

ISOVER
SAINT-GOBAIN

So wird gedämmt



Vario®
Original von ISOVER

Das Komplettsystem. Seit 1997.

Vario® Professional Guide COMPACT

Smart Airtightness and
Moisture Management


SAINT-GOBAIN

Guaranteed Protection



The Vario airtightness and moisture management system combines the greatest possible safety with outstanding structural properties. That's our promise to you and your client. With our Vario system guarantee extended to 50 years.

For full information, see www.isover.de/vario

Expertise from the expert for the expert

With this new Vario® Professional Guide COMPACT, we introduce you to all system components and give you many valuable professional tips for professional processing using the Vario® airtightness and moisture management system. The practical guide takes you step-by-step through the complex laying situations that you will encounter on every construction site.



Lasting value for your customers

Reliable protection with the Vario® system

Moisture in construction has serious consequences in the long run. If airtightness and moisture management are not reliably ensured, this can result in expensive structural damage - including rotten wooden beams or mould infestation. If damage occurs, this is accompanied not only by unpleasant legal disputes but also by financial burdens.

Work is much more relaxed with the ISOVER Vario® air tightness and moisture management system, which offers reliable protection against structural damage. Not only do we have over 25 years of experience with smart membranes such as the Vario® XtraSafe or the Vario® KM Duplex UV, but we also offer you a range of perfectly coordinated system components of sealants and adhesive tapes for interior and exterior use.

However, the Vario® airtightness and moisture management system is far more than a proven classic. Rather, we continuously invest in its practical development. And so, just in time for the 25th anniversary, numerous system components were once again improved, which made it possible to further optimise both the product properties and the scopes of application of the system.

Table of contents

PROFESSIONAL TIPS FOR EASY WORK

Losen the liner from the adhesive tape	7
Do not overstretch adhesive tapes	8
Tear off adhesive tapes by hand	9
Prepare substrate with adhesion promoter	10
V-shaped sealing of the climate membrane with Vario® DoubleFit +	11

PROFESSIONAL TIPS FOR INDOOR USE

Butt join bonding in the overlapping area of the climate membrane	12
Metal stud wall with Vario® XtraSafe in the interior insulation	14
Align the substructure with adjusting screws	16
Sealing a cable penetration (multiple core cable)	18
Beam or tong connection with a collar	22
Beam connection with adhesive tape a) in a new construction and b) for cracked beams in an old building	24
Connection to centre purlin and collar beam with a) template or b) collar	28
Connection of the climate membrane to a skylight	32

PROFESSIONAL TIPS FOR OUTDOOR USE

Connection of the climate membrane in the eaves area	42
Tong connection with a) insulation wedge or b) wooden wedge	46
Changing the airtight level in uninsulated attics (counter-board sealing)	51
Sealing a pipe penetration through the underlay with collar	52
The ISOVER application technology The ISOVER Academy - training opportunities	57
The Vario® complete system	58
Adhesive matrix - application of the products in the Vario® system	61

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Loosen the liner from the adhesive tape

The liner can be easily detached from the adhesive tape with a simple movement of the hand without damaging the adhesive surface.



Cut the tape straight. The practical tape measure imprint ensures easy handling.



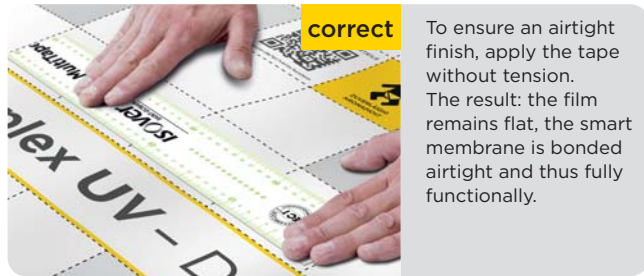
Bend the bleed edge slightly downwards into a U-shape with one hand without bending the tape.



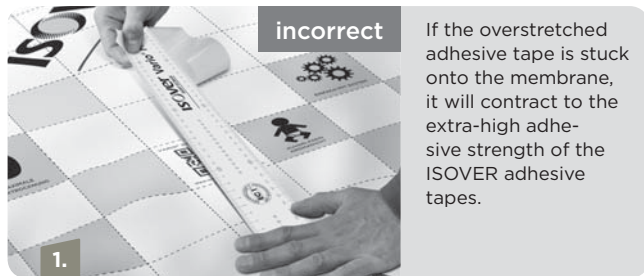
With the other hand, run a finger along the edge. This allows the adhesive tape to be easily detached from the liner.

Do not overstretch adhesive tapes

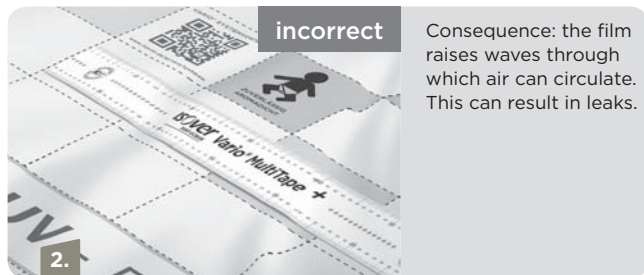
Adhesive tapes, such as the Vario® MultiTape+, must not be overstretched when adhered to the membrane.



To ensure an airtight finish, apply the tape without tension. The result: the film remains flat, the smart membrane is bonded airtight and thus fully functionally.



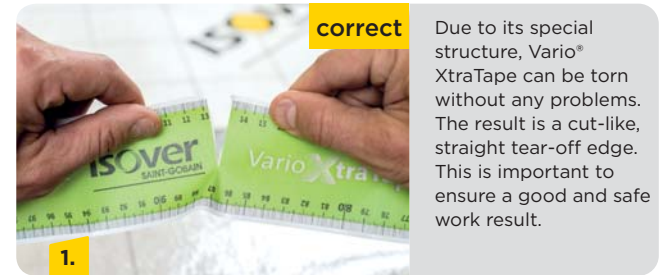
If the overstretched adhesive tape is stuck onto the membrane, it will contract to the extra-high adhesive strength of the ISOVER adhesive tapes.



