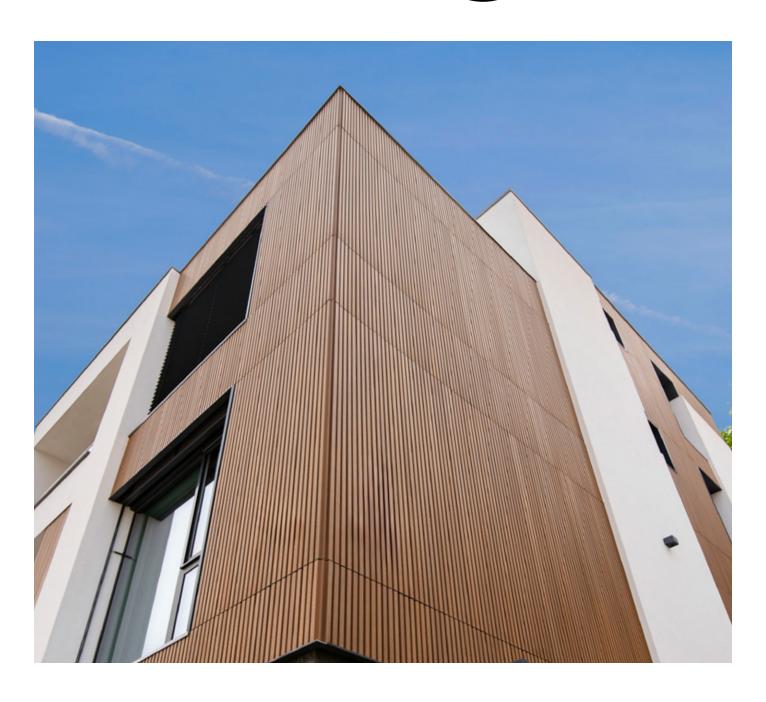


# WE O



**TECHNICAL GUIDE** 



Co-extruded composite wood cladding board with a modern slatte profile designed to enhance façades with or without insulation.

WEO® features a sleek, trapezoidal profile suitable for both horizontal & vertical installation.

WEO® is an eco-friendly product manufactured from bio-sourced materials containing 95% recycled components. The boards are protected by a co-extruded polyethylene film, which prevents moisture absorption.

They are also resistant to stains and discoloratio.



#### **BOARDS & ACCESSORIES**



#### WEO®35 CO-EXTRUDED COMPOSITE CLADDING BOARD

33x170mm x 2.9m | 33x170mm x 3.9m



Cedar 2.9M FD1536 3.9M FD1552



2.9M FD1532 3.9M FD1549



2.9M FD1533 3.9M FD1550



2.9M FD1535 3.9M FD1551



Light Grev 2.9M FD1534 3.9M FD1954



**Ebony Black** 2.9M FD2101 3.9M FD2102



#### WEO®60 CO-EXTRUDED COMPOSITE CLADDING BOARD

33x170mm x 2.9m | 33x170mm x 3.9m



Cedar 2.9M FD1567 3.9M FD1571



Teak 2.9M FD1565 3.9M FD1569



2.9M FD1566 3.9M FD1570



Dark Grey 2.9M FD1568 3.9M FD1572



#### SELF DRILLING SCREW - PAN HEAD - TX 20 - SS304

100 UNITS PER BOX + DRIVER BIT

4,2 x 38mm | 6m2 | Visible fastening

FD1451 | Cedar (RAL1011 / Pantone 2312C) FD1447 | **Teak** (RAL8024 / Pantone 469C)

FD1448 | **I**pe (RAL8028 / Pantone 4975C) FD1450 | **Dark Grey (RAL7022 / Pantone 425C)** 

FD1449 | ■ Light Grey (RAL7006 / Pantone 408C) FD2103 | ■ Ebony Black (RAL9005)

<sup>\*</sup>Also available for steel frame

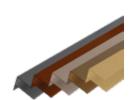


#### **SELF DRILLING SCREW - FLAT HEAD TX 20 - SS304**

200 UNITS PER BOX + DRIVER BIT

4.2x32mm | 16m<sup>2</sup> | Hidden fastening

FD1940



#### **ALUMINIUM F PROFILE (2 PCS)**

65 x 80mm x 3 m

FD1696 | Cedar (RAL1011 / Pantone 2312C) FD1693 | Teak (RAL8024 / Pantone 469C) FD1946 | Light Grey (RAL7006 / Pantone 408C)

FD1694 | Ipe (RAL8028 / Pantone 4975C) FD1695 | **Dark Grey (RAL7022 / Pantone 425C)** 

FD2105 | ■ Ebony Black (RAL9005)



#### **ALUMINIUM CLICK PROFILE (2 PCS)**

Snap-fit corner | 50 x 50mm x 3 m

FD1696 | ■ Cedar FD2047 | ■ Teak FD2048 | ■ Ipe

FD2051 | ■ Dark Grey FD2052 | ■ Ebony Black FD2050 | ■ Light Grey



#### **ALUMINIUM CLICK PROFILE (2 PCS)**

Snap-fit corner | 35 x 41mm x 3 m FD2046



#### **KEY POINTS**



#### 1 STORAGE & HANDING

Composite wood is sensitive to creep deformation.

Always store boards flat. During warehousing of board pallets, please make sure they are supported along their entire length.

Keep the protective pallet cover in place during work for protection.

Avoid placing heavy loads on the pallets.

Carry the boards one or two at a time, holding them along their edges.

### 2 TOOLS

Cutting: Use a radial saw on a table for precise cuts.

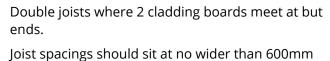
Screwdriver: Use a cladding screwdriver.

The screwdriver must have a clutch to prevent the screw head from sinking into the material.



### 3 CLADDING SUBFRAME

Installation of cladding boards must comply with local building regulations. They must be installed directly onto a cladding subframe of timber or metal joists. Can be used with external insulation.



(center to center)

Wooden battens: minimum section of 27 x 40 mm

Wooden battens: minimum section of  $27 \times 40$  mm. Ensure battens are protected with EPDM tape.

Aluminium joists : Fastening in a 2.5mm thick and 30mm wide joist

### 4 PREPARATION

Each board must be measured and trimmed to the desired size for clean joints. Boards may have up to 10 mm of excess material.





#### 5 VENTILATION

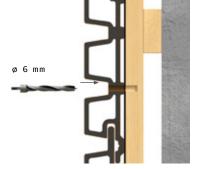
- Maintain a ground clearance of 150 mm from finished ground level (50 mm for metal frames).
- Provide upper and lower ventilation (at the top and the bottom of the cladding system, parapet, window reveals, 15 mm clearance).
- Ensure an adequate airflow of at least 20 mm between the wall and cladding boards.

### 6 HORIZONTAL INSTALLATION

Drill of Ø 6 mm.

Screw heads should rest on the cladding board without applying extra pressure to avoid cracking. Allow 15 mm clearance at the board ends to prevent cracking.

The groove should be in the low position and the tongue in the high position to prevent moisture from water stagnation and to ensure adequate ventilation.



#### Visible screwing

The boards are installed from bottom to top.

Use a single screw (colored screws, reference FD1447 to FD1451) with a 600 mm spacing along board length.

#### **Hidden screwing**

The installation of the boards is carried out from the bottom to the top of the wall. It is also recommended to proceed row by row rather than in vertical strips to allow for the gradual adjustment of the boards and the alignment of the joints.

