

RESITRIX®

WATERPROOFING MEMBRANES

Installation Instructions

RESITRIX® SK W Full Bond

RESITRIX® SK Partial Bond

RESITRIX® MB

RESITRIX® CL

RESITRIX® SR



RESITRIX®

WATERPROOFING MEMBRANES



FOREWORD

These installation instructions provide information about the materials as well as their respective properties and application options, and in conjunction with the RESITRIX® planning guidelines, provide a basis for planning the installation and installing the RESITRIX® waterproofing membranes.

These instructions are intended to support the installer in combination with practical training given by our technical services personnel at our premises and/or directly at the construction site. All of 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 method of installation. For specific and detailed substrate requirements and installation instructions for individual projects, please contact the RESITRIX® Technical Department.

The information and product descriptions in this publication are based on our experience and test results and are correct to the best of our knowledge and belief at the time of printing. 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.

May, 2013

GENERAL REQUIREMENTS

Basic Information

- / The generally accepted technology standards and state of the art have to be complied with. The latest valid editions of all relevant standards, regulations, directives and guidelines apply.
- / All RESITRIX® waterproofing membranes comply with the requirements and standards for materials used in high-quality waterproofing for roofs as per DIN 18531 (property class E1 and application category K2). The additional requirements concerning the minimum falls and thickness of trapezoidal metal decking must also be complied with.
- / All preparatory construction work has to be suitable for the respective roof structure.
- / These installation instructions cannot address the entire scope of partial or special construction or structural solutions.
- / All applicable national occupational health and safety and accident prevention regulations must be complied with. Please obtain the EC and national safety data sheets for each material.

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



IMPORTANT INSTALLATION INSTRUCTIONS

- / Please comply with the general substrate requirements for the individual installation variant. In particular, all substrates must be checked for suitability with regard to material compatibility and mechanical stress. If required, appropriate protective layers must also be installed.
- / In the case of substrates that are not compatible with bitumen and/or are susceptible to shrinkage (e.g. PVC), the existing waterproofing/ roof sealing (membrane) must be removed first.
- / All RESITRIX® waterproofing membranes can be welded at ambient temperatures down to -10°C (also, please note the permissible ambient temperature for applying the respective surface primers/ adhesives).
- / The substrate must be even and free from tension, blisters, creases, folds, sharp edges, burrs, rough sections, damaging joints, seams, voids, cracks, etc.
- / Over areas of high stress such as construction joints, expansion joints and bearings, additional measures, e.g. the installation of RESIFLEX® SK expansion joint sealing strips or separating tapes, must be taken. In highly trafficked areas, suitable and permitted mounting systems comprising fixed and loose flanges, should be used.
- / At upstand details, we recommend extending the RESITRIX® field sheet approx. 5 cm upwards, to provide additional security against water seepage.
- / Around roof drains, the substrate may be recessed by min. 1 cm for an area of at least 0.5 m^2 ($0,7\text{ m} \times 0,7\text{ m}$) in order to increase rainwater collection. Outlets should be centralised as much as possible within a seamless section of the RESITRIX® waterproofing membrane.
- / If metal components are required when constructing drainage systems, we recommend the use of stainless steel (please consult with the manufacturer regarding specific types) or aluminium. Alternatively, suitable plastic components may be used. No warranty claims will be considered in the event of signs of corrosion to unprotected drainage elements made from zinc or zinc alloys, as a result of adverse environmental and weather conditions – e.g. acid fog or rain.
- / To ensure the maximum service life of the entire waterproofing installation, regular servicing, inspections and maintenance should be undertaken in accordance with the relevant national regulations. In this regard, we advise taking out a suitable inspection and/or maintenance contract.



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1. PRODUCT OVERVIEW AND DESCRIPTION OF MATERIALS

1.1 RESITRIX® EPDM Waterproofing Membranes

With the RESITRIX® product range, we have been providing reliable, long-lasting, heavy-duty and high-performance waterproofing solutions for flat roofs on both existing and new constructions for more than 35 years. The applications are almost unlimited, ranging from balconies, dormers and garages 30 m² in size, up to industrial buildings larger than 80,000 m². We also have the perfect product for every type of living roof. To guarantee the optimal solution for your individual project, we offer a customised RESITRIX® solution for every type of roof construction, in a variety of installation options.

Waterproofing membranes can only be as good as the materials from which they are made. RESITRIX® combines the advantages of polymer-modified bitumen with the excellent properties of EPDM: This patented combination makes RESITRIX® the only waterproofing membrane that is both easy to install and sealed for a lifetime.

All variants of RESITRIX® waterproofing membranes can be hot-air welded and are bitumen-compatible. They consist of an EPDM synthetic rubber membrane with a glassfibre reinforcement inlay and an adhesion-enabling surface.

1.1.1 RESITRIX® SK W Full Bond

RESITRIX® SK W Full Bond is a fully self-adhesive, hot-air weldable and root-resistant EPDM waterproofing membrane. It can be fully bonded in exposed roof applications and, due to its FLL root-safe certificate, is especially well suited for use beneath living roofs of every kind. Additionally, certification according to DIN EN 13948.

1.1.2 RESITRIX® SK Partial Bond

RESITRIX® SK Partial Bond is a partially self-adhesive, hot-air weldable EPDM waterproofing membrane. The partial bond properties enable it to provide long-term movement and vapour pressure compensation. Consequently, this product is particularly suitable for installation on materials susceptible to movement as well as on substrates containing residual moisture.

1.1.3 RESITRIX® MB

RESITRIX® MB is an EPDM waterproofing membrane specifically designed for mechanical fixing. RESITRIX® MB complies fully with FM Standard Class No. 4470 (FM Approval).



