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V.3
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EN

SCALAMID

FACADE • FLOOR • WALL

façades | assembly manual

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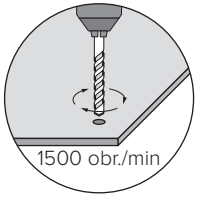
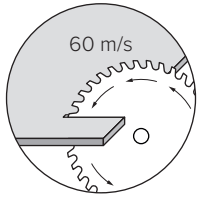
treatment and storage

DRILLING



- Drill holes in the boards on the front side, to avoid materials chips.
- Use drill bits with diamond tips.
- The rotary speed of the bit should be 1500 RPM.

CUTTING



- Because of dusting, the boards should be cut outdoors and dust masks should be used.
- Cut the boards with sawing machine with diamond disk, at 60m/s minimum. This guarantees a uniform and sharp edge, which should be sanded with sandpaper.
- Sand sharp edges using sandpaper with gradation of at least 600.
- Cut and sanded edges should be impregnated.

IMPREGNATION

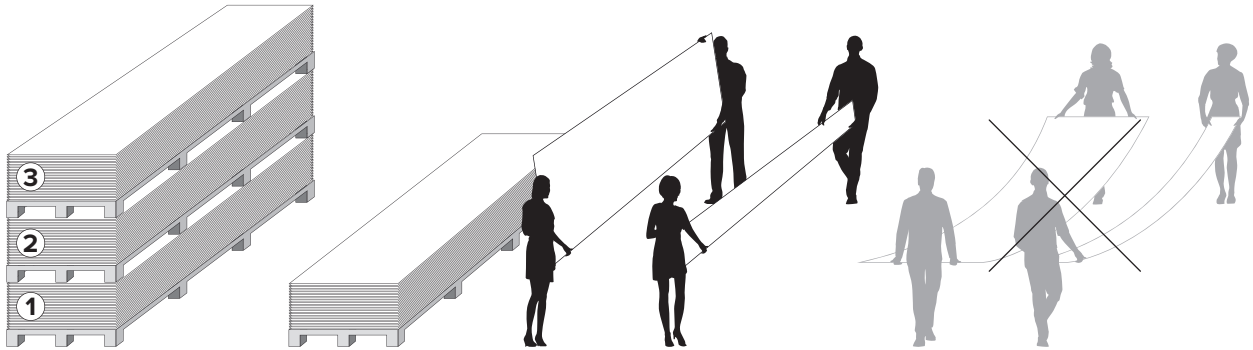
- All the cut and polished edges should be impregnated with a special preparation.
- Before applying the impregnant, make sure that the surface is dry and free from dust and other impurities..
- The board and ambient temperature should be at least 5°C.
- Apply the impregnant on the board edges using a paint roller for acrylic or a sponge. Remove excess of the preparation using a microfiber cloth.
- Install the boards only after the impregnant is dry.

RULES OF STORAGE

- The SCALAMID board should be stored on transport pallets, placed in a flat, dry and even ground.
- The board should be stored under a roof or tarpaulin, in such a way as not to obstruct air flow.
- Up to three pallets can be stacked.

HANDLING

- The SCALAMID boards should be carried in vertical position, to retain their stiffness.



CAUTION!

- Carrying the boards in horizontal position may strain their structure and cause damage.
- Never drag the boards over the ground to prevent scratches and mechanical damage.

SCALAMID

SCALAMID boards installation methods

INVISIBLE INSTALLATION

After completing the installation works, the fitting elements are invisible from the outside, which increases the aesthetic qualities of this solution.

A

INSTALLATION USING RAIL SYSTEM

Invisible installation method, using special rails. Can be used on aluminium or wooden substructure, or directly on curtain wall.

B

INSTALLATION WITH GLUE

Invisible installation method using glue. Can be used on any sort of substructure wooden or aluminium.

VISIBLE INTALLATION

After completing the installation works, the fitting elements stay invisible from the outside, which gives the façade an industrial look.

C

INSTALLATION WITH RIVETS

Visible installation system using blind rivets, on aluminium substructure.

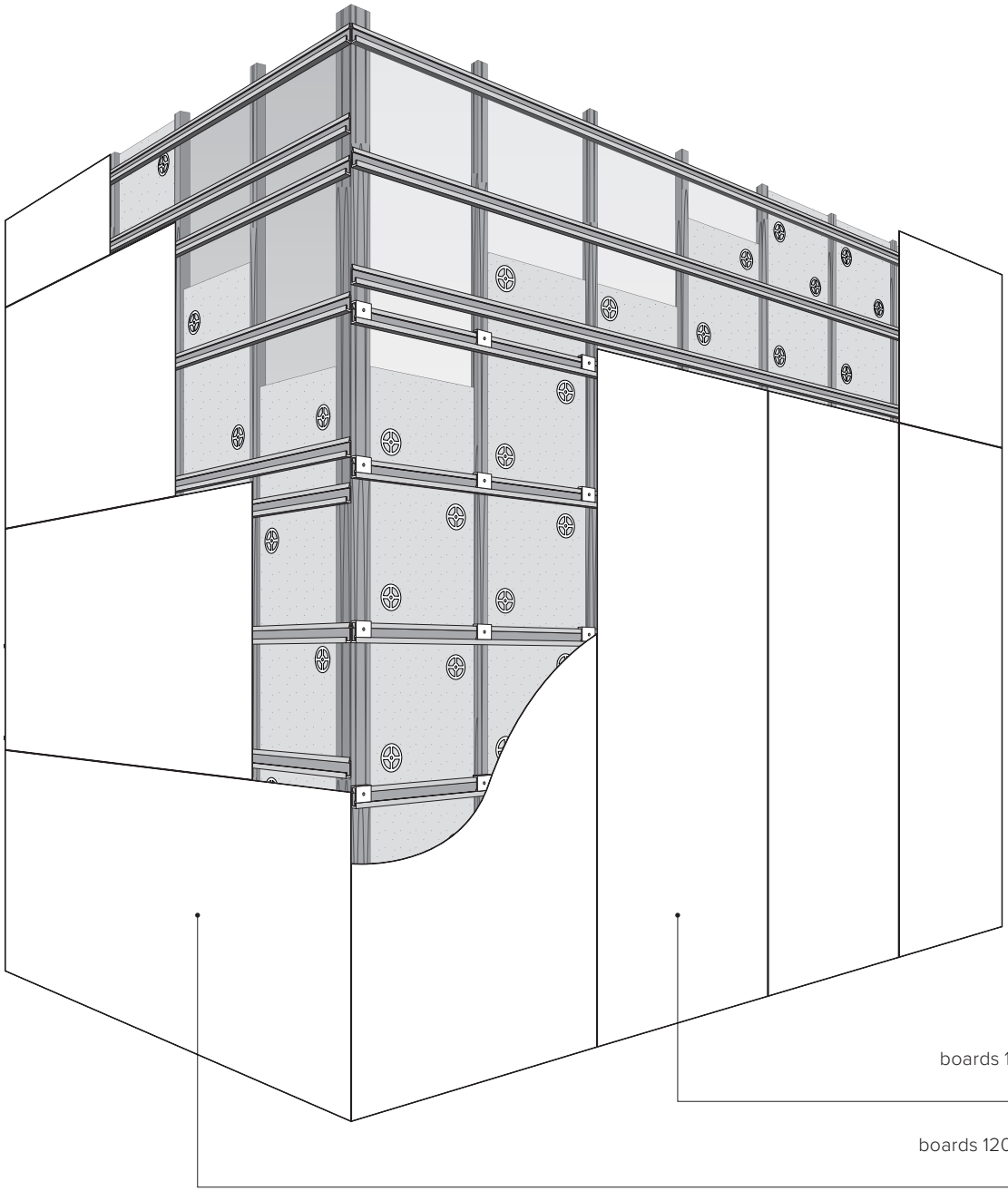
D

INSTALLATION WITH SCREWS

Visible installation system using blind screws, on aluminium or wooden substructure.

A

invisible installation using rail system



PROPERTIES OF THE SOLUTION

- **installation invisible from the outside**
- **blind holes must be made in the boards, to enable mounting of the threaded rivets**

STRUCTURE TYPE

The rail installation system can be used on wooden or aluminium substructure.

BOARD ARRANGEMENTS

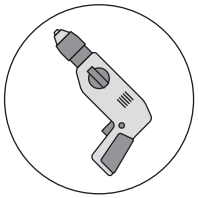
The boards can be arranged vertically or horizontally, according to the instructions of the rail system manufacturer.

SCALAMID

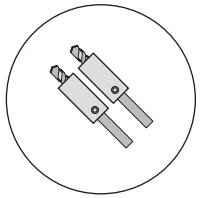
A

invisible installation using rail system

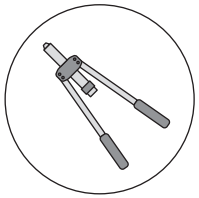
INSTALLATION ACCESSORIES



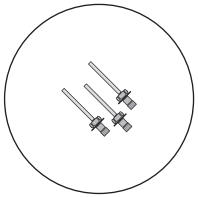
DRILL



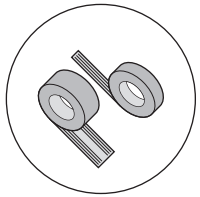
DIAMOND DRILL BITS WITH LIMITERS



RIVETER



THREADED RIVETS



EPDM TAPES

INSTALLING THE BOARDS WITH PREFAB RAILS

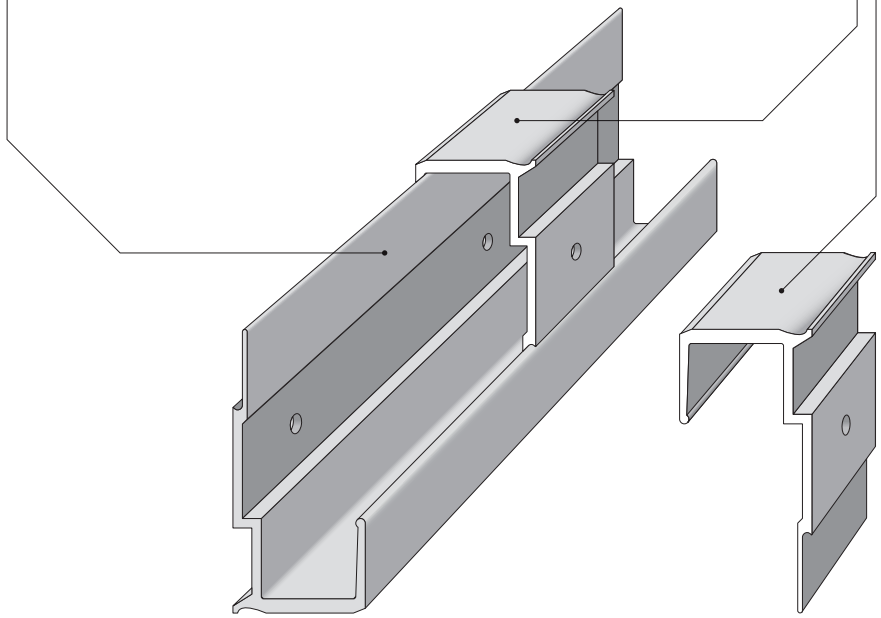
Installation is done using specially shaped rails and holders.

INSTALLATION RAILS

aluminium installation rails, intended for installation of façade boards

INSTALLATION HOLDERS

the holder is a section of the installation rails, attached to the boards with threaded rivets



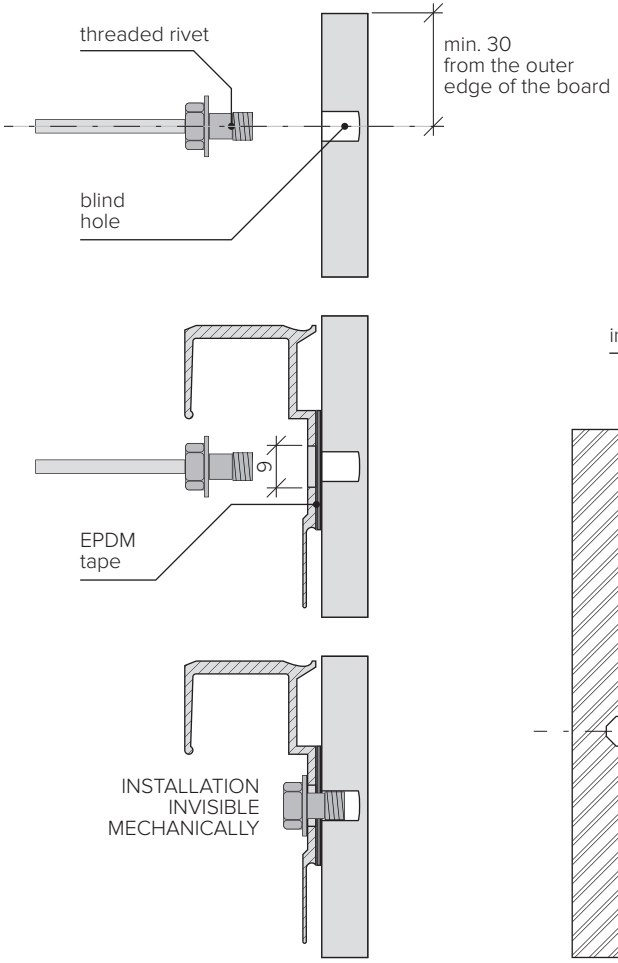
SCALAMID

A

invisible installation using rail system

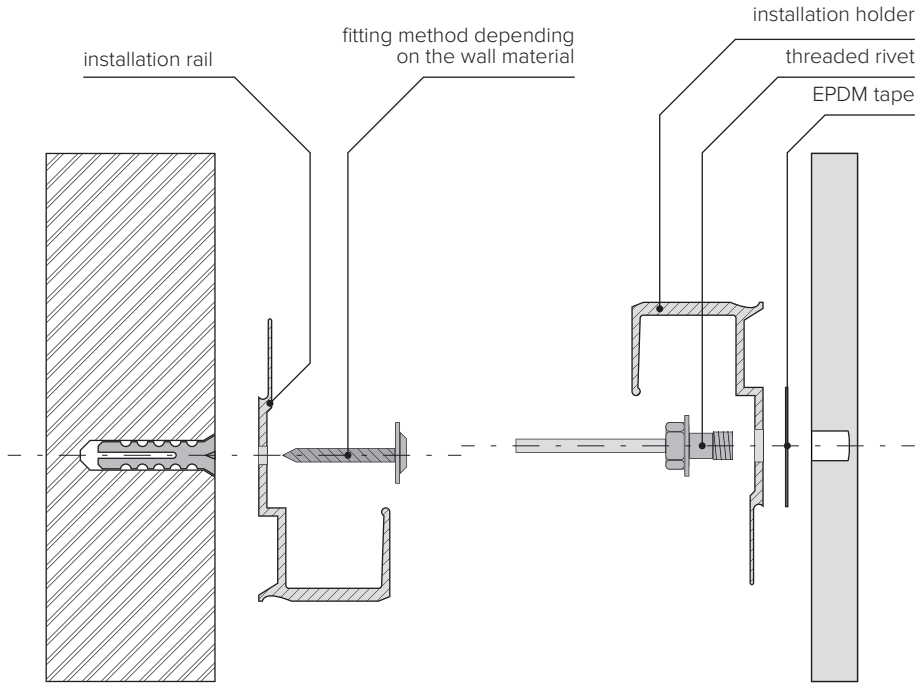
INSTALLING HOLDERS IN THE BOARDS

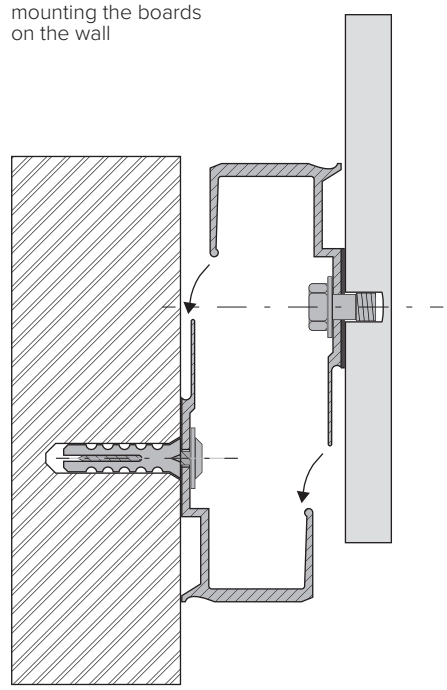
The boards are installed to the base using threaded rivets, which are invisible from the outside of the lining.



INSTALLING RAILS TO A WALL OR SUBSTRUCTURE

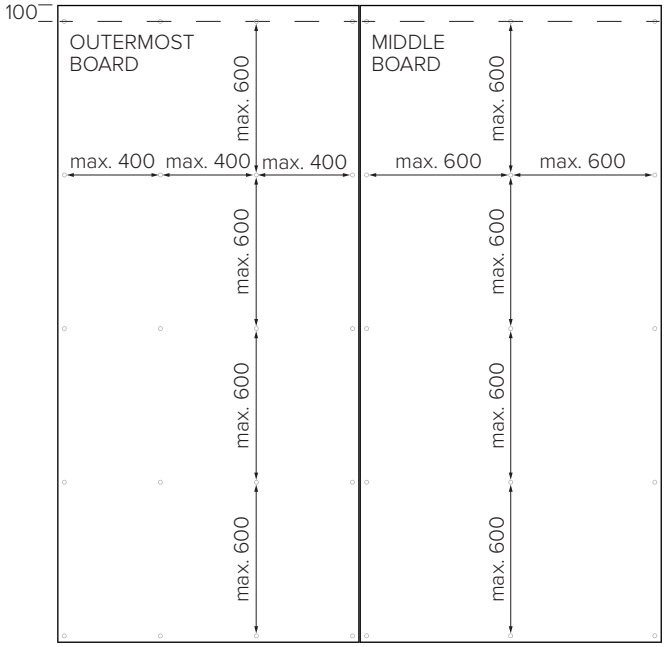
The rails are fitted directly to the wall or any sort of substructure, according to the design of the given solution.





