

ARTEFOAM

INSTRUCTION FOR INSTALLATION AND USE

Cellular cladding

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INSTALLATION - GENERAL RULES

1. GENERAL RULES

1.1. Storage

Cellular cladding profiles should be stored inside, on a dry, flat and firm base, without direct contact with the ground. While still in its protective sleeving they should not be stored in places where they may be exposed to direct sunlight.

1.2. Transport (on the pallet)

The profiles should be transported in a horizontal position.

The profiles should be transported in a horizontal position.

1.3. If any visible flaws emerge or irregularities are detected, report them immediately to the seller before installation.

1.4. Installation temperature

The installation should be carried out at ambient temperatures of between 5°C a 30°C. Prior to installation the profiles should be allowed to adjust to atmospheric conditions at the installation site for approx. 24 hrs.

1.5. Dilatation

Keep expansion gaps: the change in size due to significant changes in ambient temperature is a natural and inalienable feature of any item of almost any material, including cellular PVC. Therefore, during the installation always mind the necessity of maintaining expansion gaps between panel ends and the inside pas of finishing trims:

- ca. 8-10 mm for colours: White, Creme, Beige, Claystone, Light Grey, Sand

- ca. 15 mm for all other colours.

If the installation takes place in higher ambient temperatures (25-30°C) the clearance should be reduced to ca. 3-4 mm. Bear in mind that with every 10°C of temperature change, total profile length may expand/contract by approx. 0.7 mm per each meter of length.

1.6. Ventilation

Keep ventilation gap behind the cladding panels as specified below (see page 6, 7).

1.7. Working with the profiles

Cellular PVC profiles and accessory trims can be worked using conventional carpentry tools for cutting, drilling and shaping. Saws with fine-toothed blades should be used and power tools should be operated at the same or higher speeds to those normally used for timber work.

1.8. Do not modify the product by machining its surface or coating it with a layer of another material.

1.9. Observe all the rules indicated in the instruction for installations and use.

2. INSTALLATION

2.1. Preparation of the supporting structure

The supporting structure should be made of timber battens or studs, fastened to walls directly or with the use of metal brackets. **IMPORTANT:** all battens should be levelled to reduce any surface irregularities; if necessary, use wedges to level out the irregularities. Timber battens requirements:

- should be made of good quality timber, free of knots, the humidity of 15-18%, suitably treated with preservative

- should be firmly and reliably fixed using screws / wall plugs or other fixings suitable for the type of substrate

- the spacing between intermediate battens/studs directly behind the cladding should not exceed 40 cm centers (max 60 cm for colours: White, Creme, Beige, Claystone, Light Grey, Sand)

- at the corners of a wall and under joint trims use double battening (or battens of double width)

- battens/ studs behind the facade cladding should always provide a proper ventilation gap behind the facade panels:

a) min. 20 mm for colours (White, Creme, Beige, Claystone, Light Grey, Sand)

b) min. 40 mm for all other colours.

2.2. Installation of finishing trims

Fix the ventilation trims and the starter trims and at the bottom of the area to be clad. **IMPORTANT:** in order for the cladding to be installed properly in a level fashion, the starter trims at the bottom of the walls **MUST** be level.

Keep the ends of starting trims at least 5 mm apart to allow for expansion.

Fix the inner parts of perimeter trims over supporting battens; fix vertical trims using specified fixings at recommended intervals of 30 cm. Do not fix outer parts of the 2-part trims before panels are installed. The outer parts should be put aside and protected from damage until ready for use.

2.3. Installation of cladding boards

Plan out the places of panel butt-joints on the area to be clad. If a center joint trim is to be used, it should be fixed on supporting batten at least of the same width (use 2 battens if necessary). If joint covers are to be used to butt-join adjacent panels, they should be staggered to make a regular pattern on a wall. Cut the panels to required lengths based on that planning.

Mount the first cladding board on the starter trim, ensuring that the back leg of the panel is engaged in the trim slot. Board fixing should commence at the center of its length to the batten through the nailing slot or groove at the top edge, then work progressively outwards. Fasteners should always be placed in the middle of the length of a slot. If a nail slot falls outside a supporting batten, use a batten offcut, fasten it to the substrate under the required slot and screw the panel to the timber offcut with a fastener. Always make sure that each end of a board is screwed/nailed to a batten.

IMPORTANT: Never drive the head of the fastener tight into the panel surface, as it may hinder any thermal movement. Keep a small clearance between the fastener heads and panel surface so that each panel can be moved horizontally left/right after all its fasteners have been screwed to the battens.

IMPORTANT: Maintain expansion gaps between panel ends and the inside parts of the finishing trims, as indicated above. The gaps will subsequently be concealed by the outer parts of finishing trims.

All joint covers and vertical trims must be fixed on supporting battens. Joint covers should be installed tight to the panel ends as work proceeds - their spacing lugs will automatically provide proper clearance between adjacent panel lengths. Joint covers cannot be placed directly one over another. Joint covers forming a vertical line should be separated from each other by at least 2 courses of cladding panels. Provide packing behind any panels cut along the top edge; panel off-cuts may be suitable for that purpose.

2.4. Insert the top parts of all 2-part trims to finish the installation

No fixings are required.

3. INFORMATION FOR USAGE

During the use, possible colour changes caused by sunlight, in moderate climate, with air temperatures not exceeding 40°C, at a height of up to 1800 m above sea level, may have a homogeneous nature not exceeding the 3rd degree in the grey scale (EN 20105-A02).

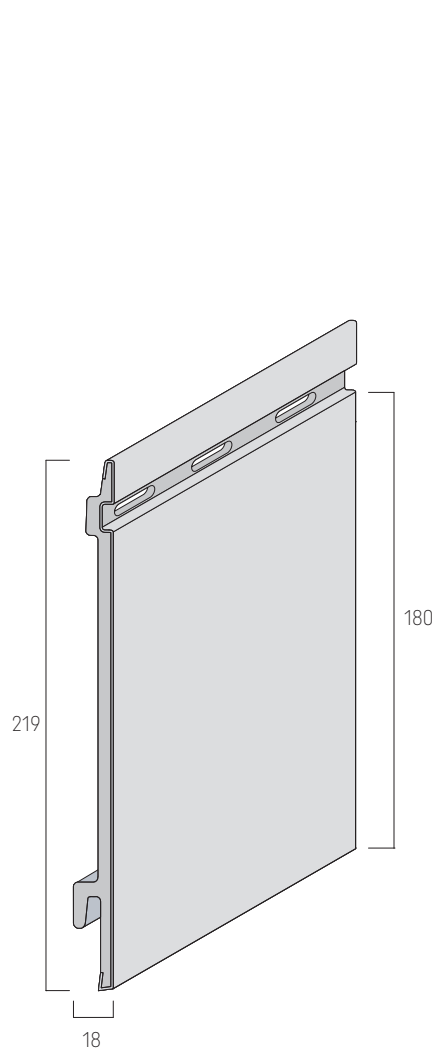
4. CLEANING AND MAINTENANCE

Cellular cladding profiles are finished, practically maintenance-free products. In order to preserve the esthetics we recommend to clean it at least once a year depending on the degree of soiling. Clean the panels and trims using a domestic detergent solution with a temperature not exceeding 40°C. Do not use solvents or similar aggressive and caustic fluids. Wash the surface with clean water after cleaning.

CLADDING BOARDS - DETAILED DESCRIPTION

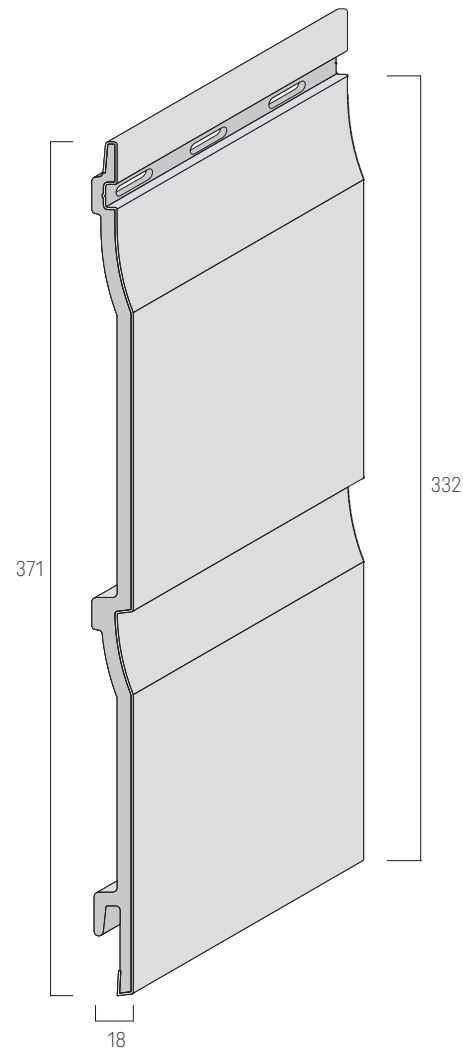
FS-201 Single board: 6 m, 2,95 m CONNEX

Covering width: 180 mm
Installation: horizontal



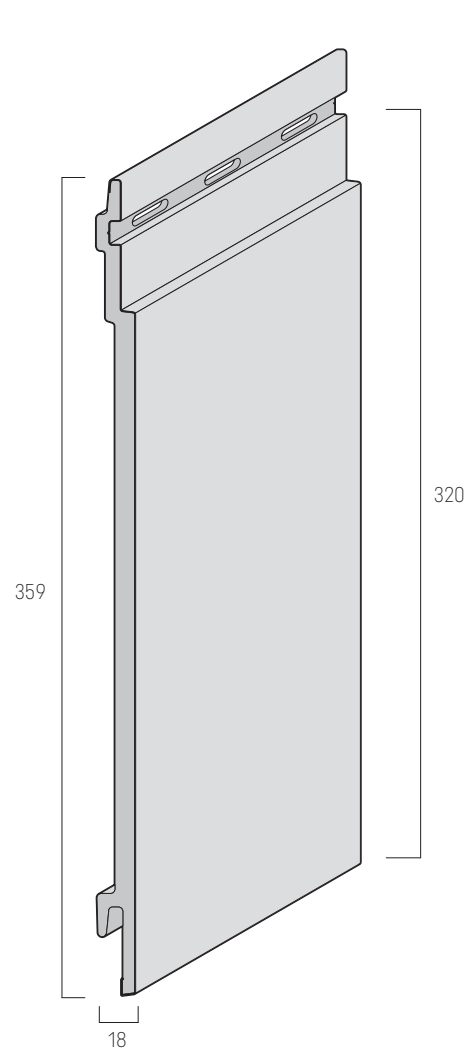
FS-202 Double board: 6 m

Covering width: 332 mm
Installation: horizontal / vertical



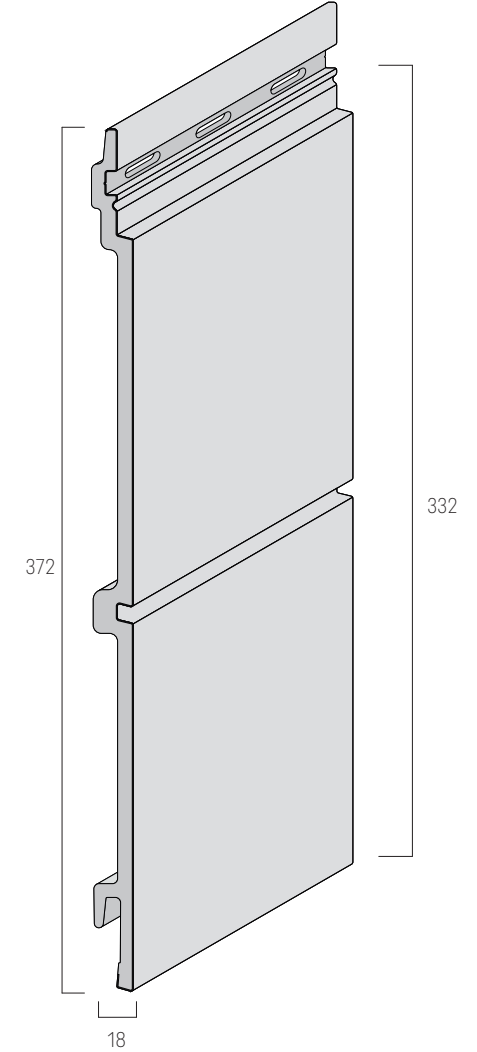
FS-301 Single board: 6 m, 2,95 m CONNEX

Covering width: 320 mm
Installation: horizontal / vertical



FS-302 Double board: 6 m, 2,95 m CONNEX

Covering width: 332 mm
Installation: horizontal / vertical



SUMMARY OF THE RULES FOR IMPLEMENTATION

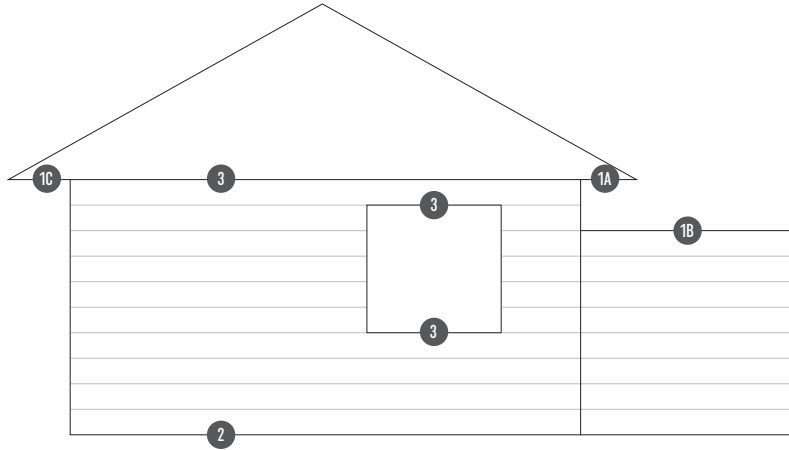
TYPE OF THE BOARD	LENGHT	COLLECTION	COLOUR	VENTILATION GAP	SPACE BETWEEN THE BATTENS
Single board	FS-201 - 6 m	CLASSIC	White (WH) Creme (CR) Beige (BE) Claystone (CS) Light Grey (LG)	2 cm	40 cm (60 cm possible)
			Grey (GR) Quartz Grey (QG) Olive (OL) Anthracite (AN)	4 cm	40 cm
Single board	FS-201 CONNEX - 2,95 m	CLASSIC	White (WH) Creme (CR) Beige (BE) Claystone (CS) Light Grey (LG)	2 cm	40 cm
			Grey (GR) Quartz Grey (QG) Olive (OL) Anthracite (AN)	4 cm	
Double board	FS-202 - 6 m	CLASSIC	White (WH) Creme (CR) Beige (BE) Claystone (CS) Light Grey (LG)	2 cm	40 cm (60 cm possible)
			Grey (GR) Quartz Grey (QG) Olive (OL) Anthracite (AN)	4 cm	40 cm

