

CATALOGUE 23/24

 **Riwega**[®] | eternitycomfort

Ventilation, impermeability, air tightness



Riwega has helped to create awareness of the importance of a properly insulated and ventilated roof in the Italian and international markets. In the process, Riwega has become the leading company in the industry. Riwega offers a wide range of highly breathable roof and wall membranes, systems for professional ventilation of the roof, products for water, air and wind tightness and permanent systems for safety. Products for pitched roofs with roof coverings have been the hallmark of the company since its foundation in 1998.

Today, the Riwega brand can claim the best results in the specialization, production and commercialization of building materials that meet the criteria of the current European directives for energy saving and environmental protection. Riwega's innovative lines of development are thus based on current market analyses and the needs derived from them.



Thanks to more than 20 years of experience in the building sector, Riwega faces different markets: roofing, ventilated facades, and building envelopes.

Riwega's primary goal is to respect the building and environment standards, to guarantee a better living quality and a vision that is linked to long-lasting and healthy buildings. These goals can only be achieved with particularly careful planning and construction of the building, using construction systems that guarantee the benefits of the structural packages: insulation, thermic inertia, ventilation, soundproofing, waterproofing, air and wind tightness.

The chosen products for the creation of the roof packages play a fundamental role: the better their technical features and their durability, the better their contribution to a long-lasting roof package and therefore, to the entire building.

Riwega | eternitycomfort products have been designed to offer planners and builders the opportunity to develop constructions with low energy consumption and a high level of living comfort, with all the guarantees for long durability.



... stands for passion, ambition and energy saving!

For more than 20 years, Riwega has been producing and selling innovative materials that make the every day and working lives of people and companies safer and more environmentally friendly.

Riwega's primary goal is to guarantee top-quality products and technologically advanced solutions for the entire building envelope.

All Riwega products guarantee perfection and safety for your roof.



... means renewal instead of stagnation

... because avant-garde is at home with us

... because innovation makes all the difference

... because innovation is synonymous with the future

... because research and development open the way to the future



Riwega invests massively in research and development, in close contact with customers and partners, with its eyes on the market and in consideration of all applicable regulations, in order to position ourselves as an innovative specialist brand for planners, timber construction companies, carpenters and roofers.

Our goal is to become even better for you every day. Riwega has established itself as one of the leading companies in the field of air and wind resistance and today it is a popular choice for professional associations, public and certification institutions in the field of training and further education in all European countries.

One important achievement in the world of vapour control layers and breathable membranes (SMT), in which Riwega has again been involved fundamentally, is its participation in the technical committee that sets various national and European regulations and standards.

These regulate the application methods for synthetic vapour control layers and breathable membranes. The standards regulate, among other things, their use on pitched roofs, on continuous or non-continuous structures, or in direct contact with thermal insulation.

Riwega follows all the regulations and standards currently in force in Europe, which define the correct design of the junction point when installing windows and doors. Furthermore, Riwega regularly organises training workshops and courses for planners and installers.

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R1 Elements for roof ventilation

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R1 Elements for roof ventilation

R1

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Mechanically resistant



Pre-folded edge



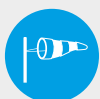
High adhesion



Water proofness



Easily mouldable



Resistance to strong wind



Fast installation



Aging resistance



UV resistance

Under ridge elements

What is a ventilated roof?

For the living comfort and the durability of the building, a correct relation between air entry from the eaves and exit from the ridge line has to be guaranteed. To obtain the „Venturi effect“ (or chimney effect) the air outlet in the ridge line has to be 25% (by volume) of the air inlet from the eave.

The ideal air-flow section, which is effective in reducing heat flow in summer climate, is at least 55 mm, below the roof batten height (roof with counter-batten + batten) or below supporting planking (roof with double batten). If the roof is not insulated, or in the case of the upper side of under-ventilated planking, where any water vapour accumulation in the roof must only be removed, an air-flow section of at least 20 mm height should be installed. This ensures the healthiness of the roof, reduces maintenance costs and optimises insulation performance.

Advantages of a ventilated roof

Only a correct air circulation where air enters through the eaves and escapes at the ridge level, can avoid critical situations and extend the durability of your roof.

A) **Reduction of humidity**

Reduces or removes the risk of condensation on the bottom side of the covering and in case of rain, snow or strong humidity, avoids that the roof tiles soak up water and transmit the same humidity to the structure below.

B) **Lower summer heat between covering and insulation:**

To reduce the thermal flow during summertime, the optimal section of the ventilation gap should be at least 55 mm. During warm sunny days, when the temperature between the insulation and covering reaches up to 80°C, the ventilated roof avoids overheating and heat propagation inside the insulation package, helping to maintain an adequate climate inside the house.

C) **Flow of infiltrations to the eaves:**

A ventilated roof facilitates the outflow of water infiltrations from the roof covering or other critical points.

D) **Increase in covering durability:**

It allows heat that rises from the inside of the building to be distributed uniformly, avoiding snow melting in defined areas that causes water infiltration where the roof tiles overlap. This way, the prerequisites conditions set by producers of roof tiles, to respect the warranty for freezing/thawing, are fulfilled.

Riwega's under-ridge elements

In this section of the catalogue we deal with materials to be used to ensure a correct ventilation with under-ridge elements, that will respond the best possible way to the technical needs (airflow, avoiding animals and insects to enter inside the roof, good water flow from the ridge tiles to roof tiles) and the need of easy installation and durability.

ROLL-tech

01

R1

QUICK OVERVIEW: STRENGTHS

The first, the original

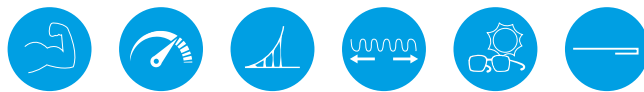
- Under-ridge roll
- Water resistant and UV stable
- Guarantees strong air passage
- Central part in reinforced PP and perfectly adaptable folded aluminium stripe
- Prefolded aluminium edge to increase mechanical resistance



Composition:

- 1 Aluminium with prefolded edge
- 2 Seam
- 3 UV stabilized PP
- 4 Reinforced PP fabric
- 5 Extruded butylic glue
- 6 Silicon liner

Features:



Technical data sheet

| | | |
|------------------------|------------|---|
| Material | | alu.PP.alu |
| Pre-folded edge | | YES |
| Aluminium stripe | | 0,15 mm |
| Roll length | | 5,00 m |
| Central fabric | | UV stabilized PP |
| Central stripe | | reinforced PP fabric |
| Material assembly | | glue and seam |
| Extruded butylic glue | | 140 g/m |
| Air flow (each side) | DIN 4108-3 | >145 cm ² /m |
| UV rays stability | | stable |
| Ageing resistance | | >10 years (indirect exp.) |
| Temperature resistance | | -30°C / +70°C |
| Processing temperature | | +5°C / +40°C |
| Alu development | | 1,45% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 2 pc/box |
| Pallet | | 60 boxes |

Codes and measures

| Colours / Measures | 310 mm | 350 mm | 370 mm | 400 mm |
|--------------------|----------|----------|----------|----------|
| Red-brown | 01013101 | 01013501 | 01013601 | 01014001 |
| Brown | 01013102 | 01013502 | 01013602 | 01014002 |
| Black | 01013103 | - | 01013603 | - |
| Beige | - | - | 01013606 | - |
| Grey | 01013104 | - | - | - |

Clima ROLL



QUICK OVERVIEW: STRENGTHS

Double central protection

- Under-ridge roll
- Suitable for areas subject to very strong winds
- Resistant to water infiltrations and UV rays
- Easily adaptable to every type of roof covering
- Pre-folded Alu-edge to increase the mechanical resistance

Features:



Technical data sheet

| | | |
|------------------------|------------|--|
| Material | | alu.TNT multilayer.alu |
| Pre-folded edge | | YES |
| Aluminium stripe | | 0,15 mm |
| Roll length | | 5,00 m |
| Central fabric | | multilayer fabric |
| Central stripe | | NO |
| Material assembly | | glue and seam |
| Extruded butylic glue | | 120 g/m |
| Air flow (each side) | DIN 4108-3 | >90 cm²/m |
| UV rays stability | | stable |
| Ageing resistance | | resistant |
| Temperature resistance | | -30°C /+70°C |
| Processing temperature | | +5°C /+40°C |
| Alu development | | 1,35% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 4 pc/box |
| Pallet | | 30 boxes |

Codes and measures

| Colours / Measures | 310 mm | 370 mm | 400 mm |
|--------------------|----------|----------|----------|
| Red-brown | 01013201 | 01013701 | 01013801 |
| Brown | 01013202 | 01013702 | 01013802 |
| Black | 01013203 | 01013703 | - |



Composition:

- Aluminium with prefolded edge ①
- Seam ②
- Multilayer fabric ③
- Extruded butylic glue ④
- Silicon liner ⑤

UNI Air ROLL

03
R1

QUICK OVERVIEW: STRENGTHS

Excellent price/quality ratio

- Under-ridge roll
- Resistant to water infiltrations and UV rays
- Easily adaptable to every type of roof covering
- Pre-folded Alu edge to increase the mechanical resistance
- Blocks access to birds and rodents under the roof tiles



Composition:

- 1 Aluminium with prefolded edge
- 2 Seam
- 3 PP fabric
- 4 Extruded butylic glue
- 5 Silicon liner

Features:



Technical data sheet

| | | |
|------------------------|------------|--|
| Material | | alu.PP.alu |
| Pre-folded edge | | YES |
| Aluminium stripe | | 0,12 mm |
| Roll length | | 5,00 m |
| Central fabric | | UV stabilized PP |
| Central stripe | | NO |
| Material assembly | | glue and seam |
| Extruded butylic glue | | 120 g/m |
| Air flow (each side) | DIN 4108-3 | >145 cm²/m |
| UV rays stability | | stable |
| Ageing resistance | | resistant |
| Temperature resistance | | -30°C / +70°C |
| Processing temperature | | +5°C / +40°C |
| Alu development | | 1,35% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 4 pc/box |
| Pallet | | 30 boxes |

Codes and measures

| Colours / Measures | 310 mm | 370 mm | 400 mm |
|--------------------|----------|----------|----------|
| Red-brown | 01010300 | 01010310 | 01010400 |
| Brown | 01010301 | 01010311 | 01010401 |

Euro-ROLL



04

R1

QUICK OVERVIEW: STRENGTHS

The strength is the price

- Under-ridge roll
- Resistant to water infiltrations and UV rays
- Easily adaptable to every type of roof covering
- Pre-folded Alu edge to increase the mechanical resistance
- Blocks access to birds and rodents under the roof tiles

Features:

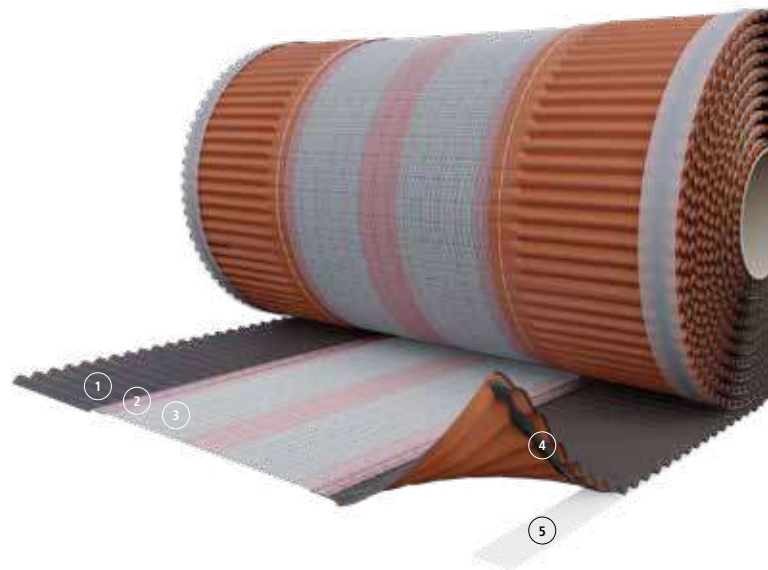


Technical data sheet

| | | |
|------------------------|------------|---|
| Material | | alu.PP.alu |
| Pre-folded edge | | YES |
| Aluminium stripe | | 0,12 mm |
| Roll length | | 5,00 m |
| Central fabric | | polypropylene |
| Central stripe | | NO |
| Material assembly | | glue and seam |
| Extruded butylic glue | | 90 g/m |
| Air flow (each side) | DIN 4108-3 | >145 cm ² /m |
| Temperature resistance | | -30°C /+70°C |
| Processing temperature | | +5°C /+40°C |
| Alu development | | 1,25% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 4 pc/box |
| Pallet | | 30 boxes |

Codes and measures

| Colours / Measures | 310 mm | 370 mm | 400 mm |
|--------------------|----------|----------|----------|
| Red-brown | 01013903 | 01013901 | 01013906 |
| Brown | 01013904 | 01013902 | 01013907 |
| Black | 01013905 | - | - |



Composition:

- Aluminium with prefolded edge ①
- Seam ②
- PP fabric ③
- Extruded butylic glue ④
- Silicon liner ⑤

Basic ROLL

05

R1

QUICK OVERVIEW: STRENGTHS

The essential one for roof ventilation

- Under-ridge roll
- Resistant to water infiltrations and UV rays
- Easily adaptable to every type of roof covering
- Blocks access to birds and rodents under the roof tiles



Composition:

- 1 Aluminium
- 2 Seam
- 3 Multilayer PP fabric
- 4 Extruded butylic glue
- 5 Silicon liner

Features:



Technical data sheet

| | | |
|------------------------|------------|---|
| Material | | alu.PP.alu |
| Pre-folded edge | | NO |
| Aluminium stripe | | 0,12 mm |
| Roll length | | 5,00 m |
| Central fabric | | multilayer PP fabric |
| Central stripe | | NO |
| Material assembly | | glue and seam |
| Extruded butylic glue | | 80 g/m |
| Air flow (each side) | DIN 4108-3 | >50 cm ² /m |
| Temperature resistance | | -30°C / +70°C |
| Processing temperature | | +5°C / +40°C |
| Alu development | | 1,25% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 4 pc/box |
| Pallet | | 60 boxes |

Codes and measures

| Colours / Measures | 310 mm | 370 mm |
|--------------------|----------|----------|
| Red-brown | 01010318 | 01010320 |
| Brown | 01010319 | 01010321 |

TIROLL Air



06
R1

QUICK OVERVIEW: STRENGTHS

Resistance is its main strength

- Under-ridge roll
- Completely made of metal (aluminium or copper)
- Resistant to water infiltrations and UV rays
- Completely water-resistant, also in case of broken tiles or if a tile is out of line
- Easily adaptable to every type of roof covering

Features:

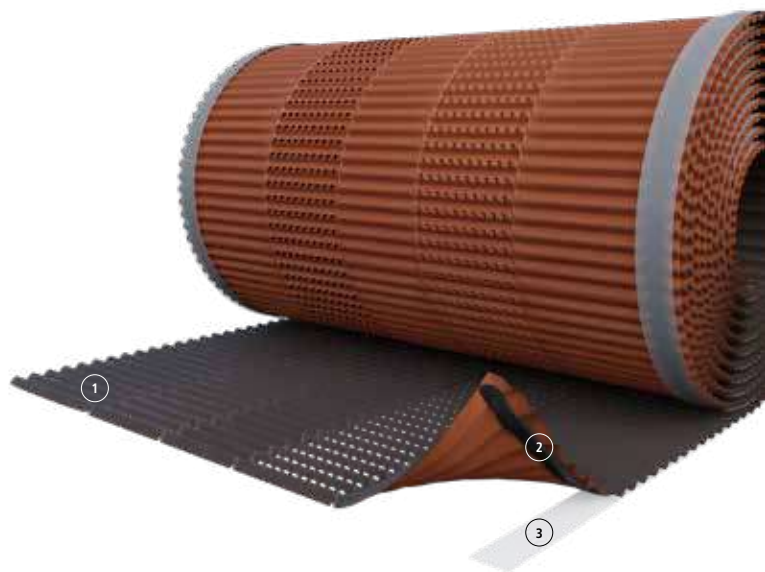


Technical data sheet

| | | |
|-----------------------------------|------------|--|
| Material | | alu / copper |
| Pre-folded edge | | NO |
| Red / brown stripe | | 0,15 mm |
| Beige Antik stripe | | 0,12 mm |
| Copper stripe | | 0,10 mm |
| Roll length | | 5,00 m |
| Butylic glue red / brown / copper | | 90 g/m |
| Butylic glue beige Antik | | 60 g/m |
| Air flow (each side) | DIN 4108-3 | >90 cm²/m |
| UV rays stability | | stable |
| Ageing resistance | | resistant |
| Temperature resistance | | -30°C /+90°C |
| Processing temperature | | +5°C /+40°C |
| Alu / copper development | | 1,20% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 4 pc/box |
| Pallet | | 30 boxes |

Codes and measures

| Colours / Measures | 320 mm | 370 mm | 400 mm |
|--------------------|----------|----------|----------|
| Red-brown | 01014321 | 01014371 | 01014391 |
| Brown | 01014322 | 01014372 | 01014392 |
| Beige Antik | - | 01014376 | - |
| Copper* | 01016325 | 01016375 | 01016395 |



Composition:

- Aluminium / copper ①
- Extruded butylic glue ②
- Silicon liner ③

*upon demand

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Venti-tech

07

R1

QUICK OVERVIEW: STRENGTHS

The tradition of the ventilated roof

- Rigid under-ridge element
- Suitable for roof coverings with curved roof tiles
- Rain and UV ray resistant side brushes
- Blocks access to birds and rodents under the roof tiles
- Lightweight, easy and quick to install



Composition:

- ① PVC
- ② UV resistant side brushes

Features:



Technical data sheet

| | | |
|----------------------|------------|---------------------------------|
| Material | | PVC |
| Under-ridge width | | 175 mm |
| Legth | | 1 m |
| Brushes height | | 75 mm |
| Air flow (each side) | DIN 4108-3 | >120 cm²/m |
| Packaging | | 20 pc/box |
| Pallet | | 10 boxes |

Codes and measures

| | |
|--------------------|--------------------|
| Colours / Measures | 75 x 175 mm |
| Red-brown | 01021771 |
| Brown | 01021772 |
| Black | 01021773 |

Venti-tech Metal



QUICK OVERVIEW: STRENGTHS

Tradition combined with strength

- Rigid under-ridge element
- Completely made of metal
- Suitable for every ridge or hip line
- Rain and UV ray resistant side brushes
- Blocks access to birds and rodents under the roof tiles
- Easy and quick to install
- Durable

Features:



Technical data sheet

| | | |
|--------------------------|------------|---------------------------------|
| Material central part | | galvanized iron |
| Material side stripes | | aluminium or lead |
| Alu thickness | | 0,15 mm |
| Lead thickness | | 0,30 mm |
| Top stripe's thickness | | min. 150 mm |
| Under-ridge's width | | max. 400 mm |
| Legth | | 1 m |
| Side stripes' height | | 125 mm |
| Butylic adhesive stripes | | YES (only alu type) |
| Air flow (each side) | DIN 4108-3 | >100 cm²/m |
| Temperature resistance | | +2°C /+90°C |
| Packaging | | 10 pc/box |
| Pallet | | 20 boxes |

Codes and measures

| Colours / Measures | 125 x min. 150 - max. 400 mm | |
|--------------------|------------------------------|-----------|
| | Lead | Aluminium |
| Red-brown | 01024001 | 01023001 |
| Natural | 01024004 | - |

Composition:

- Galvanized iron (1)
- Side stripes in aluminium or lead (2)

Accessories for the roof-ventilation

The reason for ventilation

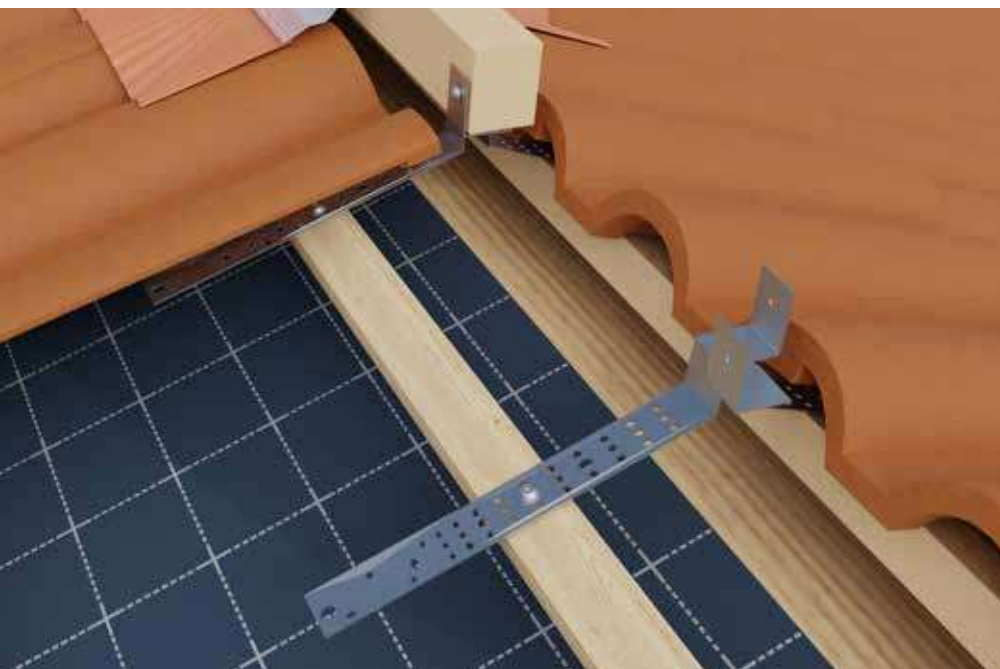
The roofing of a building is the fundamental element of a building since it is the most affected part by climatic variations that follow one another over the seasons and years. Good ventilation allows fresh and clean air to enter the upper part of the building, with continuous air circulation, which is beneficial for the entire structure. Over time, material exposed to humidity and mold deteriorates thus making maintenance work or even a complete replacement necessary.

Riwega's accessories for ventilated roofs

This section displays various types of accessories that contribute to allowing proper roof ventilation. Divided into accessories for laying the ridge and accessories for the eaves, which allow the air-flow but not the access of animals (normally birds and/or rodents) under the roof.

From ridge batten holders, ridge clips and ventilation elements, to systems for protection against the intrusion of birds or rodents: Riwega's assortment for ventilated roofs ensures that all materials that make up the roof do not overheat. The result is optimised efficiency and longer service life of the entire roof system, as well as greater energy savings.

Batten support bracket



QUICK OVERVIEW: STRENGTHS

Essential for a correct ridge tile installation

- Metal batten support brackets
- Adaptable to all kinds of roof cover
- Can be used on all rigid supports (wood or concrete)
- Adjustable in height and available in different measures
- Guarantees stability of the roof covering without using any foam or mortar

Universal batten support bracket

| Product | Height (mm) | Width (mm) | Code |
|--------------|-------------|------------|----------|
| Universal 30 | 220 | 30 | 01040130 |
| Universal 40 | 220 | 40 | 01040140 |
| Universal 50 | 220 | 50 | 01040150 |



Nail-type batten support bracket

| Product | Height (mm) | Width (mm) | Code |
|------------------|-------------|------------|----------|
| Nail-type 210/40 | 210 | 40 | 01040240 |
| Nail-type 260/40 | 260 | 40 | 01040340 |
| Nail-type 260/50 | 260 | 50 | 01040350 |
| Nail-type 310/40 | 310 | 40 | 01040440 |
| Nail-type 310/50 | 310 | 50 | 01040450 |



Kit "S" 57 / Kit "F"

| Product | Content | Code |
|---------|---|----------|
| Kit S | 30 hooks S57, 14 u. batten support brackets*, 200 nails** | 01030140 |
| Kit F | 30 hooks F08, 14 u. batten support brackets*, 200 nails** | 01030240 |



*Width = 40 mm; **2,8x35 mm

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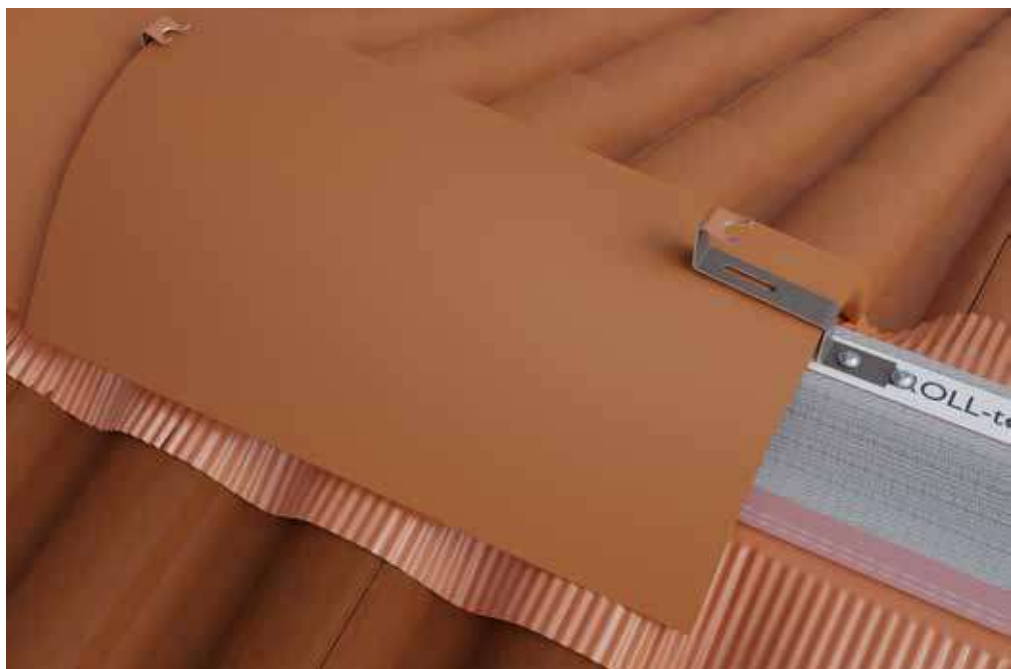
Ridge tile hooks

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R1

QUICK OVERVIEW: STRENGTHS

Guaranteed anchoring

- Pre-shaped aluminium hooks
- Optimal to anchor the ridge tiles to the support batten using screws
- Guarantees stability of the roof covering without using any foam or mortar
- Available in various shapes to adapt to different roof covering types



Ridge tile hook "S" 57

| Colour | Material | Use | Code |
|--------|-----------|-------------------|----------|
| Brown | Aluminium | Smooth ridge tile | 01055702 |
| Red | Aluminium | Smooth ridge tile | 01055701 |



Ridge tile hook "F" 08

| Colour | Material | Use | Code |
|--------|-----------|--------------------------|----------|
| Brown | Aluminium | Interlocking ridge tiles | 01050802 |
| Red | Aluminium | Interlocking ridge tiles | 01050801 |



Ridge tile hook "B" 02

| Colour | Material | Use | Code |
|--------|-----------|----------------------|----------|
| Brown | Aluminium | Concrete ridge tiles | 01050202 |
| Red | Aluminium | Concrete ridge tiles | 01050201 |
| Black | Aluminium | Concrete ridge tiles | 01050203 |

Eaves ventilation combs



QUICK OVERVIEW: STRENGTHS

The air passage is welcome under the roof covering, while birds are not

- Eaves ventilation combs to protect the ventilation entrance
- Suitable for all types of curved tiles and roof tiles
- Available in different heights and measures
- To guarantee proper opening for correct roof ventilation

PP eaves ventilation combs

| Material | Colour | Measures (mm) | Code |
|---------------|--------|---------------|----------|
| Polypropylene | Red | 60x1000 | 01071062 |
| Polypropylene | Black | 60x1000 | 01071063 |
| Polypropylene | Black | 100x1000 | 01071113 |



Metal eaves ventilation combs

| Material | Colour | Measures (mm) | Code |
|------------------|------------------|---------------|----------|
| Galvanized sheet | Pre-coated brown | 60x1000 | 01073062 |
| Galvanized sheet | Pre-coated brown | 100x1000 | 01073102 |
| Copper | Copper | 60x1000 | 01072060 |
| Copper | Copper | 100x1000 | 01072100 |



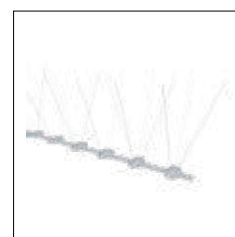
PP eaves ventilation combs with support

| Version | Material | Colour | Measures (mm) | Code |
|-------------------|---------------|--------|---------------|----------|
| Comb with support | Polypropylene | Black | 60x1000 | 01074063 |
| Only support | Polypropylene | Black | 32x1000 | 01074064 |



Anti-bird spikes

| Material | Colour | Measures (mm) | Code |
|----------------------|-----------------------|---------------|----------|
| Polycarbonate + inox | transparent - natural | 500x80xh105 | 01075126 |



Angled protection screens

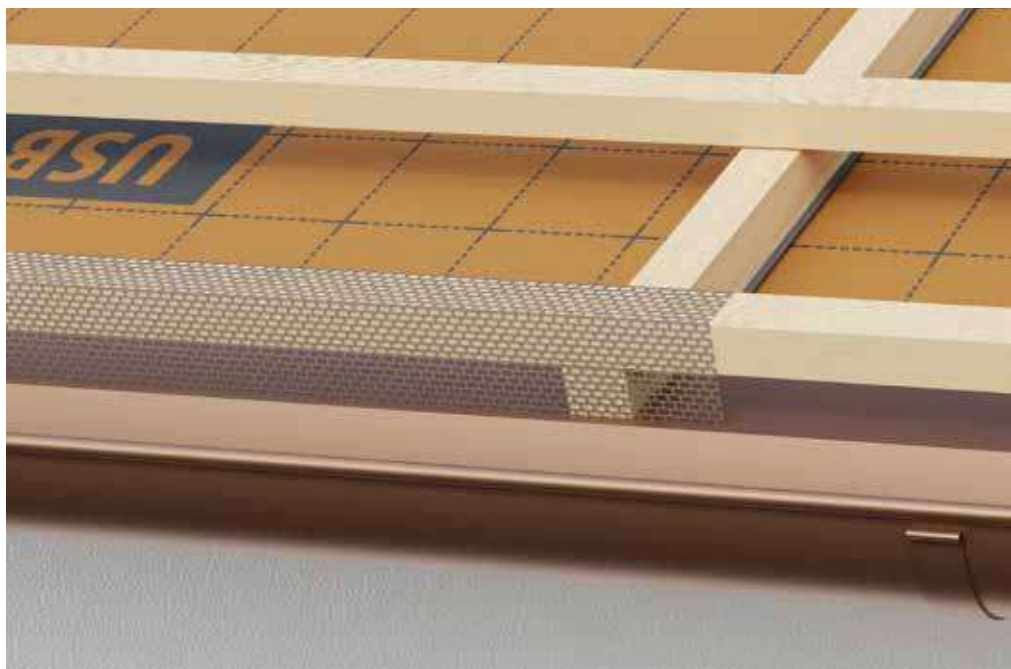
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R1

QUICK OVERVIEW: STRENGTHS

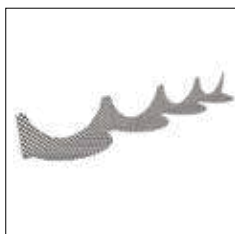
Ready-to-use protection

- Rigid net to cover the ventilation entrance
- Barrier against birds and rodents
- Pre-moulded, easy and quick to install
- Resistant to atmospheric agents and UV rays
- Available in different heights and measures



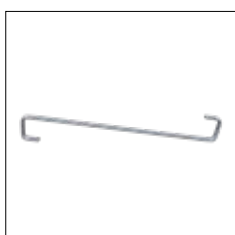
Angled bird protection screen

| Material | Colour | Measures (mm) | Code |
|-----------|---------|---------------|----------|
| PVC | Brown | 30x50 | 01081352 |
| PVC | Brown | 30x90 | 01081392 |
| Aluminium | Natural | 30x50 | 01081353 |
| Aluminium | Natural | 24x100 | 01081303 |
| Aluminium | Brown | 24x100 | 01081302 |



Pre-cut bird protection screen

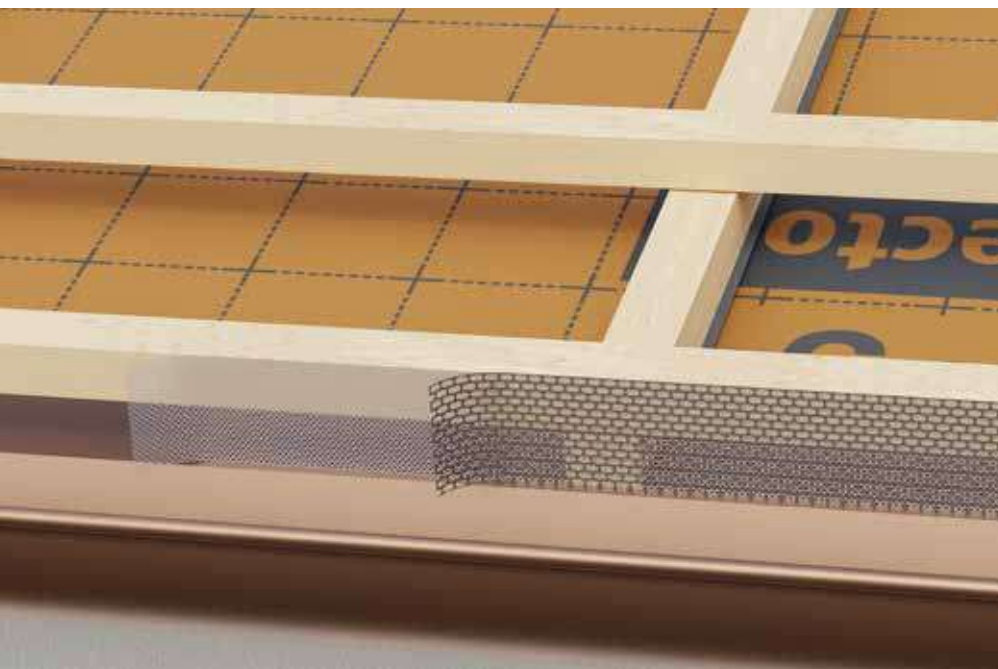
| Colour | Spacing (mm) | Legth (m) | Code |
|--------|--------------|-----------|----------|
| Brown | 195 | 1 | 01085152 |
| Brown | 230 | 1 | 01085153 |



Accessories for pre-cut bird pr. screen: stainless steel hooks

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 50 | 16 | 400 | 04013516 |
| 50 | 20 | 400 | 04013520 |
| 90 | 16 | 400 | 04014916 |
| 90 | 20 | 400 | 04014920 |

Protection screen rolls



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R1

QUICK OVERVIEW: STRENGTHS

Flexible protection

- Screen-roll for the protection of the ventilation chamber
- Barrier against birds, rodents and insects
- Resistant to atmospheric agents and UV rays
- Available in different heights and materials

Bird protection screen roll

| Material | Colour | Measures (mm x m) | Code |
|-------------|------------|-------------------|----------|
| PVC | Red-brown | 50x5 | 01082051 |
| PVC | Brown | 50x5 | 01082052 |
| PVC | Red-brown | 80x5 | 01082081 |
| PVC | Brown | 80x5 | 01082082 |
| PVC | Red-brown | 100x5 | 01082101 |
| PVC | Brown | 100x5 | 01082102 |
| PVC | Red-brown | 150x5 | 01082151 |
| PVC | Brown | 150x5 | 01082152 |
| PVC | Red-brown | 180x5 | 01082181 |
| PVC | Brown | 180x5 | 01082182 |
| Metal sheet | Brown | 100x25 | 01084100 |
| Metal sheet | Galvanized | 100x25 | 01084104 |
| Copper | Copper | 50x25 | 01083050 |
| Copper | Copper | 80x25 | 01083080 |
| Copper | Copper | 100x25 | 01083100 |
| Copper | Copper | 150x25 | 01083150 |



Insect protection screen roll

| Material | Colour | Measures (cm x m) | Code |
|-----------|---------|-------------------|----------|
| Aluminium | Natural | 10*x30 | 01086105 |
| Aluminium | Natural | 15*x30 | 01086155 |



*upon demand, available also in rolls height up to 100 cm
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IP Black 95/160

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R1

QUICK OVERVIEW: STRENGTHS

Keeps animals from entering into the facade

- Screen-roll for the protection of the ventilation chamber
- Barrier against birds, rodents and insects for ventilated facades with open joints
- Black, invisible between the facade joints
- UV-stable
- Easy to cut to the desired size



new
product



Features:



Composition:

- ① Fiberglass / PVC

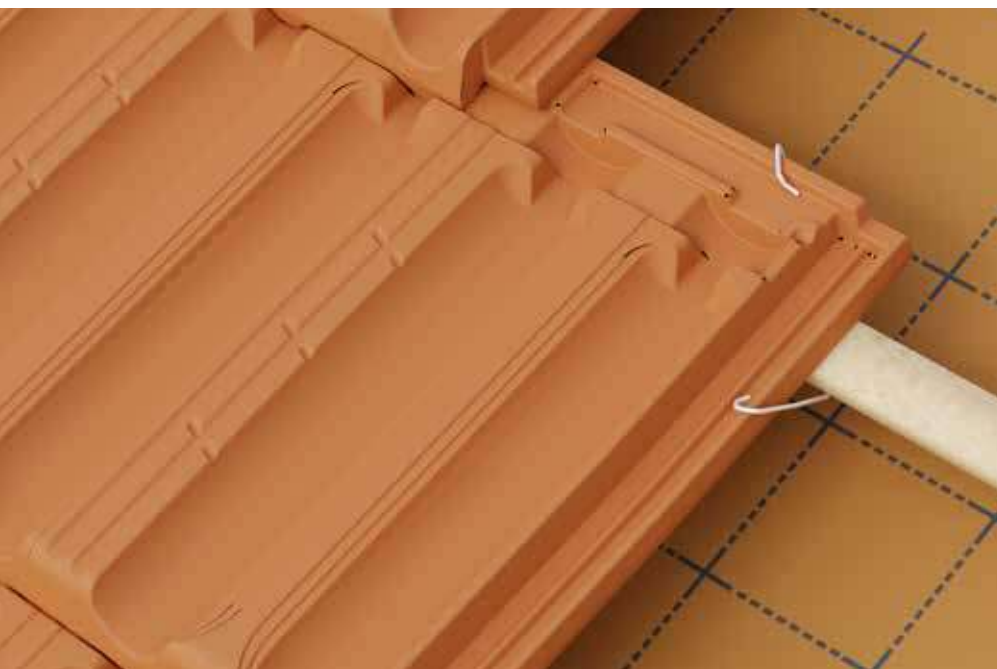
Codes and measures

| Code | Width (m) | Length (m) | Box (m ²) |
|----------|-----------|------------|-----------------------|
| 01086160 | 1,6 | 25 | 40 |

Technical data sheet

| | | | |
|--------------------|--|-----------------------|------------|
| Material | 35% Fiberglass / 65% PVC | | |
| Colour | Black | | |
| Use | Ventilated facade | | |
| Mass per unit area | EN 12127 | ~ 95 g/m ² | |
| Fabric per 10 cm | | warp | weft |
| N° wires | | 66 | 60 |
| Yarn size | | 800 dtex | 800 dtex |
| Tensile strength | EN ISO 13934-1 | >500 N/5cm | >400 N/5cm |
| UV stability | stable (joints up to max. 30 mm - max. 40 %) | | |
| Storage | dry, protected from UV rays, max. +30°C | | |

Hooks for tiles



QUICK OVERVIEW: STRENGTHS

Guaranteed stability and ventilation

- Wind-resistant hooks for tiles
- Prevents tiles slipping or falling
- Ventilated, dry and durable solution
- To guarantee covering stability despite no foam and no mortar being used

Wind-resistant hook for shaped clay tiles

Wind resistant hook for tiles

| Hook version | Tile type (qty) | Box (pc) | Code |
|------------------------|-----------------|----------|----------|
| Shaped galvanized iron | Clay (1) | 250 | 04045100 |
| Long galvanized iron | Clay (2) | 250 | 04045300 |
| Galvanized iron | Concrete (1) | 500 | 04045200 |



Wind resistant hook for beaver-tail tiles

| Material | Batten (mm) | Box (pc) | Code |
|-----------------|-------------|----------|----------|
| Galvanized iron | 30 | 200 | 04055130 |
| Galvanized iron | 40 | 100 | 04055140 |



Hooks for smooth tiles - L type

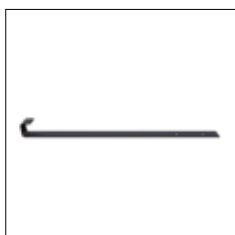
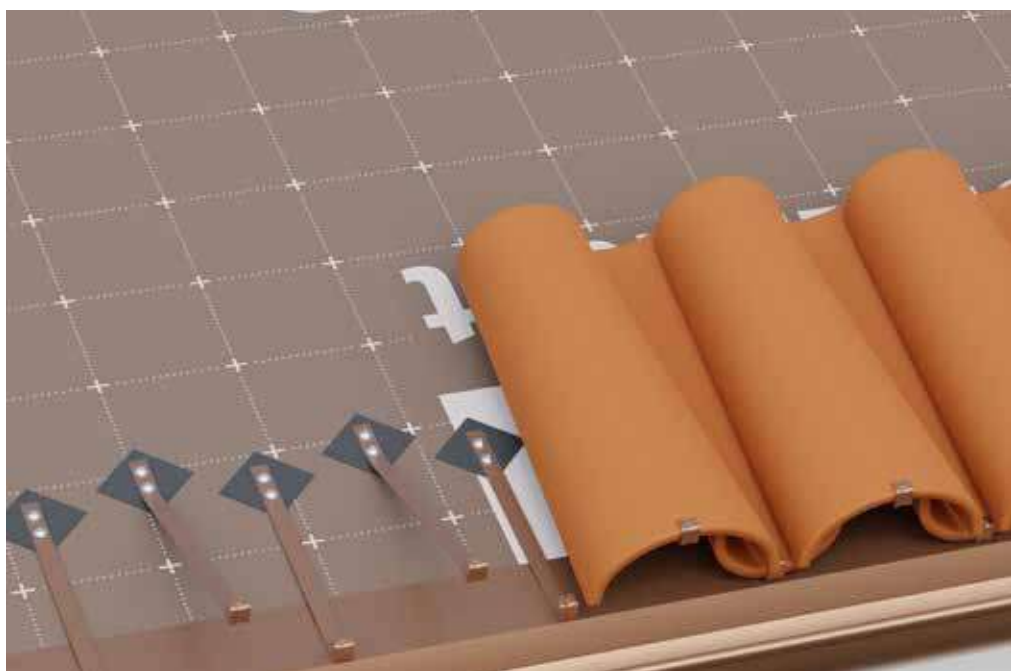
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QUICK OVERVIEW: STRENGTHS

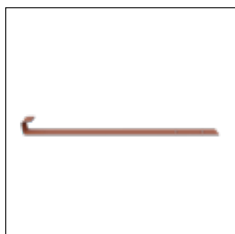
Guaranteed stability and ventilation

- L-shaped hook for eaves tiles
- Provide a secure grip for the first row of curved tiles on the pitch
- Ventilated, dry and durable solution
- Guarantees covering stability despite no foam and no mortar being used
- Available in different measures and materials



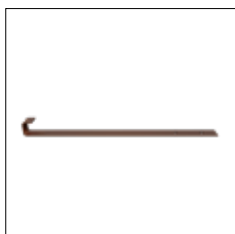
L-shaped hook for eaves tiles - burnished stainless steel

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 200 | 16 | 250 | 04023216 |
| 200 | 20 | 250 | 04023220 |
| 280 | 16 | 250 | 04023316 |
| 280 | 20 | 250 | 04023320 |



L-shaped hook for eaves tiles - pre-coated red/brown

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 200 | 16 | 250 | 04022216 |
| 200 | 20 | 250 | 04022220 |
| 280 | 16 | 250 | 04022316 |
| 280 | 20 | 250 | 04022320 |



L-shaped hook for eaves tiles - copper*

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 200 | 16 | 250 | 04021216 |
| 200 | 20 | 250 | 04021220 |
| 280 | 16 | 250 | 04021316 |
| 280 | 20 | 250 | 04021320 |

Hooks for smooth tiles - S type

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R1



QUICK OVERVIEW: STRENGTHS

Guaranteed stability and ventilation

- S-shaped hook for smooth curved tiles
- Prevent tiles from slipping
- Ventilated, dry and durable solution
- Guarantees covering stability despite no foam and no mortar being used
- Available in different measures and materials

S-shaped hook for smooth curved tiles - burnished stainless steel

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 90 | 16 | 500 | 04013916 |
| 90 | 20 | 500 | 04013920 |
| 120 | 16 | 500 | 04013016 |
| 120 | 20 | 500 | 04013020 |



S-shaped hook for smooth curved tiles - pre-coated red/brown

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 90 | 16 | 500 | 04012916 |
| 90 | 20 | 500 | 04012920 |
| 120 | 16 | 500 | 04012016 |
| 120 | 20 | 500 | 04012020 |



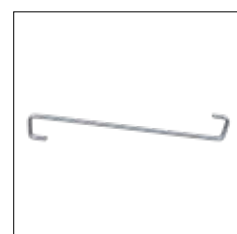
S-shaped hook for smooth curved tiles - copper*

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 90 | 16 | 500 | 04011191 |
| 90 | 20 | 500 | 04011192 |
| 120 | 16 | 500 | 04011121 |
| 120 | 20 | 500 | 04011122 |



S-shaped hook for smooth curved tiles - stainless steel

| Legth (mm) | Height (mm) | Box (pc) | Code |
|------------|-------------|----------|----------|
| 90 | 16 | 400 | 04014916 |
| 90 | 20 | 400 | 04014920 |



*upon demand

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Hooks for perforated curved tiles

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R1

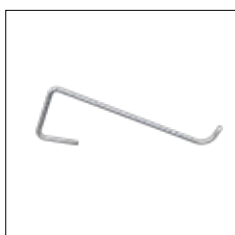
QUICK OVERVIEW: STRENGTHS

Guaranteed stability and ventilation

- Wind-resistant hooks for tiles
- Pre-shaped hooks for perforated curved tiles
- Prevents tiles slipping or falling from the roof due to strong wind
- Ventilated, dry and durable solution
- Guarantees covering stability despite no foam and no mortar being used

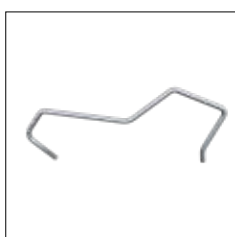


Wind-resistant hook for perforated curved tiles



Hook for perforated monk&nun anchoring the non directly on the monk

| Material | Legth (mm) | Box (pc) | Code |
|-----------------|------------|----------|----------|
| Galvanized iron | 125 | 1500 | 04035012 |
| Galvanized iron | 160 | 1500 | 04035016 |
| Stainless steel | 125 | 1500 | 04034012 |



Wind hook for monk&nun tiles anchoring directly on horizontal battens

| Colour | Diameter (mm) | Box (pc) | Code |
|-----------------|---------------|----------|----------|
| Galvanized iron | 2,5 | 1500 | 04035100 |
| Stainless steel | 2,5 | 1500 | 04034100 |

Connections for chimneys and walls

The roof needs connecting elements at various points to allow the correct flow of rainwater from the definitive roof covering to the collection channels. These connections are necessary where the roofing is interrupted, for example on: chimneys, vents, roof windows, supports on walls or shafts, the roof throat lines and on the roof gutter connections.

Riwega's connections

Sheet metal protective joints can be installed at these points. Alternatively, the Riwega range offers complete solutions that meet all other requirements very well: from adaptable, UV and weather-resistant three-dimensional fittings made of aluminum, lead or copper, to butyl spray primers for sealing humid and/or dusty surfaces. Another indispensable accessory is the tape roller: it is the ideal tool for ensuring that the necessary pressure is exerted so that butyl or acrylic adhesives tapes adhere perfectly to the membrane fiber or to other surfaces to be bonded. To achieve optimal results in the long term, nothing must be left to chance when carrying out this work.