1.1.4 RESITRIX® CL

RESITRIX® CL is an EPDM waterproofing membrane primarily designed for bonding using PU adhesives and hot bitumen.

1.1.5 RESITRIX® SR – The first grey RESITRIX®

RESITRIX® SR is a light grey coloured, self-adhesive, hot-air weldable EPDM waterproofing membrane. Due to the grey colour, RESITRIX® SR offers new aesthetic design options and additionally has solar reflective properties.

1.2 RESITRIX® Material composition and physical properties

Material Structure

■ ○ ○ ○

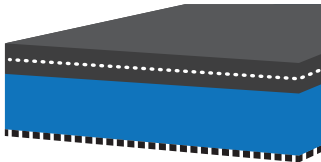
EPDM + INTEGRAL GLASSFIBRE
REINFORCEMENT AND
LAMINATED BONDING LAYERS

■

POLYMER-MODIFIED BITUMEN

■ ■

FINE QUARTZ SANDED FINISH OR PE FILM



Physical properties

	<i>RESITRIX®SK W Full Bond</i> <i>RESITRIX®SK Partial Bond</i> <i>RESITRIX®SR</i>	<i>RESITRIX®MB</i> <i>RESITRIX®CL</i>
Thickness	2,5 mm	3,1 mm
Weight	2,75 kg/m ²	3,5 kg/m ²
Length	10 m	10 m
Width	1 m *	1 m *

* Cut strips on request

1.3 Transport and Storage

RESITRIX®SK W Full Bond
RESITRIX®SK Partial Bond
RESITRIX®SR

RESITRIX®MB
RESITRIX®CL

The rolls should be stored and transported in an upright position in a cool (between +5 °C and +25°C), dry environment. Pallets should not be stacked on top of each other.

The rolls should be stored and transported in an upright position in a cool (between +5 °C and +25°C), dry environment. Pallets should not be stacked on top of each other.

In their original packaging, the rolls can be stored for a maximum of 12 months from the date of production. The rolls must be protected from direct sunlight by using the original grey protective film or a light-reflective tarpaulin. Particularly when working in strong sunlight, make sure that rolls taken from the pallet are installed immediately. Rolls remaining on the pallet must always be protected as described above.

In their original packaging, the rolls can be stored for a maximum of 24 months from the date of production.



1.4 RESITRIX® System Accessories

1.4.1 FG 35 Surface Primer

In combination with the three self-adhesive RESITRIX® waterproofing membranes, FG 35 surface primer can be used on a wide range of substrates. FG 35 is a quick-drying, ready-to-use, solvented primer consisting of synthetic rubber and resins.

Please refer to the respective product data sheet for more detailed information.

Please be sure to comply with the safety instructions on the packaging labels and on the EC material safety data sheet, if applicable.

1.4.2 G 500 Cleaner | Thinner

G 500 cleaner is suitable for degreasing metal and for cleaning lightly soiled surfaces and equipment.

Please refer to the respective product data sheet for more detailed information.

Please be sure to comply with the safety instructions on the packaging labels and on the EC material safety data sheet, if applicable.

1.4.3 PU Adhesive PU-LMF-02

PU-LMF-02 PU adhesive is a pourable, solvent-free, unplasticised single-component polyurethane adhesive, specifically designed for the surface bonding of RESITRIX® CL waterproofing membranes.

Please refer to the respective product data sheet for more detailed information.

Please be sure to comply with the safety instructions on the packaging labels and on the EC material safety data sheet, if applicable.

1.4.4 ALULON MF Surface Coating

ALULON MF is a silver-grey single-component solvented roof paint, based on polymers, bitumen and aluminium, which is used for the subsequent application of a colour finish on RESITRIX® waterproofing membranes. In addition, ALULON MF significantly reduces the surface temperature of the roof by reflecting intensi-

ve sunlight, thus protecting the building interior from excessive heat build-up.

Please refer to the respective product data sheet for more detailed information.

Please be sure to comply with the safety instructions on the packaging labels and on the EC material safety data sheet, if applicable.

1.5 RESITRIX® Accessories for Detailing Work

1.5.1 RESITRIX® Corner parts

When installing RESITRIX® waterproofing membranes, corners are formed using two-dimensional, preferably prefabricated corner pieces made from RESITRIX® SK W Full Bond or RESITRIX® SR for light coloured roofs. This method enables quick and convenient formation of internal and external corners.

The shaped pieces comprise a circle with a rounded cut-out notch, a full circle and an oval tongue. The diameter and width of the section pieces should be approx. 18–20 cm.



1.5.2 RESITRIX® Pipe Sleeve, small

The RESITRIX® pipe penetration sleeve (small) is a prefabricated, moulded sleeve with a weldable RESITRIX® sealing flange, for sealing round roof penetrations with diameters between 5–30 mm.



1.5.3 RESITRIX® Pipe Sleeve, large

Prefabricated, moulded sleeve with a weldable RESITRIX® flange, for sealing round roof penetrations with diameters between 35–100 mm.

1.5.4 BLIFIX® lightning conductor system

BLIFIX® is a mounting system for routing and attaching lightning conductor rods with a max. diameter of 10 mm onto flat roof constructions.



2. TOOLS

2.1 Required Tools

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

- / Handheld hot-air welding tool (e.g., Leister type) with a 4 cm wide nozzle
- / Silicone pressure roller (width: 4 cm)
- / Wire brush (brass)
- / Brass penny roller (width: 5 mm)
- / Professional Scissors
- / Retractable tape measure
- / Craft knife
- / Chalk marker
- / Chalk line

2.1.1 RESITRIX® Silicone pressure roller

The silicone pressure roller facilitates the proper and convenient installation of heat-weldable RESITRIX® waterproofing membranes and is specifically designed for professional use on roofs: balanced, stable, durable and long-lasting.