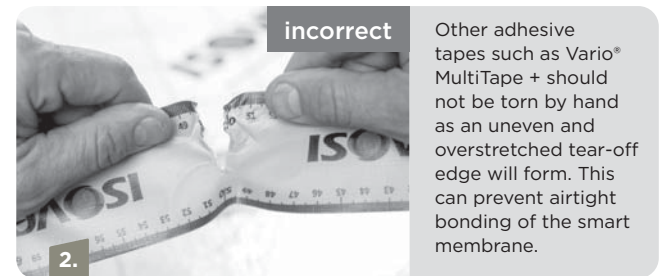
Consequence: the film raises waves through which air can circulate. This can result in leaks.

Tear off adhesive tapes by hand

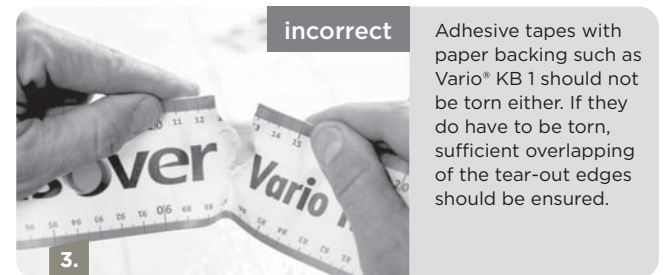
Adhesive tapes should not be torn off by hand. The specially developed fabric tapes, such as Vario® XtraTape, are an exception.



Due to its special structure, Vario® XtraTape can be torn without any problems. The result is a cut-like, straight tear-off edge. This is important to ensure a good and safe work result.



Other adhesive tapes such as Vario® MultiTape + should not be torn by hand as an uneven and overstretched tear-off edge will form. This can prevent airtight bonding of the smart membrane.



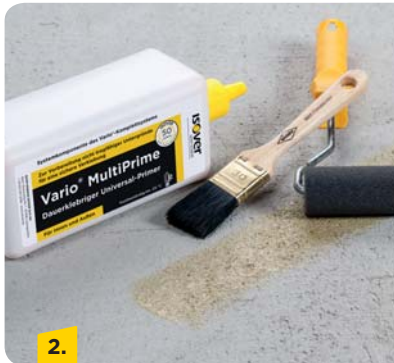
Adhesive tapes with paper backing such as Vario® KB 1 should not be torn either. If they do have to be torn, sufficient overlapping of the tear-out edges should be ensured.

Prepare substrate with adhesion promoter

Porous or sandy substrates often require pre-treatment with a primer, as is also described in the DIN 4108-7 standard. Vario® MultiPrime improves the adhesive strength on all common construction substrates such as plaster, masonry, aerated concrete and fibreboard and is thus ready for strong bonding.



Shake the dispenser bottle vigorously before use. The application quantity can be easily adjusted via the yellow twist cap.
Tip: fresh primer can be removed with water.



Apply primer evenly using a foam roller or brush. Repeat the process for highly absorbent substrates. The surface is permanently sticky and should be protected from dust until the smart membrane is connected. The primer must be completely absorbed before bonding the connection.



Tip: the yellow colouring indicates areas that have already been treated. The rectangular shape ensures stability even on slopes.

V-shaped sealing of the smart membrane with Vario® DoubleFit+

The universally applicable adhesive sealant must not be flattened when sealing. It is important to seal the film in a V-shape with two fingers.



Using the cartridge tip that has already been cut into a V-shape (see page 12), spray a voluminous bead of sealant onto the primed surface and place the film over it.



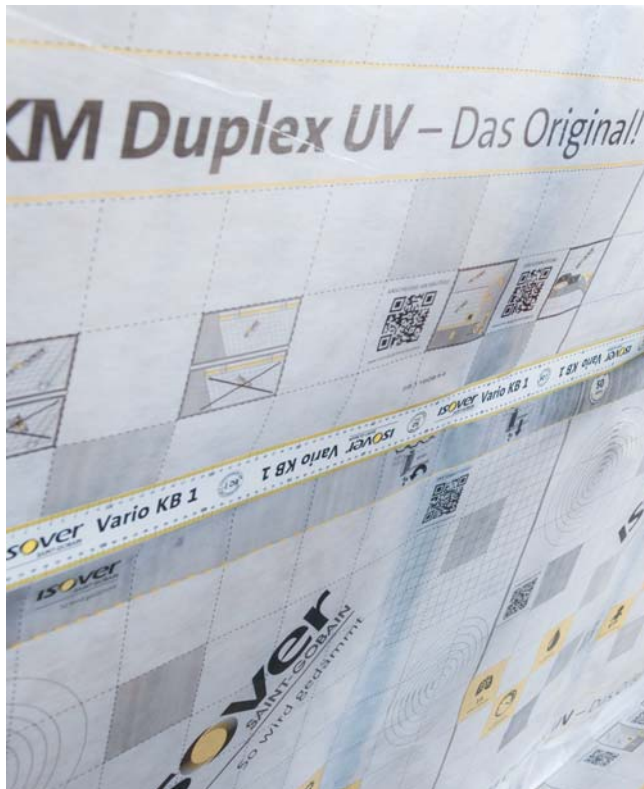
To seal the film in a V-shape, slide two fingers along the sealant bead and apply light pressure to the side of the bead. The sealing can also be done with a wooden template that is pulled over the bead.



In order for the sealant to be able to provide an optimal airtight seal, a small mound of sealant must be left under the film.

Butt joint bonding in the overlapping area of the smart membrane

After the smart membrane has been applied, the butt joint must also be bonded. Otherwise, there is a risk that dust or construction site dirt will impair effective bonding and thus the protection against moisture damage. To keep moisture out of the construction, the wall connection must be made afterwards.



Lay the smart membrane in strips with an overlap of 10 cm, starting from the top.



For this purpose, the film sheets are taped with adhesive tape Vario® KB 1 or Vario® MultiTape+ with a 3 cm overlap. The line marking on the film serves as a guide here.



To achieve effective corner bonding, carefully press the adhesive tape into the corners with a spatula. To ensure safe application, only peel off as much liner of the adhesive tape as is needed at any one time.



