

Façade breather membrane  
Euroclass A2-s1,d0

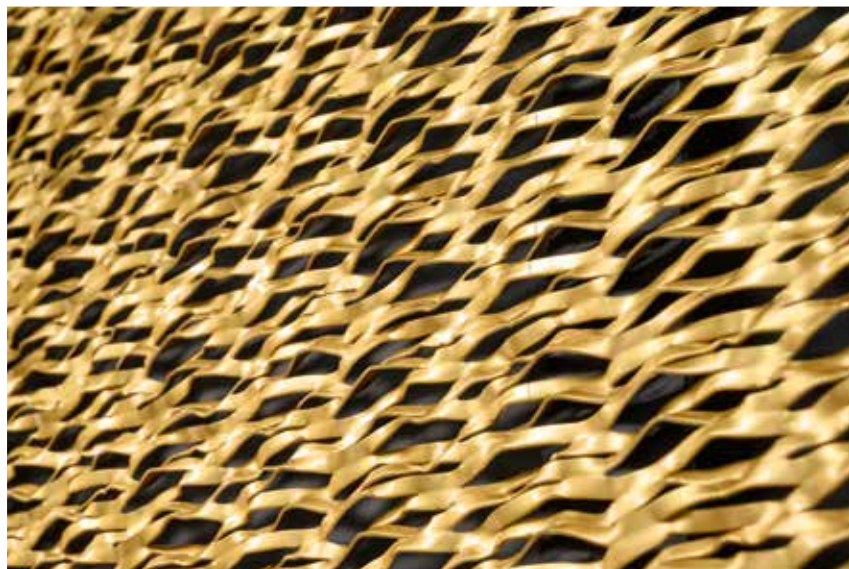
Technical Guide 10 | 2020



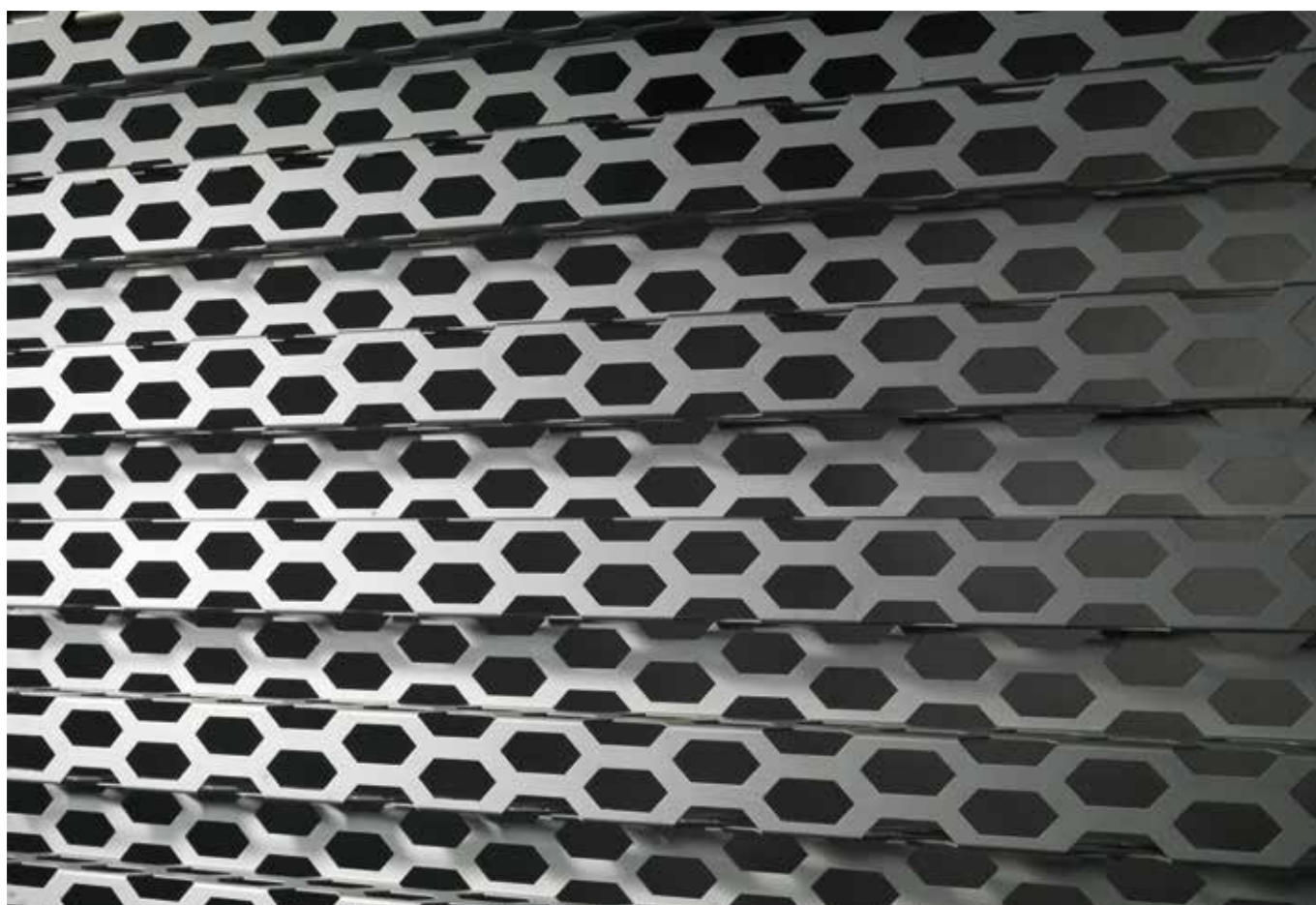




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## CONSTRUCTION



Construction

**Stamisol**  
Safe One

### **A new kind of efficiency for façade construction in Class A2**

Stamisol Safe One Euroclass A2 façade breather membrane behind cladding reduces the fire spread, improving fire safety for curtain-wall, rear-ventilated façades with highest requirements in fire protection. The sealing of the vertical rear-ventilation envelope with Stamisol Safe One façade membrane now makes design and construction more efficient and practical.