SUMMARY OF THE RULES FOR IMPLEMENTATION

TYPE OF THE BOARD	LENGHT	COLLECTION	COLOUR	VENTILATION GAP	SPACE BETWEEN THE BATTENS
Double board	FS-302 - 6 m	MODERN WOOD	White (WH) Ivory (IV) Claystone (CS) Beige (BE) Pearl Grey (PG)	2 cm	40 cm (60 cm possible)
			Quartz Grey (QG) Anthracite (AN)	4 cm	40 cm
Double board	FS-302 CONNEX - 2,95 m	MODERN WOOD	White (WH) Ivory (IV) Claystone (CS) Beige (BE) Pearl Grey (PG)	2 cm	40 cm
			Quartz Grey (QG) Anthracite (AN)	4 cm	
Single board	FS-301 - 6m	TREND	Ivory (IV) Ivory Stone (IVS) Mastic (MA) Mastic Stone (MAS) Pearl Grey (PG) Pearl Grey Stone (GPS) Anthracite (AN) Anthracite Stone (ANS)	4 cm	40 cm
	FS-301 CONNEX - 2,95 m				
Single board	FS-201 - 6m	WOOD DESIGN	Golden Oak (GO) Silvergrey (SG) Graphite (GP)	4 cm	40 cm
	FS-201 CONNEX - 2,95 m				
Double board	FS -202 - 6 m	T-REX	Creme (CR) Beige (BE) Sand (SA)	2 cm	40 cm
			Blue (BL)	4 cm	40 cm (60 cm possible)

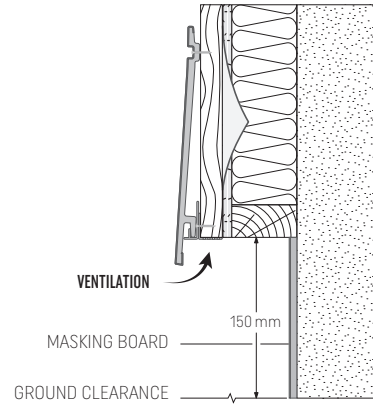
! VENTILATION

The principle of ventilated cladding requires that the air path must not be obstructed both at the top and bottom of the clad area.

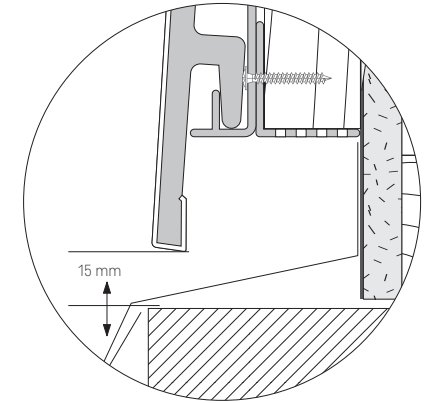


2 Bottom ventilation

3 Window joinery



Door / window head

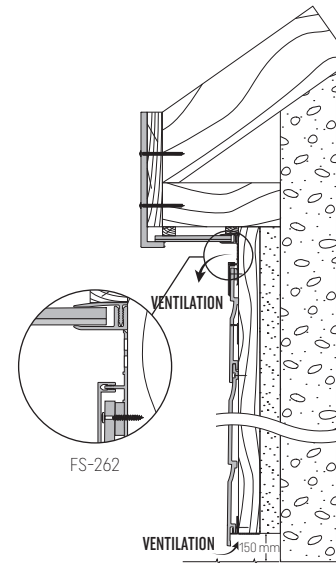
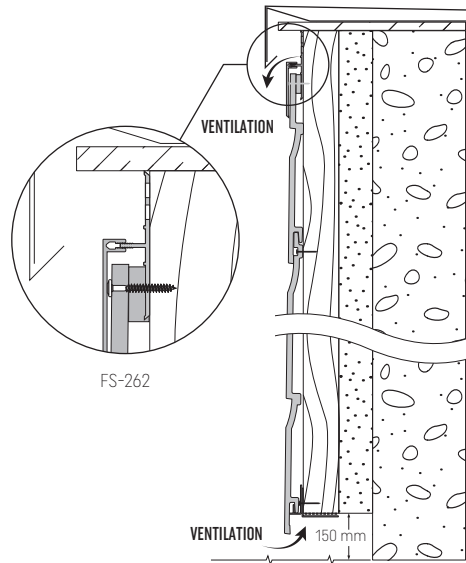
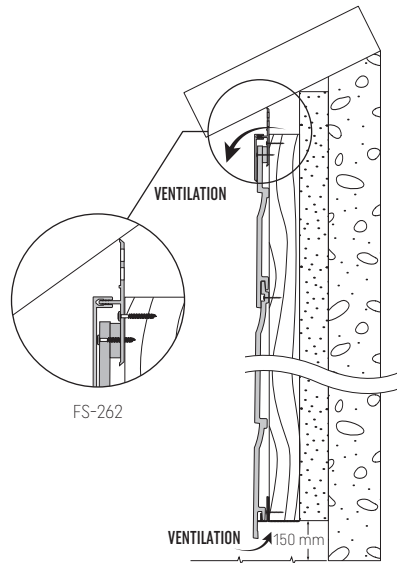


1 Top ventilation

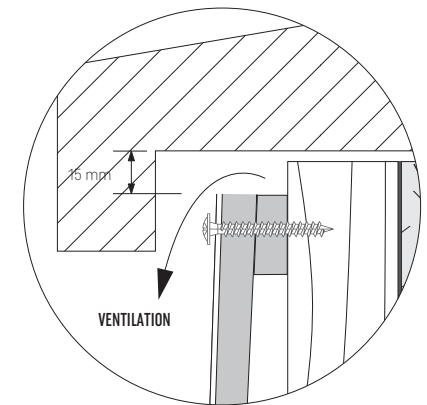
1A Ventilation under eaves

1B Ventilation under metalwork

1C Ventilation under soffit boards



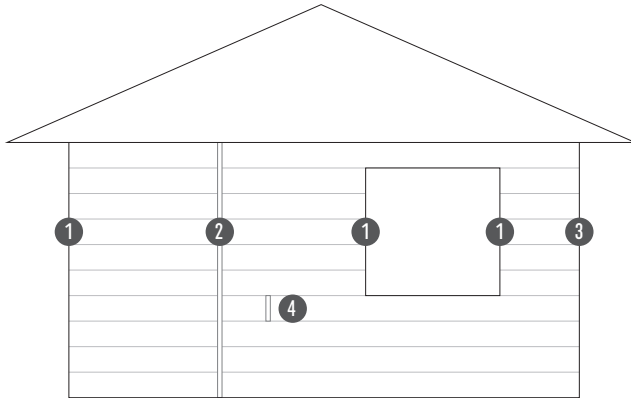
Windowsill



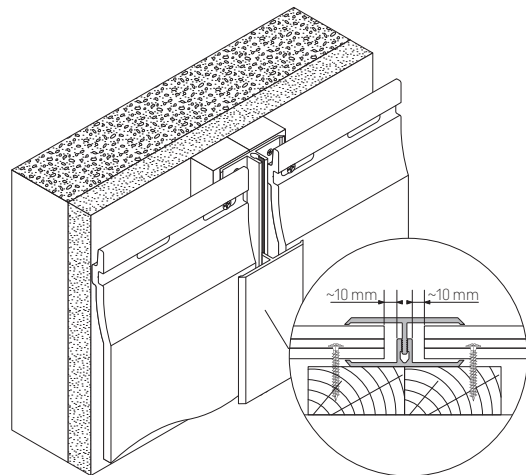
DILATATION

Proper allowance for expansion is made by:

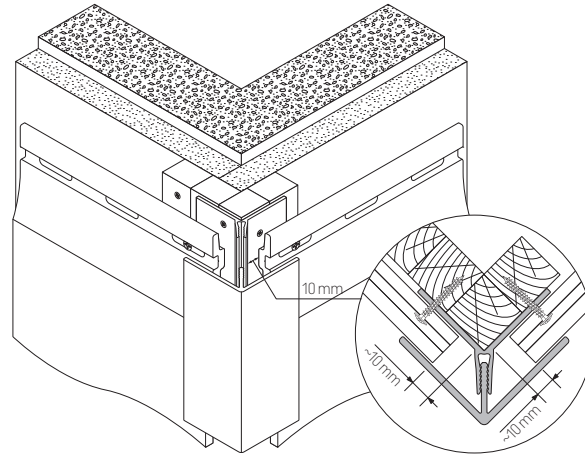
- keeping sufficient expansion gaps at each board end
- screwing fasteners not too tight so that the boards can move freely
- positioning fasteners inside nail slots, at least 1 cm away from their extremes



