Fiberdeck®
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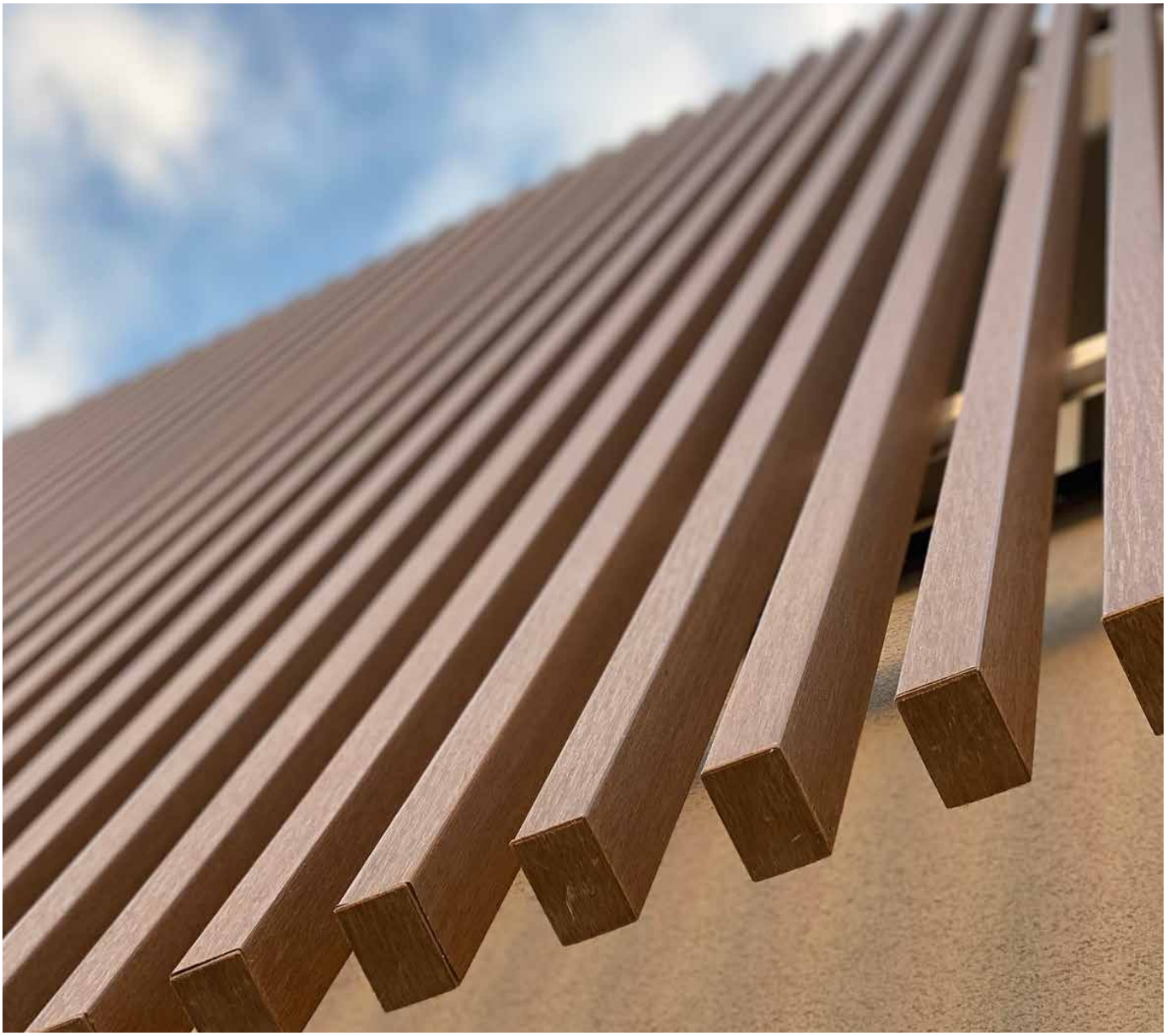
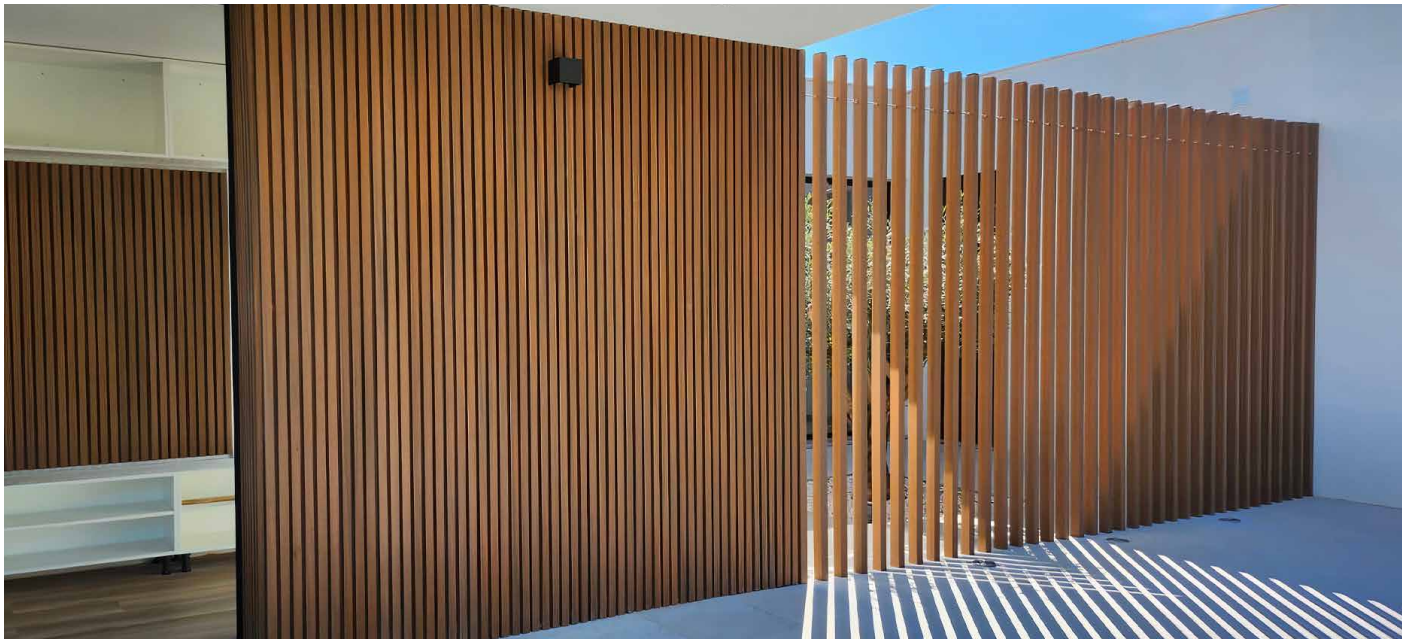
Brise Soleil WEO®



