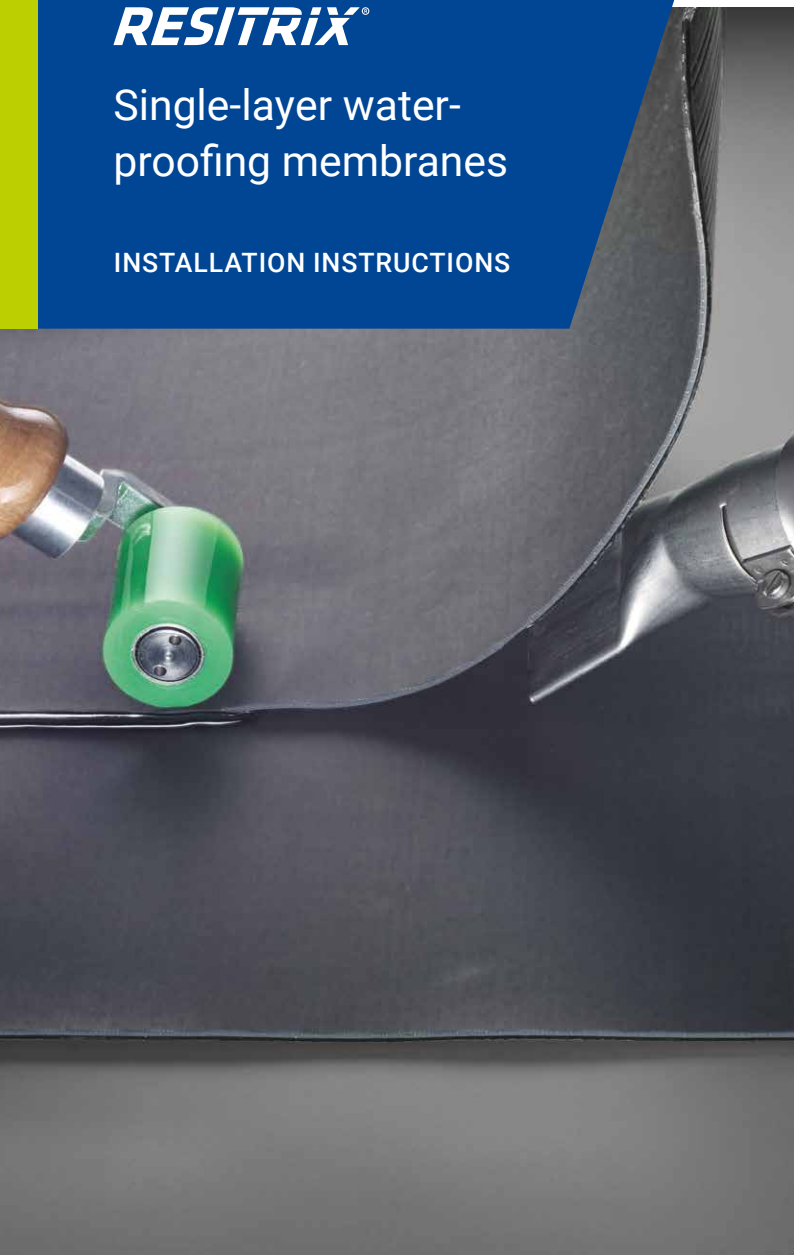
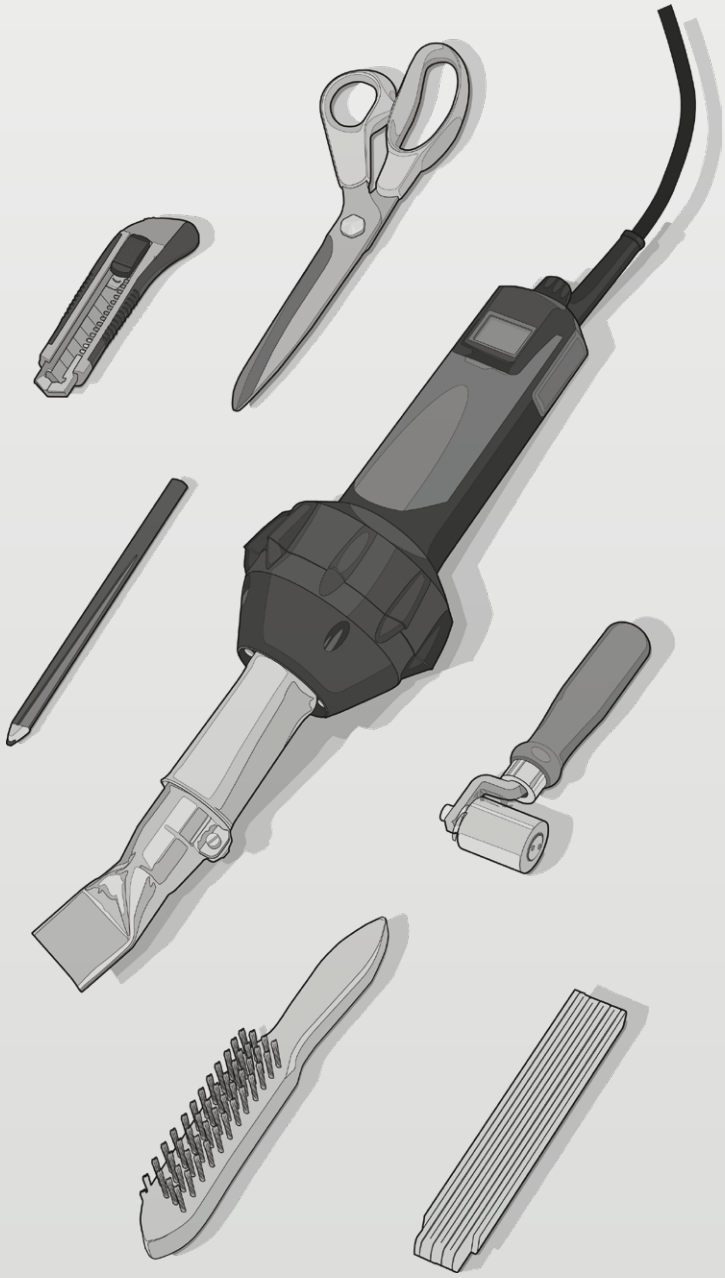
CARLISLE
CM EUROPE

RESITRIX®

Single-layer water-proofing membranes

INSTALLATION INSTRUCTIONS





Foreword

These installation instructions provide information about the materials and, in conjunction with the RESITRIX® specification guidelines, provide a basis for planning the installation and specifying RESITRIX® waterproofing membranes.

They support the installer in combination with practical training at our CARLISLE® ACADEMY and/or directly at the construction site. The essential installation steps are described in text form and are also illustrated with graphics, images, pictures and drawings.

Under some circumstances, other local conditions or material combinations not described here may affect the functionality. Please contact the Technical Department for specific and detailed substrate requirements and installation instructions for individual projects.

The information and the product descriptions in this publication are based on our experience and test results and are correct to the best of our knowledge and belief. They are the basis for all of the solutions described here. Claims for compensation may not be derived from the contents of this publication. We reserve the right to make technically feasible design and structural modifications to our product range in accordance with our high standards regarding quality and continuous advancement. These installation instructions replace and supersede all previous editions, which thereby become invalid.

June 2026

You can find our RESITRIX® Installation video on our YouTube channel here:
https://youtu.be/ma3CDMiltXk?si=G0p6B0quXUSKcsAT

Contents

Foreword	**3**
General requirements	**7**
Basic rules	7
Important installation instructions	**8**
1. Product and material description	**12**
1.1 RESITRIX® EPDM waterproofing membranes	12
1.1.1 RESITRIX® CL W	13
1.1.2 RESITRIX® MB	13
1.1.3 RESITRIX® SK W Full Bond	13
1.1.4 RESITRIX® SK Partial Bond	13
1.2 RESITRIX® Material	14
1.2.1 Material structure	14
1.2.2 Material properties	14
1.3 Transport and storage	15
1.4 RESITRIX® system accessories	16
1.4.1 Surface primer FG 35	16
1.4.2 Surface primer FG 40	16
1.4.3 Cleaner G 500	17
1.4.4 PU adhesive PU-LMF-02	17
1.4.5 Silver-coloured coating ALULON	18
1.5 RESITRIX® accessories for detailed formations	19
1.5.1 RESITRIX® corner blanks	19
1.5.2 RESITRIX® sleeve, small	19
1.5.3 RESITRIX® sleeve, medium	20
1.5.4 RESITRIX® sleeve, large	20
1.5.5 Lightning protection bracket	20
1.5.6 PV bracket	21
2. Tools	**22**
2.1 Personal tools	22
2.1.1 RESITRIX® silicone pressure roller	22
2.1.2 Brass pressure roller	22
2.1.3 RESITRIX® scissors	22
2.2 Welding with the manual welder	23
2.3 Welding using the automatic welding machine	24
2.4 Priming using the sprayer	26
3. Installation instructions	**30**
3.1 Overview of the installation options	30
3.2 General installation instructions	32
3.2.1 Substrate requirements	32
3.2.2 Self-adhesive, bonded, loosely laid under ballast and green roof	33
3.2.3 Loosely laid, mechanically fastened	33
3.2.4 Consumption quantities for primer and adhesive	34
3.3 Self-adhesive installation options	36
3.4 Bonded installation options	37
3.4.1 RESITRIX® CL W bonding in strips using PU adhesive PU-LMF-02	37
3.4.2 Bonding of RESITRIX® CL W using hot bitumen	37
3.5 Loosely laid, mechanically fastened	38
RESITRIX® MB and RESITRIX® CL W	38
3.6 Loosely laid under ballast	39
RESITRIX® MB and RESITRIX® CL W	39
4. General description of connections and terminations	**40**
4.1 RESITRIX® SK W Full Bond and RESITRIX® SK Partial Bond	40
4.2 RESITRIX® MB and RESITRIX® CL W	40
4.3 Connecting a new RESITRIX® SK W waterproofing membrane to a weathered RESITRIX® waterproofing membrane	41
5. Inside and outside corners	**40**
5.1 Formation of inside corners (primer shown only as an example)	42
5.2 Formation of outside corners	50
6. Technical drawings, standard details	**58**
6.1 Roof edge finishes	58
6.1.1 Parapet edge seal	58
6.1.2 Parapet edge seal with greening and gravel strip	58
6.1.3 Eaves edge seal	60
6.2 Detailed connections	60
6.2.1 Wall connection	60
6.2.2 Connection of skylight element	62
6.2.3 Connection of penetration component	62
6.2.4 Connection of patio door	64
6.2.5 Connection of flat roof drain	64
6.2.6 Connection of emergency overflow	66
6.3 Waterproofing	66
6.4 Expansion joints	68
6.4.1 Expansion joint using RESIFLEX® SK	68
6.4.2 Movable component connection	68
6. Certificates	**70**
7. Notes	**71**

General requirements

Basic rules

- The latest valid editions of all relevant standards, regulations, directives and guidelines apply.
- In accordance with the technical regulations, a 2% gradient should be planned at the waterproofing level. If it is necessary to deviate from this, observe the specifications of the selected regulations.
- All RESITRIX® waterproofing membranes meet the material related requirements for the waterproofing of buildings as per BS6229:2025, BS EN 1504-2, BS 8102:2022 and other standards referenced in the BBA.
- Any preparatory work carried out by other trades must be suitable for the overall structure in question.
- These installation instructions cannot include all partial and special design solutions.
- The relevant national health and safety and accident prevention regulations must be observed. Please request the safety data sheets for the individual materials. Please refer to the safety data sheet for the waste code number.