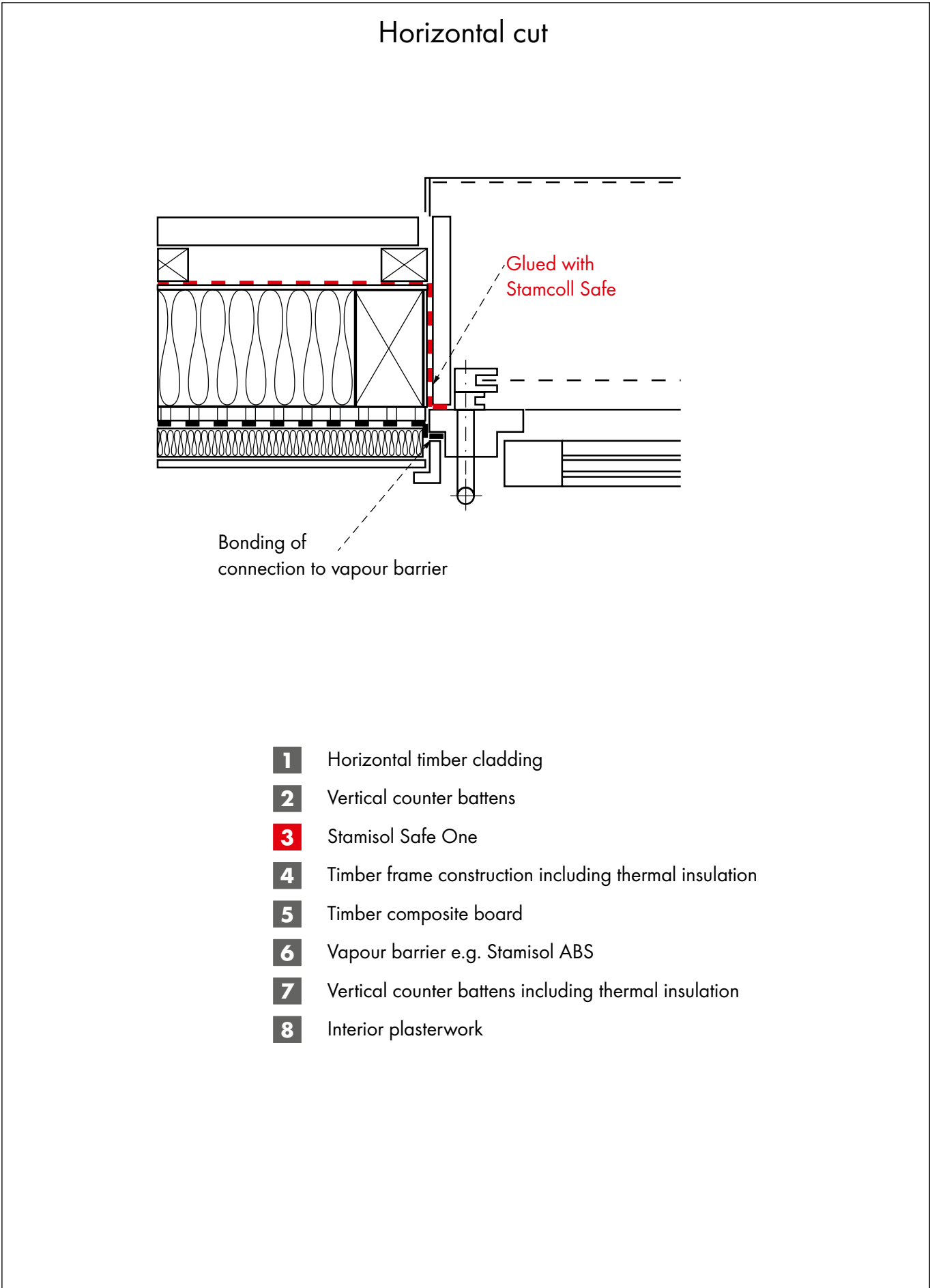
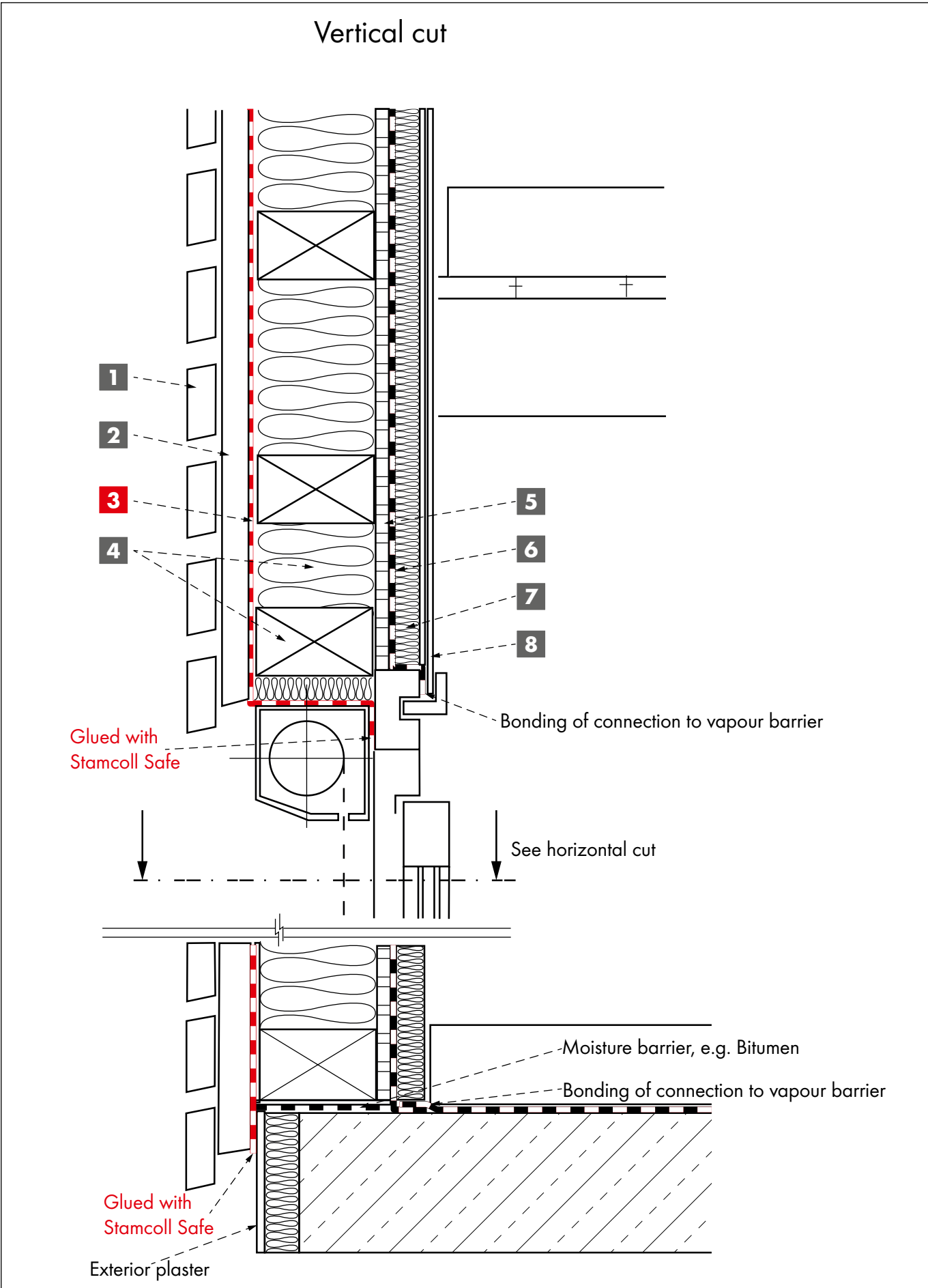
On the following pages you will find our construction models for various façade claddings in combination with Stamisol Safe One Euroclass A2 façade breather membrane.

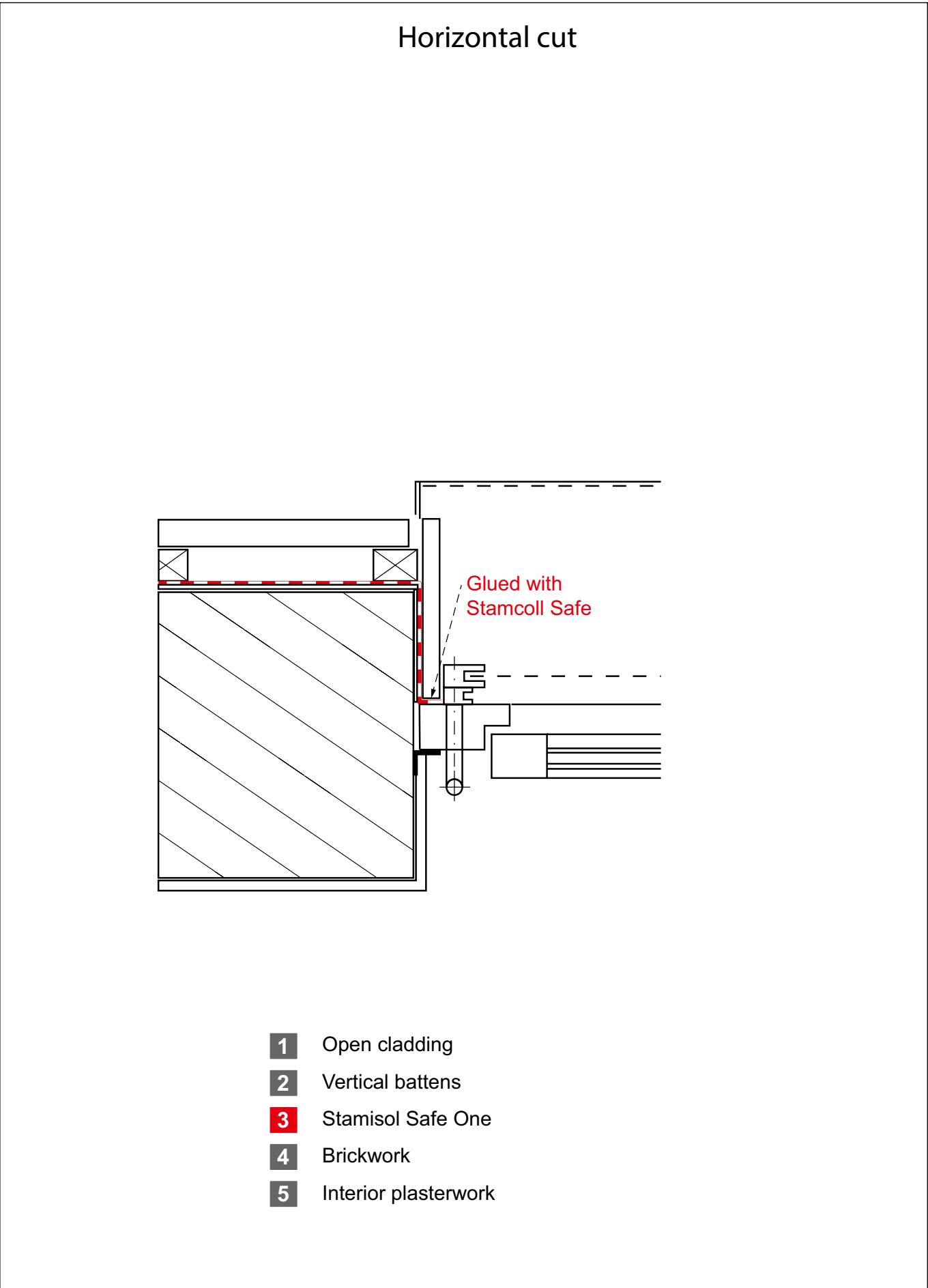
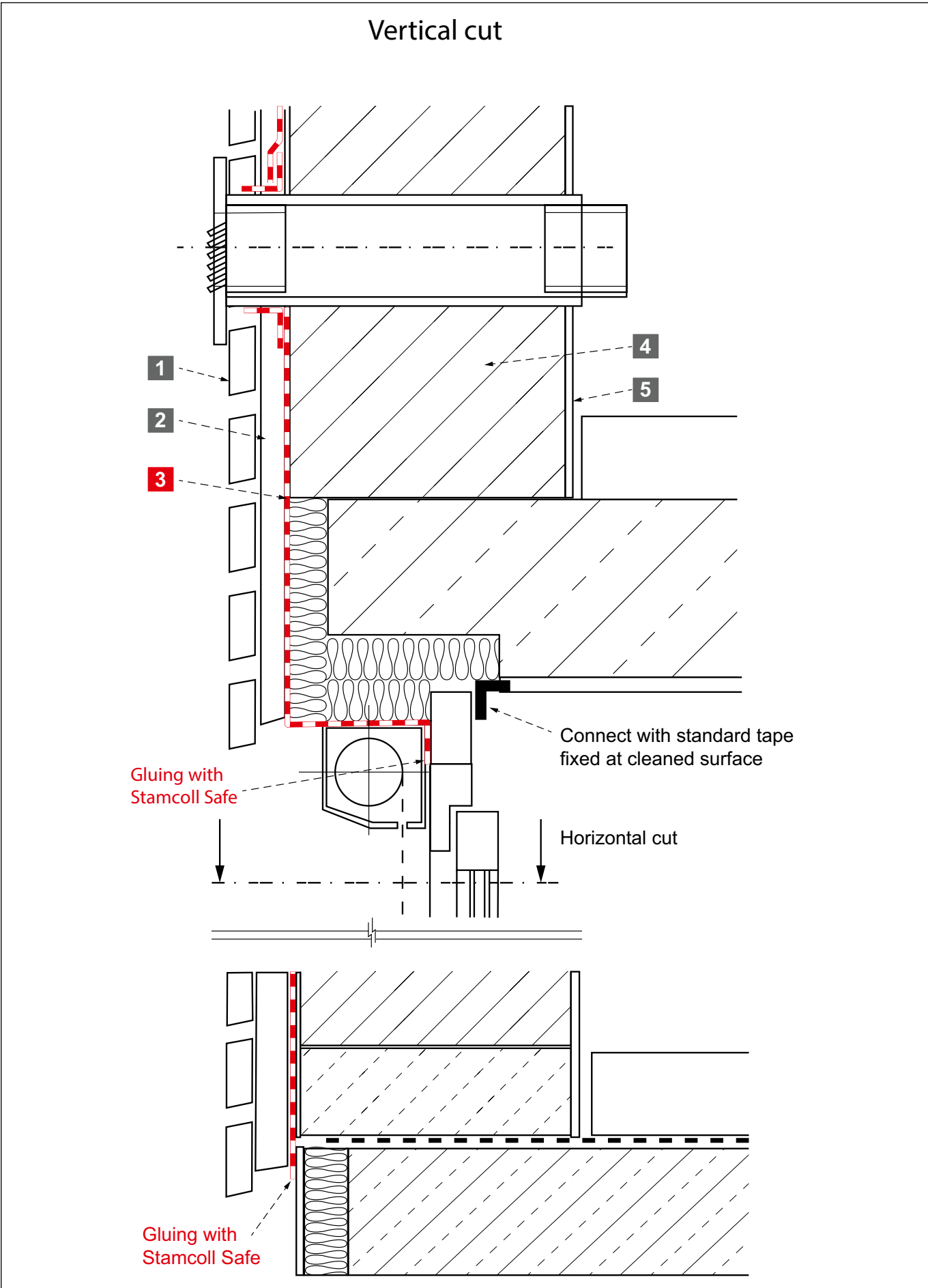
### **Planning and construction support**