Material:

Ball-bearing operated silicone pressure roller with wooden handle

Width: 40 mm

Diameter: 30 mm

Weight: approx. 200 g



2.1.2 RESITRIX® Professional Scissors

Particularly due to their sharpness, RESITRIX® scissors provide optimal flexibility and allow clean and accurate installation of RESITRIX® waterproofing membranes.

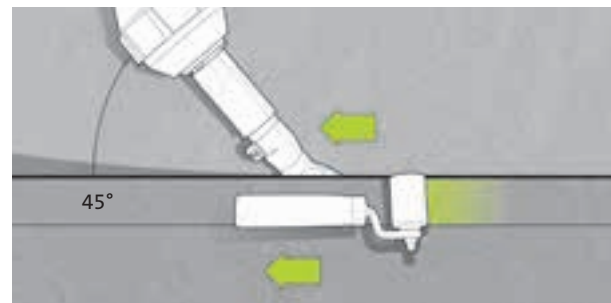


2.2 Welding with Handheld Welder

We strongly recommend always performing a test weld prior to starting the actual installation work. Please select a welding temperature between about 500° C (level 8) and a maximum of 620° C (level 10).

The optimal setting depends on the ambient temperature, wind conditions and substrate composition.

- / Insert the welding nozzle into the lap at an angle of about 45°.
- / Move the RESITRIX® silicone pressure roller precisely along the top edge of the membrane to produce a 2 – 4mm wide bleed-out.
- / The distance between the welding nozzle and silicone pressure roller should be approx. 2 – 4 cm during the welding process.



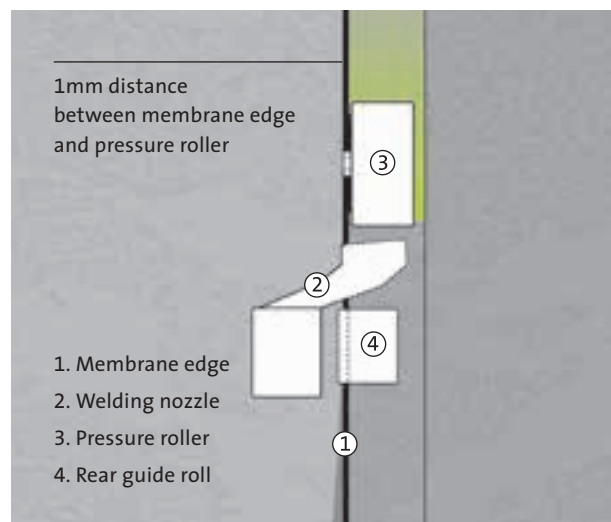
① Note:

- / When installing RESITRIX® on unprotected EPS foam, please note the following. Before the actual welding, a sealing-off of the welding bead needs to be done. For this the automatic handheld welder is inserted below the overlap at a distance of 4 respectively 8 cm (depending on the chosen application method) from the upper edge of the waterproofing membrane.
- / A protective layer forms on the surface of the RESITRIX® SR waterproofing membrane under the influence of UV irradiation, after exposure for about 24 hours. Laps in the RESITRIX® SR should therefore be welded on the day of installation or, where this is not possible, covered to isolate them from UV until the welding operation can take place. Where unwelded laps have been exposed for more than 24 hours, the protective layer which has formed should be removed by abrasion, before welding commences.

2.3 Welding with an Automatic Welding Machine

We strongly recommend always performing a test weld prior to starting the actual installation work. Please set the welding temperature to approx. 620 °C / highest level.

The pressure roller on the automatic welding machine should be moved precisely along the top membrane edge. A clearly visible bitumen bead approx. 2-4 mm wide is extruded from the edge of the membrane. This enables a simple visual inspection to confirm that the welded lap is completely watertight. If welding is interrupted, the welding process must be recommenced from the precise position where the previous weld terminated.



Welding Machine Types

Automatic welding machine (e.g. Leister Varimat) or similar approved, with additional weights where necessary.

Recommendation:

240 Volt power supply (observe all necessary safety regulation)

Accessories:

- / Spare heating element
- / Silicone pressure roller (4 cm wide)

- / Brass wire brush
- / Reinforced extension cable (minimum cross section 4 mm²)
- / Lubricant
- / Screwdriver
- / Allen key
- / G 500 Cleaner and cloth/rag

① Note:

- / For adhered or ballasted installations, the pressure roller and nozzle should be 4 cm wide.
- / For mechanically fixed installations, the respective settings depend on the machine used:
e.g. Varimat = 8 cm.

2.4 Priming with a Sprayer

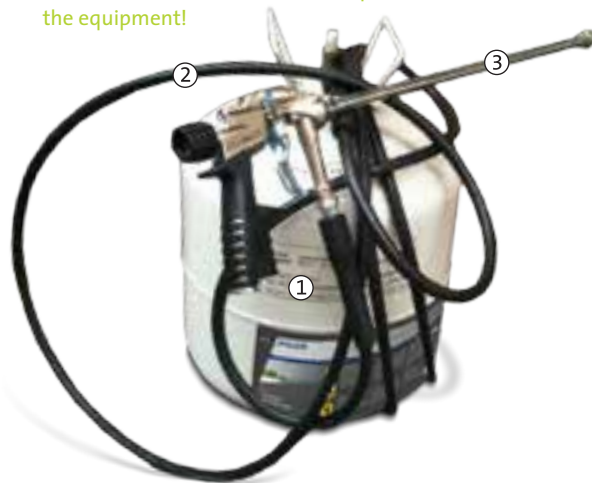
For FG 35 surface primer

The set consists of:

1. 14,4kg pressurised cannister filled with FG 35.
2. A connecting hose between pressure tank and spray gun.
3. A stainless steel spray gun including extension piece.