In addition, please comply with the instructions on the packaging of the RESITRIX® system components.

Important installation instructions

During the planning and installation of the structure, as well as detailed solutions, the following individual instructions must be borne in mind:

- The slope is formed in accordance with the current technical regulations.
- All RESITRIX® waterproofing membranes can be welded down to an application temperature of -10 °C (the corresponding application temperature of the respective primer/adhesives must also be observed).
- The general substrate requirements for the respective design must be taken into account. In particular, the respective substrate must be tested with regard to material compatibility and mechanical stress. If necessary, suitable protective layers or separating layers made of raw glass or plastic fleece or bitumen membranes must be laid. For detailed information on the component-specific substrate requirements, please refer to the RESITRIX® planning guideline.
- Waterproof joints on a prepared reinforced concrete substrate, e.g. on areas subject to vehicle traffic, can be achieved by bonding RESITRIX® CL W over the entire surface using hot bitumen compound. Furthermore, technical test evidence is available for the full-surface self-adhesion of RESITRIX® SK W Full Bond after priming with FG 35 (test report (No. PB5.1/16-452-1) issued by MFPA Leipzig on 23 May 2017).
- Suitable additional measures must be taken above expansion joints, e.g. by installing the expansion joint tape RESIFLEX® SK.
- It is recommended to extend the surface waterproofing upwards by approx. 50 mm in front of rising components in order to minimise the risk of water ingress.
- In the area around roof drains, the substrate should be lowered by at least 1 cm over an area of at least 0.5 m² (0.7 x 0.7 m) to allow rainwater to drain away more quickly. Roof drains should be positioned as centrally as possible within a seamless area of the RESITRIX® waterproofing membranes.
- Working with solvent-based substances, such as FG 35 and FG 40, requires appropriate safety measures. Ensure there is adequate ventilation.

Aggressive degradation products of bituminous materials

The oxidation of unprotected bituminous materials caused by UV radiation and weathering results in the formation of highly acidic degradation products on the surfaces of bituminous membranes, coatings, paints, shingles and ECB membranes. In combination with rain, external dew and condensation water, this may result in highly acidic solutions with a pH value ranging from approx. 1.8 to 2.5. Metals arranged underneath in the direction of flow, such as lead, steel and zinc, will sooner or later be partially destroyed by corrosion. Connections and terminations, eaves flashing, gutters and downpipes below the above-mentioned surfaces are considered to be particularly at risk. According to current knowledge, commercially available grit-coated membranes do not provide sufficient protection. In the case of RESITRIX® waterproofing membranes, signs of corrosion are generally to be expected, regardless of the colour of the surface.

The usability of rainwater using RESITRIX® waterproofing membranes

Some roofing materials are unsuitable, or only suitable to a limited extent, for collecting and reusing water in the garden and around the home. These roofs include certain metal roofs and bituminous waterproofing membranes. We do not recommend using rainwater unless appropriate measures are taken. (Source: Federal Environment Agency, Topic: Using rainwater)

Corrosion protection measures

Use of an effective surface protection layer applied over the bituminous materials, with a thickness of at least 5 cm (e.g. gravel ballast).

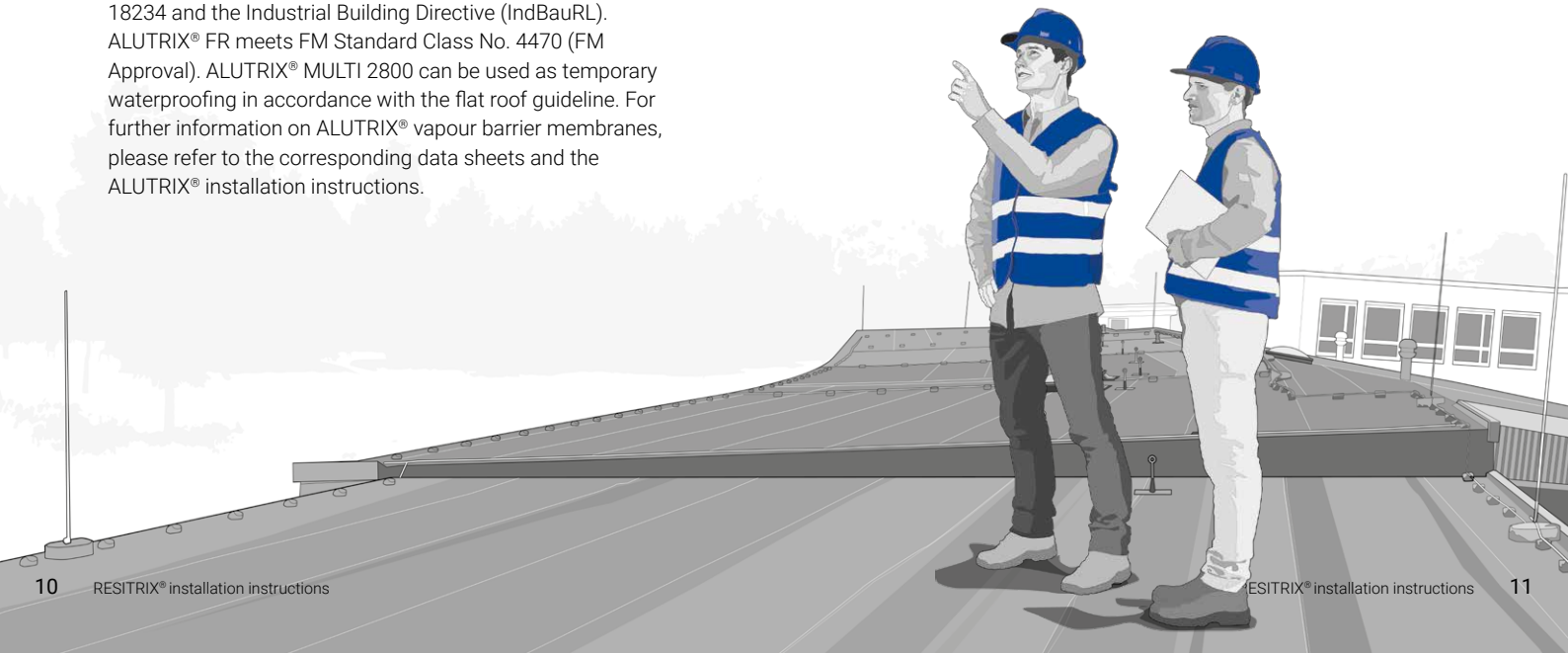
Use of materials which are largely resistant to highly acidic residues, e.g. stainless steel (material no. 14401; 1.4404; 1.4436; 1.4571), suitable plastics, aluminium or corresponding factory-coated materials.

Use of non-porous, full-surface protective coatings, using products recommended for this purpose by the materials or paint manufacturer. Gutters must be fully painted on the inside. For connection and termination plates, the coating must be applied at least 2 cm above the surface of the roof covering. Such protective coatings require regular maintenance and care.

The required intervals depend on the local conditions and the coating material.

Information regarding suitable anti-corrosion coatings can be obtained from the relevant material manufacturers or advisory bodies.

- Depending on the single layers and in conjunction with the roof geometry, additional measures may need to be taken to prevent slipping.
- In the case of direct renovation on single-layer waterproofing membranes which are prone to shrinkage, prior consultation with our application technology department is required.
- We recommend installing the self-adhesive aluminium vapour barrier membranes ALUTRIX® FR, ALUTRIX® FR B1, ALUTRIX® 600 or the self-adhesive bitumen vapour barrier membrane ALUTRIX® MULTI 2800 as vapour barrier membranes on trapezoidal steel profiles and on wood and wood-based materials. We recommend installing bitumen vapour barrier membranes ALUTRIX Multi 2800 on concrete. The tear-resistant and puncture-resistant membranes have an equivalent air layer thickness (sd value) of > 1,500 m. ALUTRIX® FR and ALUTRIX® FR B1 also have a calorific value of less than 10,500 kJ/m² and a combustion value of less than 11,600 kJ/m² and therefore fulfil the fire protection requirements of DIN 18234 and the Industrial Building Directive (IndBauRL). ALUTRIX® FR meets FM Standard Class No. 4470 (FM Approval). ALUTRIX® MULTI 2800 can be used as temporary waterproofing in accordance with the flat roof guideline. For further information on ALUTRIX® vapour barrier membranes, please refer to the corresponding data sheets and the ALUTRIX® installation instructions.
- When installing thermal insulation made of polystyrene rigid foam boards under weather-exposed waterproofing membranes, observe their limited temperature resistance. As this temperature resistance may be exceeded within localised roof areas with increased heat accumulation, for example in front of heat-reflecting light-coloured or glazed facades, we recommend installing additional ballast or using alternative thermal insulation materials in such cases.
- Edge fixing must be carried out in accordance with the agreed regulations (Trade Body Guidance and BS6229:2025). Outside Germany, the country-specific requirements must be observed!
- To ensure that the overall waterproofing system achieves its maximum service life, regular care, inspection and maintenance must be carried out in accordance with national guidelines. It is recommended to conclude a corresponding inspection and/or maintenance contract.



1. Product and material description

1.1 RESITRIX® EPDM waterproofing membranes

For more than 35 years, the RESITRIX® product range has been providing consistently reliable systems for sealing roofs, traffic-bearing surfaces, components in contact with the ground, interior spaces, canisters and facade areas, for both new builds and renovation projects. We also have the right product for all types of green roofs. To ensure the best possible solution for your project, we offer RESITRIX® waterproofing membranes suitable for every individual layer structure, available in various installation options.

Waterproofing membranes can only be as good as the materials they are made of. RESITRIX® combines the excellent properties of EPDM with the proven benefits of high-quality polymer-modified bitumen in a unique material blend, resulting in a highly flexible, single-layer waterproofing membrane.

Thanks to the polymer bitumen layer on the underside, the material can be laid on almost all substrates. The membranes can also be welded together easily, quickly and safely at any point using a hot-air gun without an open flame. Additional measures within T-joint areas are not required.

Colour deviations

In the case of RESITRIX® EPDM membranes, production-related colour variations cannot always be ruled out; however, these do not affect the properties of our EPDM products.

1.1.1 RESITRIX® CL W

RESITRIX® CL W is the classic, hot-air-weldable EPDM waterproofing membrane with root penetration resistance in accordance with FLL and DIN EN 13948. Can be used under all types of green roofs.

1.1.2 RESITRIX® MB

RESITRIX® MB is a hot-air-weldable EPDM waterproofing membrane, specifically designed for mechanical fastening and loose installation.

1.1.3 RESITRIX® SK W Full Bond

RESITRIX® SK W Full Bond is a full-surface self-adhesive and hot-air-weldable EPDM waterproofing membrane with root penetration resistance in accordance with EN 13948 (FLL under test).
RESITRIX® SK W Full Bond can be laid on a variety of substrates, for example as a fully bonded system under all types of green roofs.