GUIDE TECHNIQUE



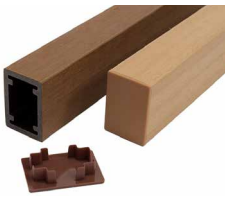
WEO Brise Soleil are architectural elements designed to regulate the flow of light. Their adjustable gap affects the direct intensity of solar radiation. They are suitable for facade cladding or various decorative applications. They also add an very good looking but do not contribute to the structural performance of buildings.

WEO® wood-composite profiles are protected by a polyethylene layer on their entire surface, that allows to resist aging effects and keeps the wood look with a remarkable color intensity. Maintenance is reduced to a minimum.

PROFILES & ACCESSORIES

BRISE SOLEIL 42X60MM
3.90m - Weight 5.15 kg

Teak	Cedar
FD1910	FD1947
FC2925	FC2926

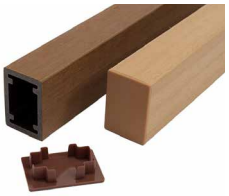


BRISE SOLEIL - End caps
42x60mm - 24 pcs

Teak	Cedar
FD1887	FD1888
FC2929	FC2930

BRISE SOLEIL 42X145MM
3.90m - Weight 10.37 kg

Teak	Cedar
FD2012	FD2013
FC2927	FC2928



BRISE SOLEIL - End caps
42x145mm - 6 pcs

Teak	Cedar
FD2014	FD2015
FC2931	FC2932

ALUMINIUM TUBE - 30X30X2MM
Alloy 6060 T5 - Tube - Weight 2.39 kg
FCD1915 / FC

ALUMINUM RAIL KX-3000 - 3M
Alloy 6005A - RAL 9005 - Weight 2 kg
FD1156 / FC

ADJUSTABLE ALUMINUM CLIP NV3
Alloy 6060 T5 - Adjustable screw M6x20mm - Weight 0.5 kg
FD1154 / FC

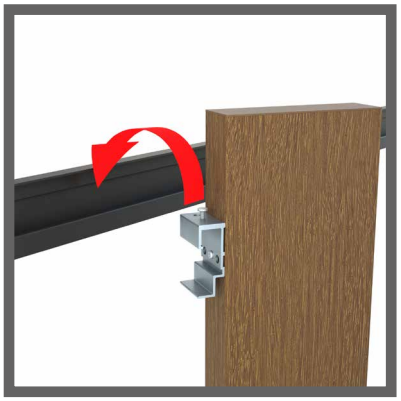
THERMAL INSULATION WEDGE
Polypropylene
FD1157 / FC

STAINLESS STEEL A2 TORX SCREW 5.5X32MM
Self-drilling screw (box of 50) - T20 bit
FD1155 / FC2628

STAINLESS STEEL A2 TORX SCREW 5.5X50MM
Self-drilling screw (box of 50) - T20 bit
FD1223 / FC2933