Use a screw (reference FD1940) in the groove with a 600 mm spacing along board length.



### 6.2 VERTICAL INSTALLATION

Pre-drill holes of 6 mm.

Use a screw (reference FD1940) in the groove with a 600 mm spacing along board length.

An airflow is required: horizontal battens must be screwed to vertical battens with EPDM tape for protection.

Screw heads should rest on the cladding board without applying extra pressure to avoid cracking. Allow 15 mm clearance at the board ends to prevent cracking.

For corners and end points: use colored screws (references FD1447 to FD1451 screws) depending on the color.







### $7 \frac{}{\text{DILATATION}}$

Expansion coefficient: WEO® boards expand 1mm/m for a 40°C temperature difference. For example, a 3.9 m board exposed to a temperature change from 5°C in the morning to 40°C in the afternoon will expand by 3.15 mm.

Allow 5 mm clearance at each board end and around all obstacles (windows, walls, corners, etc.). But joints should always align with a batten.

### 8 FINISHES

We recommend the use of lacquered aluminum profiles for finishing.

All the finishing profiles required for WEO cladding are detailed in this installation guide. They must be adapted and made to measure. Only external corner profiles (P.15-16 or P.27-28) are included in the range.

#### 9 AGEING & UPKEEP

WEO® capped composite cladding is weather and fade-resistant for 20+ years, thanks to its co-extruded polyethylene layer. The non-porous surface of the polymer resin prevents dirt from penetrating the boards. Maintenance is limited to cleaning with mild detergents or suitable solvents, with no need for aesthetic renovation (avoid abrasive products).

#### 10 replacing a board

The damaged WEO® cladding board must be cut lengthwise using a circular saw set to a maximum cutting depth of 26 mm. Trim the upper and lower tongues of the new board to fit it perfectly into the assembly, and secure it to the supporting battens using a 4.2x38 mm colored screw.

#### **TECHNICAL & GENERAL INFORMATION**

#### **GENERAL INFORMATION**

WEO® cladding boards are designed for decorative exterior applications. They effectively contribute to the water resistance of façades thanks to the air gap between the boards and the wall, and they enhance the durability of the structural shell, particularly when combined with thermal insulation. They also improve the overall aesthetic of the building. However, they do not contribute to the structural performance of the building. Compliance with current fire regulations must be verified on a case-by-case basis, depending on the specific building and local regulations.

WEO® boards are available with fire reaction ratings of E or D-s1 d0.

#### PRODUCT DESCRIPTION

The WEO® cladding is a ventilated cladding system consisting of slatted effect boards mechanically fixed onto wooden or metal battens.

The composite wood boards comply with product standard EN 15534. They are made from wood fibers derived from by-products of secondary wood processing plants and recycled polyethylene. Characteristic values are monitored and certified under the QB brand.





The boards have a matte brushed surface with multi-chromatic pigmentation. The surface is completely waterproof.

WEO®35 slatted wall cladding board is a three-slat capped composite cladding solution and WEO60 is a two-slat capped composite cladding solution with two wider slats.

They can be installed horizontally or vertically on flat vertical walls. Fixing is done using either visible screws with lacquered heads or hidden screws in the groove.

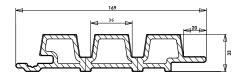
A minimum 20 mm air gap must be maintained between the back of the boards and the exterior of the loadbearing wall or any thermal insulation.

For full board lengths of 2.90 m and 3.90 m, a spacing of 300 mm at the board ends is required to allow proper fixing onto the battens (600 mm spacing for mid-board sections).



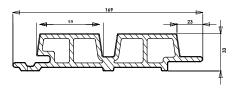
#### **CHARACTERISTICS**

### WEO® 35

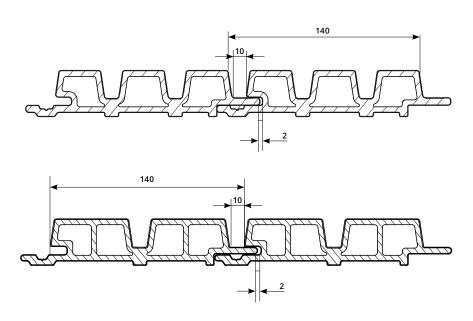


Standard length	2900 mm	3900 mm
Coverage per board	0,406 m2	0,546 m2
Weight per sq/m	15 kg/m2	15 kg/m2
Width	170 mm	170 mm
Width ( when lapped )	140 mm	140 mm

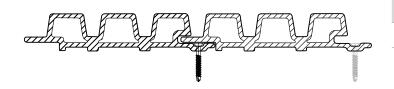
### WEO® 60



Standard length	2900 mm	3900 mm
Coverage per board	0,406 m2	0,546 m2
Weight per sq/m	14,5 kg/m2	14,5 kg/m2
Width	170 mm	170 mm
Width ( when lapped )	140 mm	140 mm

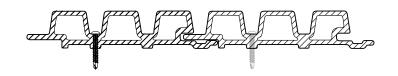


#### **HIDDEN SCREWING**



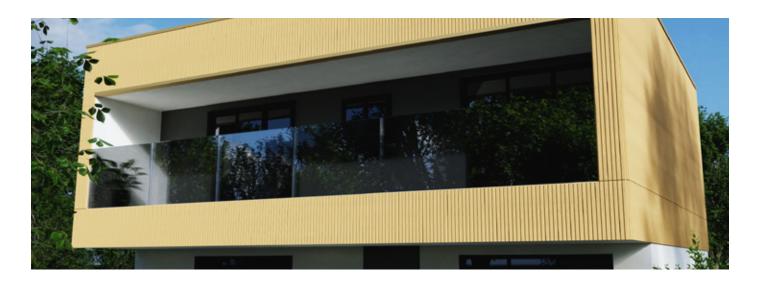
Profile	Board installation	Fixing
WEO® 35 / WEO® 60	VERTICAL	INVISIBLE / VISIBLE
WEO® 35 / WEO® 60	HORIZONTAL	VISIBLE

#### **VISIBLE SCREWING**



	2M90	3M90
QTY OF SCREWS / M2 (spacing 600 mm)	12	12
QTY OF BOARDS / M²	2.46	1.83





10

11

1 -	RANGE		
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#### 2 - VERTICAL INSTALLATION ON ALL WEO® 35 SUPPORTS

- Overview
- Foot of wall and parapet
- · Window head and sill
- Metal reveal finish
- External corner (Click Profile + F Profile)
- Internal corner
- Horizontal joint
- Separation and air space cut-off
- · Cladding end cover
- Vertical expansion joint
- Replacement of a board

### 3 - HORIZONTAL INSTALLATION 23 ON ALL WEO® 35 SUPPORTS

- Overview
- Foot of wall and parapet
- · Window head and sill
- · Metal reveal finish

- External corner (Click Profile + F Profile)
- Internal corner
- Vertical joint
- Separation and air space cut-off
- · Cladding end cover
- Vertical expansion joint
- Replacement of a board