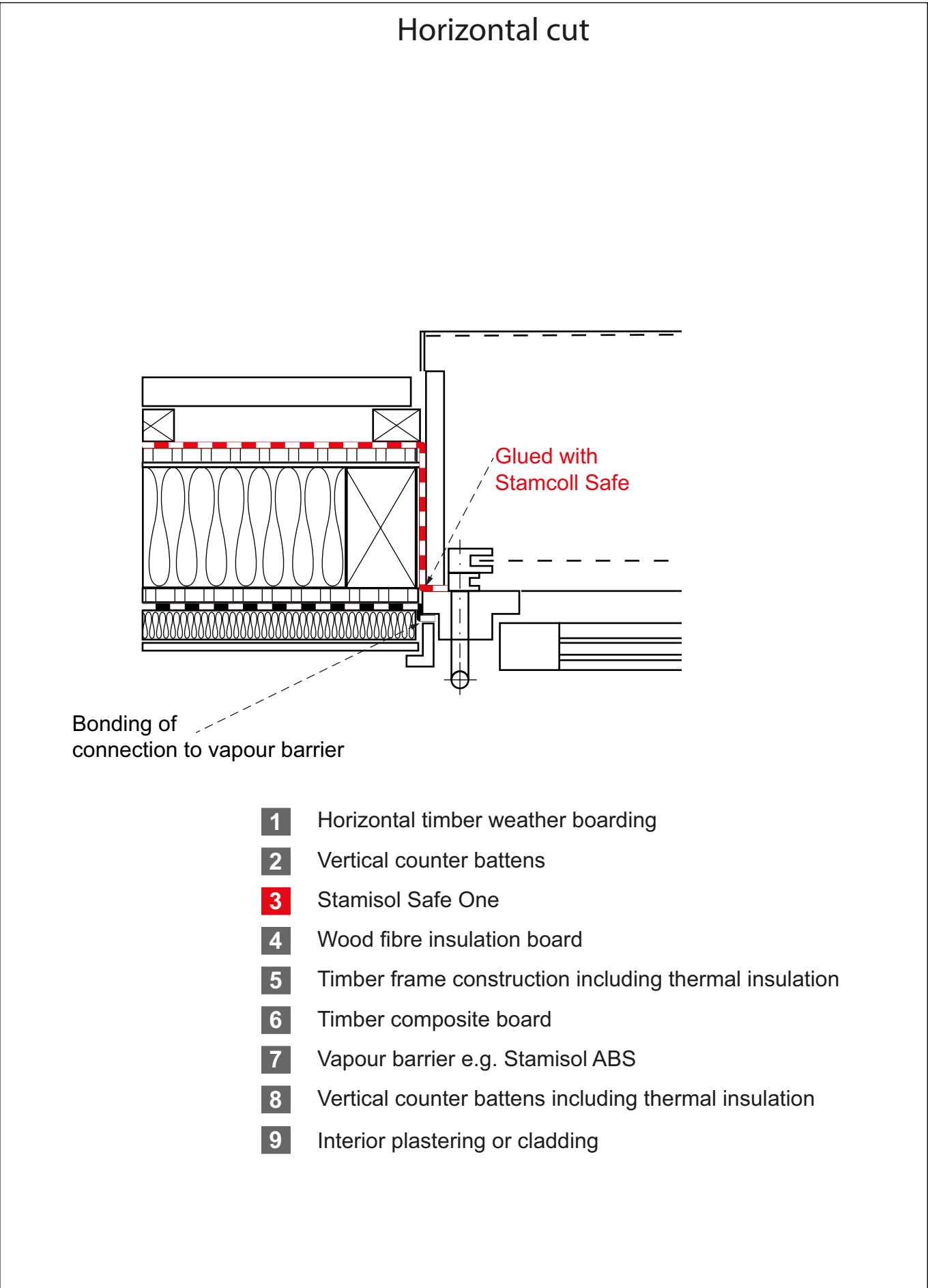
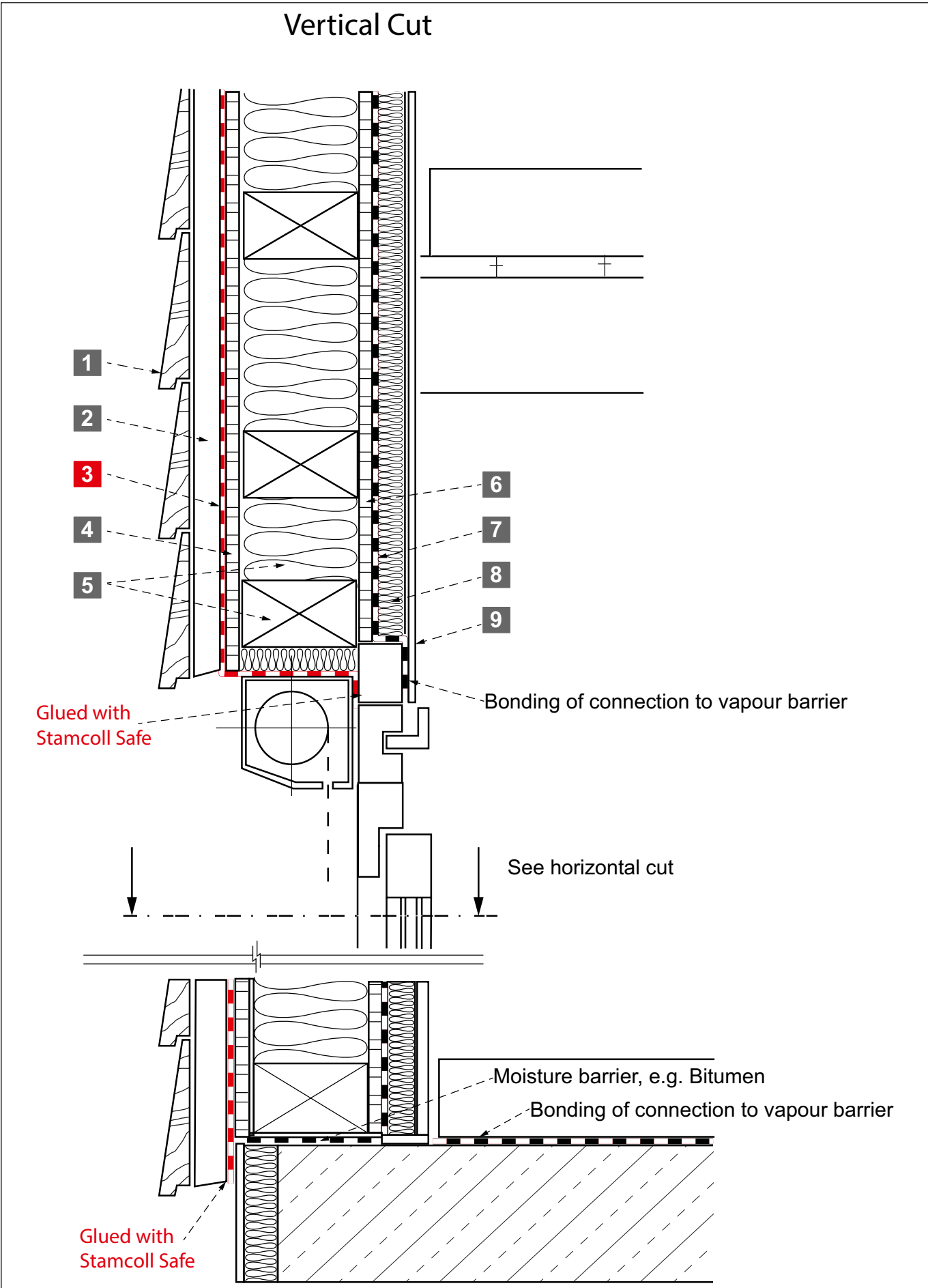
Our technical team will be pleased to support you