Finally, roll over all the bonds with a flat rubber roller and press the edges especially firmly. Do not use a foam or curved roller.



Seal torn staple openings or damage to the film with adhesive tape.

Metal stud wall with Vario® XtraSafe in the interior insulation

The Vario® Xtra system is also ideal for mounting on metal stud walls. Simply stick the Vario® XtraPatch onto the metal and attach the Vario® XtraSafe climate membrane - installing an airtight layer on metal profiles has never been so easy! Corrections are possible at any time thanks to the Velcro function. Then, create the airtight layer with Vario® XtraTape and Vario® DoubleFit+.



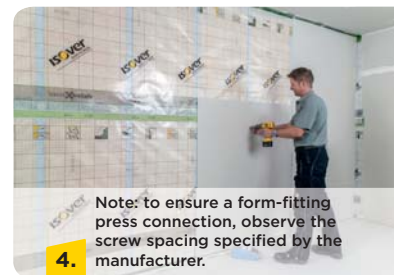
Stick the Vario® XtraPatch Velcro strips to the grease-free metal supports every 40 cm. The finger lift makes attachment easier. The strip is flat and does not show later in the construction.



Attach the first Vario® XtraSafe sheet starting from below. Attach the second sheet of film from above over the first sheet and cut off the protruding edge leaving a 10 cm overlap. Use line marking for this.



The film is immediately fixed by the Velcro strips and cannot slip. Adhere the film sheets with Vario® XtraTape.



Note: to ensure a form-fitting press connection, observe the screw spacing specified by the manufacturer.

Connect the film to the components with Vario® DoubleFit+ then apply the cladding. The airtight layer does not protrude so that an even substrate is created.

Align the substructure with adjusting screws

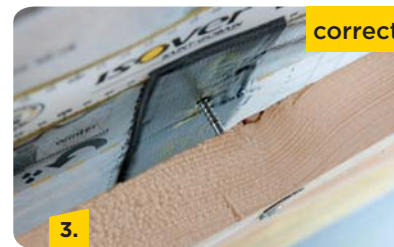
To achieve a ripple-free surface of the inner cladding, the substructure must be level. This is tricky, especially when renovating older roof structures. Particular attention is required here when adjusting the adjusting screw. If the necessary contact pressure of the counter batten on the underside of the rafter is missing, the screw perforation in the smart membrane will no longer be airtight. Such leaks can be avoided by using the Vario® AntiSpike nail sealing tape.



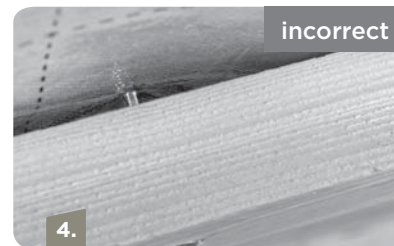
Mark the course of the battens in the area of the rafters on the film. The distance between the battens should not exceed 50 cm. The grid imprint on the film serves as a guide. Then, check the offset of the rafters using a levelling rod.



Cut Vario® AntiSpike with the cutter into approx. 10 cm long strips and stick them centrally over the rafter. If there are many cracks in the construction, lay the nail sealing tape continuously.



Now the battens and adjusting screws can be positioned. The elastic foam tape reliably seals the leak.



Without sealing tape: the batten is aligned but the perforation of the climate membrane is not sealed.

Sealing a cable penetration (multiple core cable)

Cable penetrations through the moisture-regulating smart membrane should be avoided or at least minimised as far as possible. Where they are necessary, ensure optimum sealing to safely rule out leaks.



Spray the spaces between the cables with the adhesive sealant Vario® DoubleFit + to seal them.



Gather all the cables together and bundle them with tape. Apply plenty of Vario® DoubleFit + adhesive sealant around the cable bundle to seal it.



Detach the liner of a track from a strip of the Vario® MultiTape SL + adhesive tape and stick the tape directly under the cable bundle. Then, loosen the liner of the second track, cut it cable-wide with the cutter and adhere it.



Next, stick another Vario® MultiTape SL + adhesive strip from above onto the cable bundle and then proceed as described in 3.

Beam or tong connection with a collar

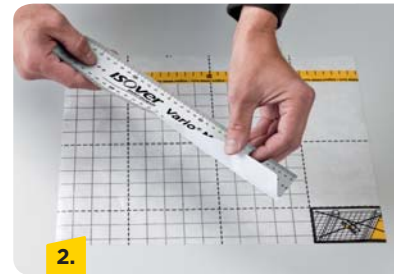
In order to ensure a reliable airtight connection of the smart membrane to a beam, the smart membrane must be cut to size and be flush with the beam. However, this is not feasible in all structural situations. In such cases, it is advisable to seal using a collar.



Preparation



For the base plate, cut a sufficiently large rectangle from a scrap piece of film. Using a template can be helpful for this.



Prefold Vario® MultiTape SL⁺ into suitable strips in the middle, peel off one half of the cover strip and stick it to the long side of the film. Do the same on the opposite side.



For the short sides of the base plate, measure the strips of tape so that they cover the entire width of the film. Peel off one half of the cover strip and stick it to the edge of the film. Do the same on the opposite side.

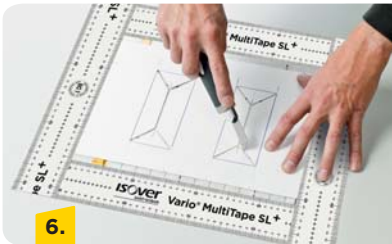


For optimum hold, roll over the adhesive tapes with the pressure roller. Tip: base plates can be prepared in the workshop and brought to the construction site.

Preparation



Place a sufficiently large cardboard template on the beam and transfer the beam dimensions.



Place the template with the beam dimensions on the prefabricated base plate and cut the climate membrane in a Y-shape according to the template drawing.



Place the template with the beam dimensions on the prefabricated base plate and cut the climate membrane in a Y-shape according to the template drawing.



Cut open the cuff on the narrow side and pull it over the beams. Caution: The cut tabs of the collar must face the room side, i.e. towards the fabricator.



Detach the second liner strip of the Vario® MultiTape SL+ adhesive strips from the collar and stick the collar to the smart membrane airtight all around.