# 4 - INSTALLATION ON WEO® 35 34 WOODEN FRAMEWORK STRUCTURE

### 5 - INSTALLATION ON WEO® 35 35 METAL FRAMEWORK

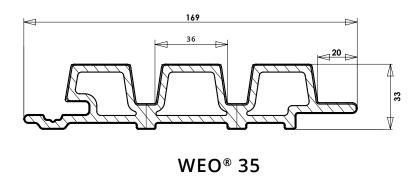
#### 6 - WEO® 60 INSTALLATION 37

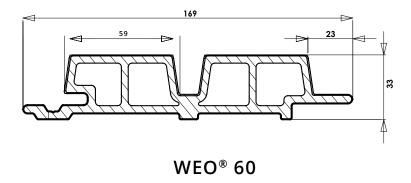
- Overview
- Foot of wall and parapet
- · External and internal corner
- Replacement of a board
- Installation on wooden framework

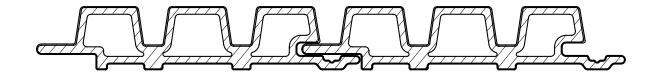
### 7 - INSTALLATION ON THE UNDERSIDE

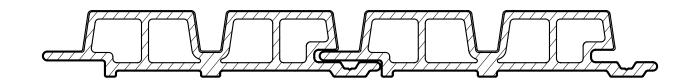
43

### 1- RANGE

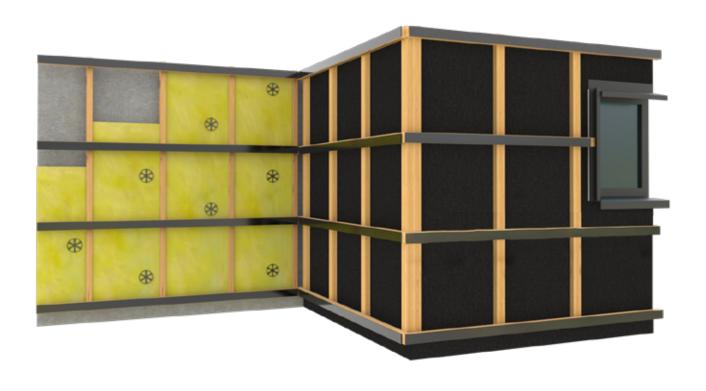








#### 2.1 - OVERVIEW



WITH INSULATION

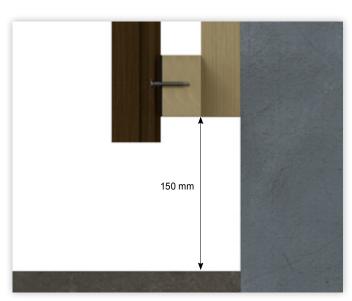
WITHOUT INSULATION

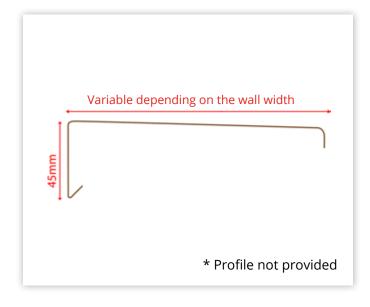
#### 2.2 - FOOT OF WALL AND PARAPET









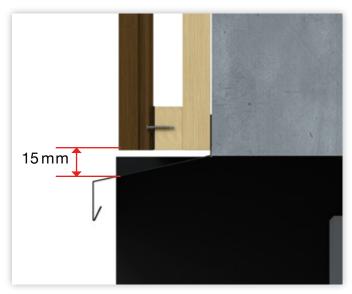




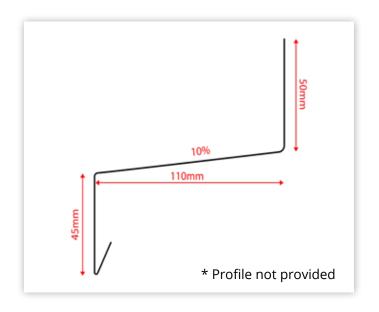
#### 2.3 - LINTEL AND SILL

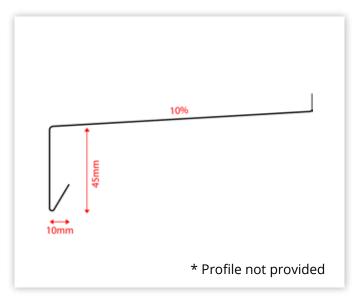




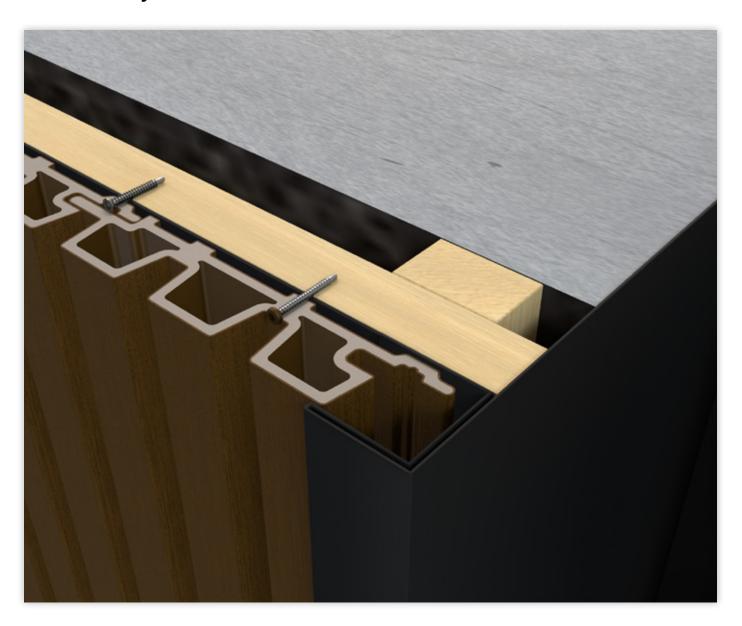


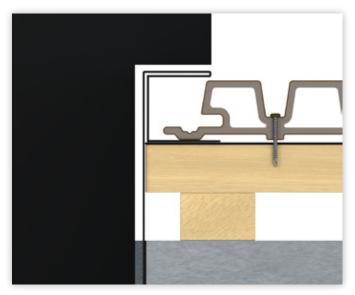


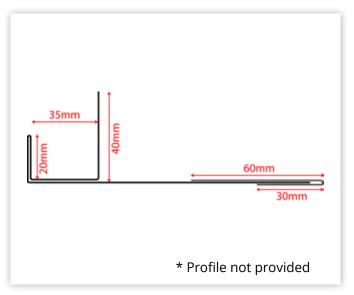




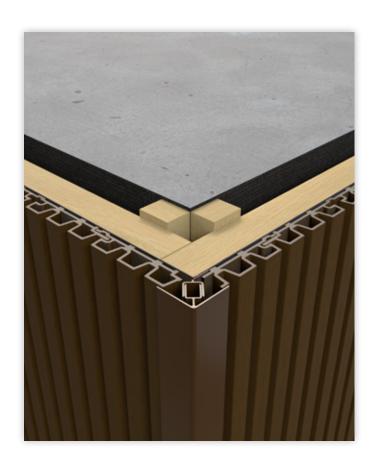