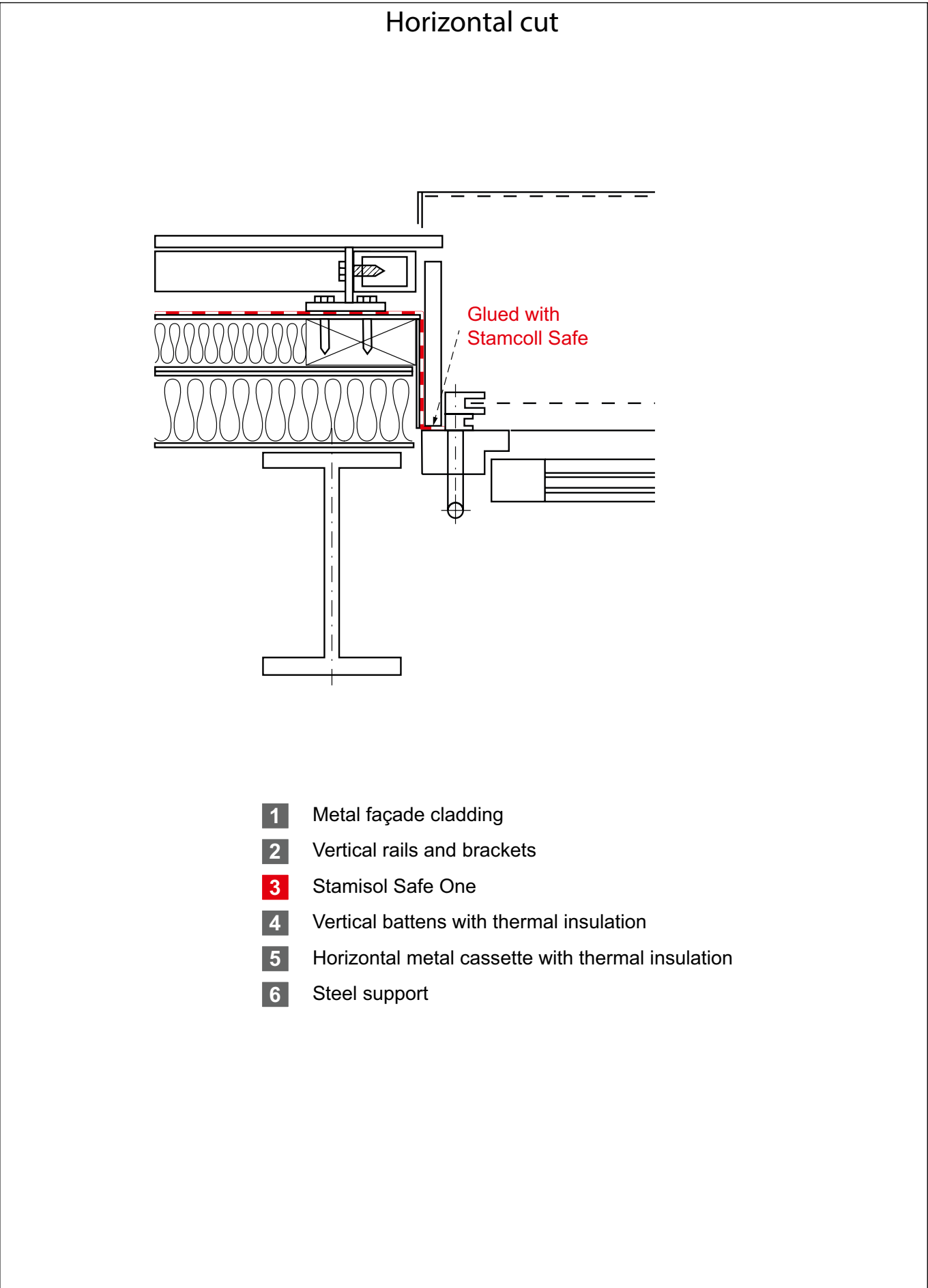
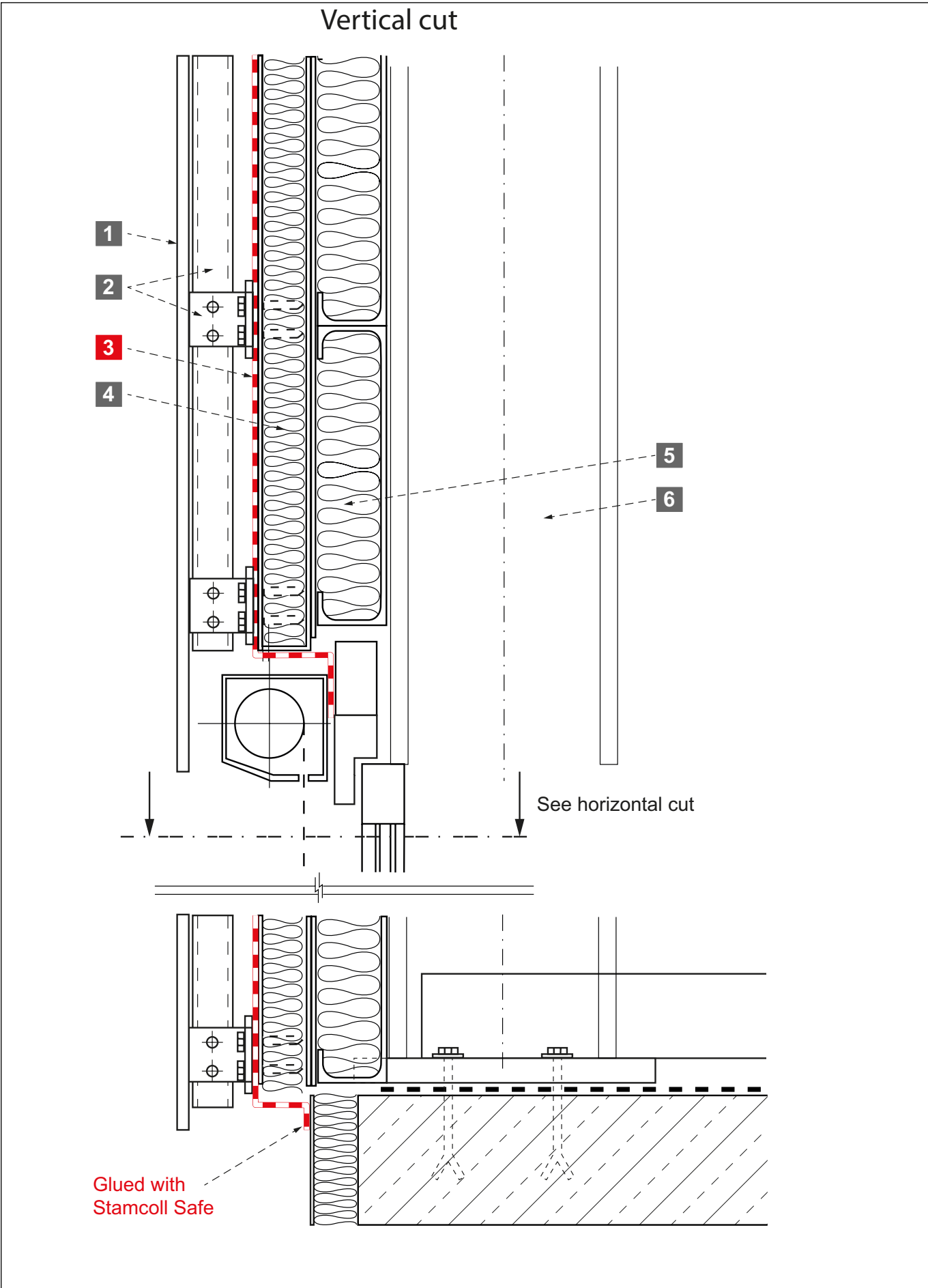
- for questions regarding Stamisol Safe One applications and buildings
- in the coordination of maximum opening degrees/joint widths for your planned façade cladding
- with recommended Stamisol distributors and installers