SCALAMID

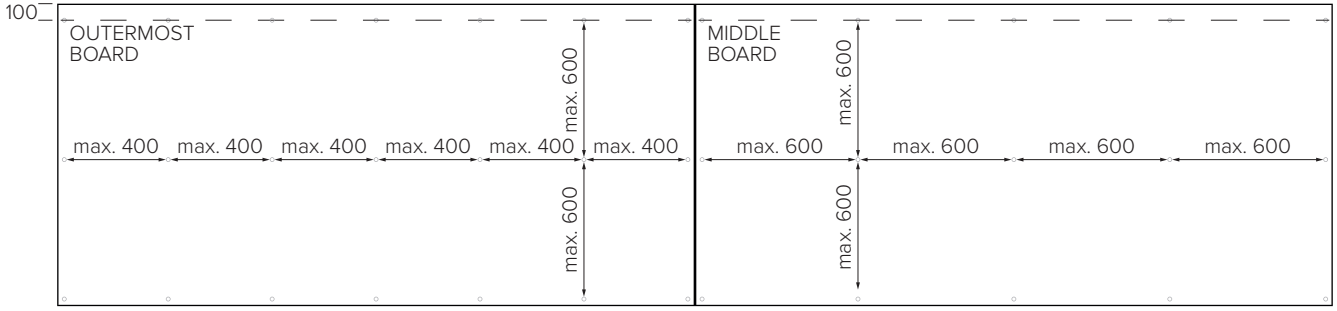
invisible installation using rail system



ARRANGEMENTS OF THE INSTALLATION POINTS

The moulded holders are fitted to the boards using threaded rivets, mounted in blind holes in the board. The rivets are invisible on the outside of the board.

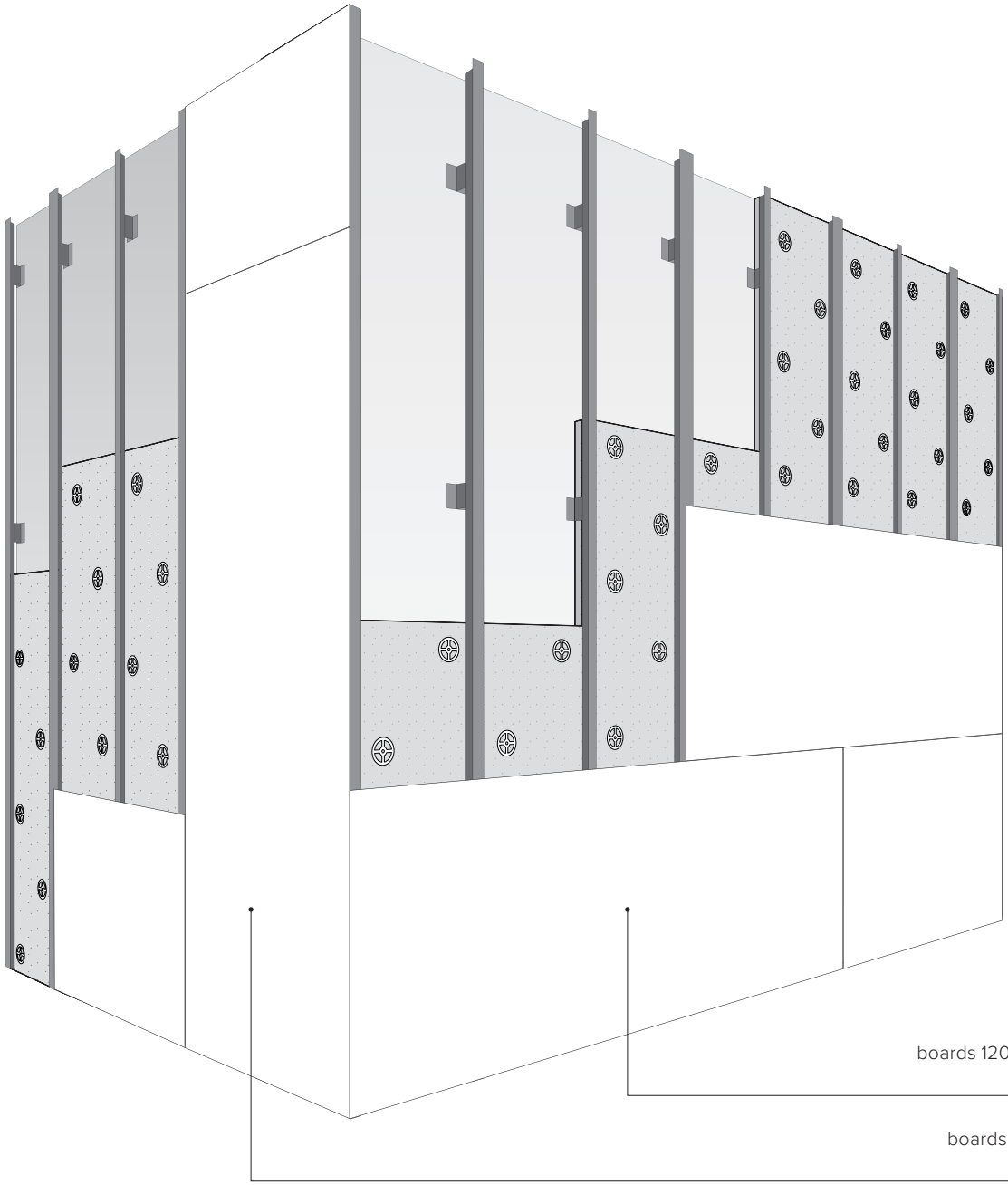
- the maximum spacing of the rails cannot exceed 600 mm
- the maximum spacing of the installation holders cannot exceed 600 mm
- in the case of outermost boards, the spacing of the installation holders cannot exceed 400 mm
- the minimum seating distance of the threaded rivets from the upper edge of the board must be at least 100 mm
- the minimum seating distance of the threaded rivets from the side and lower edge of the board must be at least 30 mm



SCALAMID

B

installation with glue



boards 1200x3200 installed horizontally
on a vertical substructure

boards 600x1600 installed vertically
on a horizontal substructure

PROPERTIES OF THE SOLUTION

- **installation invisible from the outside**
- **does not require mechanical processing of the boards**
- **cooperation between tape and glue speeds up the installation process**

STRUCTURE TYPE

The glue installation system can be used with any type of substructure, in horizontal or vertical arrangement.

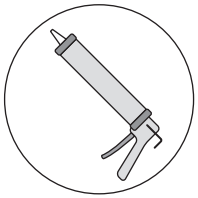
BOARD ARRANGEMENTS

The boards can be laid either vertically or horizontally.

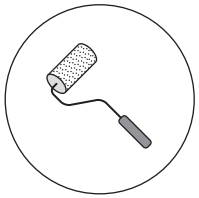
SCALAMID

installation with glue

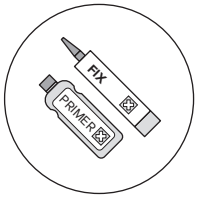
INSTALLATION ACCESSORIES



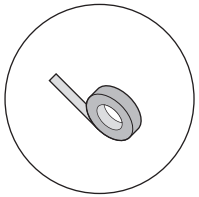
CARTRIDGE GUN



PAINT ROLLER



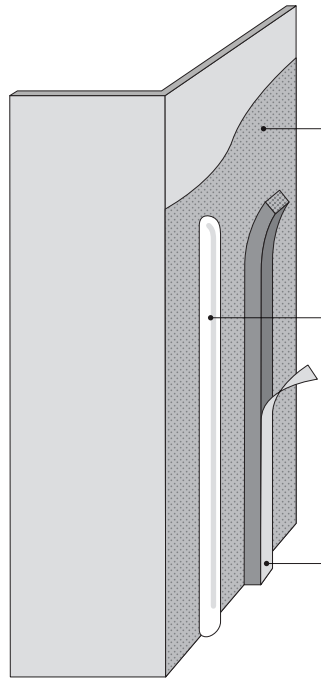
PRIMER AND ASSEMBLY ADHESIVE



ASSEMBLY TAPE

BOARD INSTALLATION

The SCALAMID boards can be attached to wooden or aluminium substructure, using tape and adhesive.



IMPREGNATION

surface coated
with primer dedicated
to glued joints

ASSEMBLY ADHESIVE

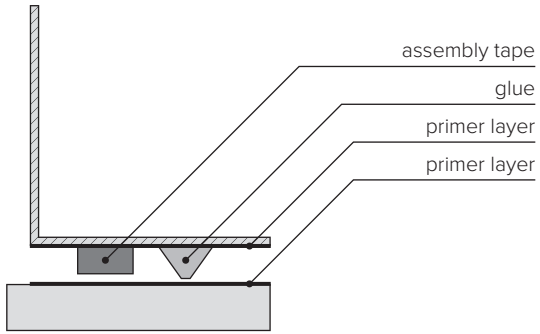
the assembly adhesive forms
a permanent joint between
the lining and aluminium
or wooden substructure

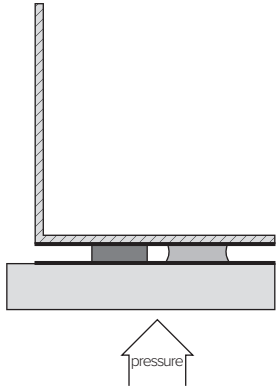
ASSEMBLY TAPE

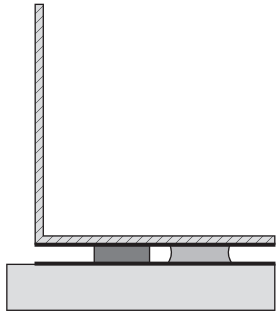
the foam assembly tape positions
the lining while the glue bonds
and seals the structure

B

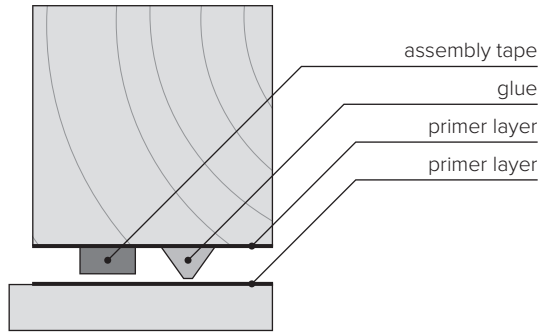
installation with glue

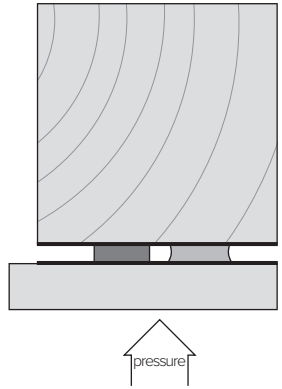


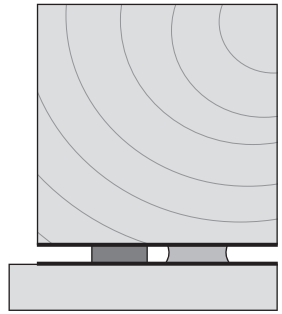




FITTING WITH GLUE
TO ALUMINIUM
SUBSTRUCTURE







FITTING WITH GLUE
TO WOODEN
SUBSTRUCTURE

METHOD OF MAKING GLUED JOINTS

Glued installation of the boards is made using assembly adhesive of appropriate strength and installation tape, which immediately stabilizes the boards and prevents them from shifting during installation.

CAUTION!

Surfaces in contact with the adhesive must be previously covered with a special primer. This applies both to the board surface and elements of the wooden or aluminium substructure.

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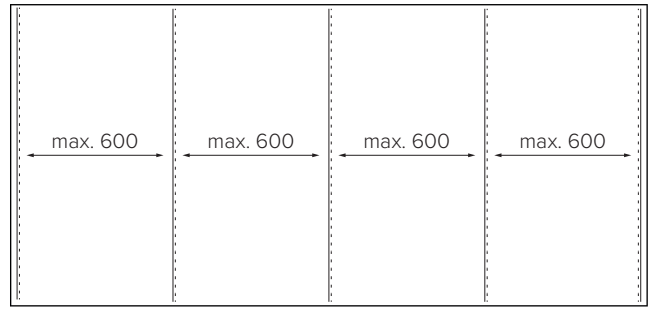
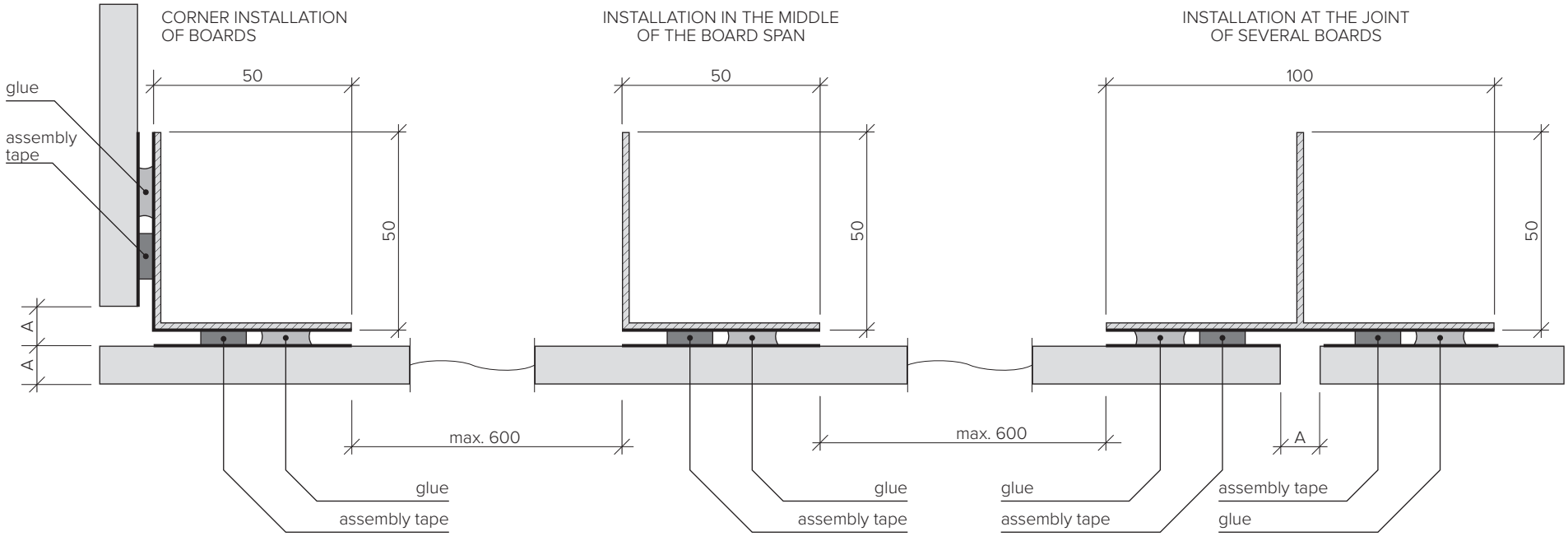
GLUED INSTALLATION TO ALUMINIUM STRUCTURE

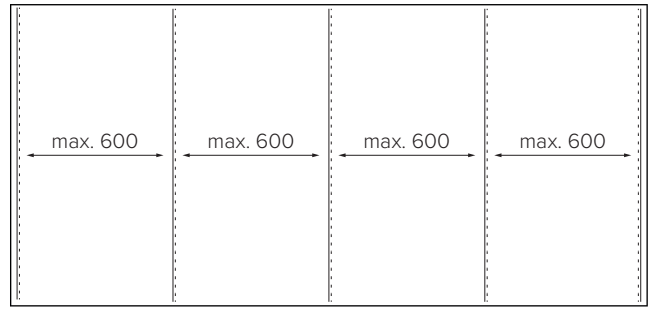
In glued joints, the installation tape functions as a sealant and protects the adhesive layer against weather factors. The tape should always be closer to the board edge than the adhesive.

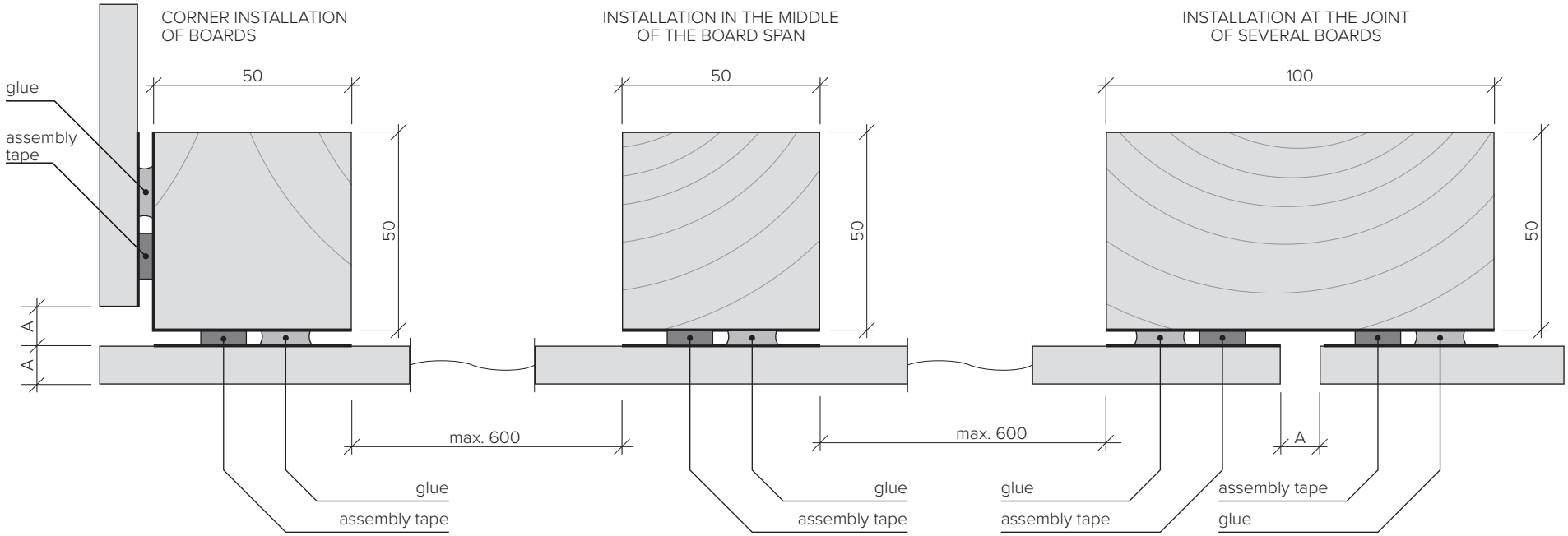




GLUED INSTALLATION TO WOODEN STRUCTURE

In glued joints, the installation tape functions as a sealant and protects the adhesive layer against weather factors. The tape should always be closer to the board edge than the adhesive.