Place a small sealing dot of the adhesive sealing compound Vario® DoubleFit+ on all beam edges.



Stick the constructed film flaps to the beam with individual strips of Vario® MultiTape+. Also, tape the cut seam of the collar.



For optimal hold, roll over all the adhesive tapes with a squeegee or pressure roller.

Beam connection with adhesive tape a) in a new construction and b) for cracked beams in an old building

The essential prerequisite for an airtight adhesive tape connection of the Vario® smart membrane to tongs, beams or centre purlins is a precisely shaped film cut-out. This means that the foil must be absolutely flush with the beam. Particular care should be taken with old, cracked beams.



Beam connection in a new construction



First, stick the Vario® MultiTape SL⁺ adhesive tape onto the film on the short sides with a tight connection to the beam. Peel off only one liner track.



Loosen the second liner track of the adhesive tape and stick it to the beam. Use a cutter to cut the adhesive tape at the edges of the beam as shown in the illustration and stick it in place.



Apply some Vario® DoubleFit⁺ adhesive sealant to all beam edges.



Then, stick the long sides with Vario® MultiTape SL⁺ as described above. Roll over all tapes with a rubber roller.

Beam connection in old buildings



Make the foil cut-out for the beam connection in the old building X-shaped. When processing, make sure that the film tabs face the room side.



Cut the triangular foil tabs parallel to the roof pitch to a length of 2.5 cm. This ensures airtight bonding with the film and the beam.



Thoroughly clean any dust and dirt off the beams at the bonding point with the steel brush. Pre-treat the substrate with primer.



Squirt the beam cracks with plenty of the Vario® DoubleFit+ adhesive sealing compound. Extend the sealing bead a few centimetres beyond the bonding point for optimal sealing.



Place sealing points in all corners with the Vario® DoubleFit+ adhesive sealing compound.



Stick the individual film tabs with Vario® Multi-Tape SL+. To do this, stick one of the adhesive traces close to the beam on the film. Detach the liner from the second line of adhesive, stick on with the excess, cut into the edges of the beam, fold over and stick on without any creases.



Then, stick four additional strips of Vario® Multi-Tape+ around the beam for secure sealing.



Roll over all adhesive tapes firmly with a squeegee or a rubber roller to ensure optimal hold.

Connection to centre purlin and collar beam with a) template or b) collar

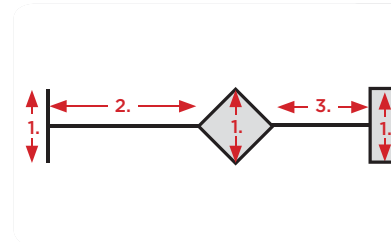
The connection to the centre purlins is usually made by sticking the film with adhesive tape. In the case of an overlying collar beam, the film must be flush with the beams.



Preparation



First measure the width and height of the centre purlin and the depth of the collar beam.



Make a template out of strong cardboard according to the drawing.

Connection with template



Option a: Place the template on the film overhang and cut out. A solid base with a board can make cutting easier.



Then, place the cut film wings of the Vario® XtraSafe flush against the beam.



Using Vario® DoubleFit+ connect the smart membrane to the beam at the sides airtight. Also, place a bead of adhesive with sealant on the underside of the beam.



Adjust the collar to the beam and place the film wings flush against the beam flanks.



Attach the film with Vario® MultiTape SL+ to the upper side of the beam so that it is airtight.



Seal the film wings with the adhesive sealing compound Vario® DoubleFit+ and stick them airtight with Vario® MultiTape SL+.

Connection with a collar



Option b: If a quick, rough cut around the beam has already been made, a collar facilitates the airtight connection.



A bead of sealant must also be laid on the underside of the beam.



For the collar, stick Vario® MultiTape SL+ on three sides of a sufficiently large piece of film, as already described for other collars. To do this, peel off the split liner on one side. Lay out the template and cut it out.



The smart membrane is now connected to the centre purlin with the Vario® XtraTape adhesive tape.

Connection of the smart membrane to a skylight

The airtight connection of the smart membrane to a skylight requires special care to reliably rule out thermal bridges. The decisive factor here is to adapt the smart membrane to the window cut-out using an H-shaped cut and to optimally prepare it for the climate-regulating seal.



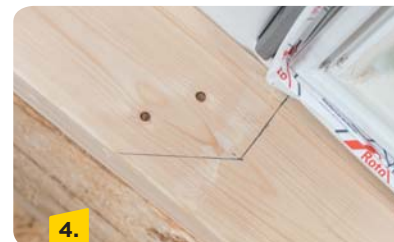
Move the outer edge of each of the upper and lower inner grooves to the rafter.



Extend the measurement from (1.) at right angles to the rafter using an angle bracket. Mark the corner points for the later transition to the lintel/balustrade according to the window manufacturer's specifications - here (e.g.) at 8 cm, measured in the inner groove of the window frame.



Extend this point horizontally to the upper part of the window.



The contour of the insulation wedge is now defined.



Proceed in the same way at the balustrade. Here, the connection should be made vertically.



Templates are helpful for cutting the respective insulation wedges. The materials needed are: cardboard, pencil, angle bracket, tape measure, cutter, thick marker pen, insulation knife.



So that there is no confusion, number the areas.



Transfer the previously marked measurements to the template, label and cut out.



Cut the appropriate insulation strip (H×W). Place the template and mark the slope with a marker pen.



Transfer the cutting lines onto the long side.



Carefully cut along the markings with the insulation knife.



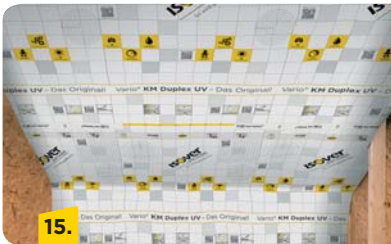
Cut the insulation boards (e.g. Integra UMP-032) for the soffit to the maximum possible thickness and fix them in place. Then, take the measurement + clamping allowance (recommendation 1 cm) for the insulation wedge.



Fit the prepared insulation wedge. Do not pinch the film skirt, in this case from the DFF manufacturer. In the picture, the vertical surface points to the fabricator.