① Important:

Please make sure to read the set-up instructions before using the equipment!



3. INSTALLATION INSTRUCTIONS

3.1 Overview of Installation Variants

Installation	RESITRIX® SR	RESITRIX® SK W Full Bond	RESITRIX® SK Partial Bond	RESITRIX® MB	RESITRIX® CL
Partial Bonding	with FG 35	with FG 35	with FG 35	–	with PU adhesive PU-LMF 02
Full Surface Bonding	with FG 35	with FG 35	–	–	with hot bitumen
Mechanically Fixed	with technically certified and approved fasteners*	with technically certified and approved fasteners*	with technically certified and approved fasteners*	with technically certified and approved fasteners	with technically certified and approved fasteners
Loose laid	ballasted*	ballasted*	ballasted*	ballasted	ballasted

* possible, but not standard variant! Please contact the RESITRIX® Technical Department where required

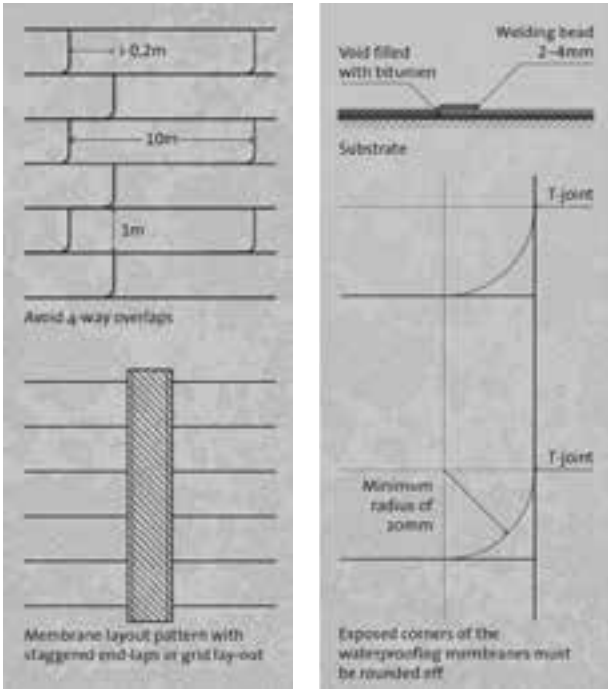
3.2 General Installation Instructions

The RESITRIX® Technical Department is available any time to provide information about specific and detailed substrate requirements, structural calculations and CAD drawings, or to conduct additional tests, such as wind load calculations in our own in-house testing laboratory. For individual application information, please contact the RESITRIX® Technical Department.

3.2.1 Self-adhesive, adhered, loose-laid, ballasted and living roofs

An overlap of at least 5 cm is required. On unfaced rigid polystyrene foam with or without non-woven glass fibre, the overlap must be 8 cm with a welding width of min. 4 cm. A nozzle width of 4 cm must therefore be used.

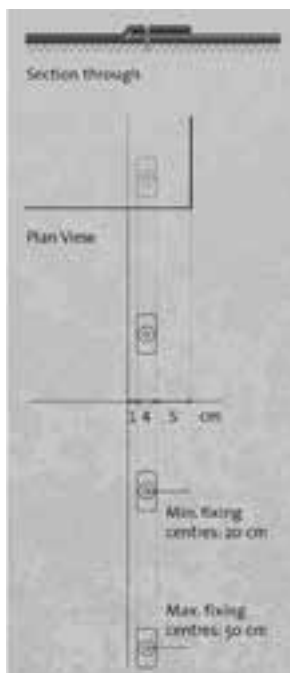
An additional base-tie-in with individual fasteners at vertical surfaces is only required for loose-laid connections and terminations.



3.2.2 Loose-laid, mechanically fixed

An overlap of at least 10 cm is required.

On unfaced rigid polystyrene foam with or without non-woven glass fibre, the overlap must be 13 cm. The welding width must be min. 8 cm, therefore the nozzle width should also be 8 cm. The overlap between the upper seam of the membrane and the fastening plate should be 5 cm. The distance between the lower edge of the membrane and the fastening plate is 1 cm (with a total overlap of 10 cm) and 4 cm (with a total overlap of 13 cm). Both the distance and the total overlap can be larger if fastening plates with larger diameters or wider widths are used.



3.2.3 Application rates for surface primer and adhesive

FG 35 surface primer:

Manual application

- / Partly priming with FG 35: approx 100 g/m²
- / Fully priming with FG 35: approx. 200 g/m²

Sprayer application

- / Partly priming with FG 35: approx 60 g/m²
- / Fully priming with FG 35: approx. 120 g/m²

PU-LMF-02 PU adhesive

- / Strip bonding with PU-LMF-02 PU adhesive: approx. 200 g/m²

① For detailed information about substrates and respective application rates, please contact the RESITRIX® Technical Department.

3.3 Self-adhesive Installation Variants

Installing and laying the self-adhesive RESITRIX® SK W Full Bond, RESITRIX® SK Partial Bond and RESITRIX® SR waterproofing membranes. After applying the FG 35 surface primer, and allowing it to dry, roll out and align the membranes with the specified overlap and with the edges running parallel to each other. Next, remove the PE release film on the underside of the membrane.