#### 2.4 - METAL JOINERY FRAME



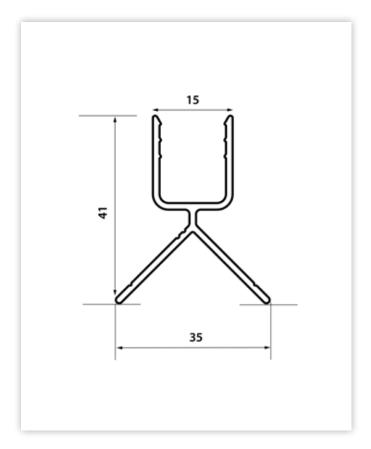


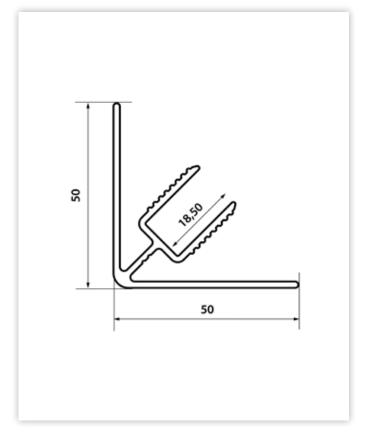


#### 2.5 EXTERNAL CORNER WITH JOINT COVER - CLICK PROFILE

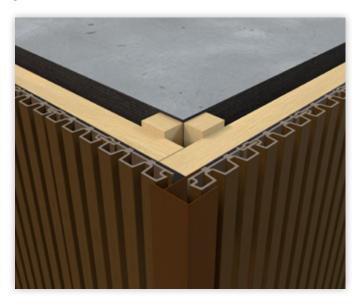




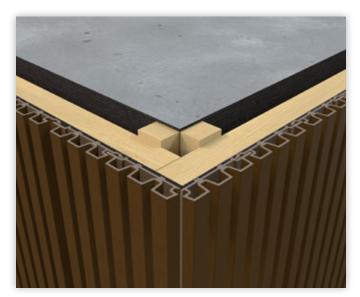


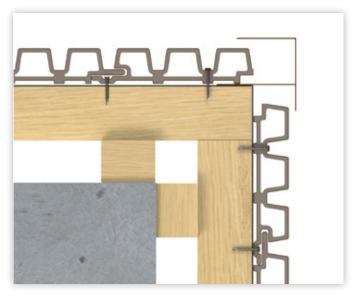


2.5.1 - EXTERNAL CORNER WITH JOINT COVER - F PROFILE

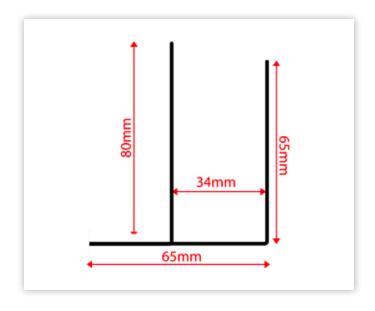


2.5.2 - EXTERNAL CORNER WITHOUT JOINT COVER

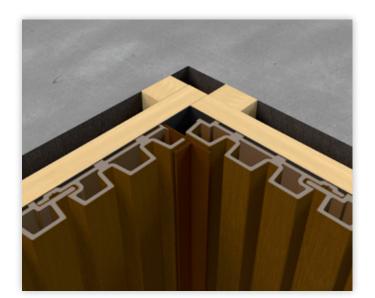




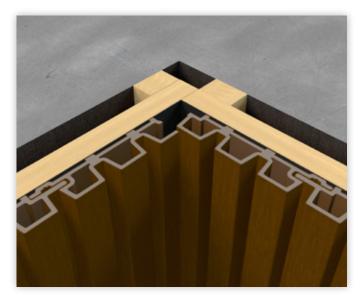


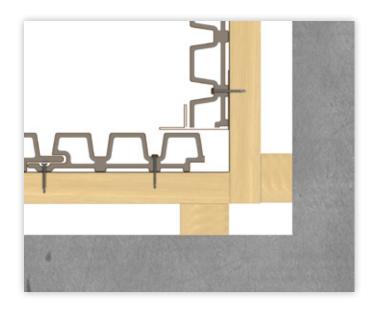


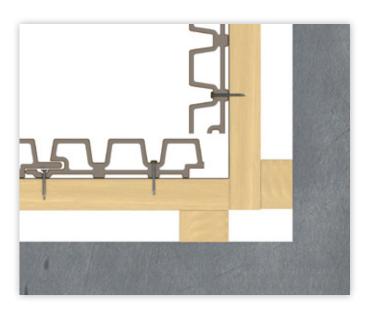
2.6 - EXTERNAL CORNER WITH COVER JOINT

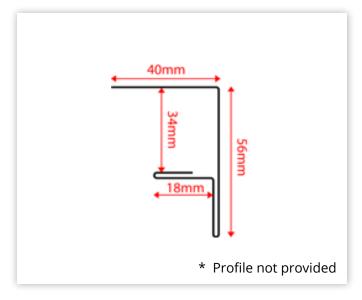


2.6.1 - EXTERNAL CORNER WITHOUT COVER JOINT





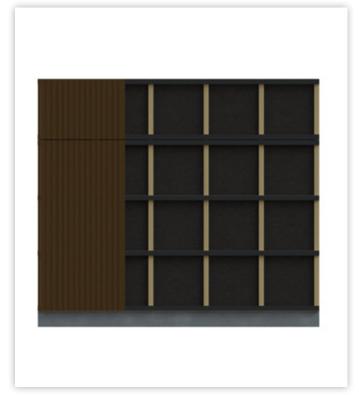




#### 2.7 - HORIZONTAL JOINT





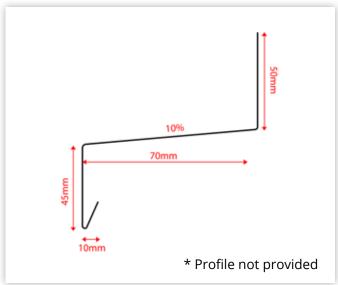




#### 2.8 - SEPARATION AND AIR SPACE CUT-OFF

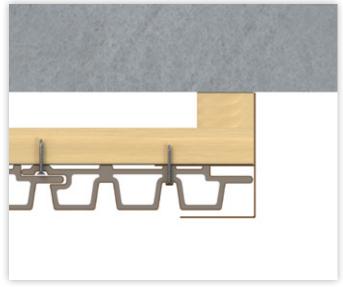


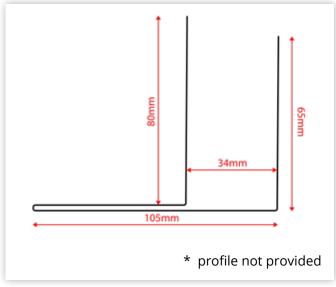




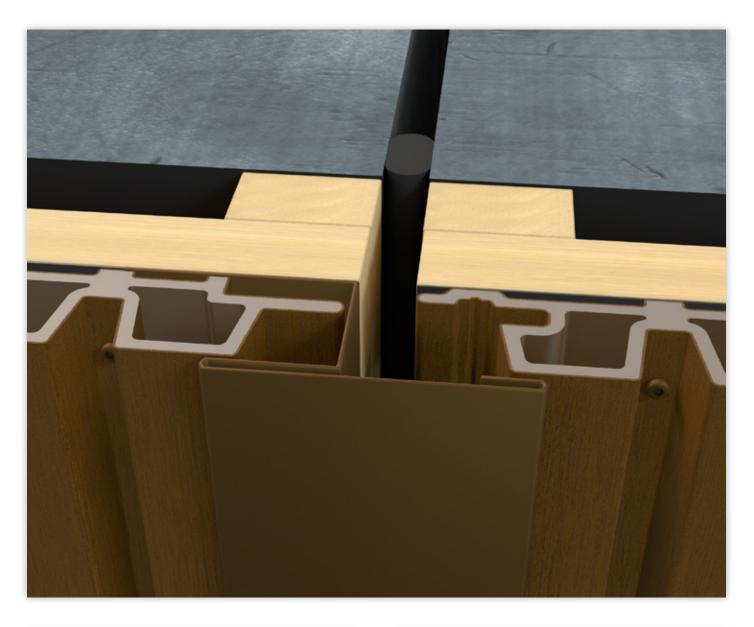