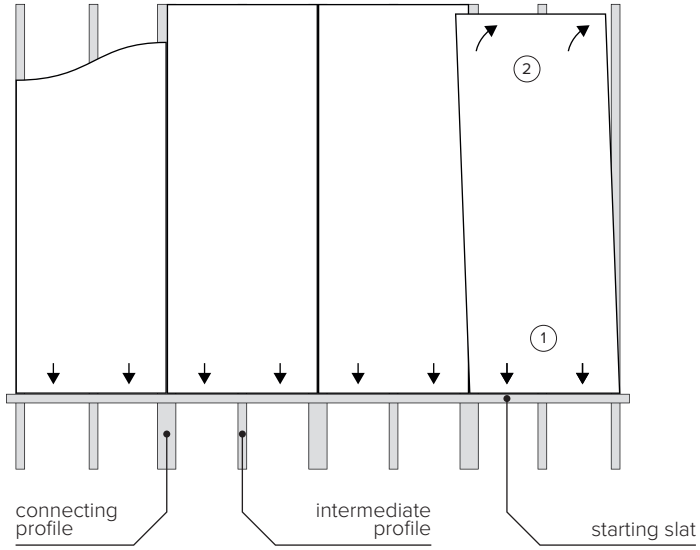
INSTALLATION ORDER

Start installing the boards from the top of the wall. If several horizontal rows of the boards are installed on a single surface, the highest one should be installed first.

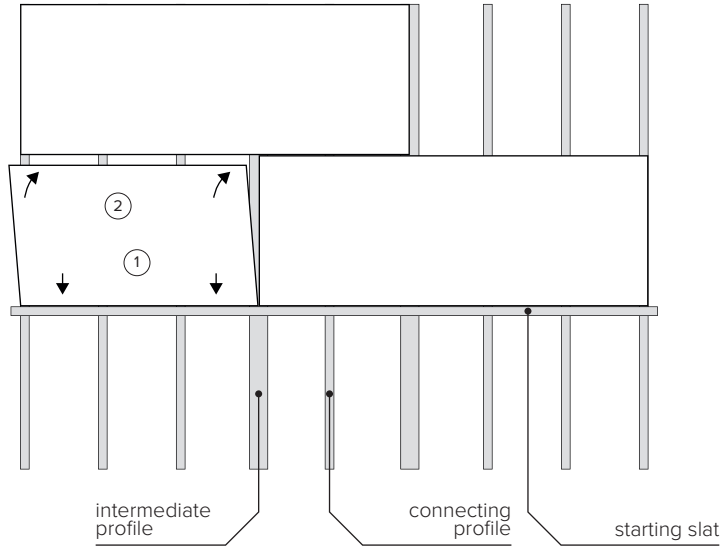
INSTALLATION ACTIVITIES

Start gluing the boards from fitting a temporary slat to the substructure to lean the boards on during assembly.
Precise levelling of the slat will make the boards level too.
Press the boards starting from the bottom edge, not to change their position relative to the slat.
After pressing the boards, the slat can be removed and used to fit another layer of the lining.

VERTICAL ASSEMBLY ON A HORIZONTAL STRUCTURE
USING THE STARTING SLAT

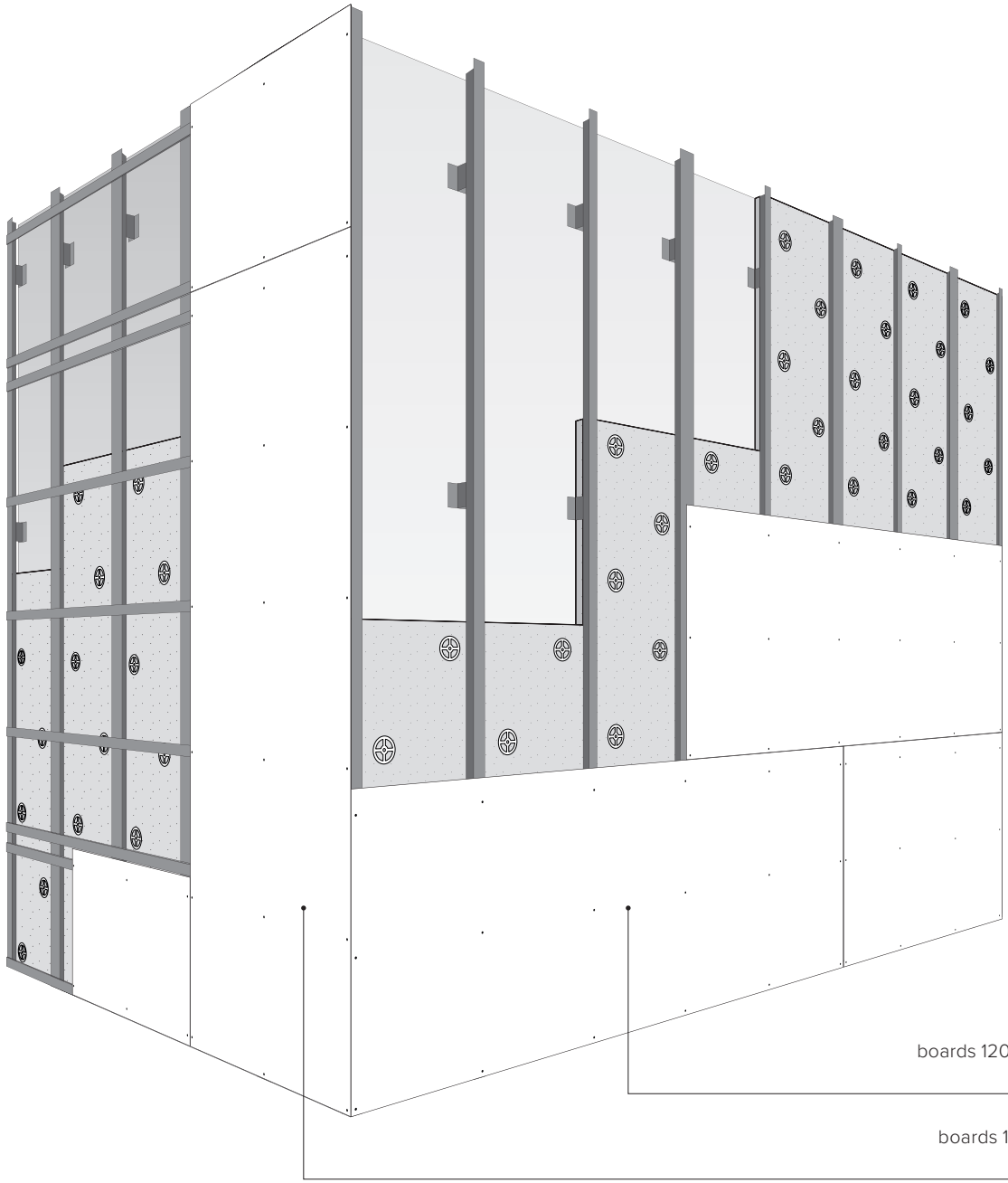


HORIZONTAL ASSEMBLY ON A VERTICAL STRUCTURE
USING THE STARTING SLAT



C

installation with blind rivets



PROPERTIES OF THE SOLUTION

- **visible installation elements**
- **industrial look**

STRUCTURE TYPE

The rivet installation can be used with horizontal or vertical aluminium substructure.

BOARD ARRANGEMENTS

The boards can be laid either vertically or horizontally.

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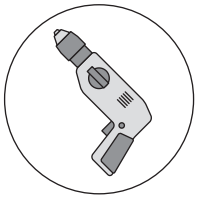
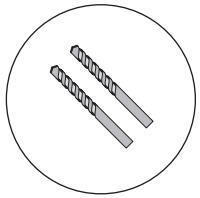
installation with blind rivets

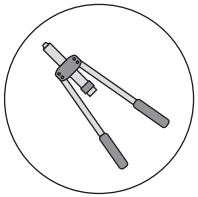
INSTALLATION ACCESSORIES



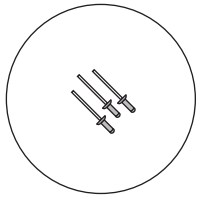
DRILL



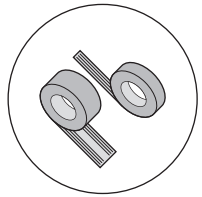
DIAMOND DRILL BITS



RIVETER



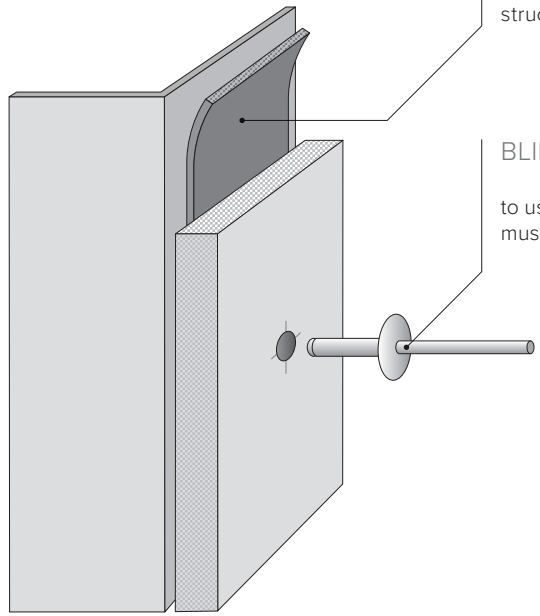
BLIND RIVETS



EPDM TAPES

BOARD INSTALLATION

Installation with blind rivets to a prepared structure is made on the front of the boards, and the rivet heads stay visible. Every board surface has fixed and movable fixing points, which enables precise levelling of every surface.



EPDM TAPE

flexible damping tape installed between the lining and the support structure

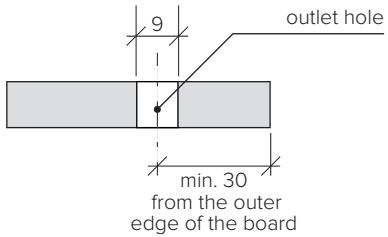
BLIND RIVET

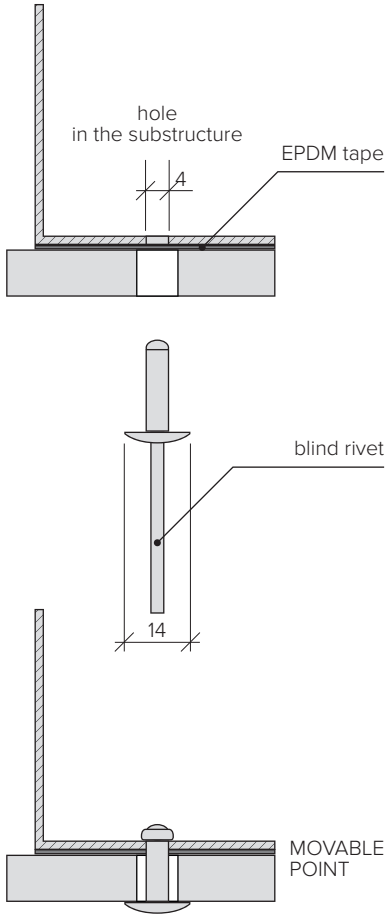
to use blind rivets, installation holes must be made in the lining

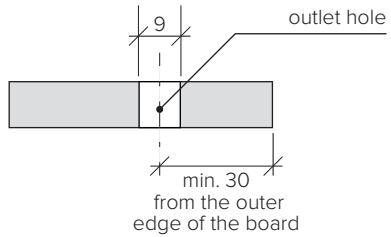
installation with blind rivets

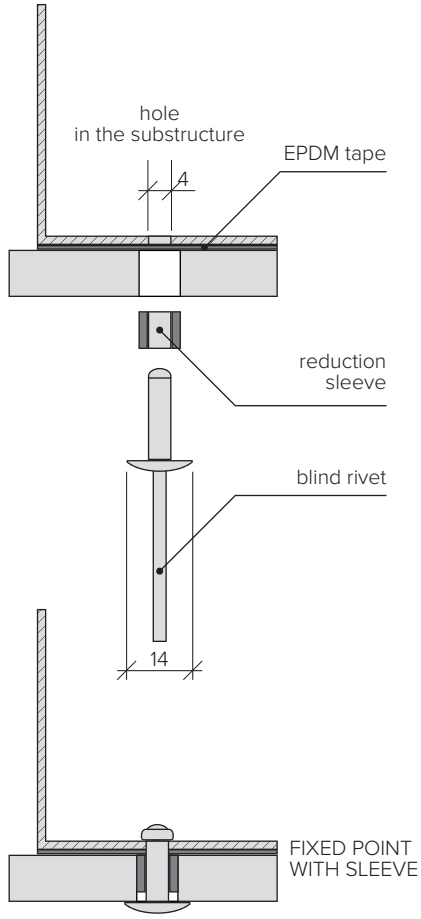
INSTALLATION WITH BLIND RIVETS

The rails are attached to the boards using blind rivets with broad heads. This type of connection uses both FIXED and MOVABLE fitting points (see p. 26).









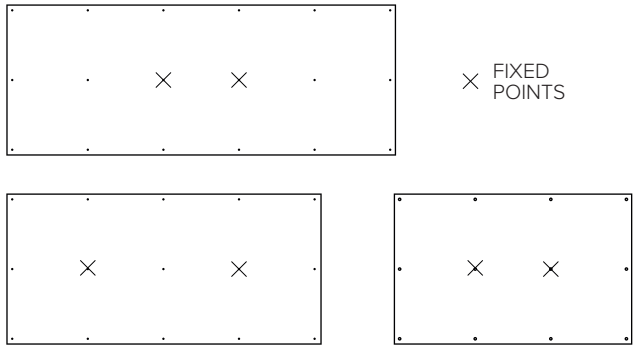
SCALAMID

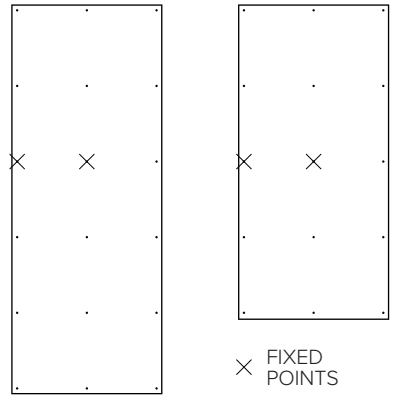
C

arrangement of fixed and movable fitting points

FIXED AND MOVABLE FITTING POINTS

In order to avoid stresses which may occur when the substructure is put under load, both fixed and movable fitting points should be used. Fixed points allow to immobilize the board in the target position. Movable points enable expansion of the board.

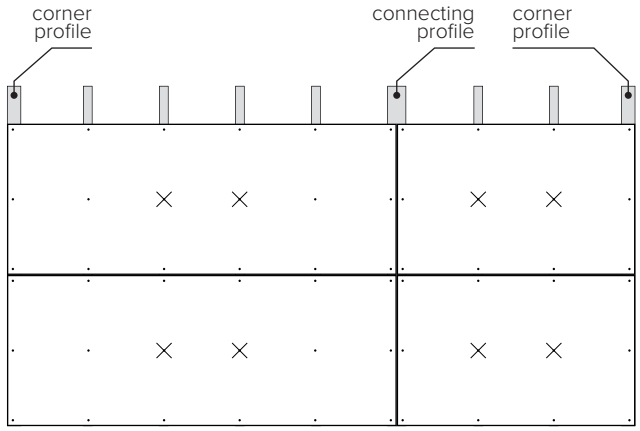




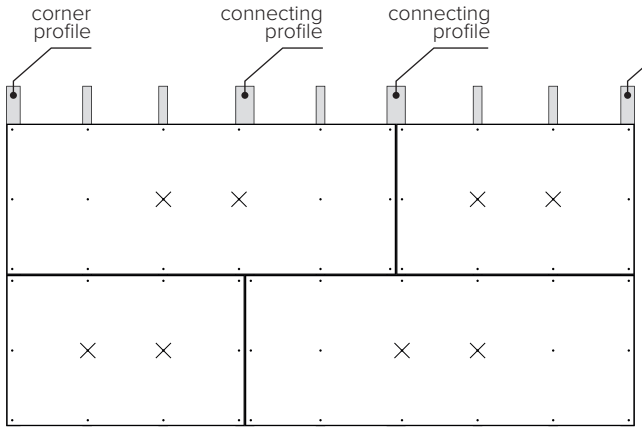
SELECTING WIDTH OF THE SUBSTRUCTURE PROFILES

When designing the aluminium substructure, select profile which make it possible to join subsequent boards.
The connecting profiles should be at least 100 mm wide.
Mid-span and corner profiles should be at least 50 mm wide.