1.1.4 RESITRIX® SK Partial Bond

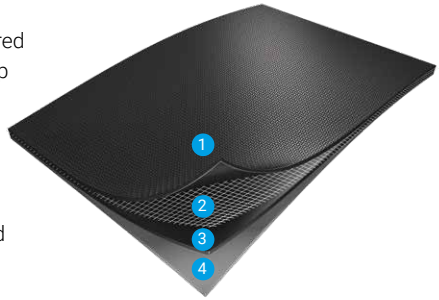
The hot-air-weldable EPDM waterproofing membrane is partially self-adhesive.

RESITRIX® SK Partial Bond can be used on materials and substrates prone to movement.

1.2 RESITRIX® material

1.2.1 Material structure

1. EPDM with textured surface – non-slip
2. Glass fibre reinforcement
3. EPDM
4. Polymer-modified bitumen



1.2.2 Material properties

	RESITRIX®SK W Full Bond	RESITRIX®SK Partial Bond	RESITRIX®MB RESITRIX®CL W
Total thickness	2.5 mm	2.7 mm	3.1 mm
Weight	2.8 kg/m²	2.9 kg/m²	3.5 kg/m²
Length	10 m	10 m	10 m
Width	1 m*	1 m*	1 m*
Thickness of the EPDM layer	1.3 mm	1.3 mm	MB 1.3/CLW 1.5
Membrane designation according to DIN/TS 20000-201 (applies to roof waterproofing)	DE EPDM-BV-V-GG-1,5-SK	DE/E1 EPDM-BV-V-GG-1,5-SK	DE EPDM-BV-V-GG-1,5-PBS

* Cut strips on request

1.3 Transport and storage

RESITRIX® SK W Full Bond RESITRIX® SK Partial Bond	RESITRIX® MB RESITRIX® CL W
The rolls must be stored and transported in a cool (between +5 °C and +25 °C) and dry place in an upright position. The individual pallets must not be stacked on top of each other. The maximum storage time in the original packaging is 24 months from the date of manufacture. The rolls must be protected against direct sunlight using the release film provided or a light-coloured tarpaulin. Particularly in strong sunlight, ensure that the roll removed from the pallet is processed immediately. The remaining rolls on the pallet must be protected as described above.	The rolls must be stored and transported in a cool (between +5 °C and +25 °C) and dry place in an upright position. The individual pallets must not be stacked on top of each other. The maximum storage time in the original packaging is 24 months from the date of manufacture.

1.4 RESITRIX® system accessories

Working with solvent-based substances, such as FG 35 and FG 40, requires appropriate safety measures. Ensure there is adequate ventilation.

1.4.1 Surface primer FG 35

The FG 35 surface primer is used in combination with the self-adhesive RESITRIX® waterproofing membranes on a wide variety of substrates. FG 35 is a solvent-based primer made of synthetic rubber and resins. For more information, please refer to the corresponding product data sheet.

1.4.2 Surface primer FG 40

The FG 40 surface primer is used in combination with the self-adhesive RESITRIX® waterproofing membranes on unlaminated EPS rigid foam boards, type DAA-dm or DAA-dh. For more information, please refer to the corresponding product data sheet.

1.4.3 Cleaner G 500

The G 500 cleaner is suitable for degreasing and cleaning metal substrates and for cleaning lightly soiled surfaces and devices. It should be stored in a cool and dry place.

1.4.4 PU adhesive PU-LMF-02

The PU adhesive is a solvent-free and plasticiser-free, free-flowing single-component polyurethane adhesive, specifically designed for surface bonding the waterproofing membrane RESITRIX® CL W.

1.4.5 Silver-coloured coating ALULON

ALULON® is a silver-grey coating which protects the roof from sunlight and other weather conditions. Thanks to its reflective properties, it protects against UV radiation and reduces the build-up of heat in the rooms below.

Please follow the safety instructions on the container labels or the safety data sheet.

1.5 RESITRIX® accessories for detailing work

1.5.1 RESITRIX® corner pieces

Specially prefabricated punched parts are available for sealing any corners. These punched parts enable the quick and convenient formation of inside and outside corners.

The cut pieces are made up of a circle with notching for external corners, a closed circle for internal corners and an oval tongue as an add-on for internal and external corners. The cut pieces have a minimum width of 25 cm. Alternatively, it is also possible to use manual cut pieces with the same dimensions.

1.5.2 RESITRIX® pipe sleeve, small

The RESITRIX® pipe sleeve is a prefabricated, weldable sleeve for sealing round roof penetrations with a diameter of 5-35 mm. Available with a round or square sleeve.

1.5.3 RESITRIX® pipe sleeve, medium

The RESITRIX® pipe sleeve is a prefabricated, weldable sleeve for sealing round roof penetrations with a diameter of 35-50 mm. Available with a round or square sleeve.

1.5.4 RESITRIX® pipe sleeve, large

Prefabricated, weldable RESITRIX® sleeve for sealing round roof penetrations with a diameter of 35-100 mm.

1.5.5 Lightning protection bracket

The bracket system for guiding and fastening lightning protection cables has a diameter of max. 10 mm on flat roof structures without ballast.

1.5.6 PV bracket

The brackets for photovoltaic systems with EPDM sleeve are ideal for mounting solar panels on pitched and flat roofs. The brackets are mechanically fastened to the supporting structure and connected to the RESITRIX® surface waterproofing with corresponding sleeves to make them permanently watertight.

2. Tools

2.1 Personal tools

The following tools are required for installing RESITRIX® waterproofing membranes:

- Manual welder (e.g. Leister with nozzle width of 40 mm)
- Silicone pressure roller (width: 40 mm)
- Wire brush
- Brass pressure roller
- Scissors
- Folding rule or tape measure
- Cutter
- Crayon
- Chalk line
- Possibly Kehl-Fix
- Possibly pressure roller
- Possibly broom (hard bristles)

2.1.1 RESITRIX® silicone pressure roller

The silicone pressure roller allows professional and comfortable application of the hot-air-weldable RESITRIX® waterproofing membranes and is specifically designed for professional application: well-balanced, stable and built to last.

2.1.2 Brass pressure roller

Double-sided brass hand roller with a ball-bearing-mounted all-metal wheel.

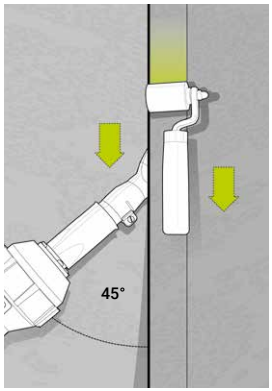
2.1.3 RESITRIX® scissors

Thanks in particular to their sharpness, the RESITRIX® scissors offer optimum flexibility and ensure clean, precise cutting of RESITRIX® waterproofing membranes.

2.2 Welding with the manual welder

A test weld must always be carried out beforehand. Please select a welding temperature setting between approx. 500 °C and a maximum of 620 °C. The optimum setting depends on the ambient temperature, the wind conditions and the nature of the substrate.

- Guide the welding nozzle into the overlap at an angle of approx. 45°.
- Guide the roller parallel to the edge of the membrane (gap approx. 2 mm).
- A bitumen bead of approx. 2-4 mm is clearly visible at the edge of the membrane (visual seam inspection).
- The distance between the welding nozzle and the silicone pressure roller is approx. 20-40 mm.



General note:

- When installing on unprotected EPS rigid foam, the minimum overlap must be increased by at least 3 cm.

2.3 Welding using the automatic welding machine

A preliminary test weld is always recommended and should always be carried out. Welding parameters recommendation: 500 °C at 2.4 m/min up to 620 °C at 3.4 m/min at 90% air. Different settings are possible.

The pressure roller of the automatic welding machine is guided exactly along the upper edge of the membrane (distance between the nozzle and pressure roller must be set to the maximum). A bitumen bead of approx. 2-4 mm emerges very visibly at the edge of the membrane, allowing easy visual inspection of the weld seam.

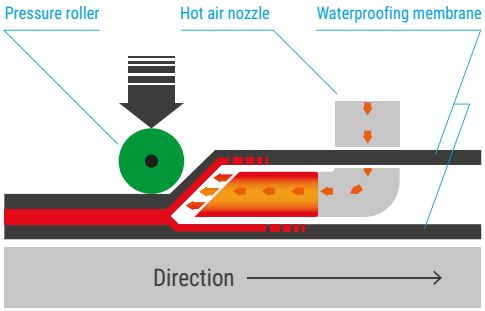
After interrupting the welding process, always resume welding immediately at the previous welding end and continue the process at this point. To do this, 2-3 cm of the welded end must be loosened.

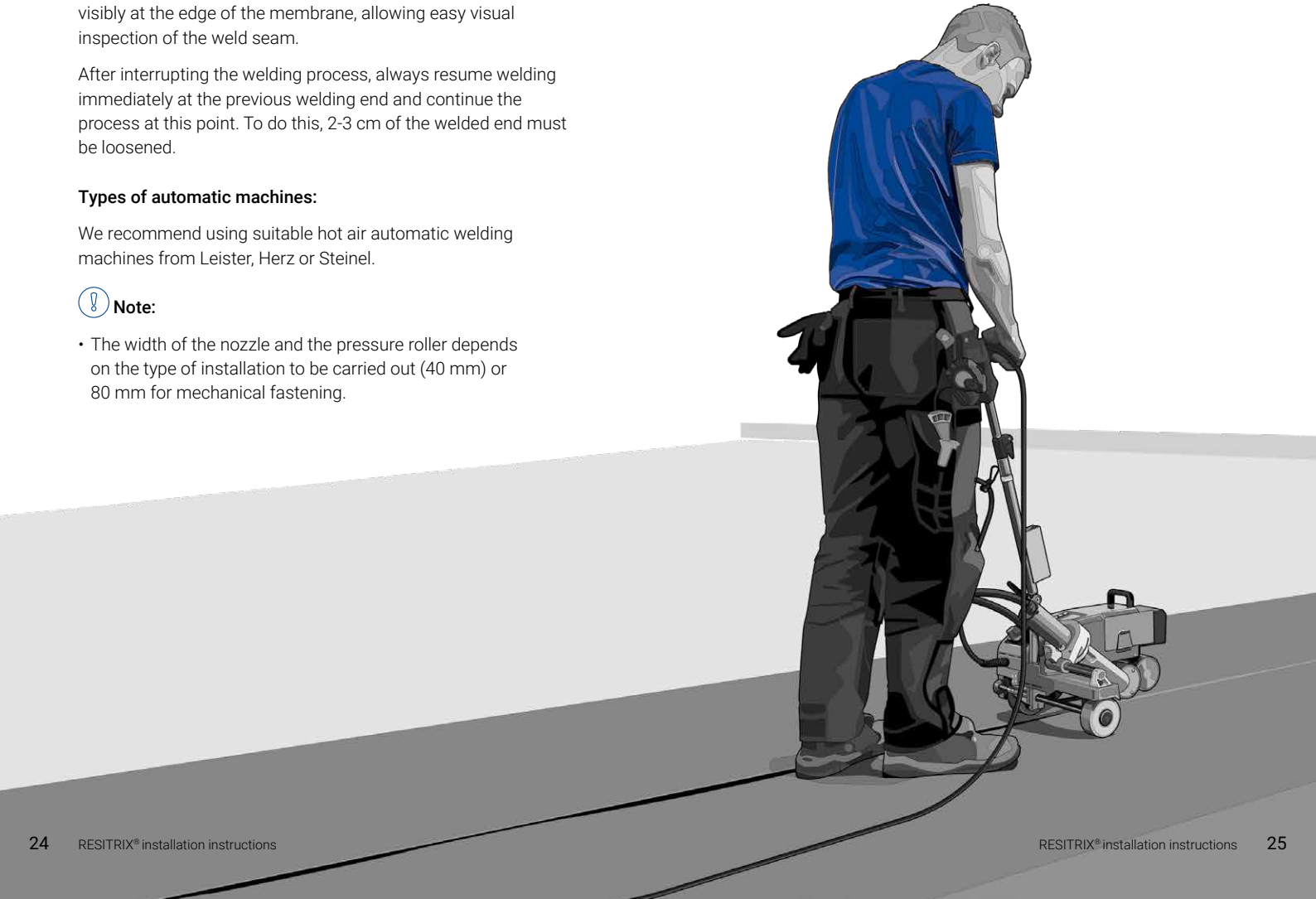
Types of automatic machines:

We recommend using suitable hot air automatic welding machines from Leister, Herz or Steinel.