#### 2.9 - CLADDING END COVER

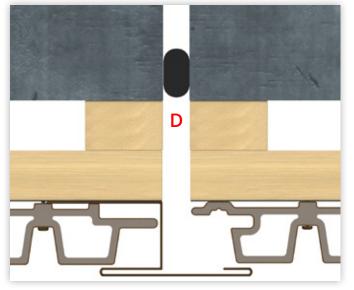


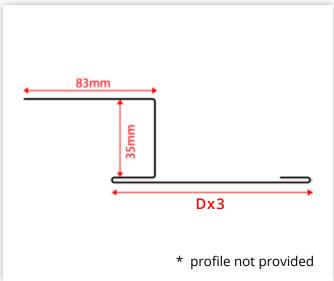




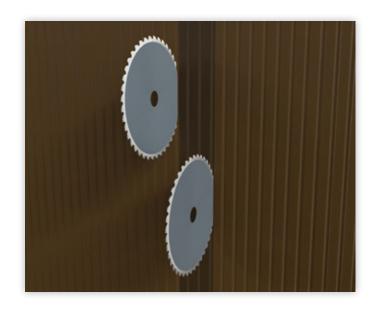
#### 2.10 - VERTICAL EXPANSION JOINT

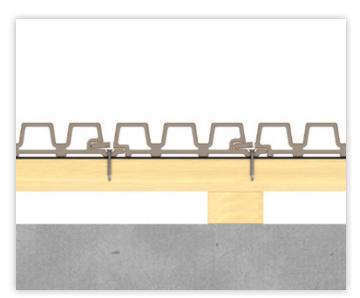






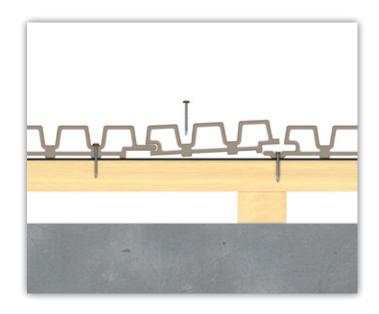
#### 2.11 - REMPLACEMENT OF A BOARD



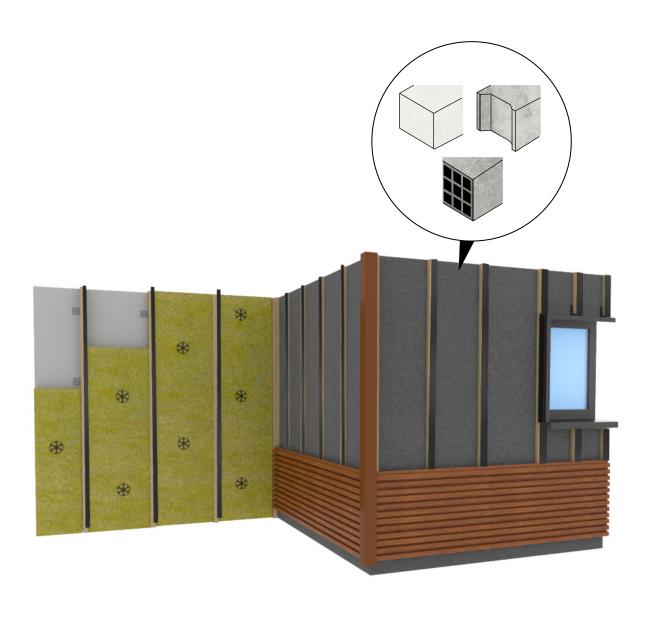






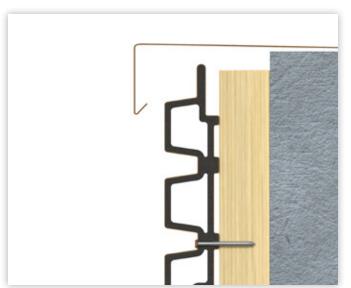






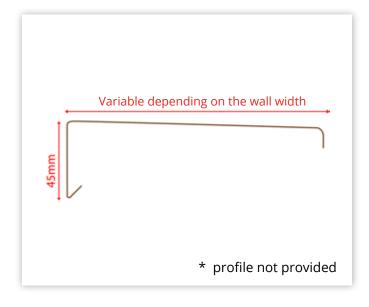
#### 3.2 - FOOT OF WALL AND PARAPET













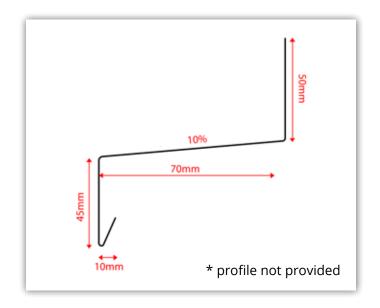
#### 3.3 - WINDOW HEAD AND SILL

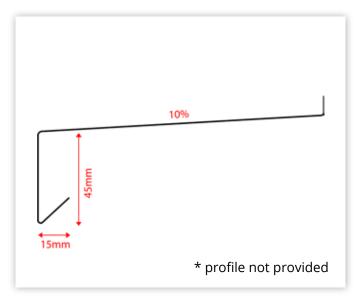








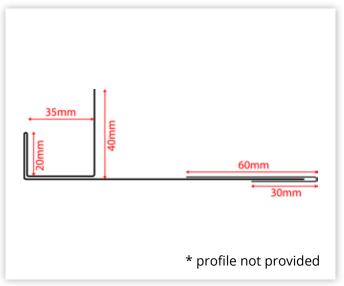




#### 3.4 - METAL REVEAL FINISH



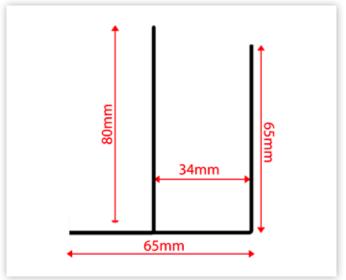




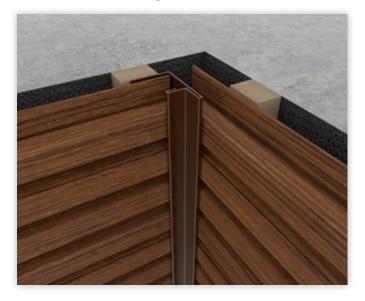
#### 3.5 - METAL REVEAL FINISH



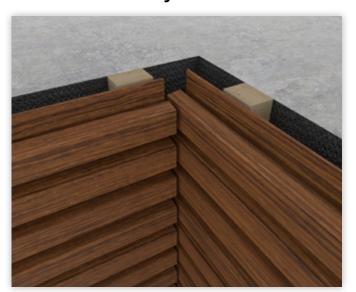




3.6 - ANGLE RENTRANT AVEC COUVRE JOINT

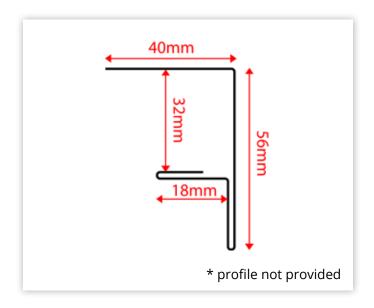


3.6.1 - ANGLE RENTRANT SANS COUVRE JOINT



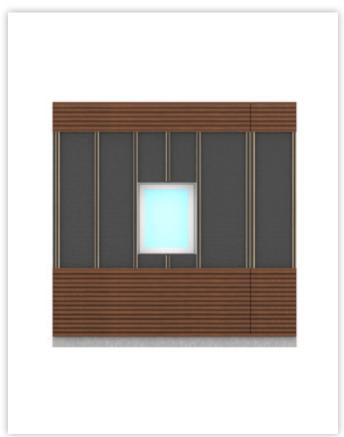