- / When the FG 35 has completely dried, roll out and align the membrane with a minimum lap width of 5 cm.
- / Fold back the first metre of the membrane, and release the PE film diagonally from the underside of the membrane.



- / Using both hands, position the first metre of the membrane, making sure it is even, smooth and free from creases.
- / Press down this area, for example using a wide broom.
- / **Make sure this area is properly adhered before proceeding!**



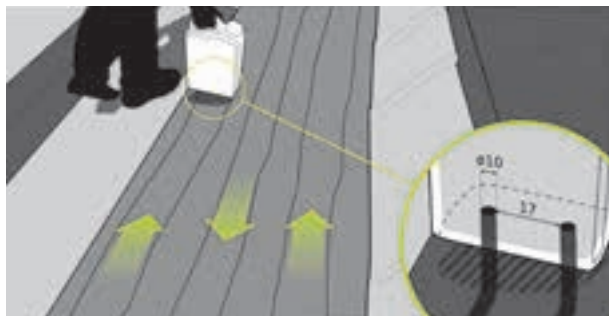
- / Unroll the rest of the membrane.
- / One person tensions and re-adjusts the alignment of the membrane by lifting and pulling it taut as required (ensure the 5 cm minimum lap width!).
- / A second person removes the release film diagonally from the membrane in a lengthwise direction.



- / Press down the membrane, e.g. with a wide broom or water-filled roller, starting in the centre and moving out towards the edges, in order to prevent air pockets.
- / Next, weld the laps, using a hot-air welder with a nozzle width of 4 cm (the nozzle width on an automatic welding machine should also be 4 cm).

3.4 Bonded Installation Variants

3.4.1 RESITRIX® CL strip bonding with PU-LMF-02 PU adhesive



Unroll and align the RESITRIX® waterproofing membranes with the specified overlap and with the edges running parallel to each other. Then roll back the membranes in a lengthwise direction.

- / Drill 2 x 10mm diameter holes in the bottom of the canister, 17 cm apart. If an air-lock occurs, briefly open the locking cap.
- / Apply the PU adhesive (see illustration).
- / Fold down the membrane
- / Keep overlaps free of PU adhesive.
- / Next, weld the laps, using a hot-air welder with a 4 cm nozzle width (the nozzle width on an automatic welding machine should also be 4 cm).

3.4.2 Bonding RESITRIX® CL with hot bitumen

Unroll and align the RESITRIX® waterproofing membranes with the specified overlap and with the edges running parallel to each other. After aligning each membrane, roll it back to the centre of the roll. Pour the hot bitumen and use a brush or mop to distribute it evenly across the entire width of the bonding area; the required application rate is approx. 1.5 kg/m². Make sure that the membrane overlaps are kept free from hot bitumen. Next, unroll the other half of the membrane and bond it with hot bitumen using the same procedure.

Next, weld the laps, using a hot-air welder with a 4 cm nozzle width (the nozzle width on an automatic welding machine should also be 4 cm).

3.5 Loose-laid, Mechanically Fixed

RESITRIX® MB and RESITRIX® CL

Unroll and align the RESITRIX® waterproofing membranes with the specified overlap and with the edges running parallel to each other.

Only approved fixings and washer plate combinations may be used. It may be possible to increase the 400N design load after prior testing by the RESITRIX® Technical Department. In such cases, a fastening plan has to be drawn up. (For higher design load values, please see Section 6 of these instructions.)

Care should be taken not to over-tighten the fasteners, in order to avoid the formation of any folds, creases or waves in the welding area following the welding process.

① **Tip:** To prevent folds and creases from forming, we recommend that you weld the side-lap onto the previous RESITRIX® sheet first, before mechanically fixing the leading edge of the membrane.

3.6 Loose-laid and Ballasted

RESITRIX® MB and RESITRIX® CL

Unroll and align the RESITRIX® waterproofing membranes with the specified overlap and with the edges running parallel to each other.

The type, layout and surface weight of the ballast may vary depending on the usage conditions and the respective wind load calculation.

For specific details on the installation process and individual on-site requirements, please contact the RESITRIX® Technical Department.

3.7 Living Roofs

RESITRIX® SK W Full Bond

After applying FG 35 surface primer and allowing it to dry completely, unroll and align the membranes with the specified overlap and with the edges running parallel to each other.

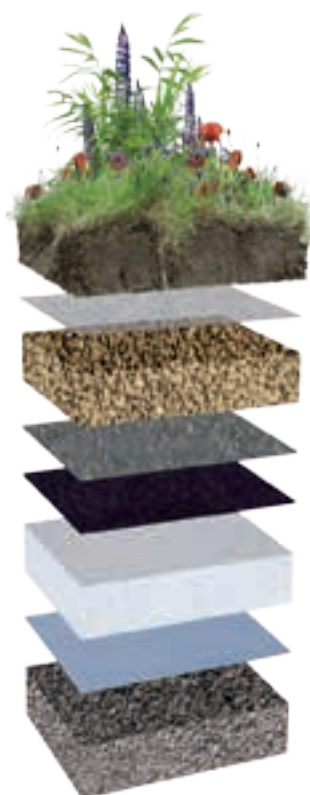
Next, remove the PE release film on the back of the membrane.

The type, layout and surface loading of the ballast is dependent upon the usage conditions and the respective wind load calculation.