Note:

- The width of the nozzle and the pressure roller depends on the type of installation to be carried out (40 mm) or 80 mm for mechanical fastening.





2.4 Priming using the sprayer

The FG 35/FG 40 pressurised canister spray system includes a ready-to-use primer which can be applied directly without the need for a compressor or a power supply.

To apply primer using a spray diffuser (mechanical application), you will need:

1. 14.4 kg pressurised canister FG 35/FG 40 (disposable)
2. Connecting hose (length: 1.50 m and 5.49 m)
3. Stainless steel spray gun including extension piece (spray lance)
4. CARLISLE® backpack for pressurised canister, optional

Before use

- Ensure that all parts of the pressurised canister spray system (disposable canister, connecting hose, spray gun and lance) are undamaged and free from defects.
- Please shake the pressurised canister thoroughly before use.

Structure and assembly

The individual components which can be screwed together must be connected to each other. In doing so, ensure that the coupling nuts have been tightened. Close the adjusting nut on the spray gun.

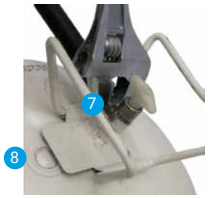
Important:
Please be sure to read the set-up instructions before use!

FG 35 FG 40

Use/handling:

- Before using the spray diffuser for the first time, fully open the valve on the pressurised canister. Check the system for leaks.
- Regulate the flow of primer using the adjusting nut on the spray gun to achieve an even spray pattern.
- After completing the spraying process, close the adjusting nuts on the spray gun and on the pressurised canister.

Please do not fully unscrew the adjusting nut on the spray gun as it does not have an end lock. Otherwise the primer would escape uncontrollably.



Transport:

When transporting a full or partially emptied pressurised canister, remove the hose and spray gun.

- Close the locking bolt on the spray canister
- Remove any residual primer from the hose
- Close the adjusting nut on the spray gun
- Detach the hose from the spray canister
- Screw the locking screw onto the hose

1. Connect the spray gun to the hose and screw on tightly using the coupling nut.
2. Spray gun
3. Adjusting nut
4. Nozzle
5. Connection hose
6. Adjusting nut does not have an end stop!
7. Connection hose on the canister valve
8. Rupture joint. Strike to harden the product residue

Change canister

- After closing the canister valve, the spray gun is opened to relieve the pressure. After closing the adjusting nut on the spray gun, the accessories can be reconnected to a new canister.

Disposal:

- The valve on the empty pressurised canister is opened so that the remaining pressure can be released. This process should take place outdoors, as any residual primer and solvent can still escape. The residual pressure is completely released after at least 24 hours. After opening a predetermined breaking point next to the valve, product residue may harden.

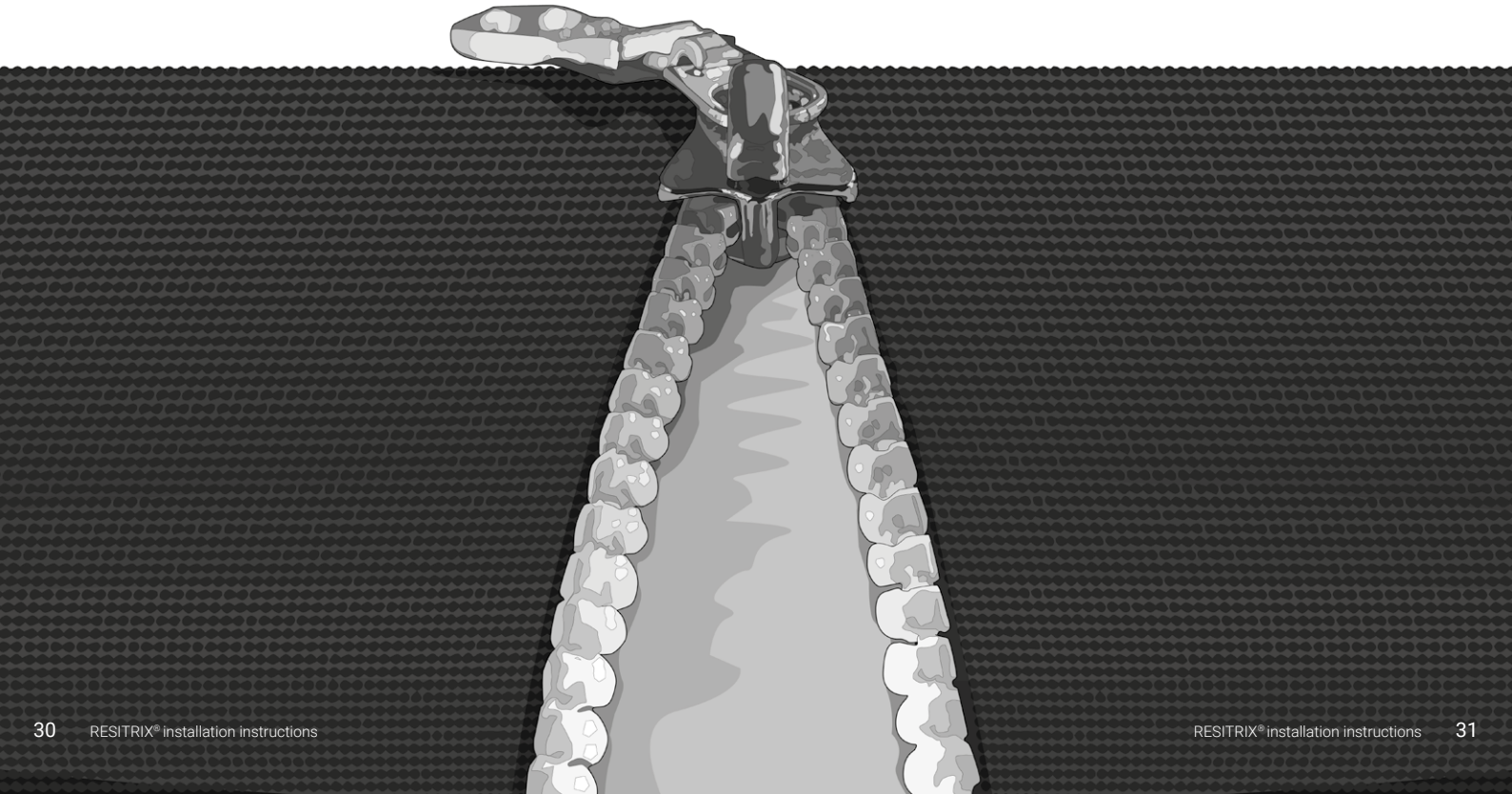
Follow your local authority guidelines for safe disposal.

3. Installation instructions

3.1 Overview of installation variants

Installation	Partial bonding	Full-surface bonding		Priming	Mechanically fixed	Loose laid
RESITRIX® CL W	using PU adhesive PU-LMF-02	using hot bitumen		-	using building authority approved fasteners*	ballasted
RESITRIX® MB	–	–		-	using building authority approved fasteners	ballasted
RESITRIX® SK W Full Bond	–	using FG 35, on unlaminated EPS rigid foam using FG 40		Full-surface		ballasted*
RESITRIX® SK Partial Bond	using FG 35, on unlaminated EPS rigid foam using FG 40	–		Full-surface		ballasted*

* possible, but not standard variant!

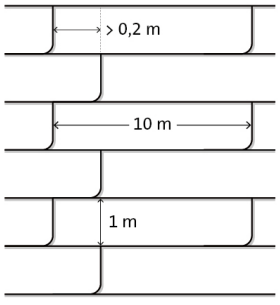


3.2 General installation instructions

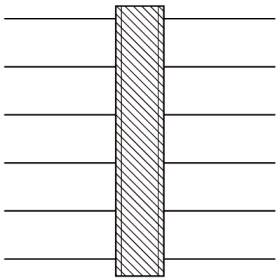
Our technical department is always available to answer any questions you may have about specific and detailed substrate requirements, structural-physical calculations, CAD drawings or further tests, such as wind suction tests in our in-house test laboratory. Please contact the technical department even for individual processing instructions.

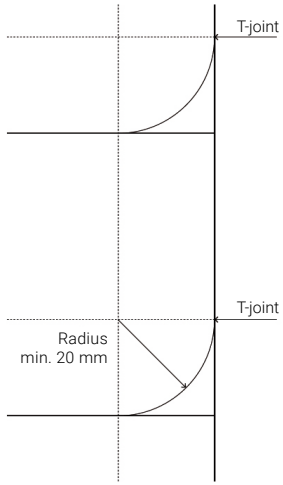
3.2.1 Substrate requirements

The substrate must be level, free of tension, bubbles, creases, sharp edges, burrs, rough sections, damaging joints, etc. For bonded installation variants, the substrate must also be dry and frost-free.



Avoid 4-way overlaps


Membrane layout pattern with staggered end-laps or grid lay-out



The visible corners of the waterproofing membranes must be rounded off

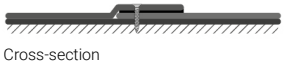
3.2.2 Self-adhesive, bonded, loose-laid, ballasted and green roof

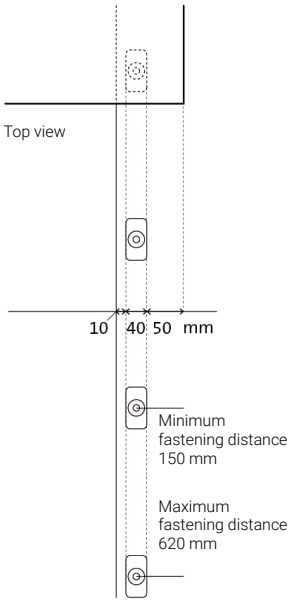
An overlap of at least 50 mm is required. On unlaminated polystyrene rigid foam, the overlap is 80 mm. The welding width must be at least 40 mm. Accordingly, a nozzle width of 40 mm should be used.

(D) Edge fixing must be carried out in accordance with the BS6229:2025. Deviations from these aforementioned solutions must be agreed in individual contracts.