#### 3.7 - VERTICAL JOINT

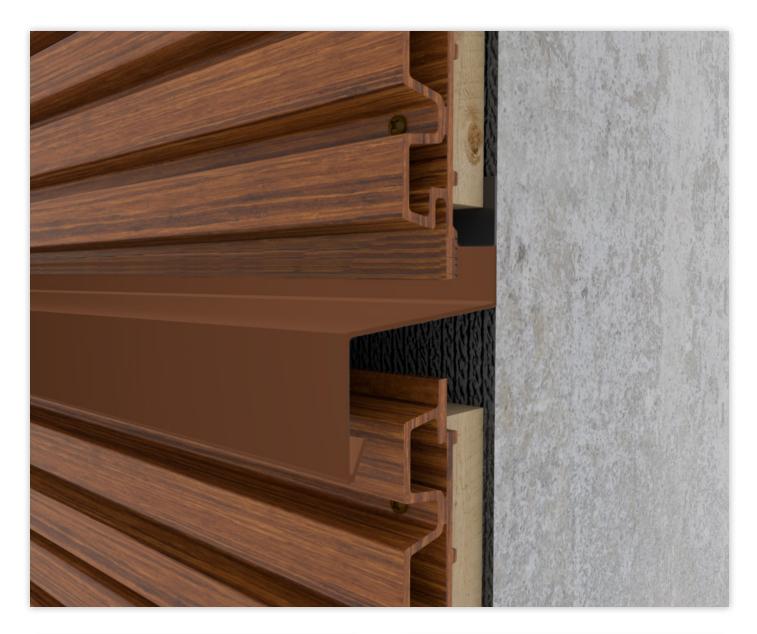




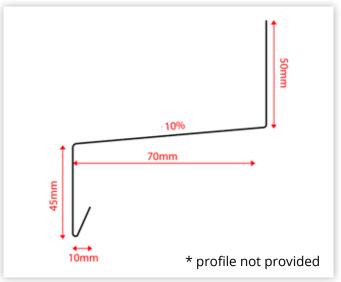




#### 3.8 - SEPARATION AND AIR SPACE CUT-OFF

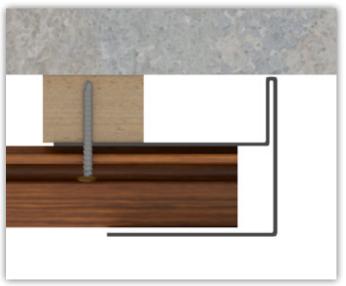


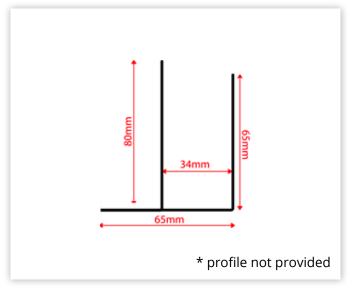




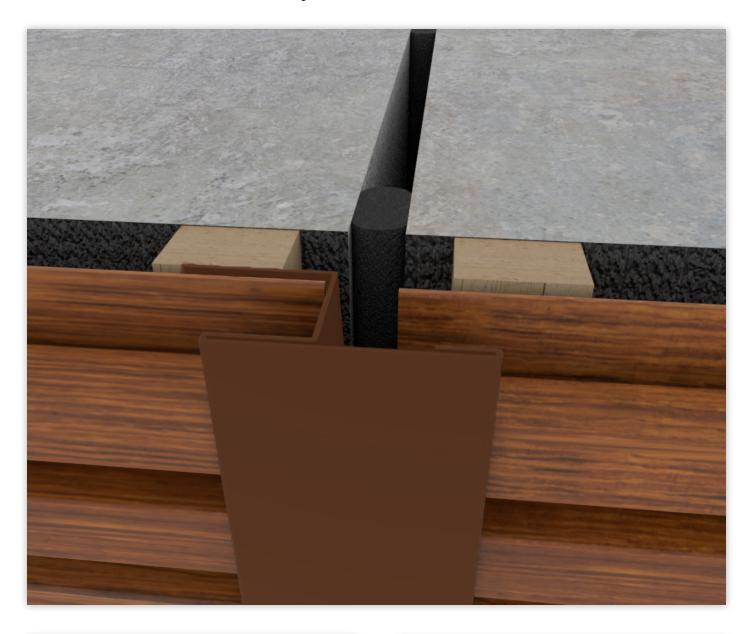
#### 3.9 - CLADDING END COVER

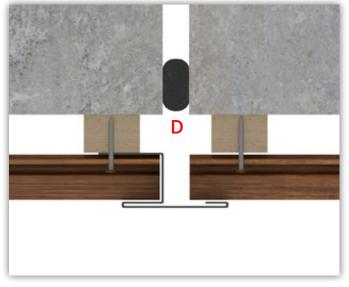


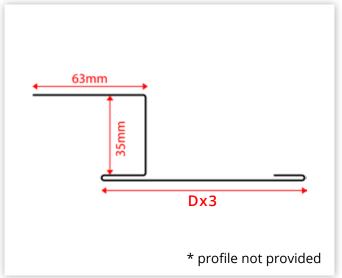




#### 3.10 - VERTICAL EXPANSION JOINT

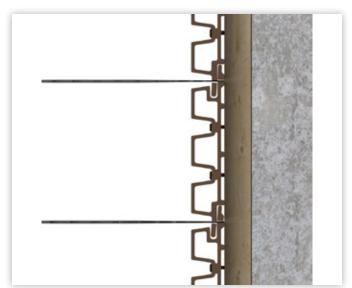






#### 3.11 - REMPLACEMENT OF A BOARD







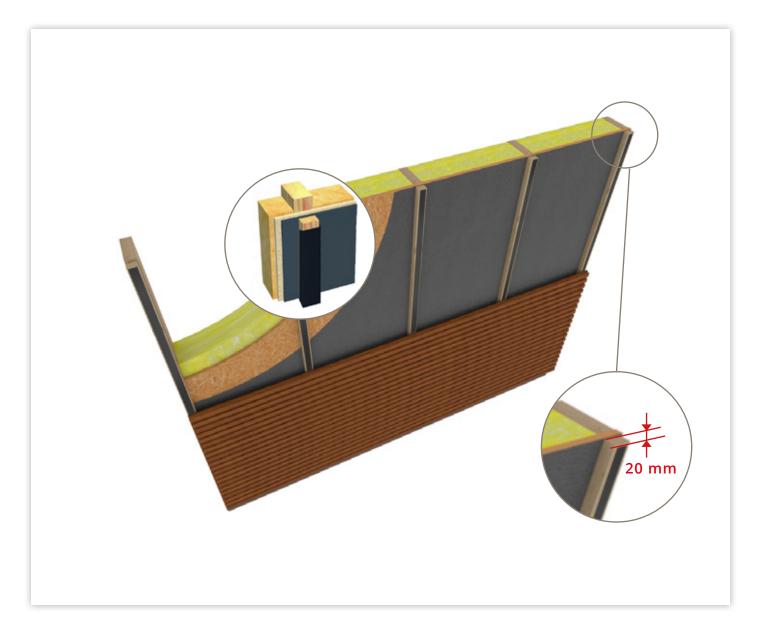






## 4 - INSTALLATION ON WOODEN FRAMEWORK STRUCTURE WEO® 35

#### 4.1 - HORIZONTAL INSTALLATION

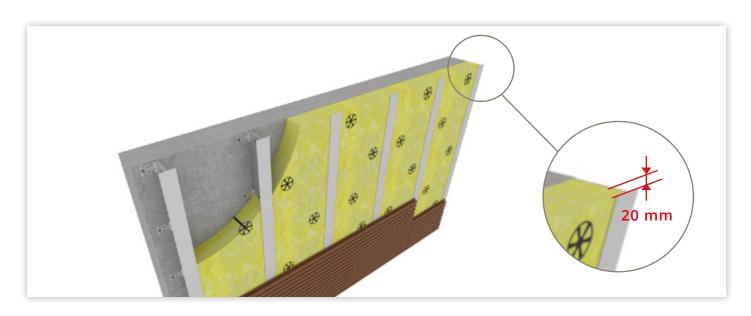




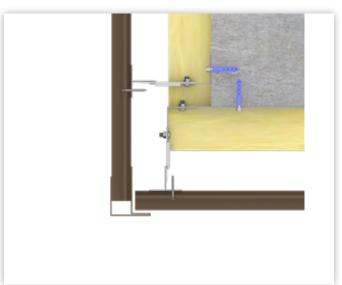


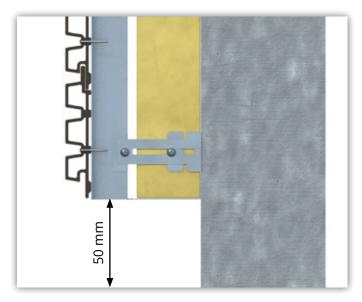
### 5 - INSTALLATION ON METAL FRAMEWORK WEO® 35

#### 5.1 - HORIZONTAL INSTALLATION





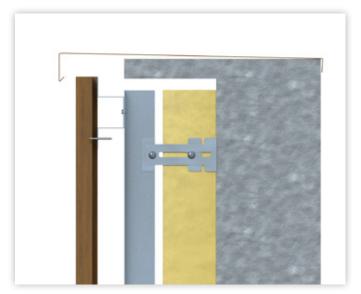




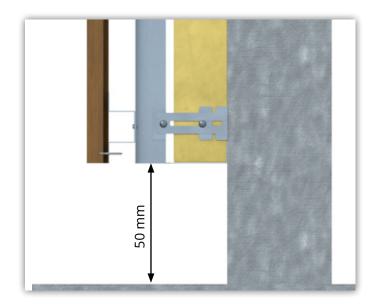
### 5 - INSTALLATION ON METAL FRAMEWORK WEO® 35