Roof vegetation projects can be divided into two categories:

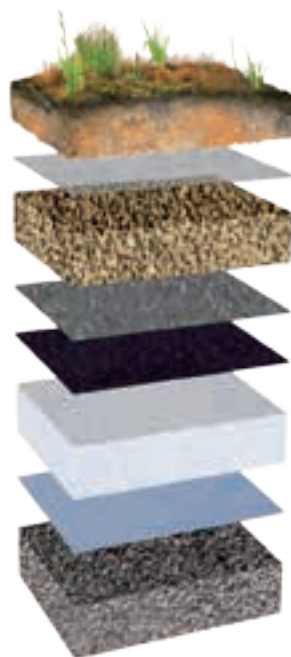
- / Intensive roof vegetation
- / Extensive roof vegetation

Intensive roof vegetation projects predominantly involve the use of perennials, shrubs, woody plants and grassy lawns. Bushes and trees may also be individually planted in selected areas. With extensive roof vegetation, the thin substrate layers are planted with grass, moss, herbs, sedum and other hardy and regenerative plants.



Typical Roof Construction
Intensive Vegetation

- ... Vegetation layer
- ... Filter layer
- ... Drainage layer
- ... Protective layer
- ... RESITRIX® SK W Full Bond
- ... Thermal insulation
- ... Vapour barrier
ALUTRIX® FR / ALUTRIX® 600
- ... Substrate



Typical Roof Construction
Extensive Vegetation

- ... Vegetation layer
- ... Filter layer
- ... Drainage layer
- ... Protective layer
- ... RESITRIX® SK W Full Bond
- ... Thermal insulation
- ... Vapour barrier
ALUTRIX® FR / ALUTRIX® 600
- ... Substrate

3.8 Substrate requirements for RESITRIX® waterproofing membranes

Type of RESITRIX® waterproofing membrane	Mineral wool	Polystyrene (EPS)	Polyurethan foam / Polyiso (PUR/PIR)	Foam glass	Supporting structure, uninsulated	Other Substrates (Existing roof /deck)
RESITRIX® SK Partial Bond Partially bonded	–	–	faced and unfaced surfaces	–	No restrictions	Bitumen / Elastomer bitumen APP-Bitumen Plasticiser-free plastic systems Plasticiser-free synthetic membranes Elastomer membranes Liquid-applied plastic systems Polyure- than-Foam
RESITRIX® SK W Full Bond Fully bonded	Surface faced	–	–	faced or unfaced surfaces with hot bitumen	No restrictions	Bitumen / Elastomer bitumen APP-Bitumen Plasticiser-free plastic systems Plasticiser-free synthetic membranes Elastomer membranes Liquid-applied plastic systems Elastomer membranes Liquid-applied plastic systems
RESITRIX® SR Fully bonded	Surface faced	–	–	–	No restrictions	Bitumen/Elastomer bitumen APP-Bitumen Plasticiser-free plastic systems Plasticiser-free synthetic membranes Elastomer membranes Liquid-applied plastic systems
RESITRIX® CL Strip bonding with PU-LMF-o2	–	unfaced	faced or unfaced on both sides (except aluminium)	–	No restrictions	Bitumen/ Elastomer bitumen Polyurethan-Foam
RESITRIX® CL Fully bonded with hot bitumen	Surface faced	–	faced or unfaced on both sides (except aluminium)	faced or unfaced surfaces	No restrictions	Bitumen/ Elastomer bitumen
RESITRIX® MB Mechanically fixed	No restrictions	No restrictions	No restrictions	–	No restrictions	Only restriction: roof structures with foam glass

📌 Important information:

- Requirement for all adhesive variants is a sound substrate / underground.
- In case additional membranes are installed beneath the RESITRIX® waterproofing membranes, the corresponding substrate requirements shown in the table above under "Other substrates" apply.
- In addition, application criteria and installation instructions of the insulation manufacturer and of the manufacturer of potential additional underlays must be considered.
- The national fire safety regulations must be observed and complied with at all times.
- Loose laid applications / installations below green roofs systems or loose laid with ballast is only possible with appropriate wind uplift testing / documentation.
- For installation of RESITRIX® waterproofing membranes on other substrates that are not mentioned above please consult with RESITRIX® Technical Department
- Other variants not shown above might be available - Please consult with RESITRIX® Technical Department



4. GENERAL DESCRIPTION OF FLASHINGS AND TERMINATIONS

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

Apply the FG 35 surface primer to the entire surface, using either a roller, brush or sprayer. After removing the release film, adhere separate flashing strips of RESITRIX® in several steps. Do not remove the release film from the roof-side section of the flashing piece until immediately before starting the welding process. Firmly and evenly press down or roll down the flashing strips, making sure that the entire surface is bonded. The length of the flashings depends on the shape and handling of the connection and termination areas. When calculating the flashing length, make sure it is long enough so that the membrane can be installed without forming any folds or creases. If a handheld welder is used for the welding, the overlap onto the roof membrane must be approx. 10 cm; if an automatic welding machine is used, the overlap onto the roof membrane must be approx. 15 cm. For mechanically fixed installations, the welding width must be at least 8 cm, otherwise min. 4 cm. In the roof perimeter zones, FG 35 primer must be fully applied for a width of 1 metre for buildings up to 20m high and 2 metres for buildings over 20m high.

4.2 RESITRIX® MB and RESITRIX® CL

For loose-applied upstand or parapet flashings, mechanical fixings must be applied to the top of the membrane. Furthermore, additional intermediate mechanical fixings are required for upstands over 50 cm high.

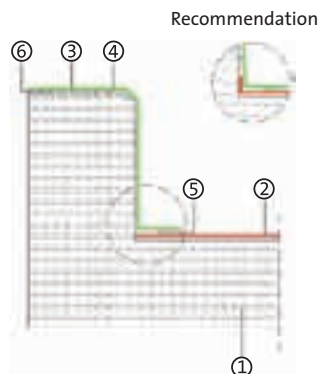
5. DETAILING WORK

Please follow the general installation instructions when performing the individual detailing work illustrated below.