Proceed in the same way in the upper part of the DFF.



First run the smart membrane completely over the window cut-out and stick the film overlap.



Cut the smart membrane in an H-shape (vertically on the long sides and horizontally in the middle) along the opening. Shorten excessively long film tabs (top + bottom) accordingly for better handling.



Attach the film material missing from the window sides. To do this, cut two strips with excess length and fasten them, e.g. using a pressure stapler. It is recommended to position the film joint to be bonded to the rafter (if present). There is better contact pressure here when bonding butt joints.



At the corner point where the insulation wedge becomes horizontal, make a mark on the front of the film with a marker pen. Cut vertically from the top with scissors.



Fold the smart membrane into the soffit without creases and again place a mark at the end of the horizontal line.



Remove the film from the soffit and cut again vertically from the top to the mark.



Proceed as above with the film skirt on the lower corners of the window. Here the film is only cut vertically from below.

21.



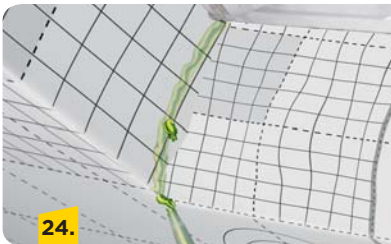
First guide the two pieces of film on the broad sides of the smart membrane over the insulation. Then lay the side strips on the soffit without creases. Trim overhanging corners.

22.



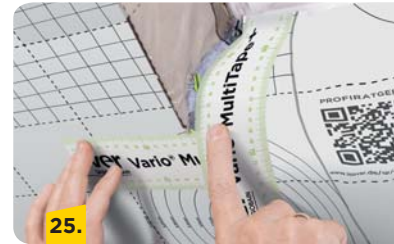
Fold the pieces of film back slightly on both long sides of the window soffit in the lower corner area and apply a bead of sealant (approx. 8-10 mm) in the overlap area.

23.



Also place dots of sealant at the incision points of the corner points.

24.



Tape the overlap with Vario® MultiTape+ to secure the position and protect the waterproofing.

25.



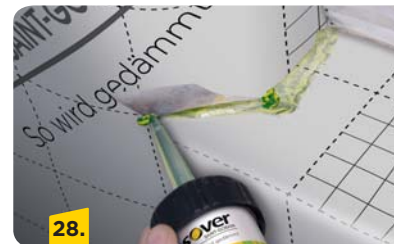
In the corners, see (22.), apply a generous amount of e.g. Vario® DoubleFit+ sealant at the lintel and apply along the overlap.

26.



Place the smart membrane over it. A small spatula helps with positioning in the corners. Ensure that the corners are clean so that the film is not damaged again when the respective inner soffit is installed later!

27.



Also place dots of sealant at the incision points of the corner points.

28.



Tape the overlapping edge of the film in the corners with a strip of Vario® MultiTape⁺. A small spatula is also very helpful here for spreading/pressing on the tape better.



Also, cut a small strip of Vario® MultiTape SL⁺ to protect the corners. Then, cut in slightly from one side towards the centre and stick over the sealant dots.



Now stick the film strips previously attached lengthwise to the roof surface with Vario® MultiTape⁺. Position the adhesive tape here and roll it on with a standard small hard rubber roller.



Clean dust and grease off the film skirt on the window (e.g. with a conventional thinner). Connect to the climate membrane with Vario MultiTape⁺. Vario MultiTape SL⁺ is best in the corners. Then press down the adhesive tape with a hard rubber roller.

Safety and protection for outdoor applications

The Vario® airtightness and moisture management system also offers the best structural safety and excellent workability properties when used from the outside.

On the following pages, for example, you will find valuable tips on connecting smart membranes in eaves areas when insulating pitched roofs or sealing penetrations in the airtight layer.



Connection of the climate membrane in the eaves area

For an optimal connection of the airtight layer in the eaves area, the smart membrane is laid crease-free with a few simple cuts and can then be connected airtight to the eaves. It must be ensured that all adjacent components are dry and free of dust and grease.



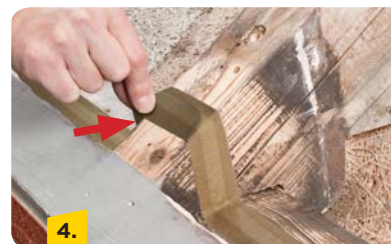
Use a wire brush to remove dust, dirt and old insulation residue from the beam and eaves in the connection area.



Remove any remaining dirt with a Hoover. The connection area must be dry and free of dust and grease. For optimum adhesion, pre-treat the substrate with primer (see page 10).



Apply the special sealant Vario[®] ProTape⁺ in the eaves area without removing the liner. Press the tape into the corners with a spatula.



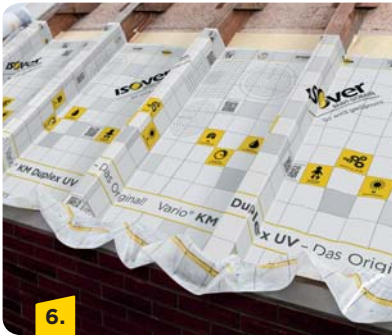
To even out the adhesive at incorrect angles on the rafter, pinch the adhesive tape at the upper edges.



Roll over the Vario® ProTape+ with the pressure roller. Press down with the roller, especially in the middle of the sealant.



Four parallel cuts are required per rafter extending from the rafter edges.



Insert Integra UMP-032 into the cavity as nail protection. Lay the smart membrane in a loop around the rafters and fasten with a hand tacker. Since the loop-shaped film lies in folds in the eaves area, it must be cut to ensure crease-free adhesion.



Trim the two outer film tabs to a length of about 3 cm. Lay the film around the rafter flanks without any creases.



For the incisions, mark the corner points of the rafter on the film.



Pull off the liner of the Vario® ProTape+ piece by piece and stick on the film without creases. For optimal hold, roll well with the pressure roller.



Cut the Vario® KM Duplex UV smart membrane parallel to the line marking up to the marked points.



Glue all film overlaps with the Vario® DoubleFit+ adhesive sealant. Finally, fix the film to the rafter with the Vario® ZSL renovation strips.