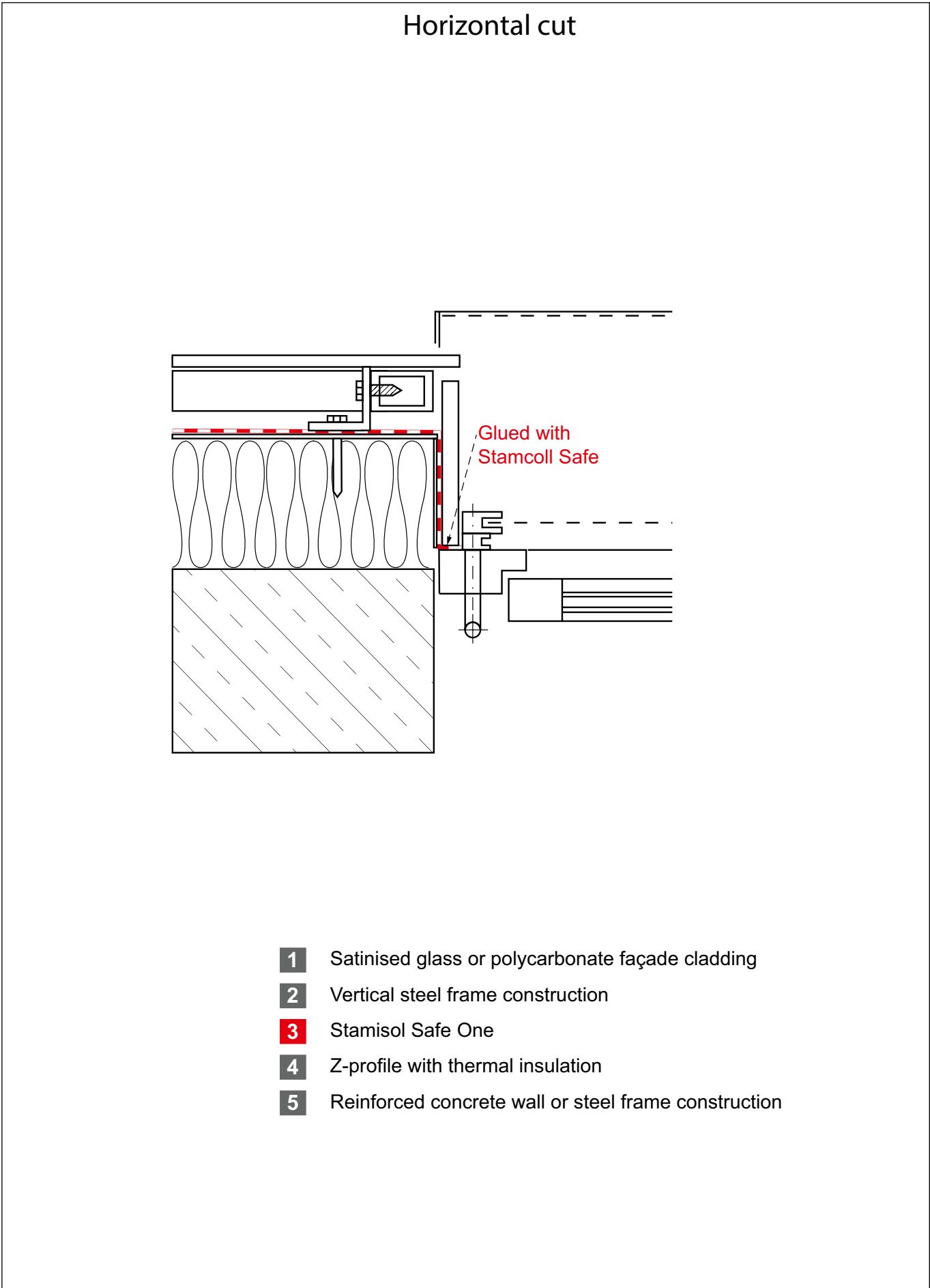
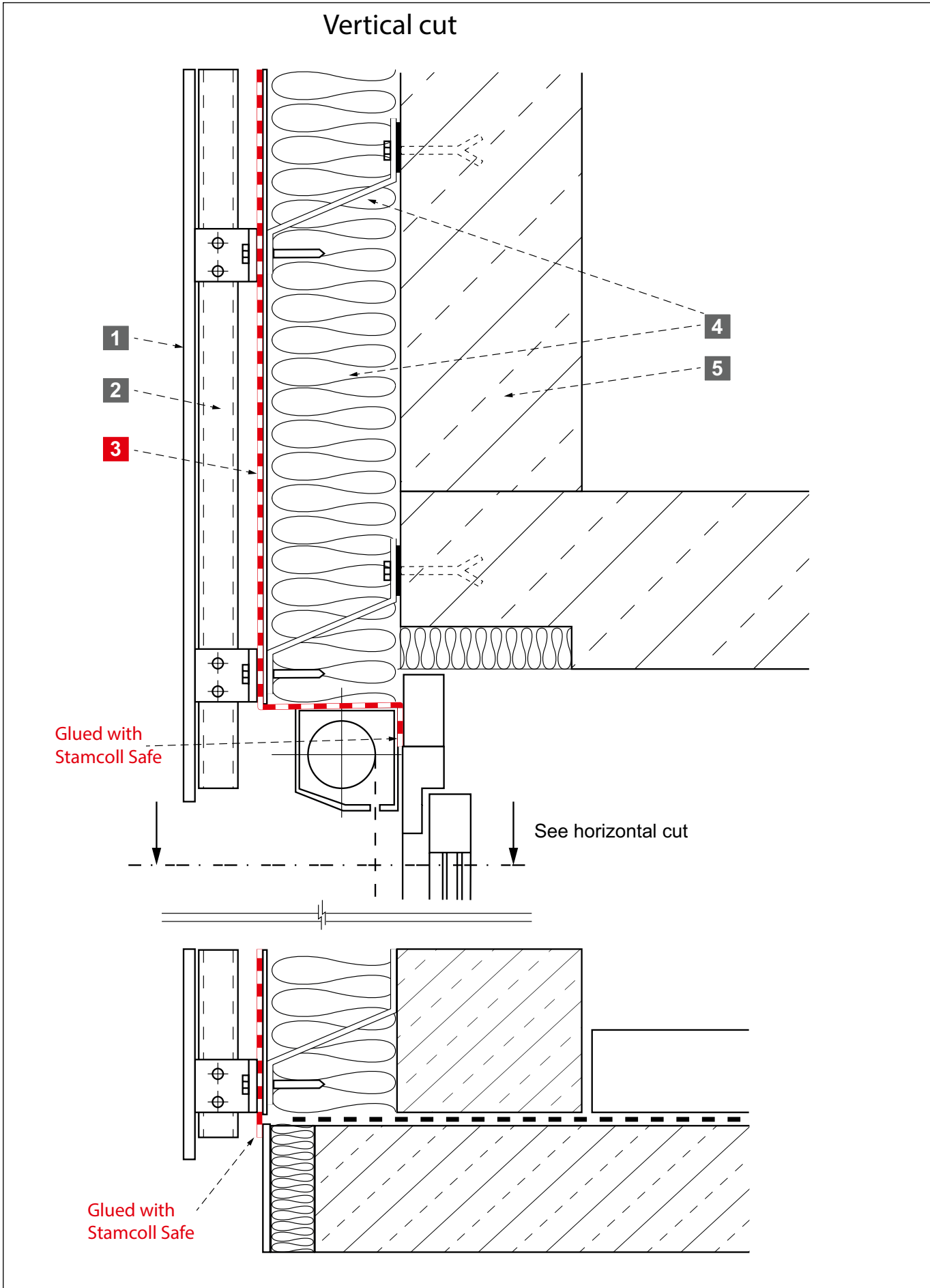
















Installation

# Stamisol Safe One

## Quick and safe installation

The Stamisol Safe One system of membrane and bonding materials is perfectly matched. It's low weight, flexibility and robustness – easy to clean and highly scratch resistant – make this membrane easy and efficient to install. A sophisticated adhesive technology creates secure connections to substrates and connections to other building elements, as it is compatible with almost all materials and construction methods, such as steel construction, solid construction, etc. In case of delays until the final assembly of the cladding, Stamisol Safe One can be exposed to the weather for up to 2 months.

## Professional execution at high standards

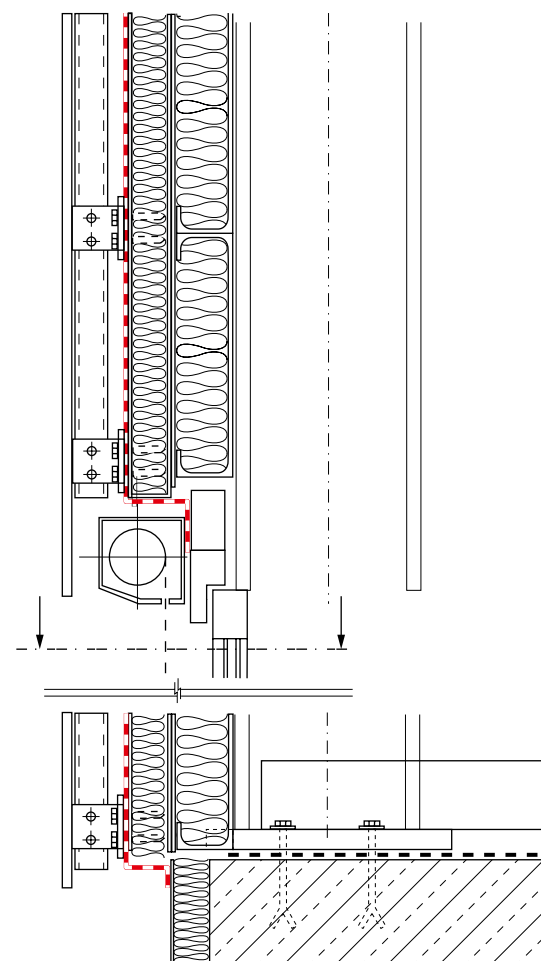
In order to guarantee our comprehensive 10-year warranty and to ensure a perfect building envelope in Euroclass A2, Stamisol Safe One façade membranes are installed by specialist companies with NVQ Level 2 or CSCS Skill Card.

## Installation support

On the following pages you will find our detailed instructions for installing Stamisol Safe One façade membranes Euroclass A2-s1,d0.