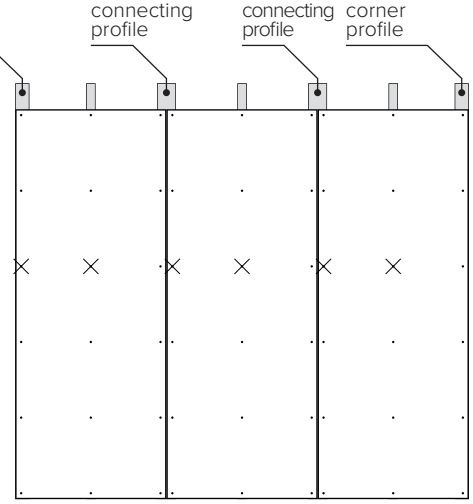
HORIZONTAL INSTALLATION
ON VERTICAL SUBSTRUCTURE



HORIZONTAL INSTALLATION ON VERTICAL
SUBSTRUCTURE WITH SHIFTER VERTICAL JOINT



VERTICAL INSTALLATION
ON VERTICAL SUBSTRUCTURE



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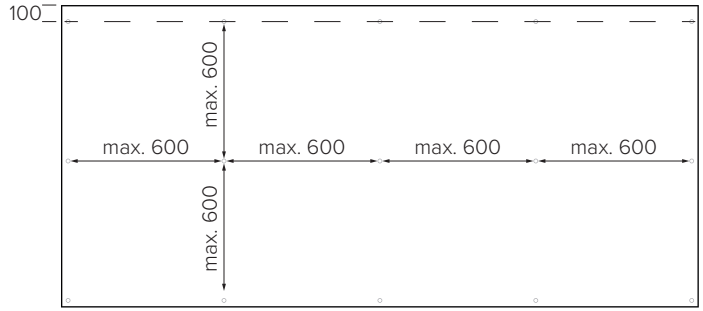
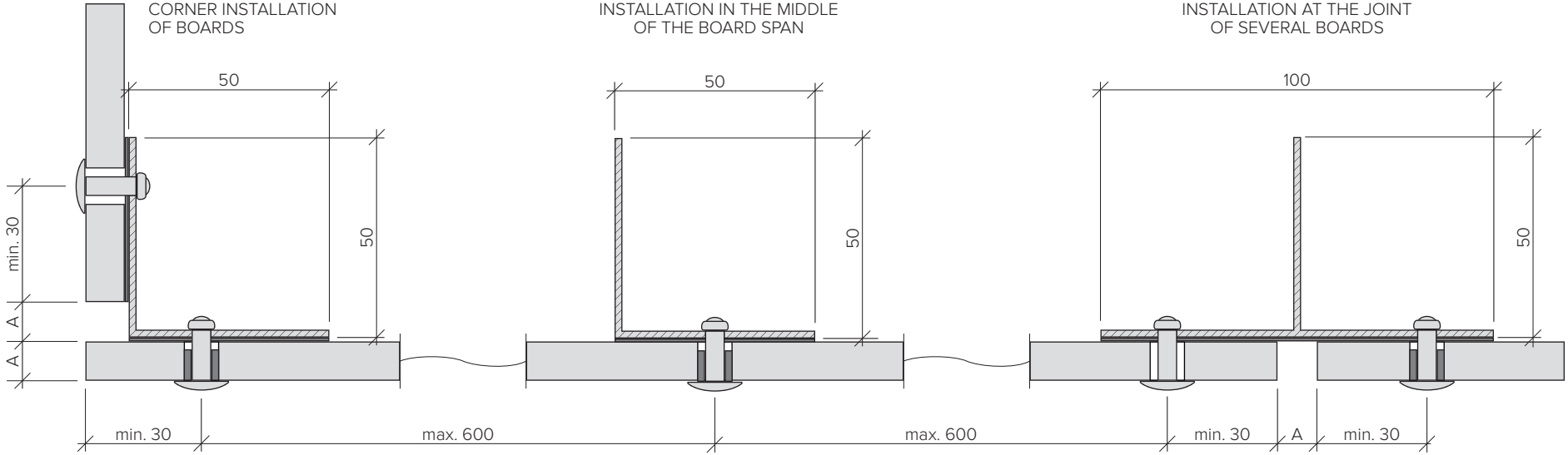
C installation using blind rivets, on aluminium substructure

ARRANGEMENTS OF THE INSTALLATION POINTS

- the spacing between the installation points cannot exceed 600 mm
- the distance between the installation points and the board edge must be at least 30 mm
- expansion joint between the boards should be at least 8 mm (board thickness)
- the minimum distance between the installation points and the upper edge of the board must be at least 100 mm
- the minimum distance between the installation points and the side and bottom edge of the board must be at least 30 mm





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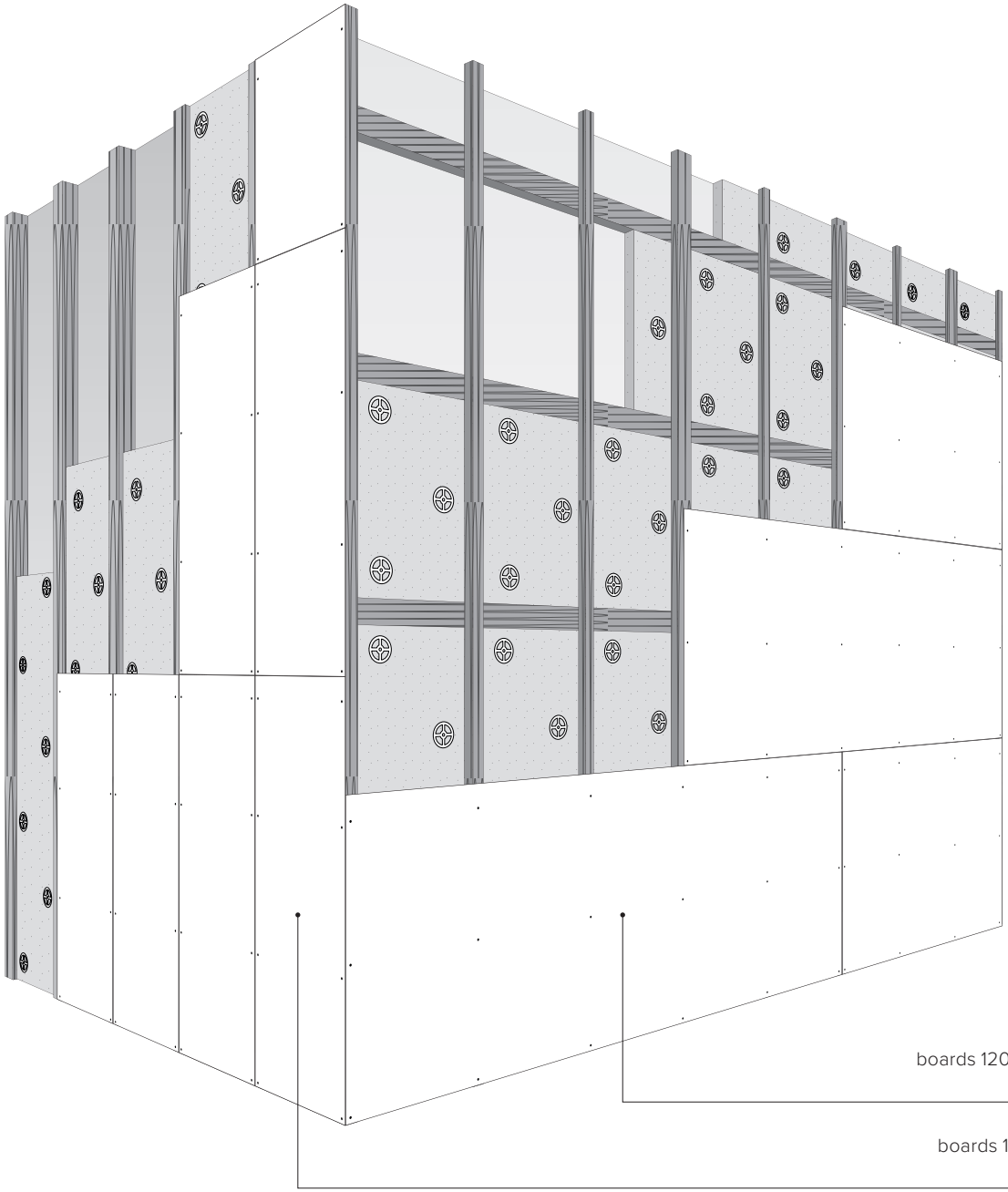
D

installation with screws



PROPERTIES OF THE SOLUTION

- **visible installation elements**
- **industrial look**

STRUCTURE TYPE

Installation with screws can be used with aluminium and wooden substructure, either vertically or horizontally.

BOARD ARRANGEMENTS

The boards can be laid either vertically or horizontally.

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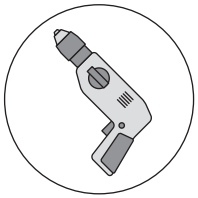
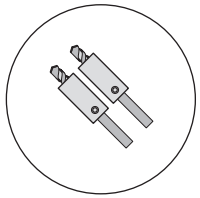
installation with screws

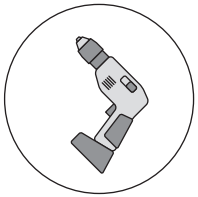
INSTALLATION ACCESSORIES



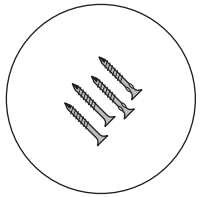
DRILL



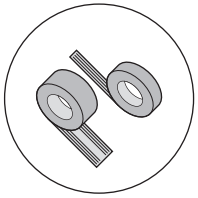
DRILL BITS
WITH LIMITERS



DRILL-DRIVER



SELF-DRILLING
SCREWS

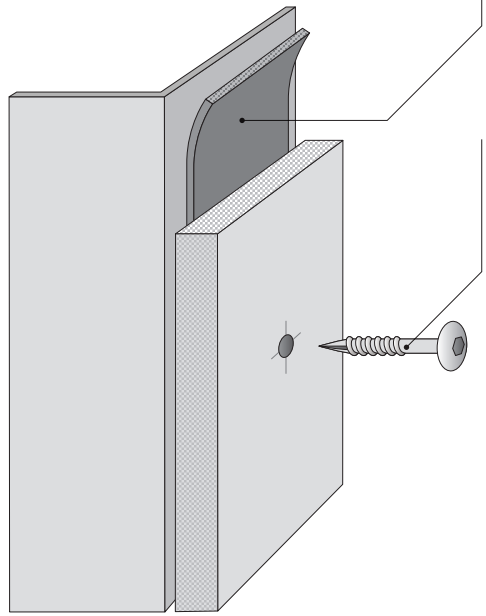


EPDM TAPES

BOARD INSTALLATION

Installation with self-drilling screws to a prepared structure is made on the front of the boards, and the screw heads stay visible.

Every board surface has fixed and movable fixing points, which enables precise levelling of every surface.



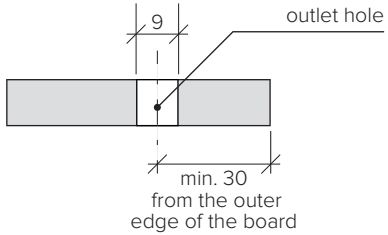
EPDM TAPE

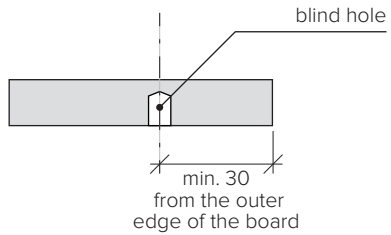
flexible damping tape installed between the lining and the support structure

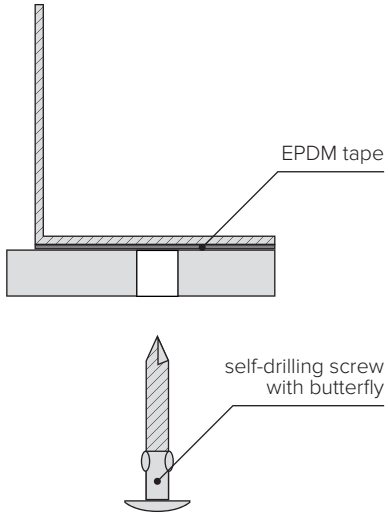
SELF-DRILLING SCREW

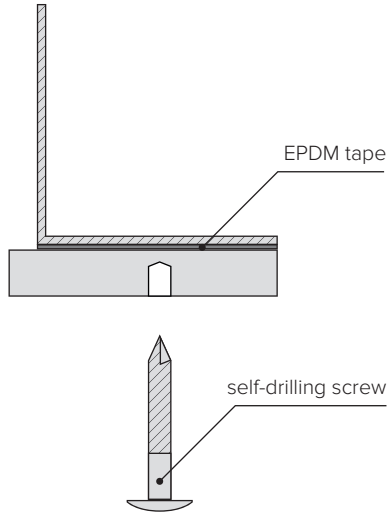
to use self-drilling screws, no installation holes must be made in the lining

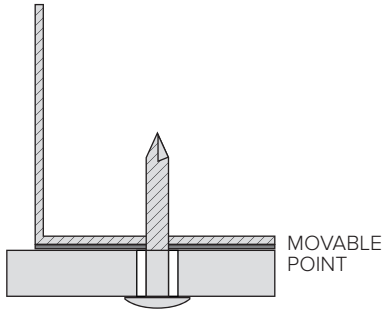
installation with screws

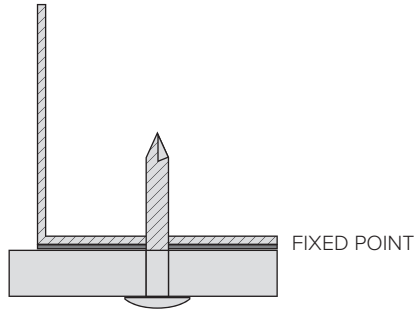










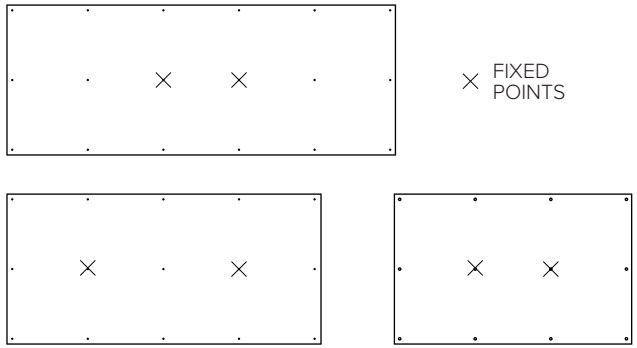


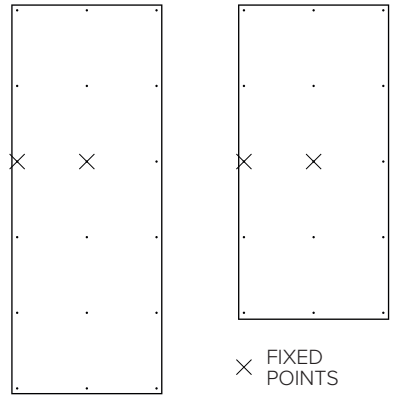
INSTALLATION WITH SELF-DRILLING SCREWS

Boards are attached to the structure using self-drilling screws. This type of connection uses both FIXED and MOVABLE fitting points.

FIXED AND MOVABLE FITTING POINTS

In order to avoid stresses which may occur when the substructure is put under load, both fixed and movable fitting points should be used. Fixed points allow to immobilize the board in the target position. Movable points enable expansion of the board.





SELECTING WIDTH OF THE SUBSTRUCTURE PROFILES

When designing the wooden or aluminium substructure, select profile which make it possible to join subsequent boards.
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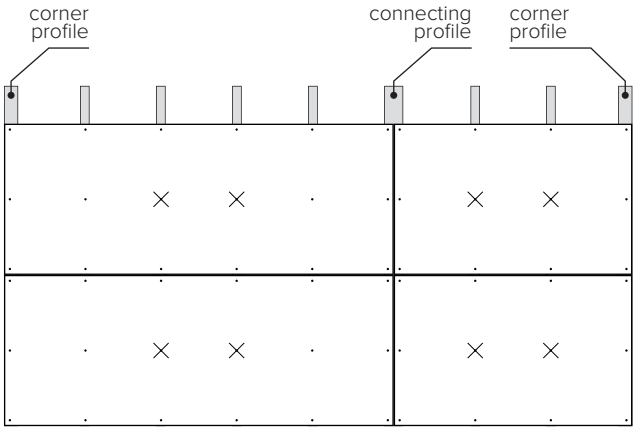
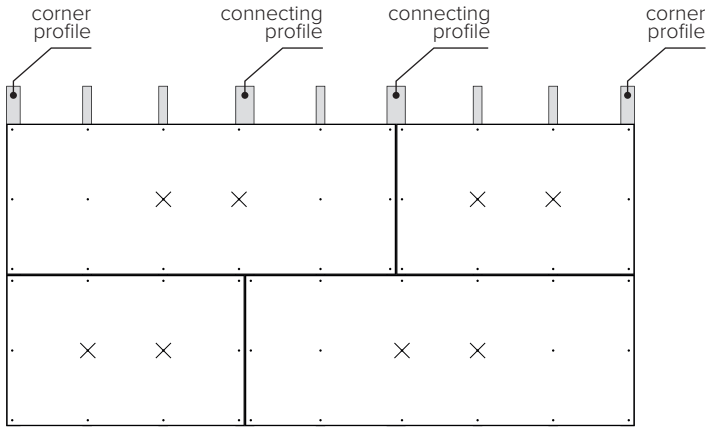
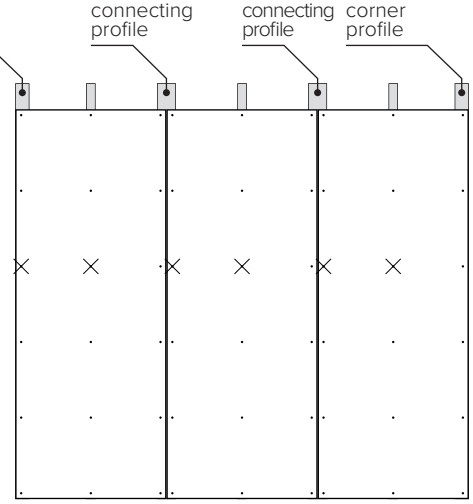
HORIZONTAL INSTALLATION
ON VERTICAL SUBSTRUCTURE