3.2.3 Loose-laid, mechanically fixed

An overlap of at least 100 mm is required. On unlaminated polystyrene rigid foam, the overlap is 130 mm. The welding width must be at least 80 mm. Accordingly, a nozzle width of 80 mm should be used. The overlap between the upper edge of the membrane and the retaining plate is 50 mm. The gap between the lower edge of the membrane and the retaining plate is 10 mm (for a total overlap of 100 mm) and 40 mm (for a total overlap of 130 mm). This gap, as well as the total overlap, can be further increased by using retaining plates with a larger diameter or greater width.
It is important that the fastener lies within the welded seam. The specified dimensions must be strictly observed.


Cross-section



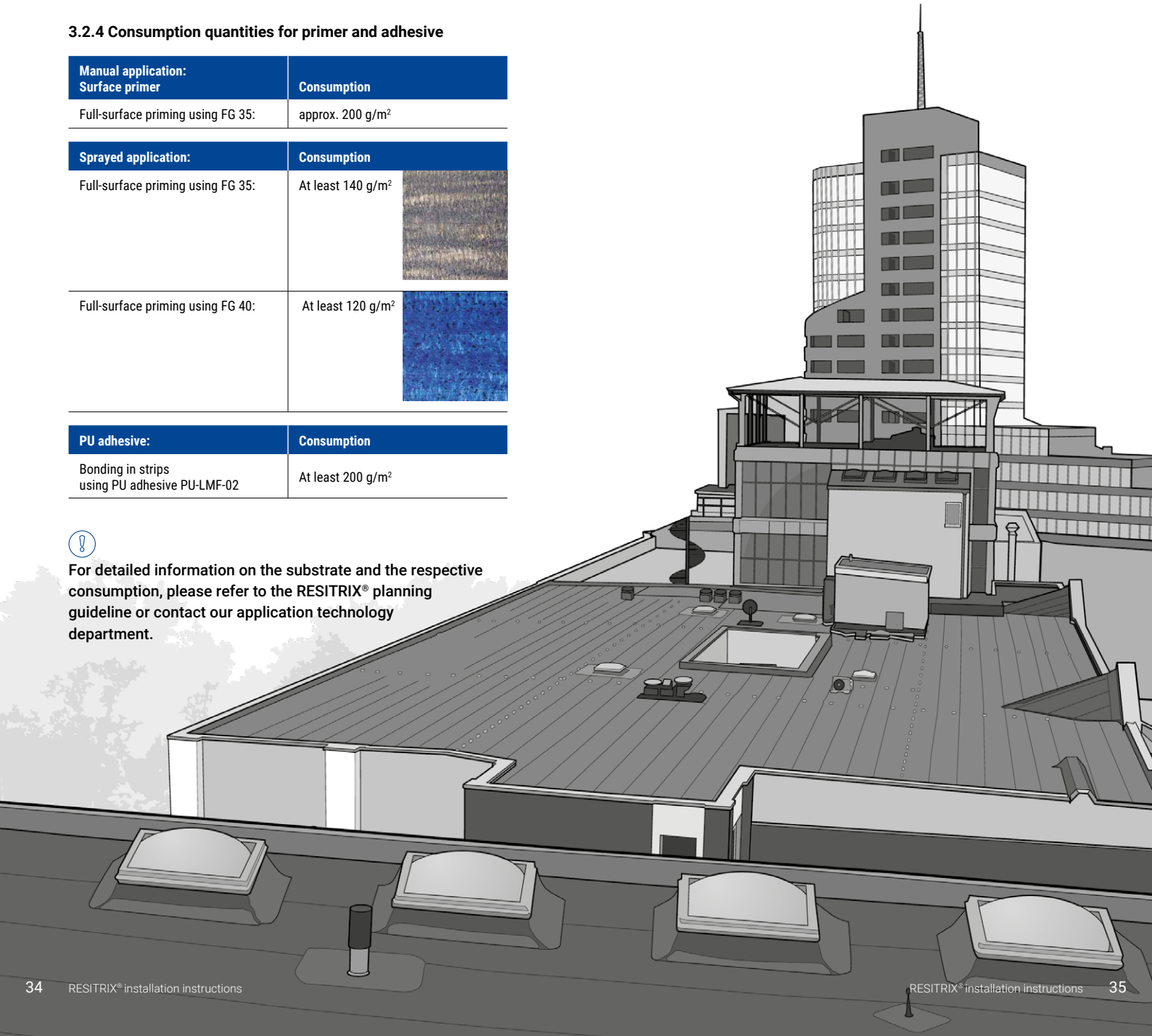
3.2.4 Consumption quantities for primer and adhesive

Manual application: Surface primer	Consumption
Full-surface priming using FG 35:	approx. 200 g/m²

Sprayed application:	Consumption
Full-surface priming using FG 35:	At least 140 g/m²
Full-surface priming using FG 40:	At least 120 g/m²

PU adhesive:	Consumption
Bonding in strips using PU adhesive PU-LMF-02	At least 200 g/m²

For detailed information on the substrate and the respective consumption, please refer to the RESITRIX® planning guideline or contact our application technology department.



3.3 Self-adhesive installation variants

Installing the self-adhesive waterproofing membranes RESITRIX® SK W Full Bond and RESITRIX® SK Partial Bond. After the surface primer has been applied and allowed to flash off, roll out and align the membranes so that the edges are straight, ensuring the specified overlap. The release film applied to the back must then be removed.

1.

- After the surface primer has sufficiently flashed off, immediately roll out the waterproofing membranes with an overlap width of 50 mm or 80 mm for EPS insulating materials.
- Fold down the first metre of the membrane and remove the release film from the underside.

2.

- Fold back the first metre of the membrane evenly and without creases, using both hands.
- Press down this area, e.g. using a broom. Pressing and tensioning the membrane properly will have a significant impact on the subsequent installation pattern!

3.

- Roll out the remaining membranes.
- One person tensions and readjusts the alignment of the membrane by lifting and pulling it taut as required (ensure the 50 mm or rather 80 mm minimum lap width!).
- The second person pulls off the release film diagonally in the longitudinal direction.

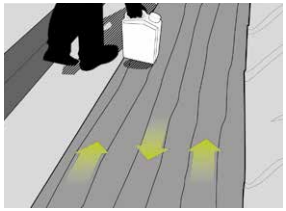
4.

- Press down the membrane, e.g. using a broom or pressure roller, starting in the centre of the membrane and working towards the outer areas to prevent air pockets.
- The overlaps are then welded together over a width of 40 mm (also using a 40 mm nozzle width on the automatic welding machine).

3.4 Bonded installation variants

3.4.1 RESITRIX® CL W bonding in strips using PU adhesive PU-LMF-02

Roll out and align the RESITRIX® waterproofing membranes so that the edges are straight, ensuring the specified overlap. Then fold back the membranes in the longitudinal direction.



- Drill a hole in the base of the canister, distance according to wind suction calculation. If there are air pockets, open the cap briefly.
- Apply the PU adhesive (see graphic)
- Fold down the membrane
- Keep the overlaps free of PU adhesive
- Press down the strip, e.g. using a broom or pressure roller
- The overlaps are then welded together over a width of 40 mm (also using a 40 mm nozzle width on the automatic welding machine).

3.4.2 Bonding of RESITRIX® CL W using hot bitumen

Roll out and align the RESITRIX® waterproofing membranes so that the edges are straight, ensuring the specified overlap. After making the alignment, roll the corresponding membrane back halfway. Pour out hot bitumen and spread over the entire adhesive surface using a brush. Observe the requirements set out in the regulations. Ensure that the membrane overlaps are kept free of hot bitumen. Then roll out the second half of the membrane and bond it using hot bitumen in the same way. Finally, the overlaps are welded together over a width of 40 mm, also using a 40 mm nozzle width on the automatic welding machine.

You can find our RESITRIX® Installation video here:
https://youtu.be/ma3CDMiltXk?si=G0p6B0quXUSKcsAT

3.5 Loose-laid, mechanically fixed

RESITRIX® MB and RESITRIX® CL W

Roll out and align the RESITRIX® waterproofing membranes so that the edges are straight, ensuring the specified overlap.

Preferably, the fasteners should be arranged within the membrane overlaps. If there is a high wind suction load, narrower membranes may need to be laid (e.g. within roof edge or roof corner areas).

Alternatively, additional fastening is within the centre of the membrane using separate cover strips made of RESITRIX® SK W Full Bond. The cover strips are welded over the entire surface or additionally bonded between the welded areas in the centre and over the entire surface after priming with FG 35.

The fasteners to be used, including retaining plates, must be approved by the building authorities. An increase in the rated load of 400 N is possible after prior testing by the technical department. A fastening plan must be drawn up for this purpose.

When screwing on the fasteners, the contact pressure must be selected so that creases and ripples in the seam area are completely eliminated following the subsequent welding.

Important:
To prevent creasing, we recommend first welding the overlap and then mechanically fastening the membrane on the other side.