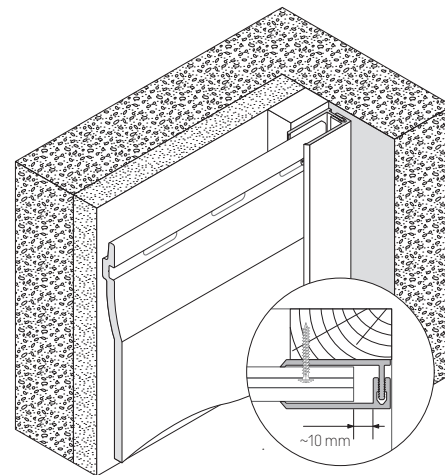
2 Center joint trim FS-282



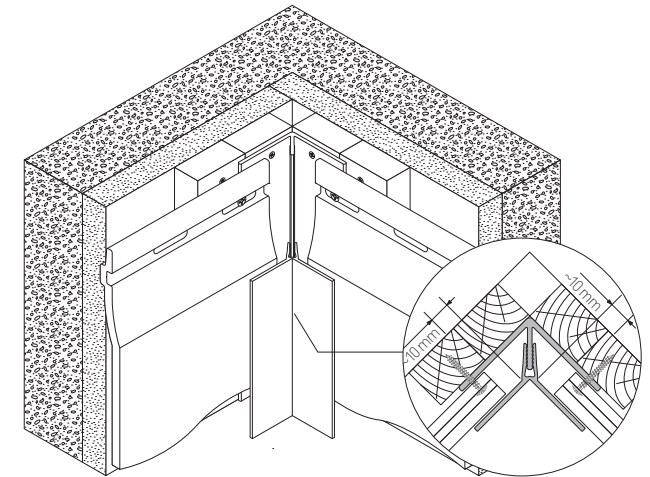
1 Universal corner FS-222



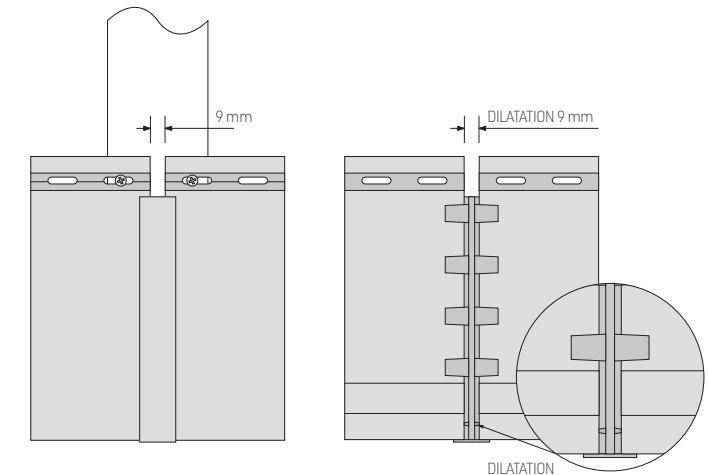
3 Finishing trim FS-252



1 Universal corner FS-222



4 Joint cover J-201/ J-202/ J-302



FRONT

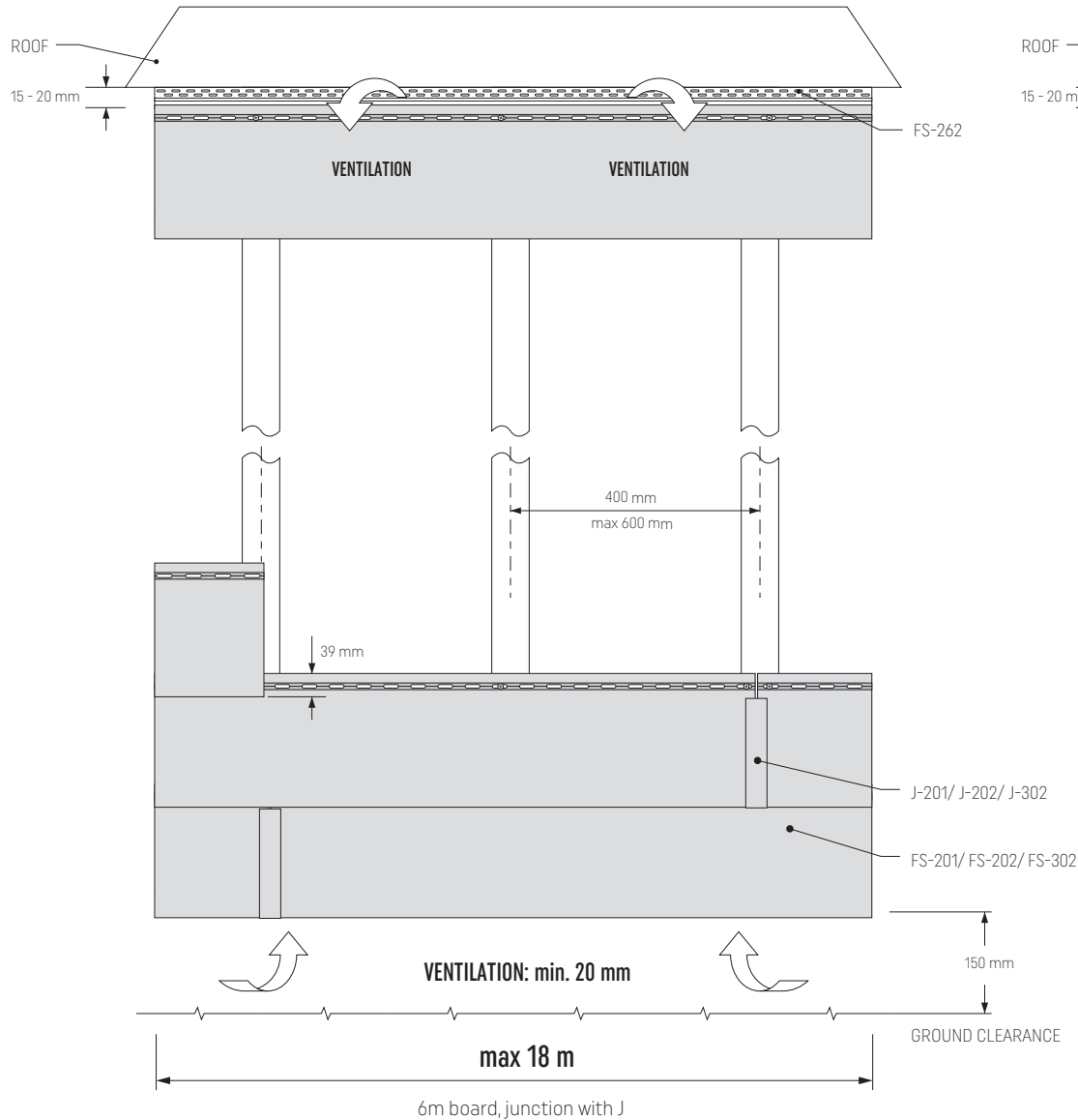
BACK

FS-201/ FS-202/ FS-302 HORIZONTAL INSTALLATION - GENERAL RULES - VENTILATION GAP = 20 MM, see page 6, 7

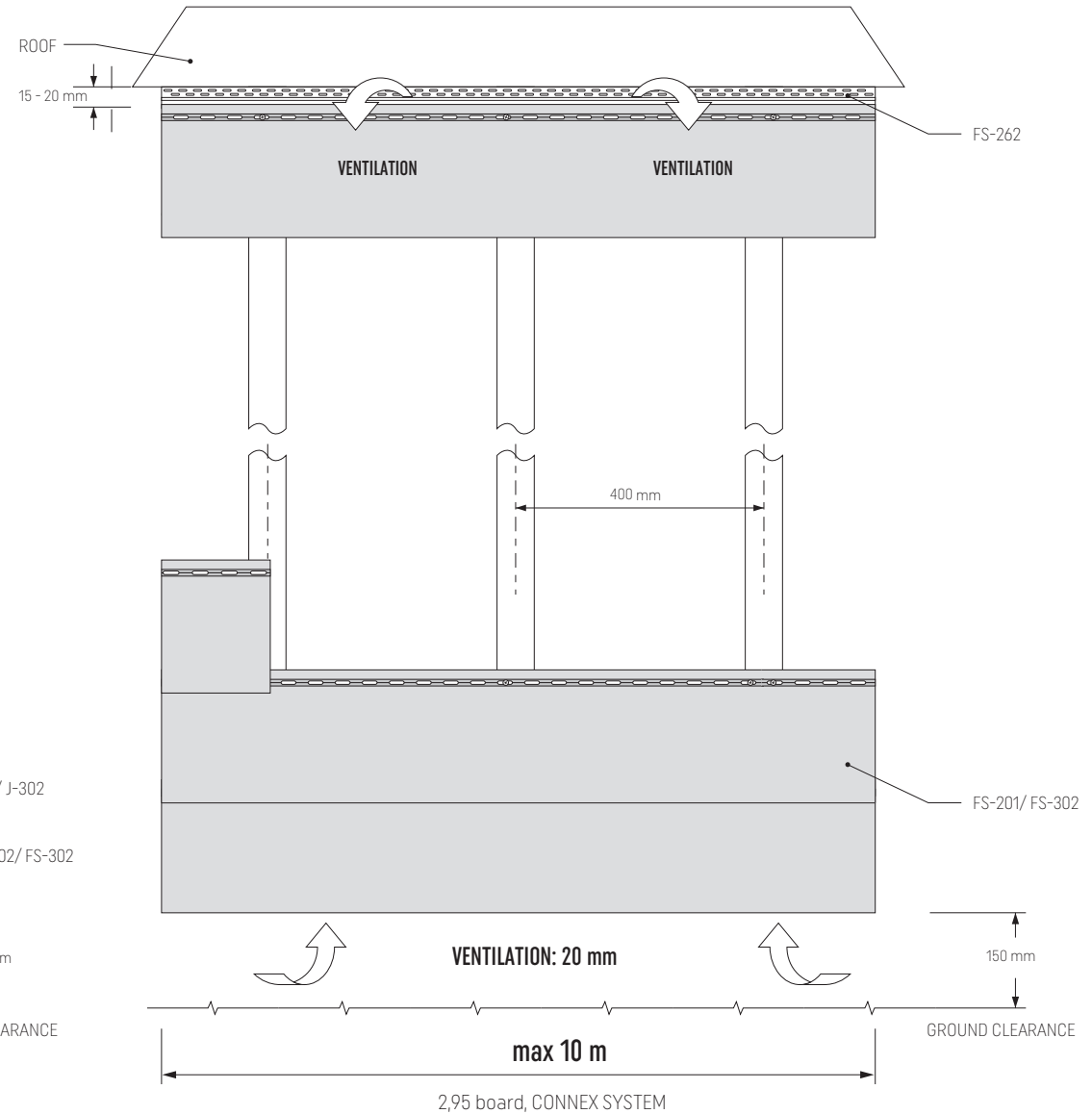
Pic. 1. KERRAFRONT Single board FS-201/ double board FS-202/ double board FS-302

Batten thickness dependent on the kind wall where the cladding is installed:

- timber frame wall: thickness 22 mm
- masonry (external insulation): thickness minimum 30 mm.

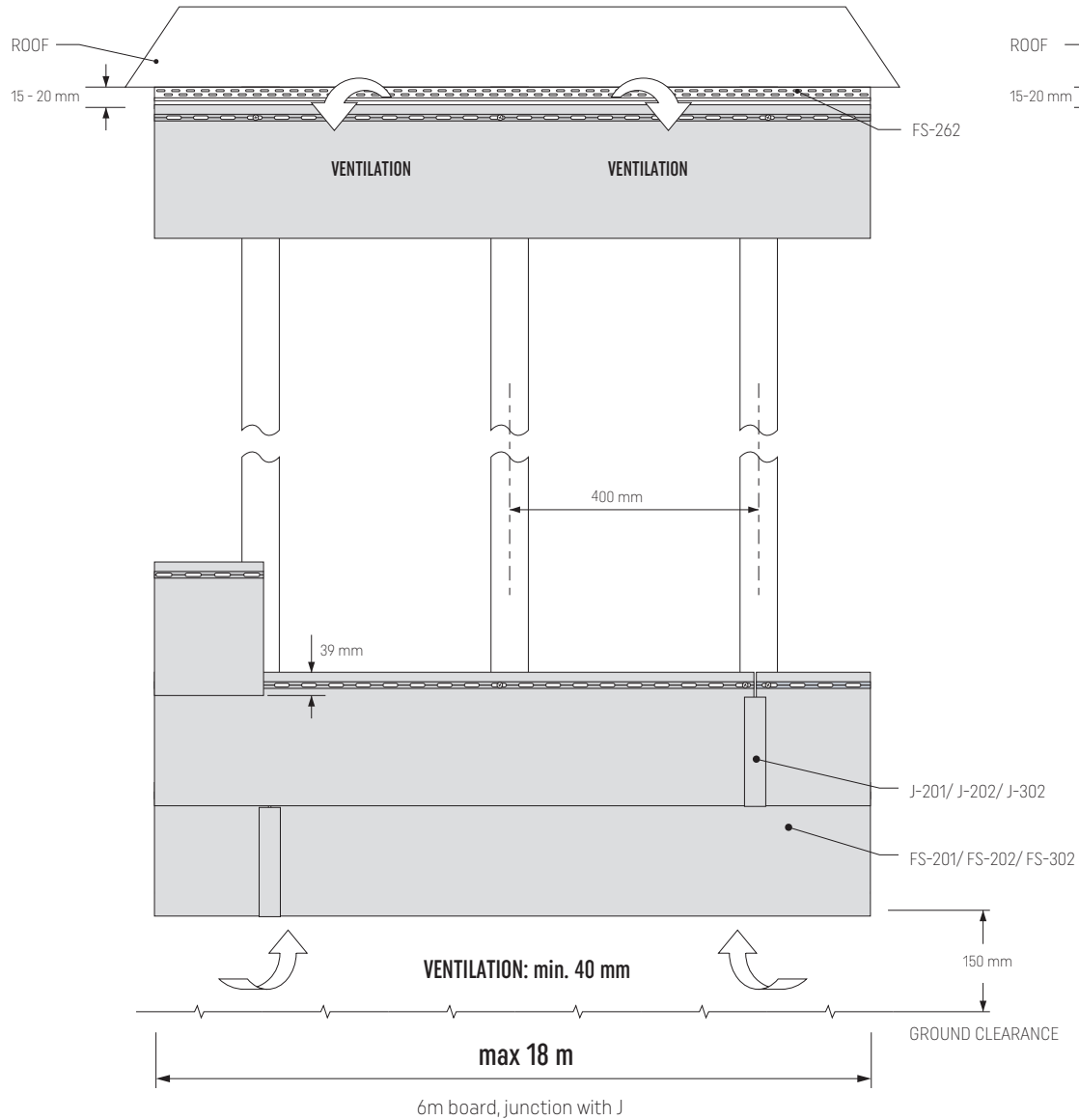


Pic. 2 KERRAFRONT CONNEX Single board FS-201/ double board FS-302

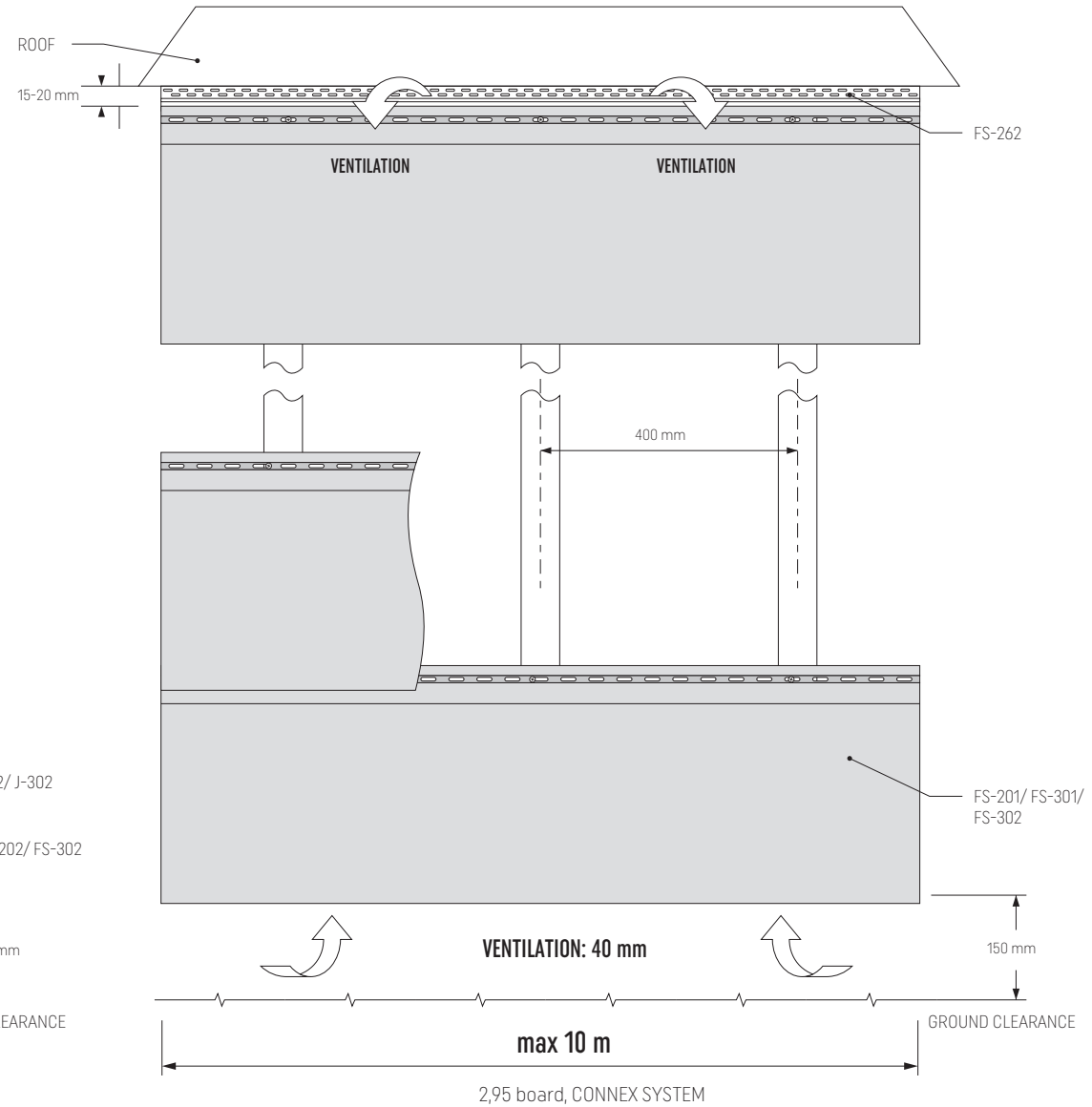


FS-201/ FS-301/ FS-202/ FS-302 HORIZONTAL INSTALLATION - GENERAL RULES - VENTILATION GAP = 40 MM, see page 6, 7

Pic. 3. KERRAFRONT Single board FS-201/ double board FS-202/ FS-302

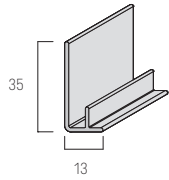


Pic. 4. KERRAFRONT CONNEX Single board FS-201, FS-301/ double board FS-302 2,95 m

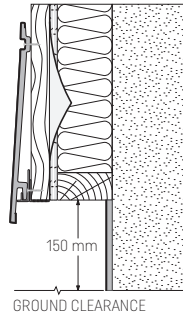


TRIMS AND ACCESSORIES

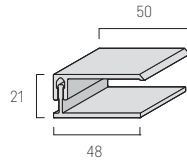
FS-211 Starter trim



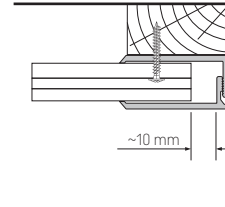
Installed on the lower edge of a wall, on the ventilation trim. It is used to fix the first cladding panel; invisible after installation.