ROLL Flex TOP - Alu

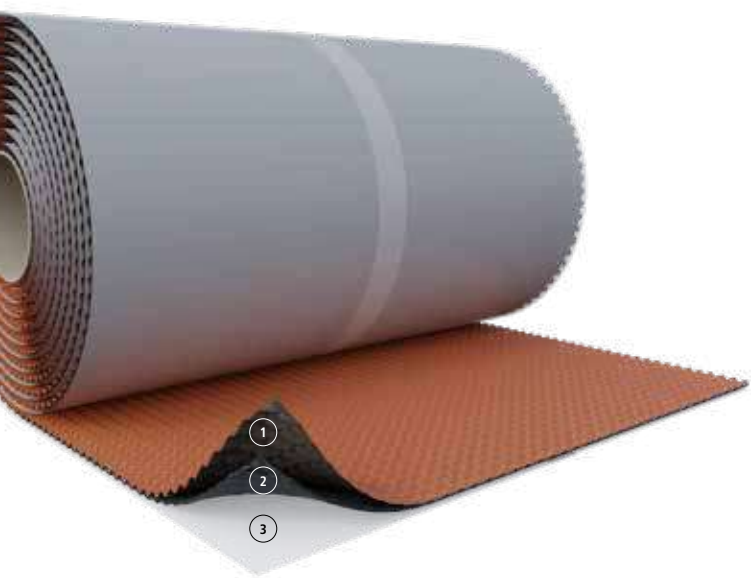
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R1

QUICK OVERVIEW: STRENGTHS

The perfect connection in alu

- Mouldable three-dimensional pleated strip
- Completely adhesive bottom side
- Perfect for sealing every step and interruption on the pitched roof
- Three different lengths available: 30, 45 e 60 cm (unique on the market)
- Watertight and resistant to UV rays



Composition:

- 1 Aluminium
- 2 Butylic glue
- 3 Silicon liner

Features:



Technical data sheet

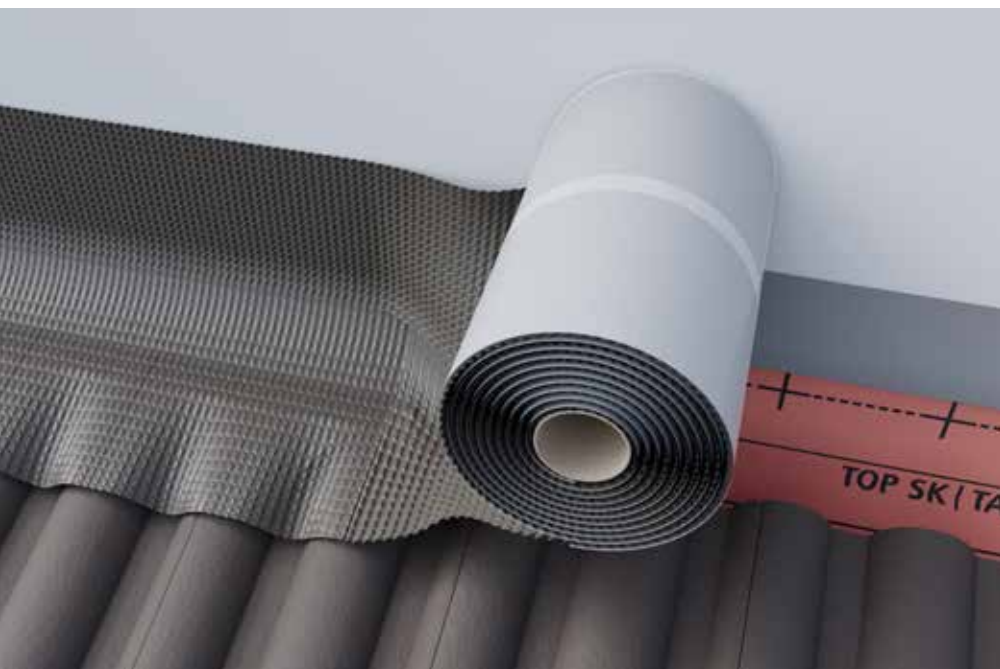
| | | |
|------------------------|--|---|
| Material | | aluminium / butyl |
| Aluminium stripe | | 0,15 mm |
| Butylic glue thickness | | 1,5 mm |
| Roll length | | 5,00 m |
| UV rays stability | | stable* |
| Ageing resistance | | resistant |
| Temperature resistance | | -30°C /+90°C |
| Processing temperature | | +5°C /+40°C |
| Alu development | | 1,30% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 1 pc/box |
| Pallet | | 48 boxes |

Codes and measures

| Colours / Measures | 300 mm | 450 mm | 600 mm |
|--------------------|----------|----------|----------|
| Red-brown | 01107301 | 01107451 | 01107601 |
| Brown | 01107302 | 01107452 | 01107602 |
| Black | 01107303 | - | - |

*with reference to the Central European climate
Riwega Srl is not responsible for negligent and improper use of its products

ROLL Flex TOP - Pb



QUICK OVERVIEW: STRENGTHS

The perfect connection in lead

- Mouldable three-dimensional pleated strip
- Completely adhesive bottom side
- Perfect for sealing every step and interruption on the pitched roof
- Watertight and resistant to UV rays

Features:

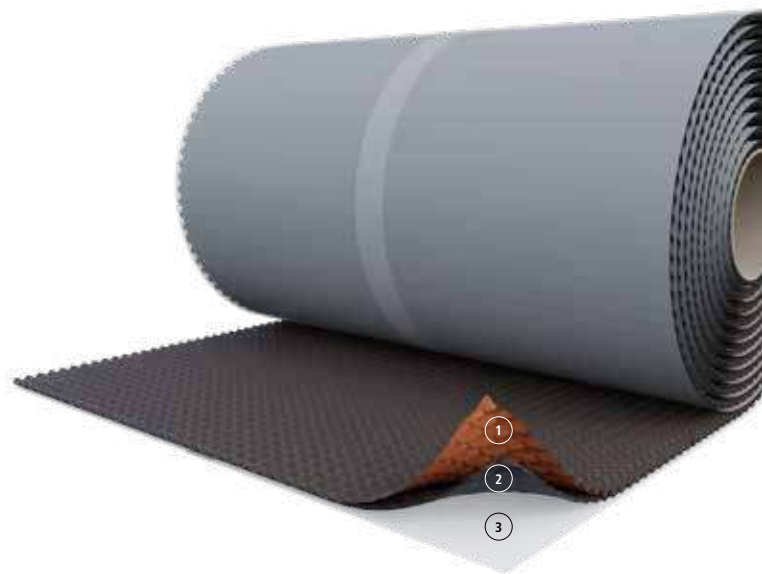


Technical data sheet

| | | |
|------------------------|--|--|
| Material | | lead / butyl |
| Lead stripe | | 0,20 mm |
| Butylic glue thickness | | 1,5 mm |
| Roll length | | 5,00 m |
| UV rays stability | | stable* |
| Ageing resistance | | resistant |
| Temperature resistance | | -30°C /+90°C |
| Processing temperature | | +5°C /+40°C |
| Alu development | | 1,30% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 1 pc/box |
| Pallet | | 48 boxes |

Codes and measures

| | |
|---------------------------|---------------|
| Colours / Measures | 300 mm |
| Red-brown | 01106301 |
| Brown | 01106302 |
| Black | 01106303 |



Composition:

- Lead ①
- Butylic glue ②
- Silicon liner ③

*with reference to the Central European climate

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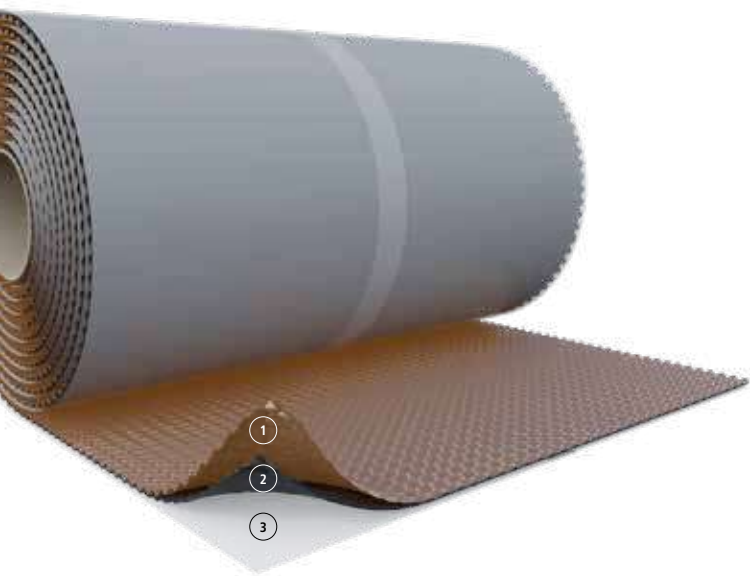
ROLL Flex TOP - Cu

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R1

QUICK OVERVIEW: STRENGTHS

The perfect connection in copper

- Mouldable three-dimensional pleated strip
- Completely adhesive bottom side
- Perfect for sealing every step and interruption on the pitched roof
- Watertight and resistant to UV rays



Composition:

- 1 Copper
- 2 Butylic glue
- 3 Silicon liner

Features:



Technical data sheet

| | | |
|------------------------|--|--|
| Material | | copper / butyl |
| Copper stripe | | 0,10 mm |
| Butylic glue thickness | | 1,5 mm |
| Roll length | | 5,00 m |
| UV rays stability | | stable* |
| Ageing resistance | | resistant |
| Temperature resistance | | -30°C / +90°C |
| Processing temperature | | +5°C / +40°C |
| Alu development | | 1,30% |
| Storage | | dry, protected from UV rays, max. +30°C |
| Packaging | | 1 pc/box |
| Pallet | | 48 boxes |

Codes and measures

| | |
|--------------------|-----------------|
| Colours / Measures | 300 mm |
| Copper | 01108305 |

*with reference to the Central European climate
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Breathable membranes and vapour control layers

Our warranties

R2



USB Protector GOLD 330
USB Protector SILVER 230



USB Protector Head FH 330
USB Protector Head FH 330 VK
USB Protector Head FH 240
USB Protector Head FH 240 VK
USB Protector Head FH 155



USB Elefant
USB Classic
USB Classic Light
VSK Classic Light



| | |
|--------------------------------|--------------------------------|
| <i>USB Weld AS</i> | <i>USB Micro 100/20</i> |
| <i>USB Vita</i> | <i>USB Micro 100 Vario</i> |
| <i>USB Reflex Plus</i> | <i>USB Micro 150 Vario</i> |
| <i>USB Drenlam Diff TOP SK</i> | <i>DS 1500 SYN</i> |
| <i>USB Drenlam Light</i> | <i>DS 46 PE</i> |
| <i>USB Windtop UV</i> | <i>DS 65 PE</i> |
| <i>USB Windtop UV 210</i> | <i>DS 188 ALU</i> |
| <i>USB Wall 120</i> | <i>VSK Micro</i> |
| <i>USB Micro Strong</i> | <i>VSK DS 1500 SYN</i> |
| <i>USB Micro</i> | <i>USB Windtop UV A2 / 225</i> |
| <i>USB Micro Light</i> | <i>USB Reflex A2 / 430</i> |
| <i>USB Micro 230/20</i> | <i>DS Reflex A2 / 140</i> |

All warranty conditions are available on www.riwega.com/en/guarantees

Graphic references

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| Roof/wall outside Wall inside | Exterior roof/ ceiling | Roof/Wall outside | Roof outside | Wall outside | Roof/wall inside |
|  |  |  |  |  |  |
| Exterior flat roof | Air tightness | High breathable | Vapour control layer | Variable Sd value | Vapour barrier |
|  |  |  |  |  |  |
| Water proofness | Heavy rain resistant | Resistant to extreme conditions | Micro- ventilation | Acoustic insulation | High adhesion |
|  |  |  |  |  |  |
| Aging resistant | Abrasion resistant | Mechanically resistant | Very light | Semi- transparent | Mesh reinforced |
|  |  |  |  |  |  |
| Usable under PV panels | UV resistant | Heat reflecting | Fire resistant | Increased thickness | All in PP |
|  |  |  | | | |
| Low inclinations | Weldability | Radon resistant | | | |

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| | 23 USB Windtop UV 210..... | Pg. 65 |
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| | 49 USB Reflex A2 / 430 | Pg. 97 |
| | 50 DS Reflex A2 / 140 | Pg. 98 |
| | 51 Temporary rain sheets | Pg. 100 |

Riwega focuses on functional raw materials, resistant to ageing and atmospheric agents that can be used in any situation. The breathable Protector line was created to be up to work even with low roof inclination, as it is well-known that the shape and inclination of the roofs are subject to constant changes and this makes us constantly face new challenges. This specially designed product-line ensures correct drying and protects the roof from wind and rain in most weather situations. Energy-saving construction, comfort, experience, research, and development, as well as modern building culture, have something in common: The Protector breathable product line, which is optimal and permanent protection for the values of our building envelopes.

The following chapter is divided according to the properties of breathable membranes, to meet the technical/commercial needs of the current market.

A) **Raw material:** the high-quality Protector raw material can be divided into two groups:

USB Protector SILVER and GOLD product group [UV50 PUR/PET technology] where the two cover fleeces, or upper and lower cover fleece, consist of a pure, high-quality thermobonded polyester fleece (PET). The heat-stabilized, indestructible and anti-slipcover fleeces give the two underlays excellent strength and ease of laying, thus preventing the formation of waves on the surface even during hot summer sunshine. The underlayer therefore lies perfectly on every roof.

The functional membrane UV50 PUR corresponds to the highly diffusible and indestructible functional membrane, which is also used in the product group Protector Head FH and is therefore heat and UV resistant and safe even in driving rain. By using these high-quality raw materials, planners, fabricators and - last but not least - the building owner can be sure that the roof will be safe and dry in the future.

Protector Head FH product group [UV50 PUR/PP technology] where the two top and bottom coating layers are made of high-quality polypropylene (PP) non-woven fabric, resistant to UV rays and heat. The highly permeable functional membrane (UV50 PUR) is made of pure polyurethane (PU) film, resistant to heat and UV rays, which protects from driving rain and is extremely resistant.

In the USB Protector Head FH product group, the upper coating layer is made of a high-quality polypropylene (PP) non-woven fabric which, in addition to being UV and heat resistant, is also treated with a flame retardant additive named FH (from the German Flammhemmend). Thanks to this process, the USB Protector Head FH membranes report a reaction to fire which lets them extinguish without fueling the flames. When the membrane is no longer in contact with the flame, no reaction occurs anymore. The fire reaction class of the product group according to the European standard EN 13501-1 is E. The reaction to fire improves very good the prevention of fire in comparison to standard membranes.

B) Production process:

To weld these high-quality raw materials together and to guarantee long term resistance, a technologically complex and specially designed production process is required. The entire production process, from the raw material to the finished product, is constantly monitored by our highly qualified production staff, in order to guarantee absolute quality.

C) Mass per unit area:

Using different raw materials and thicknesses of the upper and lower coating layers, products with different mass-per-unit area values are obtained. The breathable membranes of the USB Protector Head FH line weight 340 g/m², 240 g/m², and 155 g/m²; the breathable membranes in PUR/PET have respectively the following mass-per-unit area: USB Protector SILVER with 230 g/m² and USB Protector GOLD with 340 g/m². This range of materials covers all requirements of the various European standards, which have to be followed to reach tensile strength and good protection against rain.

D) Durability and guarantee:

Through years of external tests and laboratory tests, we have been able to ascertain the high quality of our products and we can assure that the breathable membranes of the Protector line are among the best breathable membranes in the world. For this, we can provide guarantees for 20 years for the USB Protector Head FH product group and for a period of 25 years for the USB Protector SILVER and GOLD product group.

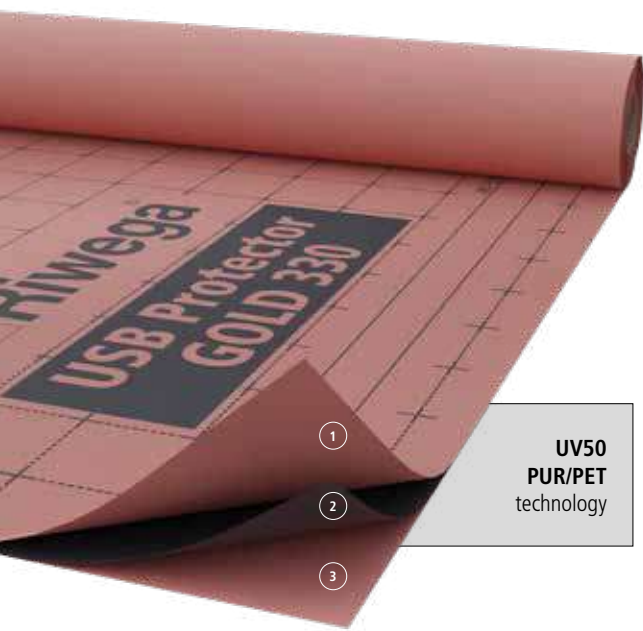
USB Protector GOLD 330

01
R2

QUICK OVERVIEW: STRENGTHS

The excellence in the market

- Highly breathable, water-tight membrane
- The best of our membranes, guaranteed for 25 years
- Extremely resistant to UV rays and extreme weather conditions
- Peerless stability to high temperature
- Stronghold against laceration or tearing



UV50
PUR/PET
technology

Composition:

- 1 UV stable, water repellent, protective top layer in PET
- 2 Film UV50 PUR, monolithic, elastic
- 3 Protective layer in PET

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02050331 | 02020331 | 1,5 | 40 | 1200 |

Features:



Classification:



Technical data sheet

| Material | | PET-composite |
|-----------------------------|------------------|------------------------------|
| Film | | UV50 PUR |
| Colour | | Salmon |
| Use underneath PV panels | | YES |
| Mass per unit area | EN 1849-2 | 340 g/m ² |
| Thickness | | 0,85 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 680 / 610 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 40 / 45 % |
| Tear resistance MD/CD* | EN 12310-1 | 400 / 400 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 12 months |
| Temperature resistance | | -40°/+120°C |

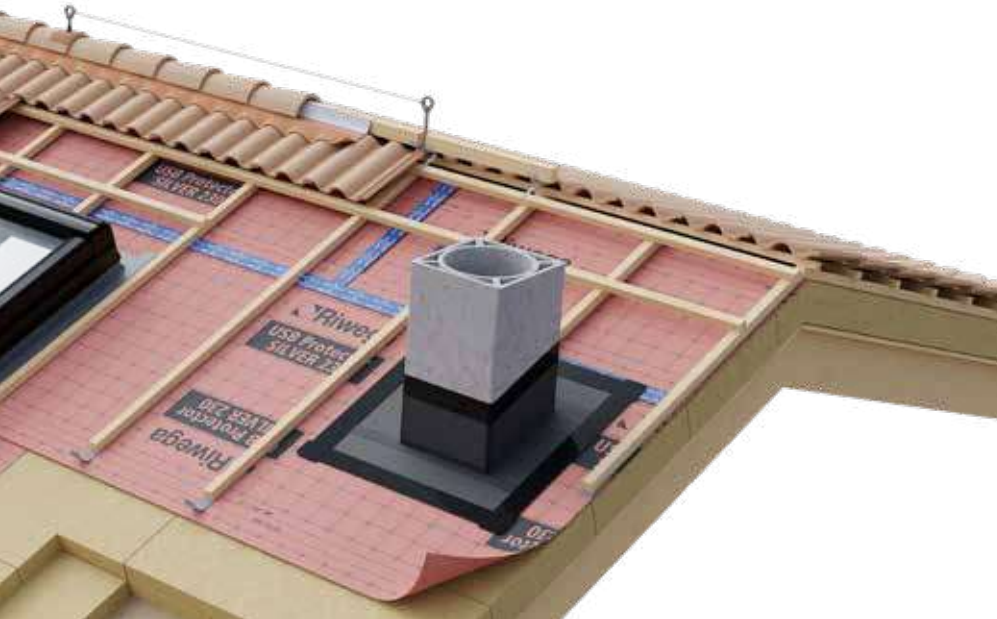
*MD = longitudinal CD = transversal

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USB Protector SILVER 230

02

R2



QUICK OVERVIEW: STRENGTHS

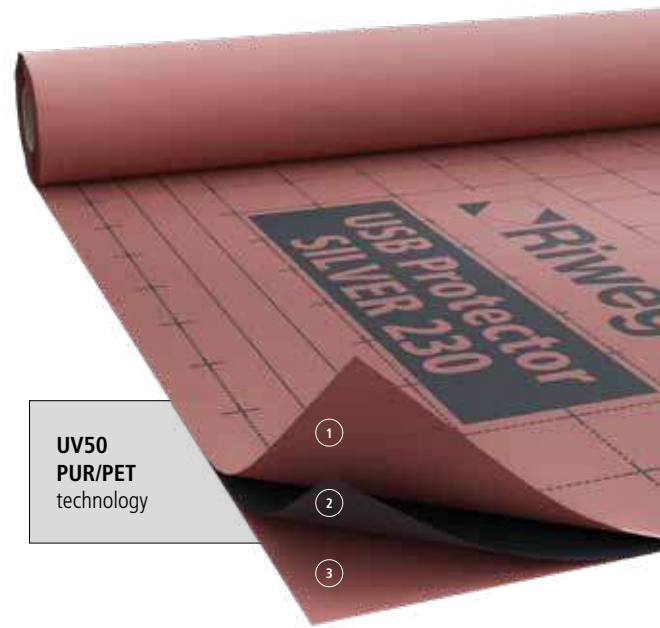
Lower grammage, the same excellence

- Highly breathable, water-tight membrane
- The lightest of the 25 years guaranteed membranes
- Extremely resistant to UV rays and extreme weather conditions
- Peerless stability to high temperature
- Stronghold against laceration or tearing

Features:



Classification:



UV50
PUR/PET
technology

Composition:

- UV stable, water repellent, protective top layer in PET ①
- Film UV50 PUR, monolithic, elastic ②
- Protective layer in PET ③

| Technical data sheet | | |
|-----------------------------|------------------|------------------------------|
| Material | PET-composite | |
| Film | UV50 PUR | |
| Colour | Salmon | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 230 g/m ² |
| Thickness | | 0,7 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 450 / 430 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 35 / 40 % |
| Tear resistance MD/CD* | EN 12310-1 | 230 / 220 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 12 months |
| Temperature resistance | | -40°/+120°C |

| Codes and measures | | | | |
|--------------------|-------------|-----------|------------|--------------------------|
| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
| 02050230 | 020202301 | 1,5 | 40 | 1200 |

*MD = longitudinal CD = transversal
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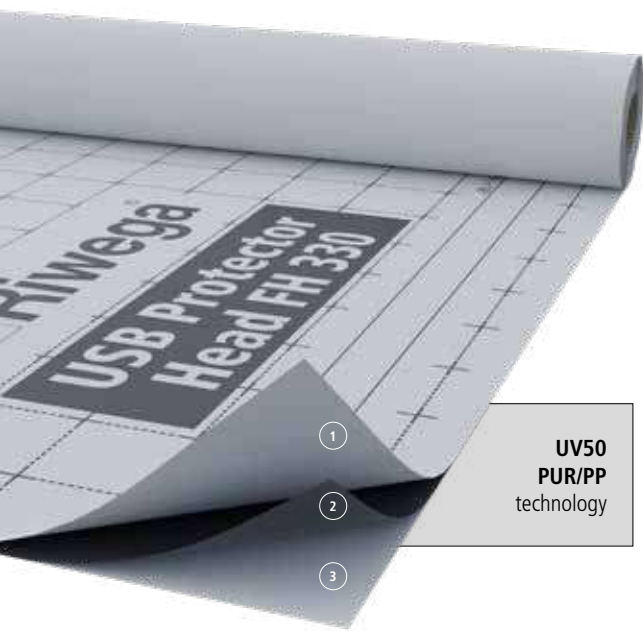
USB Protector Head FH 330

03
R2

QUICK OVERVIEW: STRENGTHS

Unbeatable mechanical resistance

- Highly breathable, water-tight membrane
- Improved fire reaction thanks to the FH factor
- The perfect membrane for alpine and mountain areas
- Stronghold against laceration or tearing
- Guaranteed water tight even in extreme conditions



UV50
PUR/PP
technology

Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Film UV50 PUR, monolithic, elastic
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m²) |
|-----------|-------------|-----------|------------|-------------|
| 02050330 | 02020330 | 1,5 | 40 | 960 |
| 020503300 | 020203300 | 3,0 | 40 | 1920 |

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|------------------|
| Material | PP-composite | |
| Film | UV50 PUR | |
| Colour | Grey | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 340 g/m² |
| Thickness | | 1,4 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m²/24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 440 / 380 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 50 / 60 % |
| Tear resistance MD/CD* | EN 12310-1 | 390 / 430 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 8 months |
| Temperature resistance | | -40°/+120°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

USB Protector Head FH 330 VK

04

R2



QUICK OVERVIEW: STRENGTHS

The "pre-welded" one with high grammage

- Highly breathable, water-tight membrane
- Pre-welded over the entire roof pitch
- Easier and faster laying
- Safely welded overlaps
- High air mass for high mechanical performance
- Improved fire reaction thanks to the FH factor

new product

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PP-composite | |
| Film | UV50 PUR | |
| Colour | Grey | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 340 g/m ² |
| Thickness | | 1,4 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Water column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 440 / 380 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 50 / 60 % |
| Tear resistance MD/CD* | EN 12310-1 | 390 / 430 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 8 months |
| Temperature resistance | | -40°/+120°C |

*MD = longitudinal CD = transversal
Riwega Srl is not responsible for negligent and improper use of its products



UV50
PUR/PP
technology

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Film UV50 PUR, monolithic, elastic ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Surface (m ²) |
|----------|-------------|-----------|------------|---------------------------|
| 02050212 | - | max. 20 | max. 20 | max. 400 |

USB Protector Head FH 240

05
R2

QUICK OVERVIEW: STRENGTHS

The FH factor's importance

- Highly breathable, water-tight membrane
- Improved fire reaction thanks to the FH factor
- Guaranteed water tightness even in extreme conditions
- Resistant to long UV ray exposure
- Guaranteed stability with high temperatures on the roof



new
product



UV50
PUR/PP
technology

Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Film UV50 PUR, monolithic, elastic
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02050224 | 02020224 | 1,5 | 50 | 1500 |
| 020502240 | 020202240 | 3,0 | 50 | 3000 |

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PP-composite | |
| Film | UV50 PUR | |
| Colour | Tobacco | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 240 g/m ² |
| Thickness | | 0,93 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 390 / 290 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 30 / 50 % |
| Tear resistance MD/CD* | EN 12310-1 | 300 / 400 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 8 months |
| Temperature resistance | | -40°/+120°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

USB Protector Head FH 240 VK

06

R2



QUICK OVERVIEW: STRENGTHS

The "pre-welded" model for quick installation

- Highly breathable, water-tight membrane
- Pre-welded over the entire roof pitch
- Easier and faster installation
- Safely welded overlaps
- UV and heat resistant even at high temperatures
- Improved fire reaction thanks to the FH factor

new product

Features:



Classification:



UV50
PUR/PP
technology

Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PP-composite | |
| Film | UV50 PUR | |
| Colour | Tobacco | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 240 g/m ² |
| Thickness | | 0,93 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 390 / 290 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 30 / 50 % |
| Tear resistance MD/CD* | EN 12310-1 | 300 / 400 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 8 months |
| Temperature resistance | | -40°/+120°C |

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Film UV50 PUR, monolithic, elastic ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Surface (m ²) |
|----------|-------------|-----------|------------|---------------------------|
| 02050211 | - | max. 20 | max. 20 | max. 400 |

*MD = longitudinal CD = transversal

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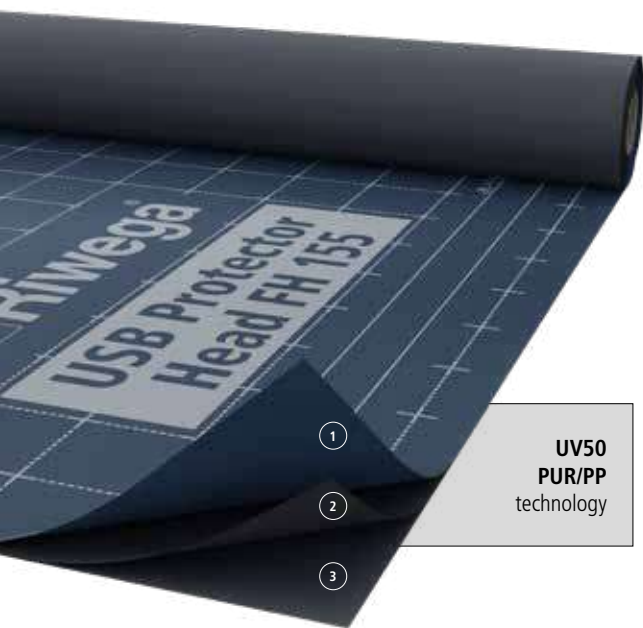
USB Protector Head FH 155

07
R2

QUICK OVERVIEW: STRENGTHS

The most adaptable of the line

- Highly breathable, water-tight membrane
- Improved fire reaction thanks to the FH factor
- Resistant and light weight, suitable for roof and wall
- Guaranteed water tightness even with driving rain
- Good resistance to high temperatures and UV ray exposure



UV50
PUR/PP
technology

Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Film UV50 PUR, monolithic, elastic
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m)** | Length (m) | Pallet (m ²) |
|----------|-------------|-------------|------------|--------------------------|
| 02050215 | 02020215 | 1,5 | 50 | 1500 |

Features:



Classification:



Technical data sheet

| Material | | PP-composite |
|-----------------------------|------------------|------------------------------|
| Film | | UV50 PUR |
| Colour | | Blue |
| Use underneath PV panels | | YES |
| Mass per unit area | EN 1849-2 | 155 g/m ² |
| Thickness | | 0,75 mm |
| Sd value | EN ISO 12572 | 0,1 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 230 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 90 / 100 % |
| Tear resistance MD/CD* | EN 12310-1 | 180 / 210 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 8 months |
| Temperature resistance | | -40°/+120°C |

*MD = longitudinal CD = transversal

**3 m version upon request

Riwega Srl is not responsible for negligent and improper use of its products

USB Weld AS



QUICK OVERVIEW: STRENGTHS

Perfect sealing of overlaps and joints

- Breathable, water-tight membrane
- Hot welding by temperatures from 200°C to 300°C or cold welding with THF Welding Liquid
- Suitable also for extreme climatic conditions
- Can be also used with very low roof pitch ($\geq 5^\circ$)

Features:



Classification:



Composition:

- Weldable PUR layer with non-slip surface ①
- Film in PET ②
- Weldable PU layer ③

Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PU.PET.PU | |
| Film | double PU film | |
| Colour | Grey | |
| Use underneath PV panels | YES** | |
| Mass per unit area | EN 1849-2 | 345 g/m ² |
| Thickness | | 0,9 mm |
| Sd value | EN ISO 12572 | 0,3 m |
| Water vapour permeability | EN ISO 12572 | ~ 115 g/m ² /24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 350 / 430 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 45 / 50 % |
| Tear resistance MD/CD* | EN 12310-1 | 280 / 250 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

*MD = longitudinal CD = transversal

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**The product is suitable for installation with maximum operating temperatures up to 90°C. If this limit is not exceeded, the product can be used under photovoltaic systems. It is necessary to ensure that the ventilation cross-sections and ventilation openings are fully functional for all types of roofs and especially for photovoltaic systems in order to prevent heat build-up. In addition, due to the way in which a photovoltaic system can be installed with gaps between one panel and another, it must be excluded that USB Weld AS becomes the main water-tight drainage layer. USB Weld AS must therefore always be the second waterproofing layer and as such must also be fully protected from direct UV exposure.

Codes and measures

| Product | Code | Width (m) | Length (m) | Pallet (m ²) |
|-------------------|-----------|-----------|------------|--------------------------|
| USB Weld AS | 02010354 | 1,5 | 30 | 900 |
| USB Weld AS | 020103540 | 3,0 | 30 | 1800 |
| USB Welding Strip | 02010353 | 0,3 | 20 | - |

*Universal strips for sealing ventilation battens
System accessories for USB Weld AS on page 174

For some years, the construction method and the building culture itself have undergone important changes. This means that European roofs are becoming less inclined and more technical. Therefore it is necessary to use the right raw materials inside protection products. Riwega's response is the Superior line.

A) **Raw material:**

The raw material used for the three breathable membranes belonging to the Superior line has been successful on the European market for over 20 years! The technology required for processing the following raw materials for the Superior line is - Upper coating layer: UV and heat resistant high-quality polypropylene non-woven fabric and non-slippery (with different colours) - The functional membrane with UV10 Bikom technology: monolithic film, breathable, resistant to rain, resistant to UV rays and heat; grammage of 28 g/m² and dark grey colour. Lower coating layer: high-quality polypropylene non-woven fabric, resistant to UV rays and heat.

B) **Production process:**

The advanced production process leads to improvements in breathability. The complex production processes are managed by a high-tech system (jumbo system), according to which the various raw materials are refined in a sort of "welding at the source". The raw material is not heated and therefore maintains the excellent initial technical properties (impermeability to water, permeability to diffusion, tear-resistance, and durability).

C) **Mass per unit area:**

By using different thicknesses of the upper and lower coating layer, different weights are obtained. The three breathable membranes of the Superior line have a weight of 235 g/m² for USB Elefant, 185 g/m² for USB Classic, 155 g/m² for USB Classic Light.

D) **Durability and guarantee:**

Thanks to the use of high-quality raw materials, combined with professional installation work on the roof or the wall and in combination with the adhesive tapes and roof ventilation systems recommended by Riwega, we guarantee 15 years on all Superior line products.

USB Elefant

09

R2



QUICK OVERVIEW: STRENGTHS

Thick, rough and resistant

- Highly breathable, water-tight membrane
- Optimized performance, guaranteed for 15 years thanks to the UV10 Bikom film
- Perfect for watertight wooden roofs and other types
- Rough surface compatible with mortar or foam

Features:

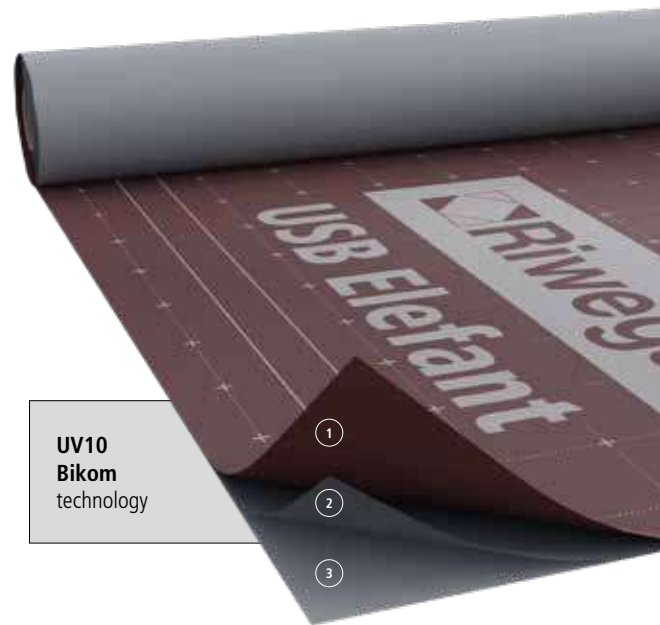


Classification:



Technical data sheet

| | | |
|-----------------------------|---------------------|-----------------------------------|
| Material | PP-composite | |
| Film | UV10 Bikom | |
| Colour | Wine red | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 235 g/m² |
| Thickness | | 1,05 mm |
| Sd value | EN ISO 12572 | 0,07 m |
| Water vapour permeability | EN ISO 12572 | ~ 500 g/m²/24 h |
| Watern column | EN 20811 | >800 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 420 / 310 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 50 / 60 % |
| Tear resistance MD/CD* | EN 12310-1 | 270 / 330 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 6 months |
| Temperature resistance | | -40°/+100°C |



**UV10
Bikom
technology**

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Film UV10 Bikom, monolithic, elastic ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02050150 | 02020233 | 1,5 | 40 | 1200 |
| 020501500 | 020202330 | 3,0 | 30 | 1800 |

*MD = longitudinal CD = transversal

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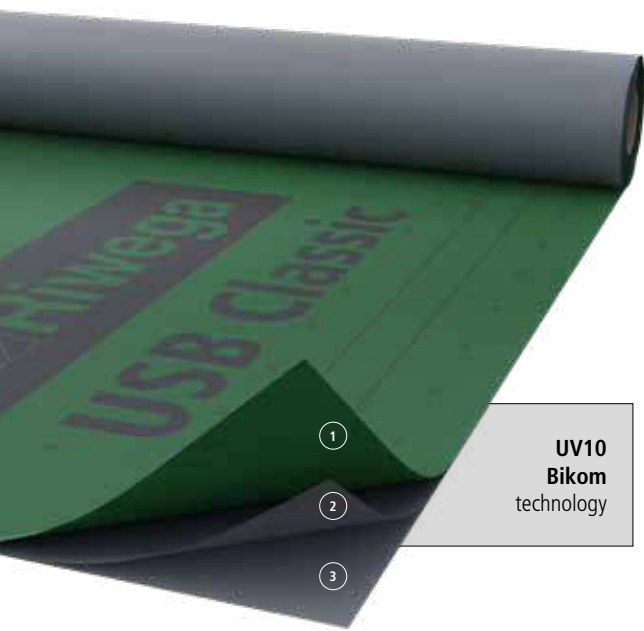
USB Classic

10
R2

QUICK OVERVIEW: STRENGTHS

The evergreen among breathable membranes

- Highly breathable, water-tight membrane
- Optimised performance, guaranteed for 15 years thanks to the UV10 Bikom film
- The most popular membrane for water-tight pitched roofs
- More than 20 years of history on the market
- Great price/quality ratio



UV10
Bikom
technology

Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Film UV10 Bikom, monolithic, elastic
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02010160 | 02020161 | 1,5 | 50 | 1500 |
| 020101600 | 020201610 | 3,0 | 50 | 3000 |

Features:



Classification:



Technical data sheet

| Material | | PP-composite |
|-----------------------------|------------------|------------------------------|
| Film | | UV10 Bikom |
| Colour | | Green |
| Use underneath PV panels | | NO |
| Mass per unit area | EN 1849-2 | 185 g/m ² |
| Thickness | | 0,89 mm |
| Sd value | EN ISO 12572 | 0,07 m |
| Water vapour permeability | EN ISO 12572 | ~ 500 g/m ² /24 h |
| Watern column | EN 20811 | >400 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 350 / 260 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 80 % |
| Tear resistance MD/CD* | EN 12310-1 | 200 / 240 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 6 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

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USB Classic Light



QUICK OVERVIEW: STRENGTHS

The lightest for the roof, the most resistant for the wall

- Highly breathable, water-tight membrane
- Optimised performance, guaranteed for 15 years thanks to the UV10 Bikom film
- Ideal for wind-tightness of ventilated facades with closed joints
- Recommended for roofs with a roof pitch over 30%
- Non-slip and non-reflective surface

Features:



Classification:



| Technical data sheet | | |
|-----------------------------|------------------|------------------------------|
| Material | PP-composite | |
| Film | UV10 Bikom | |
| Colour | Light blue | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 155 g/m ² |
| Thickness | | 0,75 mm |
| Sd value | EN ISO 12572 | 0,07 m |
| Water vapour permeability | EN ISO 12572 | ~ 500 g/m ² /24 h |
| Watern column | EN 20811 | >400 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 290 / 225 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 65 / 90 % |
| Tear resistance MD/CD* | EN 12310-1 | 170 / 200 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 6 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

**3 m version upon request

Riwega Srl is not responsible for negligent and improper use of its products



UV10
Bikom
technology

- ①
- ②
- ③

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Film UV10 Bikom, monolithic, elastic ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m)** | Length (m) | Pallet (m ²) |
|----------|-------------|-------------|------------|--------------------------|
| 02010140 | 020201501 | 1,5 | 50 | 1500 |

USB Vita

12

R2

QUICK OVERVIEW: STRENGTHS

Great combination of UV ray and fire resistance

- Highly breathable membrane
- B-S1, d0 fire reaction class
- Poly-acrylic spread coating, extremely resistant to UV rays
- Fire protection also suitable with closed joints



Composition:

- 1 Poly-acrylic coating, extremely resistant to UV rays
- 2 PET non-woven fabric

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010303 | 02020310 | 1,5 | 50 | 2250 |

Features:



Classification:



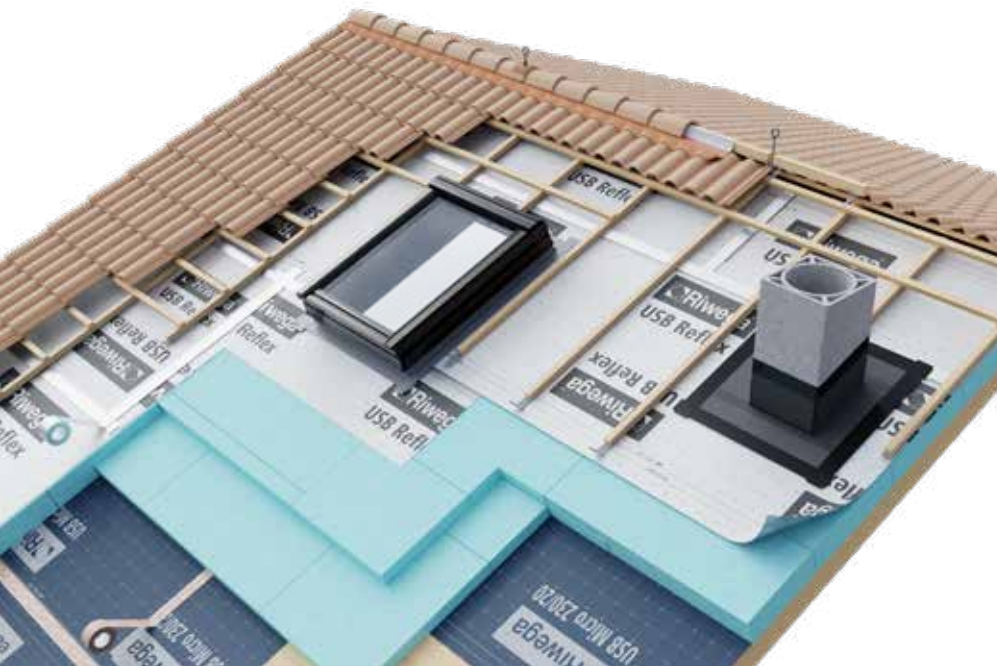
Technical data sheet

| | | |
|-----------------------------|----------------------|-------------------------------|
| Material | PET-Acrylic | |
| Film | Poly-acrylic coating | |
| Colour | Grey | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 270 g/m ² |
| Thickness | | 0,50 mm |
| Sd value | EN ISO 12572 | 0,02 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 320 / 200 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 30 / 35 % |
| Tear resistance MD/CD* | EN 12310-1 | 130 / 140 N |
| Fire reaction class | EN 13501-1 | B-S1, d0 |
| UV stability | | 9 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

USB Reflex Plus



13

R2

QUICK OVERVIEW: STRENGTHS

Waterproofing with maximum heat reflection

- Highly breathable, water-tight membrane
- Reduces the passage of heat to the insulation material, thanks to the reflective surface
- Recommended to be used with synthetic insulating materials with low mass
- The benefit of reflection also for ventilated facades with closed joints

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PP.PP.Alu.PE | |
| Film | PP | |
| Colour | Silver | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 200 g/m ² |
| Thickness | | 0,50 mm |
| Sd value | EN ISO 12572 | 0,045 m |
| Water vapour permeability | EN ISO 12572 | ~ 530 g/m ² /24 h |
| Watern column | EN 20811 | >350 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Reflection coefficient | | 0,95 R |
| Tensile strength MD/CD* | EN 12311-1 | 350 / 190 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 30 / 70 % |
| Tear resistance MD/CD* | EN 12310-1 | 200 / 200 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |

Composition:

- Layer in pre-perforated alu with antioxidant, protective PE film (1)
- PE reinforcement mesh (2)
- Functional film in PP (3)
- Protective layer in PP (4)

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010302 | 02020309 | 1,5 | 50 | 2250 |

*MD = longitudinal CD = transversal

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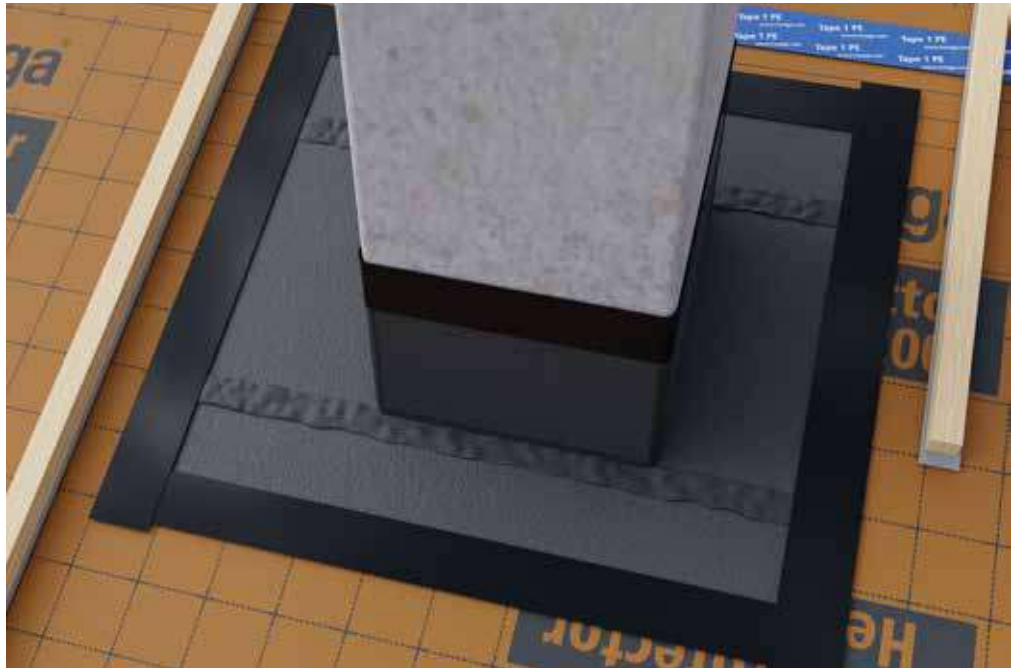
USB Fire Zero

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R2

QUICK OVERVIEW: STRENGTHS

The best fire resistant system

- Highly breathable membrane
- B_{roof} (t2) class, suitable for use under photovoltaic systems
- The best choice for protecting coverings and ventilated facades from fire
- The graphite layer protects every type of insulating material
- Perfect sealing of interruptions and joints with Fire Zero Liquid or Coll Fire B



Composition:

- 1 Graphite
- 2 Fiber glass
- 3 Functional film in PP
- 4 Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010341 | - | 1,1 | 20 | 528 |

System accessories for USB Fire Zero on page 173

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PP.PP.graphite | |
| Film | PP | |
| Colour | Antracite grey | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 720 g/m ² |
| Membran thickness | EN 1849-2 | 1,20 mm |
| Sd value | EN ISO 12572 | 0,08 m |
| Water vapour permeability | EN ISO 12572 | ~ 250 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 275 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 2-3 / 2-3 % |
| Tear resistance MD/CD* | EN 12310-1 | 180 / 220 N |
| Fire reaction class | EN 13501-1 | B-S1, d0 |
| | EN 13501-5 | B _{roof} (t2) |
| UV stability | | 6 months |

*MD = longitudinal CD = transversal

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Innovations that make NEWS



Riwegà informa

La qualità delle membrane

L'importanza di scegliere prodotti idonei

Il rischio che si corre utilizzando membrane di qualità è altissimo.

La membrana traspirante è un prodotto che costa pochi euro al metro quadrato (alcune addirittura poche decine di centesimi). Nonostante questo, una membrana ha l'importante compito di proteggere un tetto che può costare oltre i 200 euro al metro quadrato e il suo valore è quindi enorme! Dobbiamo di bassa qualità può comportare rischi altissimi, parliamo di migliaia di euro a fronte di un risparmio iniziale di poche centinaia.

Il meglio per tetto parete

Riwegà

www.riwega.com

The Eurostandard line features breathable membranes made of three-layer PP-composite. As the name suggests, these are standard products that have been used in the European market for years. The following properties of our Eurostandard product line reduce or prevent the risk of possible roof covering problems.

A) **Raw material:**

The breathable membrane is made of PP non-woven fabrics that are sufficiently UV and heat resistant, with non-slippery properties. These fleeces protect the grey, microporous functional membrane.

B) **Production process:**

To couple these long-term raw materials and make them functional, a technologically complex and specially developed production process is required. The entire production process, from the raw material to the finished product, is constantly monitored by our highly qualified production staff.

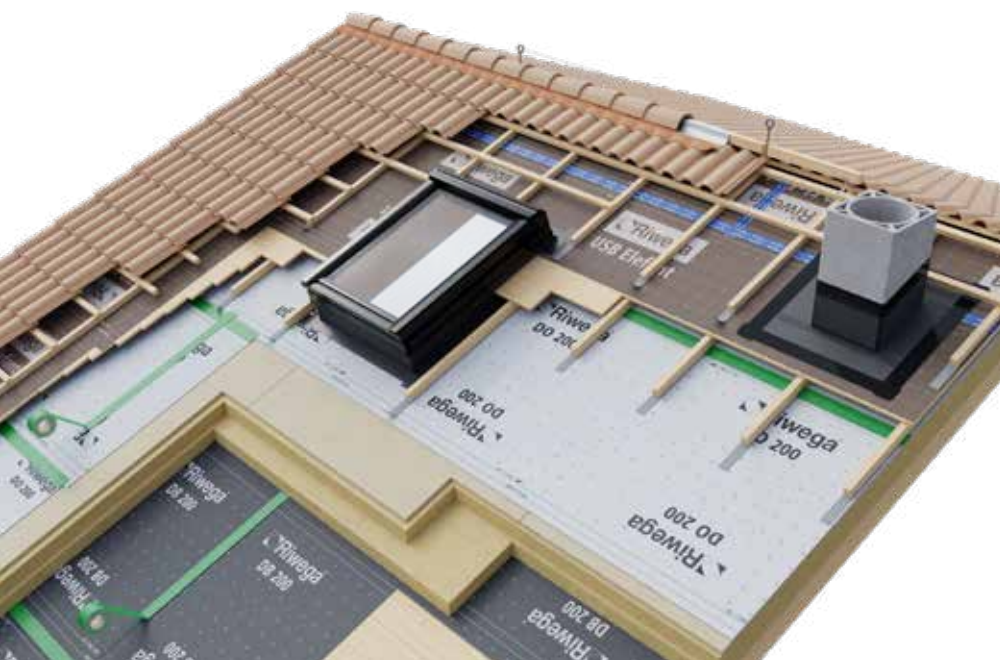
C) **Mass per unit area:**

By using different thicknesses of the upper and lower coating layer, different weights are obtained. The breathable membranes of the Eurostandard line weight 143 g/m², 155 g/m², 185 g/m² and 200 g/m². This range of materials covers all the requirements of the various European standards for tensile strength and protection against rain.

D) **Guarantee:**

Through the use of non-woven PP fabrics of standard quality and a microporous functional membrane in PP, a guarantee is issued on the Eurostandard line according to current regulations. Our technology expressly emphasizes that the different membranes of the Eurostandard line, as described in the technical sheet, must always be protected with the definitive roof covering layer as quickly as possible.