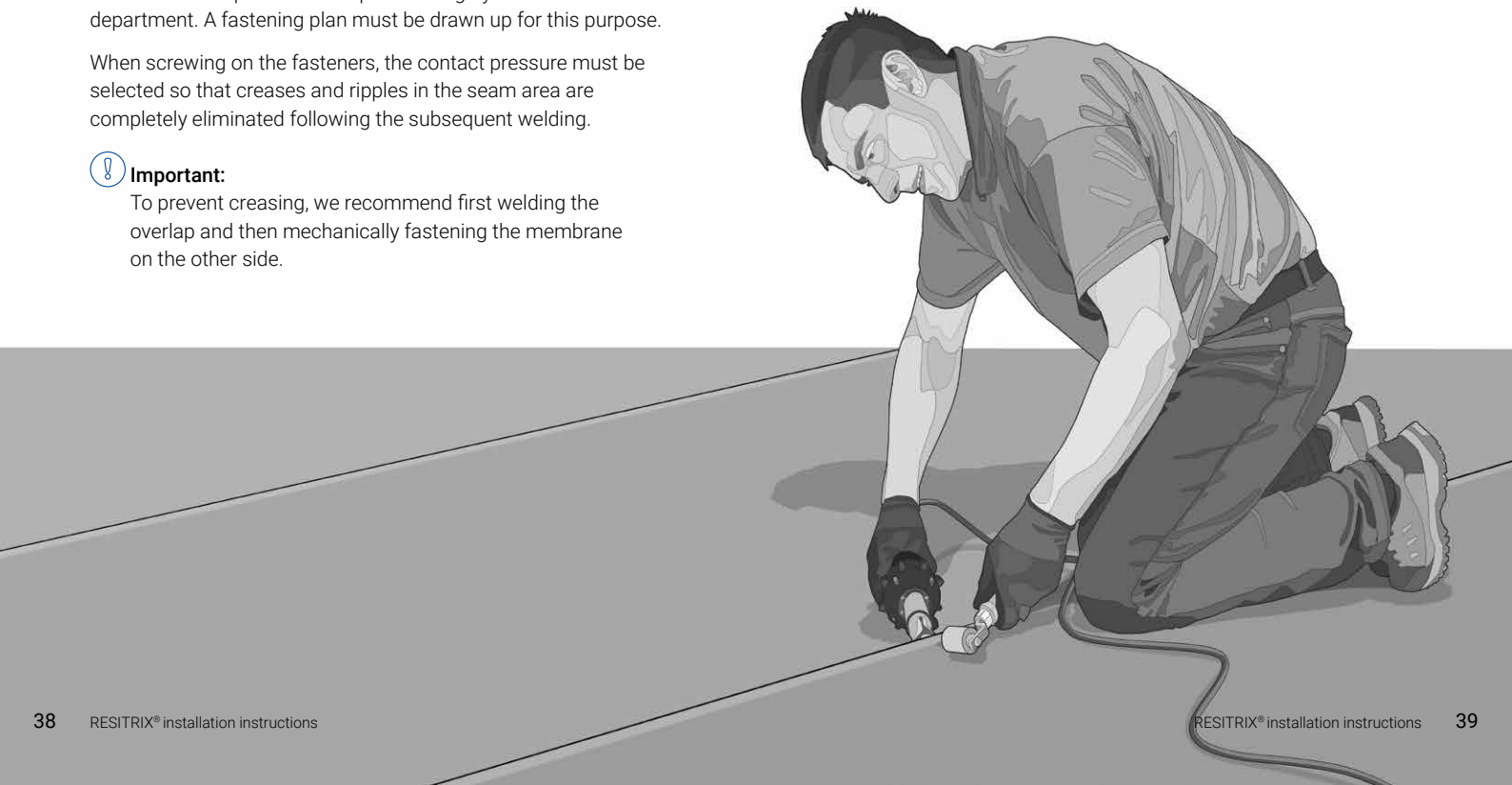
3.6 Loose-laid and ballasted

RESITRIX® MB and RESITRIX® CL W

Roll out and align the RESITRIX® waterproofing membranes so that the edges are straight, ensuring the specified overlap.

The type, arrangement and surface weight of the ballast depend on the conditions of use and the underlying wind suction calculation.

Important:
For specific details regarding installation and any individual requirements on site, please contact our technical department.



4. General description of connections and terminations

4.1 RESITRIX® SK W Full Bond and RESITRIX® SK Partial Bond

Connection and termination areas made of unlaminated EPS must always be primed with FG 40. If the roof surface is primed with FG 40, the connections and terminations can also be primed with FG 40. The application is carried out always over the entire surface using a sprayer. The FG 35 surface primer can be applied either manually or sprayed on. The release film on the back of the separate connection strip must be removed; however, the overlap area to the roof surface membrane must not be removed until just before the welding process. Press or roll on the connecting membrane evenly and firmly to ensure continuous adhesion. The length of the strip depends on the type and processing of the connection or termination area. It must be selected in such a way that it can be laid without creases. The overlap on the roof side is at least 100 mm when welding with a manual welder, at least 150 mm when welding with an automatic welding machine.
The welding width of the connection strip is at least 40 mm.
The surface primer is applied over the entire surface.

4.2 RESITRIX® MB and RESITRIX® CL W

Loosely extend separate connection strips up to the upper edge/front edge of the connection or termination area.
Top-mounted mechanical fixing of the connection strip to prevent water penetration. Furthermore, an additional mechanical intermediate fixing is required for connection or termination heights above 500 mm.

4.3 Connecting a new RESITRIX® SK W waterproofing membrane to a weathered RESITRIX® waterproofing membrane

- Roughen the area to be reworked using a wire brush
- Remove dust and dirt particles (e.g. using a broom)
- Clean the area using the G500 cleaner
- Prime the area using surface primer FG35
- Hot-air weld the area with the connection material (observe the overlap width of at least 5 cm and welding width of at least 4 cm)

5. Inside and outside corners

The corners are best formed using flat, prefabricated punched parts made of RESITRIX® SKW. These punched parts are prefabricated to the correct shape, enabling the quick, safe and convenient formation of inside and outside corners. The corner parts consist of 3 parts, two circles with a notch and a closed circle. Alternatively, the required corner parts can simply be cut to size directly on site from the sheeting, so that there is virtually no loss of material. To maintain the overlap width, the diameter and width of the punched parts/blanks must be at least 250 mm. The individual punched parts/blanks are welded to the connection strip with an overlap width of at least 40 mm over the entire surface using hot air. The seams of the individual punched parts/blanks are also joined by hot-air welding.

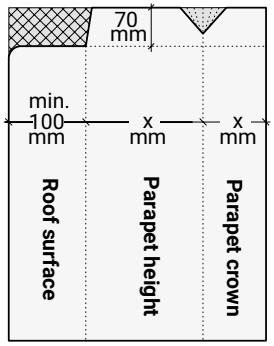
You can find our RESITRIX® Installation video here:
https://youtu.be/ma3CDMiltXk?si=G0p6B0quXUSKcsAT

5.1 Formation of inside corners (primer shown only as an example)

1.

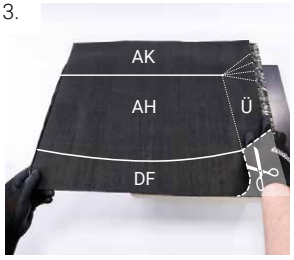
Position a membrane. If the edge is to be fixed into the parapet, we recommend line fastening. In the case of linear fastening, the Resitrix® surface waterproofing must be raised at least 60 mm up the parapet. The overlap area of the surface waterproofing must be observed.

2.



Blank 1: Carefully transfer the dimensions of the parapet template onto the release film using a folding rule, pencil and cutter knife – see illustrations.

3.



Parapet crown (AK)
Parapet height (AH)
Roof surface (DF) min. 100 mm
Overhang (Ü) 70 mm

Remove the release film area AK ...

4.

... and press blank 1 onto the parapet crown using a pressure roller. Overstretch the transition from the parapet crown to the vertical parapet height.

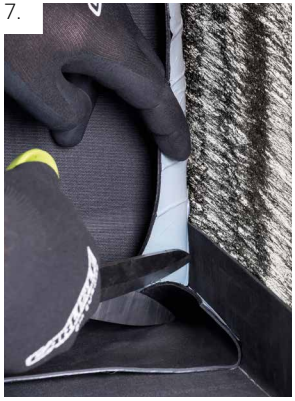
5.

Tip:
To facilitate overstretching, heat the front of the material slightly using hot air.

Remove release film from area AH and roll on using a pressure roller. »

6.

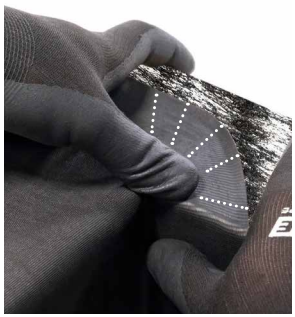
7.



Cut out excess Resitrix® material in the lower corner area. Remove the release film from area Ü and work the Resitrix® into the corner areas. Roll on area Ü at the parapet height.

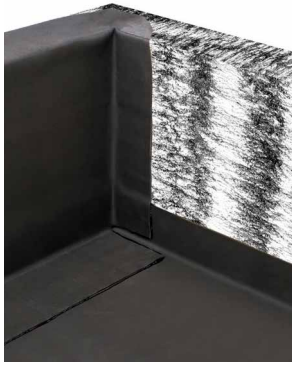
8.

9.



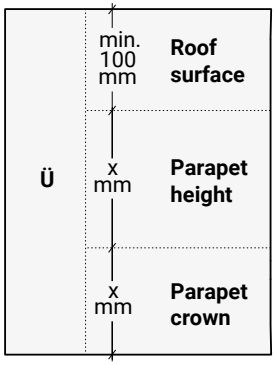
Use your fingers and a pressure roller to press the overstretched area onto the parapet crown without creases. »

10.



Remove the release film area DF (surface) and weld blank 1 onto the surface waterproofing.

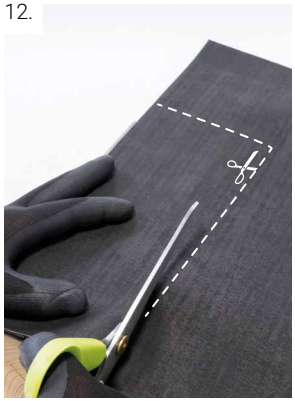
11.



Blank 2: Carefully transfer the dimensions of the parapet template onto the release film using a folding rule, pencil and cutter knife – see picture.

Ü= AK (dimensions of parapet crown)

12.



Position blank 2, remove the release film from area Ü and roll onto the parapet crown. Cut away the overhang according to the diagram, leaving a gap of 3–5 mm from the parapet edge. Remove the film from area AH and roll on at the parapet height using a pressure roller. »

13.

14.

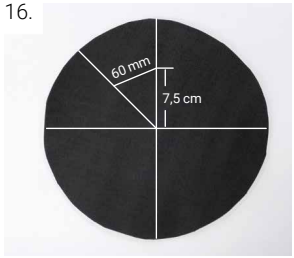
Make a cut in the area of the surface, remove the release film area DF and then weld the second blank.

Tip:
Start by welding area DF, then weld from the bottom of area AH upwards to area AK.

15.

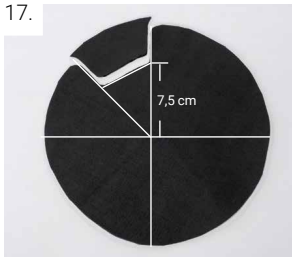
Make a circular blank (or use the punched part) with a diameter of 25 cm. (Circular blank is made of RESITRIX® SK W Full Bond).

16.



Divide the circular blank into 4 equal parts and cut one part in half. Measure 7.5 cm from the centre and mark on the drawn axis. Mark the width of 60 mm from this point on the line bisecting the angle using a folding rule.

17.



Cut out the section (as shown) with scissors ...

17.

... and fold. »

18.

Position the circular blank without creases and mark the corner areas. Overstretch the marked corner areas.

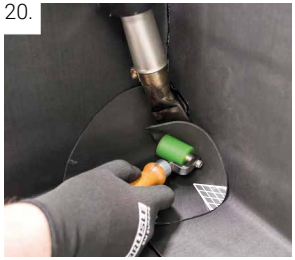
Then fix the circular blank to the surface waterproofing using hot air.

19.

Tip:
To facilitate overstretching, heat the front of the material slightly using hot air.

Weld the rear fold area of the circular blank over the entire surface.

20.



21.

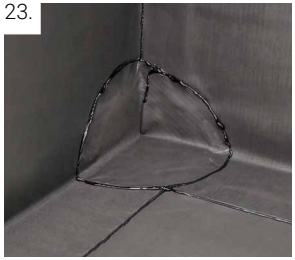
Weld the overstretched corner areas.

Important:
Weld the overlap areas from the parapet height to the roof surface (corner area) without tension and over the entire surface.

22.

After finishing the corner areas, the circular blank (punched part) is welded over the entire surface.

23.



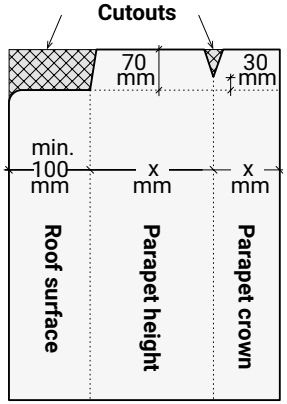
Finished inside corner. «

Info:
The fold may deviate from the vertical.