CONCEPT 1

Installation one by one with aluminium clip



ALUMINIUM TUBE
Thickness 2mm, provides additional rigidity

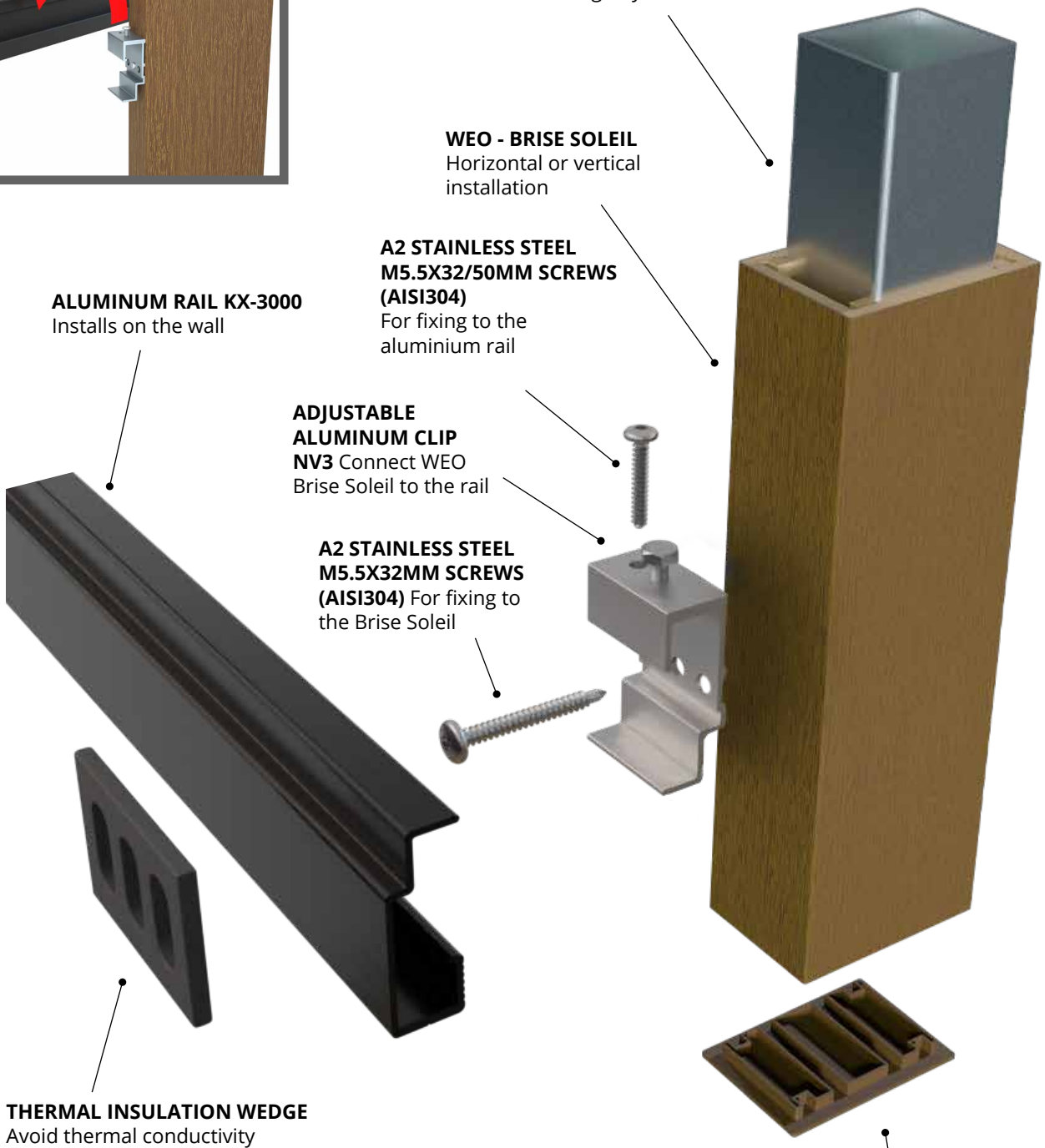
WEO - BRISE SOLEIL
Horizontal or vertical installation

A2 STAINLESS STEEL M5.5X32/50MM SCREWS (AISI304)
For fixing to the aluminium rail

ALUMINUM RAIL KX-3000
Installs on the wall

ADJUSTABLE ALUMINUM CLIP
NV3 Connect WEO Brise Soleil to the rail

A2 STAINLESS STEEL M5.5X32MM SCREWS (AISI304) For fixing to the Brise Soleil



THERMAL INSULATION WEDGE
Avoid thermal conductivity

END CAPS
For a nice finish

CONCEPT 2

Installation as a panel

ALUMINIUM TUBE
Thickness 2mm, provides additional rigidity

WEO - BRISE SOLEIL
Vertical installation

A2 STAINLESS STEEL M5.5X32/50MM SCREWS (AISI304)
For fixing to the aluminium rail

ALUMINUM RAIL KX-3000 Fits onto the support rail. Cut to length according to desired panel width

A2 STAINLESS STEEL M5.5X32MM SCREWS (AISI304) screws for fixing the Brise Soleil

THERMAL INSULATION WEDGE
Avoid thermal conductivity

ALUMINUM RAIL KX-3000
Installs on the wall

END CAPS
For a nice finish

ESSENTIAL POINTS

Tools and Equipment

• Circular saw bench / Motorized screwdriver + Bit T20 (not included in screw boxes)

Storage and Handling

Wood composite is susceptible to creep. It is imperative to keep the profiles always flat. When storing pallets, ensure they rest along their entire length. Keep the protective tarp on the pallets. Avoid placing loads on the pallets.