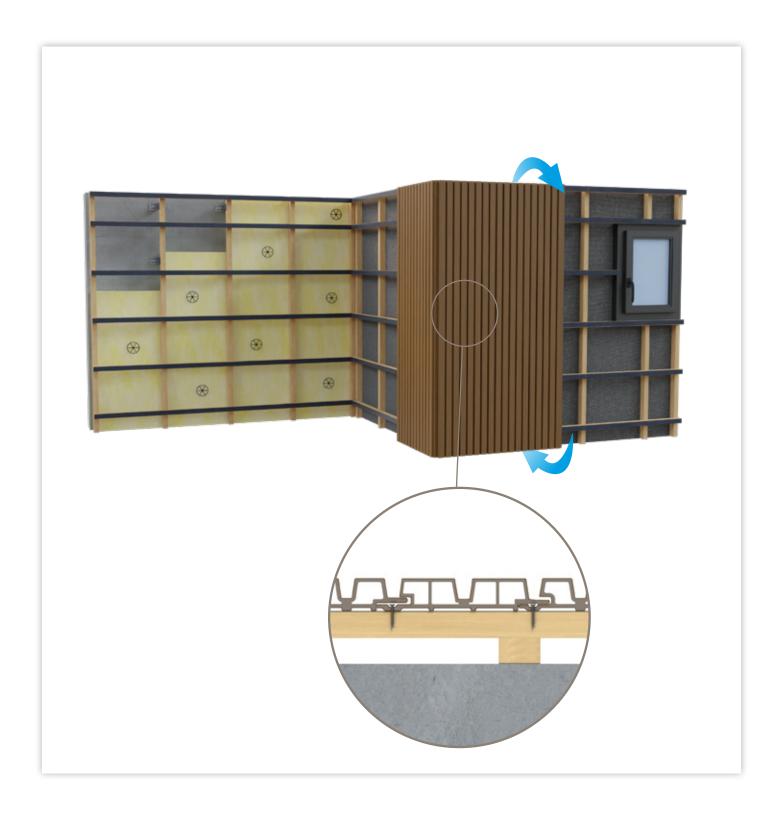
#### **5.2 - VERTICAL INSTALLATION**



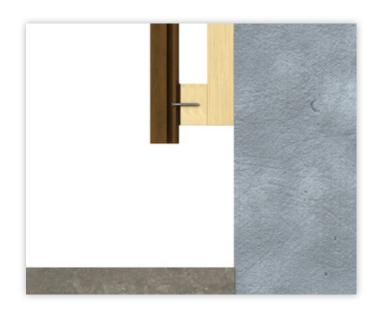


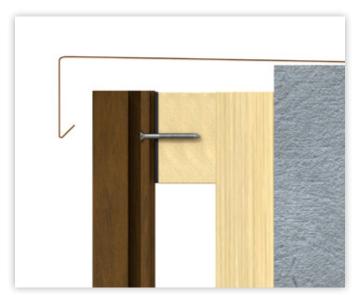






#### 6.1 - FOOT OF WALL AND PARAPET



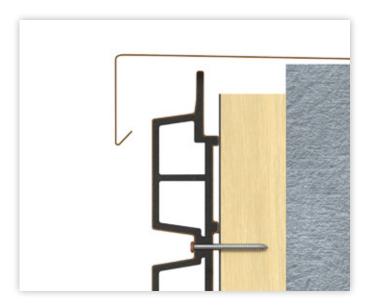




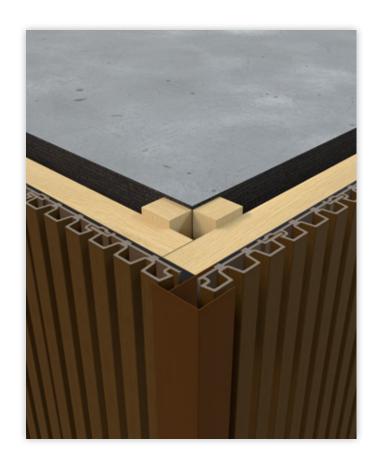


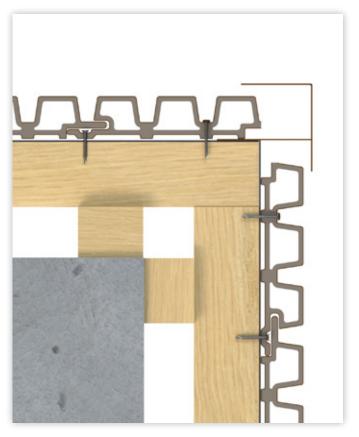
6.1.1 - FOOT OF WALL AND PARAPET: HORIZONTAL INSTALLATION

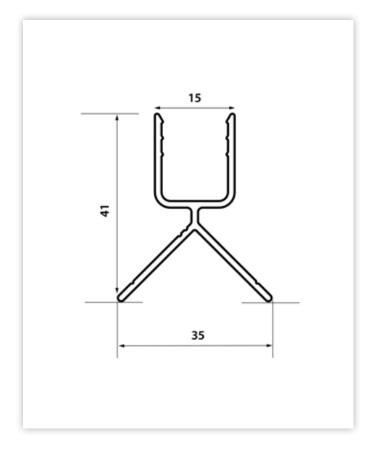


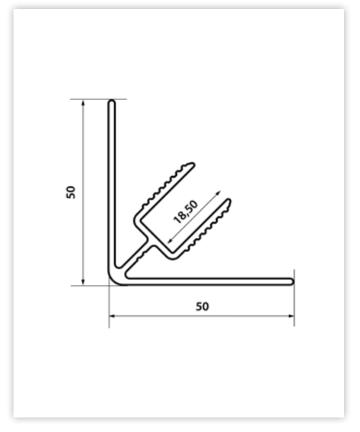


#### 6.2 - EXTERNAL CORNER WITH JOINT COVER - CLICK PROFILE

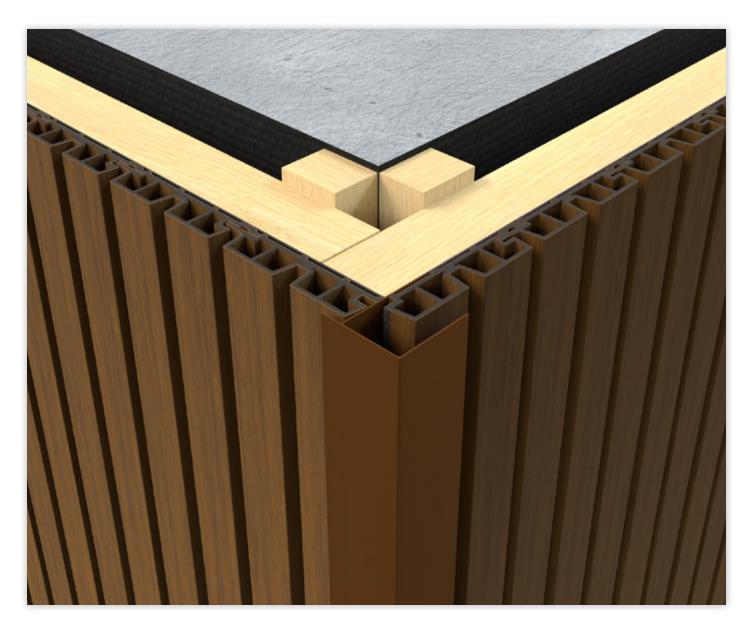