Our technical team will support you with

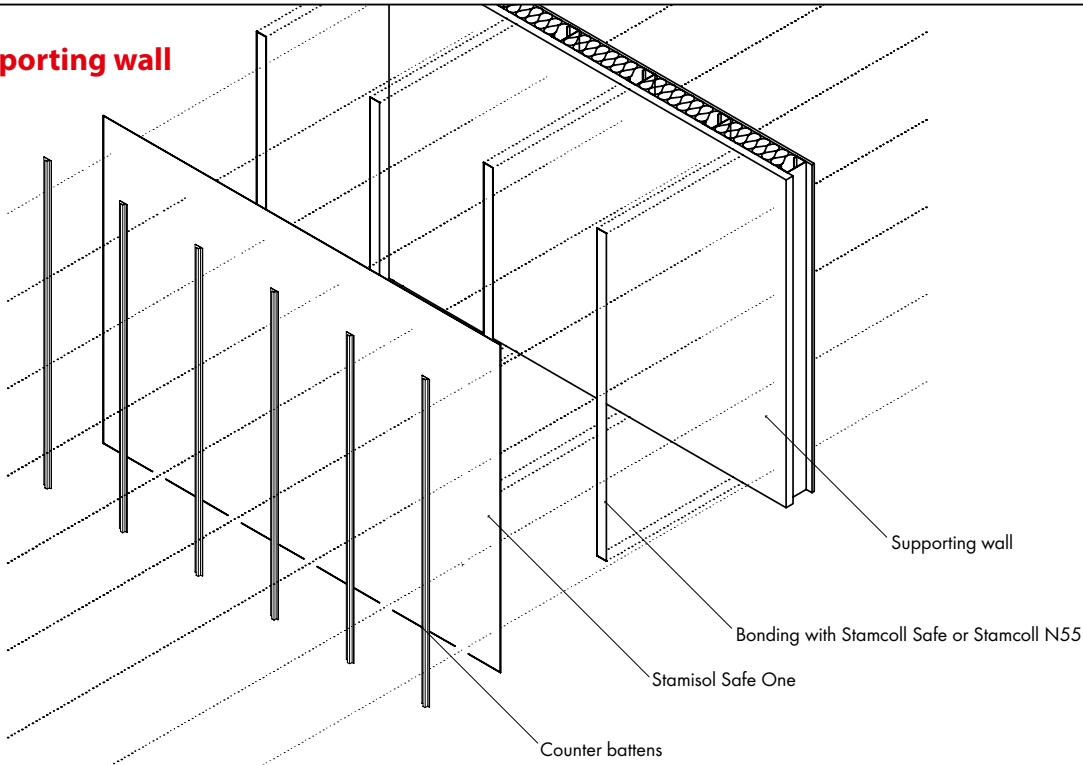
- Training videos for the installation of Stamisol Safe One (available soon)
- Site specific technical advice



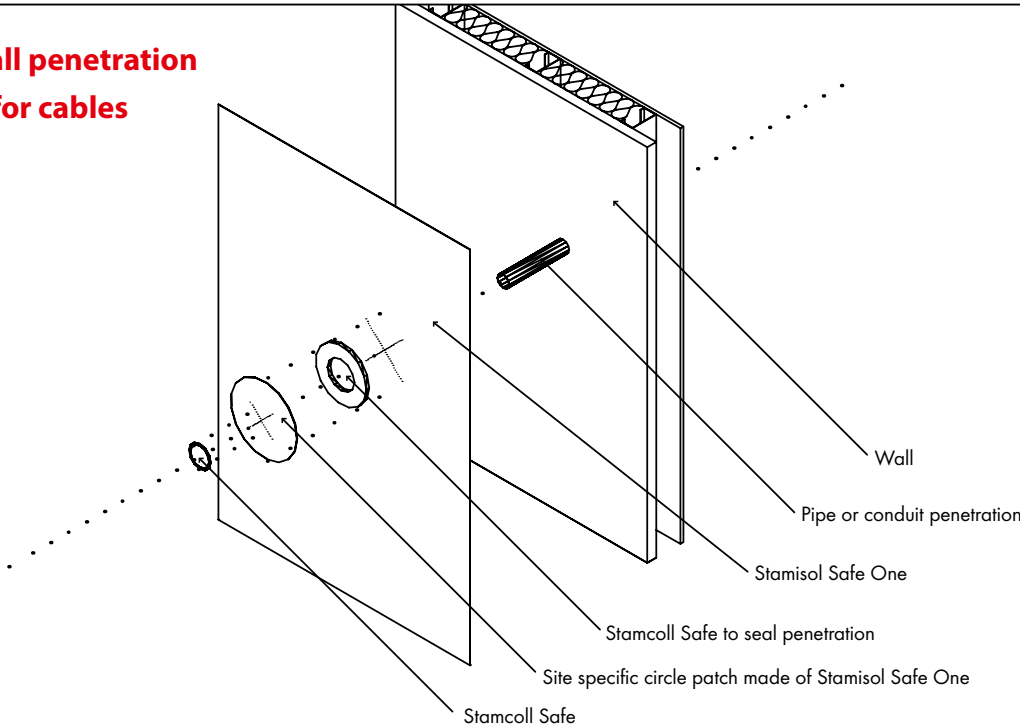
# INSTALLATION



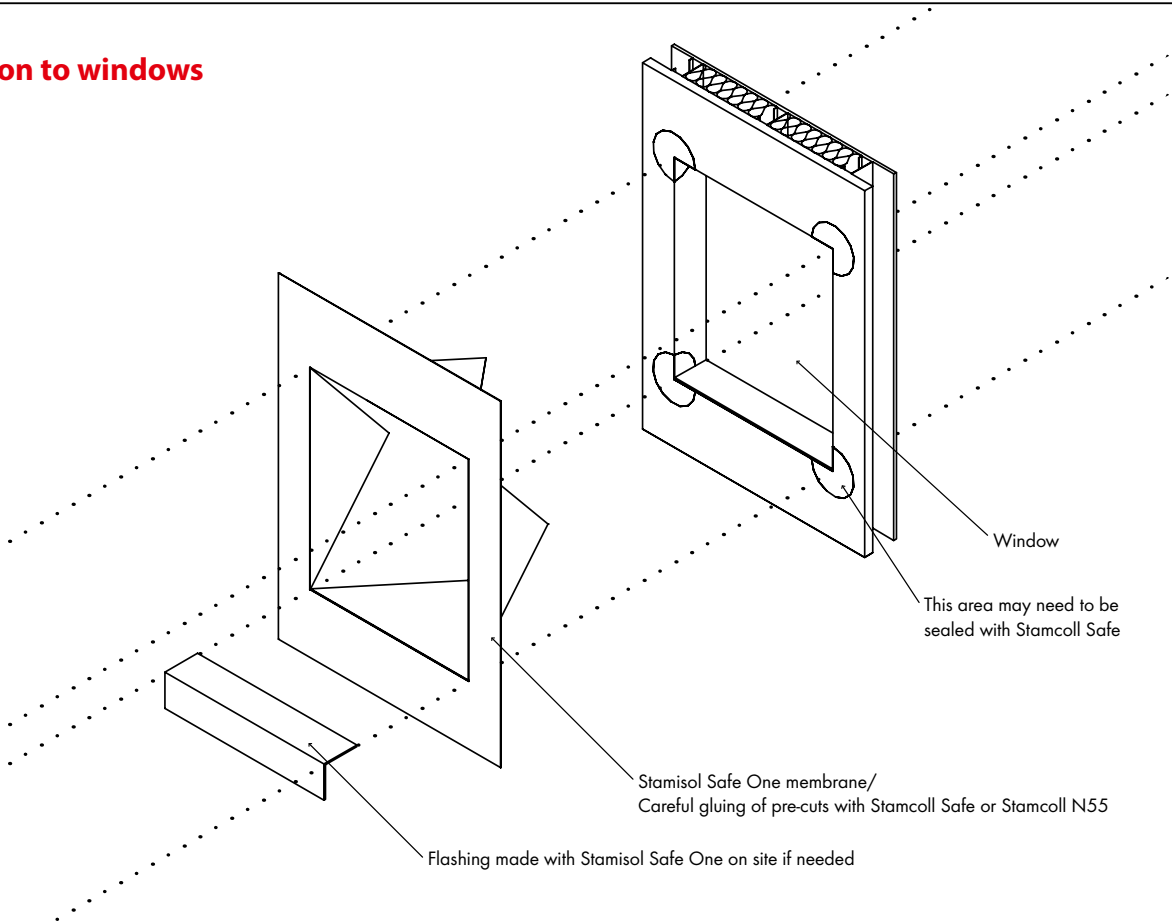
Exterior supporting wall



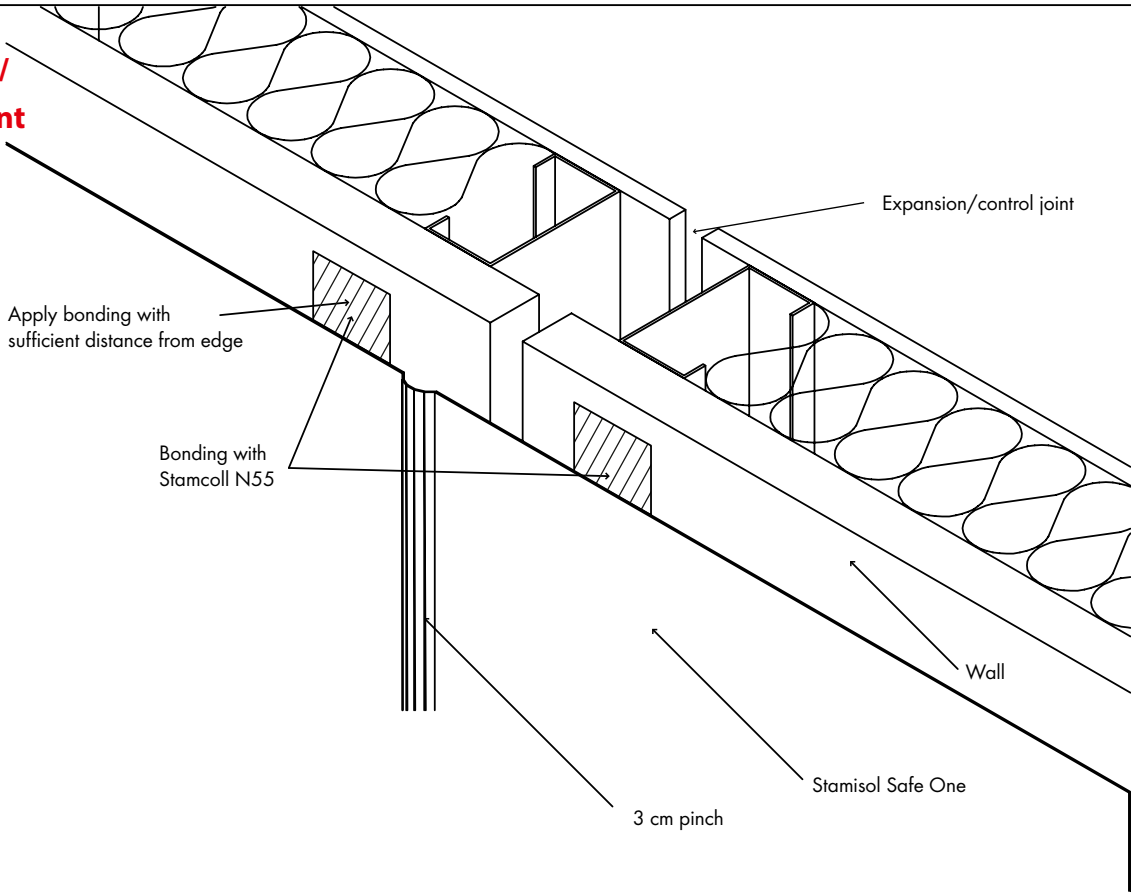
Through wall penetration and fitting for cables