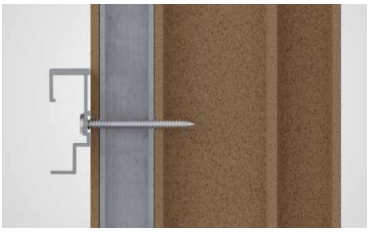
Aluminum Tube

WEO® Brise Soleil profiles are supplied without aluminum tube. Due to the risk of wood composite to creep, Brise Soleil profiles require aluminum reinforcement for any installation with spans between fixing points to ensure stability.

For the 42x145mm section, the 30x30x2mm aluminum tube – reference FD1915 / 2935 – slides into one of the end cells. As an alternative to the 30x30mm tube, a 30x60mm rectangular aluminum tube can be fitted into the central cell to meet any type of installation (not supplied).

Fixing

The WEO® Brise Soleil must be fixed into the aluminum tube. The use of A2 stainless steel self-drilling screws is recommended (FD1155 / 2628). Any other fastening method (brackets, rivets, bolts, etc.) must comply with the local standards and requirements according to the final use of the profiles and their installation configuration.



Applications

WEO® Brise Soleil profiles are architectural elements designed for building facade cladding or decorative uses and are used to reduce direct solar radiation. They should not be used for structural applications.

End Caps

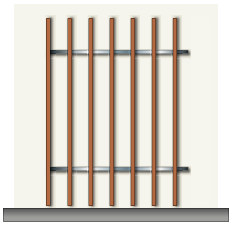
Plastic caps are available for WEO® Brise Soleil to ensure a nice finish. They must be glued to ensure they stay in the profiles. Suitable adhesives, such as Sika® or 3M®, should be compatible with plastic, resistant to moisture, and withstand significant temperature variations (-30°C to +75°C). The aluminum tube is deliberately provided slightly shorter to allow the plastic caps to fit in.

ESSENTIAL POINTS

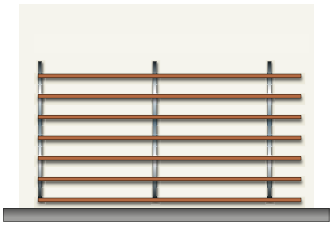
Installation direction

WEO Brise Soleil profiles can be installed horizontally or vertically.

The spans are determined based on the wind loads defined below. A maximum overhang of 50 cm is permissible..



VERTICAL INSTALLATION



HORIZONTAL INSTALLATION

Span and Wind loads

The span is the maximum recommended distance between 2 fixing points.

42X60MM + 2MM ALUMINUM TUBE

Orientation: Horizontal or Vertical

Span between 2 fixing points	Maximum wind loads
3m	2955 Pa
2.80m	3475 Pa
2.50m	5130 Pa
2m	9850 Pa

Please contact us for more details or for Overseas zones.

42X145MM + 2MM ALUMINIUM TUBE

Orientation: Horizontal or Vertical

Span between 2 fixing points	Maximum wind loads
3.90m	3475 Pa
3m	5112 Pa
2.50m	6261 Pa
2m	7969 Pa

Please contact us for more details or for Overseas zones.