DO 200



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R2

QUICK OVERVIEW: STRENGTHS

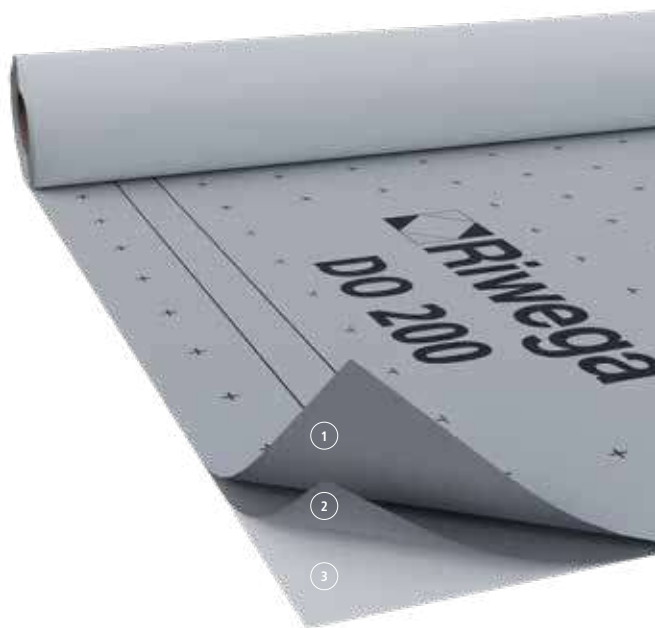
The 100% PP solution with high grammage

- Highly breathable, water-tight membrane
- High grammage which ensures high mechanic performance
- High tearing resistance
- A non-slip surface allows easy laying
- 100% completely recyclable polypropylene

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|-------------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Grey | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 200 g/m ² |
| Thickness | | 0,80 mm |
| Sd value | EN ISO 12572 | 0,02 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 480 / 330 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 75 / 120 % |
| Tear resistance MD/CD* | EN 12310-1 | 260 / 360 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

Composition:

- Protective UV stabilized, water repellent layer in PP (1)
- Microporous film in PP (2)
- Protective layer in PP (3)

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010200 | 02020314 | 1,5 | 50 | 1500 |

*MD = longitudinal CD = transversal

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DO 180 Top Stream

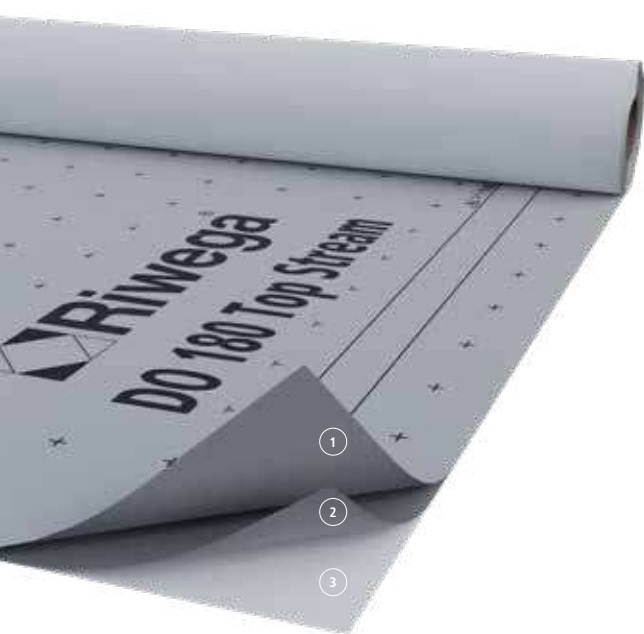
16

R2

QUICK OVERVIEW: STRENGTHS

The 100% PP solution with medium grammage

- Highly breathable, water-tight membrane
- High grammage which ensures high mechanic performance
- High tearing resistance
- The non-slip surface allows easy laying
- 100% in completely recyclable polypropylene



Composition:

- 1 Protective UV stabilized, water repellent layer in PP
- 2 Microporous film in PP
- 3 Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010180 | 02020317 | 1,5 | 50 | 1500 |

Features:



Classification:



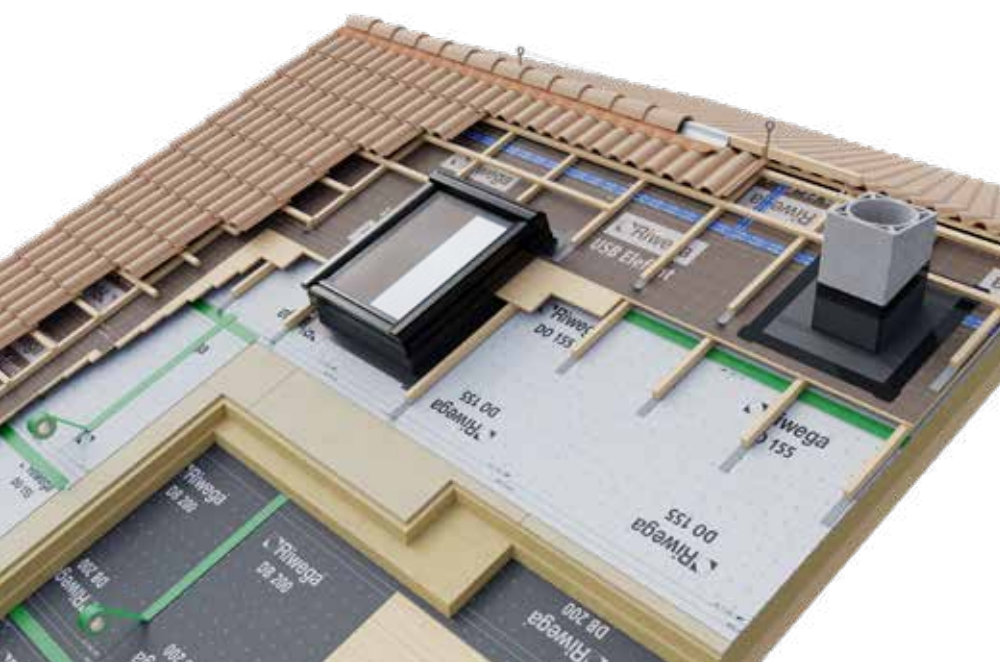
Technical data sheet

| | | |
|-----------------------------|------------------|-------------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Grey | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 185 g/m ² |
| Thickness | | 0,83 mm |
| Sd value | EN ISO 12572 | 0,04 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 400 / 375 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 45 / 70 % |
| Tear resistance MD/CD* | EN 12310-1 | 280 / 310 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

*MD = longitudinal CD = transversal

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DO 155



QUICK OVERVIEW: STRENGTHS

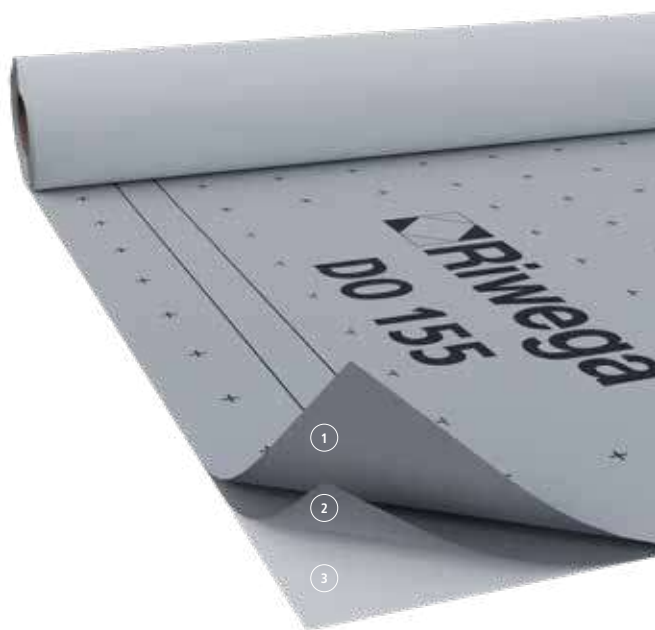
The 100% PP solution with low grammage

- Highly breathable, water-tight membrane
- Light membrane for roofs and resistant membrane for walls, perfect for wind-tightening of ventilated facades
- High tearing resistance
- The non-slip surface allows easy laying
- 100% in completely recyclable polypropylene

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|-------------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Grey | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 155 g/m ² |
| Thickness | | 0,60 mm |
| Sd value | EN ISO 12572 | 0,02 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 350 / 230 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 75 / 115 % |
| Tear resistance MD/CD* | EN 12310-1 | 185 / 225 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 2 months |
| Temperature resistance | | -40°/+90°C |

Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Microporous film in PP
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010190 | 02020312 | 1,5 | 50 | 1500 |

*MD = longitudinal CD = transversal

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DO 135

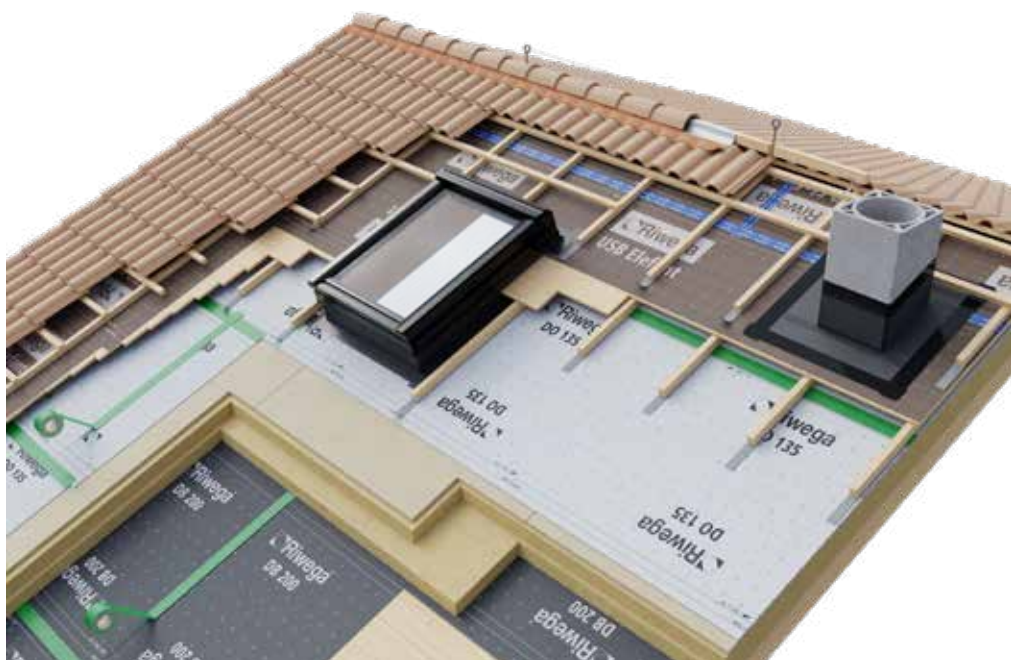
18

R2

QUICK OVERVIEW: STRENGTHS

The 100% PP solution with ultra-light grammage

- Highly breathable, water-tight membrane
- The lightest roof membrane which is ideal for wind-tightening ventilated facades with closed joints
- High tearing resistance
- The non-slip surface allows easy laying
- 100% in completely recyclable polypropylene



Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Microporous film in PP
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010191 | 02020313 | 1,5 | 50 | 2250 |

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|-------------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Grey | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 143 g/m ² |
| Thickness | | 0,60 mm |
| Sd value | EN ISO 12572 | 0,03 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 290 / 250 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 80 % |
| Tear resistance MD/CD* | EN 12310-1 | 220 / 245 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 2 months |
| Temperature resistance | | -40°/+90°C |

*MD = longitudinal CD = transversal

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Separation layers for metal coverings

The structured separation layers ensure a regular discharge of the condensation water between the metal cover and the waterproof roofing membrane. The “micro-ventilation” guarantees the condensate’s drying and reduces significantly the “rumble effect” of raindrops and hailstones. The separation layer has also the function to separate the metal covering from the substructure, thus avoiding corrosion damage.

Riwega’s separation layers

The structured separation layers of Drenlam Riwega differ in the different raw materials:

A) **USB Drenlam Diff TOP SK - USB Drenlam Light**

The structured separation layer USB Drenlam Diff TOP SK and USB Drenlam Light is made of eight millimetres high, UV stabilized PP monofilaments with Carbon Black. Only pure virgin materials are used for their production, to obtain a structured separation layer without the addition of recycled materials.

B) **USB Drenlam Bluetech**

Only pure virgin materials are used for the production of the USB Drenlam Bluetech to obtain a structured separation layer without the addition of recycled materials; this guarantees a particularly high compressive strength of the 14 mm high monofilaments and excellent UV protection. Thanks to the excellent technical and mechanical properties and increased free space between the metal roof and the substructure, USB Drenlam Bluetech is one of the best separation layers for metal roofs. The special height of USB Drenlam Bluetech ensures optimal air circulation and drainage between the substructure and the roof. Moisture and condensation are eliminated and white rust is avoided. USB Drenlam Bluetech can be installed under any metal cover and, thanks to its high compressive strength, it offers reliable protection against any deformation of the metal coating.

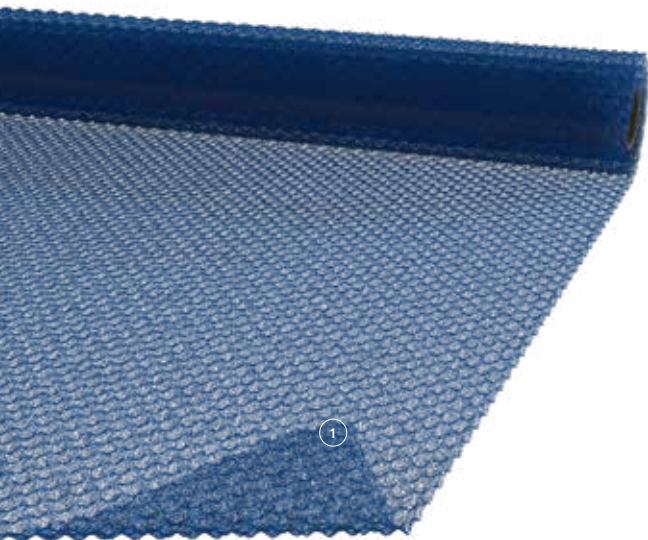
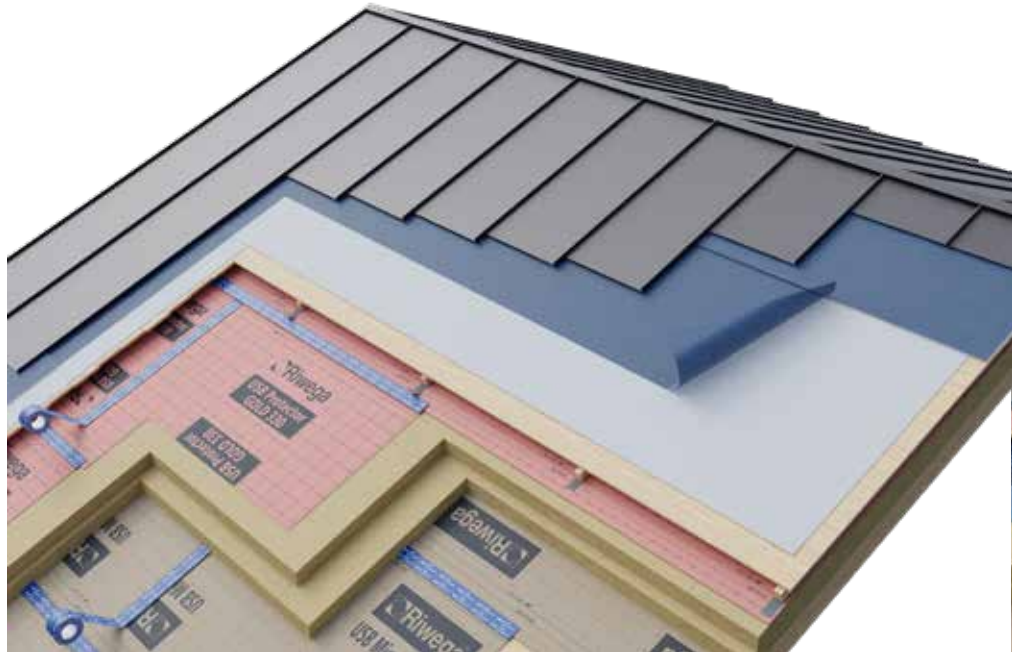
USB Drenlam Bluetech

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R2

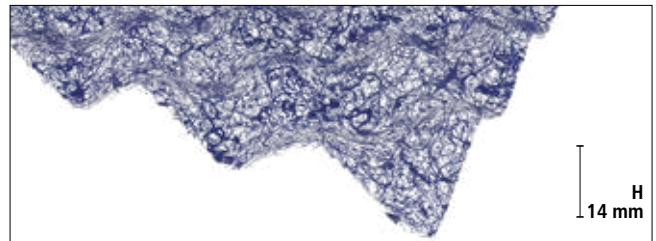
QUICK OVERVIEW: STRENGTHS

Noise preventing evolution which guarantees perfect drainage

- Separation layer for metal roofs
- High resistance to compressive loads like snow and photovoltaic panels
- Three-dimensional "blister" structure for better drainage of condensed water
- 100% virgin PP (non-recycled) for guaranteed extended durability



Features:



Composition:

- ① Three-dimensional structure in PP with neutral masterbatch

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02064022 | - | 1,25 | 20 | 150 |

Technical data sheet

| Material | PP with neutral masterbatch | |
|--------------------------|-----------------------------|----------------------|
| Colour | Blue | |
| Use underneath PV panels | YES | |
| Mass per unit area | EN 1849-2 | 450 g/m ² |
| Thickness | | 14 mm |
| Tensile strength MD/CD* | EN ISO 12311-1 | 63 / 28 N/50mm |
| Elongation MD/CD* | EN ISO 12311-1 | 55 / 55 % |
| Void ratio | | min. 95 % |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -30°/+90°C |
| 0 kPa | 0 kg/m ² | 14,5 mm (±10%) |
| 2 kPa | 200 kg/m ² | 13,6 mm (±10%) |
| 5 kPa | 500 kg/m ² | 13,2 mm (±10%) |
| 10 kPa | 1000 kg/m ² | 12,6 mm (±10%) |
| 15 kPa | 1500 kg/m ² | 11,8 mm (±10%) |

*MD = longitudinal CD = transversal
Note: due to the increased thickness, for a correct installation, use a "high-staple" fastening system (h=38mm)
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USB Drenlam Light

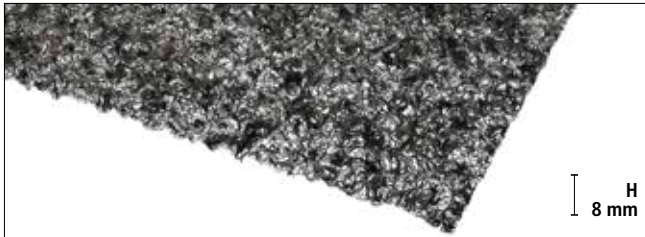


QUICK OVERVIEW: STRENGTHS

Universal sounddeadening layer in 100% polypropylene

- Separation layer for metal roofs
- Great sound-deadening effect
- Guarantees an optimal micro ventilation for the evacuation of condensation
- 100% virgin PP (non-recycled) for guaranteed extended durability

Features:



Technical data sheet

| | | |
|--------------------------|----------------------|----------------------|
| Material | PP with carbon black | |
| Colour | Black | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 350 g/m ² |
| Thickness | | 8 mm |
| Tensile strength MD/CD* | EN ISO 12311-1 | 75 / 22 N/50mm |
| Elongation MD/CD* | EN ISO 12311-1 | 40 / 40 % |
| Void ratio | | min. 95 % |
| Noise reduction | EN ISO 712-2 | ΔLW 28 dB |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

Composition:

Three-dimensional netting in PP with carbon black ①

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02064010 | - | 1,25 | 28 | 315 |

*MD = longitudinal CD = transversal
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USB Drenlam Diff TOP SK

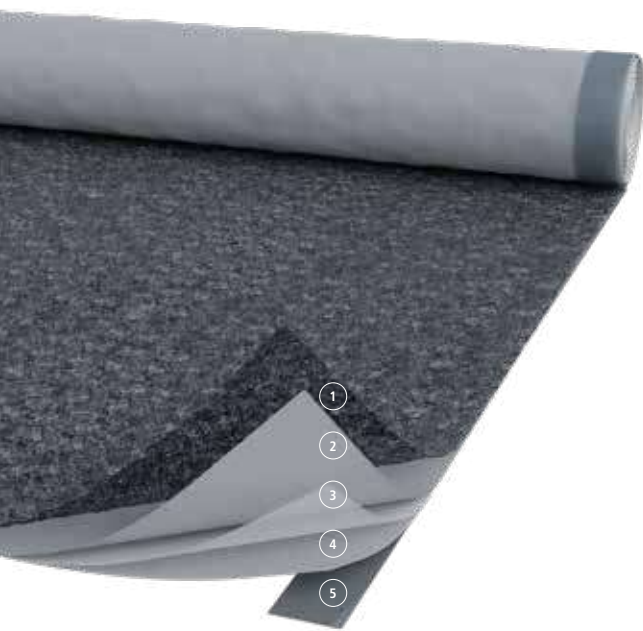
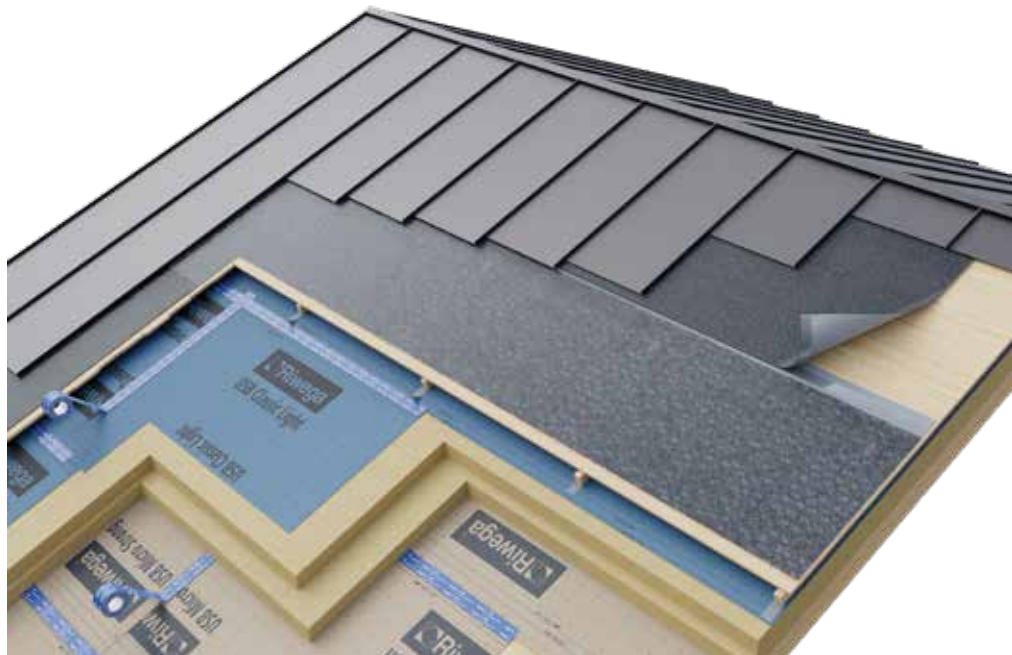
21

R2

QUICK OVERVIEW: STRENGTHS

Stops noise and condensation

- Separation layer for metal roofs
- Unique because of the double integrated adhesive tape (TOP SK)
- Guarantees an optimal micro ventilation for the evacuation of condensation
- 100% virgin PP (non-recycled) for guaranteed extended durability



Composition:

- ① Three-dimensional netting in PP with carbon black
- ② Protective UV stabilized, water repellent layer in PP
- ③ Functional film in PP
- ④ Protective layer in PP with integrated adhesive tape
- ⑤ Silicone liner

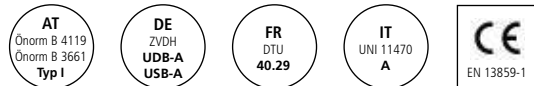
Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|------|-------------|-----------|------------|--------------------------|
| - | 02064011 | 1,5 | 24 | 324 |

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------------------------|--------------------------------|
| Material | PP 3 strati + PP with carbon black | |
| Film | PP | |
| Colour | Black/Grey | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 500 (150+350) g/m ² |
| Thickness | | 8,75 (0,75+8) mm |
| Sd value | EN ISO 12572 | 0,02 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 190 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 70 % |
| Tear resistance MD/CD* | EN 12310-1 | 150 / 190 N |
| Void ratio | | min. 95 % |
| Noise reduction | EN ISO 712-2 | ΔLW 28 dB |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

*MD = longitudinal CD = transversal

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The wind-tightness protects the facade insulation from cold and hot outside air so that it cannot flow into the thermal insulation. The facade membrane must therefore always be installed outside or above the thermal insulation.

The Riwega solution for ventilated facades

The breathable, windproof and rainproof membranes for the permanent protection of the building envelope differ in two main characteristics:

- Multi-layer membrane, UV stable, breathable, for use on a facade with open joints;
 - Breathable, multi-layer windproof membrane for use on a ventilated facade with closed joints;
- These are breathable, wind and rainproof membranes for permanent protection of the building envelope.

These, in turn, are characterized by:

A) **Raw material:**

To guarantee long-term UV stability to the USB Windtop UV and USB Windtop UV 210 breathable membranes, pure PUR is used, combined with a UV-stabilized and heat-resistant PET non-woven fabric. The three-layer breathable windproof membranes USB Wall 120 and DO 100 are composed of two stabilised non-woven fabrics, made by UV- and heat-resistant PP that protect the high-quality functional membrane with light grey colour.

B) **Production process:**

The UV stable PUR functional membrane is coupled to the PET nonwoven fabric by a laminating machine. The windproof breathable membranes, thanks to their low weight, can be calendared and heat-sealed.

USB Windtop UV

22
R2

QUICK OVERVIEW: STRENGTHS

Protection that doesn't fear UV rays

- Waterproof breathable membrane
- The special polyurethane coating makes it particularly practical and resistant to UV rays
- Ideal membrane for waterproof and wind-tight thermal insulation in ventilated facades with open joints
- Black color for a low aesthetical impact



Composition:

- ① UV stable PUR functional film
- ② Protective layer in PET

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010301 | 02020301 | 1,5 | 50 | 1500 |

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------------|--|------------------------------|
| Material | PUR.PET | |
| Film | UV50 PUR | |
| Colour | Black | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 160 g/m ² |
| Thickness | | 0,50 mm |
| Sd value | EN ISO 12572 | 0,14 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 170 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 25 / 30 % |
| Tear resistance MD/CD* | EN 12310-1 | 130 / 160 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | stable (joints up to max. 30 mm - max. 40 %) | |
| Weathering without final cladding | | 4 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

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USB Windtop UV 210



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R2

QUICK OVERVIEW: STRENGTHS

UV resistance with increased weight

- Waterproof breathable membrane
- Increased mass per unit area for improved mechanical resistance
- Ideal membrane for waterproof and wind-tight thermal insulation in ventilated facades with open joints
- Black color for a low aesthetic impact
- Available in 1,5 m and 3 m version

new product

Features:



Classification:



| Technical data sheet | | |
|-----------------------------------|--|------------------------------|
| Material | PUR.PET | |
| Film | PUR | |
| Colour | Black | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 210 g/m ² |
| Thickness | | 0,54 mm |
| Sd value | EN ISO 12572 | 0,15 m |
| Water vapour permeability | EN ISO 12572 | ~ 200 g/m ² /24 h |
| Watern column | EN 20811 | >300 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 360 / 250 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 20 / 25 % |
| Tear resistance MD/CD* | EN 12310-1 | 180 / 280 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | stable (joints up to max. 30 mm - max. 30 %) | |
| Weathering without final cladding | | 3 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products



Composition:

- UV stable PUR functional film ①
- Protective layer in PET ②

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 020103015 | - | 1,5 | 50 | 1500 |
| 020103012 | - | 3,0 | 50 | 3000 |

USB Wall 120

24
R2

QUICK OVERVIEW: STRENGTHS

The essential membrane for ventilated facades with continuous cladding

- Highly breathable, water-tight membrane
- Guarantees wind-tightness of the insulation of ventilated facades with continuous cladding
- Available in 3m height to speed up laying time



Composition:

- 1 Protective UV stabilized, water repellent layer in PP
- 2 Functional film in PP
- 3 Protective layer in PP

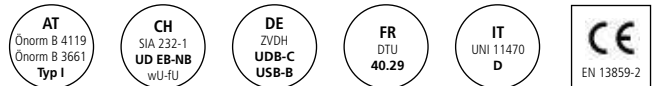
Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02010090 | 02020121 | 1,5 | 50 | 1500 |
| 020100900 | - | 3,0 | 50 | 3000 |

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|-------------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Grey | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 120 g/m ² |
| Thickness | | 0,65 mm |
| Sd value | EN ISO 12572 | 0,02 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 260 / 155 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 70 % |
| Tear resistance MD/CD* | EN 12310-1 | 105 / 140 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

DO 100



QUICK OVERVIEW: STRENGTHS

The ultra-light grammage solution for walls

- Highly breathable, water-tight membrane
- The lightest membrane for wind-tightening and waterproofing ventilated facades with continuous cladding
- Made of 100% recyclable polypropylene

Features:



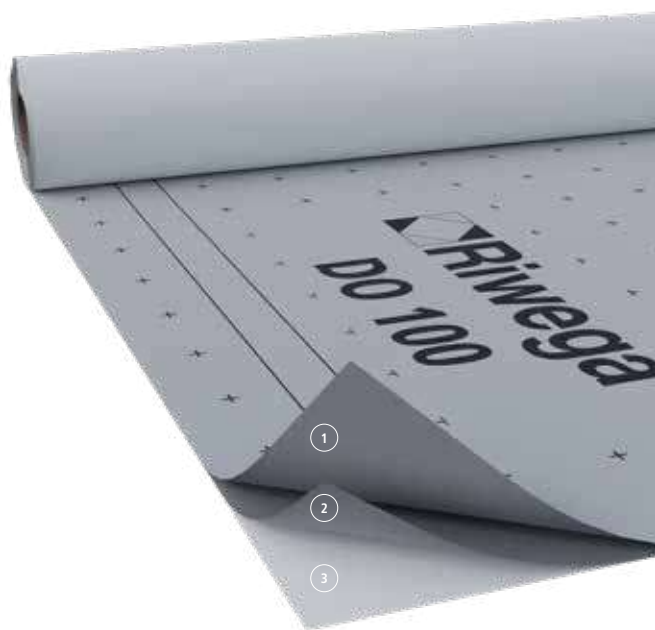
Classification:



| Technical data sheet | | |
|-----------------------------|------------------|-------------------------------|
| Material | | PP.PP.PP |
| Film | | PP |
| Colour | | Grey |
| Use underneath PV panels | | NO |
| Mass per unit area | EN 1849-2 | 100 g/m ² |
| Thickness | | 0,40 mm |
| Sd value | EN ISO 12572 | 0,03 m |
| Water vapour permeability | EN ISO 12572 | ~ 1000 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 250 / 150 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 80 / 120 % |
| Tear resistance MD/CD* | EN 12310-1 | 120 / 150 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+80°C |

*MD = longitudinal CD = transversal

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Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Microporous film in PP ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02010186 | - | 1,5 | 50 | 2250 |
| 020101860 | - | 3,0 | 50 | 4500 |

The vapour control layer, with airtight characteristics, has to be installed on the inside of the insulating package on the building envelope. The aim is to avoid hot airflow into the insulation and to regulate the migration of vapour, thus avoiding damages caused by condensation.

Superior Line

Riwega's vapour control layers

Riwega produces vapour control layers for the entire building envelope, both in light versions for indoor use and in heavier versions to be used above the roof structure and walkable for the subsequent working steps. Depending on the technical requirements, Riwega offers vapour control layers with a fixed Sd value of 2 m, 10 m and 20 m, or with variable Sd values (from 0,2 to 20 m), particularly interesting for renovations or roofs, for hot or flat roofs, situations in which it is often necessary to manage problems of poor transpiration of the outer layers. Thanks to this range of proposals, we can provide the optimal solution for a perfect building structure with controlled vapour diffusion in any construction situation. The products in the range differ in the following compositional characteristics:

A) **Raw material:**

Various high-quality raw materials are used to obtain products with different technical characteristics and to satisfy the offered 10-year guarantee.

B) **Production process:**

To couple these high-quality long-lasting raw materials and make them functional requires a technologically complex and specially prepared production process.

C) **Mass per unit area:**

The reduced weight of vapour control layers for inside walls is a fundamental factor for a simple, rapid and professional installation of the airtight layer; at the same time, to resist any insufflation of insulating material, tensile strength, rigidity and elongation features are required. For external installation on the roof structure (under the insulation) the mass per unit area of the product must be high, to guarantee mechanical and abrasion resistances so that they can be walked on and loaded mechanically.

USB Micro Strong



QUICK OVERVIEW: STRENGTHS

Top mechanical resistance

- Vapour control layer
- High tearing resistance
- Top abrasion resistance also when the product is laid on rough surfaces
- Regulates the vapour flow
- Ideal as a temporary waterproofing system during the different working phases on the working site

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|--------------|-----------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Beige | |
| Mass per unit area | EN 1849-2 | 230 g/m ² |
| Thickness | | 1,06 mm |
| Sd value | EN ISO 12572 | >2 m |
| Water vapour permeability | EN ISO 12572 | ~ 15 g/m ² /24 h |
| Watern column | EN 20811 | >900 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 380 / 300 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 50 / 65 % |
| Tear resistance MD/CD* | EN 12310-1 | 300 / 390 N |
| Fire reaction class | EN 13501-1 | E |
| VOC class | ISO 16000 | A+ |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Functional film in PP ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030195 | 02020191 | 1,5 | 50 | 1500 |

*MD = longitudinal CD = transversal
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USB Micro

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R2

QUICK OVERVIEW: STRENGTHS

The first, the original

- Vapour control layer
- Regulates the passage of vapour
- High mechanical resistance
- Ideal also as a temporary waterproofing system during the different working phases on the working site
- more than 20 years of history in the market
- Great quality/price ratio



Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Functional film in PP
- ③ Protective layer in PP

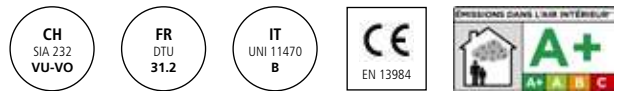
Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m²) |
|-----------|-------------|-----------|------------|-------------|
| 02030140 | 02020141 | 1,5 | 50 | 1500 |
| 020301400 | - | 3,0 | 50 | 3000 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|--------------|------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Beige | |
| Mass per unit area | EN 1849-2 | 155 g/m² |
| Thickness | | 0,78 mm |
| Sd value | EN ISO 12572 | >2 m |
| Water vapour permeability | EN ISO 12572 | ~ 15 g/m²/24 h |
| Watern column | EN 20811 | >550 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 310 / 240 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 70 / 80 % |
| Tear resistance MD/CD* | EN 12310-1 | 190 / 230 N |
| Fire reaction class | EN 13501-1 | E |
| VOC class | ISO 16000 | A+ |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

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USB Micro Light



QUICK OVERVIEW: STRENGTHS

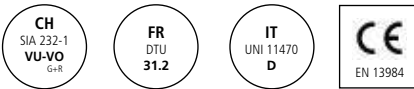
The lightweight and handy solution for the inside

- Vapour control layer
- Ideal to be laid as inside protection of the wooden wall or ceiling structure
- Easy to be laid thanks to its semi-transparency
- Regulates the passage of vapour and guarantees a perfect wind-tight building envelope

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|--------------|----------------------------|
| Material | PP.PE.PP | |
| Film | PE | |
| Colour | Beige | |
| Mass per unit area | EN 1849-2 | 120 g/m ² |
| Thickness | | 0,57 mm |
| Sd value | EN ISO 12572 | 10 m |
| Water vapour permeability | EN ISO 12572 | ~ 3 g/m ² /24 h |
| Water column | EN 20811 | >400 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 210 / 160 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 80 % |
| Tear resistance MD/CD* | EN 12310-1 | 180 / 220 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Functional film in PE ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02030115 | - | 1,5 | 50 | 1500 |
| 020301150 | - | 3,0 | 50 | 3000 |

*MD = longitudinal CD = transversal

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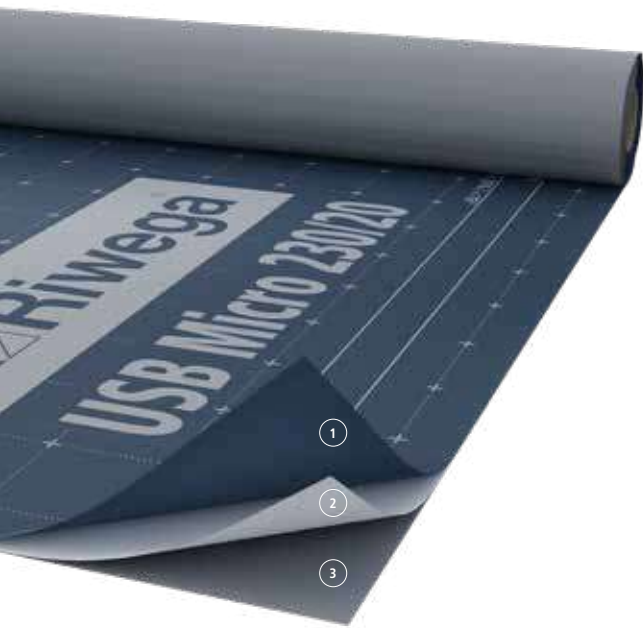
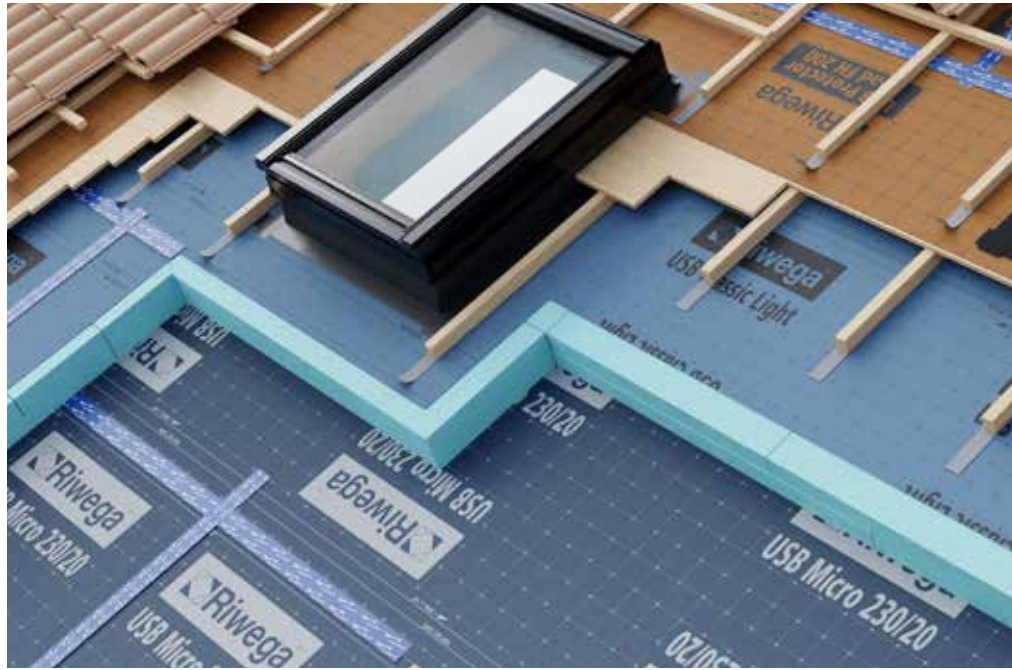
USB Micro 230/20

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R2

QUICK OVERVIEW: STRENGTHS

Low breathability with high mechanical resistance

- Vapour control layer
- Indicated to be laid under insulating materials with low breathability
- High tearing resistance
- Indicated for installation in buildings with high water vapour concentration
- Ideal also as a temporary waterproofing system during the different building phases



Features:



Classification:



Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Functional film in PP
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030230 | 02020126 | 1,5 | 50 | 1500 |

Technical data sheet

| | | |
|---------------------------|--------------|------------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Dark blue | |
| Mass per unit area | EN 1849-2 | 220 g/m ² |
| Thickness | | 1,06 mm |
| Sd value | EN ISO 12572 | 20 m |
| Water vapour permeability | EN ISO 12572 | ~ 1,5 g/m ² /24 h |
| Watern column | EN 20811 | >900 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 400 / 280 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 70 % |
| Tear resistance MD/CD* | EN 12310-1 | 250 / 320 N |
| Fire reaction class | EN 13501-1 | E |
| VOC class | ISO 16000 | A+ |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

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USB Micro 100/20

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R2



QUICK OVERVIEW: STRENGTHS

Ultra-light with low breathability

- Vapour control layer
- Ideal as an inner cladding of the installed insulating material between wall and ceiling
- Easy to be laid thanks to its semi-transparency
- Suitable to be laid in buildings with high vapour concentration
- Regulates the passage of vapour and guarantees a perfect wind-tight building envelope

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|------------------------|------------------------------|
| Material | PP.PE | |
| Film | PE | |
| Colour | Semi-transparent white | |
| Mass per unit area | EN 1849-2 | 100 g/m ² |
| Thickness | | 0,42 mm |
| Sd value | EN ISO 12572 | 20 m |
| Water vapour permeability | EN ISO 12572 | ~ 1,5 g/m ² /24 h |
| Watern column | EN 20811 | >400 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 180 / 120 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 65 / 70 % |
| Tear resistance MD/CD* | EN 12310-1 | 80 / 90 N |
| Fire reaction class | EN 13501-1 | E |
| VOC class | ISO 16000 | A+ |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |

Composition:

- Protective UV stabilized, water repellent layer in PP ①
Functional film in PE ②

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02030143 | - | 1,5 | 50 | 1500 |
| 020301430 | - | 3,0 | 50 | 3000 |

*MD = longitudinal CD = transversal

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USB Micro 150 Vario

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R2

QUICK OVERVIEW: STRENGTHS

The upgrade of variable hygrometric

- Vapour control layer with variable hygrometric
- High tearing resistance due to heavy grammage
- Perfect for insufflation
- Perfect regulation of vapour passage based on temperature and humidity
- Easy drying of the bottom side during summer



Composition:

- ① Support layer in PET
- ② Functional film in PA
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030145 | - | 1,5 | 50 | 1500 |

Features:



Classification:



Technical data sheet

| Material | PET.PA.PP | |
|---------------------------|--------------|----------------------------------|
| Film | PA | |
| Colour | White | |
| Mass per unit area | EN 1849-2 | 150 g/m ² |
| Thickness | | 0,78 mm |
| Sd value | EN ISO 12572 | 0,2 - 20 m |
| Water vapour permeability | EN ISO 12572 | ~ 100 - 1 g/m ² /24 h |
| Water column | EN 20811 | >200 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 430 / 170 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 25 / 110 % |
| Tear resistance MD/CD* | EN 12310-1 | 125 / 200 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

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USB Micro 100 Vario



QUICK OVERVIEW: STRENGTHS

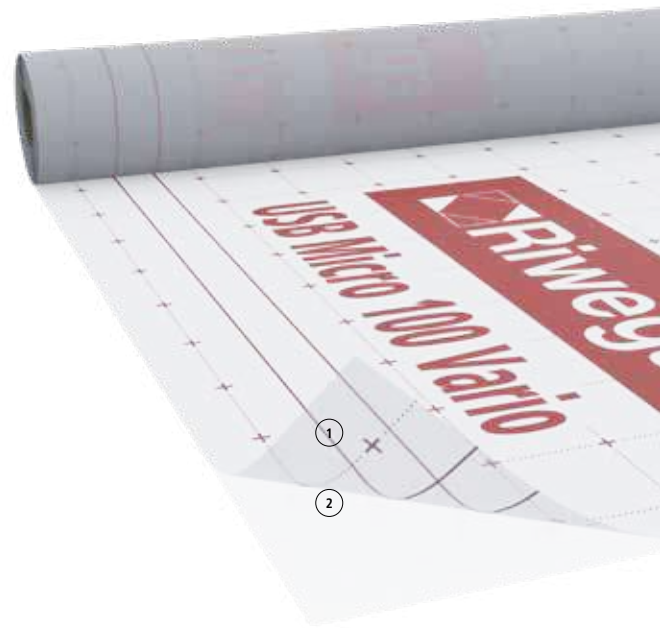
The ultra-light layer, able to adopt its hygrometric properties

- Hygrosensitive vapour control layer
- Ideal as a cladding for inside and outside of wooden structures
- Variable regulation of vapour passage based on temperature and humidity
- Perfect to be used during renovation works on the building envelope

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|------------------------|----------------------------------|
| Material | PET.PA | |
| Film | PA | |
| Colour | Semi-transparent white | |
| Mass per unit area | EN 1849-2 | 100 g/m ² |
| Thickness | | 0,30 mm |
| Sd value | EN ISO 12572 | 0,2 - 20 m |
| Water vapour permeability | EN ISO 12572 | ~ 100 - 1 g/m ² /24 h |
| Water column | EN 20811 | >200 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 210 / 190 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 35 / 35 % |
| Tear resistance MD/CD* | EN 12310-1 | 59 / 65 N |
| Fire reaction class | EN 13501-1 | E |
| VOC class | ISO 16000 | A+ |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+100°C |

Composition:

- Functional film in PA ①
- Support layer in PET ②

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|-----------|-------------|-----------|------------|--------------------------|
| 02030144 | - | 1,5 | 50 | 2250 |
| 020301440 | - | 3,0 | 50 | 4500 |

*MD = longitudinal CD = transversal
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The vapour control layer, with airtight characteristics, has to be installed on the inside of the insulating package on the building envelope. The aim is to avoid hot airflow into the insulation and to regulate the migration of vapour, thus avoiding damages caused by condensation.

Eurostandard Line

Riwega's vapour control layers

Riwega produces vapour control layers for the entire building envelope, both in light versions for indoor use and in heavier versions to be used above the roof structure and walkable, for the subsequent building phases. Depending on the technical requirements, Riwega offers steam brake screens with a fixed S_d value of 2 m, 5 m, 6 m and 20 m. The products in the range differ in the following compositional characteristics:

A) **Raw material:**

The vapour barrier layer is made of PP non-wovens, which are sufficiently resistant to UV and heat, with non-slip properties to obtain products with different technical characteristics and to meet the legal warranties.

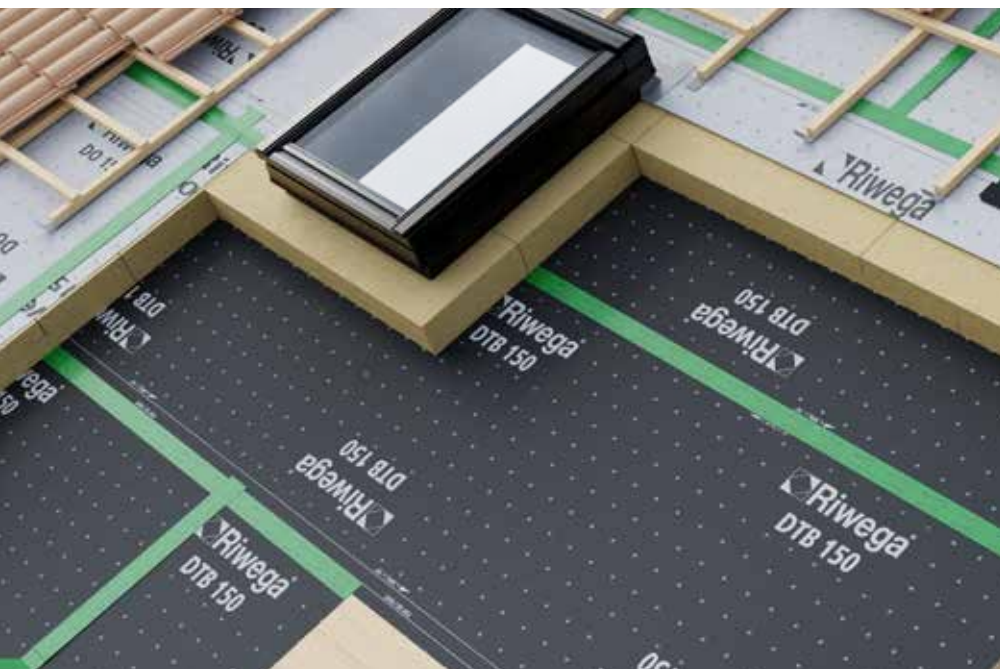
B) **Production process:**

To couple these long-term raw materials and make them functional, a technologically very complex and specially designed production process is required. The entire production process, from the raw material to the finished product, is constantly monitored by our highly qualified production staff.

C) **Mass per unit area:**

By using different thicknesses of the upper and lower coating layer, different weights are obtained. The Eurostandard line vapour control layers weight 140 g/m^2 , 150 g/m^2 , 155 g/m^2 and 200 g/m^2 . This range of materials covers all the mechanical requirements for the creation of layers for controlling the passage of steam and airtightness in various construction situations.