5.2 Formation of outside corners

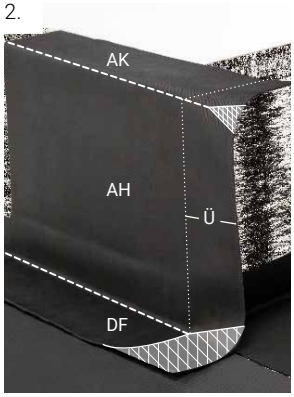
1.

Position a membrane. If the edge is to be fixed into the parapet, we recommend line fastening. In the case of linear fastening, the RESITRIX® surface waterproofing must be raised at least 6 cm up the parapet. The overlap area of the surface waterproofing must be observed.



Blank 1: Carefully transfer the dimensions of the parapet template onto the release film using a folding rule, pencil and cutter knife – (see illustrations).

2.



Parapet crown (AK)
Parapet height (AH)
Roof surface (DF)
min. 100 mm
Overhang (Ü) 70 mm

3.

Position blank 1. »

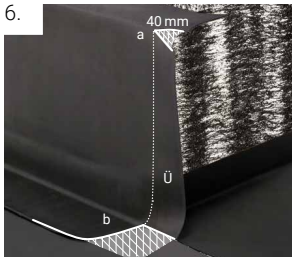
4.

Remove release film in sections from areas AK and AH ...

5.

... and, using a pressure roller, roll the RESITRIX® onto the AK area (parapet crown) and the AH area (parapet height) in sections.

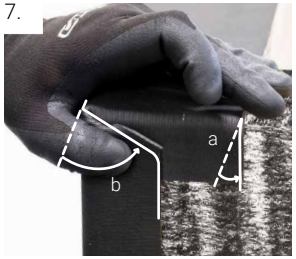
6.



(a.) Cut a 40 mm V-shape into the top overhang.

(b.) Cut the bottom overhang up to the corner and remove the excess RESITRIX® material. After cutting, remove the release film area Ü.

7.



Forming a crush fold

(a) Fold the upper overhang downwards

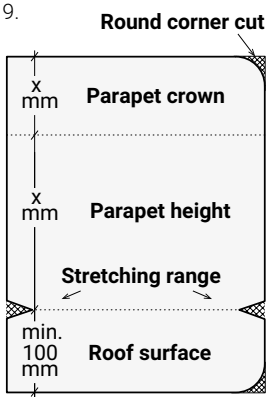
(b) Fold in the lateral overhang towards the crush fold

8.

Weld the area Ü (overhang) from the lower corner area to the upper parapet edge.

Remove the release film from the DF area (surface) and weld blank 1 onto the surface waterproofing. »

9.



Blank 2: Carefully transfer the dimensions of the parapet template onto the release film using a folding rule, pencil and cutter knife – (see illustration) The corner areas must be overstretched at the transition from the parapet height to the surface.

Tip:
To facilitate overstretching, heat the front of the material slightly using hot air.

10.

Position blank 2 and maintain a gap of 3-5 mm from the corner area.

11.

Make a round corner cut in the upper area AK (parapet crown).

12.

Remove release film from area AK and roll on. Then remove the release film from area AH and roll it on as well.

13.

Remove release film from area DF and weld areas DF, AH and AK.

14.

Tip: Starting with the DF area and then from the lower AH area upwards to the AK area. »

15.

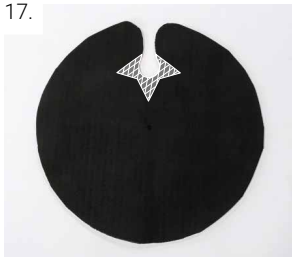
Create a circular blank (or punched part) with a diameter of 250 mm. The circular blank is made of RESITRIX® SK W Full Bond.

16.

Make the so-called kidney cut, starting 60 mm from the centre of the circle. The cut should be approx. 10 mm wide and taper upwards. The upper corners of the kidney cut must be rounded off.

Tip:
Fold the circular blank in the centre and make the kidney cut in one movement.

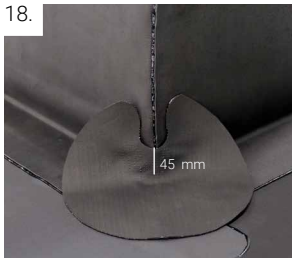
17.



Overstretch the RESITRIX® material in the areas shown.

Tip:
To facilitate overstretching, heat the front of the material slightly using hot air.

18.



Position the circular blank (or punched part) without creases in the corner area. This must be raised at least 45 mm above the DF (roof surface).

19.

The circular blank (or the punched part) must be welded over its entire surface. »

20.

Important:
Weld the overlap area from the parapet height to the roof surface (corner area) without tension and over the entire surface.

21.

Cut a semicircle with a diameter of at least 250 mm and round off the corners.

22.

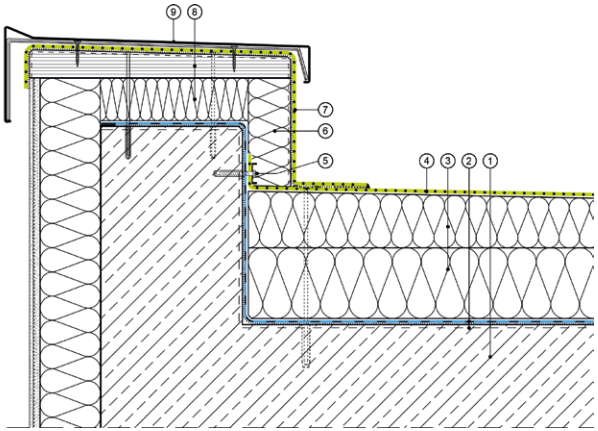
Position the cut semicircle at a distance of 2–3 mm above the roof surface and weld over the entire surface.

23.

Finished outside corner. «

6.1 Roof edge finishes

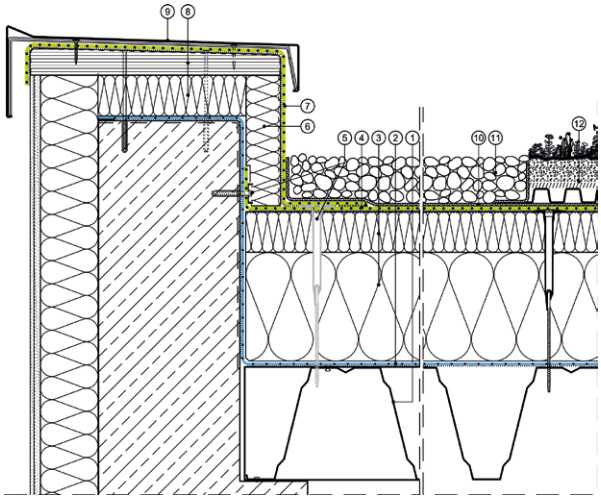
6.1.1 Parapet edge seal



Please follow the general installation instructions for all the detailed designs shown below. The following detailed drawings are purely schematic representations.

1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
5. Line fastening, alternatively single linear fastener
6. Vertical insulation
7. **RESITRIX® SK W Full Bond** fully bonded to be windproof, seam connection B ≥ 40 mm welded to surface waterproofing
8. Multilayer, OSB or composite board on compression-resistant thermal insulation
9. Parapet cover mechanically fastened

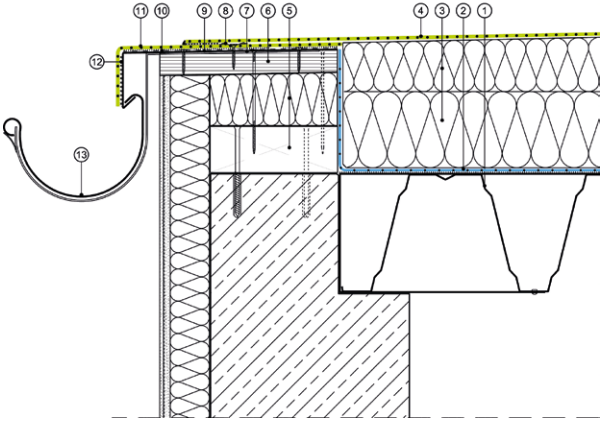
6.1.2 Parapet edge seal with greening and gravel strip



1. Trapezoidal steel construction
2. Surface primer FG 35 and vapour barrier **ALUTRIX® 600** or **ALUTRIX® FR** or **ALUTRIX® FR B1** or as temporary waterproofing **ALUTRIX® MULTI 2800**
3. Flat roof insulation
4. Surface waterproofing **RESITRIX® SK W Full Bond** fully bonded or with ballast according to verification of positional stability
5. Line fastening, alternatively linear single fastener
6. Vertical insulation
7. **RESITRIX® SK W Full Bond** fully bonded to be windproof, seam connection B ≥ 40 mm welded to surface waterproofing.
8. Multilayer, OSB or composite board on compression-resistant thermal insulation
9. Parapet cover mechanically fastened
10. Protective layer
11. vegetation-free gravel layer
12. Extensive roof greening system

* corrosion-resistant for application class K2

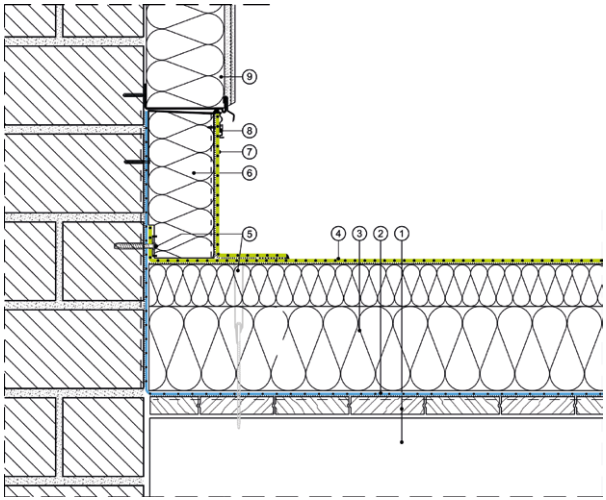
6.1.3 Eaves edge seal



1. Trapezoidal steel construction
2. Surface primer FG 35 and vapour barrier **ALUTRIX® 600** or **ALUTRIX® FR** or **ALUTRIX® FR B1** or as temporary waterproofing **ALUTRIX® MULTI 2800**
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
5. Edge plank
6. Multi-layer, OSB or composite board on pressure-resistant thermal insulation
7. Gutter bars embedded or gaps filled in
8. Linear edge fastening
9. Eaves flashing
10. Surface primer FG 35 on the horizontal part of the eaves flashing
11. **RESITRIX® SK W Full Bond** on the horizontal part of the eaves flashing fully bonded to be windproof
12. **RESITRIX® SK W Full Bond** welded to the vertical part of the eaves flashing
13. Eaves gutter made of stainless steel, aluminium or with protective coating