HORIZONTAL INSTALLATION ON VERTICAL
SUBSTRUCTURE WITH SHIFTER VERTICAL JOINT



VERTICAL INSTALLATION
ON VERTICAL SUBSTRUCTURE



D installation using blind screws, on aluminium substructure

ARRANGEMENTS OF THE INSTALLATION POINTS

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- the distance between the installation points and the board edge must be at least 30 mm
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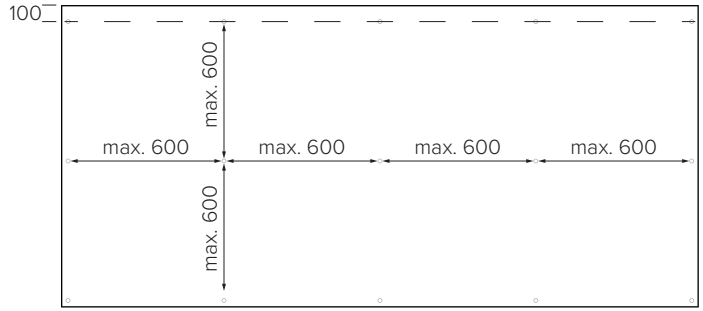

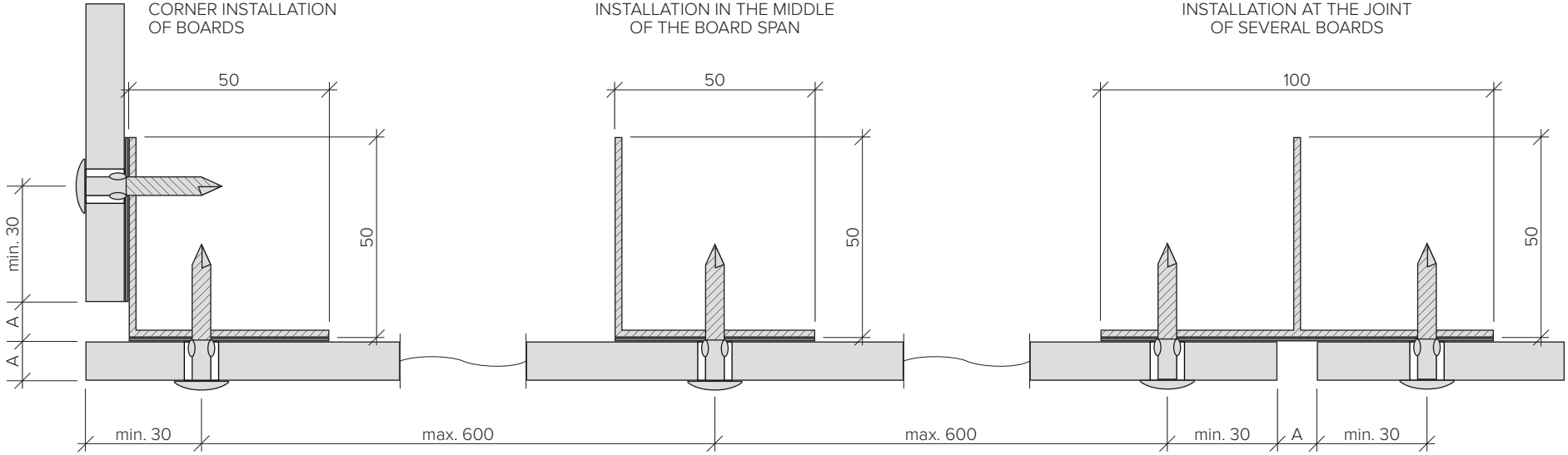

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D

installation using screws, on wooden substructure

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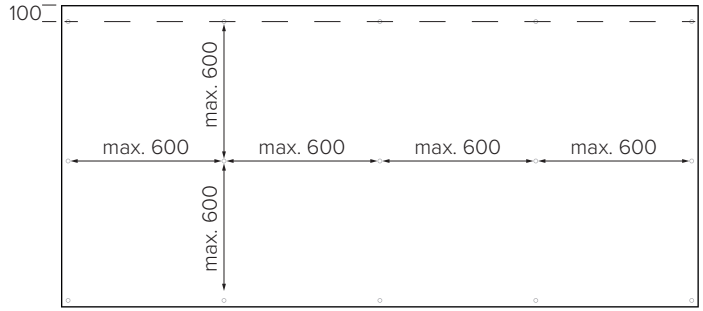
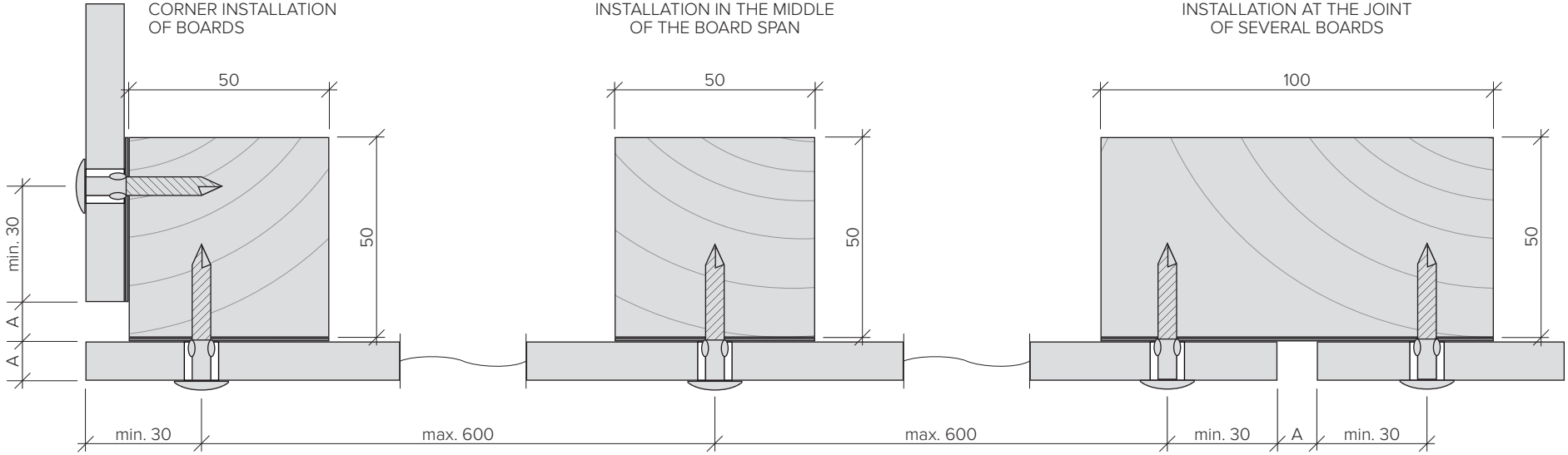
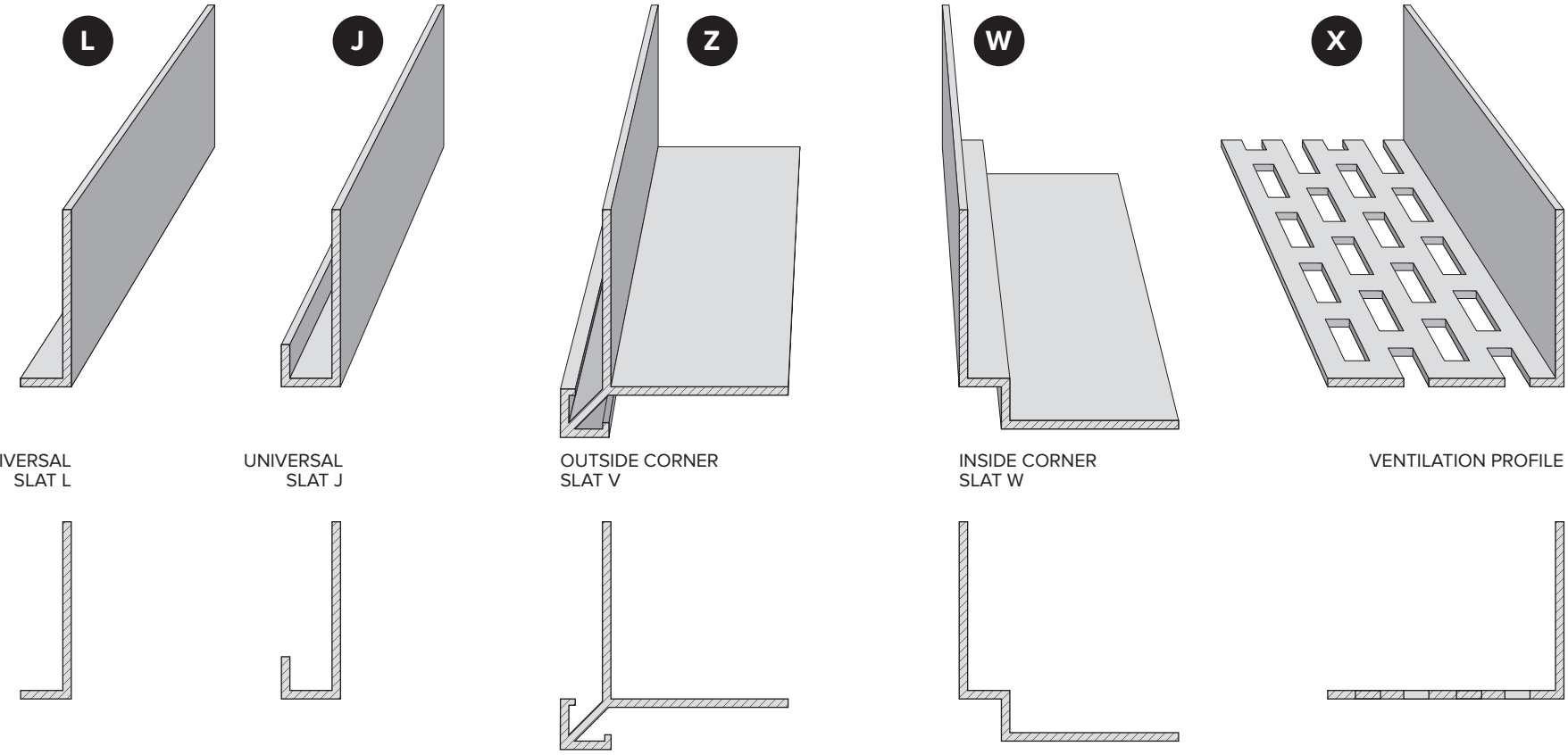


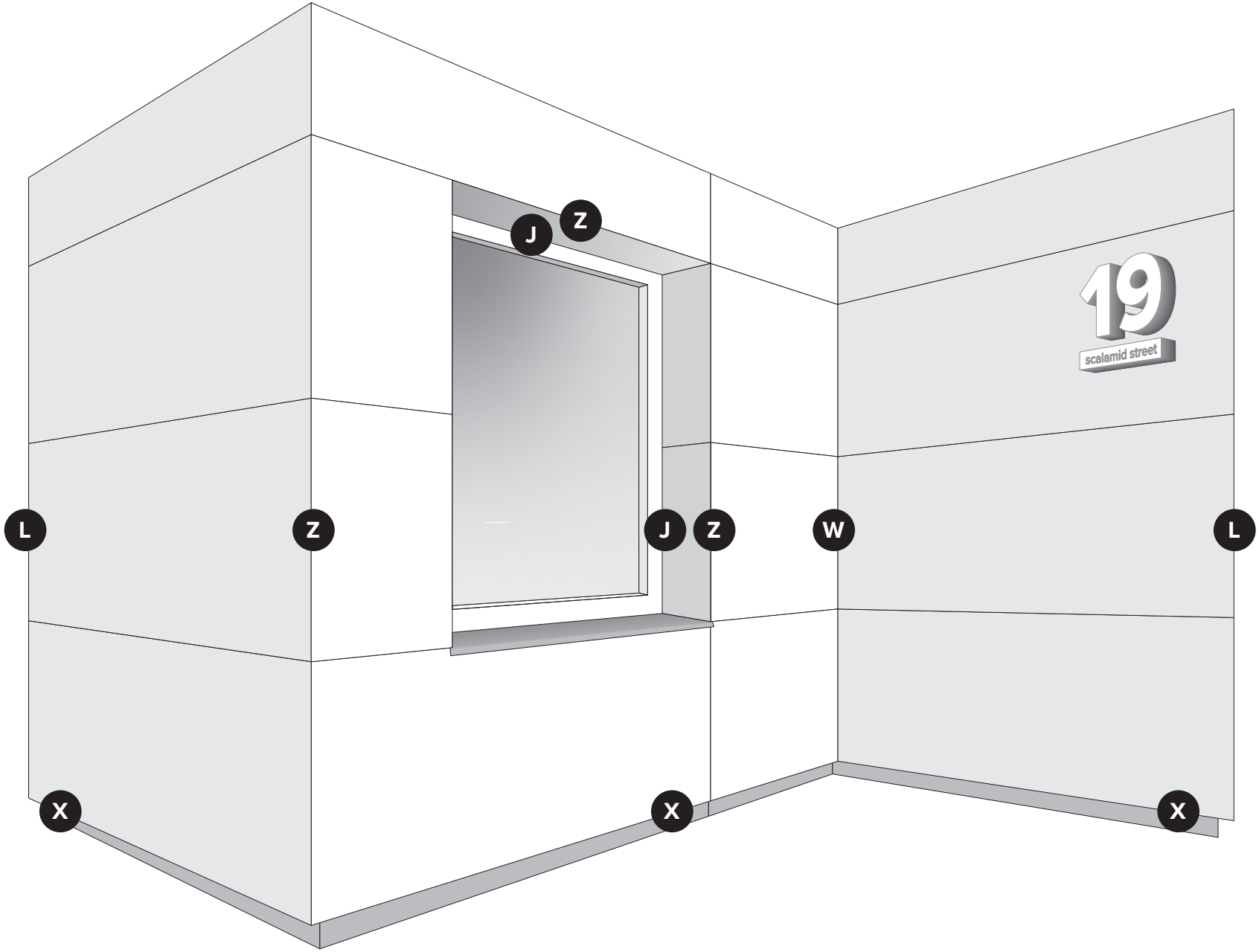


SCALAMID

SECTIONS FOR FINISHING FAÇADE LINING

For aesthetic finishing of façade lining, a family of dedicated finishing sections is available.




J
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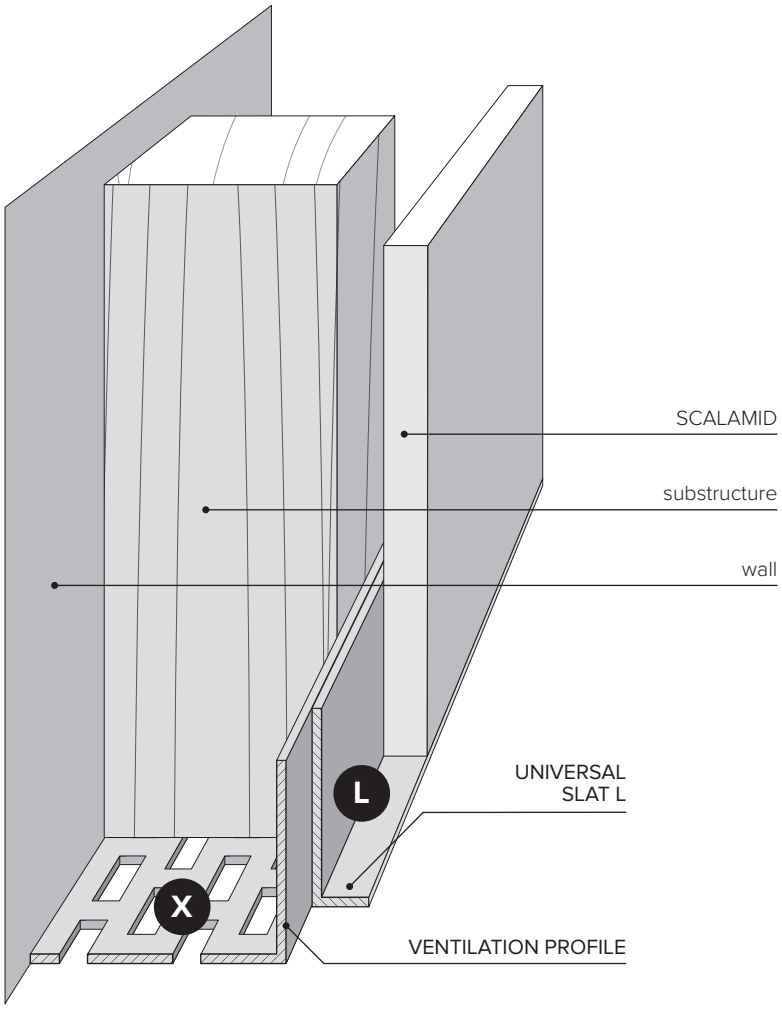
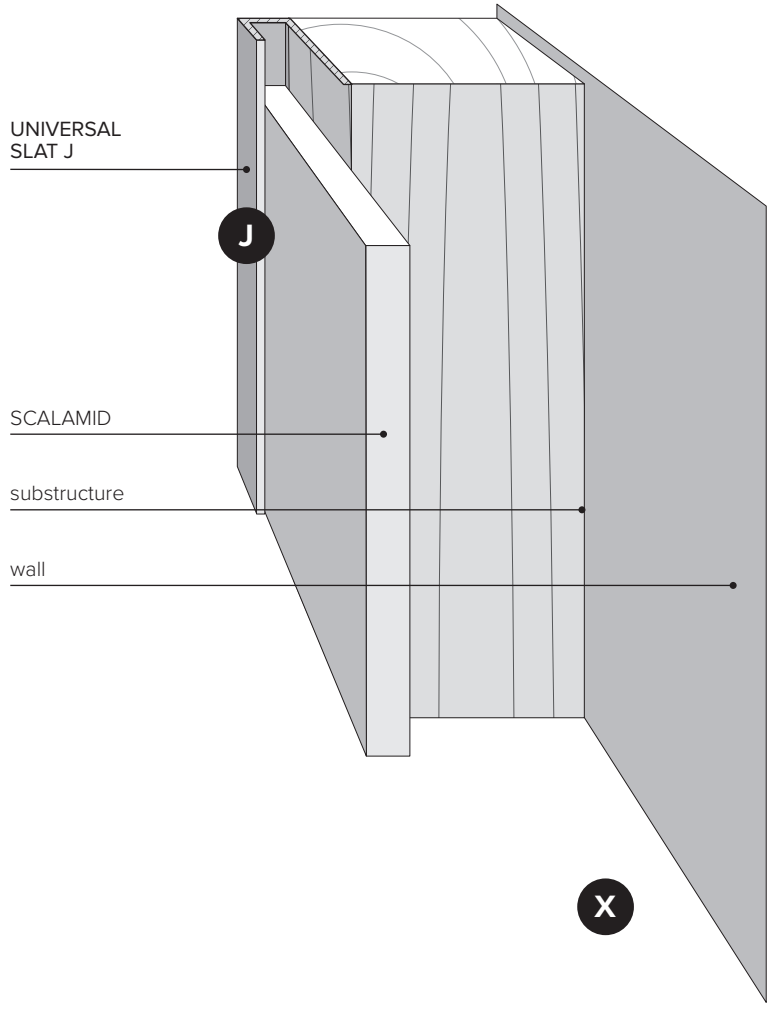
19
scalamid street