DTB 150



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R2

QUICK OVERVIEW: STRENGTHS

The easy and effective reinforced choice

- Vapour control layer
- High tearing resistance thanks to reinforcing mesh
- Regulates the vapour flow
- Guaranteed non-slip surface during all roof building stages

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|------------------|----------------------------|
| Material | Reinforced PE | |
| Film | PP | |
| Colour | Black | |
| Mass per unit area | EN 1849-2 | 150 g/m ² |
| Thickness | | 0,55 mm |
| Sd value | EN ISO 12572 | >5 m |
| Water vapour permeability | EN ISO 12572 | ~ 4 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Water tightness | EN 1928 (Met. A) | passed |
| Tensile strength MD/CD* | EN 12311-1 | 330 / 400 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 40 / 50 % |
| Tear resistance MD/CD* | EN 12310-1 | 350 / 310 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Polyethylene reinforcing mesh ②
- Functional film in PP, watertight and lightly breathable ③
- Protective layer in PP ④

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030150 | - | 1,5 | 50 | 2250 |

*MD = longitudinal CD = transversal

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DB 200

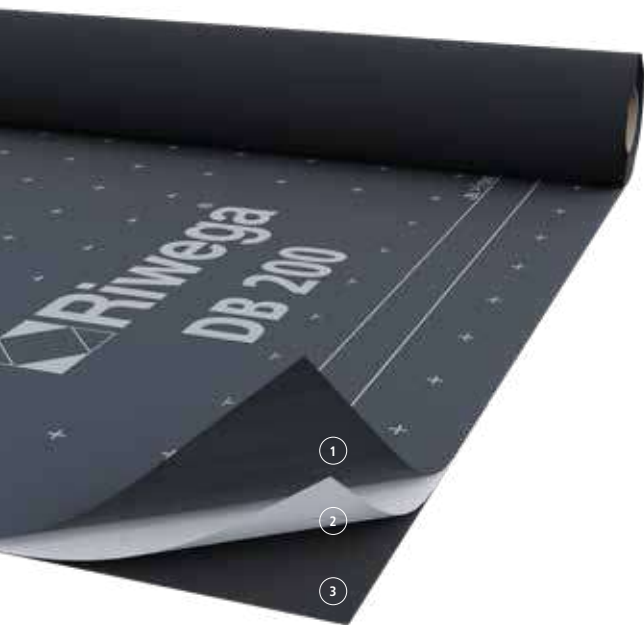
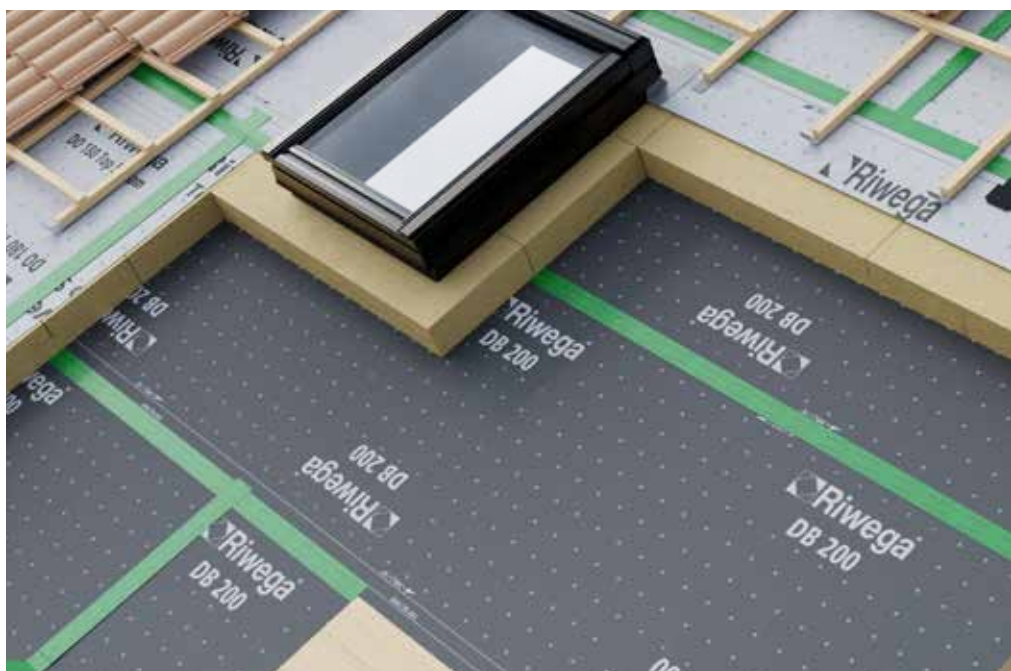
34

R2

QUICK OVERVIEW: STRENGTHS

Easy and effective choice with high grammage

- Vapour control layer
- High tearing resistance
- Regulates the vapour flow
- Ideal as a temporary waterproofing system during the different working phases on the working site



Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Functional film in PP, watertight and lightly breathable
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030200 | 02020316 | 1,5 | 50 | 1500 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|------------------|----------------------------|
| Material | PP,PP,PP | |
| Film | PP | |
| Colour | Antracite grey | |
| Mass per unit area | EN 1849-2 | 200 g/m ² |
| Thickness | | 0,80 mm |
| Sd value | EN ISO 12572 | 6 m |
| Water vapour permeability | EN ISO 12572 | ~ 3 g/m ² /24 h |
| Water column | EN 20811 | >200 cm |
| Water tightness | EN 1928 (Met. A) | passed |
| Tensile strength MD/CD* | EN 12311-1 | 480 / 330 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 75 / 120 % |
| Tear resistance MD/CD* | EN 12310-1 | 260 / 360 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

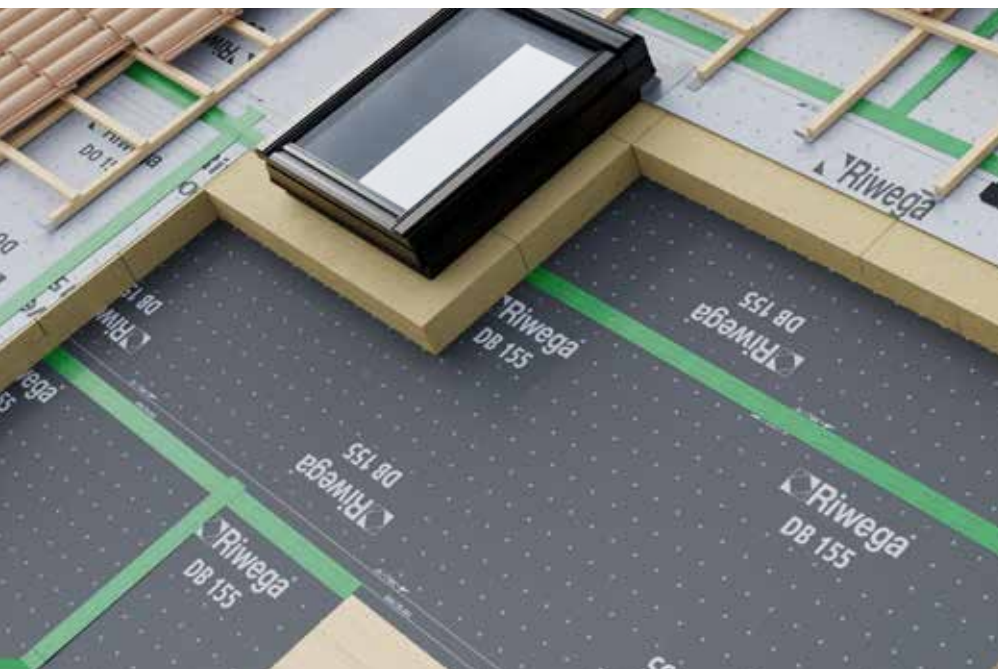
*MD = longitudinal CD = transversal

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DB 155

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R2



QUICK OVERVIEW: STRENGTHS

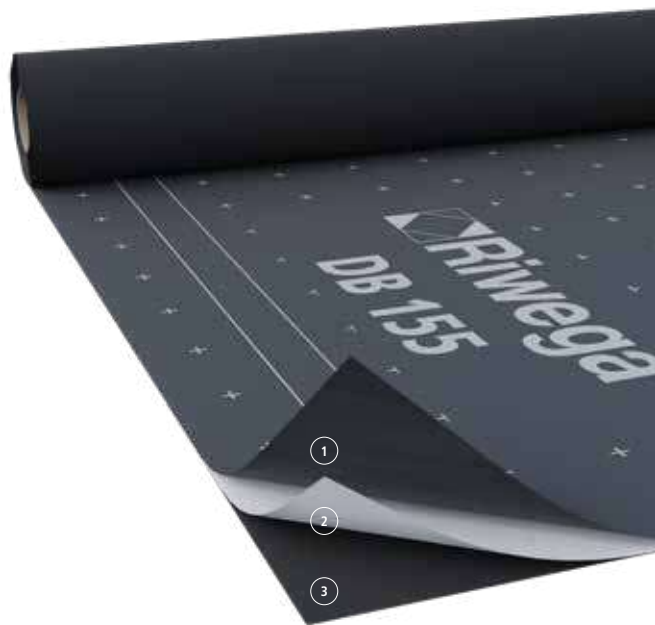
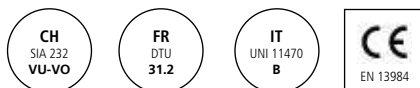
Easy and effective choice with medium grammage

- Vapour control layer
- Light membrane for roofs and resistant membrane for walls
- Regulates the vapour flow
- Ideal also as a temporary waterproofing system during the different working phases on the working site

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|------------------|-----------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Antracite grey | |
| Mass per unit area | EN 1849-2 | 155 g/m ² |
| Thickness | | 0,60 mm |
| Sd value | EN ISO 12572 | 2 m |
| Water vapour permeability | EN ISO 12572 | ~ 15 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Water tightness | EN 1928 (Met. A) | passed |
| Tensile strength MD/CD* | EN 12311-1 | 350 / 230 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 75 / 115 % |
| Tear resistance MD/CD* | EN 12310-1 | 185 / 225 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Functional film in PP, watertight and lightly breathable ②
- Protective layer in PP ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030190 | 02020311 | 1,5 | 50 | 1500 |

*MD = longitudinal CD = transversal

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DB 135

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R2

QUICK OVERVIEW: STRENGTHS

Easy and effective choice with low grammage

- Vapour control layer
- Regulates the passage of vapour and guarantees a perfect wind-tight building envelope
- Ideal as an inner cladding of the installed insulating material between wall and ceiling
- Easy and quick to install thanks to its lightweight



Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Functional film in PP, impermeabile e leggermente traspirante
- ③ Protective layer in PP

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02030135 | - | 1,5 | 50 | 2250 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|------------------|------------------------------|
| Material | PP,PP,PP | |
| Film | PP | |
| Colour | Black | |
| Mass per unit area | EN 1849-2 | 140 g/m ² |
| Thickness | | 0,30 mm |
| Sd value | EN ISO 12572 | 20 m |
| Water vapour permeability | EN ISO 12572 | ~ 1,5 g/m ² /24 h |
| Water column | EN 20811 | >200 cm |
| Water tightness | EN 1928 (Met. A) | passed |
| Tensile strength MD/CD* | EN 12311-1 | 250 / 180 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 50 / 50 % |
| Tear resistance MD/CD* | EN 12310-1 | 65 / 65 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+90°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

Hygrotherm Europe

Hygrotherm Europe is an advanced technical support tool, essential to assist the professional technician or installer in the evaluation of the risk phenomena of surface condensation, mould and interstitial condensation. The result of the calculation will be a report flanked by the product's laying specifications and by graphics from which we can understand the behaviour of the structure at a thermohygroscopic level, any problems and solutions to have the best possible solution. Hygrotherm Europe uses the Wufi® software (developed by the

Fraunhofer IBP Institute) specifically for performing hourly hygrothermal simulations in dynamic mode by the UNI EN 15026 standard, and therefore indispensable for evaluating the water content and temperature in the building element for now. Hygrotherm Europe can be used internationally. The dynamic simulation is supported by the Metonorm software, or a database of meteorological information, such as global radiation, temperature, humidity, rainfall, wind speed and direction and duration of sunshine for any location in the world.

R2



Vapour barriers

The vapour barrier with air tightening qualities, has to be laid on the inside of the building envelope's insulating package. The aim is to prevent hot airflow into the insulation and to block the migration of vapour, thus avoiding damage by condensation. The vapour barrier is used only in cases of extreme necessity, in structures and insulation packages where there is not the slightest possibility of drying out humidity either from the outside or from the inside. The use of vapour barriers with total blocking of vapour migration requires increased room ventilation which can occur either manually (by opening the windows) or automatically through the use of CMV systems (Controlled Mechanical Ventilation); otherwise, the risk of mould or stagnation of humidity on the building's internal surfaces would increase significantly.

Riwega's vapour barriers

Riwega offers vapour barriers for the entire building envelope, both in light versions for indoor use and in heavier versions to be used on the roof structure, which are walkable during the subsequent building phases. Depending on the technical requirements Riwega offers vapour barriers of different constitution:

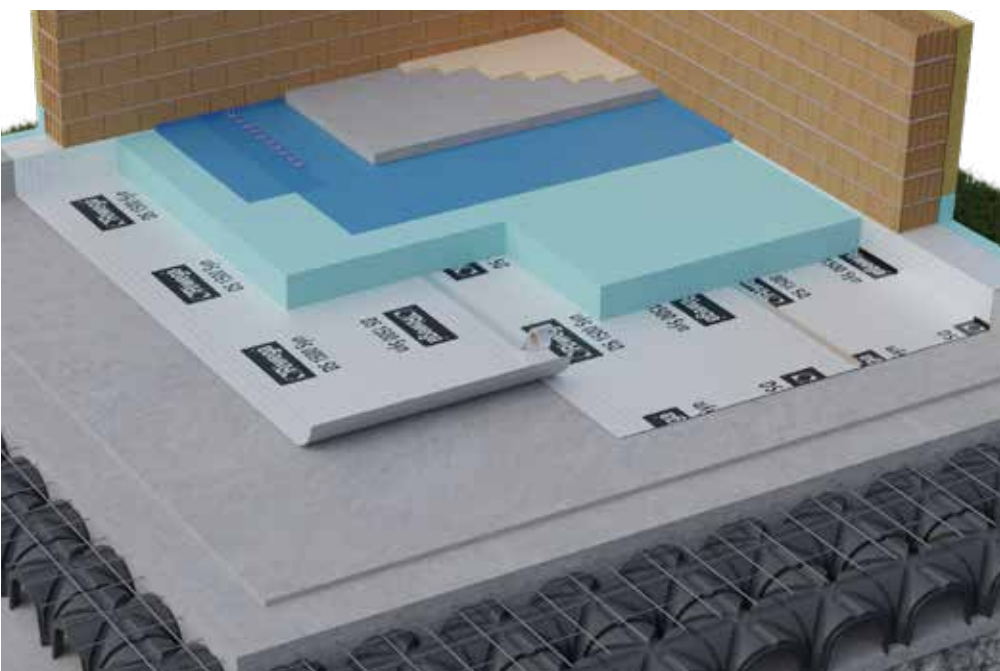
A) **Synthetic:**

They are based on polyethylene, polyethylene/aluminium or polypropylene/aluminium and can be used as barriers on the internal side of walls and false ceilings or under-screed; the PP / ALU version also has an effective Radon barrier function.

B) **Bituminous:**

They are bitumen based, coupled with polypropylene non-woven fabrics or quartz sand; they are normally used as vapour barriers in roofs, or as the last waterproofing layer of the roof formwork, creating under-ventilated planking in packages with double ventilation.

DS 1500 SYN



QUICK OVERVIEW: STRENGTHS

Shield against vapour and radon gas

- Vapour barrier
- Certified as a vapour and radon gas barrier
- Ideal for the protection of internal insulation of a reinforced concrete wall
- Reflecting, waterproof, air- and windtight, light and handy vapour barrier

Features:



Classification:



Composition:

- Protective layer in PP ①
- Film in PE ②
- Aluminium film ③
- Film in PE ④
- Protective layer in PP ⑤

Technical data sheet

| | | |
|---------------------------|-----------------|---|
| Material | PP,PE,Alu,PE,PP | |
| Colour | White | |
| Mass per unit area | EN 1849-2 | 130 g/m ² |
| Thickness | | 0,45 mm |
| Sd value | EN ISO 12572 | >1500 m |
| Water vapour permeability | EN ISO 12572 | ~ 0,02 g/m ² /24 h |
| Water column | EN 20811 | - |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 170 / 110 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 45 % |
| Tear resistance MD/CD* | EN 12310-1 | 75 / 90 N |
| Fire reaction class | EN 13501-1 | E |
| Radon gas diffusion (D) | ISO 11665-10 | 1,64 x 10 ⁻¹⁴ m ² s ⁻¹ |
| Temperature resistance | | -40°/+100°C |

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02064007 | - | 1,5 | 50 | 2250 |

*MD = longitudinal CD = transversal

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DS 188 ALU

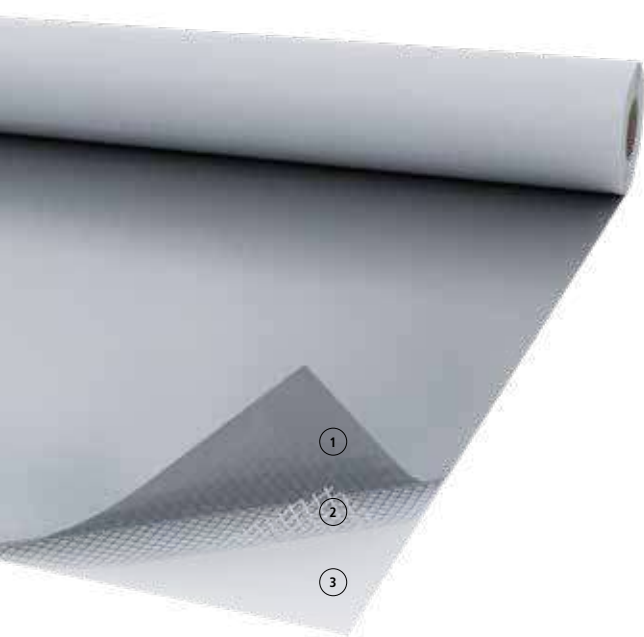
38

R2

QUICK OVERVIEW: STRENGTHS

The most performing vapour barrier with reflecting effect

- Vapour barrier
- In counter-walls and false-ceilings the reflecting surface increases the internal heat reflection
- High mechanical resistance thanks to its reinforcing mesh
- Minimizes the passage of water vapour and guarantees a perfect airtight building envelope



Composition:

- ① Aluminium film
- ② PET reinforcing mesh
- ③ Film in PE

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02064008 | - | 1,5 | 50 | 3000 |

Features:



Classification:



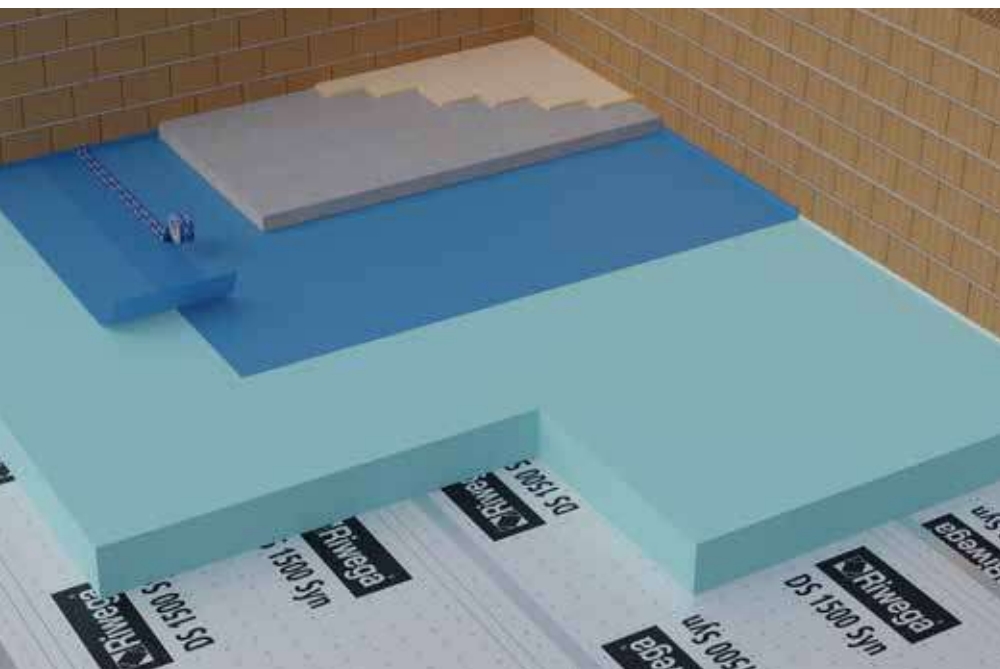
Technical data sheet

| Material | Reinforced PE.Alu | |
|---------------------------|-------------------|------------------------------|
| Colour | Aluminium | |
| Mass per unit area | EN 1849-2 | 170 g/m ² |
| Thickness | | 0,30 mm |
| Sd value | EN ISO 12572 | 200 m |
| Water vapour permeability | EN ISO 12572 | ~ 0,2 g/m ² /24 h |
| Water column | EN 20811 | - |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 290 / 260 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 15 / 15 % |
| Tear resistance MD/CD* | EN 12310-1 | 180 / 180 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | - |
| Temperature resistance | | -40°/+80°C |

*MD = longitudinal CD = transversal

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DS 65 PE



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R2

QUICK OVERVIEW: STRENGTHS

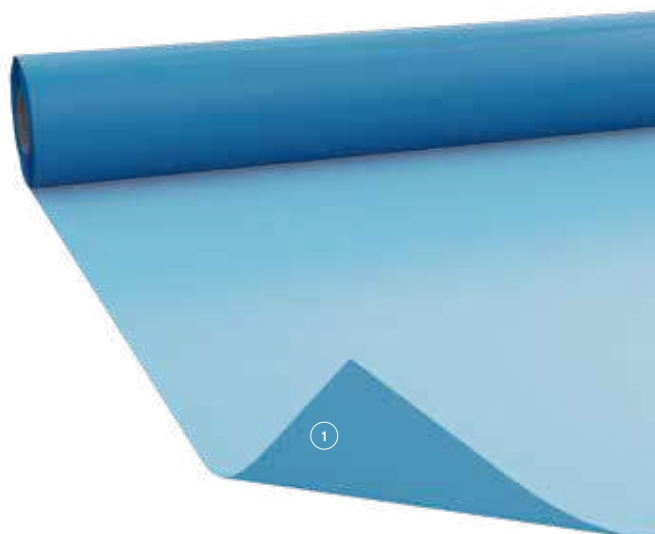
The multipurpose barrier 100% in PE

- Vapour barrier
- Only 3 m height available to ease and speed up laying time
- Ideal to be laid under the screeds as a separation and sliding layer
- Minimizes the passage of water vapour and guarantees a perfect airtight building envelope

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|-----------------------------|------------------------------|
| Material | PE | |
| Colour | Semi-transparent light blue | |
| Mass per unit area | EN 1849-2 | 188 g/m ² |
| Thickness | | 0,20 mm |
| Sd value | EN ISO 12572 | 140 m |
| Water vapour permeability | EN ISO 12572 | ~ 0,2 g/m ² /24 h |
| Water column | EN 20811 | - |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 175 / 160 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 500 / 570 % |
| Tear resistance MD/CD* | EN 12310-1 | 130 / 135 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | - |
| Temperature resistance | | -20°/+80°C |

Composition:

Film in PE ①

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02064006 | - | 3,0 | 33 | 3960 |

*MD = longitudinal CD = transversal

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DS 46 PE

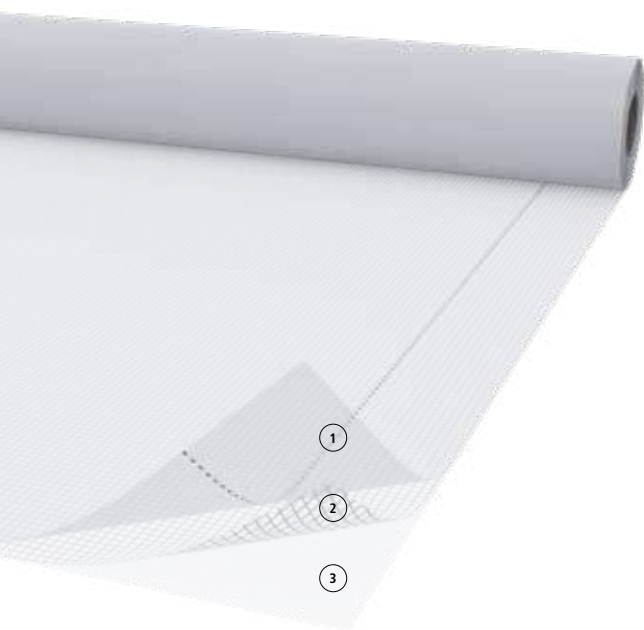
40

R2

QUICK OVERVIEW: STRENGTHS

The light and handy semi-transparent barrier

- Vapour barrier
- Great mechanical resistance, thanks to the central reinforcing mesh
- Easy to be laid thanks to its semi-transparency
- Minimizes the passage of water vapour and guarantees a perfect airtight building envelope



Composition:

- 1 Film in PE
- 2 PET reinforcing mesh
- 3 Film in PE

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02064009 | - | 1,5 | 50 | 6000 |

Features:



Classification:



Technical data sheet

| Material | reinforced PE | |
|---------------------------|------------------------|------------------------------|
| Colour | Semi-transparent white | |
| Mass per unit area | EN 1849-2 | 110 g/m ² |
| Thickness | | 0,22 mm |
| Sd value | EN ISO 12572 | 40 m |
| Water vapour permeability | EN ISO 12572 | ~ 0,6 g/m ² /24 h |
| Water column | EN 20811 | - |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 220 / 190 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 30 / 35 % |
| Tear resistance MD/CD* | EN 12310-1 | 155 / 145 N |
| Fire reaction class | EN 13501-1 | F |
| UV stability | | - |
| Temperature resistance | | -40°/+80°C |

*MD = longitudinal CD = transversal

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Bituminous vapour barriers

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R2

DS 28 750 PP TOP SK

| | | |
|-------------------------|------------|----------------------|
| Mass per unit area | EN 1849-2 | 700 g/m ² |
| Thickness | | 0,9 mm |
| Sd value | | 95 m |
| TOP SK glue type | | bituminous |
| Tensile strength MD/CD* | EN 12311-1 | 530 / 350 N/50mm |
| Tear resistance MD/CD* | EN 12310-1 | 200 / 200 N |
| Code TOP SK | | 02064019 |



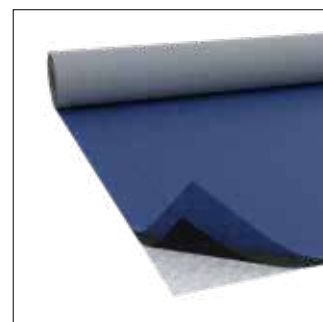
DS 48 1000 PP

| | | |
|-------------------------|------------|-----------------------|
| Mass per unit area | EN 1849-2 | 1000 g/m ² |
| Thickness | | 1,0 mm |
| Sd value | | 106 m |
| TOP SK glue type | | - |
| Tensile strength MD/CD* | EN 12311-1 | 470 / 360 N/50mm |
| Tear resistance MD/CD* | EN 12310-1 | 195 / 220 N |
| Code | | 02064014 |



DS 48 1100 PP / DS 48 1100 PP TOP SK

| | | |
|-------------------------|------------|-----------------------|
| Mass per unit area | EN 1849-2 | 1100 g/m ² |
| Thickness | | 1,1 mm |
| Sd value | | 152 m |
| TOP SK glue type | | acrylic |
| Tensile strength MD/CD* | EN 12311-1 | 700 / 440 N/50mm |
| Tear resistance MD/CD* | EN 12310-1 | 220 / 230 N |
| Code / Code TOP SK | | 02064005 / 02064020 |



DS 48 1300 TOP SK

| | | |
|-------------------------|------------|-----------------------|
| Mass per unit area | EN 1849-2 | 1300 g/m ² |
| Thickness | | 1,3 mm |
| Sd value | | 152 m |
| TOP SK glue type | | acrylic |
| Tensile strength MD/CD* | EN 12311-1 | 730 / 450 N/50mm |
| Tear resistance MD/CD* | EN 12310-1 | 250 / 250 N |
| Code TOP SK | | 02064013 |



DS 48 2200 TOP SK PP-S

| | | |
|-------------------------|------------|-----------------------|
| Mass per unit area | EN 1849-2 | 2200 g/m ² |
| Thickness | | 1,8 mm |
| Sd value | | 213 m |
| TOP SK glue type | | bituminous |
| Tensile strength MD/CD* | EN 12311-1 | 930 / 540 N/50mm |
| Tear resistance MD/CD* | EN 12310-1 | 360 / 370 N |
| Code TOP SK | | 02064018 |



*MD = longitudinal CD = transversal

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Auto-adhesive screens and membranes

VSK is a product line of breathable membranes, vapour control layers and vapour barriers with self-adhesive surfaces. Today, these innovations make it possible to facilitate and speed up the installation of roof, floor or wall membranes. Another major advantage is that these membranes adhere to the surface over the entire area, which makes them more resistant to mechanical effects such as foot traffic or weathering.

VSK vapour retarders, barriers and breathable membranes are divided into the following models:

A) **VSK Classic Light**

Breathable, waterproof membrane with acrylic dispersion adhesive, suitable for the protection of walls, floors and timber roofs during the construction phase and the exterior protection of timber-concrete wall joints.

B) **VSK Micro**

The vapour barrier with acrylic dispersion adhesive is suitable for the protection of walls, floors and wooden roofs during the construction phase.

C) **VSK DS 1500 SYN**

This vapour barrier with acrylic dispersion adhesive is certified as a radon gas barrier. It is ideal for use under subfloors and can also be used as a vapour barrier on flat roofs with a wooden structure.

D) **VSK Bitum Reflex 500**

The vapour barrier with bitumen adhesive for installation on straight concrete slabs and foundations, trapezoidal sheets or metal roofing.

E) **VSK Bitum Reflex 1500**

The vapour barrier with bitumen adhesive for increasing nail and /or screw tightness. It is ideal for under-ventilated timber sheathing and/or under metal roofs, e.g. in combination with the USB Drenlam Bluetech membrane.

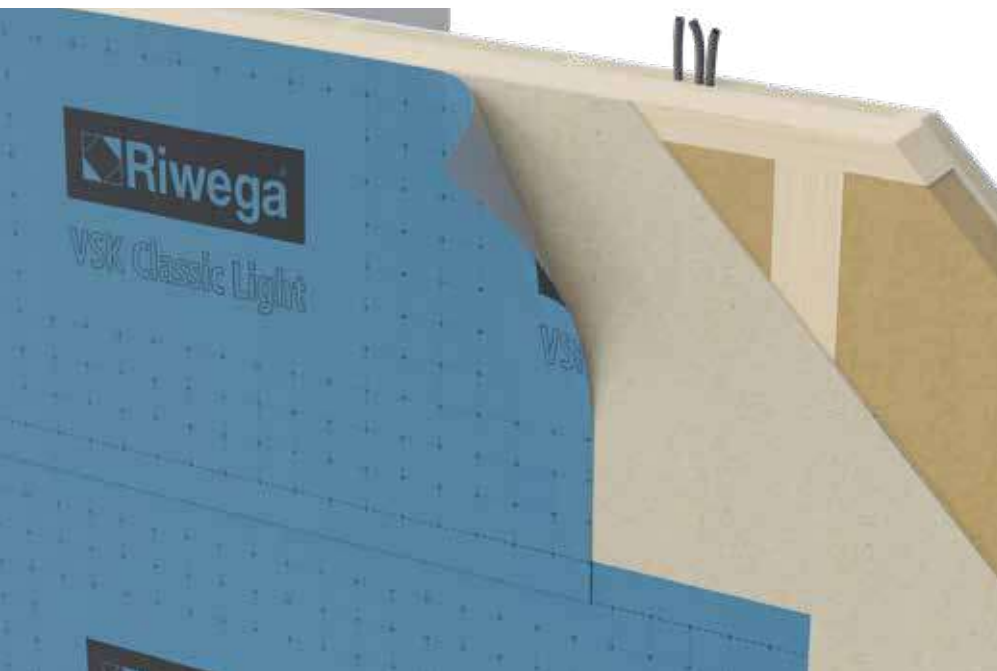
F) **VSK Bitum ARD**

This vapour barrier with bitumen adhesive is ideal on under-ventilated roof boarding as an additional waterproofing layer under roof tiles or for waterproofing low-pitched concrete roofs, car parking areas or open timber roofing.

VSK Classic Light

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R2



QUICK OVERVIEW: STRENGTHS

The self-adhesive breathable membrane

- Breathable, waterproof membrane, adhesive over the entire surface
- Protection of structures during transport and construction phases
- External protection on wood - concrete wall connection
- Acrylic dispersion-based adhesive

new product

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|------------------------------|
| Material | PP-composite | |
| Film | UV10 Bikom | |
| Colour | Light blue | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 255 g/m ² |
| Glue weight | | 100 g/m ² |
| Pre-cutted liner | | 125 + 25 cm |
| Sd value | EN ISO 12572 | 0,20 m |
| Water vapour permeability | EN ISO 12572 | ~ 100 g/m ² /24 h |
| Watern column | EN 20811 | >400 cm |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 290 / 225 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 65 / 90 % |
| Tear resistance MD/CD* | EN 12310-1 | 170 / 200 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 6 months |
| Temperature resistance | | -40°/+100°C |
| Working temperature | | +5°C / +40°C |



Composition:

- Protective UV stabilized, water repellent layer in PP ①
- Film UV10 Bikom, monolithic, elastic ②
- Protective layer in PP ③
- Acrylic dispersion-based adhesive ④
- Re-cut liner 25/125 cm ⑤

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02065010 | - | 1,5 | 30 | 1080 |

*MD = longitudinal CD = transversal

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VSK Micro

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R2

QUICK OVERVIEW: STRENGTHS

The self-adhesive vapour control layer

- Vapour control layer, adhesive on the entire surface
- Protection of structures during transport and construction phases
- Acrylic dispersion-based adhesive
- Pre-cut liner for easier and faster laying



new product



- ①
- ②
- ③
- ④
- ⑤

Composition:

- ① Protective UV stabilized, water repellent layer in PP
- ② Functional film in PP
- ③ Protective layer in PP
- ④ Acrylic dispersion-based adhesive
- ⑤ Re-cut liner 25/125 cm

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02065020 | - | 1,5 | 30 | 1080 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|--------------|-----------------------------|
| Material | PP.PP.PP | |
| Film | PP | |
| Colour | Beige | |
| Mass per unit area | EN 1849-2 | 255 g/m ² |
| Glue weight | | 100 g/m ² |
| Pre-cutted liner | | 125 + 25 cm |
| Sd value | EN ISO 12572 | >2 m |
| Water vapour permeability | EN ISO 12572 | ~ 15 g/m ² /24 h |
| Watern column | EN 20811 | >550 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 310 / 240 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 70 / 80 % |
| Tear resistance MD/CD* | EN 12310-1 | 190 / 230 N |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 4 months |
| Temperature resistance | | -40°/+100°C |
| Working temperature | | +5°C / +40°C |

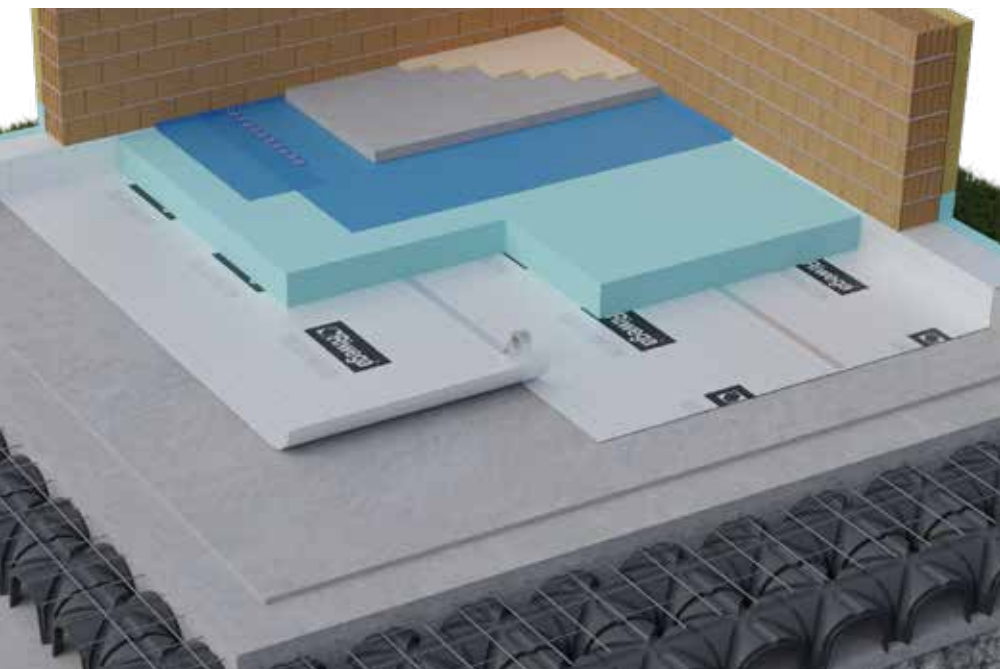
*MD = longitudinal CD = transversal

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VSK DS 1500 SYN

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R2



QUICK OVERVIEW: STRENGTHS

The self-adhesive radon and vapour barrier

- Vapour barrier, adhesive on the whole surface
- Certified as radon gas barrier, ideal for under screed laying
- Vapour barrier screen on flat roofs with wooden structure
- Acrylic dispersion-based adhesive

new product

Features:



Classification:



Technical data sheet

| | | |
|---------------------------|-----------------|---|
| Material | PP,PE,Alu.PE.PP | |
| Colour | White | |
| Mass per unit area | EN 1849-2 | 235 g/m ² |
| Glue weight | | 100 g/m ² |
| Pre-cutted liner | | 125 + 25 cm |
| Sd value | EN ISO 12572 | >1500 m |
| Water vapour permeability | EN ISO 12572 | ~ 0,02 g/m ² /24 h |
| Watern column | EN 20811 | >200 cm |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 170 / 110 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 60 / 45 % |
| Tear resistance MD/CD* | EN 12310-1 | 75 / 90 N |
| Fire reaction class | EN 13501-1 | E |
| Radon gas diffusion (D) | ISO 11665-10 | 1,64 x 10 ⁻¹⁴ m ² s ⁻¹ |
| UV stability | | 3 months |
| Temperature resistance | | -40°/+100°C |
| Working temperature | | +5°C / +40°C |

*MD = longitudinal CD = transversal

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Composition:

- Protective layer in PP ①
- Film in PE and aluminium ②
- Protective layer in PP ③
- Acrylic dispersion-based adhesive ④
- Re-cut liner 25/125 cm ⑤

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02065030 | - | 1,5 | 30 | 1080 |

VSK Bitum Reflex 500

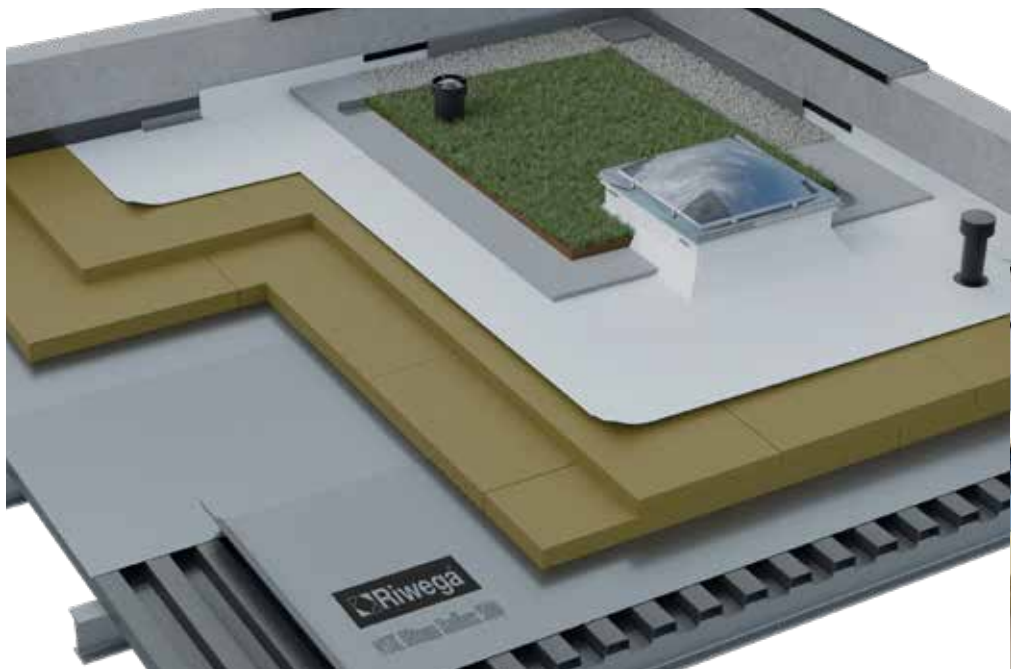
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R2

QUICK OVERVIEW: STRENGTHS

Self-adhesive vapour barrier for flat roofs

- Vapour barrier, adhesive on the whole surface
- Vapour barrier screen on flat roofs with wooden structure
- Application on trapezoidal sheet metal
- Bitumen-based adhesive



new product



Composition:

- ① Composite aluminium foil
- ② Fibre mesh of glass
- ③ Self-adhesive modified bitumen
- ④ Silicone liner

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02065032 | - | 1,08 | 50 | 1242 |

Features:



Classification:



Technical data sheet

| Material | Self-adhesive modified bitumen | |
|-----------------------------------|--------------------------------|-----------------------------|
| Colour | Reflective aluminium grey | |
| Mass per unit area | EN 1849-2 | 500 g/m ² |
| Thickness | EN 1849-1 | 0,5 mm |
| Sd value | EN ISO 12572 | >1500 m |
| Water vapour permeability | EN ISO 12572 | ~ 15 g/m ² /24 h |
| Water tightness | EN 1928 (Met. A) | passed |
| Tensile strength MD/CD* | EN 12311-1 | 600 / 600 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 12 / 8 % |
| Peel strength at the joints | EN 12316-1 | 100 N/50 mm |
| Resistance to impact | EN 12691 | ≥ 300 mm |
| Fire reaction class | EN 13501-1 | E |
| External fire reaction class | | B _{roof} (t1) |
| Flexibility at low temperatures | EN 1109-1 | ≤ -25°C |
| Flow resistance at elevated temp. | EN 1110 | ≥ +90°C |

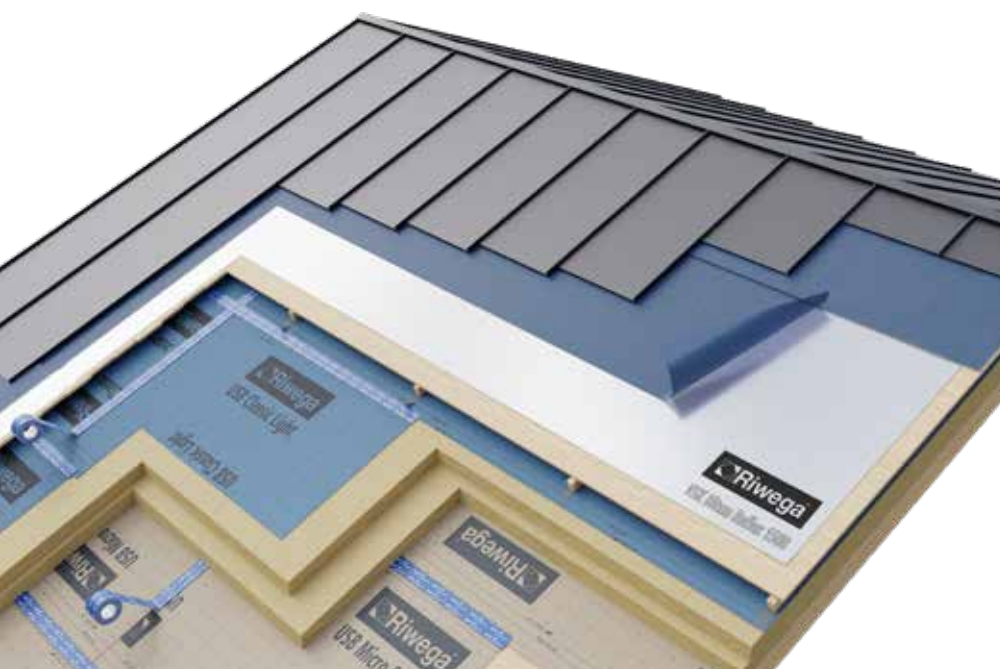
*MD = longitudinal CD = transversal

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VSK Bitum Reflex 1500

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R2



QUICK OVERVIEW: STRENGTHS

Self-sealing, self-adhesive waterproof bituminous underlayment

- Vapour barrier, adhesive on the whole surface
- Ideal on under-ventilated plankings under metal covers
- The perfect solution in combination with USB Drenlam Bluetech
- Increases nail/screw sealing
- Bitumen-based adhesive

new product



Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|--------------------------------|-----------------------|
| Material | Self-adhesive modified bitumen | |
| Colour | Reflective aluminium grey | |
| Mass per unit area | EN 1849-2 | 1500 g/m ² |
| Thickness | EN 1849-1 | 1,5 mm |
| Sd value | EN ISO 12572 | >1500 m |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 240 / 271 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 34 / 27 % |
| Tear resistance MD/CD* | EN 12310-1 | 40 / 29 N |
| Fire reaction class | EN 13501-1 | E |
| Temperature resistance | | -25°/+80°C |

Composition:

- Composite aluminium foil ①
- Self-adhesive modified bitumen ②
- Silicone liner ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02065031 | - | 1 | 10 | 330 |

*MD = longitudinal CD = transversal

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VSK Bitum ARD

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R2

QUICK OVERVIEW: STRENGTHS

The self-adhesive shelter bit slated bituminous underlayment

- Vapour barrier, adhesive on the whole surface
- Ideal as direct under-tile waterproofing
- Application on inclined concrete roofs
- Ideal for carports or canopies in wood
- Bitumen-based adhesive



new product



Composition:

- ① Silicone liner
- ② Self-adhesive modified bitumen with slate flakes
- ③ Pre-cutted silicone liner 50/50 cm

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02065040 | - | 1 | 10 | 300 |

Features:



Classification:



Technical data sheet

| Material | Distilled bitumen modified with SBS | |
|-----------------------------------|-------------------------------------|-----------------------|
| Finishing | Slate flakes | |
| Colour | Grey | |
| Mass per unit area | EN 1849-2 | 3500 g/m ² |
| Water tightness | EN 1928 (Met. A) | 60 kPa |
| Sd value | EN ISO 12572 | 70 m |
| Tensile strength MD/CD* | EN 12311-1 | 400 / 300 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 35 / 35 % |
| Tear resistance MD/CD* | EN 12310-1 | 130 / 130 N |
| Resistance to static punching | EN 12730 (A) | 10 kg |
| Resistance to impact | EN 12691 | 700 mm |
| Dimensional stability | EN 1107-1 | ± 0,3 % |
| Fire reaction class | EN 13501-1 | E |
| External fire reaction class | EN 13501-5 | F _{roof} |
| Flexibility at low temperatures | EN 1109-1 | -20°C |
| Flow resistance at elevated temp. | EN 1110 | +90°C |

*MD = longitudinal CD = transversal

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Fire protection screens and membranes

R2

A ventilated facade or roof brings many benefits; one of the most important is the improvement and maintenance of the overall thermo-hygrometric performance of the thermal insulation package. To ensure this performance is sustained, the insulation on the outer surface must be protected with a waterproof, breathable and windproof membrane. This membrane keeps the thermal insulation dry and protects it from external (rain and wind) and internal influences (vapour transmission, water vapour condensation).

In turn, to maintain its performance, the membrane must resist a range of external influences: UV rays, high temperatures, temperature fluctuations and - until now little considered - even fire.

This last aspect, fire, has often caused problems with fires on roofs or facades in the recent past. These problems have often been triggered by trivial causes, such as a short circuit in an electrical or photovoltaic system, or by flying sparks from improperly maintained chimneys; in these cases, contact with combustible materials can start a fire that quickly spreads to the facade or roof thanks to the ventilation/ventilation of the insulation package. Often with tragic consequences!

For this reason, Riwega offers two new fire-resistant windproof membranes for ventilated facades, as well as a vapour barrier for indoor use. All are fire class A2 and therefore approved as "non-combustible".

A) **USB Windtop UV A2 / 225**

Made of glass fiber and with a UV-stable coating. It is the ideal breathable membrane for exterior use for wind and water tightness of ventilated and ventilated facades with open joints.

B) **USB Reflex A2 / 430**

Made of glass fibres with micro-perforated functional membrane and aluminium coating. It is the ideal product for ventilated facades with closed joints thanks to its reflective surface, which improves the overall thermal performance of the insulation package, and its waterproofing class W1. It is also ideal as an underlay for roofs in general.

C) **DS Reflex A2 / 140**

A vapour barrier made of glass fibre with aluminium coating, ideal for indoor use, with a reflective surface. It creates airtightness, its reflective surface improves the overall thermal performance of the insulation package.

All these products will be sealed with Coll Fire B butyl/aluminium adhesive tape (see page 122).

USB Windtop UV A2 / 225

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R2

QUICK OVERVIEW: STRENGTHS

Fire resistance inside ventilated facade

- Breathable waterproofing membrane for ventilated facades
- Class A2 reaction to fire
- Ideal membrane for waterproof and wind-tight ventilated facades with open joints
- Black color for an optimal aesthetical impact
- UV resistance for joints up to 50 mm



new product



Composition:

- ① Special UV-coating
- ② Fibre glass

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010343 | - | 1,5 | 50 | 2625 |

Features:



Classification:



Technical data sheet

| Material | fibre glass fabric and black filled coating | |
|-----------------------------------|--|------------------------------|
| Colour | black | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 225 g/m ² |
| Thickness | | 0,23 mm |
| Sd value | EN ISO 12572 | 0,09 m |
| Water vapour permeability | EN ISO 12572 | ~ 500 g/m ² /24 h |
| Resistance to water passage | EN 1928 (Met. A) | W2 |
| Tensile strength MD/CD* | EN 12311-1 | 4200 / 3100 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 6 / 5 % |
| Tear resistance MD/CD* | EN 12310-1 | 290 / 390 N |
| Fire reaction class | EN 13501-1 | A2-s1,d0 |
| UV stability | stable (joints up to max. 50 mm - max. 50 %) | |
| Weathering without final cladding | | 3 months |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

USB Reflex A2 / 430

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R2



QUICK OVERVIEW: STRENGTHS

Fire resistance on roof and facade

- Breathable, water-tight membrane
- Class A2 reaction to fire
- Reflective surface for better hot weather-performance
- Ideal for wind and water tightness of roofs and facades with closed joints
- Increased weight and strength for better mechanical resistance

new product



Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|--|------------------------------|
| Material | micro-perforated aluminium foil, functional film, fibre glass fabric | |
| Colour | aluminium | |
| Use underneath PV panels | NO | |
| Mass per unit area | EN 1849-2 | 430 g/m ² |
| Thickness | | 0,43 mm |
| Sd value | EN ISO 12572 | 0,08 m |
| Water vapour permeability | EN ISO 12572 | ~ 500 g/m ² /24 h |
| Heavy rain test | TU Berlin | passed |
| Resistance to water passage | EN 1928 (Met. A) | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 3000 / 3200 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 6 / 5 % |
| Tear resistance MD/CD* | EN 12310-1 | 580 / 450 N |
| Fire reaction class | EN 13501-1 | A2-s1,d0 |
| UV stability | | 9 months |
| Temperature resistance | | -40°/+90°C |

Composition:

- Micro-perforated aluminium film ①
- Functional film ②
- Fibre glass ③

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010344 | - | 1,2 | 35 | 1764 |

*MD = longitudinal CD = transversal

Riwega Srl is not responsible for negligent and improper use of its products

DS Reflex A2 / 140

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R2

QUICK OVERVIEW: STRENGTHS

Fire resistant vapour barrier

- Vapour barrier
- Class A2 reaction to fire
- Reflective surface to improve the performance of the insulation package
- Ideal for perfect air-tightness
- Lightweight and easy to install on vertical walls or ceilings



new
product



Composition:

- ① Aluminium film
- ② Fibre glass

Codes and measures

| Code | Code TOP SK | Width (m) | Length (m) | Pallet (m ²) |
|----------|-------------|-----------|------------|--------------------------|
| 02010345 | - | 1,2 | 50 | 3840 |

Features:



Classification:



Technical data sheet

| Material | fibre glass fabric and pure aluminium | |
|---------------------------|---------------------------------------|-------------------------------|
| Colour | aluminium | |
| Mass per unit area | EN 1849-2 | 140 g/m ² |
| Thickness | | 0,10 mm |
| Sd value | EN ISO 12572 | >2500 m |
| Water vapour permeability | EN ISO 12572 | ~ 0,01 g/m ² /24 h |
| Water tightness | EN 13984 | passed |
| Tensile strength MD/CD* | EN 12311-1 | 1300 / 1200 N/50mm |
| Elongation MD/CD* | EN 12311-1 | 2,6 / 3,5 % |
| Tear resistance MD/CD* | EN 12310-1 | 143 / 144 N |
| Fire reaction class | EN 13501-1 | A2-s1,d0 |
| Temperature resistance | | -40°/+100°C |

*MD = longitudinal CD = transversal

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Customizable products

Customize your membrane!