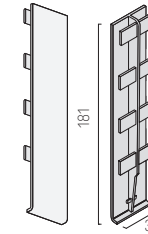
FS-252 Finishing trim, 2-piece



Installed at the top or side edge of a wall, esp. suitable where panels have been cut to required height.

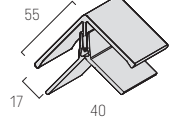


J-201 Joint cover for FS-201

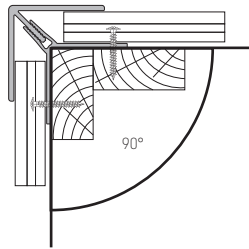


Installed between adjacent panels, always on a supporting batten, in order to butt-join FS-201 cladding boards.

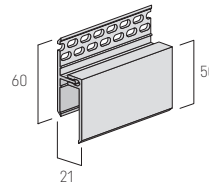
FS-222 Universal corner, 2-piece



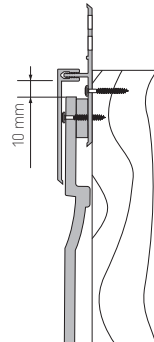
Installed in corners of walls, can be used as an internal or external corner detail.



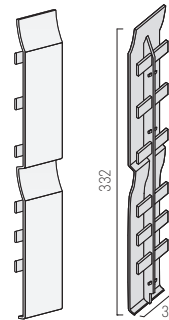
FS-262 Ventilation trim, 2-piece



Installed at the top edge of the clad area in order to allow proper ventilation

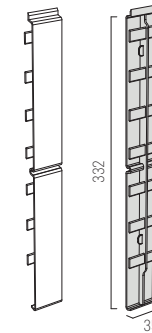


J-202 Joint cover for FS-202



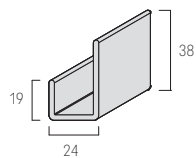
Installed between adjacent panels, always on a supporting batten, in order to butt-join FS-202 cladding boards.

J-302 Joint cover for FS-302

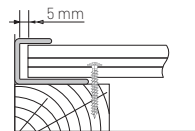


Installed between adjacent panels, always on a supporting batten, in order to butt-join FS-302 cladding boards.

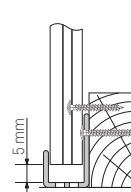
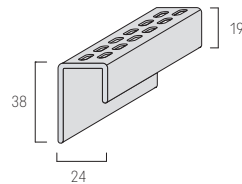
FS-251 Universal trim



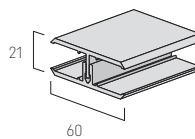
Installed vertically on a side edge or along a diagonal top edge of a wall, can be used as an alternative to FS-252 trim.



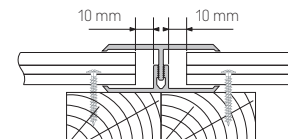
FS-261 FS-261 Perforated trim



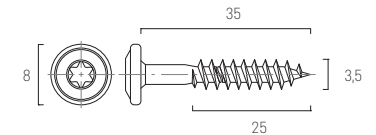
FS-282 Center joint trim 2 pieces



Installed vertically for continuous joints between cladding boards on a wall.

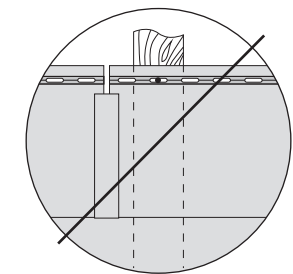
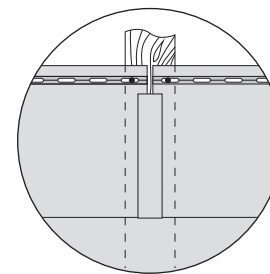
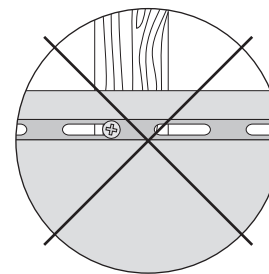
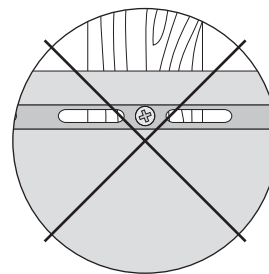
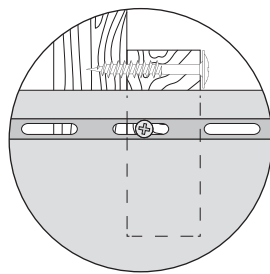
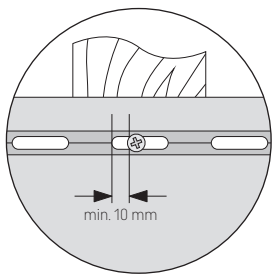
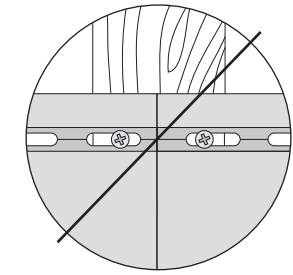
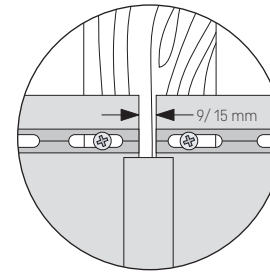
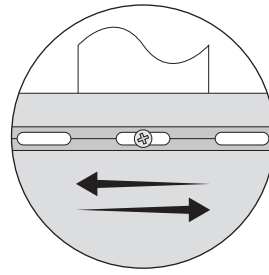
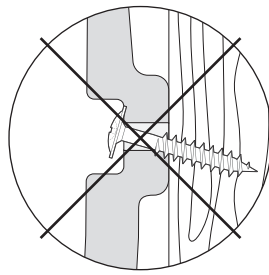
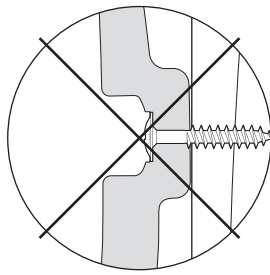
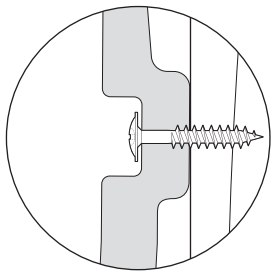


INOX-UP3.5X35-TX15-A2 Fitting screw



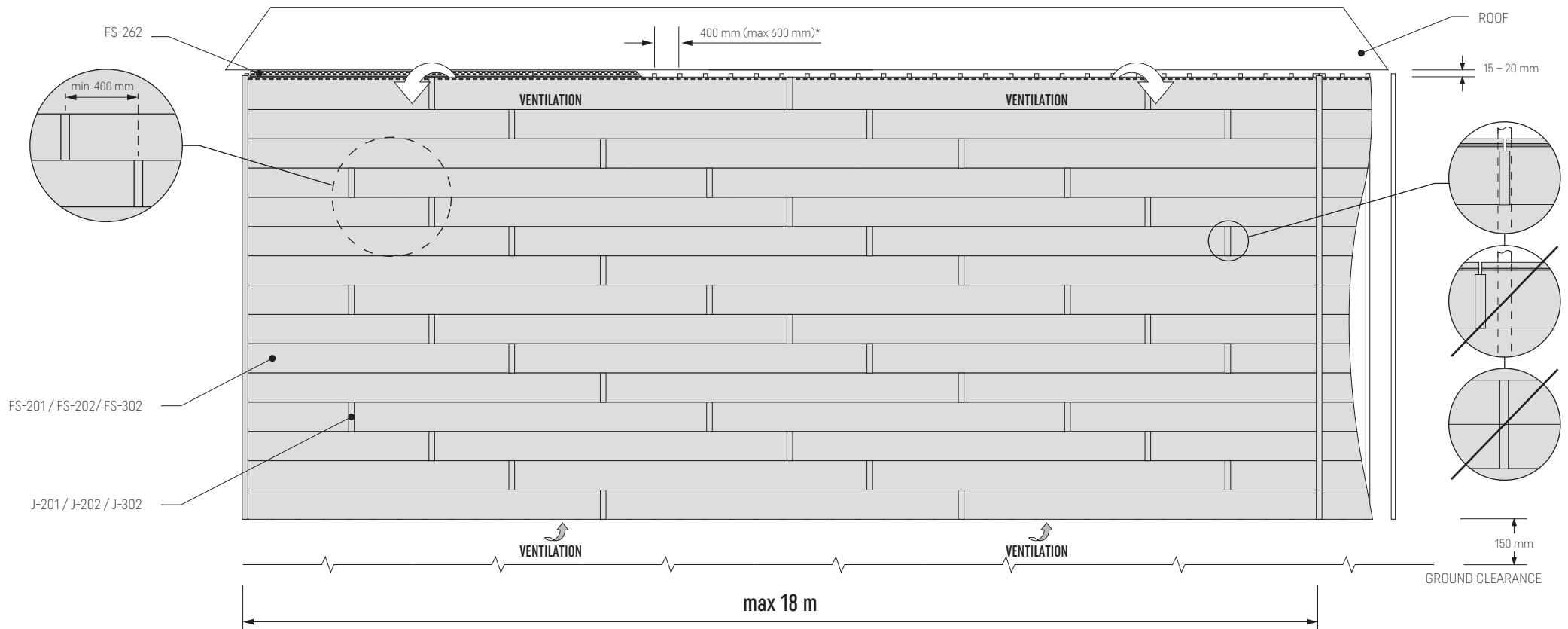
Usage per 1 m²:
 single board FS-201: 15 pcs
 single board FS-301: 9 pcs
 double board FS-202: 9 pcs
 double board FS-302: 9 pcs

PRINCIPLES OF POSITIONING THE SCREWS IN THE FIXING HOLES



HORIZONTAL INSTALLATION - GENERAL RULES

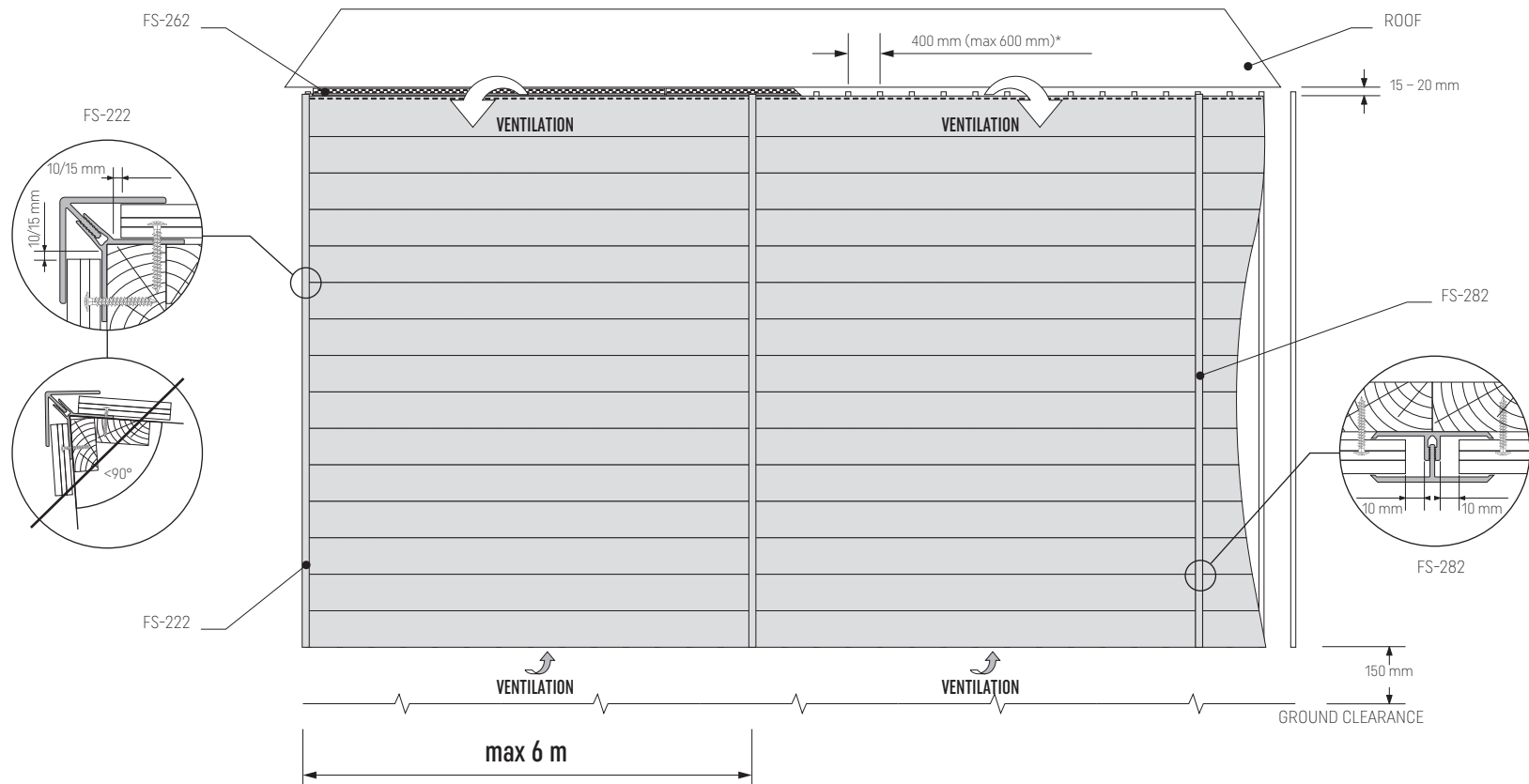
Pic. 5. Rules for joining the cladding profiles (FS-201/ FS-202/ FS-302) with (J-201/ J-202/ J-302) joint covers