Connection to windows



Expansion/  
control joint

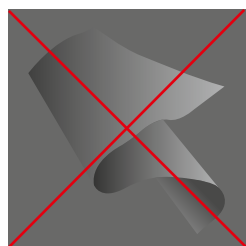




## Application

Stamisol Safe One is an Euroclass A2 façade breather membrane for use in vertical wall installations, behind closed or partially open façades and rainscreens. It is rated A2-s1,d0 (EN 13501-1) and is UV resistant for partially open curtain façades with up to 50mm gaps or a maximum open area of 50 %. Stamisol Safe One comes with a 10-year guarantee (terms & conditions see page 23) for UV resistance and a lifetime guarantee as an Euroclass A2-s1,d0 membrane.

NOTE: As per EN 13859-2, Clause 5.2.2, in the case of the breather membrane being used on a supporting structure, further flame retardant testing of the structure may be needed to determine the flame retardancy of the construction due to a possible difference in flame retardancy of the supporting construction materials (e.g. wood). Stamisol Safe One is Euroclass A2-s1,d0 when free hanging or directly installed on a supporting substructure with a flame retardant classification of A1 or A2.



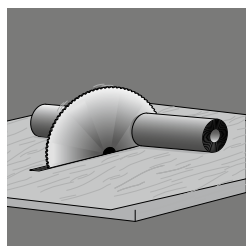
### Storage & Handling

Store the rolls horizontally in cool, dry and sheltered conditions. Handle the material with care and ensure that the membrane is not creased or folded. When unrolling the membrane, ensure all

surfaces are clean, dry and free of dust, grit or grease/oils. Always work with clean hands or wear gloves and use clean tools.

### Installation

These installation instructions are provided as general, standard procedures. As each construction is unique, it is strongly recommended that any site-specific installation concerns, not covered by these instructions, are referred to the Stamisol Safe One Technical Support Team for advice and guidance.



### Cutting the membrane

1. Prior to unrolling the material, the Stamisol Safe One roll may be cut with a saw if a different width is required. All cut edges must be covered with an overlap (min 50 mm) when installed.

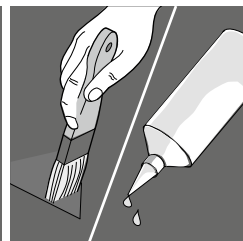
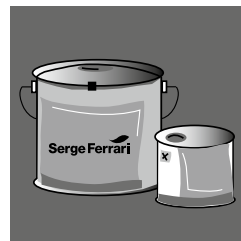
2. The membrane can be cut with sharp scissors or a Stanley-type knife and straight edge. Ensure that any work surface is clean, dry and free of dust, grit and/or grease/oils.



### Fixing the membrane

1. Stamisol Safe One should be installed with the black coated side facing out.
2. The material may be fixed either mechanically (with staples or battens) or mechanically and

glued to the substrate, with the white uncoated side inwards. In both cases the fabric should be tensioned for a smooth installation and fixed securely before gluing or fixing any overlaps or connections.



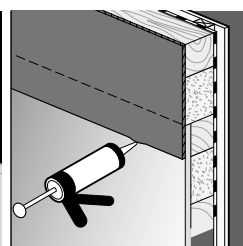
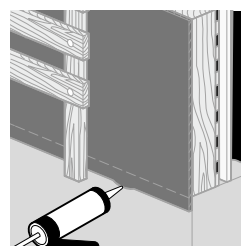
3. If using Stamcoll N55 Glue to fix the material, shake the tin thoroughly and fill the supplied applicator bottle to apply the glue to the substrate (wood, aluminium, steel, concrete, etc). Use a brush to spread the glue in 50 mm wide strips, three strips per full width of Stamisol Safe One (e.g. each side and middle). Coverage guide: 40 g of Stamcoll N55 per lin.meter.

I. The supporting structure needs to be clean and free from dust – non-porous substrate surfaces should be cleaned with spirit or cleaners based on acetone or isopropanol and with a clean and lint-free cloth;

II. The ambient temperature should be between +5 °C and + 40 °C;

III. If the supporting structure has a porous/absorbent surface, prime the substrate with Stamcoll N55 glue prior to fixing the material, and allow the primer coat to dry completely before applying glue strips to fix the material;

IV. Press the material **firmly to the wet glue strips** to ensure an even, bubble-free adhesion (do not allow the Stamcoll N55 to begin to dry);



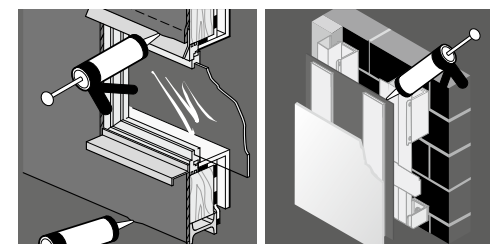
### Overlaps

All overlaps should be a minimum of 50 mm and cut edges must always be overlapped. Roll out and mechanically fix the overlapping panel first, leaving

## Installation instructions

50 mm at the bottom unsecured. Align and mechanically fix the top of the next, underlying panel. Overlaps may be secured mechanically (with staples or battens) or glued using Stamcoll Safe Cartridge.

If using Stamcoll Safe Cartridge to fix the overlap, the nozzle for the cartridge should be cut so as to deliver an 8 mm wide bead of glue, applied 25 mm from the top edge of the underlap. Roll down the overlap and press firmly with a roller or with hand pressure to create a smooth, secure and bubble-free bond. (Note: the glue will spread under the pressure to a strip approx. 40 mm wide.) A test bond is required prior to full installation of the membrane. Coverage guide: one cartridge for 6.5 m of 8 mm wide glue beading. If the Stamisol Safe One membrane is being installed behind a partially open façade and will be visible, it is recommended to use a strip of masking tape, aligned to the edge of the overlap, to protect the underlap from any glue squeezed out when the bond is made. Remove masking tape immediately after fixing the overlap. (Note: dried glue cannot be removed from the membrane without leaving a visible residue.)



### Connections

Connections (e.g. windows) should be treated with the same method as overlaps, using Stamcoll N55 glue to the substrate and Stamcoll Safe Cartridge to bond the overlaps. (Use masking tape to protect the surface of the membrane and remove immediately after bonding.)

### Penetrations

Penetrations (e.g. cables) should be covered with a single square of Stamisol Safe One, bonded to the underlying membrane using Stamcoll Safe Cartridge. Place the square in a diamond position, with one corner pointing upwards.

### Repairs

Damaged areas must be repaired using patches of Stamisol Safe One membrane. The area must be clean, dry and free of dust and grease. The patch must be 25 mm larger than the damaged area. Fix the patch by using Stamcoll Safe Cartridge.

# Stamisol Safe One

### Further Information

These installation instructions are based upon currently available good practice and information and are offered as a general guide. Final determination of the suitability of any information or material for the use contemplated and the manner of use is the sole responsibility of the user and the user must assume all risk and liability in connection therewith. Check the suitability and safety of the products for the use envisaged with all current and applicable national standards.

Terms & Conditions for applicable guarantees are provided on page 23. Please refer any project-specific installation queries to the Stamisol Safe One Technical Team.

### IMPORTANT

- Stamisol Safe One should only be installed by qualified persons with an NVQ Level 2 and/or CSCS Skill Card
- Use only Stamcoll N55 Glue and Stamcoll Safe Cartridge as adhesives in the installation, at temperatures between +5 °C and +40 °C
- When applying the Stamcoll Safe adhesive to the Stamisol Safe One membrane, it is important that no more than 80g per sqm of Stamcoll Safe is applied to the membrane to maintain Euroclass A2
- Protect Stamisol Safe One from UV exposure: cover and finish the construction of the membrane installation within a maximum of 2 months (for Western Europe)
- It is always recommended to use aluminium or steel fixing battens to hold Stamisol Safe One membrane in position, in case of fire. Stamcoll Adhesive is recommended only to adhere the membrane to the fixing surface as the adhesive itself is not to class A2-s1,d0. See the technical sheet of Stamcoll Adhesive at page 22 for full specification.
- Failure to follow these instructions will void any guarantees and warranties for the product



Stamcoll Safe

The water-resistant adhesive for bonding Stamisol Safe One membranes

- Description
- Stamisol adhesive Stamcoll Safe delivered from cartridge
- is a high-quality, one-component adhesive / sealant based on silane-terminated polymers
  - hardens through reaction with moisture

- Benefits
- Very good primer-free adhesion on numerous substrates
  - Good weather, aging and UV resistance
  - Can be used indoors and outdoors
  - Permanently elastic - for tension-equalizing bonds and with dynamic loads
  - Almost odorless
  - Free of solvents, silicone based
  - Can be painted over

1. Technical data

Viscosity: low viscosity (easy to work)

Density at +23 °C, 50 % RH: ~1.44 g/cm³

Temperature resistance: -40 ° to +100 °C

Processing temperature: +5 ° to +30 °C

Skin formation time at +23 °C, 50 % RH: ~ in 25 min.