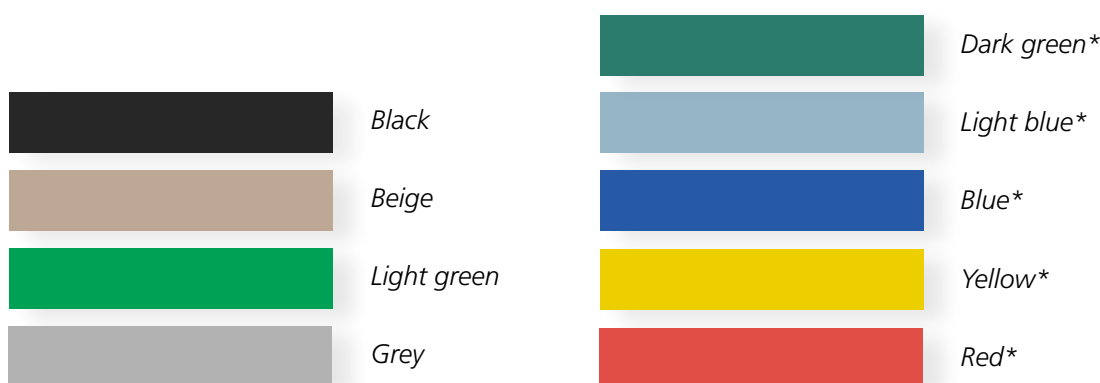
Create your customized membrane (with your logo and colors) **and let people recognize your business!**

The minimum effort, the maximum result!

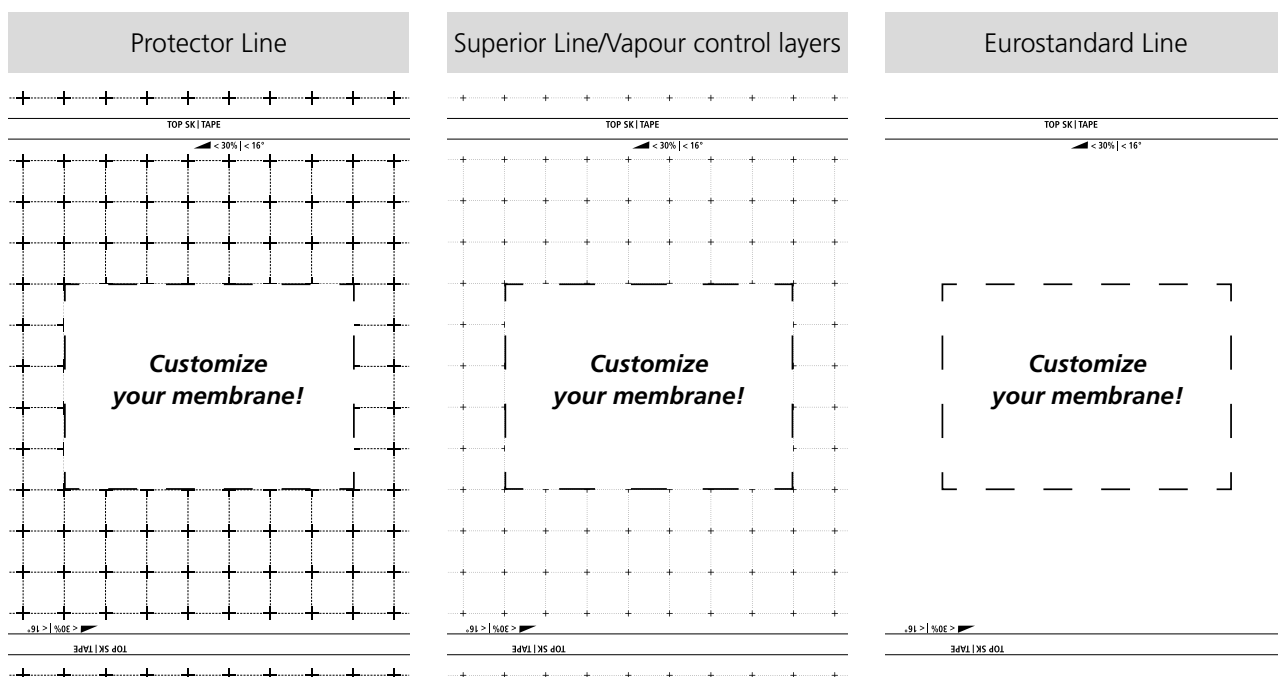
Make your construction site unique, to guarantee double success. The customized membrane guarantees high visibility to your company until the final covering is laid.

How to do it?

Send your vector logo to your local technical consultant. In no time, you will receive some graphic proposals from which you can choose. Depending on your choice, you will be notified of the printing cost. The minimum order quantity for standard products (membrane colour and print colour as indicated in our catalogue) is 4.500 m²; for a completely customized product (membrane colour and printing colour) the minimum order quantity is 9.000 m².



Models for membrane customization:



*colours subject to extra charge

Temporary rain sheets

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R2

QUICK OVERVIEW: STRENGTHS

The essential protection for your working site

- Temporary rain sheet
- Temporary protection during working phases
- Waterproof element for emergencies
- High tearing resistance thanks to reinforcement stripes
- Available in RAPID version which is provided with a central hook for a quicker positioning



Composition:

- ① PE layer
- ② Metal grommet

Codes and measures

| Version | Code | Width (m) | Length (m) | Pallet (m ²) |
|----------|----------|-----------|------------|--------------------------|
| RAPID | 02070001 | 15 | 15 | - |
| Standard | 02070002 | 6 | 10 | - |
| Standard | 02070003 | 8 | 10 | - |
| Standard | 02070004 | 10 | 12 | - |

Technical data sheet - Temporary rain sheet RAPID

| | | |
|--|-------|------------------------------|
| Material | PE | |
| Colour | Green | |
| Mass per unit area | | 200 g/m ² |
| Mass per unit area reinforced PE | | 220 g/m ² |
| Water tightness | | passed |
| Tensile strength (layer) | | 1000 N (~ 100 kg) |
| Tensile strength (reinforcing stripes) | | 2100 N (~ 210 kg) |
| Perimetral reinforcement | | ~ 5 cm |
| Perimetral grommets distance | | grommets' ø 12 mm (each 1 m) |
| Coating | | on both sides |
| UV stability | | stable |
| Temperature resistance | | -40°/+80°C |



R3 Waterproofing, air and wind tightness

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R3 Waterproofing, air and wind tightness

R3

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R3 Waterproofing, air and wind tightness

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R3

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| Roof/wall outside/inside | Roof/Wall outside | Roof outside | Roof/wall inside | Pavement inside | Universal use |
|  |  |  |  |  |  |
| High breathable | Vapour control layer | Variable Sd value | Vapour barrier | 20 years guarantee | 10 years guarantee |
|  |  |  |  |  |  |
| Water proofness | Anti rising effect | Air- and wind tightness | Wind tightness | Air tightness | Nail tight |
|  |  |  |  |  |  |
| Cutted liner | Partial liner | Without liner | Fast installation | Mesh reinforced | Semi-transparent |
|  |  |  |  |  |  |
| Aging resistant | Abrasion resistant | Mechanically resistant | High elasticity | High adhesion | Biadhesive surface |
|  |  |  |  |  |  |
| Usable under PV panels | UV resistant | Heat reflecting | Fire resistant | Low temperature resistance | Acoustic insulation |
|  |  |  |  |  |  |
| Different measures | Plasterable surface | Radon resistant | Expanding properties | Rippable by hand | Cuttable |

Acrylic adhesive tapes

A building of modern conception, defined as nZEB (Nearly Zero Energy Building), achieves its objectives of energy-saving and living comfort when a well-insulated and airtight building envelope is built, with well-designed and manufactured wind and airtight systems.

To sum up, these are the reasons why air-tightness should not be neglected in an energy-efficient building:

- the better high energy efficiency of the envelope
- heat loss is avoided
- the possibility of interstitial condensation is reduced and the whole building works better
- avoids moisture loads in the insulation package
- improves the health of the building
- the CMV (controlled mechanical ventilation) works better
- increases living comfort

Riwega acrylic adhesive tapes

In this field the acrylic adhesive tapes proposed by Riwega stand out as indispensable products; made with the last polymeric technologies of acrylic dispersion, without VOCs and harmful substances, maintain zero contamination risk of the air in the building.

The adhesive systems are designed to give the best adhesion results on all building products (screens and membranes, wood, brick, concrete, metal, etc...) and have durability overtime to ensure results for the entire duration of the building. Riwega's 20 years of experience has meant that depending on the type of adhesive and the type of support can offer various solutions for sealing, depending on your needs:

- Flexibility and plasticity thanks to the elastic polyethylene support
- Rigidity and mechanical strength thanks to the rigid polypropylene support
- Fast processing thanks to the treated polyethylene backing of the protective liner
- Processing at low temperatures thanks to a specific glue formulation
- Permanent UV stability thanks to black polyethylene backing
- Convenience in corners thanks to the pre-folded strip
- Simplicity and cost-effectiveness thanks to the paper support
- Reflectance thanks to the aluminium support
- Plasterability thanks to the polypropylene fabric support
- Economical thanks to the polyethylene backing and glue according to normal standards
- A multiplicity of solutions thanks to double-sided tape solutions

Tape 1 PE

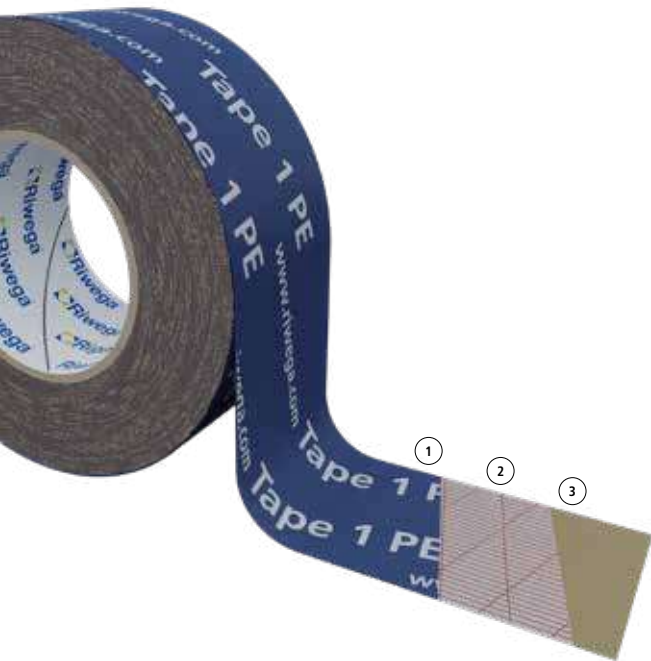
01

R3

QUICK OVERVIEW: STRENGTHS

Single-sided acrylic tape

- The extreme flexibility makes it easily adaptable to any laying situation
- Next-generation acrylic glue, high adhesion, solvent-free
- Dual use, internal and exterior, thanks to the waterproof surface
- Particularly resistant to UV rays and ageing



Composition:

- 1 Polyethylene
- 2 Acrylic glue with PET reinforcing
- 3 Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-----------------|----------|-----------------|----------|--------------|
| Tape 1 PE | 02040160 | 60x25 | 10 | 80 |
| Tape 1 PE 100 X | 02040193 | 100x25 | 6 | 80 |
| Tape 1 PE 150 | 02040194 | 150x25 | 4 | 80 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|---|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | LDPE film |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,27 - 0,29 mm |
| Sd value | | ~12 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥25 N/25 mm; 300 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Emissions | EMICODE® | EC1 ^{PLUS} |
| Working temperature | | +5°C / +30°C lavorabile from -10°C |
| Temperature resistance | | -30°C / +100°C |
| UV stability | | 24 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

*with reference to the Central European climate
Riwega Srl is not responsible for negligent and improper use of its products

Tape Strong



QUICK OVERVIEW: STRENGTHS

Nondeformable with easy tearing

- Single-sided acrylic tape
- The particular rigidity reduces excessive deflections
- Next-generation acrylic glue, high adhesion, solvent-free
- Dual use, internal and exterior, thanks to the waterproof surface
- The tooting on the sides makes it easily tearable by hand

Features:

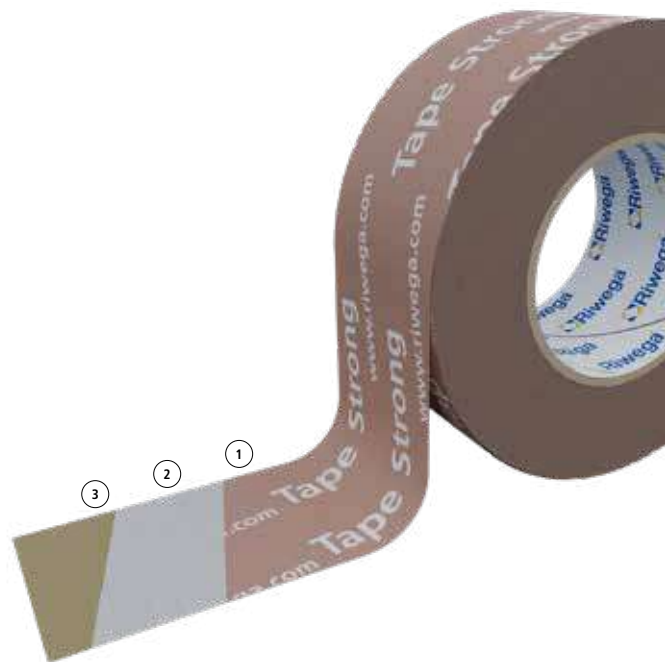


Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | PP film |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,30 - 0,32 mm |
| Sd value | | ~16 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥60 N/25 mm; 450 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +100°C |
| UV stability | | 24 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |



Composition:

- Polypropylene ①
- Acrylic glue with PET reinforcing ②
- Silicone liner** ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------------|-----------|-----------------|----------|--------------|
| Tape Strong | 02040170 | 60x25 | 10 | 80 |
| Tape Strong 12/48 | 020401701 | 12+48x25 | 10 | 80 |
| Tape Strong 200 X | 02040172 | 100+100x25 | 2 | 80 |

*with reference to the Central European climate

**pre-cutted silicone liner in Tape Strong 12/48 variant (12+48 mm) and Tape Strong 200 X (100+100 mm)

Riwega Srl is not responsible for negligent and improper use of its products

Tape Rapid

03

R3

QUICK OVERVIEW: STRENGTHS

The quickest ever

- Single-sided acrylic tape
- Speed up installation because of the absence of the liner
- Next-generation acrylic glue, high adhesion, solvent-free
- Dual use, internal and exterior, thanks to the waterproof surface
- Minimizes waste on the building site



Composition:

- ① LDPE/PP
- ② Acrylic glue with PET reinforcing

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------|----------|-----------------|----------|--------------|
| Tape Rapid | 02040162 | 60x50 | 10 | 80 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | LDPE/PP film |
| Reinforcing mesh | | YES |
| Protection liner | | NO |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,23 - 0,27 mm |
| Sd value | | ~40 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥35 N/25 mm; 400 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +120°C |
| UV stability | | 24 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

*with reference to the Central European climate
Riwega Srl is not responsible for negligent and improper use of its products

Tape ICE



04
R3

QUICK OVERVIEW: STRENGTHS

Low temperature – high adhesion

- Single-sided acrylic tape
- The adhesive layer guarantees an immediate grip down to -20°C
- Next-generation acrylic glue, high adhesion, solvent-free
- Dual use, internal and exterior, thanks to the waterproof surface
- Good UV and ageing resistance

Features:

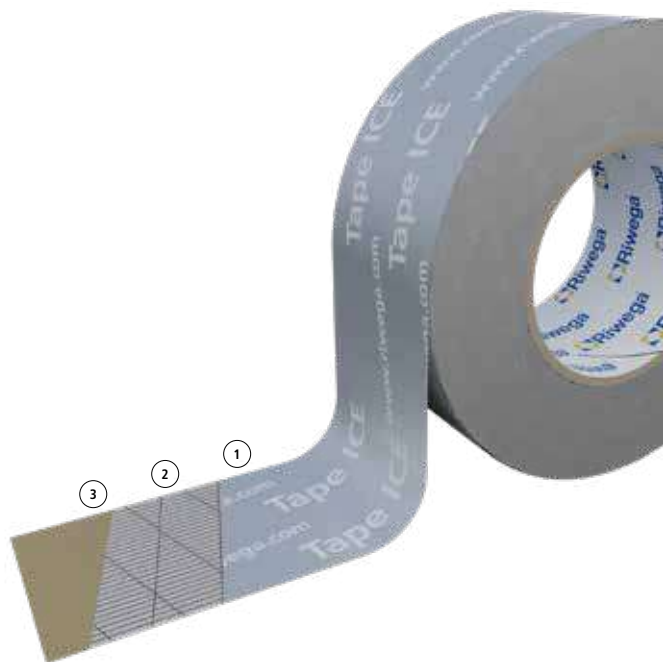


Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|---|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | LDPE film |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,26 - 0,28 mm |
| Sd value | | ~11 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥25 N/25 mm; 50 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Emissions | EMICODE® | EC1 ^{PLUS} |
| Working temperature | | +5°C / +30°C lavorabile from -20°C |
| Temperature resistance | | -30°C / +100°C |
| UV stability | | 24 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |



Composition:

- Polypropylene ①
- Acrylic glue with PET reinforcing ②
- Silicone liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|----------|----------|-----------------|----------|--------------|
| Tape ICE | 02040165 | 60x25 | 10 | 80 |

*with reference to the Central European climate
Riwega Srl is not responsible for negligent and improper use of its products

Tape UV

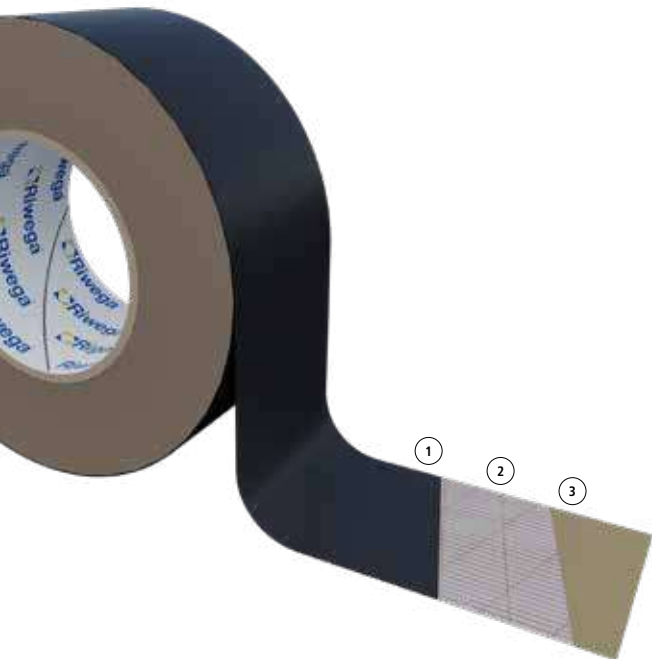
05

R3

QUICK OVERVIEW: STRENGTHS

Specially designed to withstand UV rays

- Single-sided acrylic tape
- Unsurpassed UV and ageing resistance
- Ideal sealing in ventilated facades with open joints
- Next-generation acrylic glue, high adhesion, solvent-free
- The particular rigidity reduces excessive deflections



Composition:

- ① UV stabilized PP
- ② Acrylic glue with polyester reinforcing
- ③ Silicone liner**

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------------|-----------|-----------------|----------|--------------|
| Tape UV 60 | 02040183 | 60x25 | 10 | 80 |
| Tape UV 80 | 02040181 | 80x25 | 6 | 80 |
| Tape UV 300 X | 020103533 | 300x25 | 2 | 60 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | PP film |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,30 - 0,32 mm |
| Sd value | | ~16 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥60 N/25 mm; 450 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +100°C |
| UV stability | | 24 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

*with reference to the Central European climate

**pre-cutted silicone liner in Tape UV 300 X variant (150+150 mm)

Riwega Srl is not responsible for negligent and improper use of its products

Tape Corner

06

R3

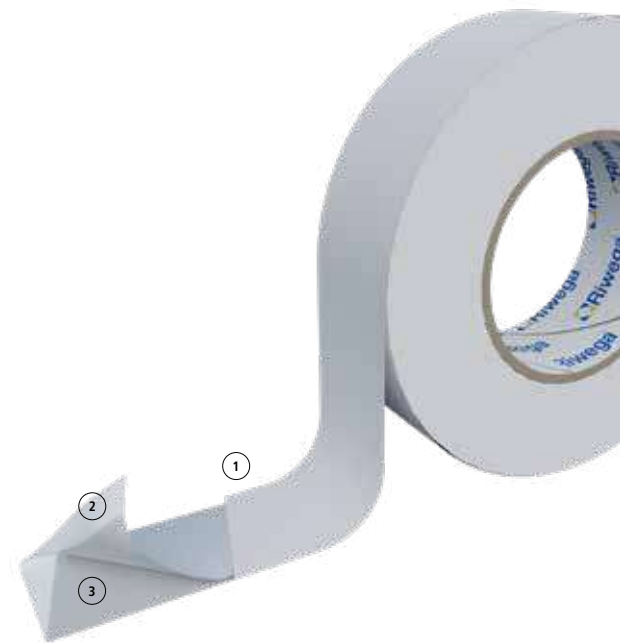


QUICK OVERVIEW: STRENGTHS

The best one for angular conjunctions

- Single-sided acrylic tape
- Pre-folded and partly devoid of the liner to facilitate the laying
- Acrylic glue, with high adhesion on all surfaces
- Dual use, internal and exterior, thanks to the waterproof surface

Features:



Technical data sheet

| | | |
|-------------------------|--|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | LDPE film |
| Reinforcing mesh | | NO |
| Protection liner | | PARTIAL |
| Solvents and emollients | | NO |
| Sd value | | ~0,5 m |
| Working temperature | | ≥+0°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | 4 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 12 months |

Composition:

- Silicone liner ①
- Acrylic glue ②
- Polyethylene ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------------|----------|-----------------|----------|--------------|
| Tape Corner 30/30 | 02040191 | 30+30x25 | 7 | - |
| Tape Corner 12/48 | 02040192 | 12+48x25 | 5 | - |

Direct sales of Tape Corner only to Italy, Croatia, Slovenia, Estonia, Lithuania, Latvia, Finland, Portugal, Bulgaria, Switzerland, Greece, Romania, Slovakia, Turkey

*with reference to the Central European climate

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Tape 1 PAP

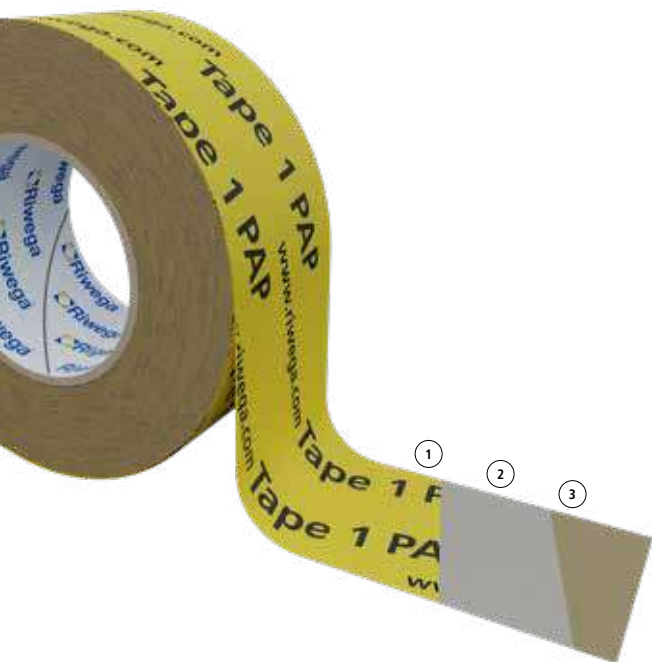
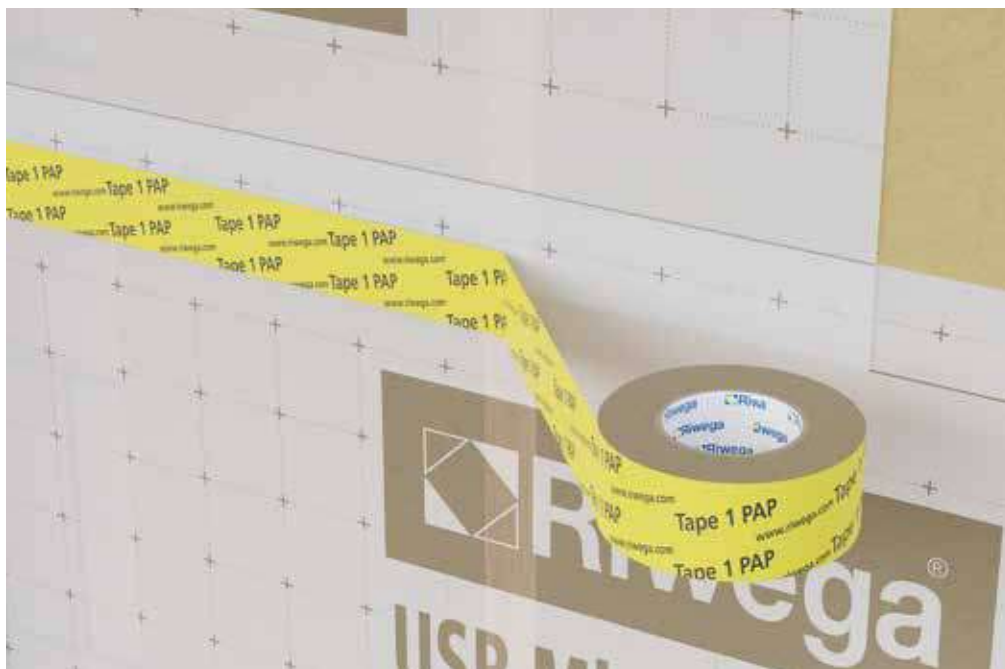
07

R3

QUICK OVERVIEW: STRENGTHS

The tape for internal use

- Single-sided acrylic tape
- Perfect for sealing any interruption of vapour control layers and wooden surfaces
- Paper surface, usable indoors only
- Next-generation acrylic glue, high adhesion, solvent-free



Composition:

- 1 Paper with PE coating
- 2 Acrylic glue
- 3 Silicone liner*

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------------|----------|-----------------|----------|--------------|
| Tape 1 PAP | 02040150 | 60x25 | 10 | 80 |
| Tape 1 PAP X | 02040151 | 30+30x25 | 10 | 80 |
| Tape 1 PAP X3 | 02040152 | 30+15+15x25 | 10 | 80 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | paper with PE coating |
| Reinforcing mesh | | NO |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,32 - 0,34 mm |
| Sd value | | ~5 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥150 N/25 mm; 3-5 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +100°C |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

*variants with pre-cutted silicone liner: Tape 1 PAP X (30+30 mm) and Tape 1 PAP X3 (30+15+15 mm)
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Tape Reflex



QUICK OVERVIEW: STRENGTHS

The reflective one

- Single-sided acrylic tape
- Specially designed for sealing of USB Reflex Plus and DS 188 ALU
- Dual use, interior and exterior, thanks to the reflective surface
- Next-generation acrylic glue, high adhesion, solvent-free

Features:

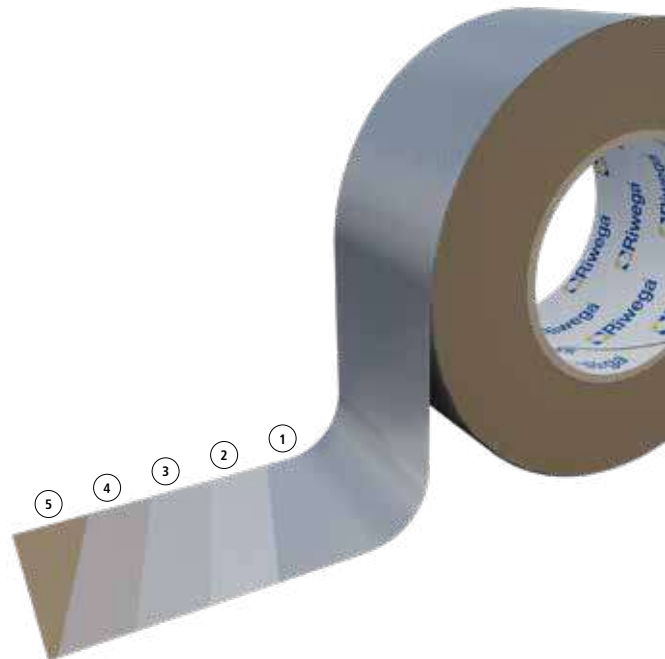


Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | alu sprayed PP film |
| Reinforcing mesh | | NO |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,20 - 0,25 mm |
| Sd value | | -42 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥70 N/25 mm; 80 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +100°C |
| UV stability | | 1 month* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |



Composition:

- Aluminium sprayed PP film ①
- PP film ②
- Non-woven fabric in PP ③
- Acrylic glue ④
- Silicone liner ⑤

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------|----------|-----------------|----------|--------------|
| Tape Reflex | 02040180 | 80x25 | 6 | - |

*with reference to the Central European climate
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Tape Vlies

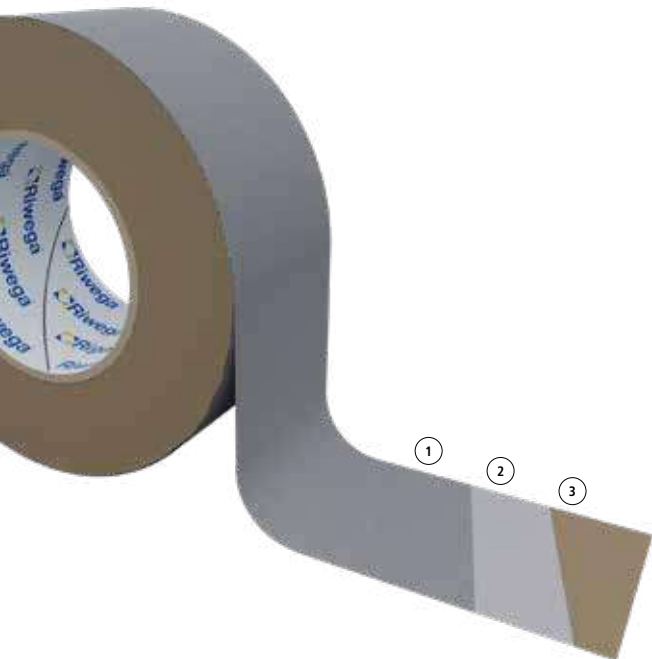
09

R3

QUICK OVERVIEW: STRENGTHS

The plasterable one

- Single-sided acrylic tape
- Surface designed for points that need to be plastered over
- For the connection points of wood and plastering surfaces
- Next-generation acrylic glue, high adhesion, solvent-free



Composition:

- ① Non-woven fabric in PP
- ② Acrylic glue
- ③ Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------|----------|-----------------|----------|--------------|
| Tape Vlies | 02045800 | 50x25 | 12 | - |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | non-woven fabric in PP |
| Reinforcing mesh | | NO |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,55 - 0,57 mm |
| Sd value | | ~8 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥50 N/25 mm; 40 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +100°C |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

Tape Green

10

R3



QUICK OVERVIEW: STRENGTHS

The essence of sealing

- Single-sided acrylic tape
- Excellent quality/price ratio
- Perfect for sealing any interruption of vapour control layers and wooden surfaces
- Dual use, internal and exterior, thanks to the waterproof surface
- High adhesion acrylic glue, solvent-free

Features:

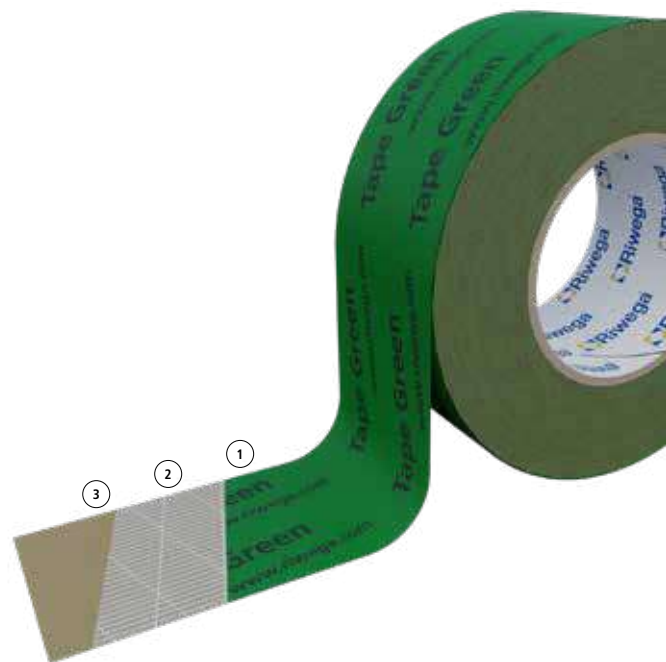


Classification:



Technical data sheet

| | | |
|---------------------------------|--------------|--|
| Glue | | pure polyacrylate |
| Glue carrier material | | film in PE |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | ~0,28 mm |
| Sd value | | ~40 m |
| Tear resistance with elasticity | DIN EN 14410 | ≥22 N/10 mm; 586 % |
| Bond strength | DIN 4108-11 | compliant |
| Resistance to condensation | | high |
| Initial adhesion (Tack) | | high |
| Emissions | EMICODE® | EC1 |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | 3 months* |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |



Composition:

- Polyethylene ①
- Acrylic glue with PET reinforcing ②
- Silicone liner ③

Codes and measures

| Version | Code** | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------------|-----------|-----------------|----------|--------------|
| Tape Green | 02040161 | 50x25 | 12 | 85 |
| Tape Green 60 | 020401616 | 60x25 | 10 | 85 |

*with reference to the Central European climate

**on request also available in Industry version

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Tape 2 AC

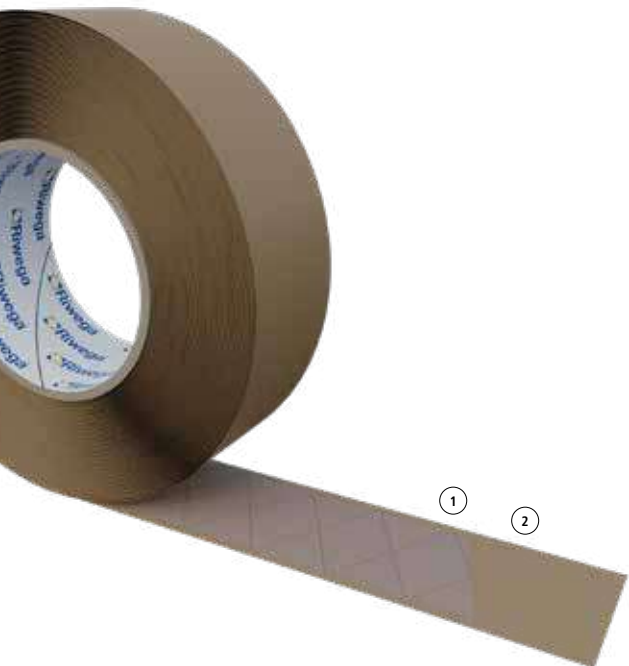
11

R3

QUICK OVERVIEW: STRENGTHS

Double adhesion in one tape

- Double-sided acrylic adhesive tape
- Specific for sealing the overlaps of vapour control layers and breathable membranes
- High adhesion acrylic glue, solvent-free
- Quick and easy to lay
- Adheres to all surfaces of the building



Composition:

- ① Acrylic glue with PET mesh
- ② Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|--------------|----------|-----------------|----------|--------------|
| Tape 2 AC 20 | 02040220 | 20x50 | 12 | 60 |
| Tape 2 AC 50 | 02040250 | 50x50 | 5 | 60 |

Features:



Classification:



Technical data sheet

| | | |
|----------------------------|-------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | - |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 0,22 - 0,24 mm |
| Peel adhesion | AFERA 5001 | ≥25 N/25 mm |
| Resistance to condensation | | high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | high |
| Emissions | EMICODE® | EC1 ^{PLUS} |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +120°C |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

Tape BOLD



12

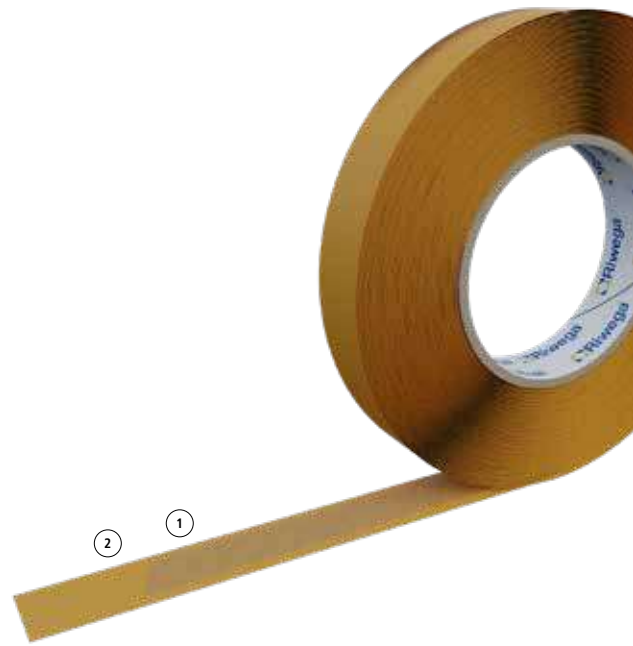
R3

QUICK OVERVIEW: STRENGTHS

The reinforced, double-faced one

- Double-sided acrylic adhesive tape
- Highly adhesive acrylic mass on polyester mesh
- Ideal for taping vapour barriers and breathable membranes to wooden or wall structures
- High adhesion acrylic glue, solvent-free, with viscoelastic and thixotropic effects

Features:



Technical data sheet

| | | |
|----------------------------|-------------|--|
| Glue | | polyacrylate-based disp. |
| Glue carrier material | | - |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 1942 | 1,50 - 2,00 mm |
| Peel adhesion | AFERA 5001 | ≥25 N/25 mm |
| Resistance to condensation | | high |
| Resistance to aging | | high |
| Initial adhesion (Tack) | | high |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +80°C |
| Storage place | | dry, protected from UV rays, +18°C / +25°C |
| Storage period | | max. 24 months |

Composition:

- Acrylic glue with PET mesh (1)
Silicone liner (2)
(3)

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-----------|----------|-----------------|----------|--------------|
| Tape BOLD | 02040210 | 10x12 | 10 | 80 |

Butyl adhesive tapes

The most critical points of a building envelope in terms of water, air and wind tightness are the crossings and the emerging bodies, which are represented by systems, chimneys, shafts, pipes, windows, etc ... The butyl adhesive tapes are certainly the safest and most practical systems for the perfectly sealing of these critical points.

Riwega butyl adhesive tapes

Butyl is a compound that is produced by mixing gypsum powder and synthetic resins, thus obtaining an adhesive mass that can have different densities and viscosity grades; this is then extruded into stripes of varying widths and thicknesses as required and can be coupled with various types of supports, to obtain specific characteristics that allow solving a large number of different situations. These are the different solutions offered by Riwega:

- Highly flexible tape for circular sealing around pipes and vents
- Wide tape with pre-cut liner for corner sealing of windows, fireplaces, shafts, wall attachments, etc.
- Tapes of various widths for different seals
- A tape which is Certified class "B" in fire reaction, to seal surfaces with the same characteristics
- Tapes with aluminium support to give perennial stability to UV rays
- Flat or thick double-sided tapes, for the most varied seals

Coll Flexi

13

R3



QUICK OVERVIEW: STRENGTHS

The most flexible one

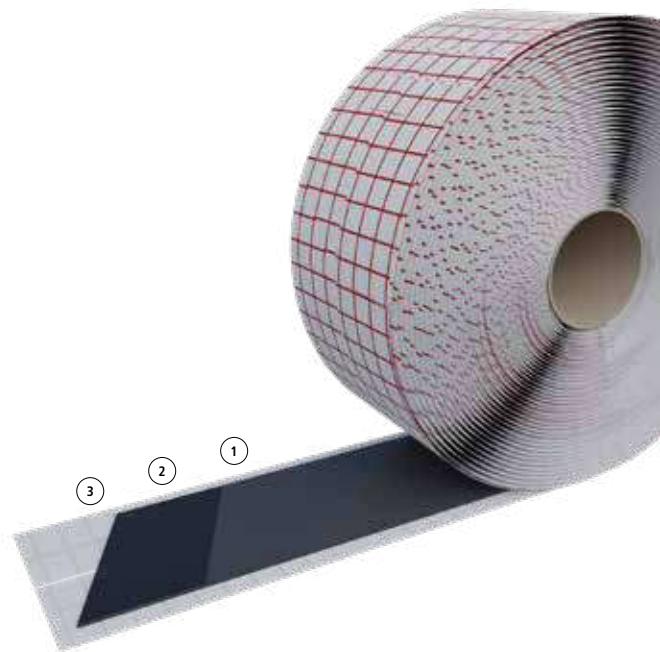
- Mono-adhesive butyl tape
- The high flexibility makes it easily adaptable to any laying situation
- Guarantees perfect sealing even in the case of circular cross-section elements
- Dual use, internal and exterior, thanks to the waterproof surface

Features:



Technical data sheet

| | | |
|---------------------------------|-------------------|---|
| Glue | | butyl |
| Glue carrier material | | high flexible LDPE film |
| Protection liner | | YES (pre-cutted) |
| Solvents and emollients | | NO |
| Thickness | | 1,5 mm |
| Specific weight | DIN EN ISO 1183-1 | ~1,4 g/cm³ |
| Viscosity | DIN EN ISO 7390 | stable |
| Hardness (Shore 00) | DIN EN ISO 868 | ~40 |
| Compressive strength | DTU 39.4 | >0,04 N/mm² |
| Elongation at break (film) | | max. 300 % |
| Solid content | DIN EN ISO 10563 | >99 % |
| Vapour passage resistance μ | DIN EN ISO 12572 | min. 766000 |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -40°C / +90°C |
| Fire class | DIN 4102 | B2 |
| | EN 13501-1 | E |
| UV stability | | 3 months* |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 24 months |



Composition:

- High flexible PET film (1)
- Butylic glue (2)
- Pre-cutted silicone liner (3)

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------|----------|-----------------|----------|--------------|
| Coll Flexi | 02044100 | 100x15 | 4 | 30 |

*with reference to the Central European climate

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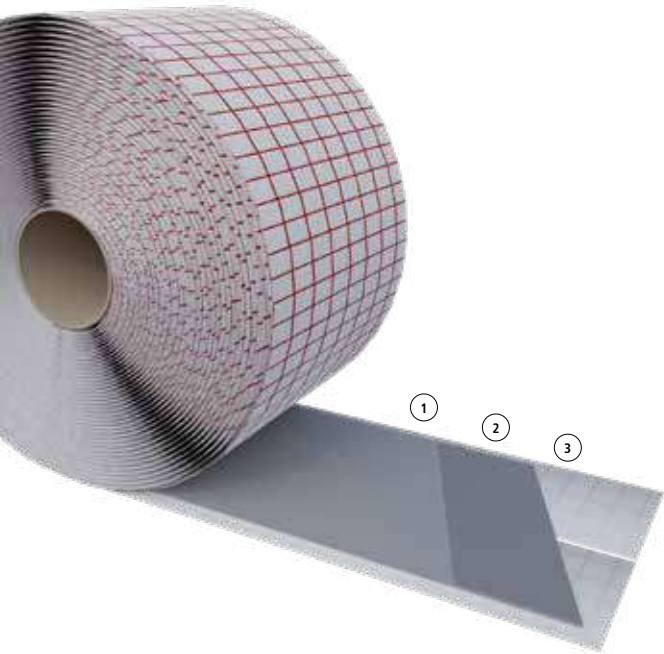
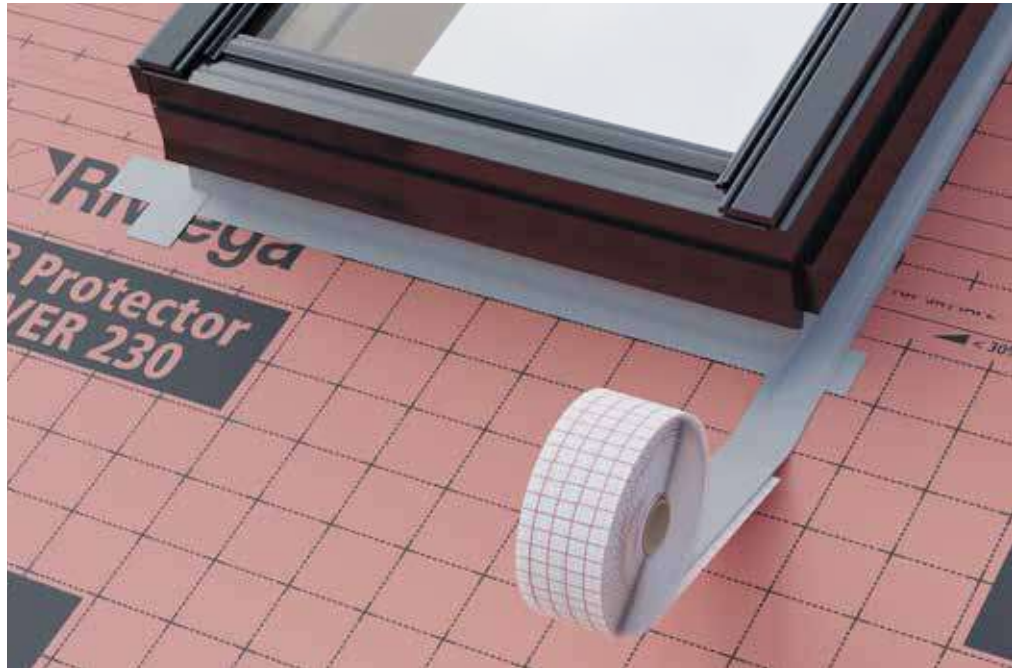
Coll 150 X

14
R3

QUICK OVERVIEW: STRENGTHS

Precision sealing

- Monoadhesive butyl band
- The pre-cut liner makes it ideal for all linear and corner seals
- Characterized by butyl glue with a high seal and without solvents, suitable for every laying surface.
- Dual use, indoor and outdoor, thanks to the water-resistant surface



Composition:

- 1 PE film
- 2 Butylic glue
- 3 Pre-cutted silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------|----------|-----------------|----------|--------------|
| Coll 150 X | 02044151 | 150x15 | 2 | 30 |

Features:



Technical data sheet

| | | |
|------------------------|-------------------|---|
| Glue | | butyl |
| Glue carrier material | | LDPE |
| Protection liner | | YES (pre-cutted) |
| Thickness | | 2,0 mm |
| Specific weight | DIN EN ISO 1183-1 | ~1,4 g/cm³ |
| Viscosity | DIN EN ISO 7390 | stable |
| Hardness (Shore 00) | DIN EN ISO 868 | ~40 |
| Compressive strength | DTU 39.4 | >0,04 N/mm² |
| Solid content | DIN EN ISO 10563 | >99 % |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -40°C / +100°C |
| Fire class | DIN 4102 | B2 |
| UV stability | | 3 months* |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |

*with reference to the Central European climate
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Coll 50 - 80 - 150

15

R3



QUICK OVERVIEW: STRENGTHS

The semi-flexible for every linear seal

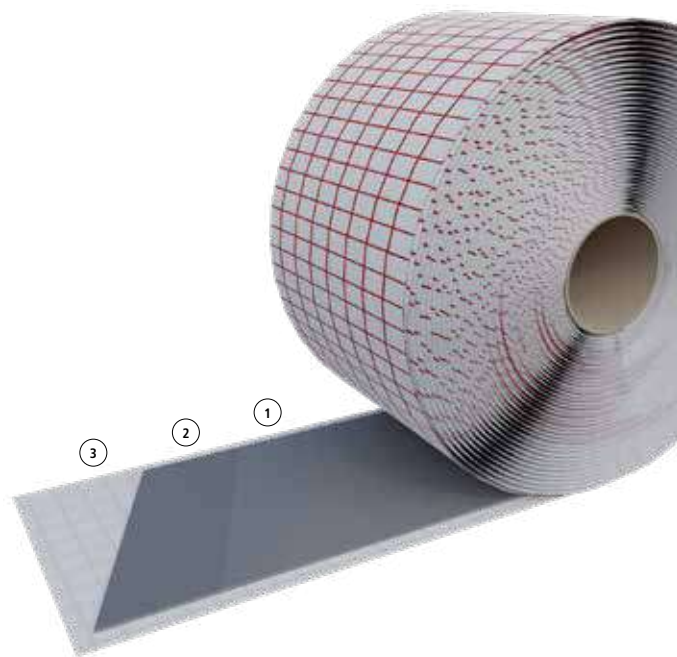
- Monoadhesive butyl band
- Suitable for multiple fields of use thanks to the variety of sizes and thicknesses
- Characterized by butyl glue with a high seal and without solvents, suitable for every laying surface
- Dual use, indoor and outdoor, thanks to the water-resistant surface

Features:



Technical data sheet

| | | |
|------------------------------|-------------------|---|
| Glue | | butyl |
| Glue carrier material | | LDPE |
| Protection liner | | YES |
| Thickness Coll 50 / Coll 150 | | 1,0 mm |
| Thickness Coll 80 | | 2,0 mm |
| Specific weight | DIN EN ISO 1183-1 | ~1,4 g/cm³ |
| Viscosity | DIN EN ISO 7390 | stable |
| Hardness (Shore 00) | DIN EN ISO 868 | ~40 |
| Compressive strength | DTU 39.4 | >0,04 N/mm² |
| Solid content | DIN EN ISO 10563 | >99 % |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -40°C / +100°C |
| Fire class | DIN 4102 | B2 |
| UV stability | | 3 months* |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |