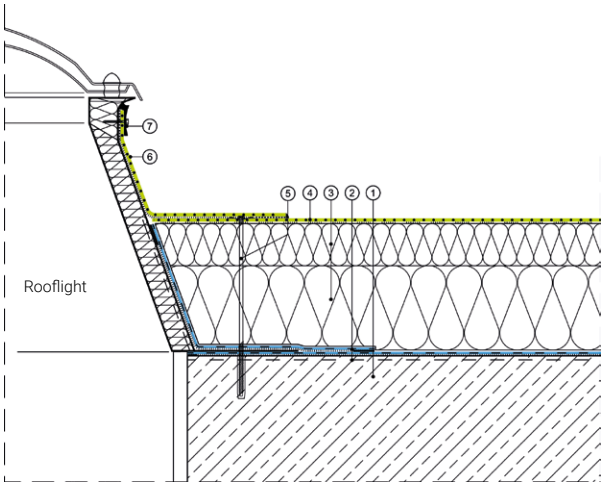
6.2 Detailed connections

6.2.1 Wall connection



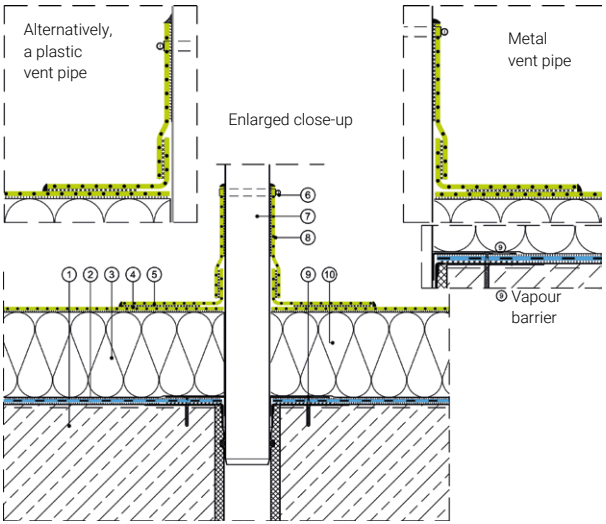
1. Wooden construction
2. Vapour barrier **ALUTRIX® 600** or for temporary waterproofing **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
5. Line fastening, alternatively single linear fastener
6. Vertical insulation
7. **RESITRIX® SK W Full Bond** fully bonded to be windproof, seam connection B ≥ 40 mm welded to surface waterproofing
8. Clamping rail
9. Rainproof external wall panelling

6.2.2 Connection of skylight element



1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
5. Linear edge fastening using single fasteners
6. Detailed connection **RESITRIX® SK W Full Bond** after surface primer FG 35 bonded to the upstand to be windproof, seam connection B ≥ 40 mm welded to the surface waterproofing, corners connected using formed parts
7. Clamping rail, fastener corrosion-resistant at a distance ≤ 200 mm

6.2.3 Connection of penetration component

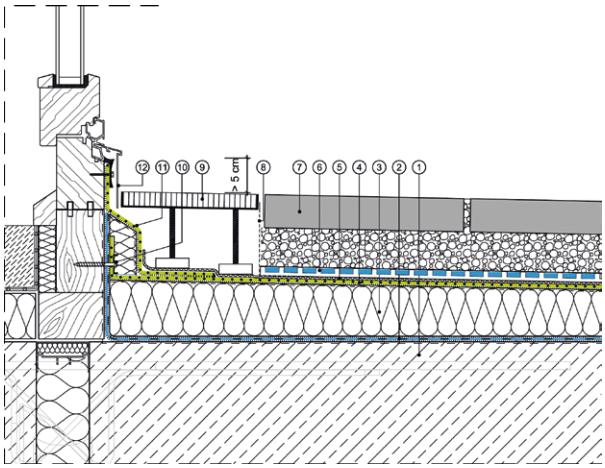


1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®**
5. Detailed connection **RESITRIX® SK W Full Bond**, welded seam connection
6. Stainless steel strap connected to prevent water penetration
7. Penetration component, e.g. metal vent pipe
8. Connection strip **RESITRIX® SK W Full Bond** welded onto metal pipe, welded seam connection B ≥ 40 mm
9. **CARLISLE® vapour barrier plate**
10. Edge fastening if required

Alternative:

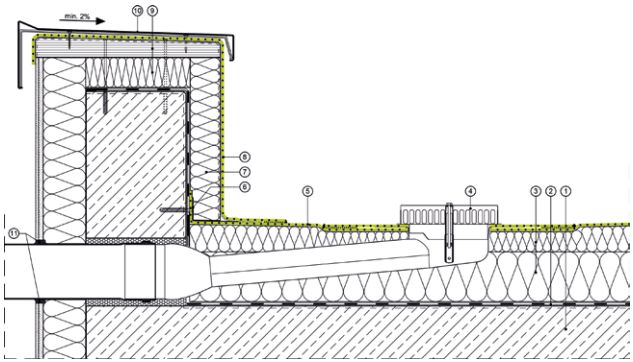
7. Penetration component, e.g. plastic vent pipe
8. Connection strip **RESITRIX® SK W Full Bond** bonded to surface primer FG 35, welded seam connection B ≥ 40 mm

6.2.4 Connection of patio door



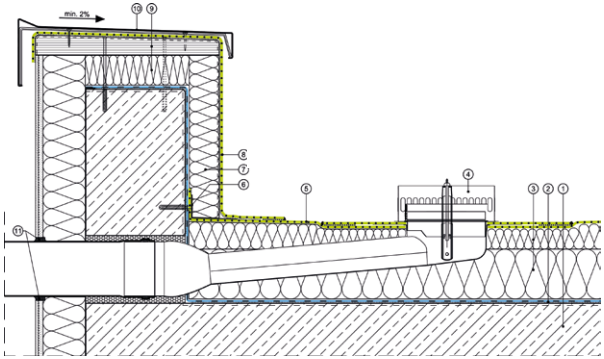
1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. Surface waterproofing **RESITRIX® SK W Full Bond**, bonded to surface primer FG 35
5. Protective layer
6. Drainage layer
7. Decking
8. Gravel holding angle
9. Trough-forming drainage channel with secured drain
10. Line edge fastening
11. Detailed connection **RESITRIX® SK W Full Bond** fully bonded, welded seam connection B ≥ 40 mm
12. Overhang plate and step protection

6.2.5 Connection of flat roof drain



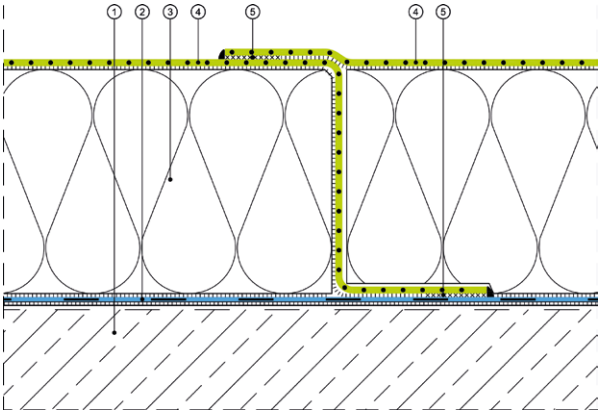
1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. **CCM parapet drain** with flat base plate, factory-fitted connection sleeve and leaf catcher M
5. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
6. Line fastening, alternatively single linear fastener
7. Vertical insulation
8. **RESITRIX® SK W Full Bond** fully bonded to be wind-proof, seam connection B ≥ 40 mm welded to surface waterproofing
9. Multilayer, OSB or composite board on compression-resistant thermal insulation
10. Parapet cover mechanically fastened
11. Pre-compressed sealing tape with permanently elastic sealant

6.2.6 Connection of emergency overflow



1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. **CCM parapet emergency overflow** with flat base plate, factory-fitted connection sleeve and leaf catcher M
5. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
6. Line fastening, alternatively single linear fastener
7. Vertical insulation
8. **RESITRIX® SK W Full Bond** fully bonded to be windproof, seam connection B ≥ 40 mm welded to surface waterproofing
9. Multilayer, OSB or composite board on compression-resistant thermal insulation
10. Parapet cover mechanically fastened
11. Pre-compressed sealing tape with permanently elastic sealant

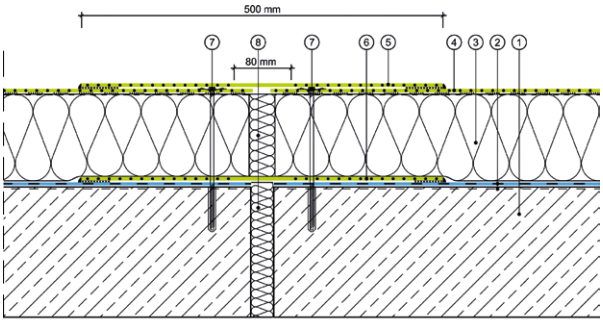
6.3 Waterproofing



1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®** bonded or mechanically fastened
5. **RESITRIX®** welded seam connection B ≥ 40 mm

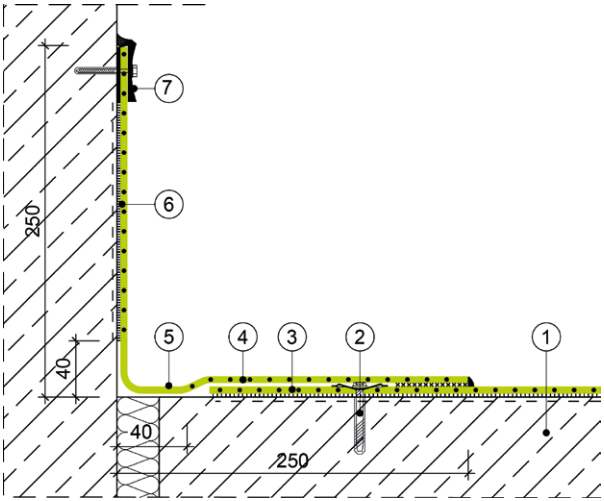
6.4 Expansion joints

6.4.1 Expansion joint using RESIFLEX® SK



1. Solid construction
2. Vapour barrier **ALUTRIX® MULTI 2800** on surface primer FG 35, separated over the expansion joint
3. Flat roof insulation
4. Surface waterproofing **RESITRIX®** bonded or mechanically fastened, separated over the expansion joint
5. Expansion joint tape **RESIFLEX® SK** with 80 mm reinforcement-free zone, welded seam connection B ≥ 40 mm
6. Expansion joint tape **RESIFLEX® SK** with 80 mm reinforcement-free zone on surface primer FG 35, seam connection B ≥ 40 mm welded to vapour barrier
7. Linear edge fastening using single fasteners
8. Soft vertical insulation

6.4.2 Movable component connection



1. Solid construction
2. Linear edge fastening using single fasteners
3. Surface waterproofing **RESITRIX®SK W Full Bond** bonded to surface primer FG 35
4. Expansion joint tape **RESIFLEX® SK** with 80 mm reinforcement-free zone, welded seam connection B ≥ 40 mm
5. Unbonded area directly above the joint
6. Vertical connection fully bonded to surface primer FG 35
7. Clamping rail with sealant grouting, for application class K2 additionally embedded overhang strip

6. Certificates

- Certification according to DIN EN ISO 9001 and DIN EN ISO 14001
  BS6229:2025, approved Document L Volume 1 and Volume 2, FLL

7. Notes

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RESITRIX® Laying instructions 2026 I / EN / 06/2026
The current brochure can be found in the download area at www.ccm-europe.com/gb/service-portal