* see page 6, 7

HORIZONTAL INSTALLATION - GENERAL RULES

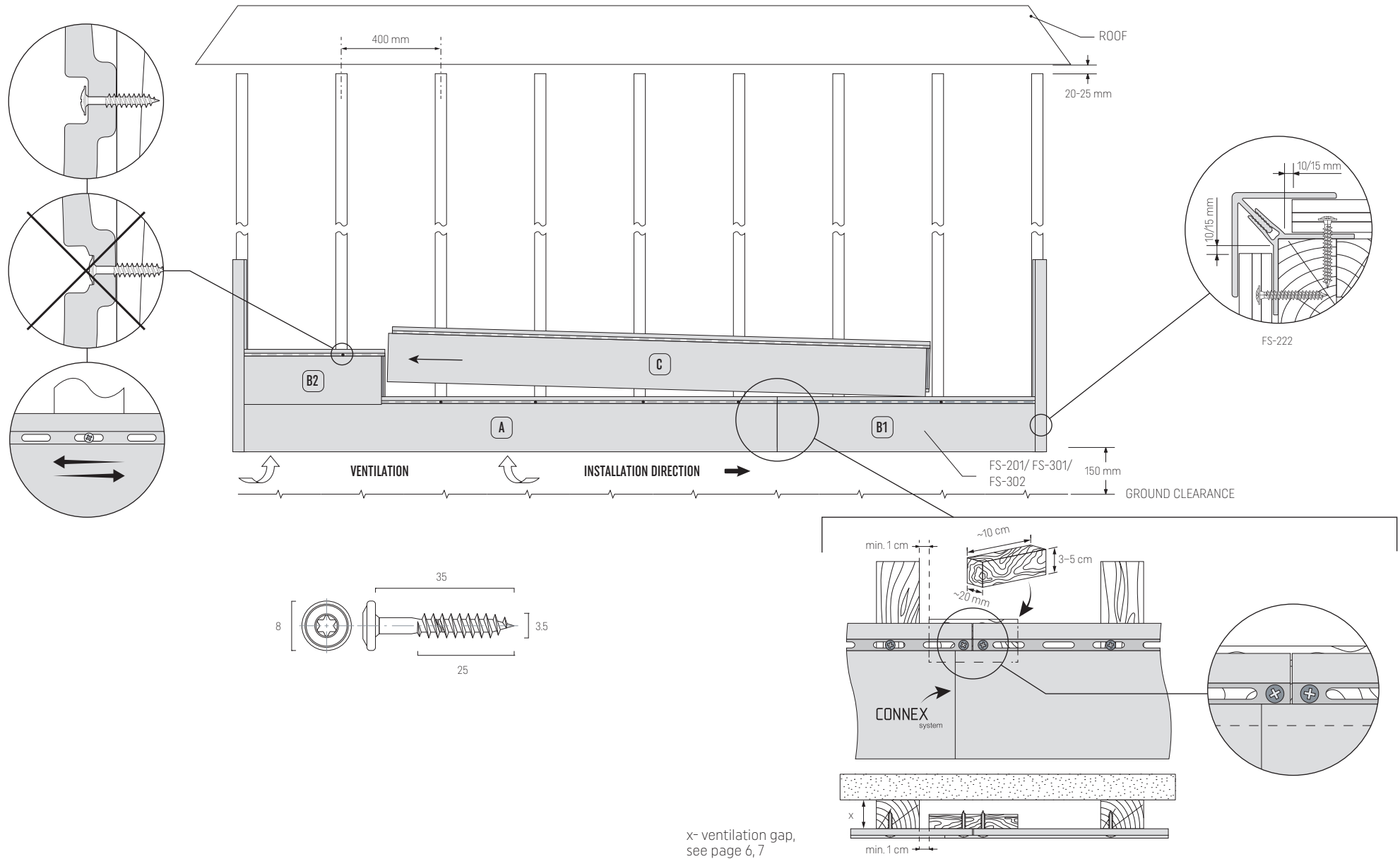
Pic. 6. Joining the cladding profiles (FS-201/ FS-202/ FS-302) with FS-282 trim



* see page 6, 7

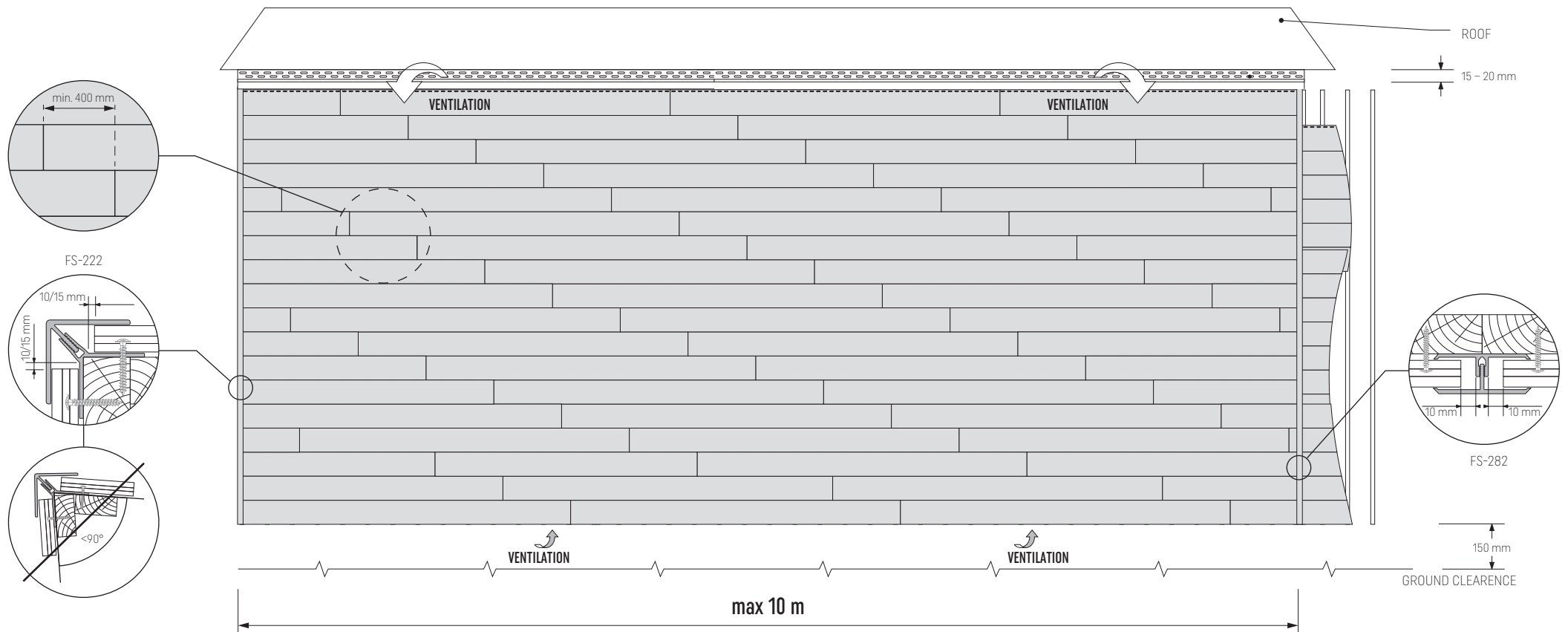
HORIZONTAL INSTALLATION - SYSTEM CONNEX

Pic. 7. Rules for joining the cladding profiles (FS-201/ FS-301/ FS-302) - system CONNEX



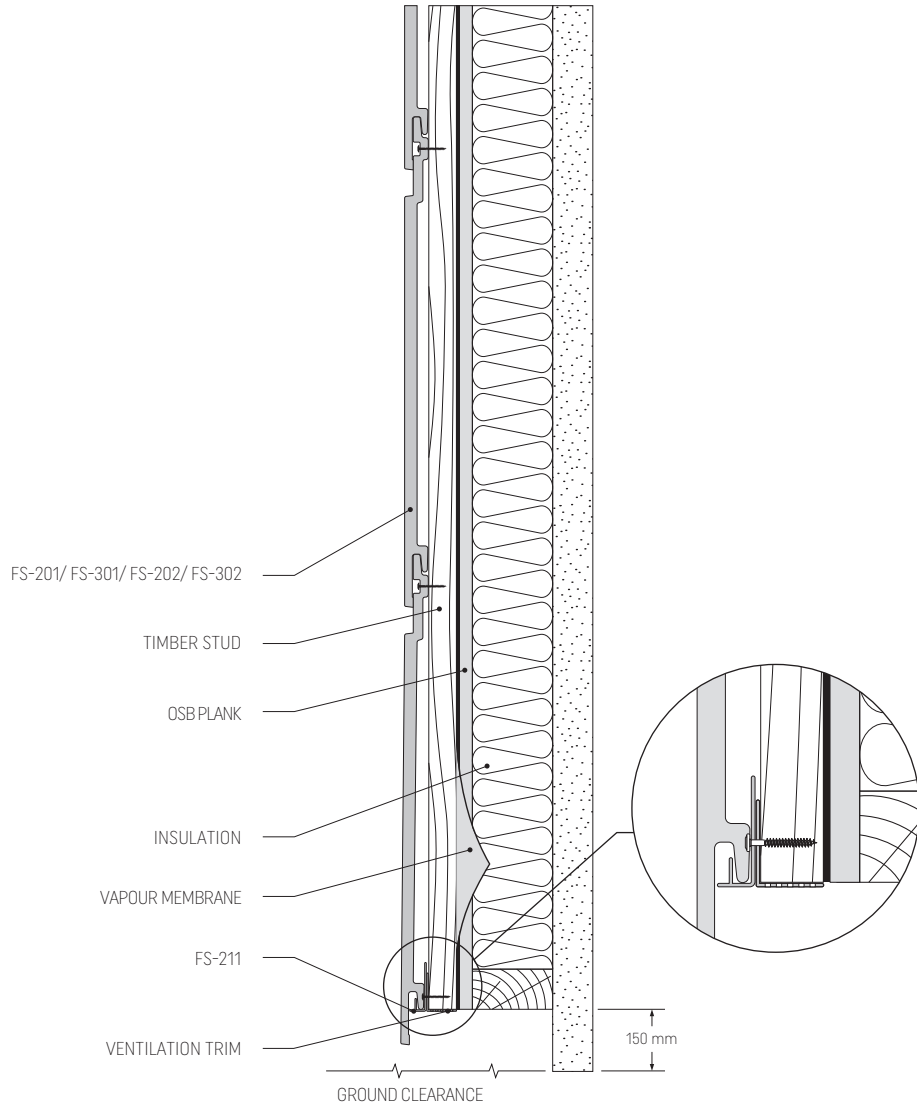
HORIZONTAL INSTALLATION - SYSTEM CONNEX

Pic. 8. Rules for joining the cladding profiles (FS-201/ FS-301/ FS-302) - system CONNEX 2,95 ml

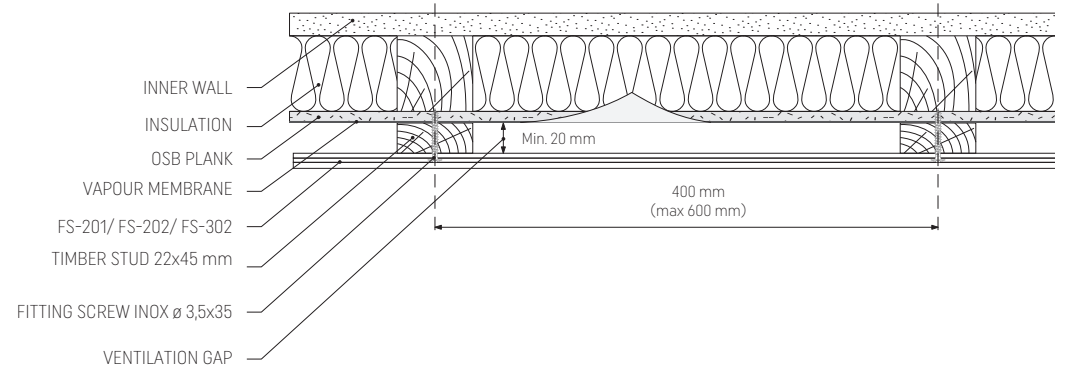


HORIZONTAL INSTALLATION ON A TIMBER FRAME WALL

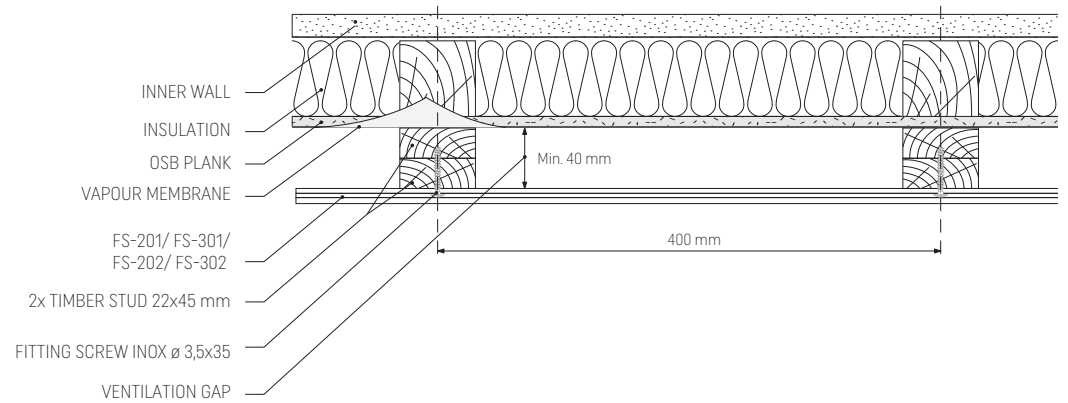
Pic. 9. KERRAFRONT Single board / double board on a timber frame wall - vertical section