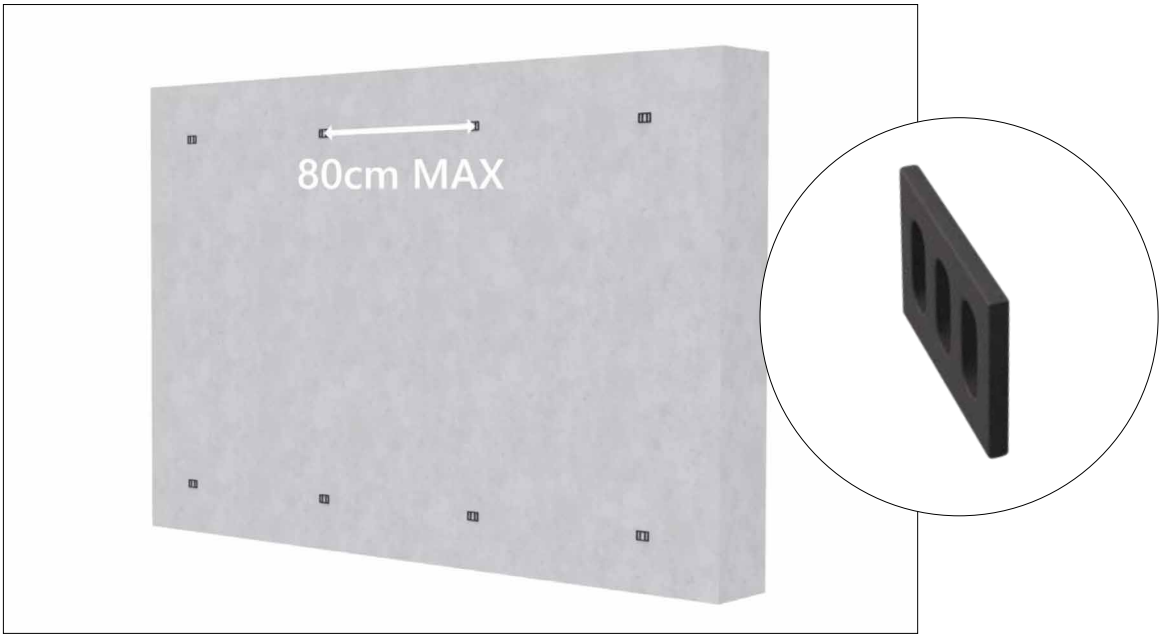
MECHANICAL REQUIREMENTS

- **Deformations:** Deflection calculated under self-weight - 1/500th of the span
- **Strength:** Yield limit < 21 MPa for wood-composite and 120 MPa for aluminum
- **Wind pressures:** values for extreme wind according to NF EN 1991-1-4 (Eurocode 1)

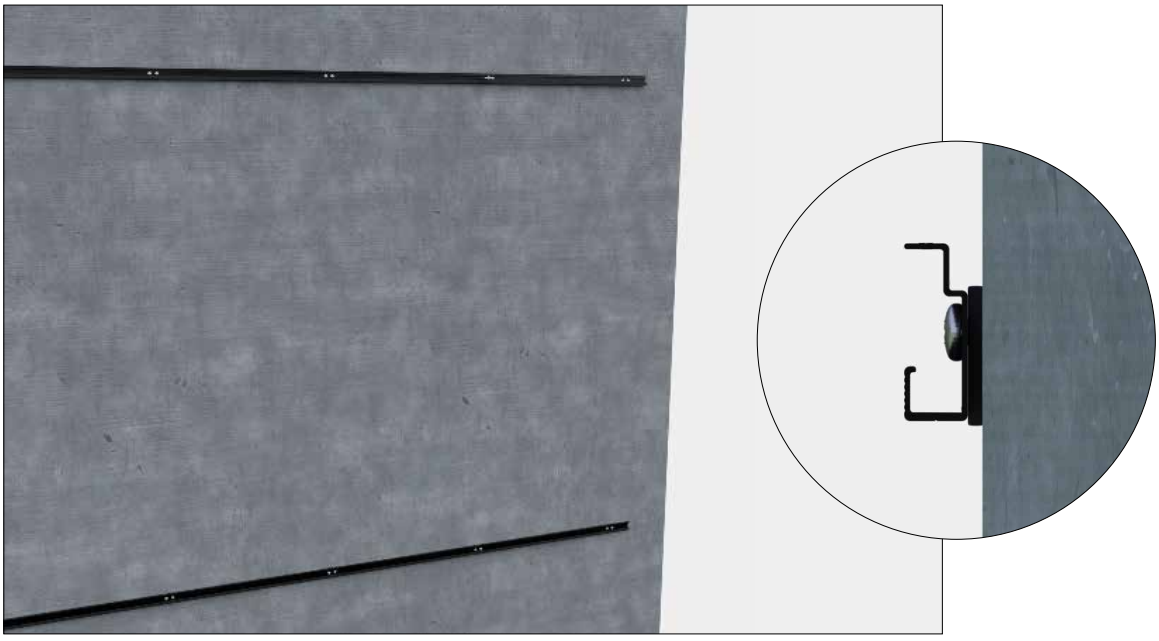
Standards :

NF EN 1991-1-4 (Eurocode 1)