Composition:

- PE film ①
- Butylic glue ②
- Silicone liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|----------|----------|-----------------|----------|--------------|
| Coll 50 | 02044050 | 50x15 | 12 | 30 |
| Coll 80 | 02044080 | 80x15 | 4 | 30 |
| Coll 150 | 02044150 | 150x15 | 4 | 30 |

*with reference to the Central European climate

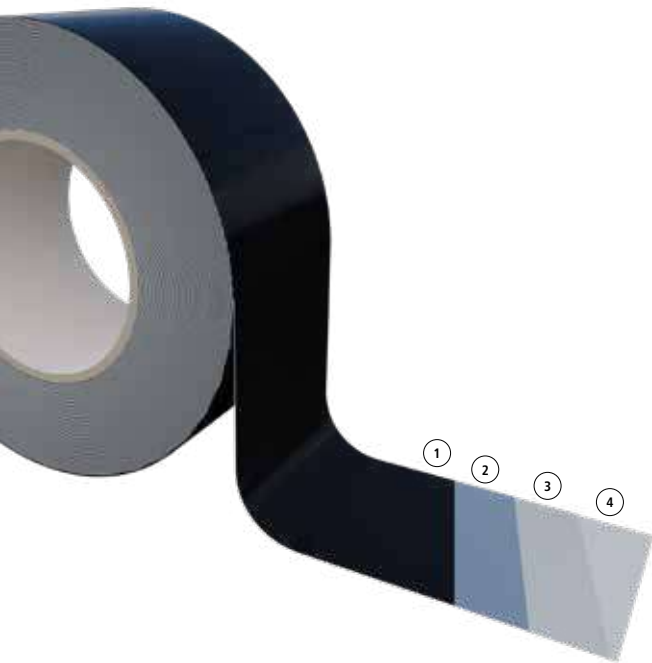
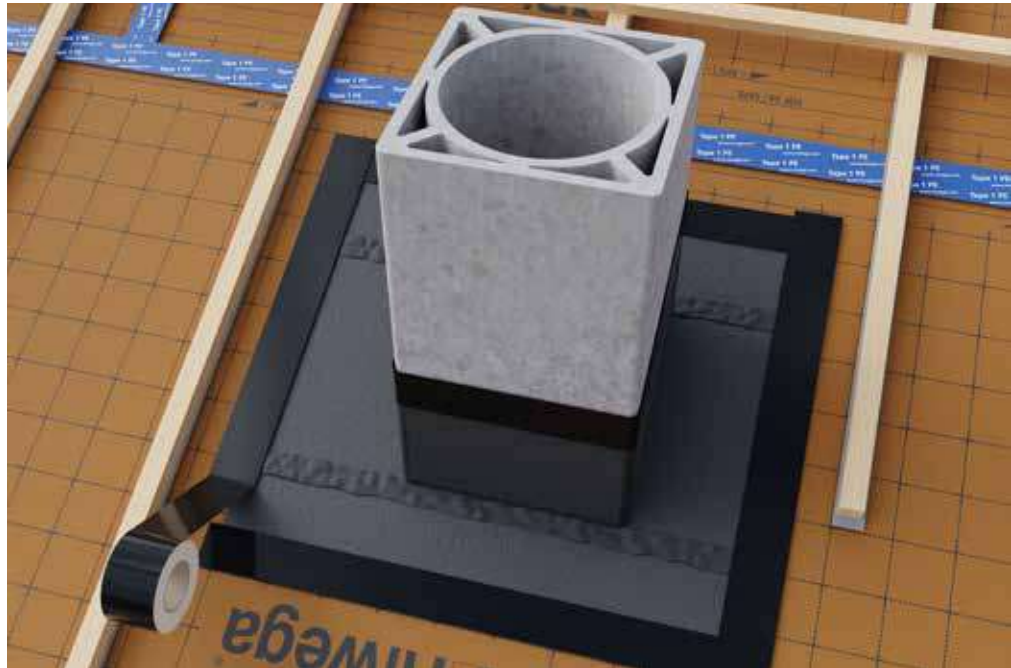
Coll Fire B

16
R3

QUICK OVERVIEW: STRENGTHS

The first fire-certified tape

- Mono adhesive butyl tape
- Class B fire reaction certificate to meet the minimum standards of public buildings
- Particularly suitable for the sealing of USB Fire Zero and USB Vita
- Characterized by butyl glue with a high seal suitable for every laying surface



Composition:

- 1 PET film
- 2 Aluminium film
- 3 Butylic glue
- 4 Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------|----------|-----------------|----------|--------------|
| Coll Fire B | 02044060 | 60x10 | 10 | 50 |

Features:



Technical data sheet

| | | |
|-----------------------------|------------------------------|---------------------------------------|
| Glue | | butyl |
| Glue carrier material | | Alu / PET |
| Protection liner | | YES |
| TVOC-test | ISO 16000-6 | 30 µg/m³ |
| Thickness | | 0,6 mm |
| Sd value | UNI EN 1931 | 1632 m |
| Tensile strength MD/CD** | EN 12311-1 | 185 / 200 N/50mm |
| Elongation at break MD/CD** | EN 12311-1 | 10 / 20 % |
| Probe tack | ASTM D 2979 | 7.0 N |
| 180° Peel Adhesion | ASTM D 1000 | 27 N/cm |
| Solid content | | 100 % |
| Vapour passage resistance µ | EN 1931 | 2720000 |
| Working temperature | | +0°C / +40°C |
| Temperature resistance | | -30°C / +90°C |
| Fire class | EN ISO 11925-2 EN 13501-1 | B-s1, d0 |
| UV stability | | high* |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |

*with reference to the Central European climate

**MD = longitudinal CD = transversal

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Coll ALU



17

R3

QUICK OVERVIEW: STRENGTHS

The fitting that is not afraid of UV rays

- Mono adhesive butyl tape
- Ideal for invisible repair of breakages on sheet metal parts
- Perfect for sealing solar and photovoltaic panels
- Particularly resistant to weathering and ageing

Features:



Classification:



Technical data sheet

| | | |
|-----------------------------|------------------|---|
| Glue | | butyl |
| Glue carrier material | | alu film |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | | 0,6 mm |
| Tensile strength MD/CD** | EN 12311-1 | 180 / 190 N/50mm |
| Elongation at break MD/CD** | EN 12311-1 | 15 / 20 % |
| Probe tack | ASTM D 2979 | 8.0 N |
| 180° Peel Adhesion | ASTM D 1000 | 20 N/cm |
| Solid content | DIN EN ISO 10563 | 100 % |
| Vertical scrolling | ISO 7390 | 0 mm |
| Vapour passage resistance μ | EN 1931 | 1530000 |
| Working temperature | | +0°C / +40°C |
| Temperature resistance | | -30°C / +90°C |
| UV stability | | high* |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |



Composition:

- Aluminium film ①
- Butylic glue ②
- Silicone liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|--------------|----------|-----------------|----------|--------------|
| Coll ALU 75 | 02044073 | 75x10 | 8 | 60 |
| Coll ALU 150 | 02044074 | 150x10 | 4 | 60 |

*with reference to the Central European climate

**MD = longitudinal CD = transversal

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Tape 2 BU

18

R3

QUICK OVERVIEW: STRENGTHS

The most performing adhesive

- Double-sided butyl tape
- Ideal for attaching membranes to any type of structure
- Guarantees seal even in case of movement of the supporting material
- High adhesion butyl glue, solvent-free



Composition:

- 1 Butyl
- 2 Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-----------|----------|-----------------|----------|--------------|
| Tape 2 BU | 02040315 | 20x25 | 14 | 30 |

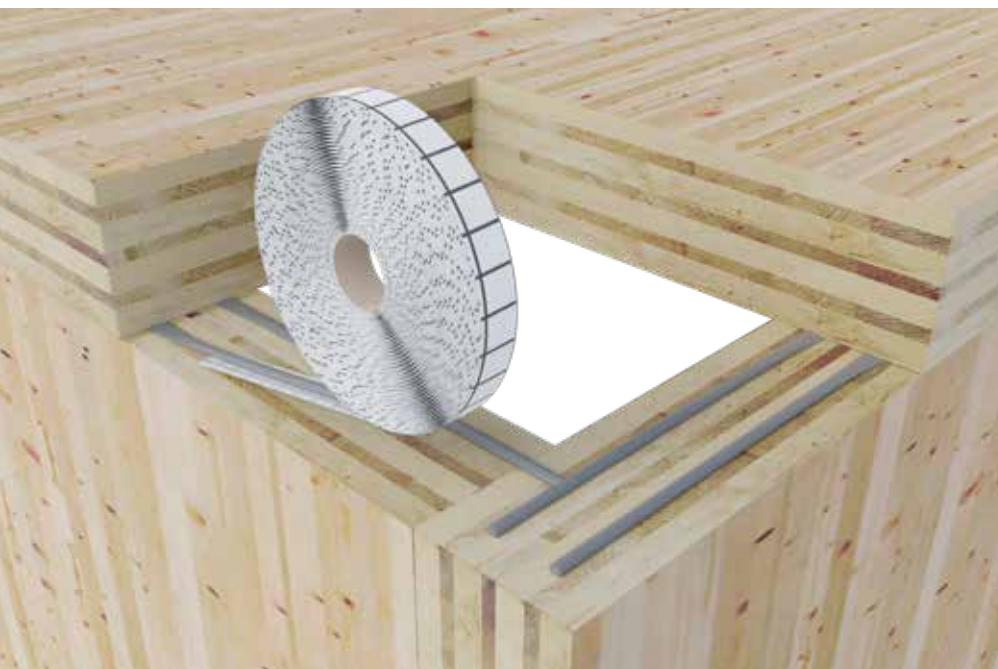
Features:



Technical data sheet

| | | |
|----------------------------------|-------------------|---|
| Glue | | butyl |
| Glue carrier material | | - |
| Protection liner | | YES |
| Thickness | | 1,5 mm |
| Specific weight | DIN EN ISO 1183-1 | ~1,3 g/cm³ |
| Viscosity (with thickness <2 mm) | DIN EN ISO 7390 | stable fino a +100°C |
| Hardness (Shore 00) | DIN EN ISO 868 | ~30 |
| Compressive strength | DTU 39.4 | >0,03 N/mm² |
| Solid content | DIN EN ISO 10563 | >99 % |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +30°C |
| Operating temperature | | -40°C / +100°C |
| Fire class | DIN 4102 | B2 |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |

Tape 2 CO



19

R3

QUICK OVERVIEW: STRENGTHS

The ideal connection sealant for wooden houses

- Butyl adhesive cord
- Its conformation makes it perfect for sealing between wood surfaces
- Guarantees the adhesive seal even in the event of movement of the support material
- Characterized by butyl glue with a high seal and free of solvents

Features:



Technical data sheet

| | | |
|-----------------------|-------------------|---|
| Glue | | butyl |
| Glue carrier material | | - |
| Protection liner | | YES |
| Diameter of the cord | | 6 mm |
| Specific weight | DIN EN ISO 1183-1 | ~1,6 g/cm³ |
| Viscosity | DIN EN ISO 7390 | stable |
| Hardness (Shore 00) | DIN EN ISO 868 | ~40 |
| Compressive strength | DTU 39.4 | >0,05 N/mm² |
| Solid content | DIN EN ISO 10563 | >99 % |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +30°C |
| Operating temperature | | -40°C / +100°C |
| Fire class | DIN 4102 | B2 |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |

Composition:

- Butyl cord (1)
Silicone liner (2)

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-----------|----------|-----------------|----------|--------------|
| Tape 2 CO | 02040306 | 6x7 | 22 | 30 |

Seals for windows

A critical point of the air and wind tightness of the building envelope is represented by the installation of window frames. It is necessary to pay close attention to the connections on windows: filling the joint between the window and the masonry with foam and plaster is not enough to create air and wind tightness, since not all construction foams can create an airtight layer.

The Riwega solutions for windows

The FDB tapes were created precisely to create the air and wind tight connection between masonry and counter-frame, or in the absence of a counter-frame, between masonry and window simply and quickly. They consist of a combination of different functional films and plasterable nonwovens. The polyacrylate full-surface adhesive is protected by an easy-to-remove protective film (FL, FingerLift) and is therefore ideal for professional corner and edge sealing in construction.

These adhesive tapes solve various situations on the building site and are:

- Adhesive tapes with variable Sd-values that can be used both indoors and outdoors;
- Adhesive tapes with variable Sd-value in "PLUS" version, with adhesive strength on the entire surface (ideal for installation without counter frame);
- Adhesive tapes with variable Sd-value with reinforcing fabric, for connection to thermal insulation;
- INT and EXT tapes, which can be used both indoors and outdoors.

Other solutions, for sealing door and window frames, also include:

- Butyl adhesive tapes for exterior sealing of the window frame;
- Profiles to create a stable and aesthetically pleasing connection between the window and door system and the thermal insulation package;
- Compri tapes for sealing against driving rain (class BG1) and air/wind (class BGR) at the joints between the frame and counter frame;
- Multifunctional compressive tapes for sealing against driving rain on the door and window frame (class BG1), for air/wind sealing (class BGR) and for thermal ($\lambda=0.048$ W/mK) and acoustic (RST,w=41 dB) sealing of the joints between the window and counter frame;
- A low-stretch, elastic and airtight foam for sealing and thermal-acoustic insulation of cavities between masonry and counter-frame or between the masonry and the door or window frame;
- An MS polymer sealant with long-lasting elasticity in a white or transparent finish, for the final sealing of the frame system;
- A compressible sealant made of expanded EPDM, for closing and sealing cavities in existing window systems that need to be renovated.

FDB Vario

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R3



QUICK OVERVIEW: STRENGTHS

The universal window tape

- Acrylic adhesive tape with variable hygrometry
- Indoor & outdoor use, regulates the passage of vapour according to temperature and humidity
- Guarantees air, wind and waterproofing in the laying joint of windows and doors
- Waterproofing to air, water and wind
- Overplasterable surface

Features:



Classification:



Technical data sheet

| | | |
|--------------------------------|----------------|--------------------------------|
| Glue | | acrylic with Fingerlift |
| Glue carrier material | | PET.PA |
| Thickness | EN 1849-2 | 0,63 mm |
| Sd value | | 0,5 - 20 m |
| Air tightness | EN 1026 | $a_n \leq 0,1$ |
| Tightness against driving rain | EN 1027 | >600 Pa |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 55 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 25 / 135 % |
| Water column | | >200 cm |
| Resistance to water passage | EN 1928 | W1 |
| Fire reaction class | EN ISO 11925-2 | E |
| VOC class | ISO 16000 | A+ |
| Working temperature | | -10°C / +40°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | 6 months |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 12 months |



Composition:

- Multilayer non-woven PET.PA ①
- Acrylic glue with Fingerlift (protruding liner) ②

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------|----------|--------------------|----------|--------------|
| 75 | 02045807 | 75 (50+25) x25 | 5 | 96 |
| 100 | 02045810 | 100 (75+25) x25 | 4 | 96 |
| 150 | 02045815 | 150 (65+60+25) x25 | 2 | 96 |

*MD = longitudinal CD = transversal

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FDB Vario Plus

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R3

QUICK OVERVIEW: STRENGTHS

The window frame is sealed in one quick solution

- Acrylic adhesive tape with variable hygrometry
- Specially designed for systems without subframe
- Indoor and outdoor use
- Regulates the passage of vapour according to temperature and humidity
- Waterproofing to air, water and wind on the laying joint of windows and doors



Composition:

- ① Acrylic glue with silicone liner
- ② Multilayer non-woven PET.PA
- ③ Acrylic glue with Fingerlift (protruding liner)

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------|-----------|--------------------|----------|--------------|
| 75 | 020458071 | 75 (50+25) x25 | 5 | 96 |
| 100 | 020458101 | 100 (75+25) x25 | 4 | 96 |
| 150 | 020458151 | 150 (65+60+25) x25 | 2 | 96 |

Features:



Classification:



Technical data sheet

| | | |
|--------------------------------|----------------|--------------------------------|
| Glue | | acrylic with Fingerlift |
| Glue carrier material | | PET.PA |
| Thickness | EN 1849-2 | 0,63 mm |
| Sd value | | 0,5 - 20 m |
| Air tightness | EN 1026 | $a_n \leq 0,1$ |
| Tightness against driving rain | EN 1027 | >600 Pa |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 55 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 25 / 135 % |
| Water column | | >200 cm |
| Resistance to water passage | EN 1928 | W1 |
| Fire reaction class | EN ISO 11925-2 | E |
| VOC class | ISO 16000 | A+ |
| Working temperature | | -10°C / +40°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | 6 months |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 12 months |

*MD = longitudinal CD = transversal

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FDB Vario NET

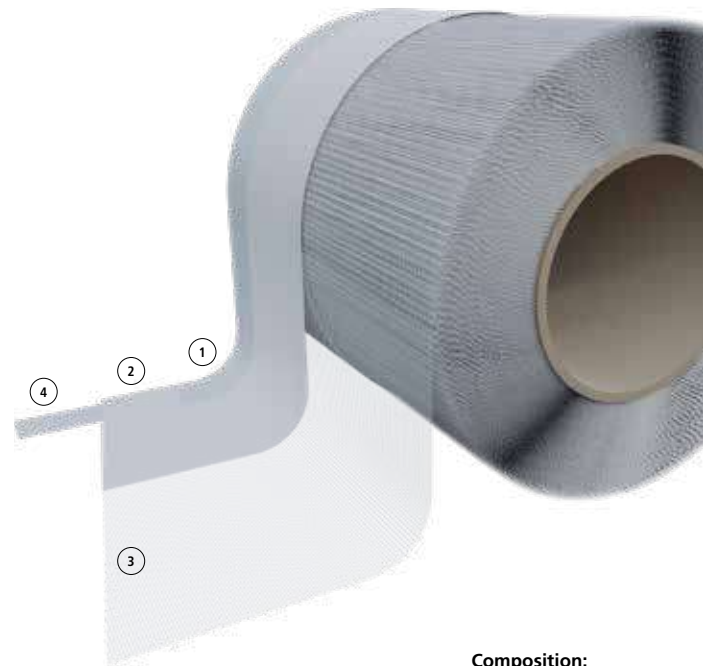


QUICK OVERVIEW: STRENGTHS

Perfectly sealed window and door next to a heat insulation system

- Variable hygrometric window tape with mesh
- Indoor and outdoor use, regulates the passage of vapour
- With fibre-glass for over plastering
- Double-sided adhesive strip

Features:



Composition:

- Acrylic glue with silicone liner (1)
- Multilayer non-woven PET.PVC (2)
- Fiberglass mesh (3)
- Acrylic glue with silicone liner (4)

Technical data sheet

| | | |
|---|--------------|---|
| Glue | | acrylic |
| Glue carrier material | | PET.PVC |
| Fiberglass mesh for plastering | | 100 mm |
| Sd value | EN ISO 12572 | 0,03 - 15 m |
| Permeability coefficient (joints) | EN 1026 | a ~0 m ³ /[h m (daPa) ⁿ] |
| Tightness against driving rain (joints) | EN 1027 | ≥1050 Pa |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +45°C |
| Temperature resistance | | -40°C / +80°C |
| Fire reaction class | EN 13501-1 | E |
| UV stability | | 6 months |
| Storage place | | dry, protected from UV rays, +1°C / +20°C |
| Storage period | | max. 12 months |

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------------|----------|-----------------|----------|--------------|
| FDB Vario NET | 02045775 | 75x30 | 4 | 24 |

FDB INT VSK Plus

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R3

QUICK OVERVIEW: STRENGTHS

The complete adhesive tape for indoors, with reinforced surface

- Breathable adhesive tape
- Inside use
- Windtight sealing of door and window joints
- Increased weight for high mechanical strength
- Overplasterable surface



Composition:

- ① Acrylic glue with silicone liner
- ② Multilayer non-woven PP.PE
- ③ Acrylic glue with pre-cutted liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------|----------|-----------------|----------|--------------|
| 85 | 02046208 | 85 (25+60) x25 | 4 | 72 |
| 100 | 02046210 | 100 (25+75) x25 | 4 | 72 |

Features:



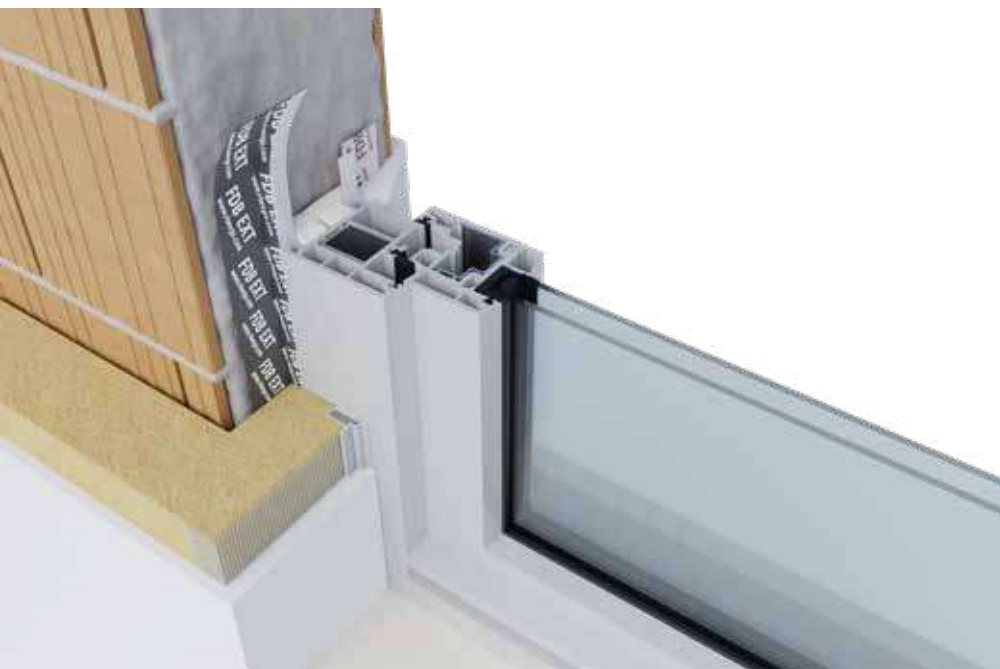
Technical data sheet

| | | |
|----------------------------|--------------|-----------------------------|
| Glue | | acrylic with Fingerlift |
| Glue carrier material | | PP.PE |
| Thickness | DIN 53855 | 0,49 mm |
| Sd value | EN ISO 12572 | 40 m |
| Air tightness | EN 1026 | $a_n \leq 0,1$ |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 55 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 25 / 135 % |
| Fire reaction class | EN 13501-1 | E |
| Working temperature | | +5°C / +40°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | do not expose to UV rays |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 12 months |

*MD = longitudinal CD = transversal

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FDB EXT VSK Plus



QUICK OVERVIEW: STRENGTHS

The complete adhesive tape for indoors, with reinforced surface

- Breathable adhesive tape
- Outside use
- Windtight sealing of door and window joints
- Increased weight for high mechanical strength
- Overplasterable surface

Features:



Technical data sheet

| | | |
|-----------------------------|--------------|-----------------------------|
| Glue | | acrylic with Fingerlift |
| Glue carrier material | | PP.PP |
| Thickness | DIN 53855 | 0,62 mm |
| Sd value | EN ISO 12572 | 0,08 m |
| Air tightness | EN 1026 | $a_n \leq 0,1$ |
| Resistance to water passage | EN 1928 | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 290 / 31 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 19 / 130 % |
| Water column | | >200 cm |
| Fire reaction class | EN 13501-1 | E |
| Working temperature | | +5°C / +40°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | 6 months |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 12 months |

Composition:

- Acrylic glue with silicone liner ①
- Multilayer non-woven PP.PP ②
- Acrylic glue with pre-cutted liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------|----------|-----------------|----------|--------------|
| 85 | 02046108 | 85 (25+60) x25 | 4 | 72 |
| 100 | 02046110 | 100 (25+75) x25 | 4 | 72 |

*MD = longitudinal CD = transversal
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FDB INT

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R3

QUICK OVERVIEW: STRENGTHS

The perfect internal sealing of windows and doors

- Breathable adhesive tape
- Inside use
- Windtight sealing of door and window joints
- Overplasterable surface
- Available in several types to ensure tightness on every laying surface



Features:



Composition:

- ① Multilayer non-woven PET.PE.PET
- ② Butylic strip / acrylic strip
- ③ Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------------|----------|-----------------|----------|--------------|
| FDB INT AC 75 | 02045512 | 75x30 | 5 | 96 |
| FDB INT AC 100 | 02045513 | 100x30 | 4 | 96 |
| FDB INT AC 150 | 02045514 | 150x30 | 2 | 96 |
| FDB INT AC+AC 75 | 02045522 | 75x30 | 5 | 96 |
| FDB INT AC+AC 100 | 02045523 | 100x30 | 4 | 96 |
| FDB INT AC+AC 150 | 02045524 | 150x30 | 2 | 96 |
| FDB INT AC+BU 75 | 02045532 | 75x25 | 5 | 96 |
| FDB INT AC+BU 100 | 02045533 | 100x25 | 4 | 96 |
| FDB INT AC+BU 150 | 02045534 | 150x25 | 2 | 96 |

Technical data sheet

| | | |
|----------------------------|--------------|-----------------------------|
| Glue | | acrylic/butyllic |
| Glue carrier material | | PET.PE.PET |
| Thickness | DIN 53855 | 0,49 mm |
| Sd value | EN ISO 12572 | ~40 m |
| Air tightness | EN 1026 | $a_n \leq 0,1$ |
| Tensile strength MD/CD* | EN 12311-1 | 300 / 55 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 25 / 135 % |
| Fire reaction class | EN 13501-1 | E |
| Working temperature | | +5°C / +40°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | do not expose to UV rays |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

*MD = longitudinal CD = transversal

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FDB EXT

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R3



QUICK OVERVIEW: STRENGTHS

The perfect external sealing of window and door

- Breathable adhesive tape
- Outside use
- Windtight sealing of door and window joints
- Overplasterable surface
- Available in several types to ensure tightness on every laying surface

Features:



Composition:

- ① Multilayer non-woven PET.PP.PET
- ② Butylic strip / acrylic strip
- ③ Silicone liner



Technical data sheet

| | | |
|-----------------------------|--------------|--------------------------------|
| Glue | | acrylic/butylic |
| Glue carrier material | | PET.PP.PET |
| Thickness | DIN 53855 | 0,37 mm |
| Sd value | EN ISO 12572 | 0,04 m |
| Resistance to water passage | EN 1928 | W1 |
| Tensile strength MD/CD* | EN 12311-1 | 290 / 31 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 19 / 130 % |
| Fire reaction class | EN 13501-1 | E |
| Working temperature | | +5°C / +40°C |
| Temperature resistance | | -40°C / +80°C |
| UV stability | | 3 months |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------------|----------|-----------------|----------|--------------|
| FDB EXT AC 75 | 02045612 | 75x30 | 5 | 96 |
| FDB EXT AC 100 | 02045613 | 100x30 | 4 | 96 |
| FDB EXT AC 150 | 02045614 | 150x30 | 2 | 96 |
| FDB EXT AC+AC 75 | 02045622 | 75x30 | 5 | 96 |
| FDB EXT AC+AC 100 | 02045623 | 100x30 | 4 | 96 |
| FDB EXT AC+AC 150 | 02045624 | 150x30 | 2 | 96 |
| FDB EXT AC+BU 75 | 02045632 | 75x25 | 5 | 96 |
| FDB EXT AC+BU 100 | 02045633 | 100x25 | 4 | 96 |
| FDB EXT AC+BU 150 | 02045634 | 150x25 | 2 | 96 |

*MD = longitudinal CD = transversal

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Air Coll

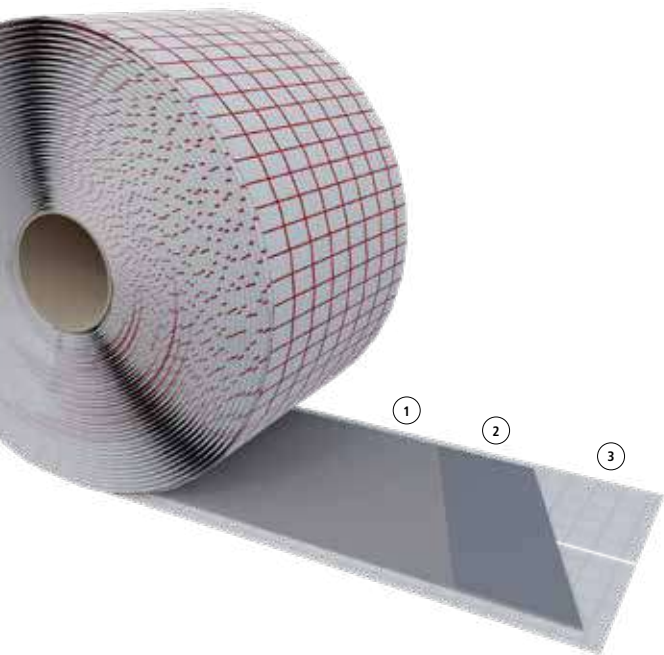
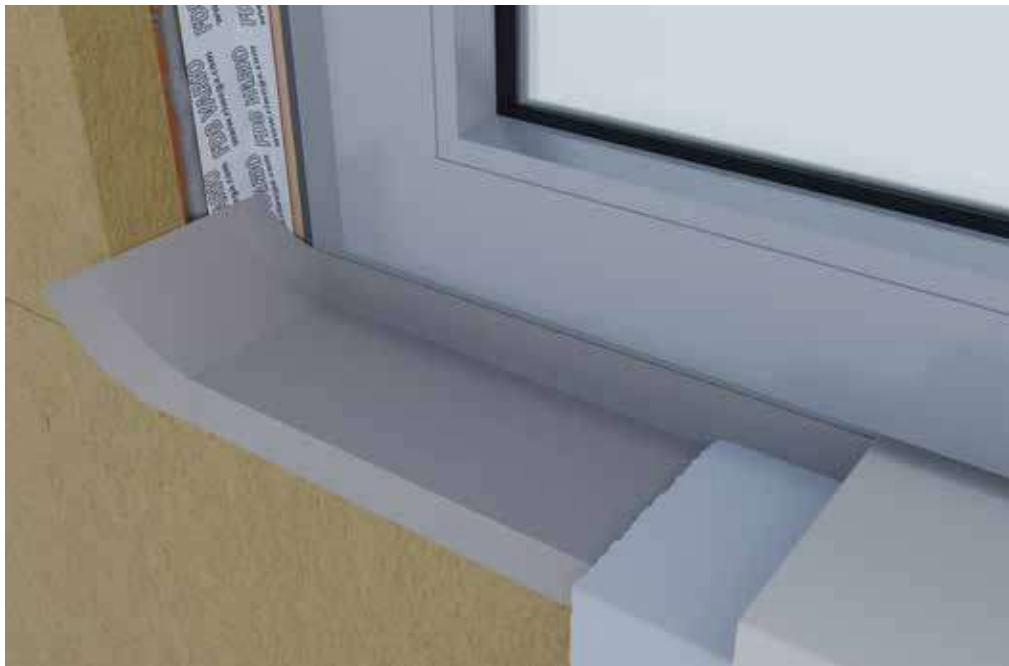
27

R3

QUICK OVERVIEW: STRENGTHS

Strong plastering adhesion

- Monoadhesive butyl band
- Excellent for stitches that require subsequent shaving
- Ideal for waterproofing the external sill support
- The pre-cut liner makes it ideal for all linear and corner seals
- Characterized by butyl glue with a high seal and without solvents, suitable for every laying surface



Composition:

- ① Non-woven fabric in PP
- ② Butylic glue
- ③ Pre-cutted silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|----------------|----------|-----------------|----------|--------------|
| Air Coll 75 X | 02203207 | 75x25 | 4 | 30 |
| Air Coll 150 X | 02203215 | 150x25 | 1 | 30 |

Features:



Technical data sheet

| | | |
|------------------------|-------------------|---|
| Glue | | butyl |
| Glue carrier material | | non-woven fabric in PP |
| Protection liner | | YES (pre-cutted) |
| Thickness | | 1,0 mm |
| Specific weight | DIN EN ISO 1183-1 | ~1,4 g/cm³ |
| Viscosity | DIN EN ISO 7390 | stable |
| Hardness (Shore 00) | DIN EN ISO 868 | ~40 |
| Compressive strength | DTU 39.4 | >0,04 N/mm² |
| Solid content | DIN EN ISO 10563 | >99 % |
| Emissions | EMICODE® | very low |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -40°C / +100°C |
| Fire class | DIN 4102 | B2 |
| UV stability | | 3 months* |
| Storage place | | dry, protected from UV rays, ~20°C |
| Storage period | | max. 12 months |

*with reference to the Central European climate
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FDB Profile

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R3

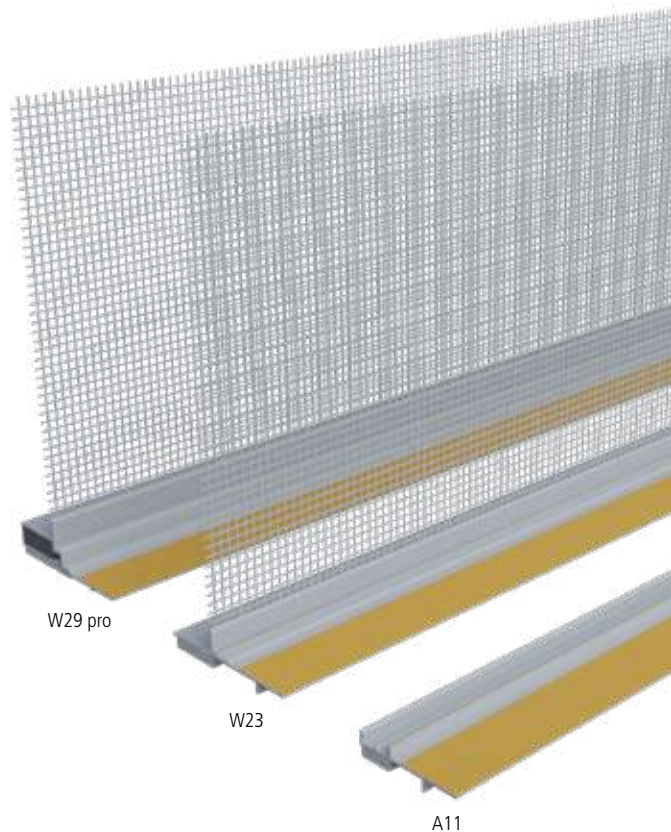
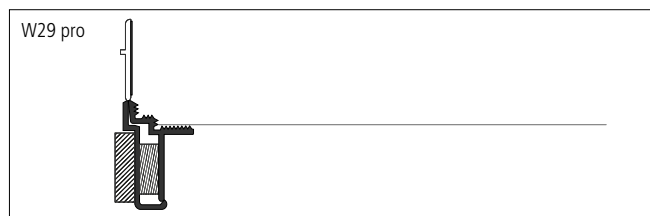
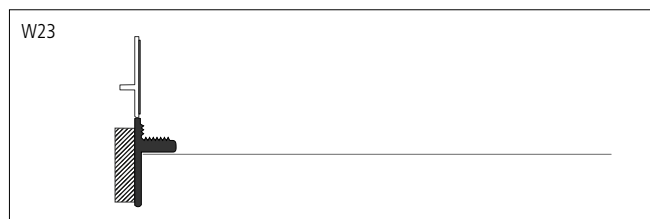


QUICK OVERVIEW: STRENGTHS

Windows and doors next to plasters

- Soffit profile
- Indoor and outdoor use, to connect the window to the thermal insulation system
- Self-adhesive, equipped with expanding tape and available in different types
- Air, water and wind tight joints on windows and doors

Features:



Codes and measures

| Version | Code | Material | Seal | Measures (cmxmm) | Thickness (mm) | L mesh (mm) | Dimension (mm) | Box (m) |
|---------|----------|----------|--------|------------------|----------------|-------------|----------------|---------|
| A11 | 02046011 | Plastic | PE | 240x9 | 5 | - | - | 48 |
| W23 | 02046023 | Plastic | PE | 240x18 | 6 | 250 | 4x4 | 60 |
| W29 pro | 02046029 | Plastic | PE+PUR | 240x25 | 10 | 125 | 4x4 | 60 |

GAE BG1

29

R3

QUICK OVERVIEW: STRENGTHS

The self-expanding BG1 class

- Precompressed self-expanding seal
- The elasticity of the joint, is resistant to expansion and vibrations
- Double use, internal and external (high water tightness)
- Ideal for ensuring the thermo-acoustic insulation of the connection joints



Composition:

- 1 Pre-compressed polyurethane foam
- 2 Polyester reinforced acrylic glue
- 3 Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Joints (mm) | Box (pc) |
|------------|----------|-----------------|-------------|----------|
| GAE BG1 10 | 02143010 | 10x13 | 1-4 | 30 |
| GAE BG1 15 | 02143015 | 15x12 | 2-6 | 20 |
| GAE BG1 20 | 02143020 | 20x8 | 4-9 | 15 |
| GAE BG1 30 | 02143030 | 30x4,3 | 6-15 | 10 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------------|------------------|--|
| Material | | polyurethane foam |
| Glue | | acrylic |
| Protection liner | | YES |
| Stress class | DIN 18452:2009 | BG1 e BGR |
| Permeability coefficient (joints) | DIN EN 12114 | $a_n \leq 0,1 \text{ m}^3/[\text{h m (daPa)}^{2/3}]^*$ |
| Tightness against driving rain | DIN EN 1027 | $\geq 600 \text{ Pa}^*$ |
| Noise reduction from joints | DIN EN 12354-3 | $R_{st,w} (C; C_{tr}) = 44 (-1; -2) \text{ dB}$ |
| Compat. with other building materials | DIN 18542:2009 | compliant |
| Resist. to UV and atmospheric agents | DIN 18542:2009 | compliant |
| Dimensional tolerance | DIN 7715 T5 P3 | compliant |
| Thermal conductivity (λ) | DIN EN 12667 | 0,052 W/mK |
| Vapour passage resistance μ | DIN EN ISO 12572 | ≤ 100 |
| Emissions | EMICODE® | very low |
| Working temperature | DIN 18542:2009 | -30°C / +90°C |
| Fire class | DIN 4102-1 | B1 |
| Storage place | | dry, protected from UV rays, +1°C / +20°C |
| Storage period | | max. 24 months |

*ift Rosenheim

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GAE Trio

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R3



QUICK OVERVIEW: STRENGTHS

The expanding tape with three functions

- Precompressed self-expanding seal
- Triple function: air, wind and waterproofing, sound insulation
- Control of the vapour passage
- The elasticity of the joint, is resistant to expansion and vibrations
- Function as thermal and acoustic insulation of the connection points

Features:

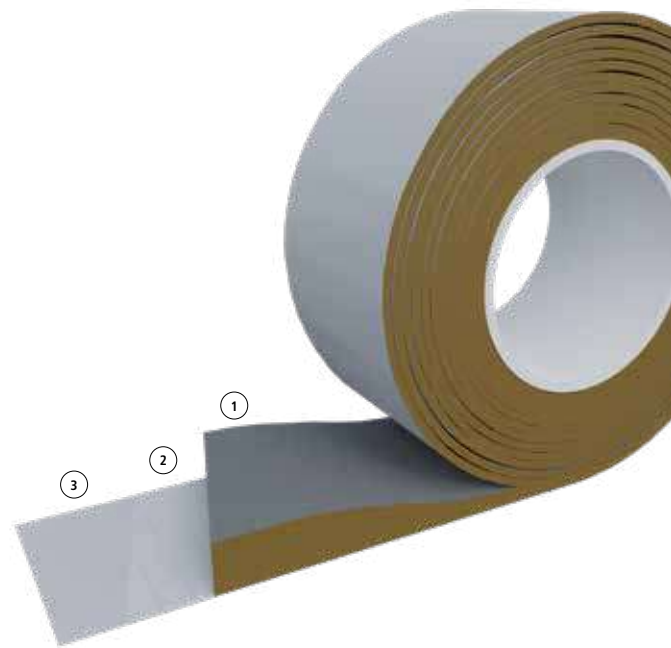


Classification:



Technical data sheet

| | | |
|---------------------------------------|------------------|--|
| Material | | polyurethane foam |
| Glue | | acrylic |
| Stress class | DIN 18452:2009 | BG1 e BGR |
| Permeability coefficient (joints) | DIN EN 12114 | $a_n \leq 0,1 \text{ m}^2/[\text{h m (daPa)}^n]$ |
| Tightness against driving rain | DIN EN 1027 | $\geq 600 \text{ Pa}$ |
| Noise reduction from joints | DIN EN 12354-3 | $R_{st,w} (C; C_{tr}) = 41 (-1; -1) \text{ dB}$ |
| Compat. with other building materials | DIN 18542:2009 | compliant |
| Resist. to UV and atmospheric agents | DIN 18542:2009 | compliant |
| Value-U (window profile=70 mm) | DIN EN 4108-3 | 0,8 W/m²K |
| Value-U (window profile=80 mm) | DIN EN 4108-3 | 0,7 W/m²K |
| Value-U (window profile=90 mm) | DIN EN 4108-3 | 0,6 W/m²K |
| Thermal conductivity (λ) | DIN EN 12667 | 0,048 W/mK |
| Vapour passage resistance μ | DIN EN ISO 12572 | ≤ 100 |
| Vapour pressure gradient | | permeable externally |
| Emissions | EMICODE® | very low |
| Working temperature | DIN 18542:2009 | -30°C / +80°C |
| Fire class | DIN 4102-1 | B1 |
| Storage place | | dry, protected from UV rays, +1°C / +20°C |
| Storage period | | max. 12 months |



Composition:

- Pre-compressed polyurethane foam (yellow part inside) ①
 Acrylic glue ②
 Silicone liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Joints (mm) | Box (pc) |
|-------------|----------|-----------------|-------------|----------|
| GAE Trio 54 | 02150056 | 54x5,6 | 5-10 | 5 |
| GAE Trio 64 | 02150064 | 64x4,3 | 7-15 | 4 |
| GAE Trio 74 | 02150074 | 74x3,3 | 10-20 | 4 |

Elastic Foam

31

R3

QUICK OVERVIEW: STRENGTHS

The high elasticity certified for airtightness

- Polyurethane monocomponent foam
- Highly insulating viscoelastic airtight foam
- Guarantees thermal and acoustic insulation of the connection joints
- High elasticity even in case of structure movements
- Low expansion foam to guarantee airtightness



Features:



Classification:



Technical data sheet

| Material | | polyurethane monocomponent foam |
|--|--------------------|--|
| Density | EN ISO 10563 | 15 / 20 kg/m ³ |
| Output free foaming (20°C/65% UR) | FEICA TM 1003 | ~38 l (dm ³) |
| Thermal conductivity | DIN 56612 | ~0,0365 W/mK |
| Vapour passage resistance μ | EN 12086 | 19 |
| Joint acoustic insulation (joint 10 mm x 100 mm) | Önorm EN ISO 10140 | R _{s,w} (C; Ctr): 63 (-2;-5) dB |
| Air tightness | EN 1026/EN 12207 | up to 600 Pa |
| Cutable time (20°C/65% UR) | | 15 - 20 min. |
| Formation of skin (20°C/65% UR) | | 8 - 12 min. |
| Fire class | DIN 4102-1 | B3 |
| Emissions | EMICODE® | EC1 ^{PLUS} |
| Working can temperature | | +10°C / +30°C |
| Working environment temperature | | +5°C / +35°C |
| Optimal working temperature | | +15°C / +25°C |
| Temperature resistance | | -40°C / +80°C |
| Storage place | | dry, protected from UV rays, max. 20°C |
| Storage period | | max. 12 months |

Codes and measures

| Version | Code | Content (ml) | Box (pc) | Pallet (box) |
|---------|----------|--------------|----------|--------------|
| Can | 02040505 | 750 | 12 | 56 |

Sil Power Fix

32

R3



QUICK OVERVIEW: STRENGTHS

The elastic sealant, durable and invisible

- Ms Polymer sealant
- Ideal for air- and windtight sealing of any interruptions of the building envelope
- Completely invisible and flexible joint; internal and external use
- Particularly resistant to expansions and vibrations

Features:



Classification:



Technical data sheet

| Material | MS polimero | |
|-----------------------------------|---|------------------------|
| Colour | Colourless | White |
| Density | ~1,05 g/cm ³ | ~1,4 g/cm ³ |
| Output | 30 ml/m | |
| Hardness (Shore A) | ~22 | ~25 |
| Max. joint deformation | ±25 % | |
| Elongation at break | npd* | 250 % |
| Overpaintable | on complete hardening | |
| Formation of skin (23°C/50% UR) | ~10 min. | ~60 min. |
| Drying (23°C/50% UR) | ~2 mm/24 h | |
| Emissions | EMICODE® | EC1 ^{PLUS} |
| Working temperature | +5°C / +40°C | |
| Operating temperature | -20°C / +100°C | |
| Fire class | EN 13501-1 | E |
| Classification facade elements | EN 15651-1 | F-INT 25LM |
| Classification bathroom plumbings | EN 15651-3 | npd* XS1 |
| Classification walkways | EN 15651-4 | npd* 25LM |
| Storage place | dry, protected from UV rays, +5°C / +25°C | |
| Storage period | max. 12 months | |

Codes and measures

| Version | Code | Content (ml) | Box (pc) | Pallet (box) |
|------------|----------|--------------|----------|--------------|
| Colourless | 02040408 | 290 | 20 | 60 |
| White | 02040409 | 290 | 20 | 60 |

*no performance determined

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Nail sealing products

Air or wind tightness very often finds a solution with the use of specific seals, that can be produced in various materials: polyethylene or PVC foams, bitumen bands or polyurethane-based liquid solutions.

R3

Riwega's seal

Using the range of products offered by Riwega, the holes made by the screws/nails for fixing the roof battens can be sealed; these products also find application in the laying of structures for plasterboard or for ventilated facades, as they seal holes on the vapour control layers or in the breathable membranes against air or wind passage.

Technical solutions to assist you with professional waterproofing, such as:

- Continuous single-sided polyethylene foam nail sealing tape with acrylic adhesive. Bonding should always be to the waterproofing membrane (not to the counter batten), along the counter batten line;
- Continuous double-sided polyethylene foam nail sealing tape with a double layer of acrylic adhesive. It can be glued to the waterproofing membrane as well as to the wooden battens. With this nailing tape, the counter battens can be prepared in advance and fixed to the roof at a later stage;
- One-sided, continuous bitumen-based nail sealing tape. Bonding should be done above the waterproofing membrane (not on the counter batten), along the counter batten line;
- Single nail seals are made of PVC foam with acrylic adhesive on one side. Should be glued to the waterproofing;
- Polyurethane-based sealing liquid. It should be applied directly to the counter batten using the appropriate two-way dispensing nozzle, immediately before it is positioned and fixed to the waterproofing membrane. The reaction of the liquid forms 2 sealing beads on the edges of the counter-battening.