Pic. 10. Ventilation gap 20 mm required - horizontal section, see page 6, 7

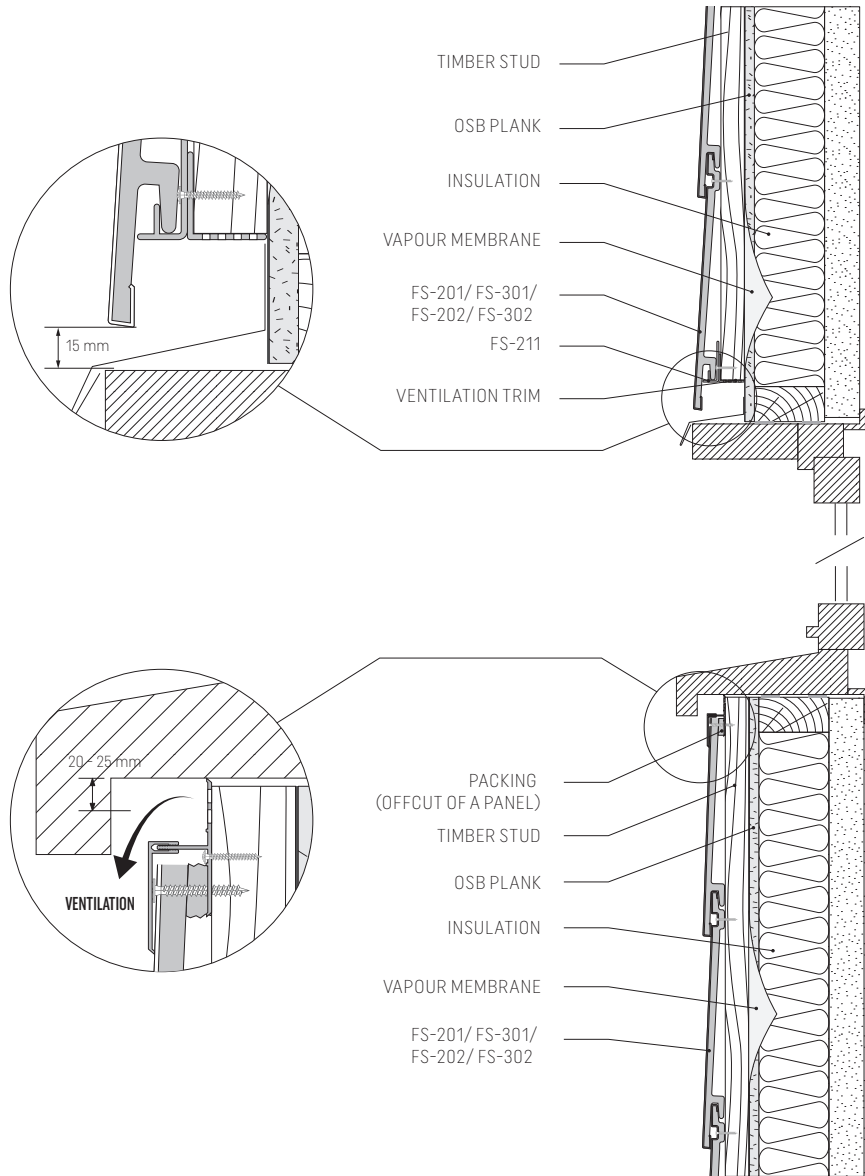


Pic. 11. Ventilation gap 40 mm required - horizontal section, see page 6, 7

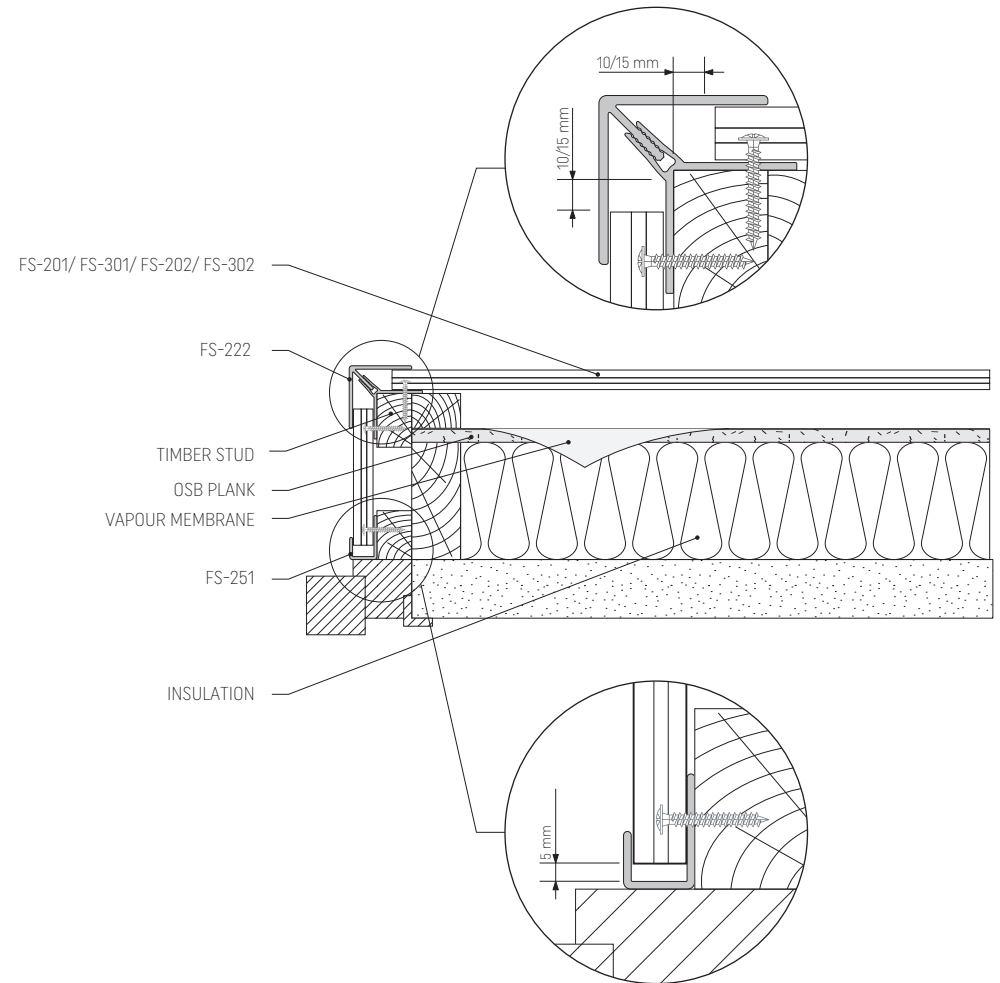


INSTALLATION AROUND WINDOWS, TIMBER FRAME WALL

Pic. 12. KERRAFRONT Joinery detail on a timber frame wall - vertical section

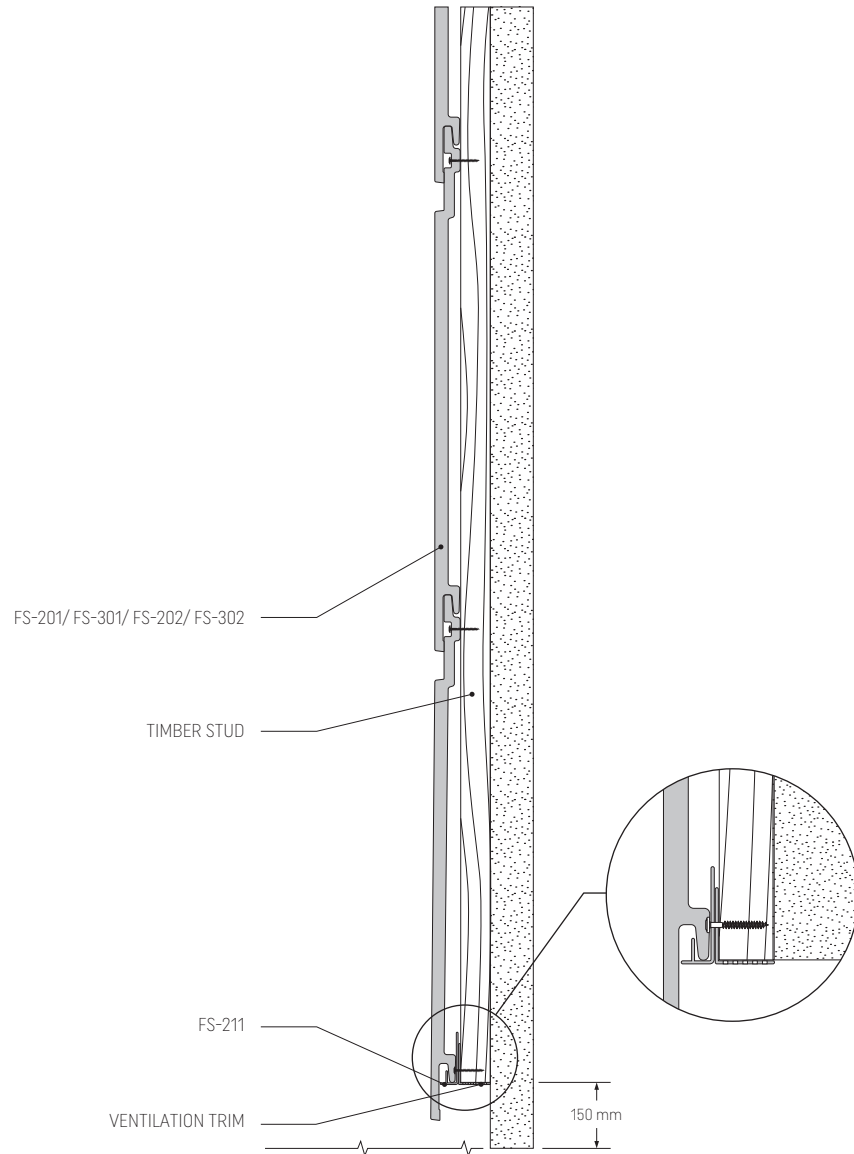


Pic. 13. KERRAFRONT Joinery corner detail on a timber frame wall - horizontal section

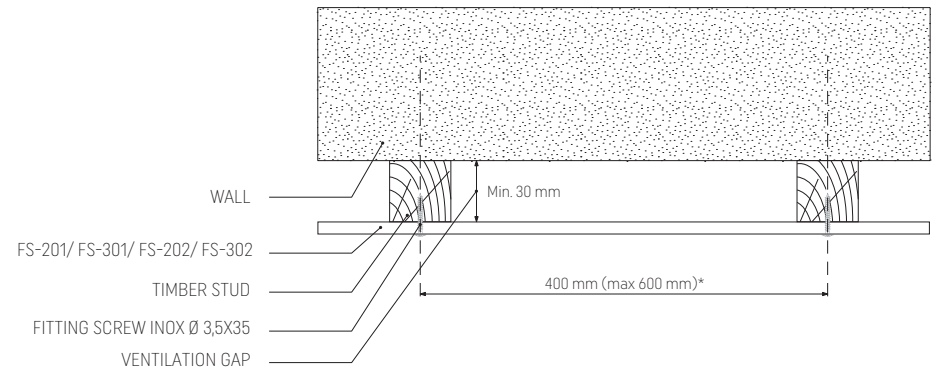


HORIZONTAL INSTALLATION ON MASONRY

Pic. 14. KERRAFRONT Single board / double board, horizontal installation on masonry - vertical section

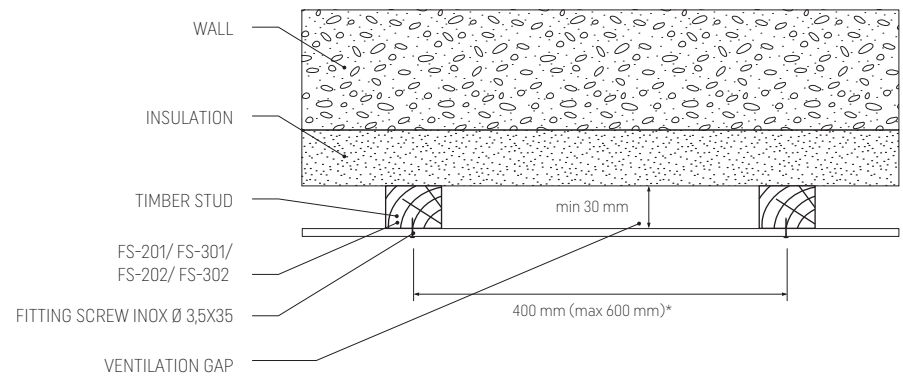


Pic. 15. Ventilation gap on masonry wall - horizontal section



* see page 6, 7

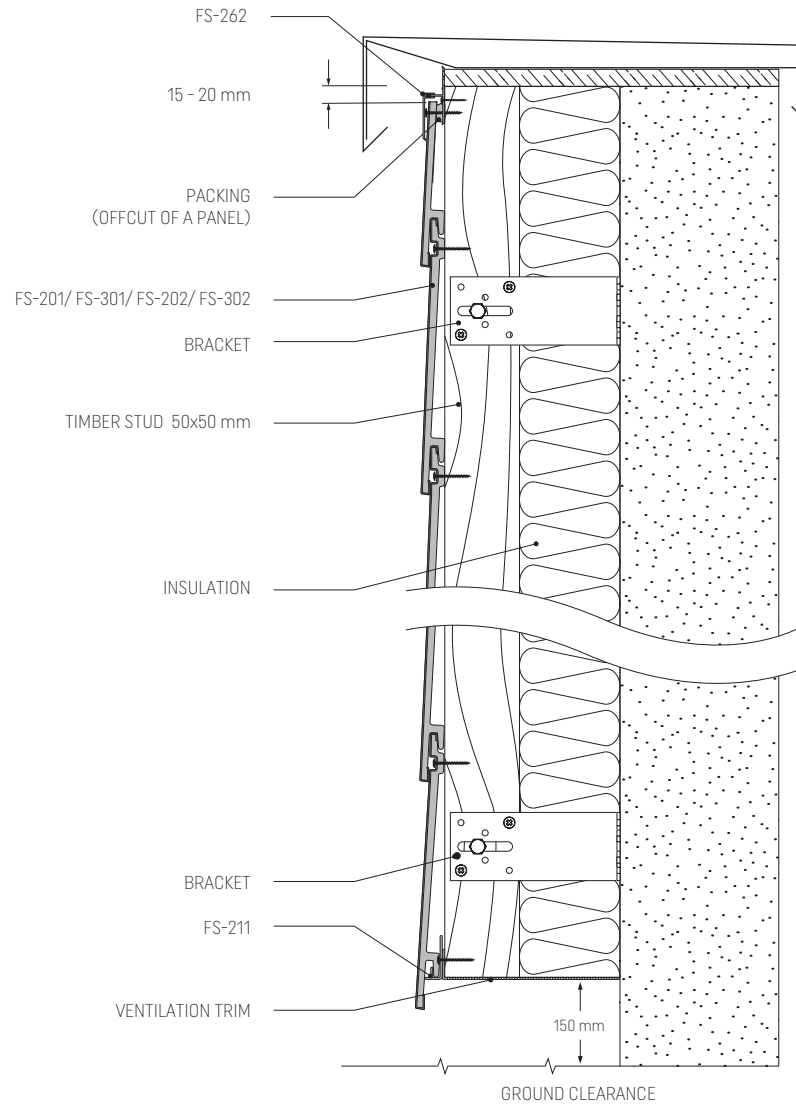
Pic. 16. Ventilation gap required on insulated masonry wall between studs - horizontal section