using finishing profiles on the façade

USING THE STARTING SECTION AS UNIVERSAL SLAT L



USING THE STARTING SECTION AND UNIVERSAL SLAT J



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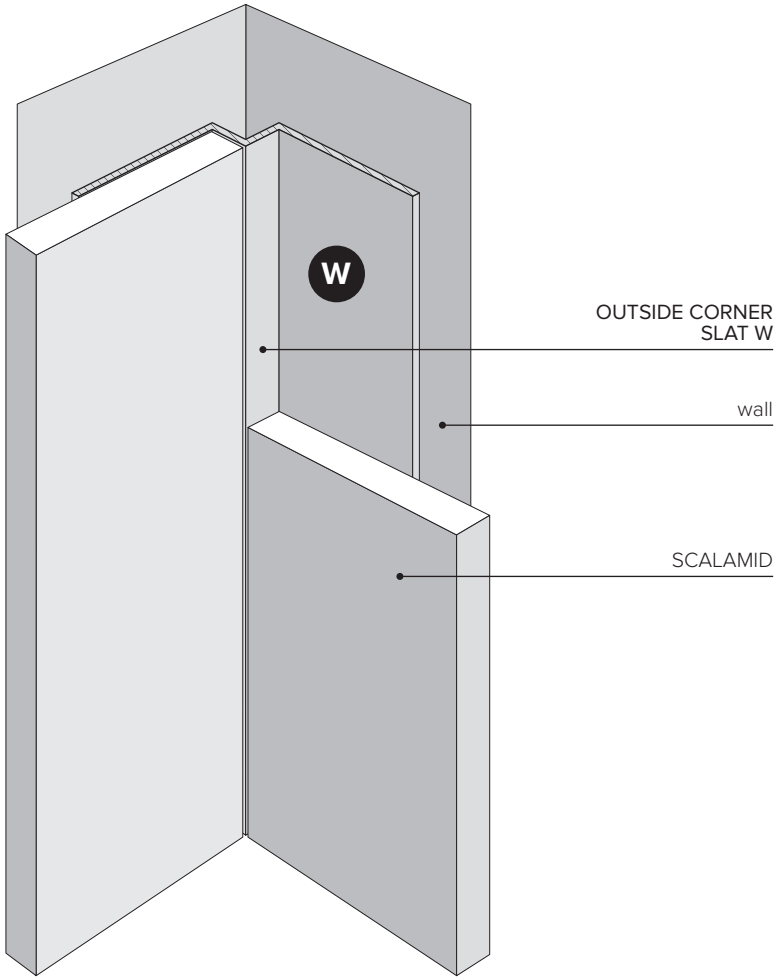
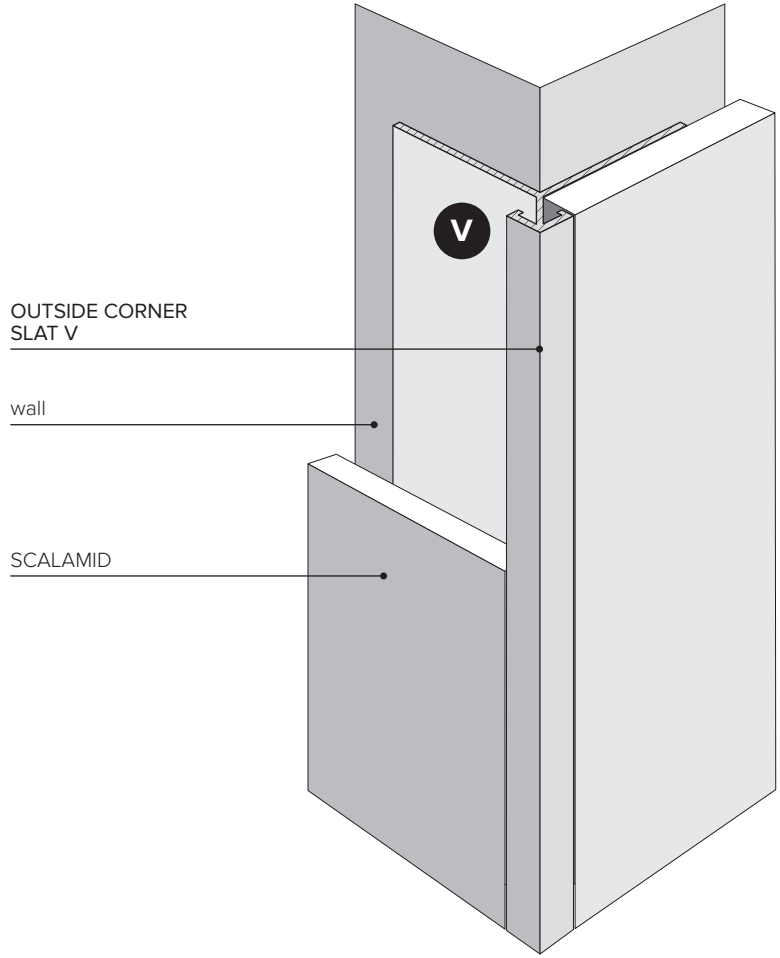
METHOD OF FINISHING INSIDE CORNERS
USING CORNER SLAT W