INSTALLATION STEPS

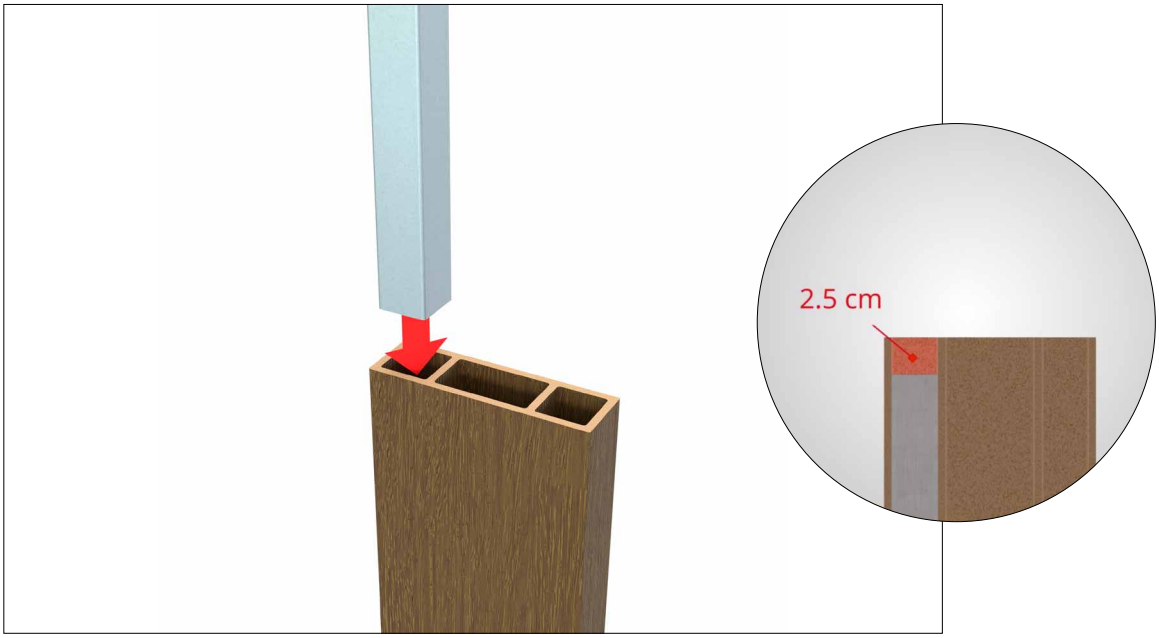


STEP 1 Add a Thermal insulation wedge (FD1157) between the aluminium rail and the wall to prevent moisture and thermal conductivity.



STEP 2 Fasten the aluminium rail (FD1156) on the wall using an appropriate fastening.

INSTALLATION STEPS

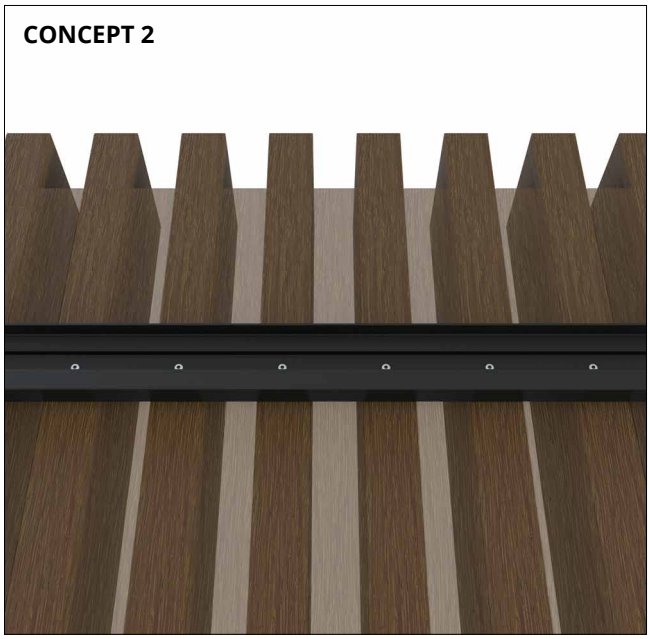


STEP 3 Slide the aluminum tube inside the WEO® Brise Soleil, leaving a 2.5cm gap at the ends.

CONCEPT 1

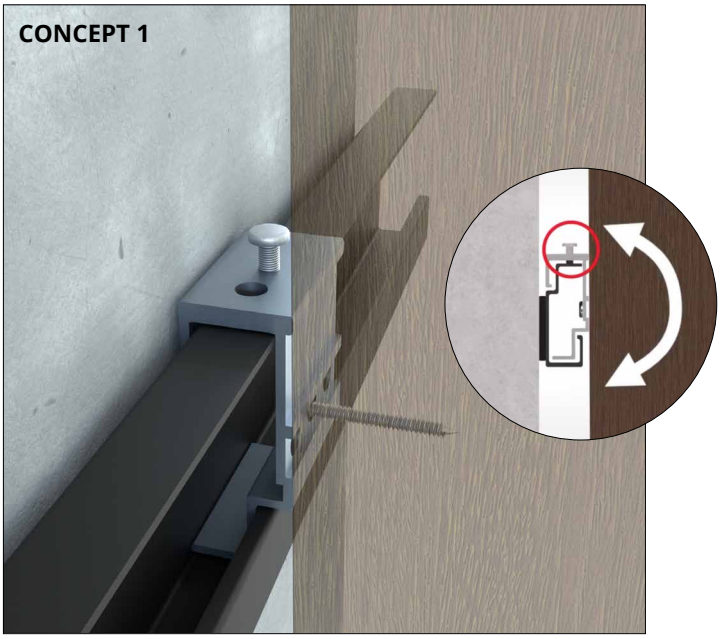
STEP 4A Screw WEO Brise Soleil one by one using the clip (FD1154). Use stainless steel self-drilling screw A2 5.5x32mm (FD1155 / FC2628)