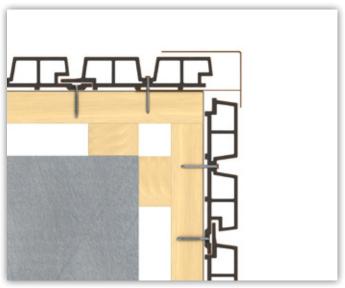


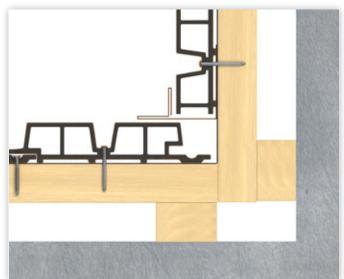




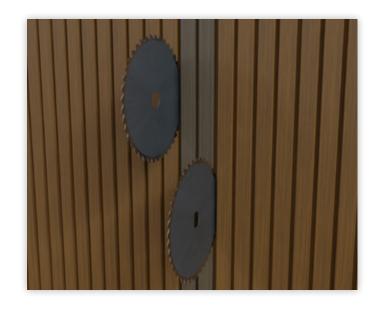
#### 6.2.2 - EXTERNAL CORNER (F PROFILE) / INTERNAL CORNER

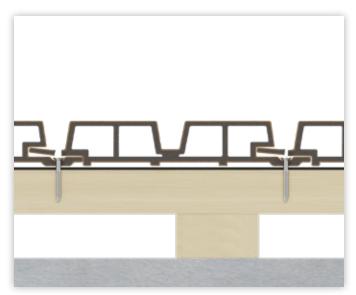






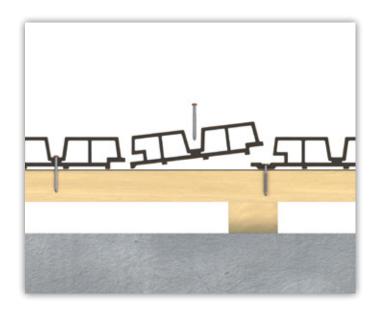
#### 6.3 - REPLACEMENT OF A BOARD





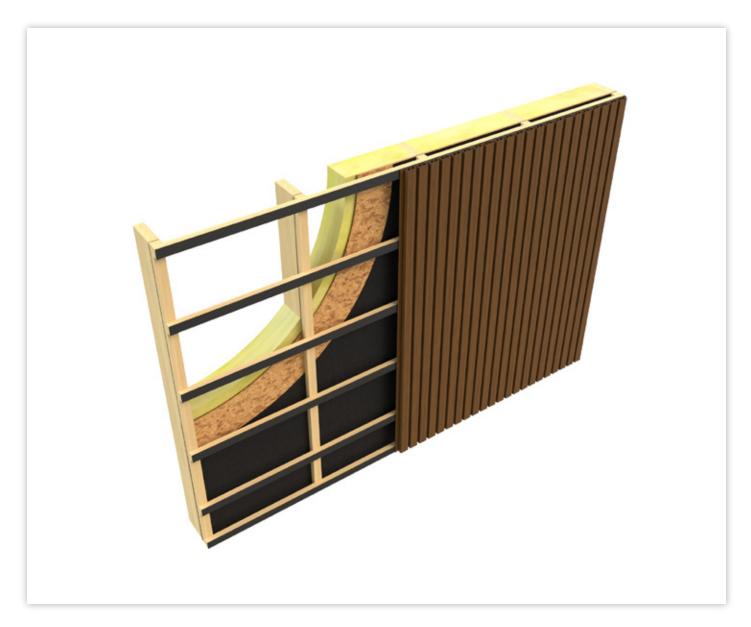


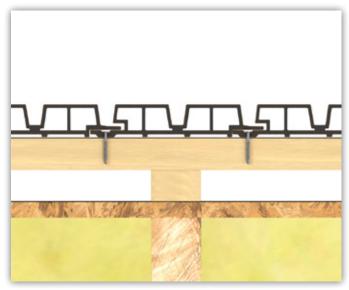






#### 6.4 - INSTALLATION ON WOODEN FRAMEWORK







### 7 - INSTALLATION ON THE UNDERSIDE