5.1 Flashings and Terminations

5.1.1

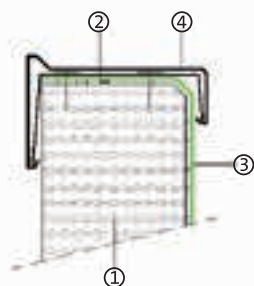
Bonded using
RESITRIX® SK W Full Bond /
RESITRIX® SK Partial Bond /
RESITRIX® SR



1. Building structure / substrate
2. RESITRIX® waterproofing membrane (type determined by selected installation variant)
3. Surface primer FG 35 (full surface application)
4. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR adhered
5. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR hot-air welded to the roof membrane
6. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR hot-air welded to the parapet or trim

5.1.2

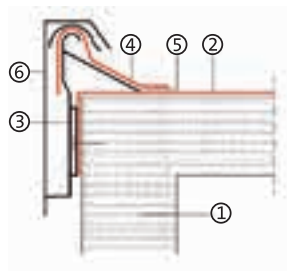
Metal Capping



1. Building structure / substrate
2. FG 35 surface primer (full surface application)
3. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR adhered
4. Mechanically fixed capping profile

5.1.3

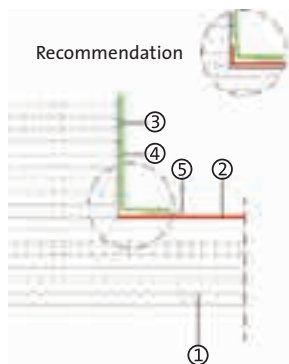
Multi-part Roof Edge Fascia Profile



1. Building structure / substrate
2. RESITRIX® waterproofing membrane (type determined by selected installation variant)
3. Fixing clip system for roof edge fascia profile
4. RESITRIX® flashing strips (type determined by selected installation variant) Loose-laid and clamped
5. RESITRIX® flashing strips hot-air welded to the roof membrane
6. Roof edge fascia profile

5.1.4

Bonded using
RESITRIX® SK W Full Bond /
RESITRIX® SK Partial Bond /
RESITRIX® SR



1. Building structure / substrate
2. RESITRIX® waterproofing membrane (type determined by selected installation variant)
3. FG 35 surface primer (full surface application)

4. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR adhered
5. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR hot-air welded to the roof membrane

5.1.5

Upstand with termination
bar detail

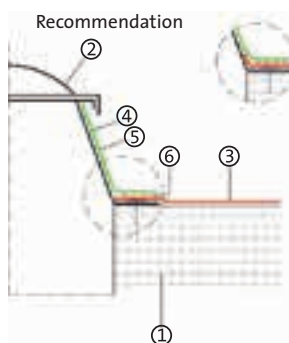


1. Building structure / substrate
2. RESITRIX® waterproofing membrane (type determined by selected installation variant)
3. FG 35 surface primer (full surface application)
4. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR adhered

5. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR hot-air welded to the roof membrane
6. Termination bar
7. Permanently elastic sealant

5.1.6

Rooflight kerb



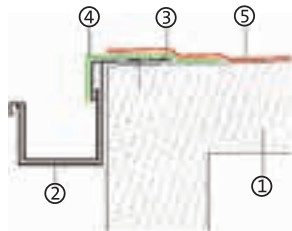
1. Building structure / substrate
2. Rooflight (e.g. dome)
3. RESITRIX® waterproofing membrane (type determined by selected installation variant)
4. FG 35 surface primer (full surface application)

5. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR flashing strips adhered
6. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR hot-air welded to the roof membrane

5.2 Rainwater drainage

5.2.1

Eaves gutter

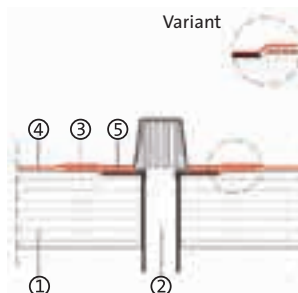


1. Building structure / substrate
2. Eaves gutter
3. FG 35 surface primer on metal closure

4. RESITRIX® SK W Full Bond flashing strips adhered to continuous metal drip flashing / closure
OR
RESITRIX® weltdrip with drip former
5. RESITRIX® waterproofing membrane (type determined by selected installation variant) hot-air welded to the roof edge flashing strips

5.2.2

Drop outlet



1. Building structure / substrate
2. Outlet
3. Connecting sleeve
4. RESITRIX® waterproofing membrane (type determined by selected installation variant)

5. RESITRIX® waterproofing membrane hot-air welded to outlet flange

5.2.3

Overflow weir with RESITRIX® sealing flange



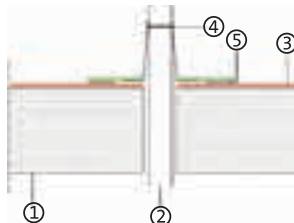
1. Building structure / substrate
2. Overflow drain spigot
3. RESITRIX® waterproofing membrane (type determined by selected installation variant)
4. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR flashing hot-air welded to outlet flange and roof membrane

5. FG 35 surface primer (full surface application)
6. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR adhered
7. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR flashing hot-air welded to outlet flange and RESITRIX® parapet flashing