Tong connection with a) insulation wedge or b) wooden wedge

If tongs are available to brace the roof structure or to integrate a ceiling, the Vario® KM Duplex UV cannot simply be guided over them. This is because tongs form acute angles with the rafters, which cannot be sealed without creases. Cavities develop underneath that can cause structural damage due to backflow. Therefore, acute-angled tongs are added to form a rectangle that can be glued well and airtight.



Preparation



First make a template. To do this, transfer the angle points of the tongs to a prepared cardboard strip cut to rafter height.



Connect the marked angle points straight and cut the template along the line with the cutter.



Prepare a piece of insulating material (e.g. Integra UMP-032, multilayer, if necessary) in the thickness of the tongs and cut to size using the template. Use a suitable tool, e.g. insulation knife, for this.



Tong wedges can be made from both insulation material and wood.

Tong connection with insulation wedge



Screw or nail on the precisely cut insulation wedges as a right-angled addition to the tongs.



Lay the film in loops over the rafters and tongs and staple to the tongs.



Cut the film horizontally on the lower and upper side of the insulation package.



The film can now be placed tightly against the rafters and stapled on without any creases.



Seal the open edges airtight with Vario® MultiTape SL+ adhesive tape. To do this, pre-fold a strip of adhesive tape in the middle and stick it to the edge. Cut the overhanging tape along the fold, fold over the strips of adhesive tape and glue.



Proceed with all open edges as described in 5.a. Then spray the adhesive sealant Vario® DoubleFit+ on all corners to seal.

Tong connection with wooden wedge



Screw on the precisely cut wooden wedges as a right-angled addition to the tongs.



Place a strip of Vario® KM Duplex UV film over the extended tongs, wrap it around the top and bottom of the tongs and staple to both the rafter and the tongs.

Changing the airtight level in uninsulated attics (counter-board sealing)



Lay the film in a loop over the rafters and the tongs added at right angles and fasten using a hand tacker. Cut the film horizontally along the top and bottom edges of the tongs.



Press the smart membrane against the rafter flanks and staple it on without creases or fix it with Vario® ZSL.



Seal the inner edges with Vario® DoubleFit⁺.



Seal outer edges with Vario® MultiTape SL⁺. To do this, pre-fold a matching strip in the middle, peel off one half of the liner and glue it to the edge. Cut the tape, peel off the second liner strip and run the tape tightly around the corner.

If the roof is not to be insulated all the way to the top but the top floor ceiling (collar beam layer) forms the end of the insulation, a suitable OSB board is screwed onto the inside of the rafters above the integrating ceiling as a so-called counter-board. The aim is to create a medium to which an airtight connection can be made from both sides with film and adhesive tape.

Such a counter-board seal can be made either with Vario® MultiTape⁺ or with Vario® ProTape⁺. When using Vario® ProTape⁺ in outdoor applications, it is recommended to first draw a line with the chalk line in order to apply the sealing tape in a straight line.



Glue board joints from the inside with Vario® MultiTape⁺. In the event of uneven support of the counter board on the rafter, apply Vario® AntiSpike sealing tape to the areas. Then screw the counter board to the beams from the inside (attic).



Connect the counter board to the smart membrane from the outside. When bonding with Vario® MultiTape⁺, press the adhesive tape well into the edges with a spatula. For optimal hold, roll over the adhesive tape with a pressure roller. If necessary, spray the corners with Vario® DoubleFit⁺.

Sealing a pipe penetration through the underlay with a collar

Pipe penetrations through the underlay and underlay membranes as well as underlay panels must always be sealed with a collar. The Vario® MultiTape⁺ weatherproof adhesive tape, whose waterproof adhesive is precisely matched to the special surface structure of underlay membranes, is used for bonding. The pipe collar can be conveniently prepared in the workshop.



Preparation



Materials needed: Remnant piece of pipe with the appropriate diameter, smaller pipe section (both cut on one side analogous to the slope of the roof), template (width: pipe circumference plus 2 cm, length: pipe circumference minus 4 cm), Integra ZUB, Vario® MultiTape⁺, Vario® DoubleFit⁺, cutter, ballpoint pen.



Cut the two remaining pieces of the Integra ZUB underlay to the size of the template.



Wrap a cut of the Integra ZUB underlay membrane around the pipe and fix it overlapping on the long side. Cut off Integra ZUB along the bevelled pipe opening. Loosen the fixation again and put the collar aside.



Prepare four strips of Vario® MultiTape⁺ adhesive tape. To do this, place the tube on half the width of the adhesive tape, mark crescents and cut out the curve. Put the adhesive strips to one side.

Preparation



Place the piece of pipe (with the diameter of the ventilation pipe) with the bevelled side in the middle of the film and mark the outline.



Place the smaller tube, which is also bevelled, in the middle of the outline drawn and mark it.



Cut out the small outline with the cutter. Then cut tabs from the larger outline towards the centre and fold up.



Pull the base plate with the cut out curve over the pipe. Make sure that the tabs are facing upwards. Now apply the adhesive sealing compound Vario® DoubleFit+ all around the marked outline.

Preparation



Place the prepared pipe collar (3.) around the pipe from the shorter side and fix the front seam with adhesive tape. Glue the collar to the base plate by sealing with a Vario® DoubleFit+ bead.



Stick the prepared Vario® MultiTape+ (4.) adhesive strips around the pipe from all four sides according to the cut-outs.



Seal the front seam of the collar with Vario® MultiTape+. Roll over all tapes with a pressure roller for optimum hold.



Pull the piece of pipe out of the finished pipe collar.



12.

When laying the underlay membrane, cut out the ventilation pipe as precisely and accurately as possible. Before sealing the pipe penetration, check the underlay membranes for good adhesion.



14.

Put the prepared collar over the pipe (shorten the neck of the collar if necessary) and stick it to the underlay membrane. It is essential to use the water-resistant adhesive tape Vario® MultiTape⁺/SL⁺ to achieve optimum adhesive performance for outdoor use.



15.

Stick the upper edge of the collar to the pipe. Caution: Roughen PVC pipes in the bonding area beforehand with emery paper and clean with thinner.