Curing in 24 hours at +23 °C, 50 % RH,: ~ in 4 mm

Storage stability at +23 °C, 50 % RH: 12 months from production

Additional condition at processing temperature from 0 ° to + 5 °C: Stamcoll Safe is up to max. 80 °C. Can be processed at +5 °C. In the temperature range from 0 °C to +5 °C: Ensure that the surfaces are free of water, frost, ice, etc. If low temperature and low humidity, curing can be delayed considerably. These values are for information only and are not intended for the design of specifications. Please contact Stamisol Safe One Technical Team before creating specifications.

2. Processing instructions

- 2.1. Gluing overlaps with Stamisol Safe One
- Preparation processes
- 2.2. Preparation of the adhesive surfaces of all substrates to be glued
- Compatibility: Paints, varnishes, plastics and other coating materials must be compatible with the Stamcoll Safe.
- Cleaning: The adhesive surfaces of the substrates to be glued must be clean, dry, grease free and stable.
- Cleaner for non-porous surfaces: The cleaning should be completed with spirit or other cleaners based on acetone or isopropanol and with a clean and lint-free cloth.
- 2.3. Liability and pre-treatment
- Application technology and advice: Stamisol Safe One Technical Team would be happy to help you with your enquiry. If in doubt please let us know your application parameters and requirements and we will do our best to support you.
- 2.4. Apply Stamcoll Safe
- Considerations
- Avoidance of air pockets: To achieve optimal adhesion and good mechanical properties, air pockets must be avoided.
- Due to a number of external influences during the installation processing and application, the user should always carry out a trial test and application before starting the main work.
- The specific use by date of use can be found on the outside of the cartridge.

3. Application technology and advice

Your Stamisol consultant is available for technical advice (see contact details at back cover).

4. Safety instructions

First aid measures and disposal instructions are available at stamisol.com. For details please read our safety and instruction sheet before commencing work.

5. Warranty

All information in this document is based on our current technical knowledge and experience. Because of the large number of possible influences in the processing and application of our products, they do not release the processor from carrying out his own tests and trials.

A legally binding assurance of properties or suitability for a specific application cannot be derived from this. The guarantee given is that the product complies with the current sales specifications of Serge Ferrari.

We reserve the right to update and improve the product as technical developments’ progress.

Serge Ferrari continues to carry out tests on the product and may create recommendations for specific applications based on product order requirements.

If the application for which the Stamisol Safe One product is used, is subject to local approval, the user is responsible for obtaining that approval.

Serge Ferrari assumes no liability for any subsequent costs incurred by the Installer through wrong application, the product was not designed for.

Our recommendations does not release the user from their own obligation to third parties and does not take into account the rights of third parties as it is the responsibility of the user to clarify these third party obligations.

May 2020, version 1.2

Stamcoll N55

Adhesive properties

High heat-resistant contact. Water resistant. Excellent resistance to plasticizers, oil, gasoline, diluted acids and alkalis.

Application

The surface to be glued should be free of dust, oil, grease and traces of separation agents. This adhesive is particularly suitable for gluing Stamisol breather membranes onto timber, metal, steel, concrete, weather boards and wall finish.

Wet gluing

Stir the adhesive thoroughly. Apply to one of the surfaces (about the thickness of a finger) forming circles with a brush. Press both contact surfaces immediately together. Remove any air bubbles for a perfect contact.

Contact gluing

Stir the adhesive thoroughly. Apply to both surfaces forming circles with a brush. Wait to air dry (finger-test). Press both surfaces immediately together. Remove any air bubbles for a perfect contact.

Primer

Where a fixing plater is required to attach the membrane too, such as aluminium beading , then the beading may need an adhesive “key” brushed on, to allow the adhesive to firmly adhere. When this is required, “key” the plate or beading with Stamcoll N55 adhesive and allow to dry.

Once dry you can follow one of the above two fixing processes.

Consumption of Adhesive tin: Approx. 1 liter per 26 m roll.

Properties: Withstands temperatures from –40° C to +80° C

Storage: Store in original container, firmly closed. Use within 12 months

Disposal: Follow all applicable national health and safety requirements and any local council rules. Any adhesive remains should be disposed of at your local hazardous material waste facility. Do not release remains into the mains sewage system. Dispose of an open container, including any hardened remains, at an appropriate waste facility in the appropriate container.

Toluene-free.

Please consult the data sheet for further details of applications.



10-year warranty

Serge Ferrari AG (hereinafter referred to as the Warrantor) provides the following Warranty to the companies concerned (hereinafter referred to as the Warrantees):

1) Products covered

The Warranty covers the following products and their intended applications, shown in the technical data sheet and product brochure, within the European Union, UK, Norway and Switzerland: Stamisol Safe One, Stamisol Extreme DW, Stamisol Extreme DW 2Tape, Stamisol Advanced ECO, Stamisol Advanced ECO 2Tape, Stamisol Extreme Pack, Stamisol Advanced Pack 350, Stamisol Extreme Pack 500, Stamisol Advanced FA, Stamisol Advanced FA 2TAPE, Stamisol Advanced FA POP 2Tape, Stamisol FI, Stamisol Perform FI, Stamisol Perform FI 2Tape, Stamisol Extreme Color, Stamisol Extreme Color HI-FR, Stamisol Perform SD 70, Stamisol Perform ABS und Stamisol Perform Flex.

This warranty covers exclusively Stamisol products, which have been installed by a professional specifically trained in their usage, in compliance with best industry practice, and with the installation conditions and areas of usage specified in Stamisol brochures and technical documentation.

In case of Euroclass A2-s1,d0 façade membrane Stamisol Safe One, this warranty is only valid, installed by specialist companies with NVQ Level 2 or CSCS Skill Card.

2) Warranty period

This warranty extends for a maximum period of ten (10) years from the relevant product delivery date.

3) Object of the warranty

This warranty covers the following characteristics, for the ten-year (10-year) warranty period, with reference to the specified technical data and under normal conditions of usage:

- For under-roof and façade protective screens: conservation of fire retardancy and of at least 70 % of the material strength, waterproofing characteristics and vapour barrier permeability
- For vapour control screens: conservation of fire retardancy and of at least 70 % of the material strength and Sd value (vapour diffusion thickness or capacity for limiting water vapour penetration).

4) Exclusions

The warranty excludes the following cases:

- Use of harmful or corrosive chemicals
- Damage due to unforeseen mechanical effects (abrasion, rubbing, wind flutter, etc.)
- Product usage non-compliant with Stamisol recommendations
- Natural disaster, rioting, act of war, etc.

All damages resulting from:

- Default of a transporter
- Usage not conforming with best industry practice
- Vandalism, intentional or accidental damage or alteration
- Structural design or application unsuited to the intended purpose of the product
- Partial repair of the product prior to damage
- Installation or application modification without prior approval of the Warrantor
- Improper maintenance of the product
- Use of non-recommended accessories
- Damage to a product, whose origin and traceability has not been established

Moreover, activation of the warranty by the Warrantor is subject to full settlement of the delivery invoice for products claimed to be defective.

5) Warranty application conditions

All damage shall be immediately notified by letter, sent by recorded delivery, to the Warrantor no later than three weeks (21 days) after the relevant anomaly has been noted. Under the guarantees specified in Clause 3 and the exclusions listed in Clause 4 of this Warranty, coverage shall include the following:

- Replacement of the defective product and its installation accessories.
- The costs of removing and re-installing the membrane, subject to acceptance of an priced estimate by the Warrantor.

In the event that the product or products are replaced, the replacement products supplied by the Warrantor are guaranteed under the terms and conditions of the initial Warranty, notwithstanding the date of the damage.

6) Application under photovoltaic cells

Our 10-year Warranty also covers photovoltaic and solar plants, if the ventilation distance between our Stamisol product and the photovoltaic or solar plant is no less than 60 mm and, if greater distances are specified in other regulations, such distances and any other guidelines for fitting our Stamisol product attached to the product, are complied with. We would like to point out explicitly that you must ensure that if our membrane heats up to 100°C this only occurs for a maximum of 20 days per year and for 2 hours per day. The maximum peak temperature of 100°C may not be exceeded. Should damage occur due to over-heating and therefore destroy the membrane, a condition for any guarantee provided by the Warrantor is that Warrantees prove that their photovoltaic or solar plant has only heated up to the previously stated level, therefore ruling out any destruction of our material because of too high temperatures in the photovoltaic or solar plant. Stamisol FI is not suitable for use in photovoltaic and solar plants.

Conditions for Stamisol Safe One

Our 10-year Warranty also covers photovoltaic and solar plants, if the ventilation distance between our Stamisol product and the photovoltaic or solar plant is no less than 60 mm and, if greater distances are specified in other regulations, such distances and any other guidelines for fitting our Stamisol product attached to the product, are complied with. We would like to point out explicitly that you must ensure that if our membrane heats up to 250°C this only occurs for a maximum of 20 days per year and for 12 hours per day. The maximum peak temperature of 250°C may not be exceeded. Should damage occur due to over-heating and therefore destroy the membrane, a condition for any guarantee provided by the Warrantor is that Warrantees prove that their photovoltaic or solar plant has only heated up to the previously stated level, therefore ruling out any destruction of our material because of too high temperatures in the photovoltaic or solar plant.

Ensure you have the document valid on the project date before activating the warranty.

Valid from the 1st of January 2020

**Allan K. Hurdle**  
**Technical Consultant**  
**Tel. 0800 / 0318 105**  
**e-Mail [stamisol.co.uk@sergeferrari.com](mailto:stamisol.co.uk@sergeferrari.com)**