5.3 Roof Penetrations

5.3.1

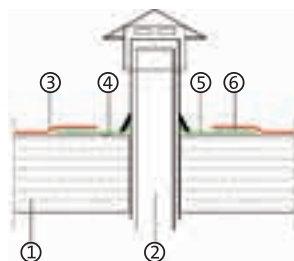
RESITRIX® Pipe Sleeve
(small) – Diameter: 5–30 mm
(large) – Diameter:
35–100 mm



1. Building structure / substrate
2. Pipe penetration (diameter of 5–30 mm or 35–100 mm)
3. RESITRIX® waterproofing membrane (type determined by selected installation variant)
4. RESITRIX® Pipe Sleeve with factory-applied sealing flange; secured to the pipe with a hose clamp. Alternatively secure the top with the heat-shrinkable tubing (included in delivery)
5. RESITRIX® SK W Full Bond sealing flange hot-air welded to the roof membrane

5.3.2

Pipe with site-applied RESITRIX® flashing

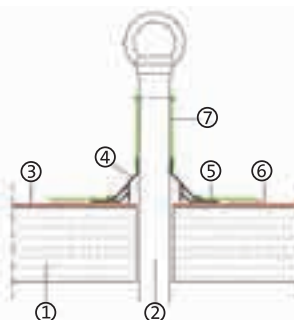


1. Building structure / substrate
2. Vent pipe with factory-applied sealing flange
3. RESITRIX® waterproofing membrane (type determined by selected installation variant)
4. FG 35 surface primer (full surface application)
5. RESITRIX® flashing hot-air welded to the roof membrane

5.4 Fall Protection Systems

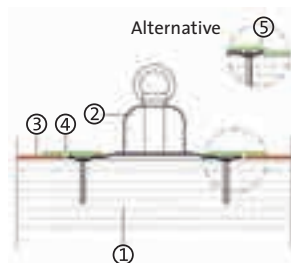
5.4.1

Fall Protection System with Connecting Sleeve
(Manufacturer: ST-Quadrat)



1. Building structure / substrate
2. Fall Protection System (System: ST-Quadrat-Lux-top ASP)
3. RESITRIX® waterproofing membrane (type determined by selected installation variant)
4. PVC protection cover with integral sealing hose and hose clamp at top
5. RESITRIX® SK W Full Bond sealing flange
6. RESITRIX® SK W Full Bond sealing flange hot-air welded to the roof membrane
7. Elastomeric sealing hose with hose clamp at top

5.4.2 Fall Protection System (make: Latchways)



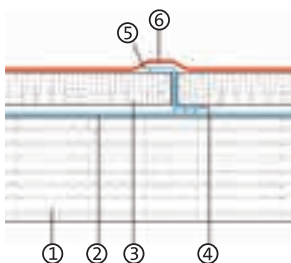
1. Building structure / substrate
2. Fall Protection System (e.g. Latchways)
3. RESITRIX® waterproofing membrane (type determined by selected installation variant)
4. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR flashing strips hot-air welded to the roof membrane and base plate of the fall protection system

Alternative:

5. RESITRIX® SK W Full Bond / RESITRIX® SK Partial Bond / RESITRIX® SR waterproofing membrane hot-air welded directly to the base plate of the fall protection system.

5.5 Sealing-off

Night joint seals to Insulated Areas



1. Building structure / substrate
2. ALUTRIX® 600 / ALUTRIX® FR Vapour Barrier
3. Thermal insulation
4. ALUTRIX® 600 / ALUTRIX® FR self-adhesive flashing strip bonded onto the vapour barrier
5. ALUTRIX® 600 / ALUTRIX® FR self-adhesive flashing strip bonded to the insulation board

6. RESITRIX® waterproofing membrane (type determined by selected installation variant)

5.6 Internal and External Corners

Internal and external corners are sealed with separate RESITRIX® shaped pieces, preferably made from RESITRIX® SK W Full Bond. The pieces should be minimum 18 cm wide. When calculating the length or diameter, allow for an overlap or welding width of minimum 3 cm.

Forming internal corners:



Fully bond the first flashing strip onto the upstand and heat-weld onto the roof side



Fully bond the second flashing strip; heat-weld the overlap and onto the roof side



Weld the entire surface and circumference of the lower circular patch, including the folded edge



Weld the entire surface of the fold



Weld the entire surface and circumference of the vertical middle corner piece



Weld the entire surface and circumference of the shaped top corner piece

The individual pieces are hot-air welded to the complete surface of the flashing strips.

Hot-air welding is also used to weld the laps of the shaped pieces.

Forming external corners:



Adhere the first flashing strip onto the horizontal top of the upstand; cut out a rounded notch to within approx. 1 cm of the upper corner point. Cut out a square at the lower corner area



Fully bond the vertical areas of the first flashing strip



Fully bond the second flashing strip; terminating it flush and heat-welding the overlap at the vertical edge



Weld both flashing strips onto the roof side



Weld the entire surface and circumference of the lower circular piece, in a kidney shape



Weld the entire surface and circumference of the top corner piece in a semi-circular form



Sealing onto alternative waterproofing materials in the field area may be possible, please consult the RESITRIX® Technical Department.

7. NOTES

RESITRIX® MB and RESITRIX® CL on Concrete and timber decks	
SFS Spike	500 N Reinforced Concrete
SFS IGR-S	500 N Aerated Concrete
SFS IR 2	500 N Wood
ISO-TAK TPP-8040	540 N Reinforced Concrete

[illegible]

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46



/ Certifications:
DIN EN ISO 9001 and
DIN EN ISO 14001



INSTITUT GRADEVINARSTVA HRVATSKE d.d.
CIVIL ENGINEERING INSTITUTE OF CROATIA



CTG - 008

ÉME Nr. A-1220/1999



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