16.

For optimum hold, roll adhesive tapes with a pressure roller and good pressure. Note: According to this principle, Vario® KM Supraplex can also be used and connected to the airtight layer.

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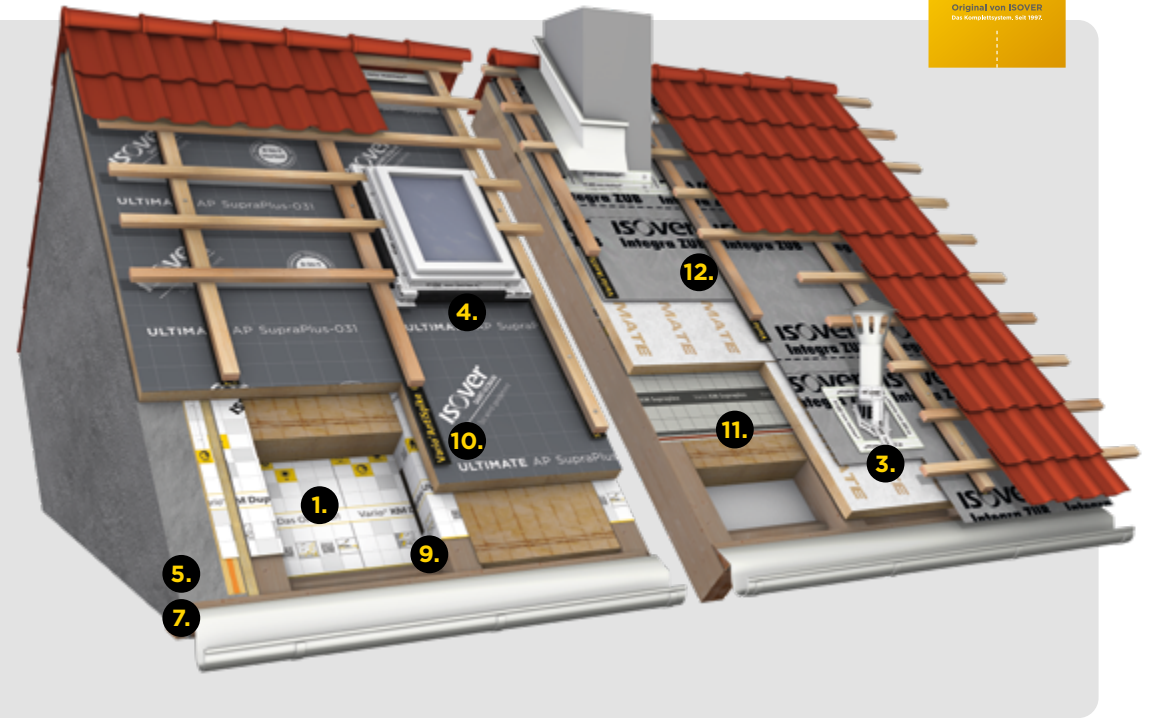
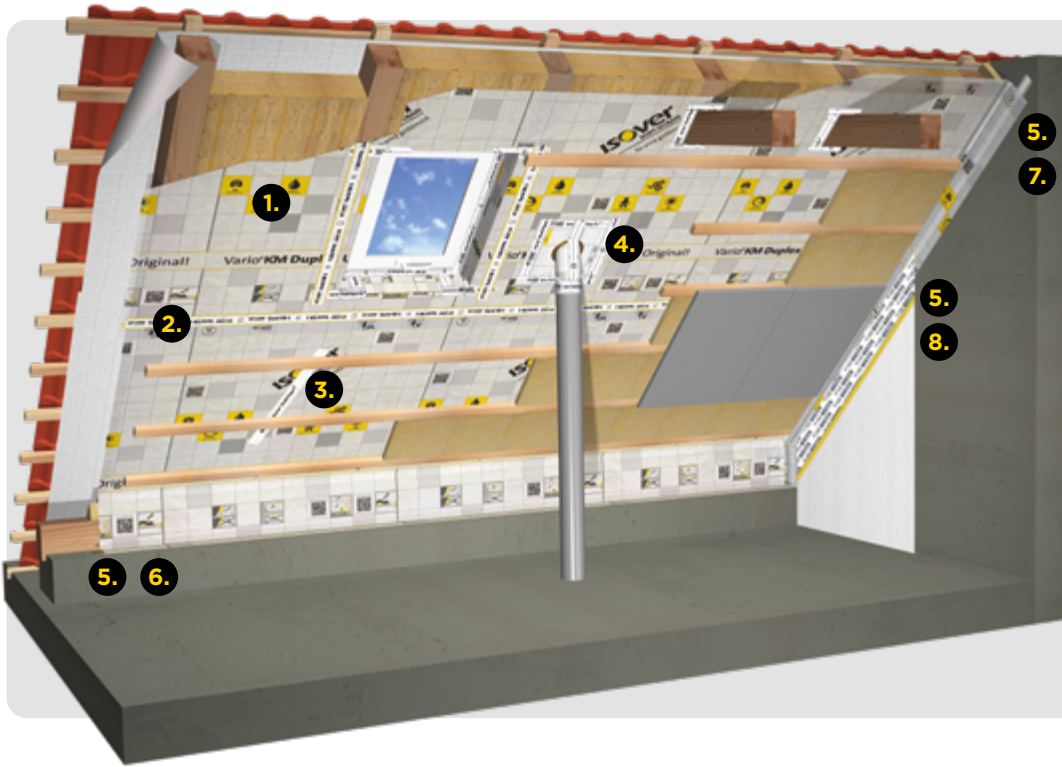
INFO