CONCEPT 2

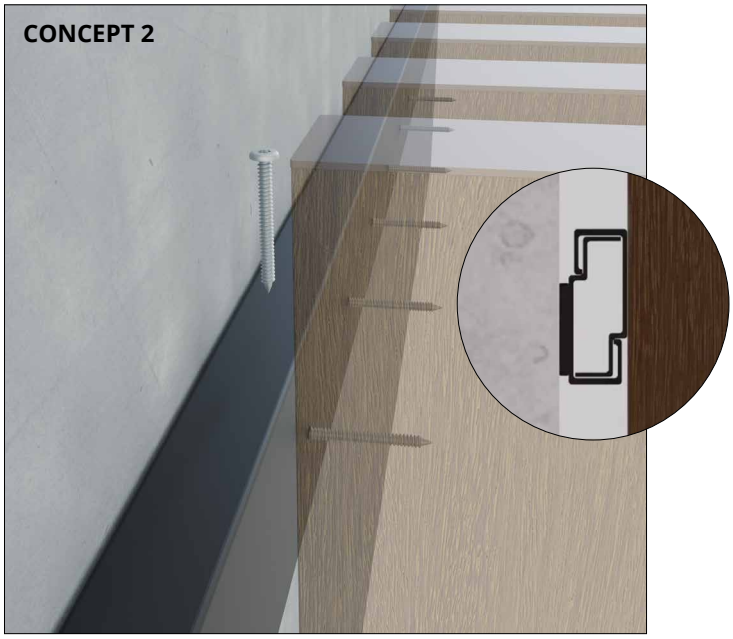


ÉTAPE 4B Screw WEO Brise Soleil together as a panel using the FD1156 aluminum rail cut to length. Use stainless steel self-drilling screw A2 5.5x32mm (FD1155).

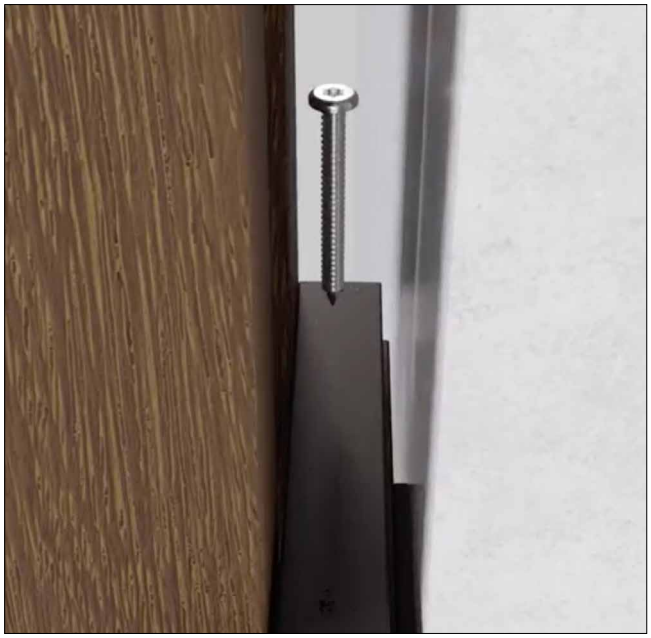
INSTALLATION STEPS



STEP 5A Fitting the WEO brise-soleils onto the aluminium rail on the wall. the gap between profiles can be adjusted and the verticality can be adjusted using the M6x20mm screw.