Tip KONT

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R3



QUICK OVERVIEW: STRENGTHS

The continuous nail sealing tape

- Single-sided adhesive nail sealing tape
- Guarantees air-, wind- and water tightness of the breathable membranes
- Thanks to its high elasticity it is resistant to dilations and vibrations
- Wall and roof application

Features:



Classification:



Composition:

- PE foam ①
- Acrylic glue ②

Technical data sheet

| | | |
|----------------------------|-------------|--------------------------------|
| Material | | PE foam |
| Glue | | acrylic |
| Protection liner | | NO |
| Thickness | | 3 mm |
| Specific weight | | 25 / 30 kg/m ³ |
| Peel adhesion | DIN EN 1939 | ≥5 N/25 mm |
| Shear strength | DIN EN 1943 | 500 g/625mm ² |
| Working temperature | | +10°C / +30°C |
| Temperature resistance | | -30°C / +80°C |
| Resistance to condensation | | high |
| Resistance to aging | | limited |
| UV stability | | limited |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------|-----------|-----------------|----------|--------------|
| Tip KONT 60 | 02045001 | 60x30 | 10 | 18 |
| Tip KONT 70 | 020450017 | 70x30 | 9 | 18 |
| Tip KONT 80 | 02045003 | 80x30 | 7 | 18 |

Tip KONT DUO

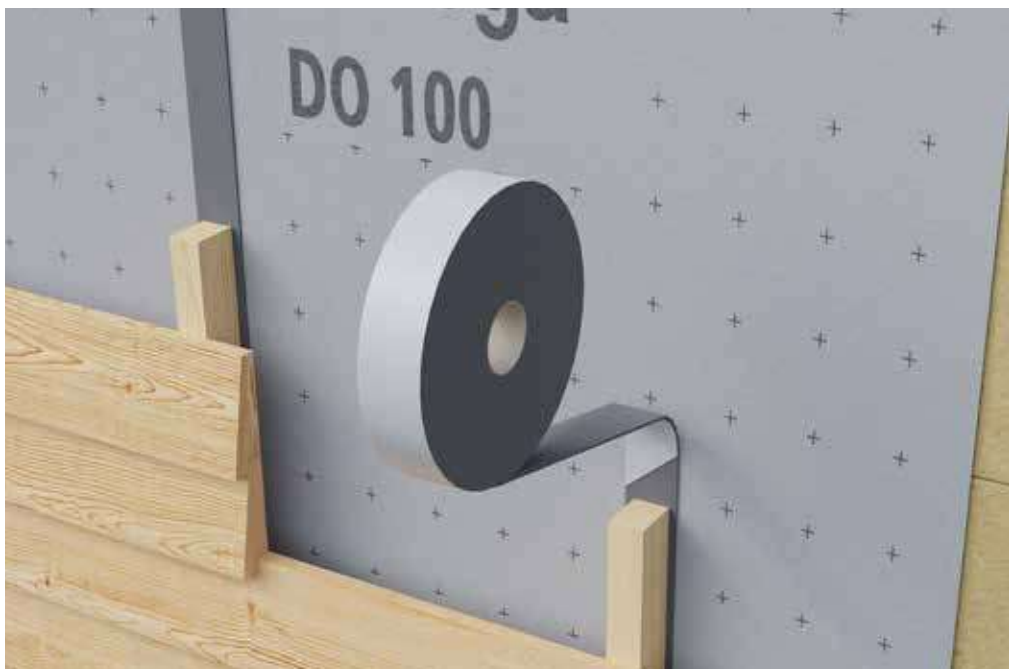
34

R3

QUICK OVERVIEW: STRENGTHS

The continuous double-adhesive nail sealing tape

- Double-sided adhesive nail sealing tape
- Fast and precise installation thanks to the double adhesive surface
- Guarantees air-, wind- and water tightness of the breathable membranes
- Wall and roof application



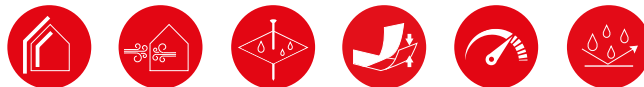
Composition:

- 1 Silicone liner
- 2 Acrylic glue
- 3 PE foam
- 4 Acrylic glue

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-----------------|-----------|-----------------|----------|--------------|
| Tip KONT DUO 50 | 020450041 | 50x30 | 10 | 18 |
| Tip KONT DUO 60 | 02045004 | 60x30 | 10 | 18 |

Features:



Classification:



Technical data sheet

| | | |
|----------------------------|-------------|-----------------------------|
| Material | | PE foam |
| Glue | | acrylic |
| Protection liner | | YES |
| Thickness | | 3 mm |
| Specific weight | | 25 / 30 kg/m ³ |
| Peel adhesion | DIN EN 1939 | ≥5 N/25 mm |
| Shear strength | DIN EN 1943 | 500 g/625mm ² |
| Working temperature | | +10°C / +30°C |
| Temperature resistance | | -30°C / +95°C |
| Resistance to condensation | | high |
| Resistance to aging | | high |
| UV stability | | limited |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Tip KONT Bitum

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R3



QUICK OVERVIEW: STRENGTHS

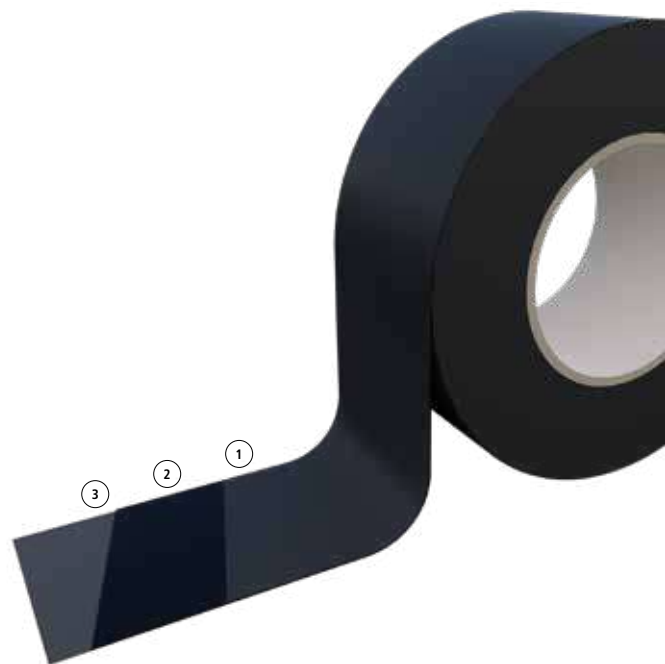
The bituminous nail sealing tape

- Continuous nail sealing tape
- Particularly resistant to UV rays and ageing
- Guarantees air, wind and water tightness of the breathable membranes
- Thanks to its high elasticity it is resistant to dilations and vibrations

Features:



Classification:



Composition:

- PE film ①
- Adhesive bitumen ②
- Silicone liner ③

Technical data sheet

| | | |
|------------------------|--|------------------------------------|
| Material | | bitumen/PE film |
| Glue | | adhesive bitumen |
| Protection liner | | YES |
| Thickness | | ~1,2 mm |
| Colonna d'acqua | | >1000 cm |
| Working temperature | | ≥+5°C** |
| Temperature resistance | | ≥-5°C |
| UV stability | | 6 months* |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-------------------|-----------|-----------------|----------|--------------|
| Tip KONT Bitum 60 | 020600609 | 60x25 | 6 | 24 |
| Tip KONT Bitum 70 | 020600709 | 70x25 | 6 | 24 |
| Tip KONT Bitum 80 | 020600809 | 80x25 | 4 | 24 |

*with reference to the Central European climate

**if necessary, heat the surface to improve adhesion

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Tip 60 / Tip 80

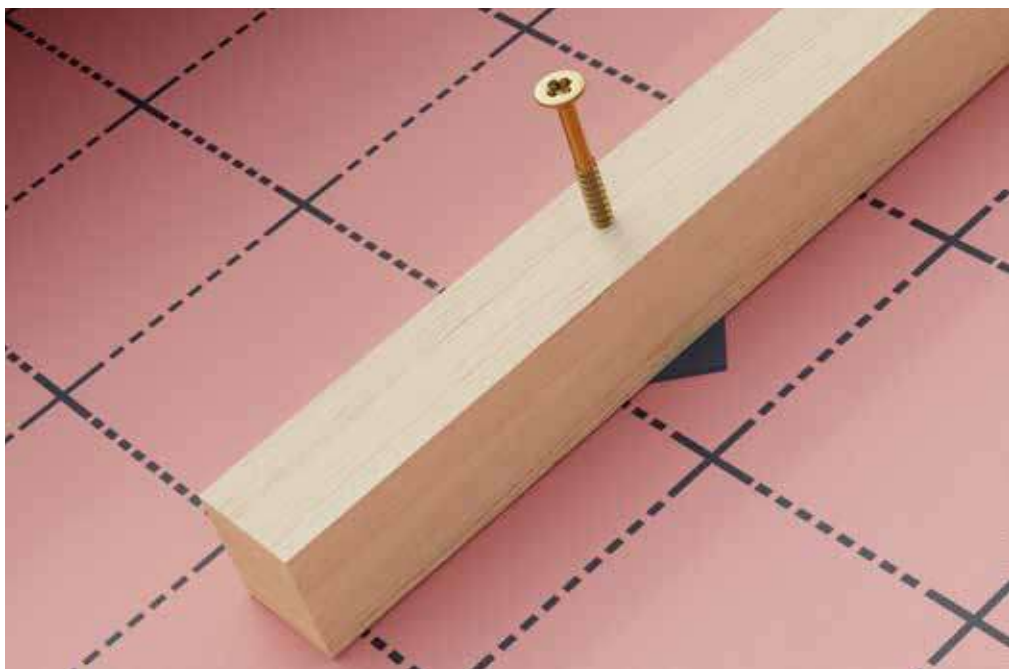
36

R3

QUICK OVERVIEW: STRENGTHS

The punctual nail sealing

- Self-adhesive single nail sealing patch
- Guarantees air, wind and water tightness of the breathable membranes
- Thanks to its high elasticity it is resistant to dilations and vibrations
- Different measurements for different needs



Composition:

- ① Silicone liner
- ② Acrylic glue
- ③ PVC foam

Codes and measures

| Version | Code | Measures (mmxmm xm) | Roll (units) | Box (pc) |
|---------|----------|---------------------|--------------|----------|
| Tip 60 | 02045000 | 60x40 x20 | 500 | 10 |
| Tip 80 | 02045002 | 80x80 x20 | 250 | 8 |

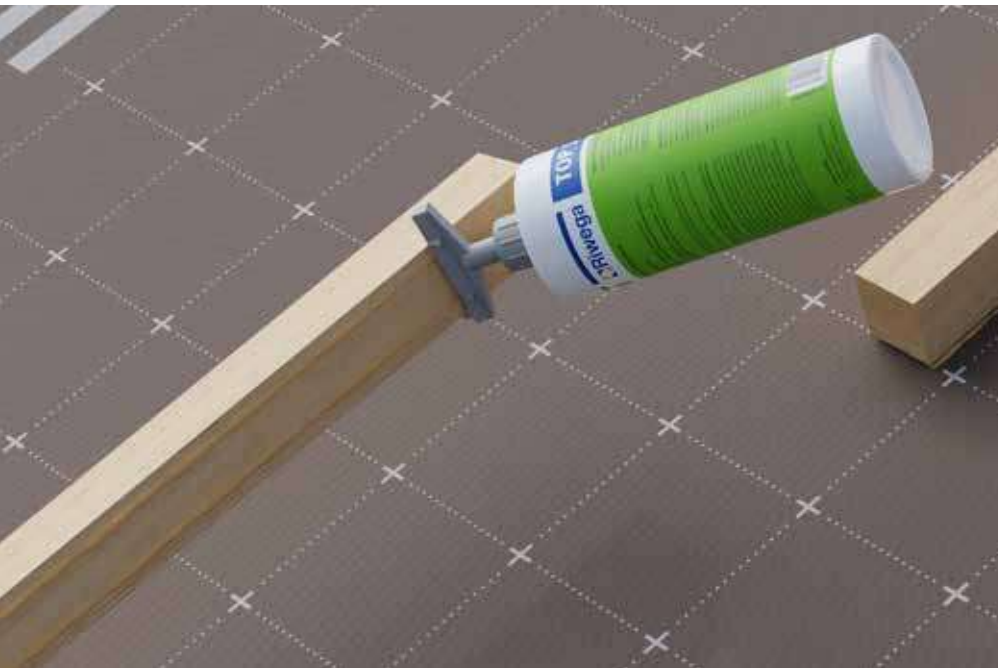
Features:



Technical data sheet

| | | |
|----------------------------|-------------|------------------------------------|
| Material | | PVC foam |
| Glue | | acrylic |
| Protection liner | | YES |
| Thickness | | 5 mm |
| Specific weight | | 120 kg/m³ |
| Peel adhesion | DIN EN 1939 | ≥5 N/25 mm |
| Shear strength | DIN EN 1943 | 250 g/625mm² |
| Working temperature | | +10°C / +30°C |
| Temperature resistance | | -30°C / +100°C |
| Resistance to condensation | | high |
| Resistance to aging | | high |
| UV stability | | high |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Top Seal



QUICK OVERVIEW: STRENGTHS

The liquid nail sealing

- Nail sealing in a cartridge
- Equipped with a special nozzle for a homogeneous and fast laying
- Guarantees air-, wind- and water tightness of the breathable membranes
- Excellent value for money

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|--------|---|
| Material | | 1-Kwet cross-linked polyurethane |
| Viscosity (20°C) | | ~1500 mPa.s |
| Density (20°C) | EN 542 | ~1,15 g/cm ³ |
| Formation of skin (20°C) | | ~12 min. |
| Partial hardening (20°C/50% UR) | | ~24 h |
| Total hardening (20°C/50% UR) | | ~7 d |
| Output | | ~20 g/m |
| Working temperature sigillante | | +7°C / +30°C |
| Working temperature ambiente | | from -5°C |
| Storage place | | dry, protected from UV rays, max. 25°C |
| Storage period | | max. 12 months |



Codes and measures

| Version | Code | Content (ml) | Box (pc) | Pallet (box) |
|-----------|-----------|--------------|----------|--------------|
| Cartridge | 020450042 | 1000 | 10 | 64 |
| Nozzle FD | 020450043 | - | 1 | - |

Ground connections

The most common problem with improperly assembled timber structures is undoubtedly the decay of the walls in the area of the foundation. This is an unfortunately widespread phenomenon that occurs a few years after construction and irrevocably damages the wooden structure, subsequently requiring extensive and very costly repairs to the lower part of the walls.

For this reason, Riwega has developed several solutions for sealing the base of the wall to the concrete foundation, but also some solutions for sealing wooden walls, especially on the exterior where a good base must be created for the thermal insulation composite system.

The offered solutions can be used on the construction site or already during pre-production. They are made of different materials such as butyl, bitumen and synthetic material. The product range consists of, among other solutions:

- A butyl adhesive tape with polypropylene fleece on the back, for the bottom/outer sealing of timber walls; it can be applied to the timber wall on site or during pre-production;
- A butyl adhesive tape with polypropylene fleece on the back, for the bottom/outer sealing of wooden walls. It can be applied during prefabrication or later on-site for sealing between the timber wall and the concrete curb (or slab);
- A polyethylene tape with 2 EPDM gaskets for sealing on the underside of the timber wall. The application of this product works if the base or foundation has unevenness or irregularities of 10 mm or less. It can be applied on-site or during prefabrication, by tacking it to the bottom surface of the timber wall;
- An EPDM tape with 2 pre-compressed polyurethane foam strips to seal and waterproof the underside of the timber wall; the application of this product works if the concrete base has unevenness or irregularities of a maximum of 20 mm; it can be applied by stapling it to the underside of the timber wall or by using a butyl adhesive strip on the lower and outer surface of the wall, depending on the version. It can be applied on-site or during prefabrication;
- A bitumen tape, covered with a non-woven polypropylene fabric. It is used to seal the underside of the timber wall and can only be applied on site.

Coll Vlies Plus

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R3



QUICK OVERVIEW: STRENGTHS

The solution against rising damp

- Self-adhesive butyl strip
- Designed to waterproof the connection point of the wooden wall over the foundation
- Can be applied cold to all building materials, prevents rising damp
- Can be over-plastered

new product

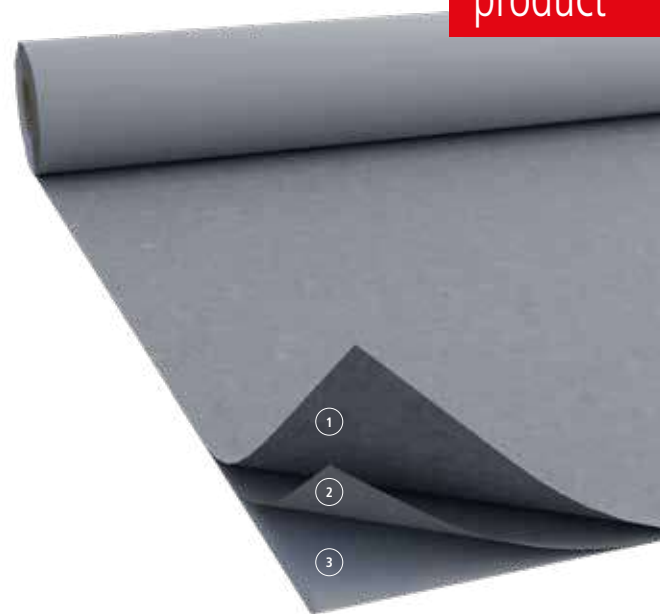
Features:



Classification:



| Technical data sheet | | |
|---|---------------------|---|
| Glue | | butyl |
| Glue carrier material | | non-woven fabric in PP |
| Protection liner | | YES |
| TVOC-test | ISO 16000-6 | 30 µg/m ³ |
| Thickness | | 1 mm |
| Tensile strength MD/CD** | EN 12311-1 | 115 / 100 N/50mm |
| Elongation at break MD/CD** | EN 12311-1 | 100 / 100 % |
| Probe tack | ASTM D 2979 | 8.0 N |
| 180° Peel Adhesion | ASTM D 1000 | 20 N/cm |
| Solid content | DIN EN ISO 10563 | 100 % |
| Vertical scrolling | ISO 7390 | 0 mm |
| Adhesion strength on concrete C2E on Fleece | EN 12004 EN 1348 | 0,9 N/mm ² |
| Working temperature | | +0°C / +40°C |
| Temperature resistance | | -30°C / +90°C |
| Storage place | | dry, protected from UV rays, +5°C / +40°C |
| Storage period | | max. 12 months |



Composition:

- Non-woven fabric in PP ①
- Butylic glue ②
- Silicone liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|---------------------|----------|-----------------|----------|--------------|
| Coll Vlies Plus 250 | 02044250 | 250x10 | 2 | 140 |
| Coll Vlies Plus 500 | 02044500 | 500x10 | 1 | 70 |

**MD = longitudinal CD = transversal

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Coll HDPE

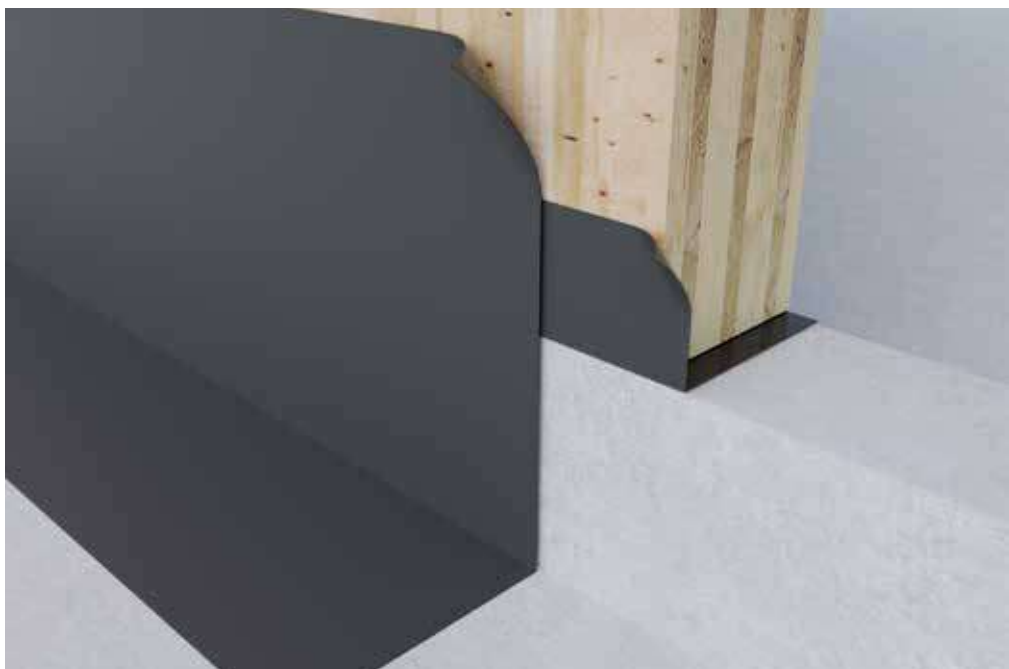
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R3

QUICK OVERVIEW: STRENGTHS

The best mechanical resistance

- Self-adhesive bituminous strip
- Designed to waterproof the connection point of the wooden wall and as an anticorrosive covering
- Can be applied "cold", a simple and quick application
- Excellent mechanical resistance against mechanical stress
- Optimum dielectric strength and high deformability



new product



Composition:

- ① HDPE film
- ② Bituminous compound
- ③ Silicone liner

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|----------------|-----------|-----------------|----------|--------------|
| Coll HDPE 250 | 020445031 | 250x20 | 2 | 40 |
| Coll HDPE 500 | 02044503 | 500x20 | 1 | 40 |
| Coll HDPE 1000 | 020445032 | 1000x20 | 1 | 25 |

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------|------------------|--|
| Glue | | bitumen |
| Glue carrier material | | HDPE |
| Protection liner | | YES |
| Thickness | | 1,5 mm |
| Water vapour permeability μ | EN 1931 | 90000 |
| Tensile strength MD/CD* | EN 12311-1 | 215 / 220 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 310 / 240 % |
| Tear resistance MD/CD* | EN 12310-1 | 135 / 135 N |
| Static load resistance Met. A/B | EN 12730 | 10 / 15 kg |
| Adhesion (to concrete at 23°C) | ASTM D 1000 | 2,9 N/mm |
| Permeability to radon gas | SP Swedish NT&RI | 5,7 x 10⁻¹² m²/s |
| Permeability to methane gas | CSI Method | <5 cc/m² x 24h x atm |
| Probe Tack | ASTM D 2979 | 7 N |
| Working temperature | | +5°C / +45°C |
| Operating temperature | | -40°C / +80°C |
| Fire class | EN 13501-1 | E |
| Storage place | | dry, protected from UV rays, +5°C / +40°C |
| Storage period | | max. 12 months |

*MD = longitudinal CD = transversal

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GAE ST



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R3

QUICK OVERVIEW: STRENGTHS

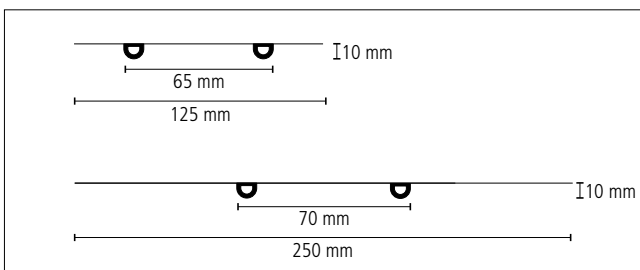
The protection of wooden elements

- Airtight sealing
- Waterproofing between wooden elements and other types of structure
- High resistance to high load pressures
- High resistance to UV rays and ageing
- Available in different sizes adaptable to the width of the wooden structure

Features:



Classification:



Technical data sheet

| | | |
|-------------------------------------|------------------|--------------------------------|
| Material | | LDPE/EPDM |
| Water tightness | EN 1928 | passed |
| Water vapour permeability | EN 1931-B | min. $3,0 \times 10^6$ s/m |
| Impact resistance | | min. 500 mm |
| Tensile strength MD/CD* | EN 12311-2 met.B | min. 20 / 20 N/mm ² |
| Elongation at break MD/CD* | EN 12311-2 met.B | min. 550 / 600 % |
| Nail tear strength MD/CD* | EN 12310-1 | min. 120 / 120 N |
| Fire class | EN 13501-1 | F |
| EPDM profile dimension | | ~10 mm |
| EPDM density | ISO 2781A | ~0,3 g/cm ³ |
| Compression set (50%) after 22h/23° | | 7 % |
| Compression set (50%) after 22h/70° | | 36 % |
| Deflection by compression (25%) | | 52 kN/m ² |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Composition:

- Film in PE ①
- Elastic EPDM pipes ②

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------|----------|-----------------|----------|--------------|
| GAE ST 125 | 02045005 | 125x25 | 8 | 6 |
| GAE ST 250 | 02045006 | 250x25 | 6 | 6 |

*MD = longitudinal CD = transversal

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GAE ST Plus

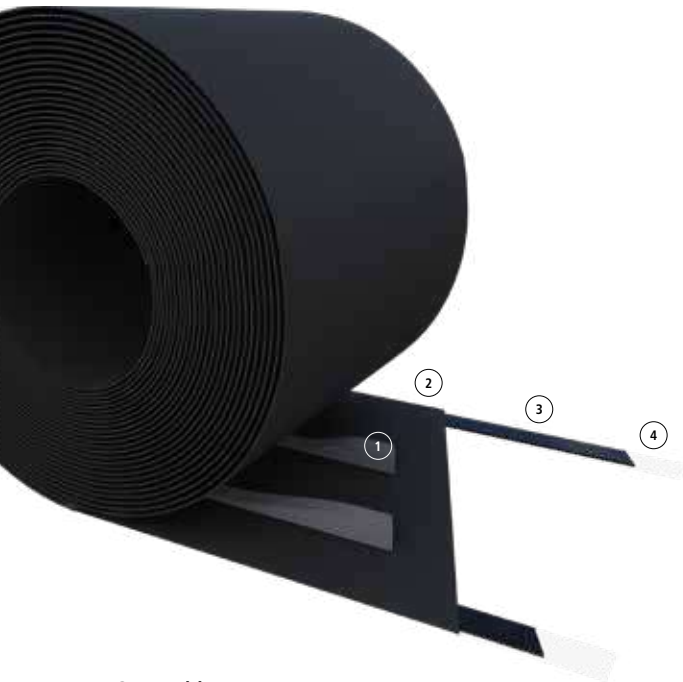
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R3

QUICK OVERVIEW: STRENGTHS

The expansive protection for wooden elements

- Sealing gasket
- Waterproofs the connection between wood and structures even with uneven surfaces
- Particularly resistant to UV rays and ageing
- Available in different sizes adaptable to the width of the wooden structure



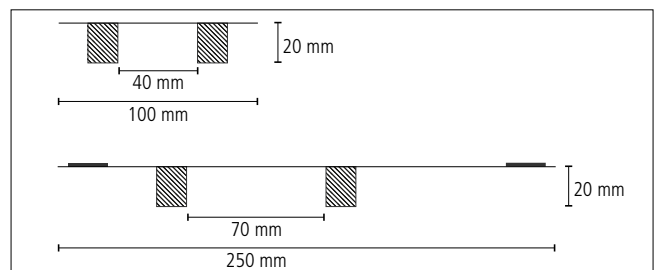
Composition:

- 1 Pre-compressed polyurethane foam
- 2 EPDM strip
- 3 Butylic glue (GAE ST Plus 250)
- 4 Silicone liner (GAE ST Plus 250)

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|-----------------|-----------|-----------------|----------|--------------|
| GAE ST Plus 100 | 020450060 | 100x25 | 3 | 24 |
| GAE ST Plus 250 | 020450061 | 250x25 | 1 | 24 |

Features:



Technical data sheet

| | | |
|-----------------------------|----------------|---|
| Strip material | | EPDM based rubber |
| Gasket material | | polyurethane foam |
| Glue (GAE ST Plus 250) | | butylic (2x20 mm) |
| Thickness EPDM | | 0,8 mm |
| Tear resistance | DIN 53504 | ≥25 kN/m |
| Tensile strength | DIN 53504 | ≥6,5 mPa |
| Elongation at break | DIN 53504 | ≥300 % |
| Dimensional tolerance | DIN 7715 T5 P3 | compliant |
| Vapour passage resistance μ | DIN EN 1931 | ~32000 |
| Working temperature | | +5°C / +35°C |
| Temperature resistance | | -30°C / +100°C |
| Fire class | DIN 13501 T1 | E |
| Ozone and UV stability | DIN 7864 T1 | compliant |
| Storage place | | dry, protected from UV rays, +1°C / +25°C |
| Storage period | | max. 12 months |

GAE ST Bitum

42

R3



QUICK OVERVIEW: STRENGTHS

The protection with high mechanical resistance

- Bitumen and non-woven strip
- Prevents rising humidity between concrete and wooden structures
- Available in different sizes adaptable to the width of the wooden structure
- High resistance to high load pressures
- Quick and easy cold laying

Features:



new product



Technical data sheet

| | | |
|-----------------------------|---------------|--|
| Material | | non-woven fabric in PP |
| Glue | | BPE elastomer bitumen |
| Reinforcement | | PET armouring |
| Thickness | | 4 mm |
| Density | | 1300 kg/m ³ |
| Visible defects | EN 1850-1 | passed |
| Water tightness | EN 1928 met.B | passed |
| Water vapour permeability μ | EN 1931 | 20000 |
| Thermal conductivity (λ) | | 0,17 W/mK |
| Dynamic stiffness | EN 29052-1 | s't=s'= 422 MN/m ² s't=s'= 917 MN/m ² |
| Storage place | | dry, protected from UV rays, +5°C / +40°C |
| Storage period | | max. 12 months |

Composition:

- Non-woven fabric in PP ①
- BPE elastomer bitumen ②
- Non-woven fabric in PP ③

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------------|-----------|-----------------|----------|--------------|
| GAE ST Bitum 140 | 020450065 | 140x10 | 1 | 140 |
| GAE ST Bitum 200 | 020450066 | 200x10 | 1 | 100 |

Sealings for wooden structures

The air and wind tightness of timber constructions is very often achieved by using special gaskets, which can be made of EPDM or pre-compressed polyurethane foam.

EPDM gaskets find their place at the joints between different construction elements. The Riwega range includes two types: a compact EPDM gasket used at joints between wooden walls and floors in CLT (X-lam) or frame constructions. Due to its uneven surface, this gasket reduces the passage of acoustic vibrations in all wooden structures. Another product is the EPDM foam gasket, which is used at joints of CLT (X-lam) or frame constructions and primarily has an airtight function.

Pre-compressed polyurethane foam tapes (GAE BG2), on the other hand, are used as a solution for special situations in carpentry to prevent the penetration of water and wind inside joints; other possible applications are the sealing of insulation packages or the sealing between the wooden beam supports in log cabin walls.

GAE LVD



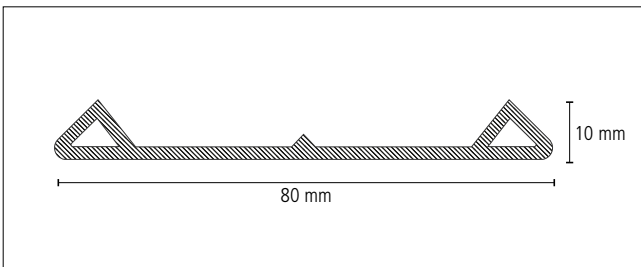
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R3

QUICK OVERVIEW: STRENGTHS

The essential for wooden joints

- Sealing gasket
- Waterproofing to air, water and wind of the connections in the wooden houses
- Resistant to dilatation and vibrations due to its high elasticity
- Also ideal for sealing the lower joint of the windows and doors

Features:



Composition:

Expanded elastic EPDM ①

Technical data sheet

| | | |
|-----------------------|--|--------------------------------|
| Material | | expanded EPDM |
| Side overhangs height | | ~10 mm |
| Density | | 0,5 g/cm ³ |
| Working temperature | | -45°C / +120°C |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|------------|----------|-----------------|----------|--------------|
| GAE LVD 80 | 02045007 | 80x25 | 12 | 1 |

GAE STG Double

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R3

QUICK OVERVIEW: STRENGTHS

Stop the spread of noise

- Sealing gasket
- Stops the passage of footstep vibrations for a better noise reduction
- Waterproofing to air, water and wind of the connections in the wooden houses
- Divisible in half for one use versatile in all laying conditions
- Quick and easy application



①

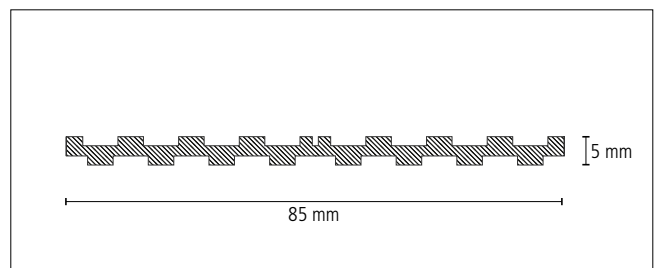
Composition:

- ① Compact EPDM

Codes and measures

| Version | Code | Measures (mmxm) | Box (pc) | Pallet (box) |
|----------------|-----------|-----------------|----------|--------------|
| GAE STG Double | 020450081 | 85 (42,5x2) x25 | 12 | 4 |

Features:



Technical data sheet

| | | |
|---------------------|----------------|--------------------------------|
| Material | | rigid EPDM |
| Thickness | | 5 mm |
| Density | | 1,3 g/cm ³ |
| Elongation at break | ISO 37 Tipo 1 | ≥250 % |
| Breaking load | ISO 37 Tipo 1 | ≥5 N/mm ² |
| Hardness (Shore A) | ASTM D 2240 3s | 60 |
| 100% module | | ≥1,5 N/mm ² |
| Working temperature | | -45°C / +130°C |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

GAE BG2

45

R3



QUICK OVERVIEW: STRENGTHS

The self-expanding BG2 class

- Precompressed self-expanding seal
- The elasticity of the joint, resistant to expansion and vibrations
- Suitable for airtight sealing of various joints in the building
- Ideal for ensuring the thermo-acoustic insulation of the connection joints

Features:



Classification:



Technical data sheet

| | | |
|---------------------------------------|------------------|--|
| Material | | polyurethane foam |
| Glue | | acrylic |
| Protection liner | | SI |
| Stress class | DIN 18452:2009 | BG2 |
| Permeability coefficient (joints) | DIN EN 12114 | $a_n \leq 1,0 \text{ m}^3/[\text{h m (daPa)}]^n$ |
| Tightness against driving rain | DIN EN 1027 | $\geq 300 \text{ Pa}$ |
| Compat. with other building materials | DIN 18542:2009 | compliant |
| Resist. to UV and atmospheric agents | DIN 18542:2009 | compliant |
| Dimensional tolerance | DIN 7715 T5 P3 | compliant |
| Thermal conductivity (λ) | DIN EN 12667 | npd* |
| Vapour passage resistance μ | DIN EN ISO 12572 | ≤ 100 |
| Emissions | EMICODE® | very low |
| Working temperature | DIN 18542:2009 | -30°C / +90°C |
| Fire class | DIN 4102-1 | B1 |
| Storage place | | dry, protected from UV rays, +1°C / +20°C |
| Storage period | | max. 12 months |



Composition:

- Pre-compressed polyurethane foam ①
- PET reinforced acrylic glue ②
- Silicone liner ③

Codes and measures

| Version | Code | Measures (mmxm) | Joints (mm) | Box (pc) |
|------------|----------|-----------------|-------------|----------|
| GAE BG2 20 | 02142017 | 20x12 | 2-6 | 15 |
| GAE BG2 30 | 02105020 | 30x4,3 | 6-15 | 10 |

*no performance determined

Riwega Srl is not responsible for negligent and improper use of its products

Bituminous adhesive stripes

A fundamental requirement for the durability and correct functioning of buildings is waterproofing and humidity; in fact, water infiltrations in any part of the building are the cause of degradation of structures, rot, mould and fungus formation, of a significant reduction in the insulating capacity of materials and a drastic decline in living comfort. It is essential to identify which are the most sensitive points of the building and to apply solutions that make them protected and secure. In these cases, one of the most widely used materials for waterproofing is bitumen.

Riwega bituminous adhesive stripes

Riwega has decided to use bitumen in the form of adhesive glue, which can be a solution to various needs if combined with specific supports.

The fields of application of the bituminous adhesive stripes are as follows:

A) **Coll Solar**

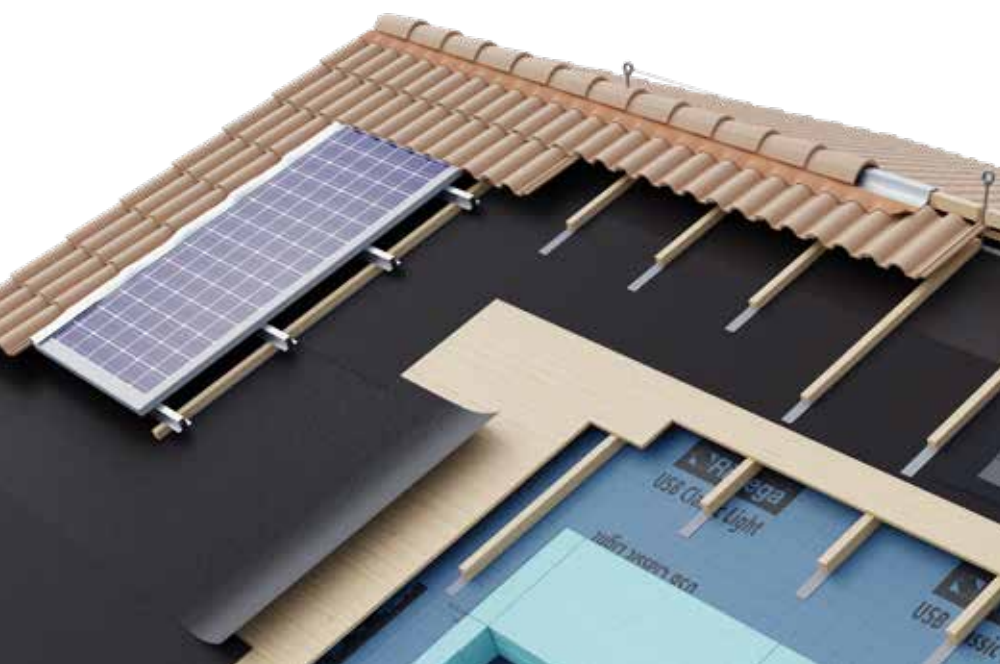
Sealing under photovoltaic panels: Normally, sheet metal „trays“ are used in this case; instead, a self-adhesive bitumen membrane with coated aluminium foil can be installed to optimise costs and reduce installation time. This is characterised by water impermeability, slip resistance, mechanical resistance, UV and temperature resistance and durability.

B) **Coll Radon**

Foundation waterproofing can have several functions: It prevents rising humidity from the concrete of the foundation, it acts as a vapour barrier and, most importantly, it provides an excellent barrier to rising radon gas.

For these cases, Riwega proposes a self-adhesive bitumen membrane coated with an anti-corrosive aluminium foil; this product is glued to the surface of the house foundation and then covered with the concrete screed.

Coll Solar



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R3

QUICK OVERVIEW: STRENGTHS

The ideal one for integrated photovoltaic panels

- Self-adhesive bituminous strip
- Ideal under rear-ventilated photovoltaic systems
- Can be applied "cold", a simple and quick application
- Antislip, excellent puncture resistance
- High resistance to atmospheric agents and ageing

Features:



Classification:



| Technical data sheet | | |
|---------------------------------|------------|--|
| Glue | | bitumen |
| Glue carrier material | | aluminium |
| Thickness | EN 1849-1 | 1,2 mm |
| Tensile strength MD/CD* | EN 12311-1 | 180 / 190 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 20 / 30 % |
| Tear resistance MD/CD* | EN 12310-1 | 45 / 40 N |
| Static load resistance met. A/B | EN 12730 | 15 / 20 kg |
| Peel resistance | EN 12316-1 | 20 N/50mm |
| Shear resistance MD/CD* | EN 12317-1 | 190 / 210 N/50mm |
| Water tightness (≥60 kPa) | EN 1928 | passed |
| Sd value | | ≥1500 m |
| Working temperature | | +5°C / +45°C |
| Operating temperature | | -40°C / +80°C |
| Fire class | DIN 4102 | B2 |
| | EN 13501-1 | E |
| Storage place | | dry, protected from UV rays, +5°C / +40°C |
| Storage period | | max. 12 months |



Composition:

- Non-slip-embossed aluminium film ①
- Bituminous compound ②
- Protection liner ③

Codes and measures

| Version | Code | Measures (m) | Box (pc) | Pallet (box) |
|------------|----------|--------------|----------|--------------|
| Coll Solar | 02044501 | 1x25 | 1 | 26 |

*MD = longitudinal CD = transversal
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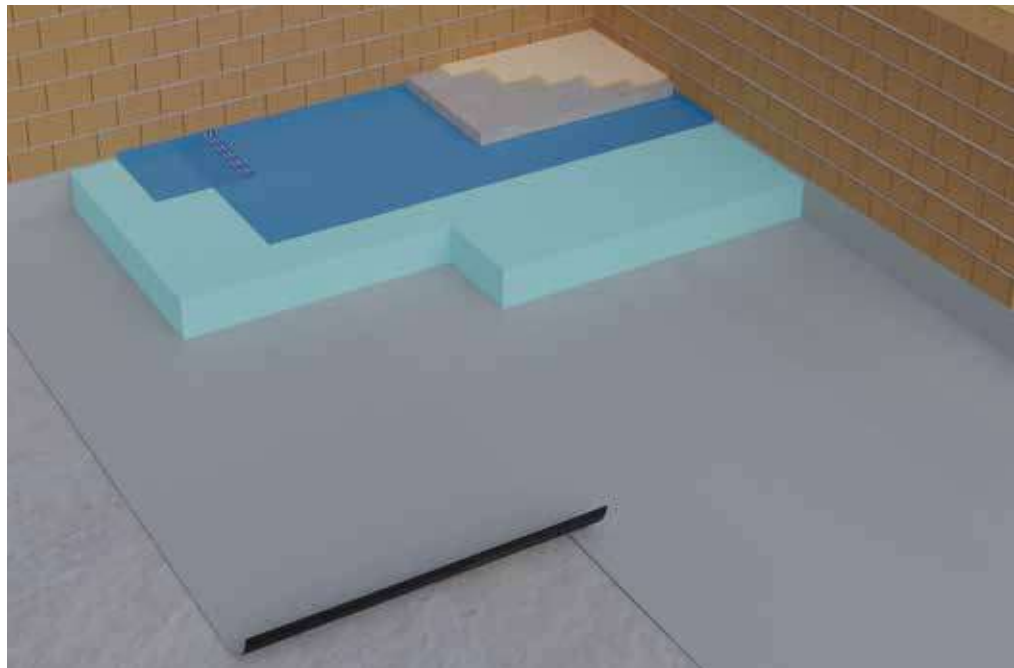
Coll Radon

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R3

QUICK OVERVIEW: STRENGTHS

The invincible against radon

- Self-adhesive bituminous strip
- Certified as a barrier against radon gas
- Vapour barrier against radon and methane
- Can be applied "cold", a simple and quick application
- Reinforced surface, excellent puncture resistance



Composition:

- 1 Alkali resistant PE-protection film
- 2 Aluminium film
- 3 Bituminous compound
- 4 Protection liner

Codes and measures

| Version | Code | Measures (m) | Box (pc) | Pallet (box) |
|------------|----------|--------------|----------|--------------|
| Coll Radon | 02044502 | 1x25 | 1 | 25 |

Features:



Classification:



Technical data sheet

| | | |
|-------------------------------------|----------------|--|
| Glue | | bitumen |
| Glue carrier material | | aluminium.PE |
| Thickness | EN 1849-1 | 1,2 mm |
| Tensile strength MD/CD* | EN 12311-1 | 180 / 190 N/50mm |
| Elongation at break MD/CD* | EN 12311-1 | 15 / 20 % |
| Tear resistance MD/CD* | EN 12310-1 | 70 / 70 N |
| Static load resistance met. A/B | EN 12730 | 15 / 20 kg |
| Peel resistance | EN 12316-1 | 35 N/50mm |
| Water tightness (≥60 kPa) | EN 1928 | passed |
| Sd value | | ≥1500 m |
| Coefficient of radon gas transmitt. | SP-Method 3873 | 0,47 x 10⁻⁹ m/s |
| Permeability to radon gas | SP-Method 3873 | 0,56 x 10⁻¹² m²/s |
| Permeability to methane gas | CSI Method | <5 cc/m² x 24h x atm |
| Working temperature | | +5°C / +45°C |
| Operating temperature | | -40°C / +80°C |
| Fire class | DIN 4102 | B2 |
| | EN 13501-1 | E |
| Storage place | | dry, protected from UV rays, +5°C / +40°C |
| Storage period | | max. 12 months |

*MD = longitudinal CD = transversal

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Adhesives and sealants

In various applications there are situations where it is necessary to work with adhesives or sealants in cartridges; Riwega has developed some solutions for this:

- An acrylic adhesive/sealant in a cartridge with thixotropic properties (which allow subsequent processing) for bonding vapour control layers, breathable membranes, or sealing tapes for windows and doors to various types of building materials (wood, brick, plaster, mortar, concrete, etc.).
- A butyl sealant in cartridge that simplifies sealing in difficult-to-handle situations; useful in cases where sealing with tape is not possible. It can be used as an adhesive for bonding vapour control layers, breathable membranes, or sealing tapes for windows and doors to various types of building materials (wood, brick, plaster, mortar, concrete, etc.).
- Riwega products are ideal for installing vapour control layers on roofs where conventional installation is difficult. E.g. on brick-concrete roofs where installation with staples or nails is not possible; thus, the vapour control layer can be professionally installed on the substrate.

Sil Butyl

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R3

QUICK OVERVIEW: STRENGTHS

The universal toluene-free adhesive

- Butyl rubber-based sealant
- Indicated for bonding and sealing of membranes and vapour screens
- High elasticity, even in case of movements of the structure
- High resistance against atmospheric agents and ageing
- Toluene-free



Features:



Classification:



Technical data sheet

| | | |
|----------------------------------|--------------|---|
| Material | | butylic glue |
| Density | EN ISO 10563 | ~1,65 g/cm³ |
| Output cartridge | | ~10 m |
| Output tube | | ~20 m |
| Hardness (Shore A) | EN ISO 53505 | ~15 |
| Min. thickness per layer | | 6 mm |
| Min. width per layer | | 10 - 15 mm |
| Resistance to atmospheric agents | | stable |
| Volumetric variation | | 10 % |
| Cohesion time | DIN 18545-B | 1 h |
| Viscosity | DIN EN 27390 | stable |
| Cleaning (fresh applied) | | with petrol / turpentine |
| Fire class | EN 13501-1 | E |
| | DIN 4102 | B2 |
| Working temperature | | +5°C / +40°C |
| Operating temperature | DIN 52455-4 | -40°C / +90°C |
| Storage place | | dry, protected from UV rays, +15°C / +25°C |
| Storage period | | max. 12 months |

Codes and measures

| Version | Code | Content (ml) | Box (pc) | Pallet (box) |
|-----------|----------|--------------|----------|--------------|
| Cartridge | 02040406 | 310 | 20 | 60 |
| Tube | 02040407 | 600 | 20 | - |

Sil AC



QUICK OVERVIEW: STRENGTHS

The universal acrylic sealant

- Acrylic acid esters-based copolymer sealant
- Indicated for bonding and sealing of membranes and vapour screens
- Thixotropic, filling and sealing properties
- High adhesion to all surfaces, solvent-free

Features:



Technical data sheet

| | | |
|-----------------------|----------|---|
| Material | | acrylic acid ester-based copolymer with additives |
| Density | | ~1,00 g/cm ³ |
| Output | | ~30 / 40 g/m |
| Formation of skin | | da ~ 30 min. immediate adhesiveness |
| Drying time | | 1 / 7 d |
| Viscosity | | mellow and thixotropic |
| Emissions | EMICODE® | very low |
| Working temperature | | -5°C / +40°C recommended over +5°C |
| Operating temperature | | -30°C / +80°C |
| Storage place | | dry, protected from UV rays, +15°C / +25°C |
| Storage period | | max. 12 months |



Codes and measures

| Version | Code | Content (ml) | Box (pc) | Pallet (box) |
|-----------|----------|--------------|----------|--------------|
| Cartridge | 02040400 | 310 | 20 | 60 |
| Tube | 02040401 | 600 | 20 | - |

Glue DB

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R3

QUICK OVERVIEW: STRENGTHS

The perfect adhesion on cement surfaces

- Polyurethane monocomponent foam
- Indicated for bonding membranes and vapour screens on all building surfaces
- Fast-drying and high resistance to ageing
- Can also be used to bond synthetic insulation panels
- Easy and fast application



Features:



Technical data sheet

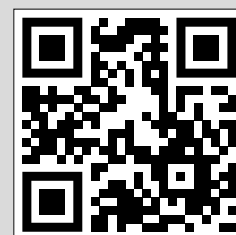
| Material | | polyurethane monocomponent foam |
|------------------------------------|---------------|--|
| Density | EN ISO 10563 | 15 / 25 kg/m ³ |
| Output free foaming (20°C/65% UR) | | 47 l (dm ³) |
| Thermal conductivity (20°C/65% UR) | DIN 56612 | ~0,035 W/mK |
| Dimensional stability | FEICA TM 1004 | ±5 % |
| DVA Vapour passage resistance | DIN 53429 | 50 / 60 g/m ² /24h |
| Cutable time (20°C/65% UR) | | 20 - 30 min. |
| Formation of skin (20°C/65% UR) | | 8 - 12 min. |
| Pressure resistance (def. 10%) | DIN 53421 | 5 / 7 N/cm ² |
| Fire class | DIN 4102-1 | B3 |
| Working can temperature | | +10°C / +30°C |
| Working environment temperature | | +3°C / +35°C |
| Optimal working temperature | | +15°C / +25°C |
| Temperature resistance | | -40°C / +80°C |
| Storage place | | dry, protected from UV rays, max. 20°C |
| Storage period | | max. 15 months |

Codes and measures

| Version | Code | Content (ml) | Box (pc) | Pallet (box) |
|---------|----------|--------------|----------|--------------|
| Can | 02040510 | 750 | 12 | 56 |

Technical manual: Roof and wall / Windows installation

Find the solution for your projects' or working sites' situation



Find out more
on our website!

AIR Stop line

One of the major problems for the building envelope's air and wind tightness is represented by the many junctions in the structure; in fact, there are many points in the house where walls and roofs are crossed by electric corrugated pipes, hydraulic pipes, vents, chimneys, CMV pipes, etc. In such situations, it's essential, that each potential air passage is perfectly sealed. Otherwise, these sensible points could become a thermal bridge, where crossing air forms condensation inside the building envelope.

To guarantee these steps' sealing, Riwega has developed the Air Stop line which boasts an interesting series of products:

A) **Universal collars**

Produced with pre-engraved EPDM sheets and equipped with acrylic adhesive tape on the perimeter; in various sizes, they are useful for sealing passages of single cables, corrugated pipes, vents and other types of pipes with various diameters.

B) **Single EPDM collars**

Installed on an aluminium or PP support coated with butyl glue; these elements are used, choosing the desired diameter, to seal the single passages, from 4 mm diameter cables, up to 25 mm diameter pipes.

C) **Single EPDM collars for chimney flues**

Available in various diameters, resistant to high temperatures. They are mounted on aluminium support coated with butyl adhesive and are used for individual sealing of stove chimneys.

D) **Multi-pass silicone collars**

Coupled with aluminium support coated with butyl glue, with the function to seal several electrical cables or corrugated pipes (up to 6) that pass through the casing in the same place.

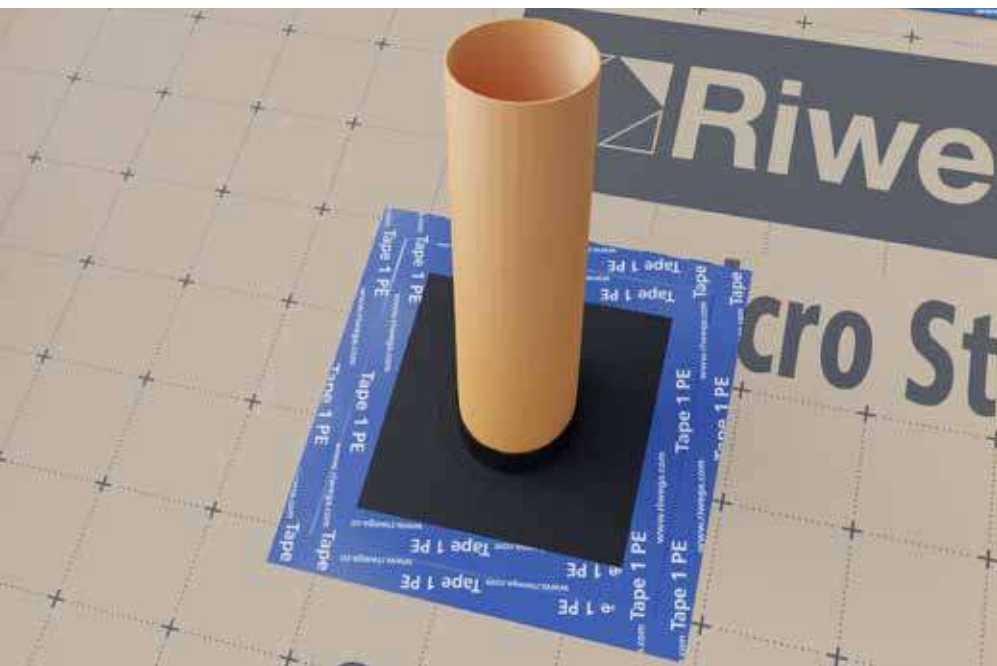
E) **Air stoppers**

To seal the passage of air inside the corrugated pipes; they allow the passage of electric cables through the end membranes of the caps.