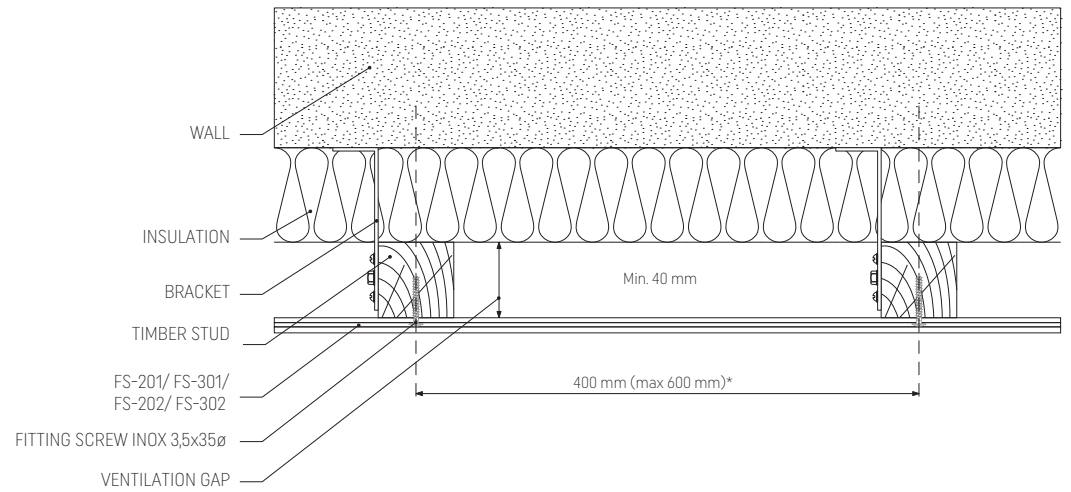
* see page 6, 7

INSTALLATION ON MASONRY WALL WITH METAL BRACKETS

Pic. 17. KERRAFRONT Single board / double board on insulated masonry wall with brackets - vertical section



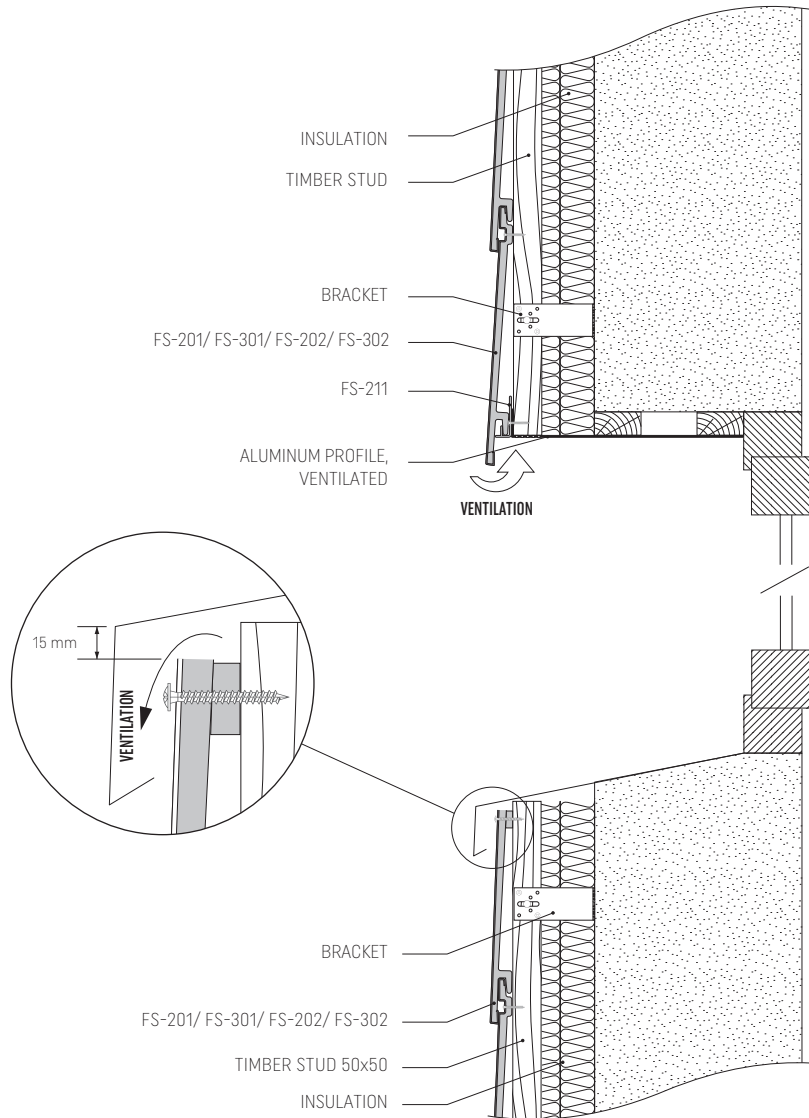
Pic. 18. Ventilation gap required on insulated masonry wall with brackets - vertical section



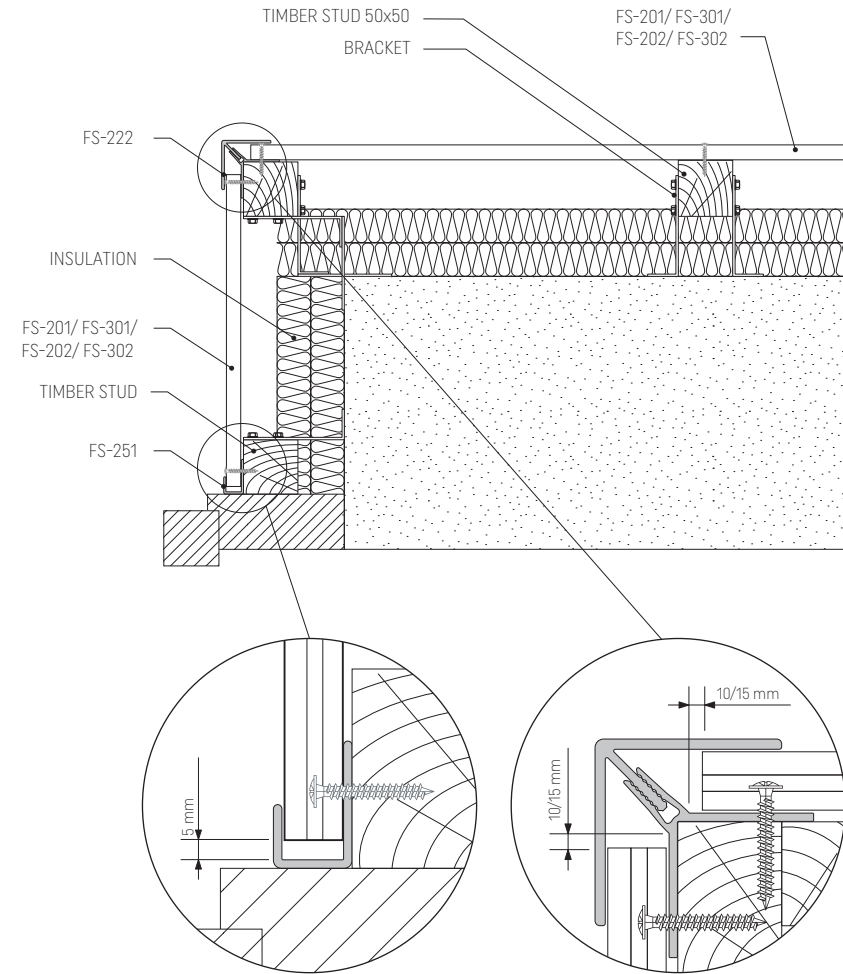
* see page 6, 7

INSTALLATION AROUND WINDOWS WITH METAL BRACKETS

Pic. 19. KERRAFRONT Joinery detail on insulated masonry wall - vertical section

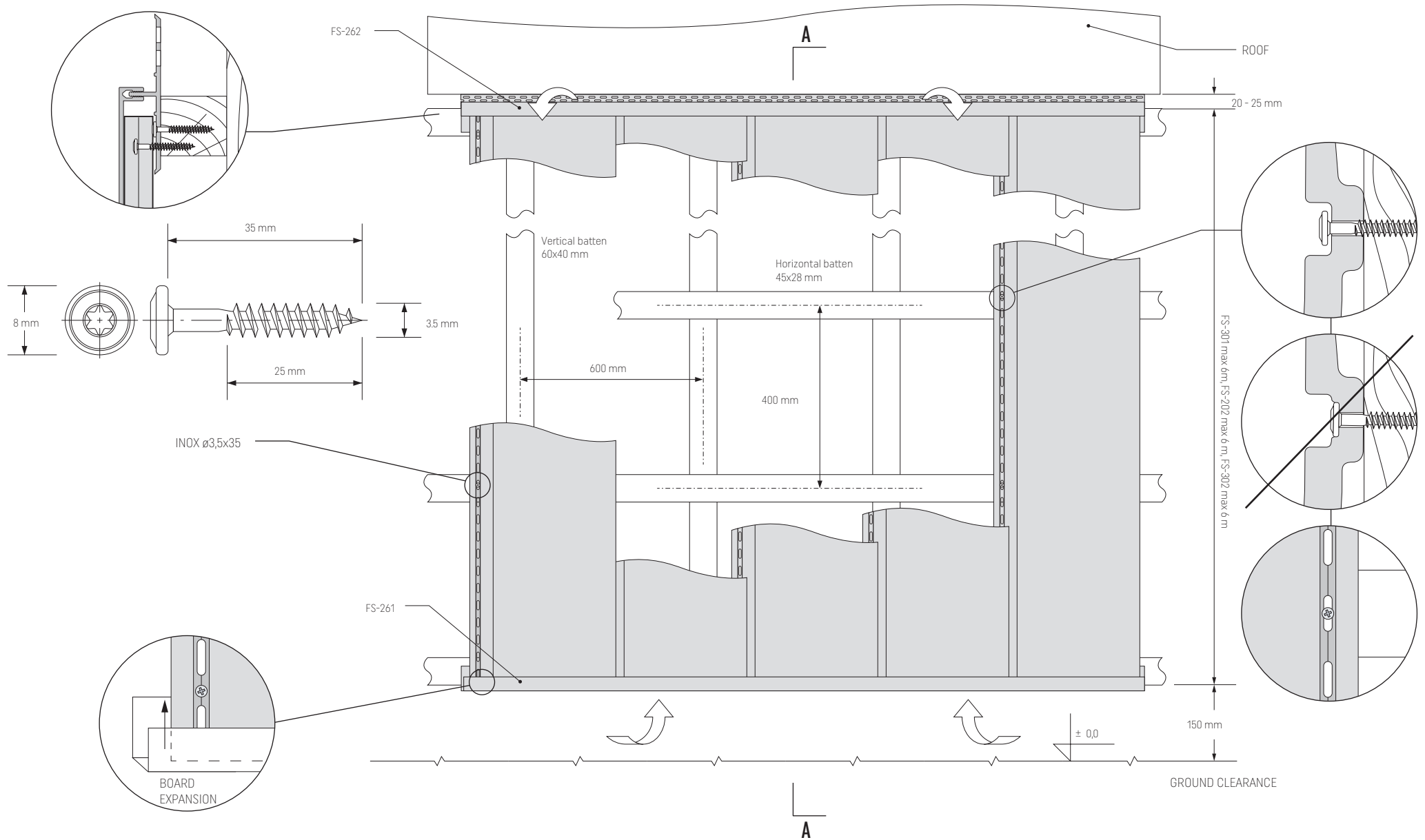


Pic. 20. KERRAFRONT Joinery corner detail on insulated masonry wall - horizontal section



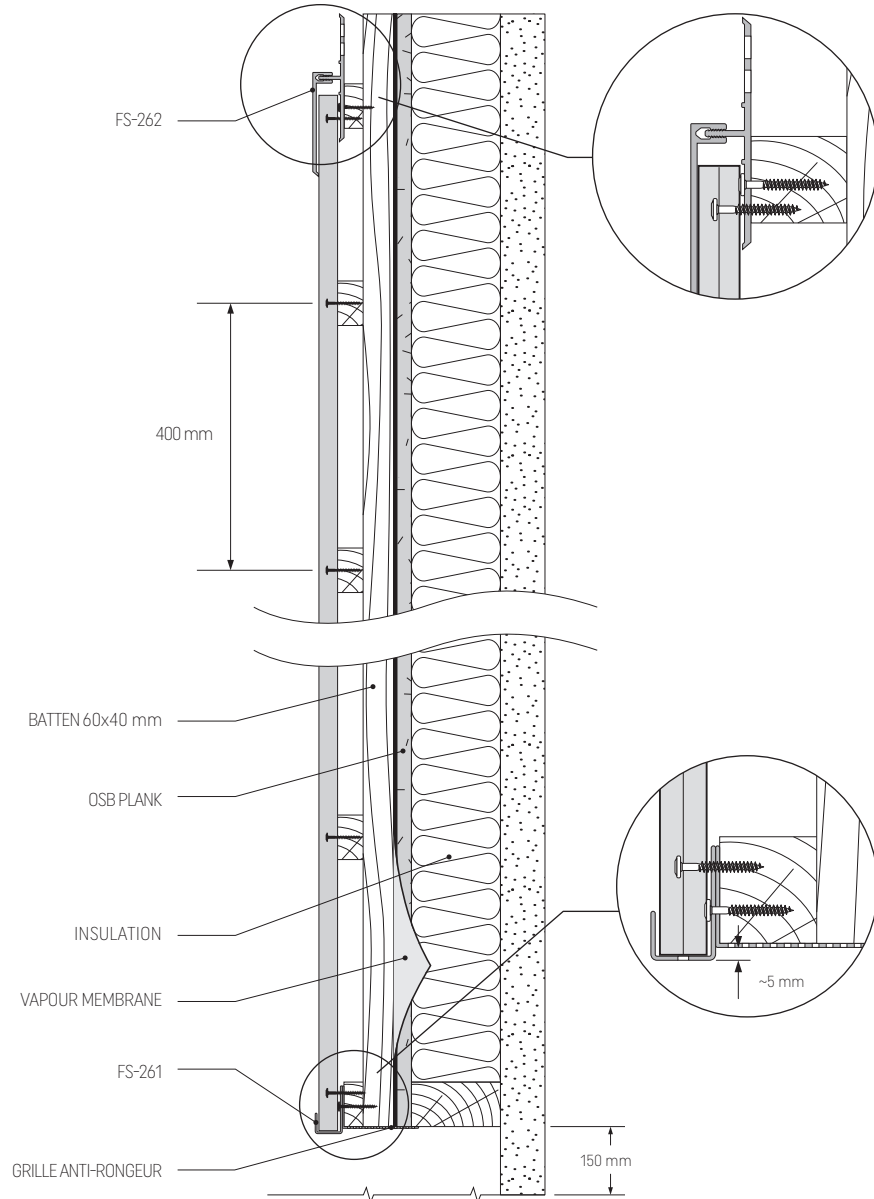
VERTICAL INSTALLATION FS-301/ FS-202/ FS-302