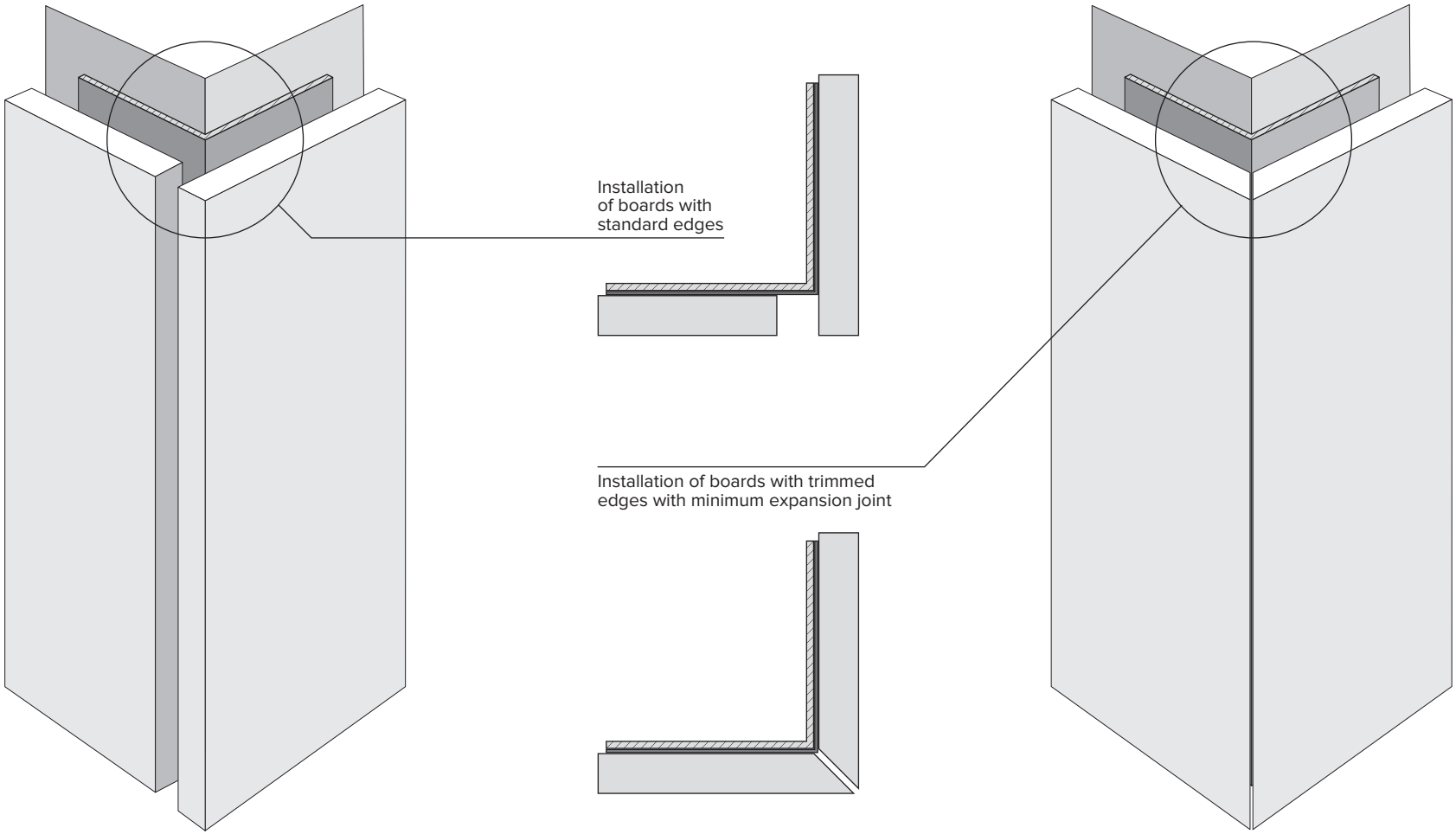


METHOD OF FINISHING OUTSIDE CORNERS
USING CORNER SLAT V



finishing methods for wall corners

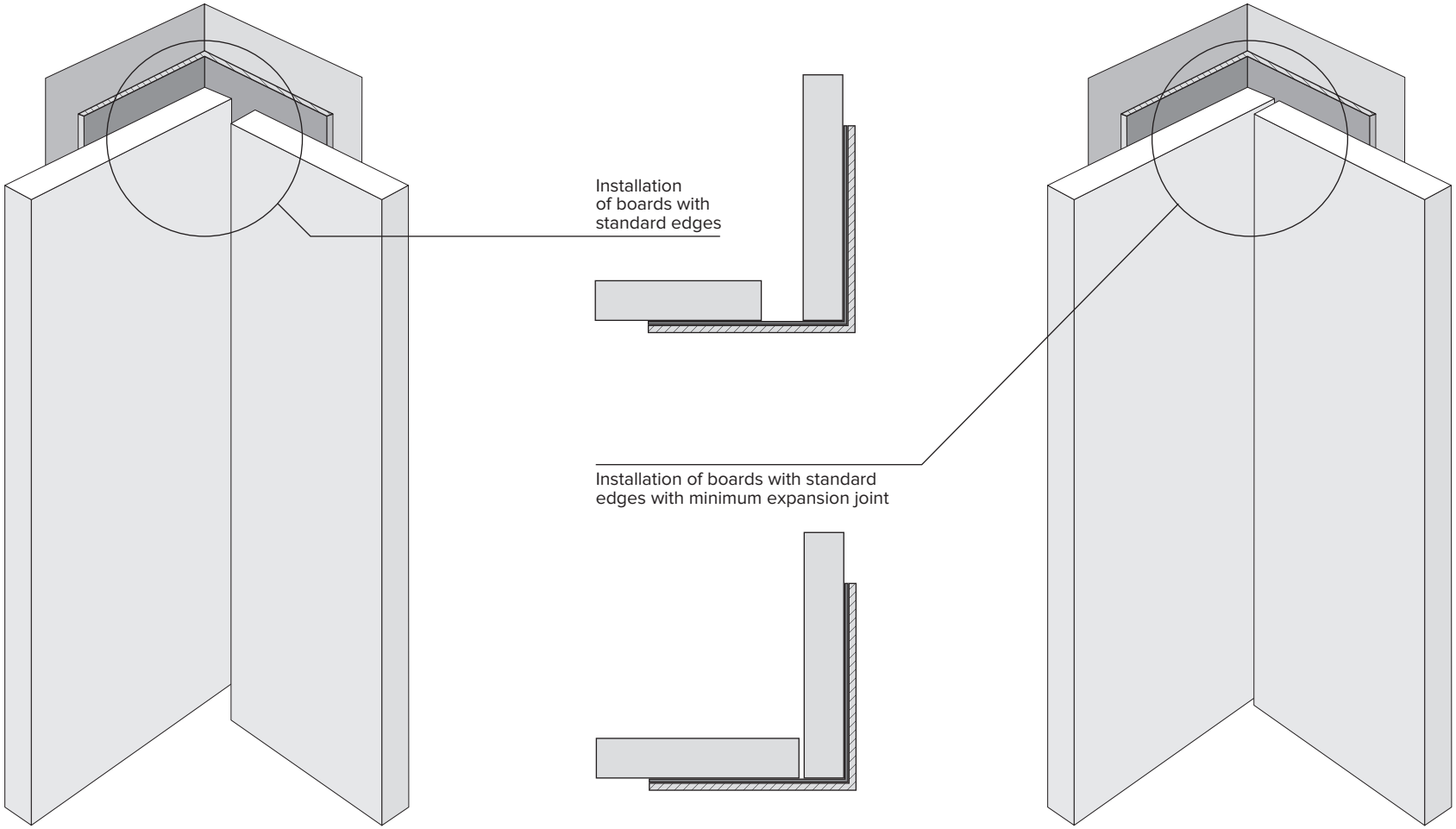
METHODS OF FINISHING OUTSIDE CORNERS
USING UNIVERSAL ANGLE BAR



SCALAMID

finishing methods for wall corners

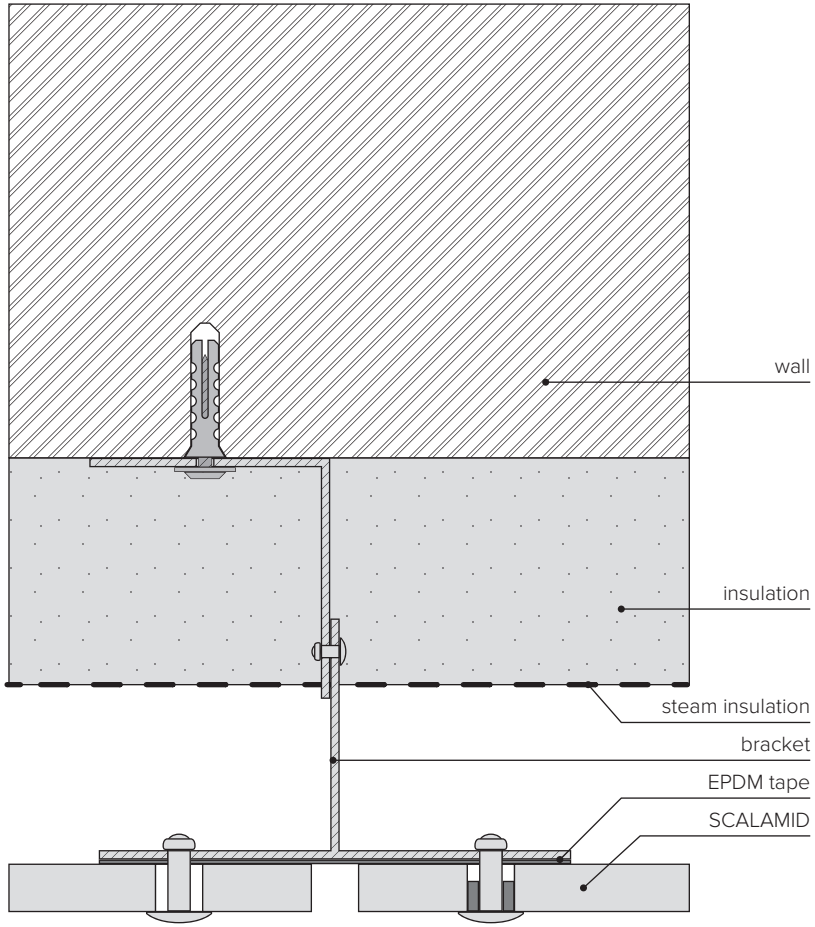
METHODS OF FINISHING INSIDE CORNERS
USING UNIVERSAL ANGLE BAR



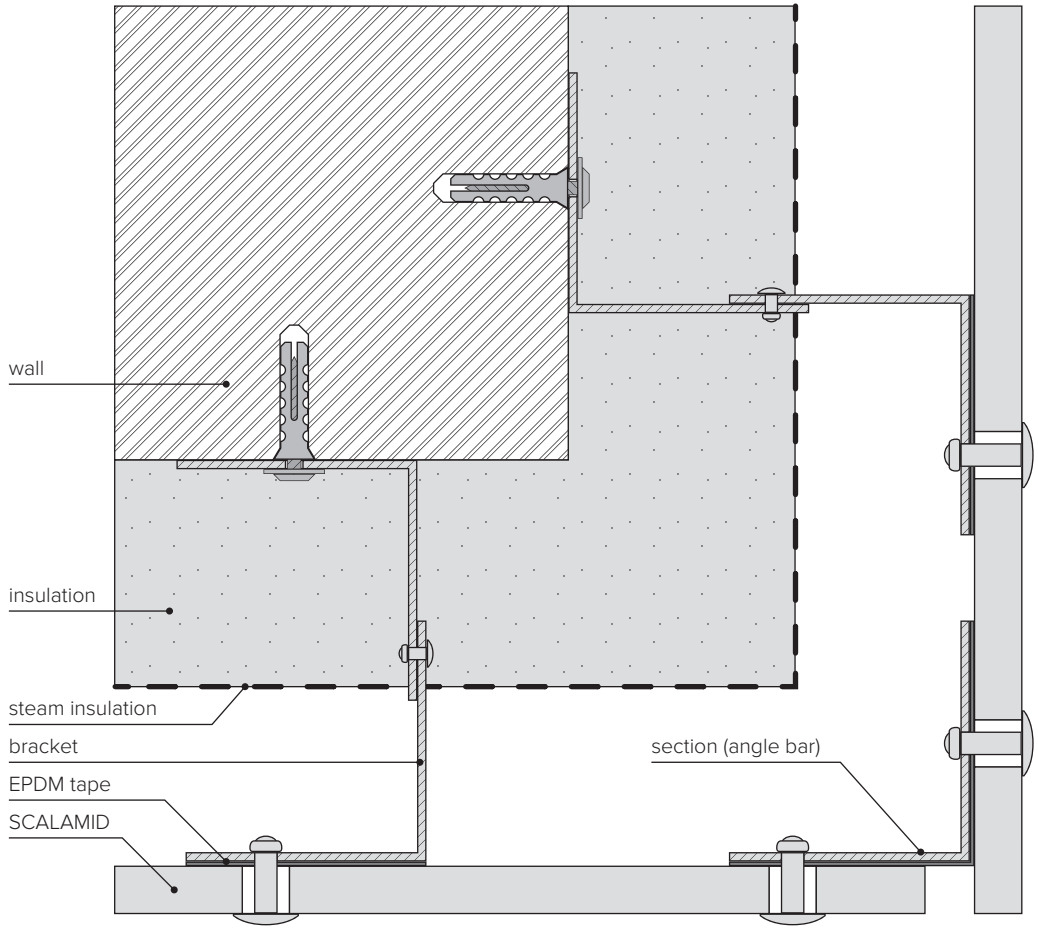
SCALAMID

structural details of ventilated facades on aluminium substructure

EXAMPLE OF STRUCTURAL SOLUTION
FOR BOARD JOINING



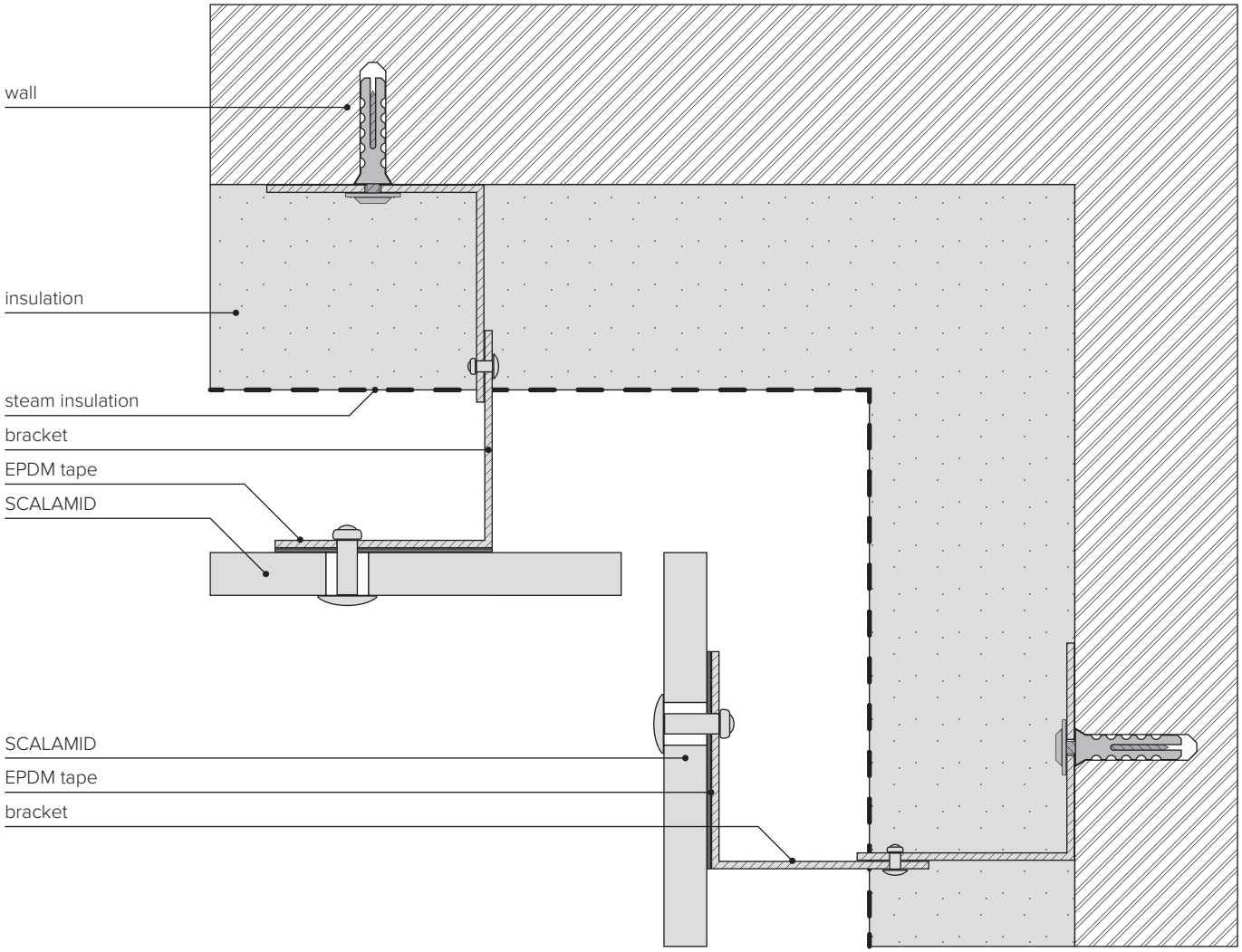
EXAMPLE OF STRUCTURAL SOLUTION
FOR OUTSIDE CORNER



SCALAMID

structural details of ventilated facades on aluminium substructure

EXAMPLE OF STRUCTURAL SOLUTION
FOR INSIDE CORNER



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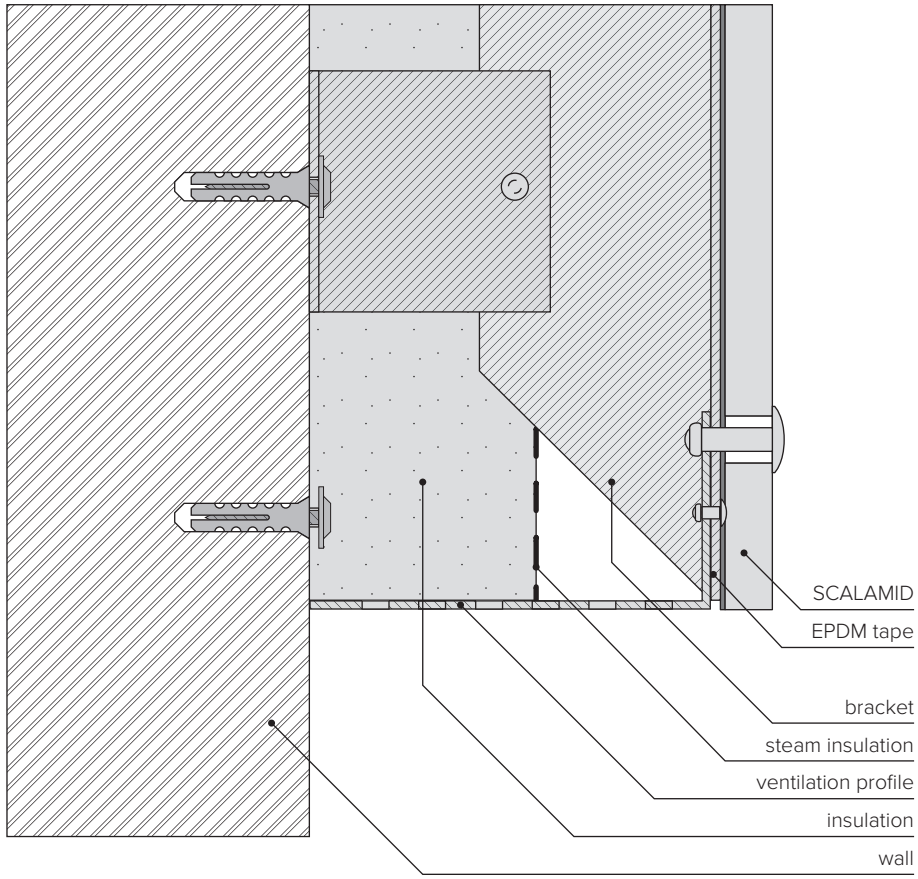
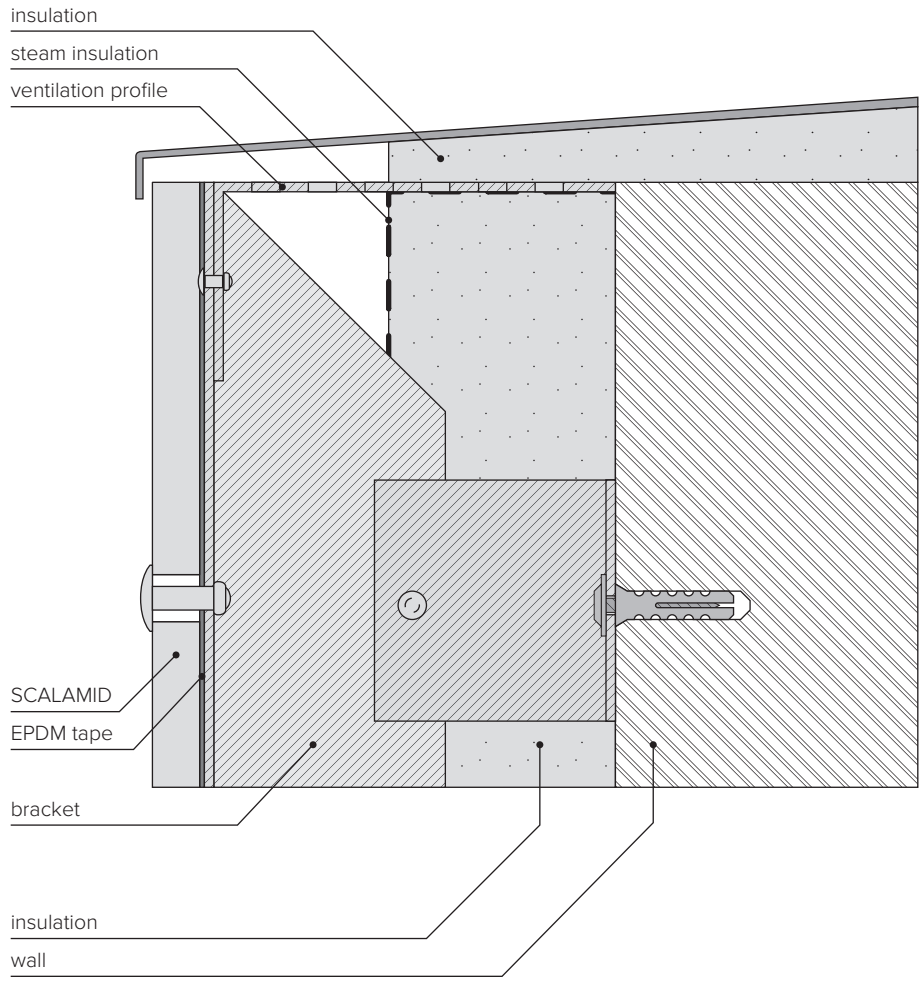
structural details of ventilated facades on aluminium substructure

EXAMPLE OF USING VENTILATION PROFILE
IN VENTILATED FAÇADE STRUCTURE





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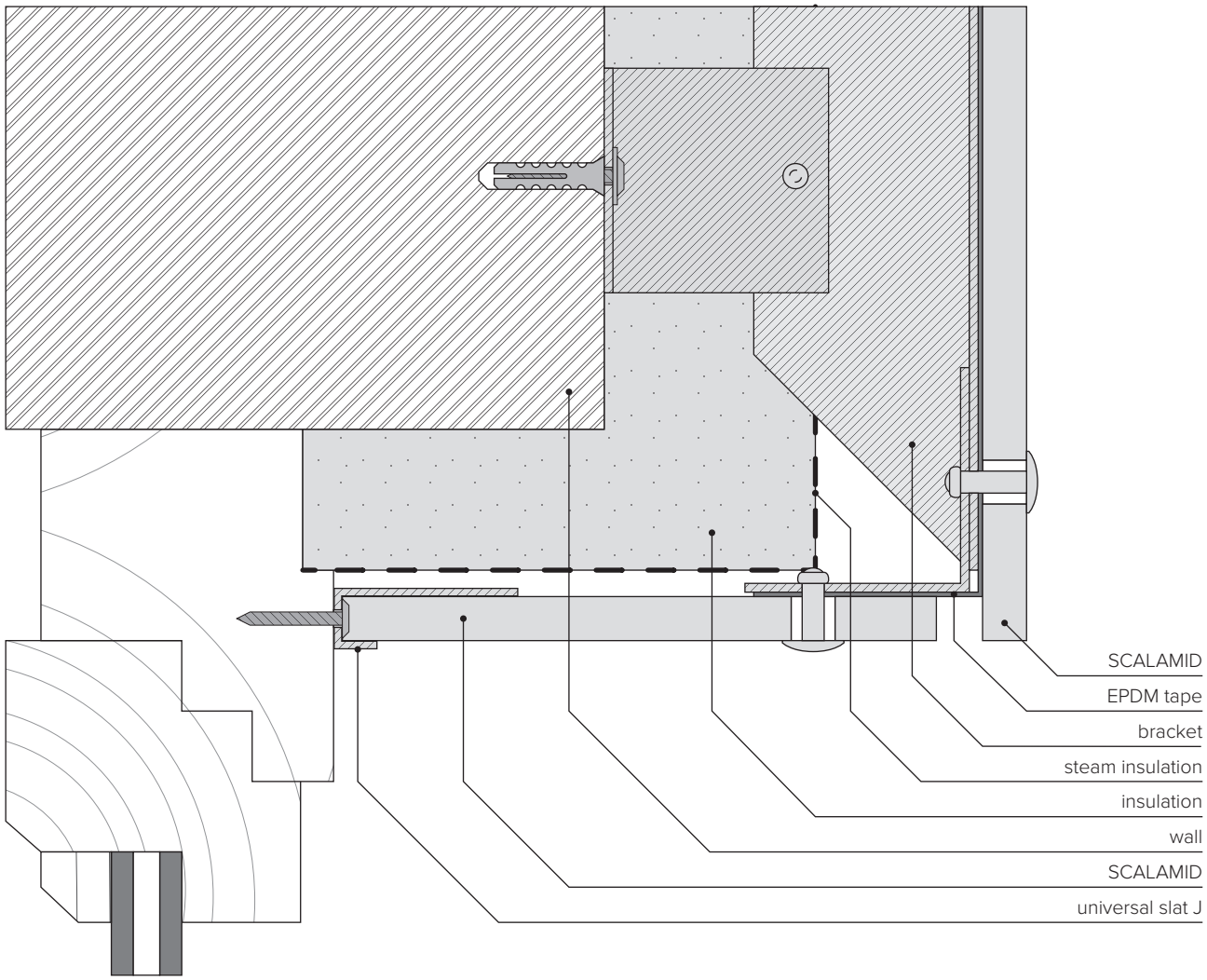
structural details of ventilated facades on aluminium substructure