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The Vario® complete system

Safety and protection for indoor and outdoor applications



1. Vario® KM Duplex UV



3. Vario® MultiTape +



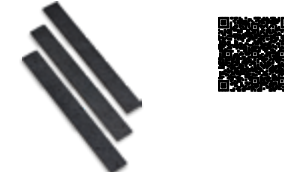
5. Vario® MultiPrime



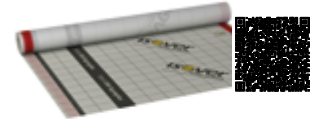
7. Vario® ProTape +



9. Vario® ZSL



11. Vario® KM Supraplex - SKS



2. Vario® KB 1



4. Vario® MultiTape SL +



6. Vario® DoubleFit +



8. Vario® Bond 100 / 150



10. Vario® AntiSpike



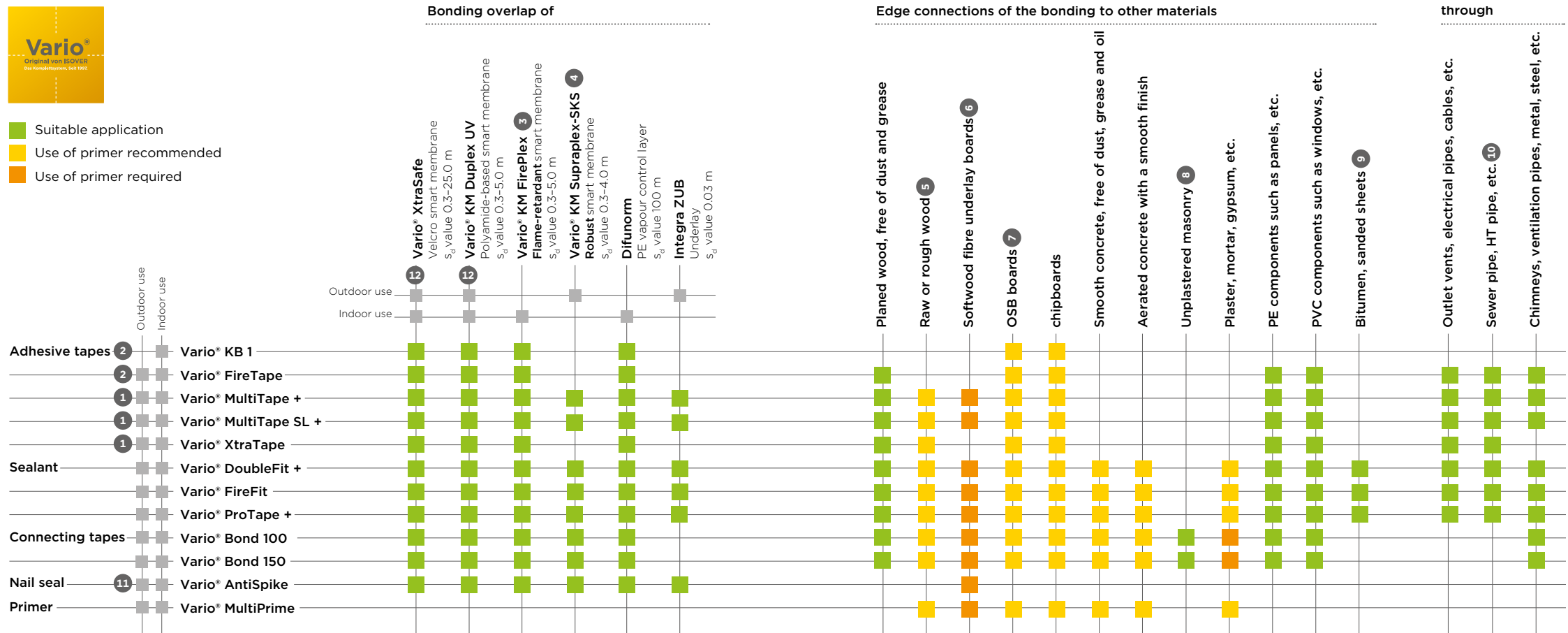
12. Integra ZUB



Vario® adhesive matrix - using the Vario® products correctly



- Suitable application
- Use of primer recommended
- Use of primer required



- 1 Vario® MultiTape+ / SL+ and Vario® XtraTape are recommended for indoor or outdoor use with looped installation of the vapour control layer and are UV-resistant for up to 6 months.
- 2 Adhesive tapes Vario® KB 1 and Vario® FireTape are not suitable for outdoor use.
- 3 Component of the flame-retardant air tightness system with system test for Euroclass B-s1, d0 in combination with Vario® FireTape and Vario® FireFit.
- 4 The moisture-variable and robust Vario® KM Supraplex-SKS climate smart membrane is laid flat over the rafters or roof boarding and is installed quickly and securely from the outside thanks to integrated self-adhesive strips.
- 5 The wood must be cleaned and hoovered using a wire brush or similar before working with adhesive tapes. Using Vario® MultiPrime is recommended. Bonding the airtight layer to conventional rough wood does not constitute permanent bonding.
- 6 In the case of softwood fibre underlay boards, the surface must always be pre-treated in accordance with DIN 4108-7 when bonding using adhesive tape. Adhesion promoter Vario® MultiPrime is suitable for this purpose. If the additional measures according to ZVDH require butt join bonding of the boards due to the local conditions, the butts can be bonded with Vario® DoubleFit+.

- 7 When using OSB boards to create an airtight layer, check with the manufacturer whether they are suitable for the application and whether the surface needs to be sanded to enable bonding. For gluing OSB board joints, we recommend Vario® MultiTape SL+.
- 8 Pre-treat aerated concrete with Vario® MultiPrime to improve adhesion. The plastering work should be carried out directly afterwards. Plaster over the strip at least 3 cm wide.
- 9 Mechanical securing, e.g. pressure bar, is recommended.
- 10 Before bonding to plastic pipes, the surface must be roughened and then cleaned thoroughly.
- 11 Vario® AntiSpike can be bonded to all ISOVER films. When creating the airtight level, Vario® AntiSpike can be used in combination with adjusting screws. For more detailed information and intended use, please contact the ISOVER and RIGIPS technical advisory service.
- 12 In outdoor areas, a loop-shaped installation of our smart membranes is recommended. Not for use as an underlay or underlay membrane. If you have any questions, please contact ISOVER Application Technology.



Special stickers indicate the presence of an airtight layer. They warn against the film being accidentally damaged by subsequent work.

Do you also want to protect your work? Contact us.

All important information and notes on the Vario adhesive matrix



If you have any questions about using Vario® products, please contact our technical advisory service.





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