Pic. 21. KERRAFRONT Single board FS-301/ double board FS-202/ double board FS-302

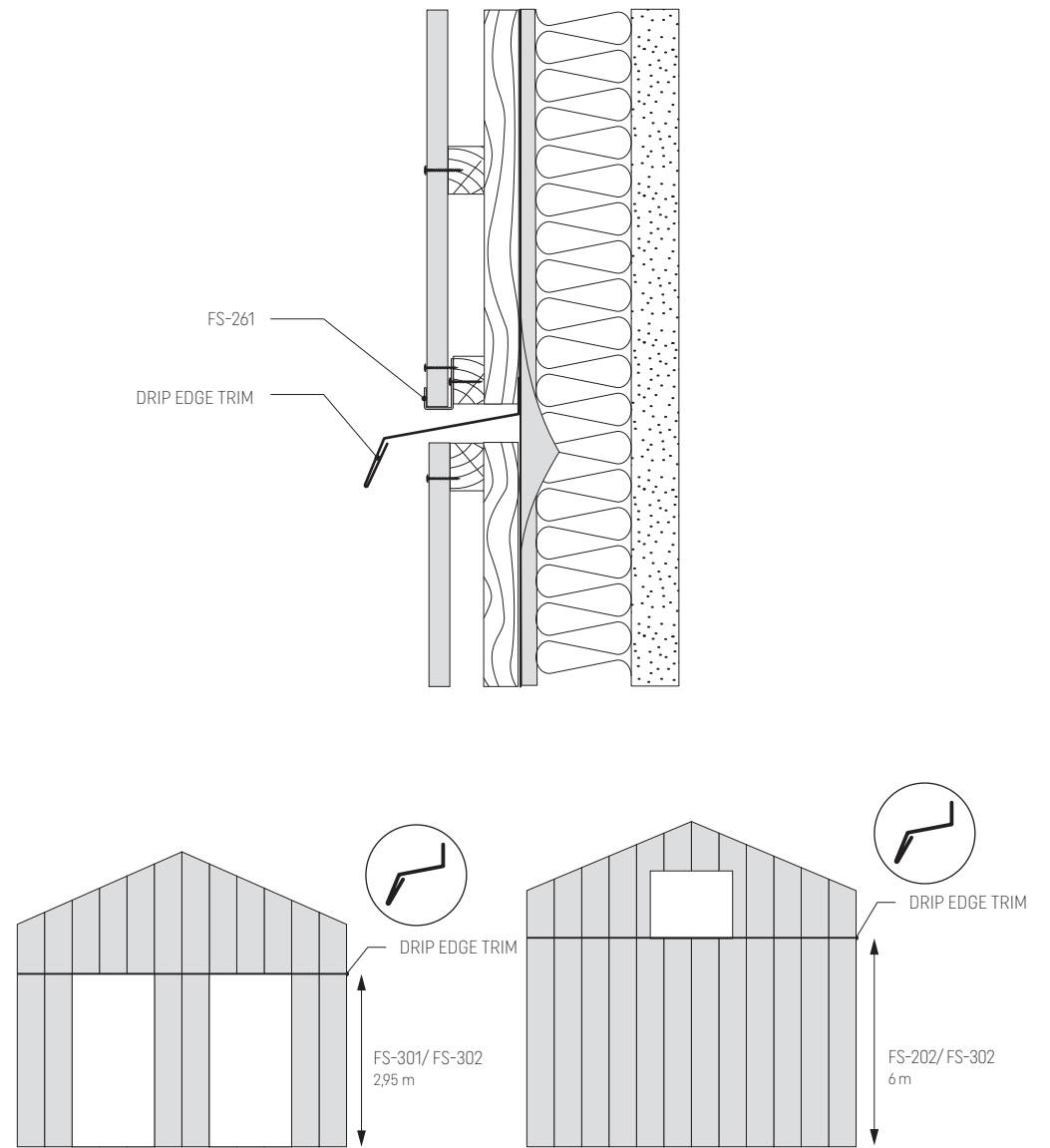


VERTICAL INSTALLATION FS-301/ FS-202/ FS-302, DRIP EDGE TRIM

Pic. 22. KERRAFRONT Single board FS-301/ double board FS-202/ double board FS-302, A-A section

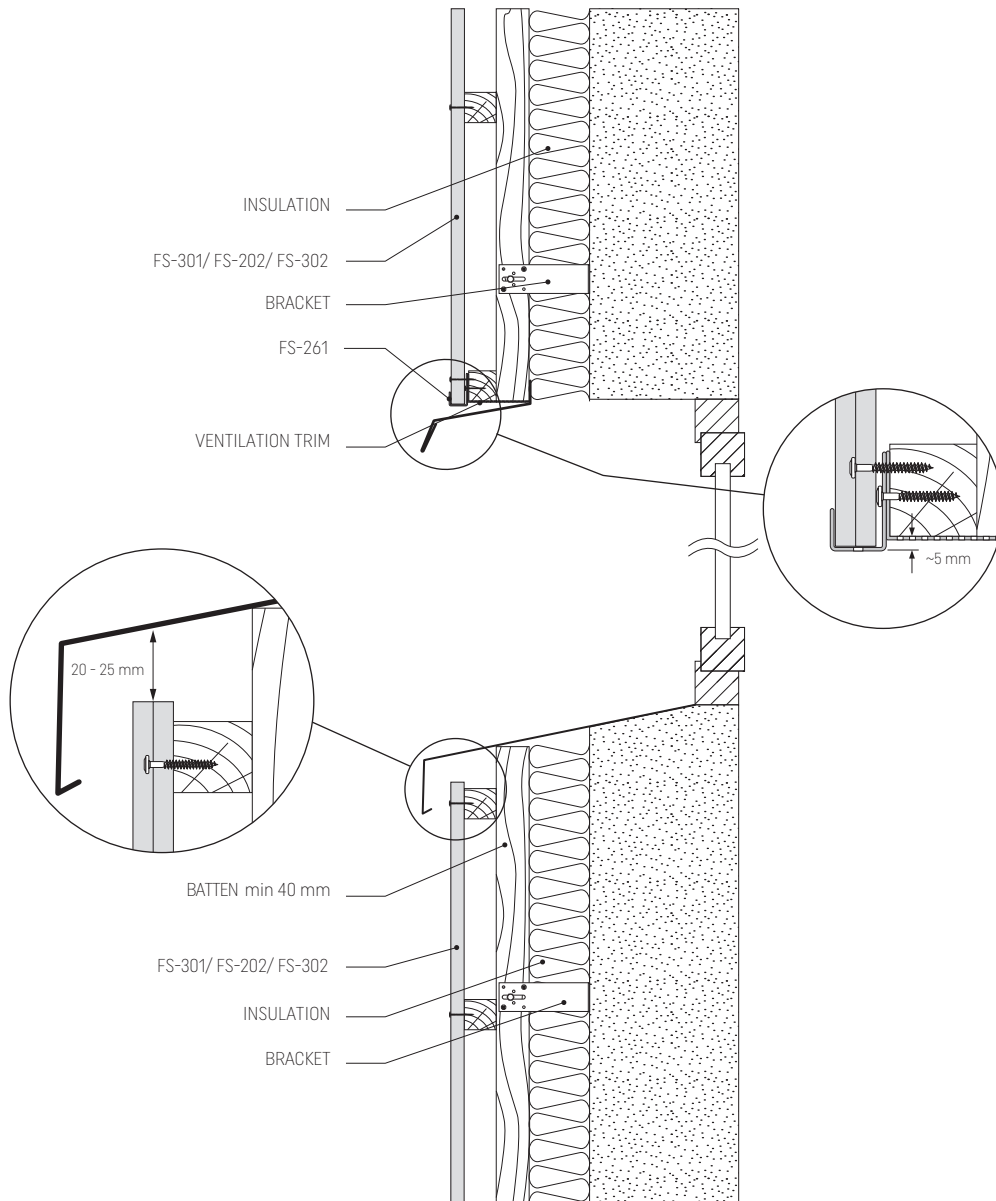


Pic. 23. KERRAFRONT Drip edge trim, detail

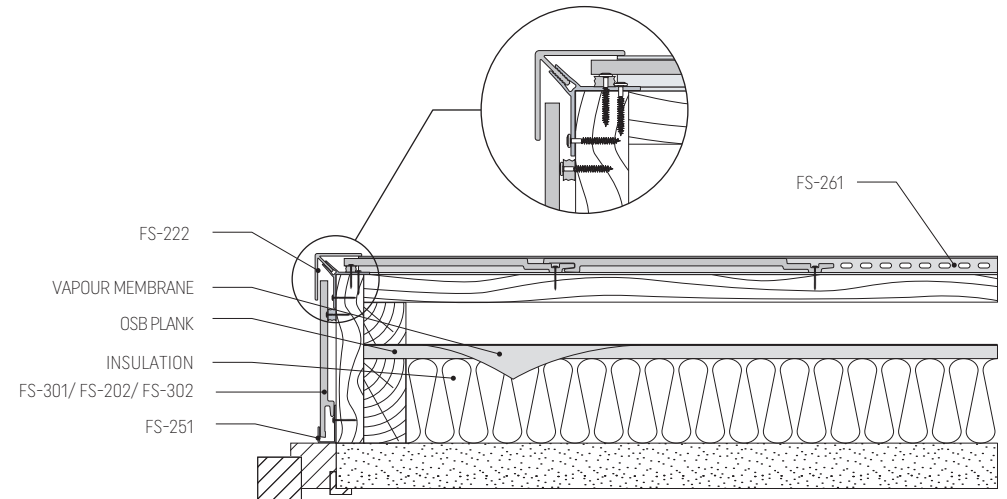


VERTICAL INSTALLATION FS-301/ FS-202/ FS-302

Pic. 24. Joinery detail on insulated masonry wall - vertical section



Pic. 25. KERRAFRONT Joinery corner detail on insulated masonry wall - horizontal section



KERRAFRONT

TECHNICAL DATA SHEET

	FS-201 Single board CLASSIC, WOOD DESIGN	FS-301 Single board TREND	FS-202 Double board CLASSIC, T-REX	FS-302 Double board MODERN WOOD
PROFILE TYPE	FS-201, Single board	FS-301, Single board	FS-202, Double board	FS-302, Double board
FINISH	embossed woodgrain	flat surface 2 lines: Soft, Stone	embossed woodgrain	embossed woodgrain
	CLASSIC (9 colours): White (WH), Creme (CR), Beige (BE), Claystone (CS), Light Grey (LG), Anthracite (AN), Olive (OL), Grey (GR), Quartz Grey (QG) WOOD DESIGN (3 colours): Graphite (GP), Silvergrey (SG), Golden Oak (GO)	TREND (8 colours): Ivory (IV), Ivory Stone (IVS), Mastic (MA), Mastic Stone (MAS), Pearl Grey (PG), Pearl Grey Stone (GPS), Anthracite (AN), Anthracite Stone (ANS)	CLASSIC (9 colours): White (WH), Creme (CR), Beige (BE), Claystone (CS), Light Grey (LG), Anthracite (AN), Olive (OL), Grey (GR), Quartz Grey (QG) T-REX (4 colours): Creme (CR), Beige (BE), Sand (SA), Blue (BL)	MODERN WOOD (7 colours): White (WH), Ivory (IV), Claystone (CS), Beige (BE), Pearl Grey (PG), Quartz Grey (QG), Anthracite (AN)
MATERIAL – CORE	foamed closed-cell PVC (PVC-UE)	foamed closed-cell PVC (PVC-UE)	foamed closed-cell PVC (PVC-UE)	foamed closed-cell PVC (PVC-UE)
TOTAL WIDTH	219 mm	359 mm	371 mm	372 mm
COVERING WIDTH	180 mm	320 mm	332 mm	332 mm
LENGTH	CLASSIC FS-201, length 6000 mm CLASSIC FS-201 CONNEX, length 2950 mm WOOD DESIGN FS-201, length 6000 mm WOOD DESIGN FS-201 CONNEX, length 2950 mm	TREND FS-301, length 6000mm TREND FS-301 CONNEX, length 2950 mm with dimensional tolerance: 2950 mm + 9 mm maximum	CLASSIC FS-202, length 6000 mm T-REX FS-202, length 6000mm	MODERN WOOD FS-302, length 6000 mm MODERN WOOD FS-302 CONNEX, length 2950 mm
WEIGHT (MIN - MAX) mb	1 kg/mb	1,9 kg/mb	1,6 kg/mb	1,8 kg/mb
THICKNESS (THINNEST POINT)	6,5 mm	9 mm	6,5 mm	6,5 mm
THICKNESS (THICKEST POINT)	18 mm	18 mm	18 mm	18 mm

Our external PVC-UE wall cladding ranges have all achieved a fire rating class D-s3-d0 when tested to EN 13501-1. For the UK, it is understood this external cladding is suitable for use in cladding applications provided it is installed in accordance with the Building Regulations Part B (1m or more from the relevant boundary and less than 18m from ground level). Please verify suitability for the intended application prior to installation.

Building Regulations Approved Document B, Volume 1 – Dwelling houses, Part B4 – External Fire Spread.

Building Regulations Approved Document B, Volume 2 – Buildings other than dwellings, Part B4 – External Fire Spread.

Care should be taken to adhere to these fitting instructions

As with all PVC cladding, panels can char and fall away. Consideration should always be given to any combustible materials behind the cladding, which may become exposed in the event of fire. Where necessary, cavity barriers should be incorporated behind the cladding, as required under the relevant national Building Regulations.

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