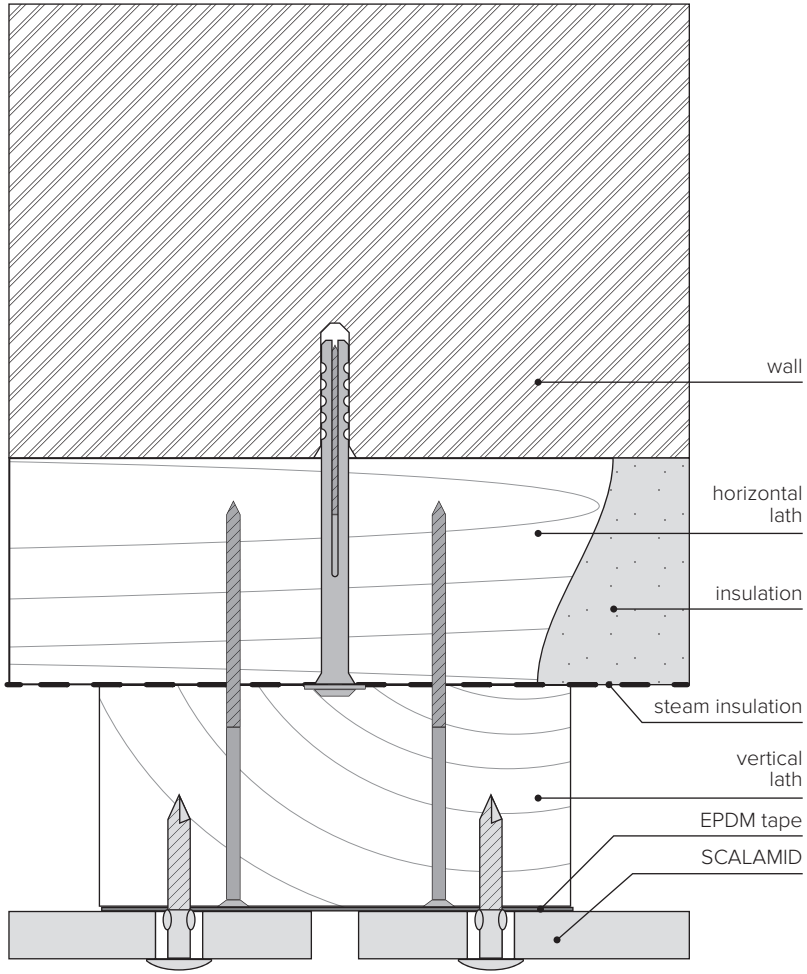
EXAMPLE OF STRUCTURAL SOLUTION
FOR FINISHING A WINDOW OPENING



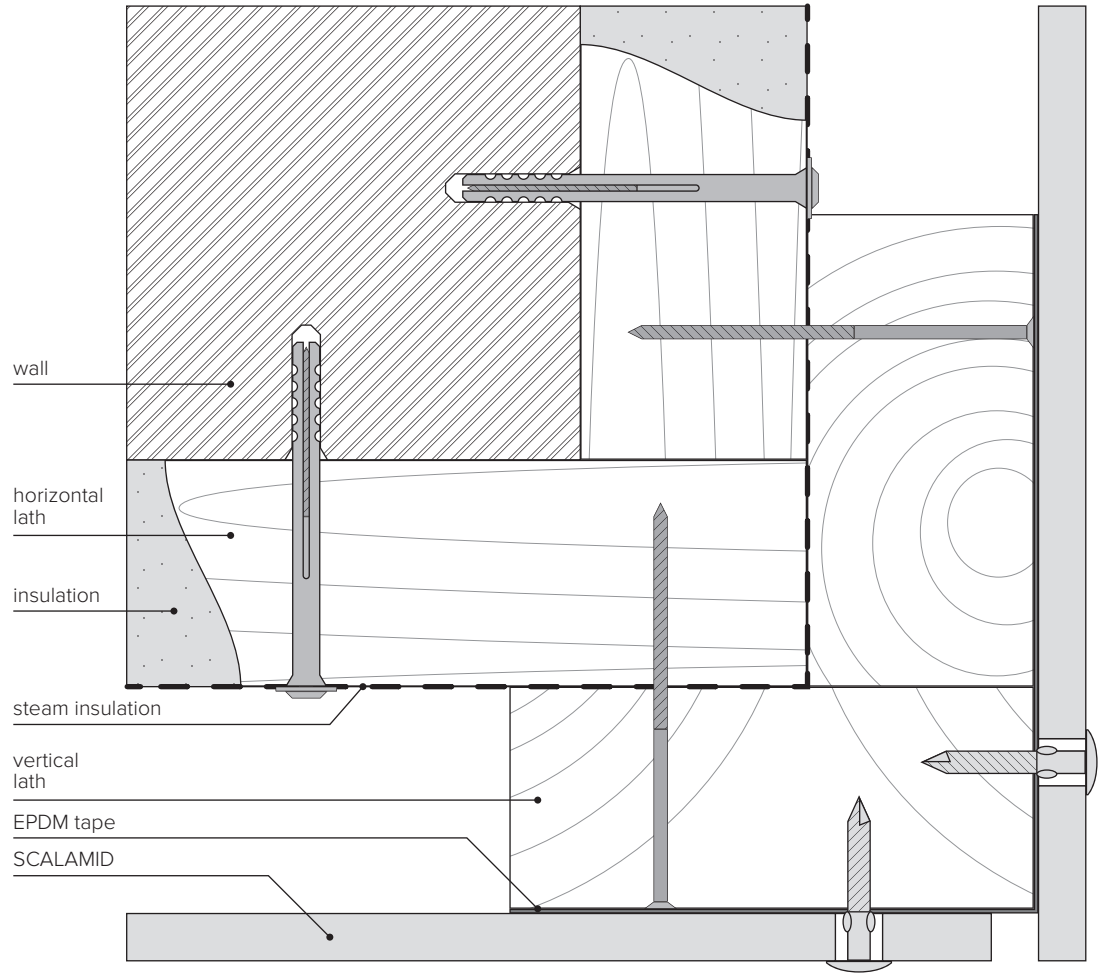
SCALAMID

structural details of ventilated facades on wooden substructure

EXAMPLE OF STRUCTURAL SOLUTION
FOR BOARD JOINING



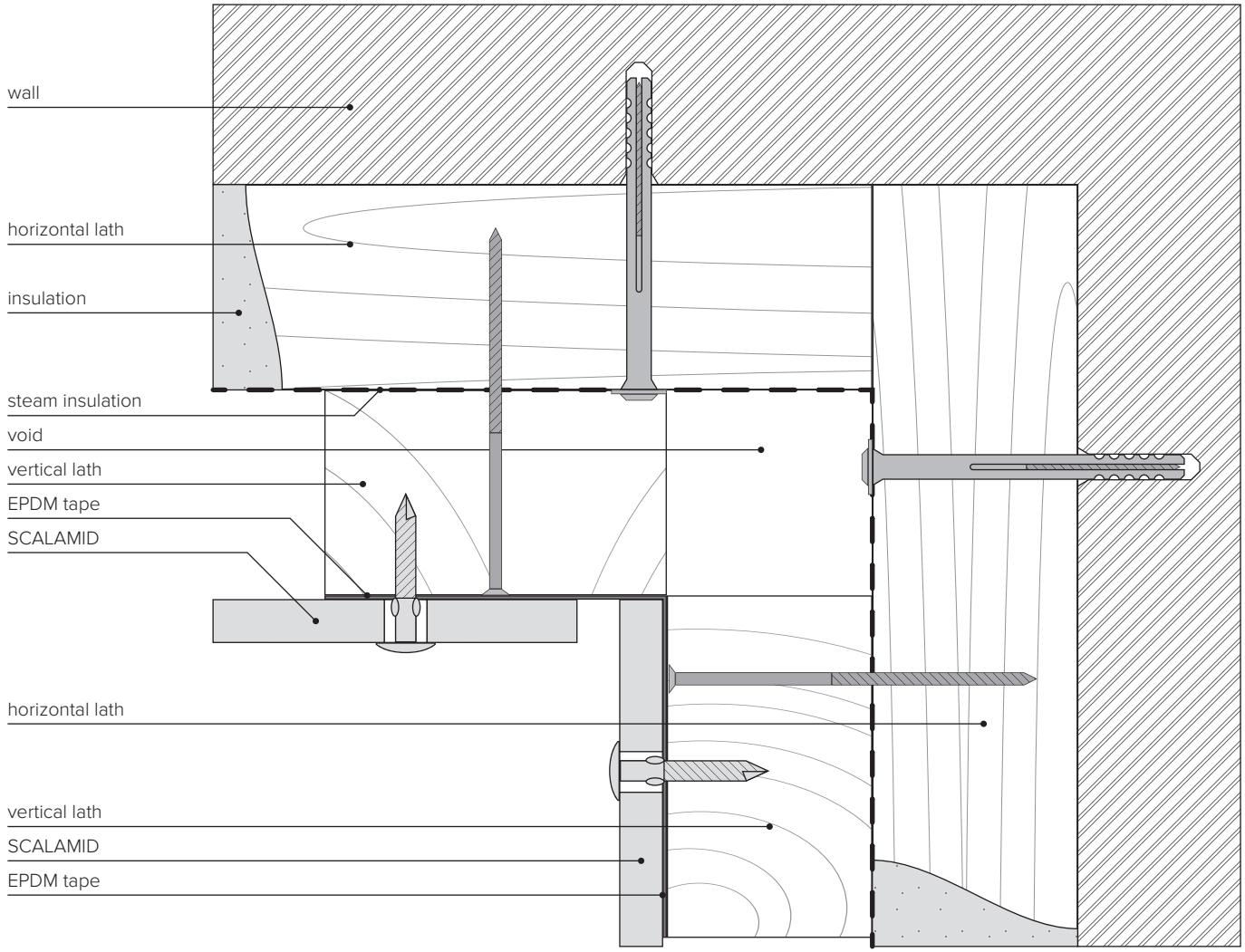
EXAMPLE OF STRUCTURAL SOLUTION
FOR OUTSIDE CORNER



SCALAMID

structural details of ventilated façades on wooden substructure

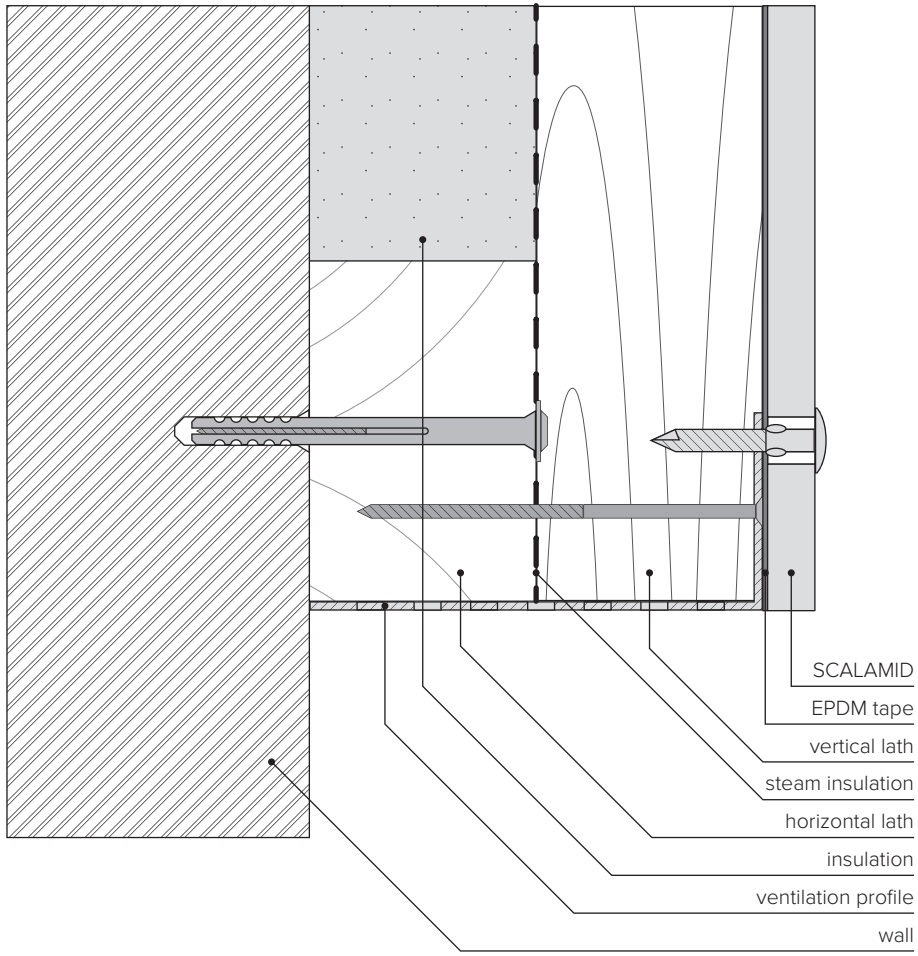
EXAMPLE OF STRUCTURAL SOLUTION
FOR INSIDE CORNER

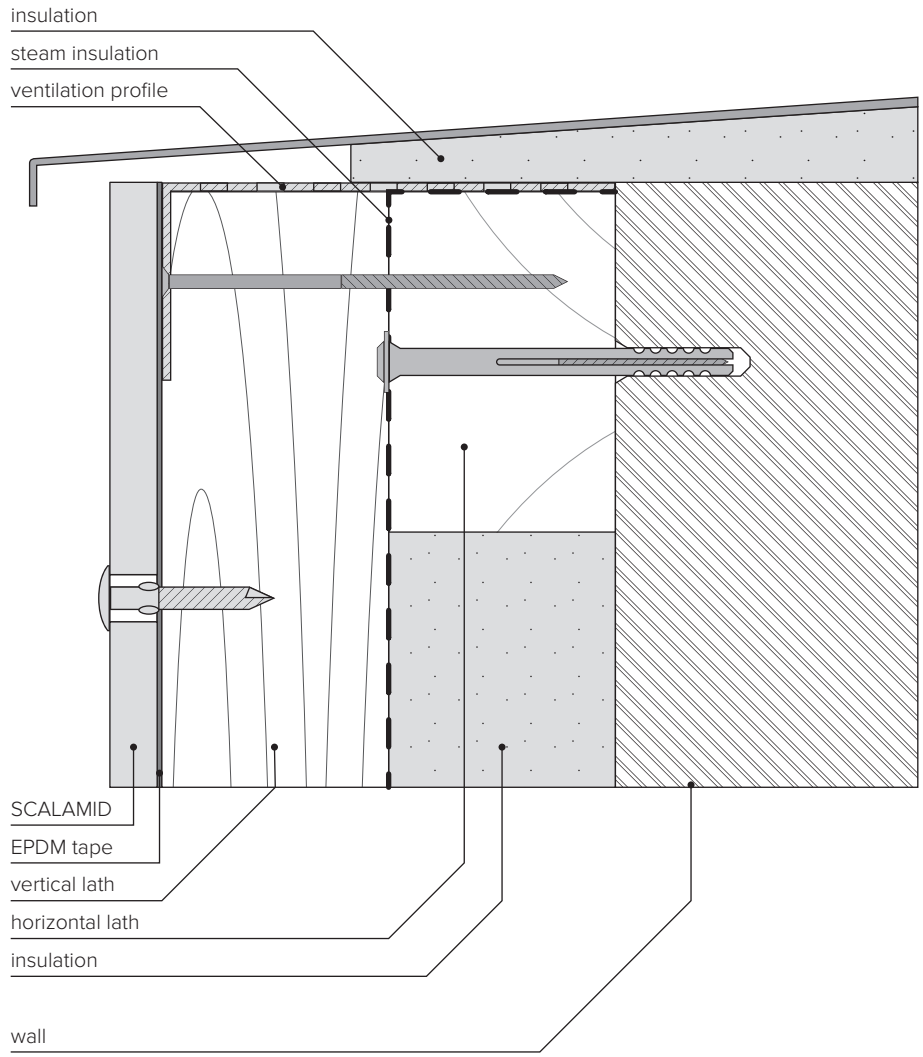


SCALAMID

structural details of ventilated façades on wooden substructure

EXAMPLE OF USING VENTILATION PROFILE
IN VENTILATED FAÇADE STRUCTURE

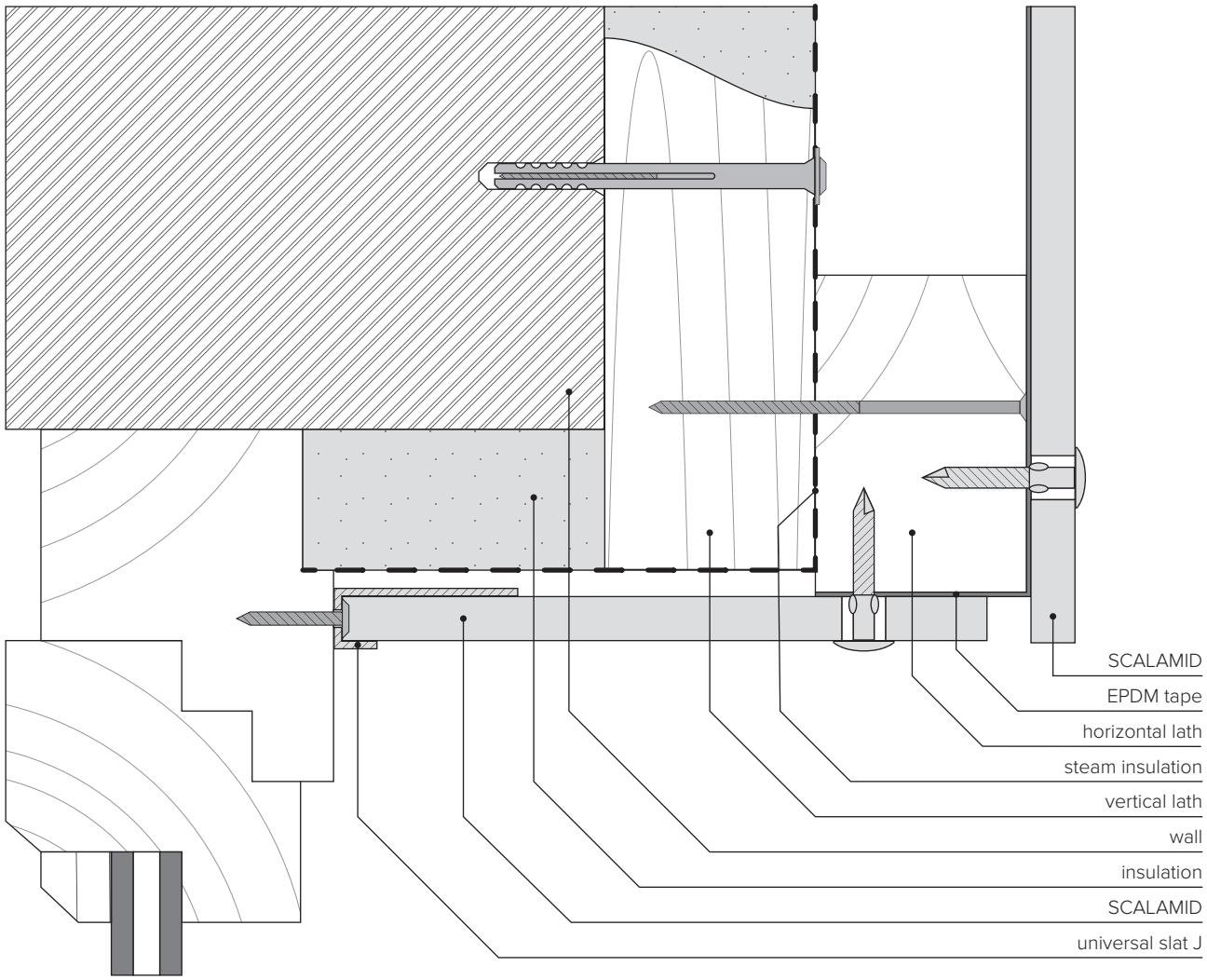




SCALAMID

structural details of ventilated façades on wooden substructure

EXAMPLE OF STRUCTURAL SOLUTION
FOR FINISHING A WINDOW OPENING



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