AIR Stop Universal

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R3



QUICK OVERVIEW: STRENGTHS

The universal with a pre-cut diameter

- Self-adhesive sealing collar
- Multiple pre-cut holes for adapt to cables and pipes of every diameter
- Fast and secure sealing thanks to applied adhesive tape
- Ideal for sealing against water, air, wind all breathable membranes and vapour barriers
- For roof and wall

Features:

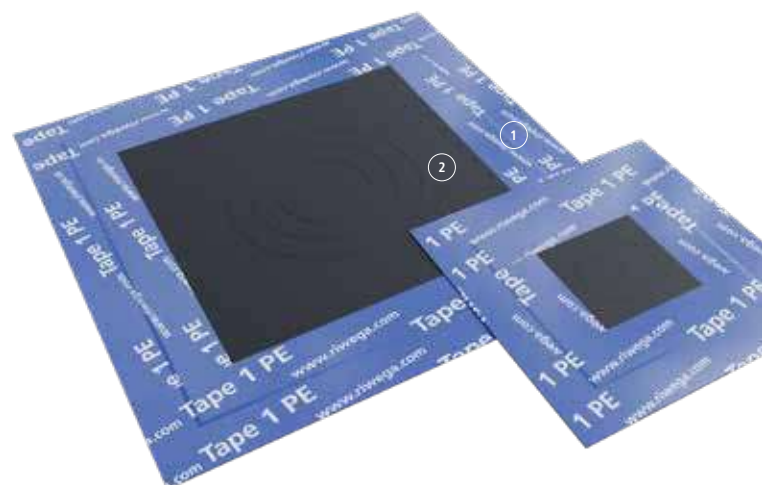


Technical data sheet - Adhesiv

| | | |
|---------------------------------|--------------|--------------------------|
| Glue | | disp. based polyacrylate |
| Glue carrier material | | PE surface |
| Reinforcing mesh | | YES |
| Protection liner | | YES |
| Solvents and emollients | | NO |
| Thickness | DIN EN 14410 | 0,27 - 0,29 mm |
| Tear resistance with elasticity | DIN EN 14410 | ≥25 N/25 mm; 300 % |
| Resistance to condensation | | very high |
| Resistance to aging | | very high |
| Initial adhesion (Tack) | | very high |
| UV stability | | 24 months |
| Working temperature | | +5°C / +30°C |
| Temperature resistance | | -30°C / +100°C |

Technical data sheet - EPDM

| | | |
|------------------------|------------|-----------------------------|
| Hardness (Shore A) | | 67° |
| Tensile strength | EN 12311-2 | 9,4 MPa |
| Tear resistance | EN 12310-2 | 55 kN/m |
| Elongation at break | | 430 % |
| Sd value | EN 1931 | ~60 m |
| Temperature resistance | | -45°C / +130°C |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |



Composition:

Adhesive Tape 1 PE ①

EPDM sheet with pre-engravings ②

Codes and measures

| Version | Code | Measures (mm) | Internal diameters (mm) |
|---------|----------|---------------|---|
| 60/135 | 02202500 | 345x345 | 60 (1 hole) for ø80-125 pipes 100 (1 hole) for ø125-160 pipes 135 (1 hole) for ø160-200 pipes |
| 2/55 | 02202510 | 195x195 | 3 (4 holes) for ø7-10 cables 7 (2 holes) for ø10-22 cables 55 (1 hole) for ø80 pipes |

AIR Stop EPDM

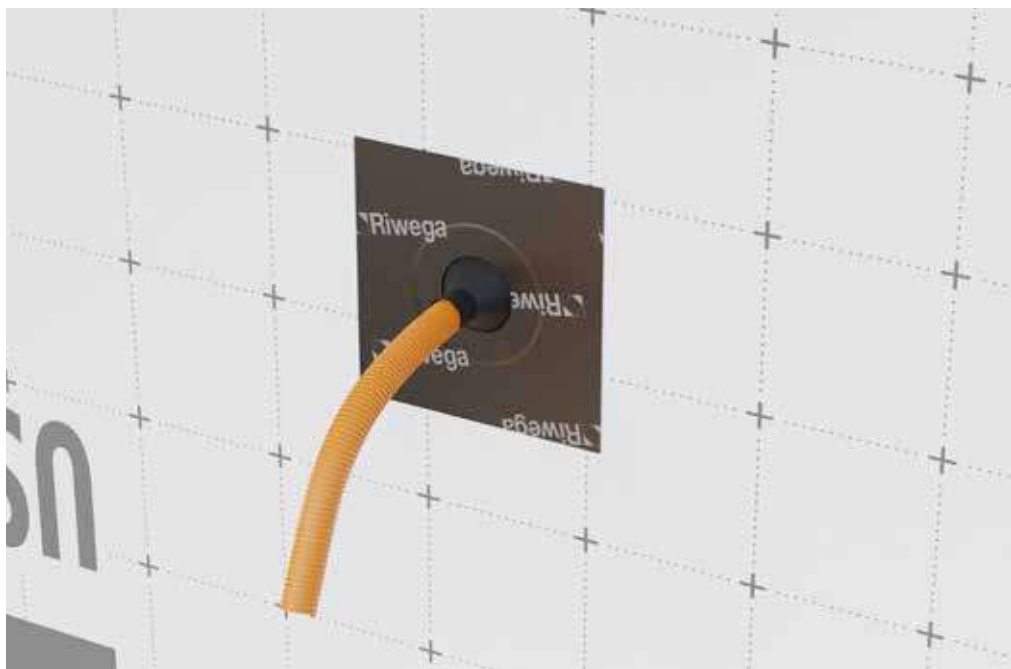
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R3

QUICK OVERVIEW: STRENGTHS

The ally for the sealing of pipes and cables

- Self-adhesive sealing collar
- Multiple measures to adapt to cables and pipes of each diameter
- Particularly resistant to UV rays and ageing
- Ideal for sealing against water, air, wind all breathable membranes and vapour barriers
- Aluminium surface, on request with plasterable TNT



AIR Stop D1 Ø 4-8 mm

| | |
|---------------------------------|---|
| Code | 02201504 |
| Internal diameter of the collar | 4-8 mm |
| Base dimension | 150x150 mm |
| Type of application | tubes: electrical, telephone, aerial and satellite dish |
| Box | 10 pcs |



AIR Stop D1 Ø 8-11 mm

| | |
|---------------------------------|---|
| Code | 02201508 |
| Internal diameter of the collar | 8-11 mm |
| Base dimension | 150x150 mm |
| Type of application | tubes: electrical, telephone, aerial and satellite dish |
| Box | 10 pcs |



AIR Stop GD21

| | |
|---------------------------------|---|
| Code | 02201515 |
| Internal diameter of the collar | 15-22 mm |
| Base dimension | 150x150 mm |
| Type of application | tubes: electrical, plumbing, of heating |
| Box | 10 pcs |



AIR Stop GD22

| | |
|---------------------------------|-----------------------------|
| Code | 02201525 |
| Internal diameter of the collar | 25-32 mm |
| Base dimension | 150x150 mm |
| Type of application | tubes: plumbing, of heating |
| Box | 10 pcs |

AIR Stop EPDM

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AIR Stop GD23

| | |
|---------------------------------|--|
| Code | 02202242 |
| Internal diameter of the collar | 42-55 mm |
| Base dimension | 230x230 mm |
| Type of application | tubes: plumbing, of solar panels, of exhaust |
| Box | 2 pcs |



AIR Stop RGD50

| | |
|---------------------------------|------------------------------------|
| Code | 02202250 |
| Internal diameter of the collar | 50-65 mm |
| Base dimension | 230x230 mm |
| Type of application | tubes: of solar panels, of exhaust |
| Box | 2 pcs |



AIR Stop RGD75

| | |
|---------------------------------|----------------------------|
| Code | 02202275 |
| Internal diameter of the collar | 75-90 mm |
| Base dimension | 230x230 mm |
| Type of application | tubes: of vents, hood, gas |
| Box | 2 pcs |



AIR Stop RGD100

| | |
|---------------------------------|----------------------------|
| Code | 02202299 |
| Internal diameter of the collar | 100-110 mm |
| Base dimension | 320x320 mm |
| Type of application | tubes: of vents, hood, gas |
| Box | 2 pcs |



AIR Stop FRGD130

| | |
|---------------------------------|----------------------------|
| Code | 02203510 |
| Internal diameter of the collar | 100-130 mm |
| Base dimension | 350x350 mm |
| Type of application | tubes: of vents, hood, gas |
| Box | 2 pcs |



AIR Stop FRGD150

| | |
|---------------------------------|----------------------------|
| Code | 02203515 |
| Internal diameter of the collar | 150-165 mm |
| Base dimension | 350x350 mm |
| Type of application | tubes: of vents, hood, gas |
| Box | 2 pcs |



AIR Stop RGD200

| | |
|---------------------------------|----------------------------|
| Code | 02203516 |
| Internal diameter of the collar | 200x220 mm* |
| Base dimension | 420x420 mm |
| Type of application | tubes: of vents, hood, gas |
| Box | 2 pcs |



AIR Stop HOT

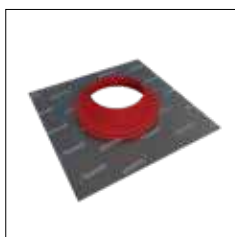
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R3

QUICK OVERVIEW: STRENGTHS

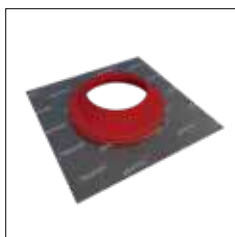
The first one which works up to 250°C

- Self-adhesive sealing collar
- Designed for waterproofing chimneys
- Multiple measures to adapt to pipes of all diameters
- Particularly resistant to UV rays and ageing
- Ideal for sealing against water, air, wind all breathable membranes and vapour barriers



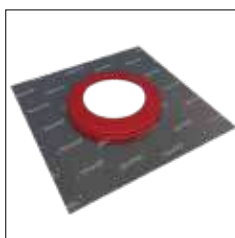
AIR Stop HOT FRGD100

| | |
|---------------------------------|----------------|
| Code | 02203530 |
| Internal diameter of the collar | 100-125 mm |
| Base dimension | 350x350 mm |
| Type of application | stove chimneys |
| Box | 2 pcs |



AIR Stop HOT FRGD150

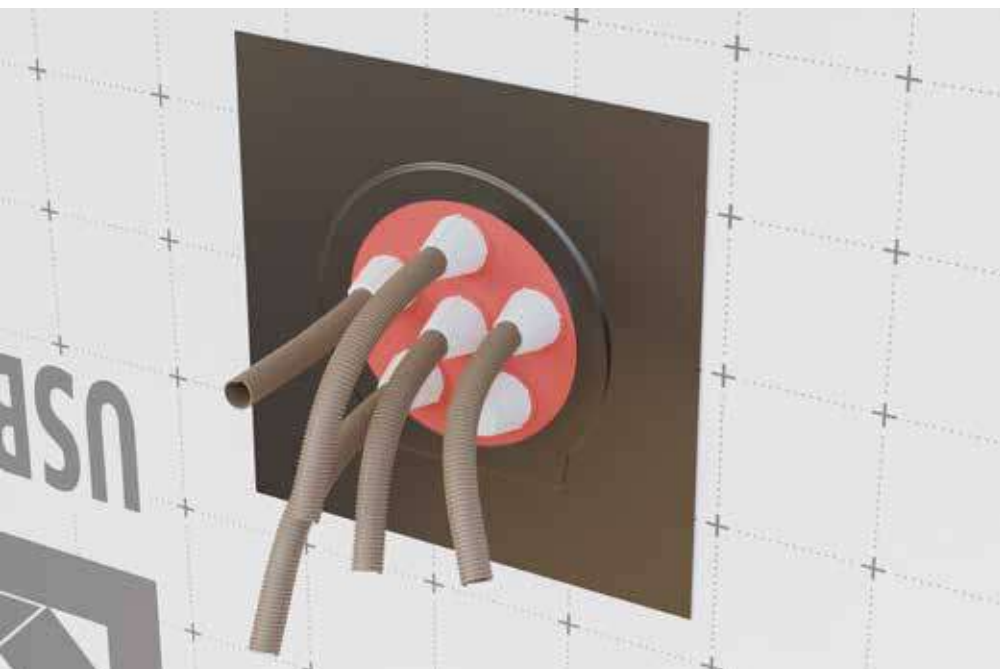
| | |
|---------------------------------|----------------|
| Code | 02203531 |
| Internal diameter of the collar | 150-165 mm |
| Base dimension | 350x350 mm |
| Type of application | stove chimneys |
| Box | 2 pcs |



AIR Stop HOT FRGD180

| | |
|---------------------------------|----------------|
| Code | 02203532 |
| Internal diameter of the collar | 180-200 mm |
| Base dimension | 400x400 mm |
| Type of application | stove chimneys |
| Box | 2 pcs |

AIR Stop M-TEC 6

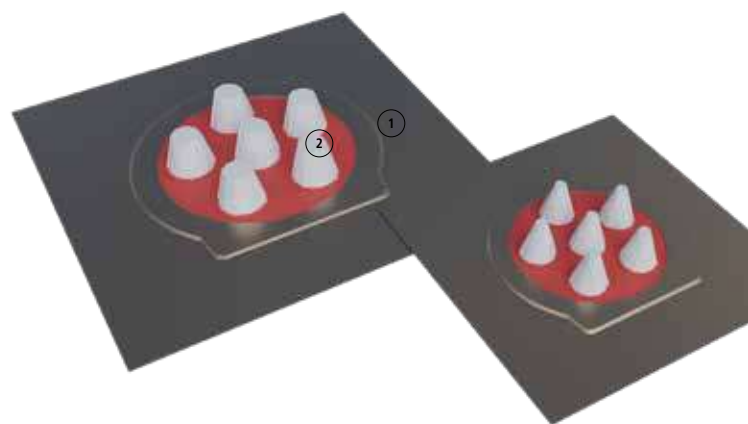
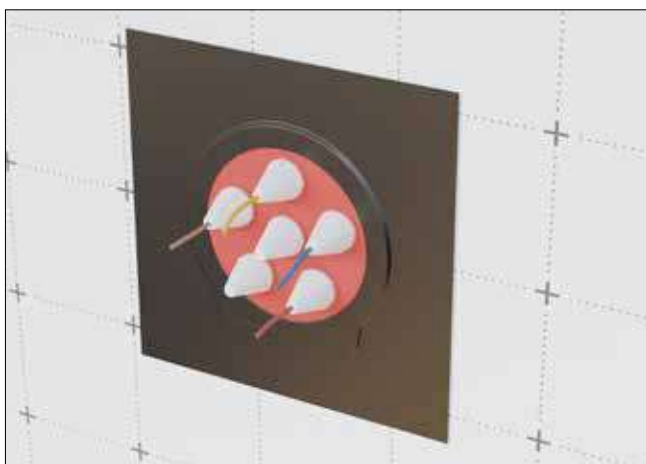


QUICK OVERVIEW: STRENGTHS

The sealing for the electric installations

- Self-adhesive sealing collar
- Available in two variants, one for cables and one for corrugated pipes
- Designed for sealing up to six holes of different diameters
- Particularly resistant to UV rays and ageing
- Adheres perfectly to breathable membranes, vapour barriers and any laying surface

Features:



Composition:

- Aluminium-butyl support ①
- Rubber ②

Technical data sheet

| | | |
|------------------------|--|-----------------------------|
| Material | | rubber/alu/butyl |
| Number of inserts | | 6 |
| Application M-TEC C | | electrical tubes/satellite |
| Application M-TEC T | | corrugated tubes |
| Working temperature | | from +4°C |
| Temperature resistance | | -20°C / +100°C |
| UV stability | | stable |
| Storage place | | dry, protected from UV rays |
| Storage period | | max. 24 months |

Codes and measures

| Version | Code | Measures (mm) | Diameters (mm) | Box (pc) |
|---------|----------|---------------|----------------|----------|
| M-TEC C | 02202310 | 230x230 | 4-11 | 4 |
| M-TEC T | 02202320 | 320x320 | 16-25 | 4 |

AIR Stopper

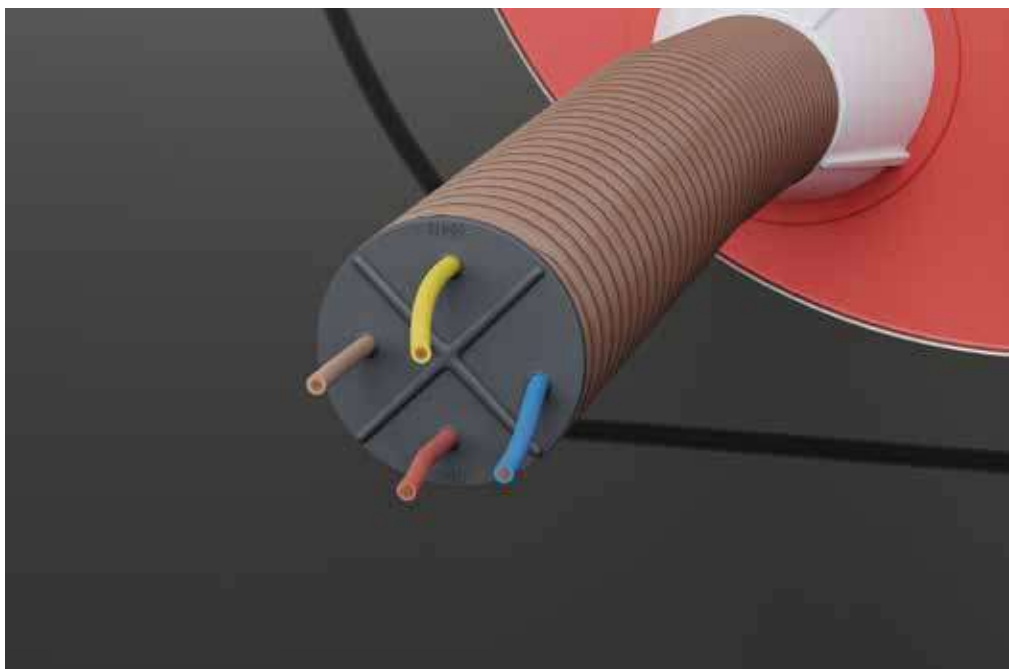
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R3

QUICK OVERVIEW: STRENGTHS

The end of corrugated tubes

- Sealing cap
- Equipped with three flaps that ensure impermeability to air and smoke passage
- Multiple measures to adapt to corrugated pipes of all diameters
- The elastic membrane is divided into several sections to separate the electrical circuits
- Particularly resistant to UV rays and ageing



Composition:

- ① Thermoplastic elastomer (TPE)

Codes and measures

| Version | Code | Tube type | Membranes | Box (pc) |
|----------------|----------|----------------|-----------|----------|
| AIR Stopper 16 | 02203616 | 5/8"-Pg 9-M16 | 1 | 20 |
| AIR Stopper 20 | 02203620 | 3/4"-Pg 11-M20 | 1 | 20 |
| AIR Stopper 25 | 02203625 | Pg 16-M25 | 2 | 20 |
| AIR Stopper 32 | 02203632 | Pg 21-M32 | 3 | 20 |
| AIR Stopper 40 | 02203640 | Pg 36-M40 | 4 | 20 |

Features:



Accessories

Riwega accessories

These include liquid and fibrous polymers that can be applied by brush or roller as soon as other waterproofing products cannot be used for purely practical reasons. Or a range of primers and solvents that can be applied by brush, roller or spray. These increase the adhesion of adhesive tapes on difficult substrates such as damp, friable or dusty surfaces. Or, for example, waterproofing agents or solvents for the installation of special membranes.

The range is completed by the installation equipment listed in section 3, such as applicators for foam or products in cartridges or bags, the complete range of accessories for the USB Weld AS system and the range of pressure rollers, which are indispensable for the installation of adhesive tapes: Because applying the right pressure to the newly laid adhesive tapes is essential to ensure complete and immediate adhesion of the adhesive to the often porous or irregular surface.

Tape Liquid

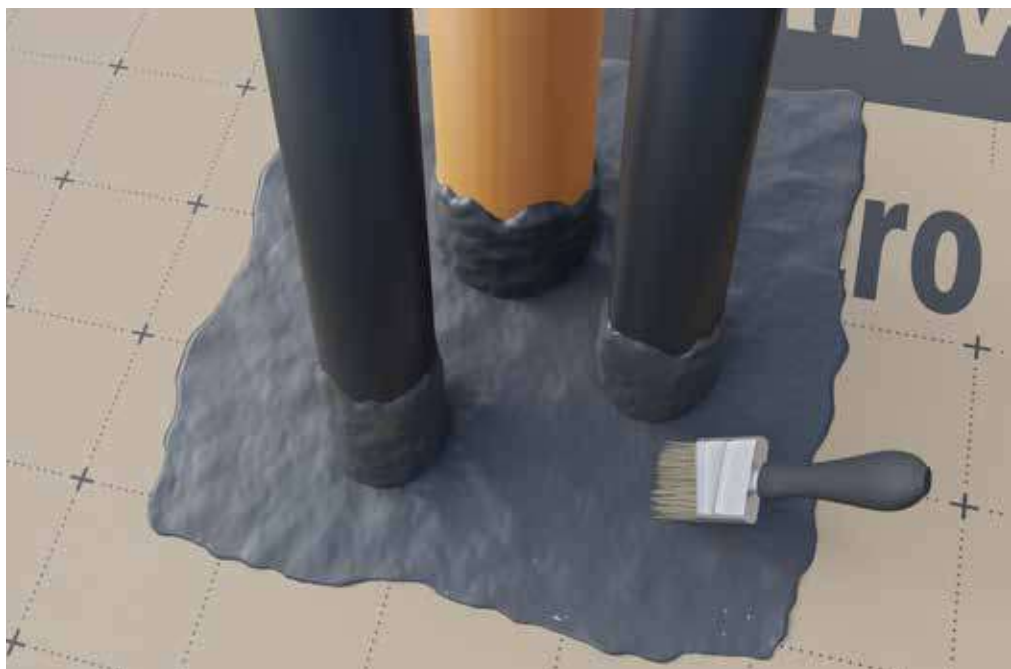
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R3

QUICK OVERVIEW: STRENGTHS

Universal sealant in a liquid version

- One-component liquid sealant; ready to use
- Solvent and plasticizer-free, adaptable to all types of surfaces
- Ideal to seal critical points in the construction
- Reinforced with fibres, no additional non-woven fabric is required



Features:



Technical data sheet

| | | |
|-----------------------------------|--|-------------------------------------|
| Material | | polyurethane prepolymer |
| Consistency | | fibre-reinforced thixotropic liquid |
| Output (depending from surface) | | ~3 kg/m ² |
| Density | | ~1,27 g/cm ³ |
| Rain resistance | | immediately after laying |
| Vapour passage resistance μ | | 32000 |
| Formation of skin (~ 20°C/60% UR) | | ~1 h |
| Working temperature | | >0°C (<0°C without snow/ice) |
| Storage place | | dry, in the original can |
| Storage period | | max. 6 months |

Codes and measures

| Version | Code | Content (kg) | Box (pc) | Pallet (box) |
|-------------|----------|--------------|----------|--------------|
| Tape Liquid | 02040700 | 3,6 | 1 | 50 |

ATTENTION: before laying, verify the compatibility of the substrate with the specific table, which can be downloaded from www.riwega.com
Riwega Srl is not responsible for negligent and improper use of its products

Primer and solvents

Primer Spray

| | |
|---------------------------------|--|
| Code | 02040603 |
| Material | synthetic rubber |
| Content | 500 ml |
| Output (depending from surface) | ~30 - 70 m (con L=60 mm) |
| Working temperature | -10°C / +30°C |
| Temperature resistance | -20°C / +80°C |
| Storage | dry, in the original can, max. 12 months |



Primer Liquid

| | |
|---------------------------------|---|
| Code | 02040600 |
| Material | synthetic rubber and organic solvent |
| Content | 500 ml |
| Output (depending from surface) | ~150 - 250 ml/m ² (~3 m ²) |
| Viscosity | ~150 mPa.s |
| Working temperature | +5°C / +30°C |
| Storage | dry, in the original can, max. 12 months |



Primer Bitum

| | |
|---------------------------------|--|
| Code | 02040601 |
| Material | bitumen in water emulsion and additives |
| Content | 5 l |
| Output (depending from surface) | ~200 / 300 g/m ² |
| Density a 20°C | 1,00 ± 0,01 kg/l |
| Working temperature | +5°C / +35°C |
| Storage | dry, in the original can, max. 12 months |



Fire Zero Liquid (Fire Zero USB Accessories - page 52)

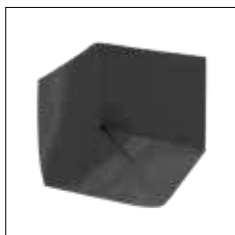
| | |
|---------------------|--|
| Code | 02010342 |
| Material | graphite water-based paint |
| Content | 5 kg |
| Output | ~5,6 kg/roll USB Fire Zero (~1,2 - 1,4 kg/m ²) |
| Massa volumica | 1,22 ± 0,02 kg/l |
| Working temperature | +10°C / +35°C |
| Storage | dry, in the original can, max. 12 months |



Accessories for USB Weld AS

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R3



Seal INT (hot or cold weldable internal corner)

| | |
|-----------------------------------|---------------------------------|
| Code | 020103531 |
| Material | TPU |
| Measurements (Width x Length x H) | 150 x 150 x 220 mm |
| Resistance to water passage | W1 |
| Fire reaction class | E |
| Cold weldability | with solvent THF Welding Liquid |
| Hot weldability | with hot air 200°C / 300°C |



Seal EXT (hot or cold weldable external corner)

| | |
|-----------------------------------|---------------------------------|
| Code | 020103532 |
| Material | TPU |
| Measurements (Width x Length x H) | 350 x 350 x 140 mm |
| Resistance to water passage | W1 |
| Fire reaction class | E |
| Cold weldability | with solvent THF Welding Liquid |
| Hot weldability | with hot air 200°C / 300°C |

new
product



Seal DD (hot or cold weldable sealing collar)

| | |
|------------------------|---------------------------------|
| Code | 020103530 |
| Material | TPU |
| Internal diameter | min. 90 mm - max. 125 mm |
| Base external diameter | 250 mm |
| Fire reaction class | E |
| Cold weldability | with solvent THF Welding Liquid |
| Hot weldability | with hot air 200°C / 300°C |



Bottle with brush

| | |
|---------------|------------------|
| Code | PLA13601 |
| Compatibility | welding solvents |
| Material | soft plastic |



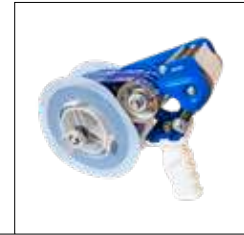
THF Welding Liquid

| | |
|---------------------|--|
| Code | 02010352 |
| Material | tetrahydrofuran (THF) |
| Content | 1 l |
| Output | ~10 ml/m (1 can ~100 m) |
| Applicatore | bottle with brush (PLA13601) |
| Working temperature | recommended +18°C / +20°C (workable >10°C) |
| Storage | dry, in the original can, max. 12 months |

Installation equipment

Nastrator

| | |
|---------------|--------------------------------|
| Code | 05RUL004 |
| Compatibility | adhesive tape internal ø 75 mm |
| Material | plastic |



Fast Gun

| | |
|------------------------|-------------------------------------|
| Code | 05PIS005 |
| Compatibility | standard cartridge ø 50 mm - 310 ml |
| Weight | 800 g |
| Push force | 450 kg |
| Peak torque | 15 Nm |
| Maximum rotation speed | 480 tr/min |
| Piston speed | 1 mm/tr |



Gun for Sil AC / Sil Butyl

| | |
|---------------|-----------------|
| Code | 05PIS001 |
| Compatibility | tubes of 600 ml |
| Material | metal / plastic |



Gun for Elastic Foam / Glue DB

| | |
|---------------|-------------------|
| Code | 05PIS002 |
| Compatibility | bottles of 750 ml |
| Material | metal / plastic |



Detergent for Elastic Foam

| | |
|--------------------------|--|
| Code | 05PIS003 |
| Appearance | liquid (ref. base aerosol) |
| Colour | colourless |
| Relative density at 20°C | 0,65 - 0,70 g/ml |
| Inflammation point | <0°C |
| Pressure at 20°C | 4/6 bar |
| Storage | dry, in the original can, max. 24 months |



Rollers

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R3

QUICK OVERVIEW: STRENGTHS

The indispensable for the correct installation of adhesive tapes

- Compression roll
- Necessary to ensure perfect adhesion of the tape to the laying surface
- Equipped with ergonomic handle
- Available in various types that can be used depending on the support



Rigid plastic roller

| | |
|-----------------|--|
| Code | 05RUL001 |
| Width | 5 cm |
| Use | application of tapes |
| Type of surface | smooth/rigid surfaces (rigid ins. panels, planking or wooden matchboard, smooth wooden panels, etc.) |



Soft rubber roller

| | |
|-----------------|--|
| Code | 05RUL002 |
| Width | 5 cm |
| Use | application of tapes |
| Type of surface | rough/irregular/soft surfaces (soft insulation panels, OSB panels, rough concrete surfaces etc.) |



Silicone roller

| | |
|-----------------|--|
| Code | PLA81202 |
| Width | 4 cm |
| Use | welding of synthetic membranes |
| Type of surface | flat and sloping roofs (rigid insulation, smooth wooden panels, osb panels, concrete surfaces, etc.) |

Support compatibility sheet

Generic construction materials

Breathable membranes and vapour control layers

| | Wood | OSB | Wood fibre | Gypsum or gypsum fibre board | Fibre-cement | Concrete/Brickwork/Plaster | Polystyrene (EPS/XPS) | Mineral wool | Glass wool | Metal | Rigid plastic | Polypropylene surface | Polyester surface | Polyethylene surface | Polyurethane surface | Aluminium surface | Surface with spread coating | Bitumen surface | Kraft paper surface |
|------------------------------|------|-----|------------|------------------------------|--------------|----------------------------|-----------------------|--------------|------------|-------|---------------|-----------------------|-------------------|----------------------|----------------------|-------------------|-----------------------------|-----------------|---------------------|
| Tape 1 PE / Tape Strong | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape Rapid | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape ICE | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape UV | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape Corner | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape 1 PAP | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape Reflex | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape Vlies | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape Green | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape 2 AC / Tape BOLD | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape 2 BU / Tape 2 CO | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll Flexi | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll 150 X | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Air Coll | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll 50 - 80 -150 | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll Fire B | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll CU / Coll ALU | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll Vlies Plus | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll HDPE | ✓ | ✓ | ✗ | ✓ | ! | ! | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll Solar | ✓ | ✓ | ✗ | ✓ | ! | ! | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Coll Radon | ✓ | ✓ | ✗ | ✓ | ! | ! | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Sil Power Fix | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Sil Butyl | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Sil AC | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T | ✓ | ✓ |
| Elastic Foam | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | T | ✓ | ✓ | ✓ | ✓ |
| Glue DB | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Top Seal | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ | T | ✓ | ✓ | ✓ | ✓ | ✓ |
| GAE BG1 / BG2 / Trio | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AIR Stop Universal | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T | ✓ |
| AIR Stop EPDM / HOT | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| AIR Stop M-TEC 6 | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| FDB Vario / FDB Vario Plus | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| FDB INT / EXT (acrylic) | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| FDB INT / EXT (butylic) | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| FDB Vario NET | ✓ | ✓ | ! | ✓ | ! | ! | ✓ | ! | ! | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tape Liquid* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Primer Spray / Primer Liquid | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | ✗ |
| Primer Bitum | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | T | ✓ | ✓ | ✓ | T | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | ✗ |

- ✓ Compatible product
- ! Compatible product only if combined with Primer Spray / Primer Liquid
- ! Compatible product only if combined with Primer Bitum
- ✗ Product absolutely NOT compatible
- T Compatibility to be verified during application

*See "Support compatibility sheet" on www.riwega.com

Our Production

Solvent welding - laminating - glueing - cutting - printing - rewinding - confectioning.

Since the mid-90s, most of our employees and sales figures have been involved in the production and development of air, wind and waterproofing systems.

Solvent welding

Based on the knowledge gathered and evaluated during this time, the decision was made to build a production plant specially adapted to the requirements of the nonwovens and films used.

This system is now the heart of our production and is how most of our products are manufactured.

The technology of „solvent welding,“ which was revolutionary during the construction of the plant and is still revolutionary today, is a great indicator of the durability of our products. The „solvent welding“ process joins the individual layers of the sarking and vapour control layers without any prior damage caused by temperature and pressure. By coating the functional membrane with a special PUR adhesive, the individual layers can move almost totally free of stress even with strong temperature changes, thus avoiding the tearing of the functional membrane that is so common with conventional products.

Laminating

A flatbed laminating machine is available for the application of adhesives, which is used to apply adhesives to laminates in roll form or powder form.

Printing

Most of the manufactured products are printed on a flexographic printing machine according to customer requirements. The selection and coordination of the right printing blocks are decisive for perfect printing quality. Printing is, of course, done with water-based inks.

Cutting, rewinding and confectioning

The rolls are finished on special roll winding machines, where the adhesive strips are also applied inline and the customer-specific roll insert is fed. The roll is then wrapped with a protective film. Further equipment for cutting and converting, specially built according to our requirements, is available. Here, cover liners can be slit, or film tapes can be produced with finger lift.

Quality assurance

All production processes are monitored and checked by the in-house quality assurance department. The close-meshed monitoring system guarantees maximum product quality and safety for the customer. Our laboratory is equipped with all the testing equipment necessary to produce CE-marked building products. Here, the goods are subjected to incoming and outgoing inspections, as well as complete production monitoring under the building product directive. With an annual audit, our production is checked by a certified institute as part of our voluntary production monitoring.



Production FDB tapes



Production of adhesive tapes



Production of ridge rolls

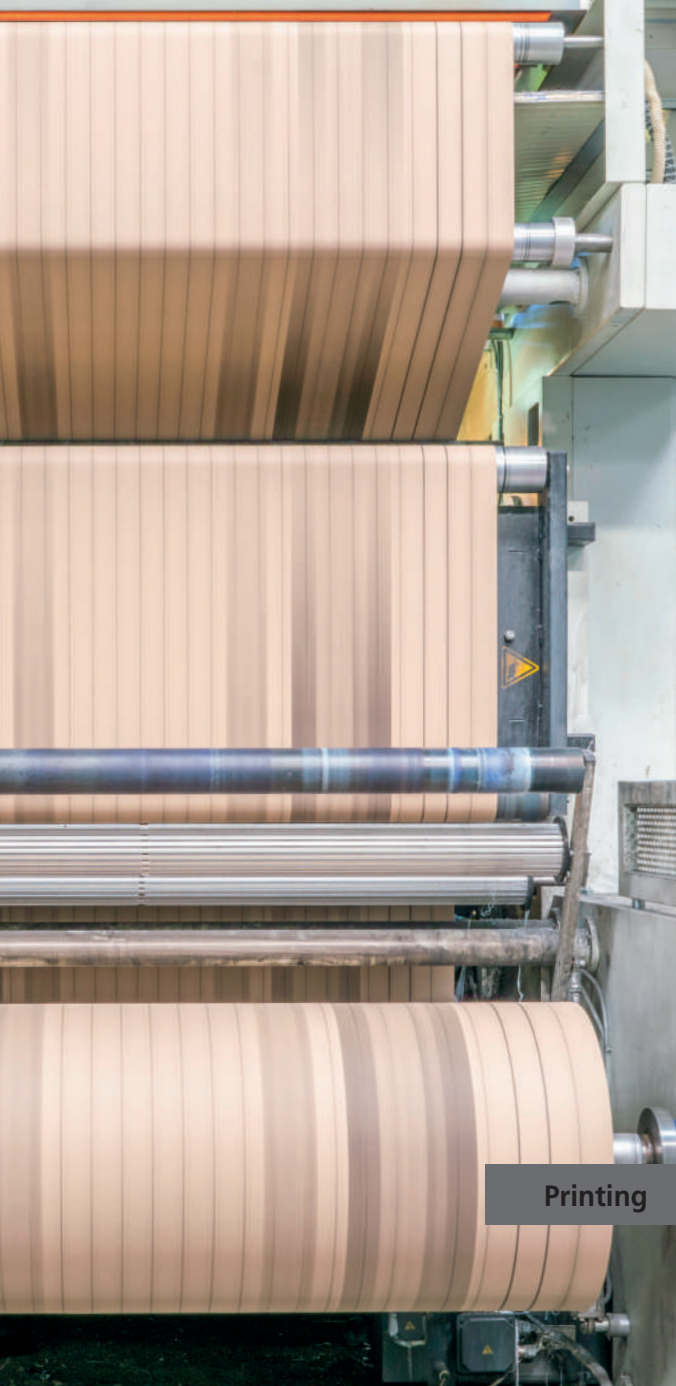


Quality assurance



Cutting

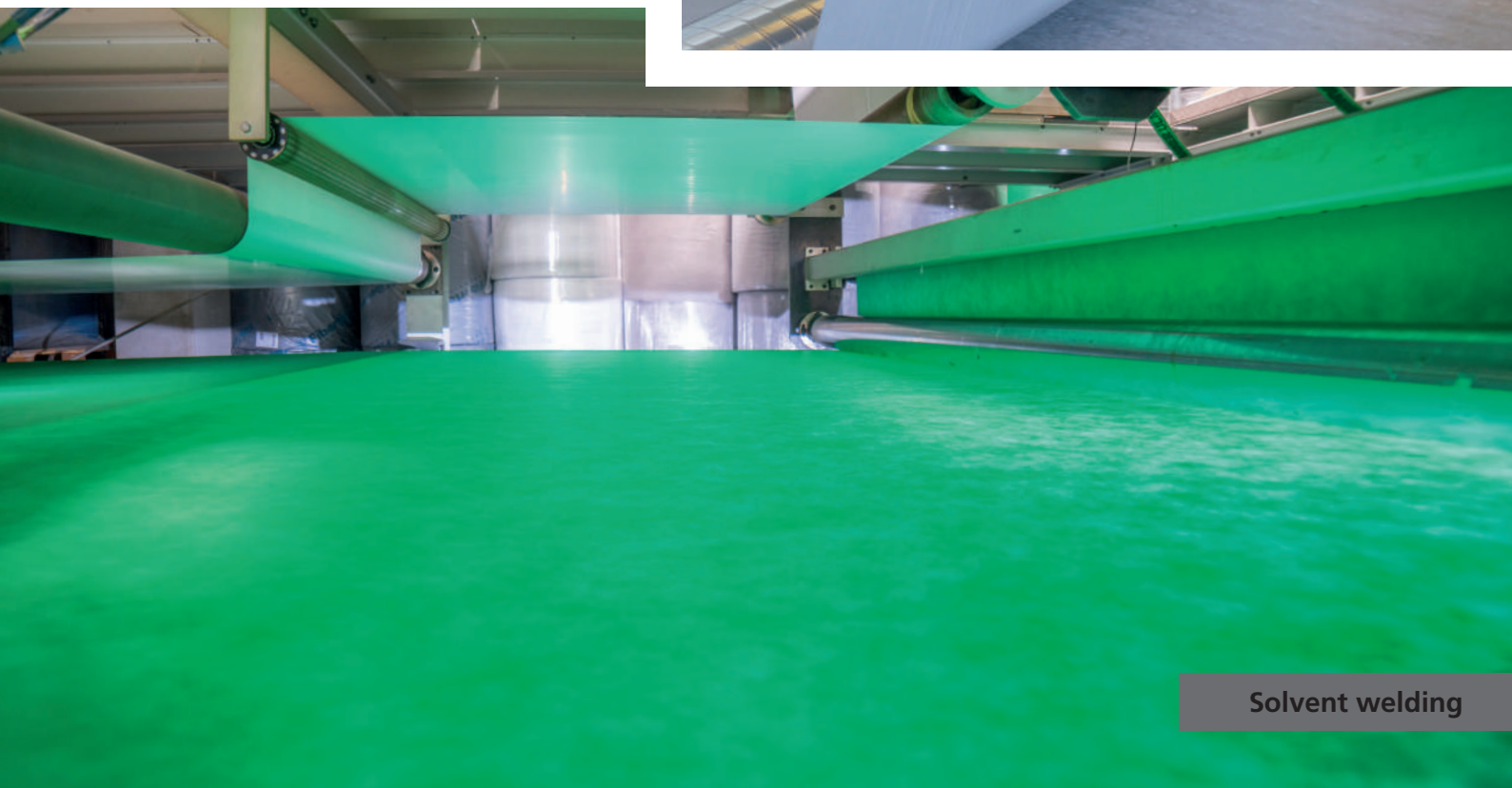




Printing



Laminating



Solvent welding

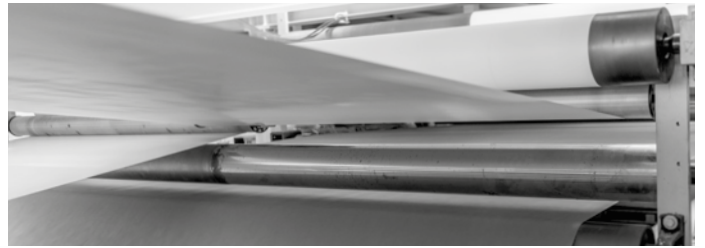


Ergepearl

CULTIVATING NEW **TECHNOLOGIES**



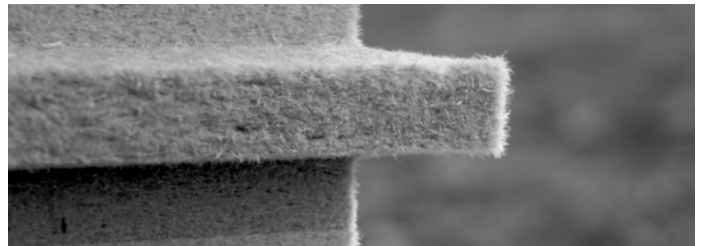
The production of superior
quality membranes



European leader
for the building envelope



The perfect partner
for the thermo-acoustic comfort



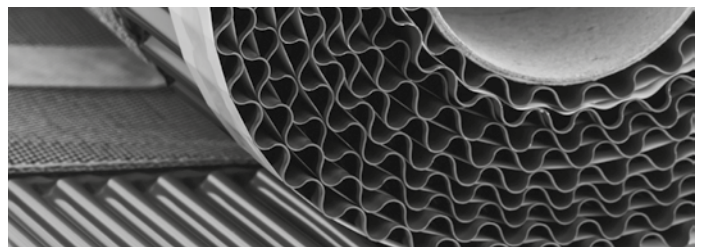
Line of products
created for carpenters



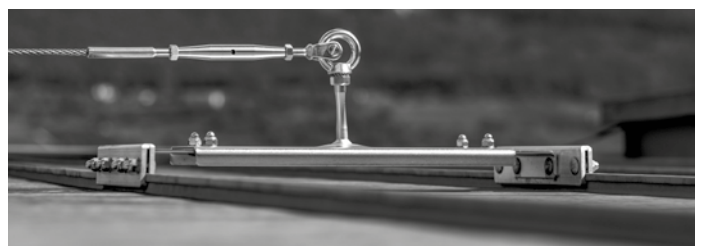
The austrian partner
for over 40 years



The reference point
in Slovenia for over 10 years



The Swiss partner for
permanent security systems



GENERAL SALES CONDITIONS

1. General

1.1 Regarding the general sales conditions, as follows is applied: Riwega Srl, with main office in I-39044 Egna (BZ), Via Isola di sopra 28, referred as the Seller.

1.2 Regarding the general sales conditions, as follows is applied: any company, who purchases products from Riwega Srl, referred as the Customer.

1.3 Regarding the general sales conditions, as follows is applied: All articles & materials, commercialized by Riwega Srl, are referred as "Products".

2. Foreword

2.1 These general Sales Conditions are applied on all sales from Riwega Srl and the customer. Exemptions to these general Sales Conditions are other written and signed agreements between the parties.

3. Characteristics of the Products - Updates and Modifications

3.1 Any information or data relating to the technical features and/or specifications of the Products contained in this catalogue, our pricelists, and similar commercial documents, shall be binding.

3.2 The customer declares to be aware and accepts the given informations regarding the characteristics and technical features of the products contained in Riwega's catalogue, pricelists and similar commercial documents.

3.3 The Seller may apply anytime, any changes to the Products, without altering their essential features, if it appears to be necessary or suitable. Product modifications and/or new technical data, will be constantly updated on the Riwega web site (Products pages). Any change on the web site will anytime, prevail over the data in the catalogue, price list and other commercial documents.

4. How to place an order

4.1 Orders of Riwega's Products are to be communicated by written the Seller with the methods and terms indicated by Riwega Srl.

4.2 The above-mentioned orders are binding for the customer, after being accepted by Riwega Srl.

5. Terms of delivery – Transport costs

5.1 If the Seller suspects, that he will be unable to deliver the Products at the expected delivery date, he must inform the Buyer about this within the shortest delay in written form: communicating, as far as possible, the estimated date of delivery.

5.2 Any delay caused by major force (as defined in art. 11) or by acts or omissions of the Buyer (e.g. the lack of informations which are necessary for the delivery of the Products and eventually unpaid invoices), shall not be considered as a delay for which the Seller is responsible.

5.3 The Products must be delivered in full wrapping and/or packing and not as unpacked loose pieces, and any order will be accepted exclusively regarding the quantities indicated in the catalogue, for reaching this purpose.

5.4 The delivery conditions and the delivery prices are indicated in Riwega's transport pricelist.

5.5 On arrival and consignee of the delivered Products, the Customer must send a signed and stamped copy of the transport document and/or bill of lading to the Seller (by fax or mail).

6. Prices

6.1 The Products are sold at the price indicated in the Riwega's pricelist which are valid at the date of the order placement.

6.2 Unless otherwise agreed, the prices are to be considered Ex Work Riwega, the products are packaged according to the usages of the sector-standard and in relation to the standard-transport conditions. It is agreed, that any other cost of additional packaging, protecting or transport service to the sector-standard, shall be paid by the Customer.

7. Payment conditions

7.1 The payments must be made in €, within the indicated terms on the invoice. If the parties have not determined the payment conditions beforehand (as defined in art. 7.5), the payment must be made as indicated under article 7.2.

7.2 If the parties have agreed on a payment by SWIFT or SEPA bank transfer, the payment must be made, unless otherwise specified by written, within 30 days from the invoice.

7.3 A payment is considered as valid, once the respective amount is at the Seller's disposal at its bank account, mentioned on the invoice.

7.4 If it is agreed that the payment must be backed by a bank guarantee, the Buyer must provide a Bank Guarantee at the Seller's disposal, at least 30 days before the date of delivery, issued by a primary Italian bank in accordance with the ICC-Rules. The Bank Guarantee has to be redeemable / payable with a simple declaration by the Seller, that he has not received the payment within the agreed payment terms.

7.5 If the parties have agreed a payment in advance, without further indication, it will be assumed that such payment in advance, refers to the full price. Unless otherwise agreed, the payment in advance must be transferred to the Seller's account at least 5 days before the agreed date of delivery.

7.6 If the parties have agreed on payment against documents (documentary collection) payment will be, unless otherwise agreed, Documents Against Payment.

7.7 Unless otherwise agreed, any expenses or bank commissions and costs due regarding the payment operation shall be paid by the Buyer.

8. Retention of title

8.1 The delivered products will remain property of the Seller, until the complete payment of the invoice has been made.

8.2 The payment of the products through cheque or bill of exchange is not considered as completed, until the full amount of the invoice is arrived on the bank account of the Seller.

8.3 Since the products will remain property of the Seller until the full payment, the buyer can't yield them or bind them in whatever form and is responsible for their maintenance.

8.4 Until the payment of the material has not been carried out completely, it's Riwega's right to ask the immediate restitution, emphasizing that the money received until that date, will be kept as a default indemnity.

9. Goods return - claims

9.1 Unless otherwise agreed, the delivery of the products is always considered Ex Works, even if the transport is organized by the Seller.

9.2 The possible product-connected risks are transferred to the Customer whenever the products leave our stockyard.

9.3 Possible claims regarding the state of the boxaging, quantity, number and exterior characteristics of the products has to be written on the carrier notice and on Riwega's transport document and must be communicated to the Seller by registered post within 3 days after goods receipt.

9.4 Possible claims for defects that can not be noticed at goods receipt (hidden defects) have to be communicated to the Seller, through registered post within 7 days within its discovery and not beyond 12 months after goods receipt.

9.5 Possible claims communicated through other methods different by the ones mentioned above will not be considered by the Seller; the Customer has not any right against this.

9.6 It is agreed that possible claims do not give the right to the Customer to suspend or delay the payment of the delivered product's price.

10. Warranty for defects

10.1 The Seller agrees to repair or replace any defects, lack of quality or non-conformity of the Products for which he is liable, occurring within twelve months from delivery of the Products, only if such defects have been timely notified in accordance with art. 9.3.

The Seller will have the choice between repairing or replacing the Products which have shown to be defect. The Products repaired or replaced under warranty will be delivered to the same guarantee for a period of six months starting from the date of repair or replacement.

10.2 The Seller does not guarantee that the Products have special specifications or further technical features or that they are suitable for particular usages not indicated in the catalogue, except such requested characteristics have been expressly agreed upon in the contract or in other documents referred to that purpose in the Contract.

10.3 It is agreed that only for the specified products, Riwega's commercial warranty is applied for the related validity period and within the terms indicated in the product's technical documents.

11. Force majeure

11.1 Either party shall have the right to suspend performance of his contractual obligations when such performance becomes impossible or unduly burdensome because of unforeseeable events beyond his control, such as strikes, boycotts, lock-outs, fires, war (either declared or not), civil war, riots, revolutions, requisitions, embargo, energy black-outs, delay in delivery of components or raw materials.

11.2 The party who wishes to make use of the present clause must promptly inform the other party, in written form, about the occurrence and the approximately end of any force majeure circumstances.

11.3 Should the suspension due to force majeure last more than six weeks, either party shall have the right to terminate the Contract by a 10 days' written notice to the counterpart.

12. Jurisdiction /Arbitration

12.1 The parties agree that the current Italian regulations are applied to the sales contract.

13. Competent Court

13.1 For every disagreement during the execution or interpretation of the sales contract and of these sales conditions, the competent Court is the Court of Bolzano (Italy).



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member of  Ergepearl group