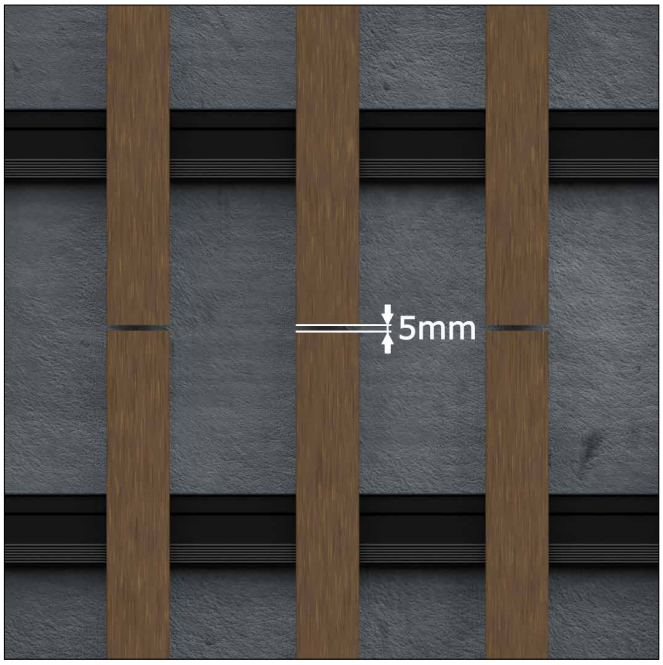


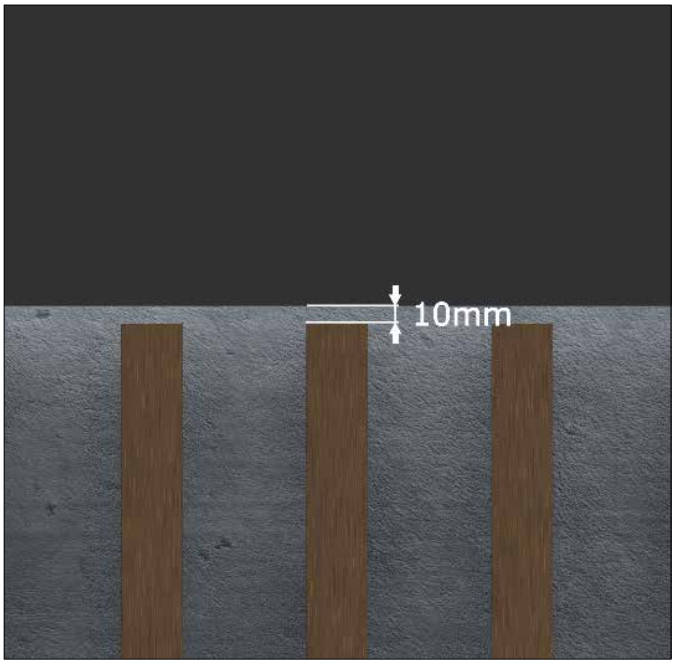
STEP 5B Fitting the WEO brise-soleils onto the aluminium rail on the wall.



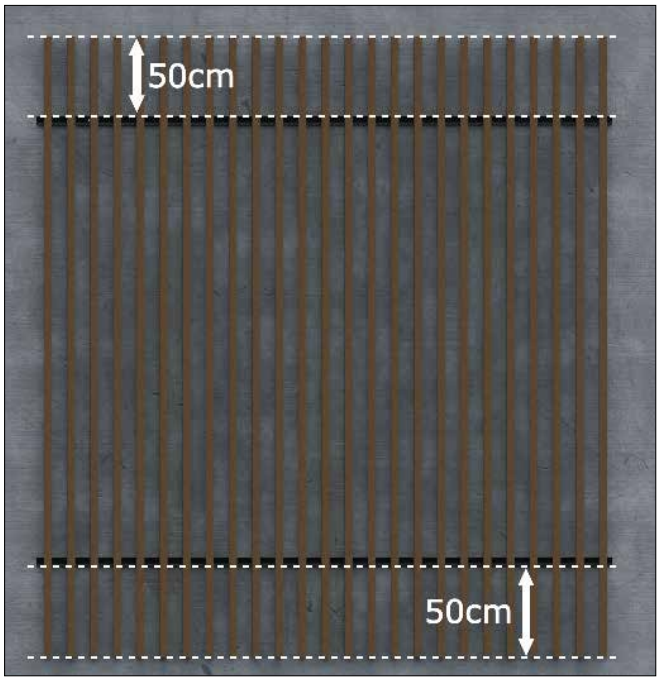
STEP 6 Screw the clip or aluminium rail to the rail on the wall using a 5.5x50mm (or 5.5x32mm) stainless steel A2 self-drilling screw and a long bit.

INSTALLATION STEPS

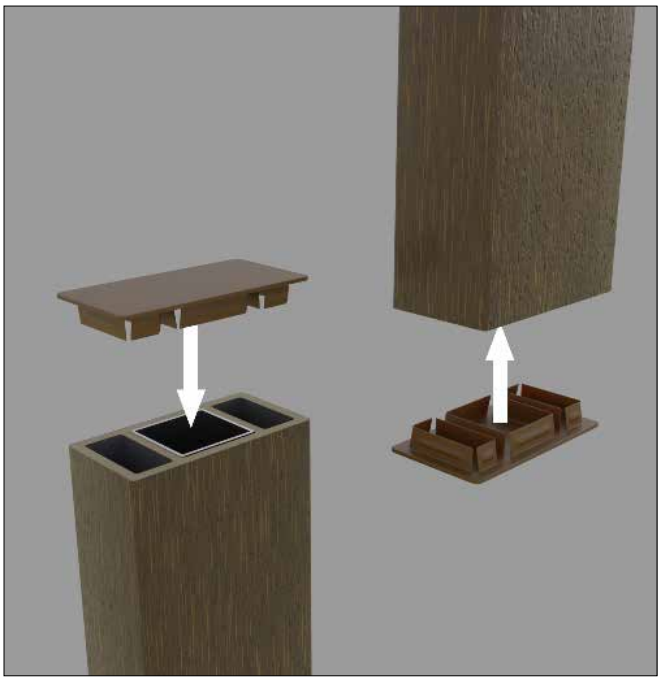




DILATATION GAP: Maintain a gap of 5mm between 2 Brise Soleil ends and 10mm between a Brise Soleil and any type of obstacle (joinery, wall, corner, etc.)



OVERHANG: A 50 cm overhang is tolerated. The aluminum tube must be slid along the entire length of the profile.



INSTALLATION OF THE CAPS: Glue should be applied to the ends before fitting.

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