

ECO BIERZO COMPOSITE, S.L.
Design No. ECB/MCMWP 30-01
Exterior Non-Load Bearing Wall Assembly
STACBOND FR Panels
NFPA 285
Rating: Meets Conditions of Acceptance

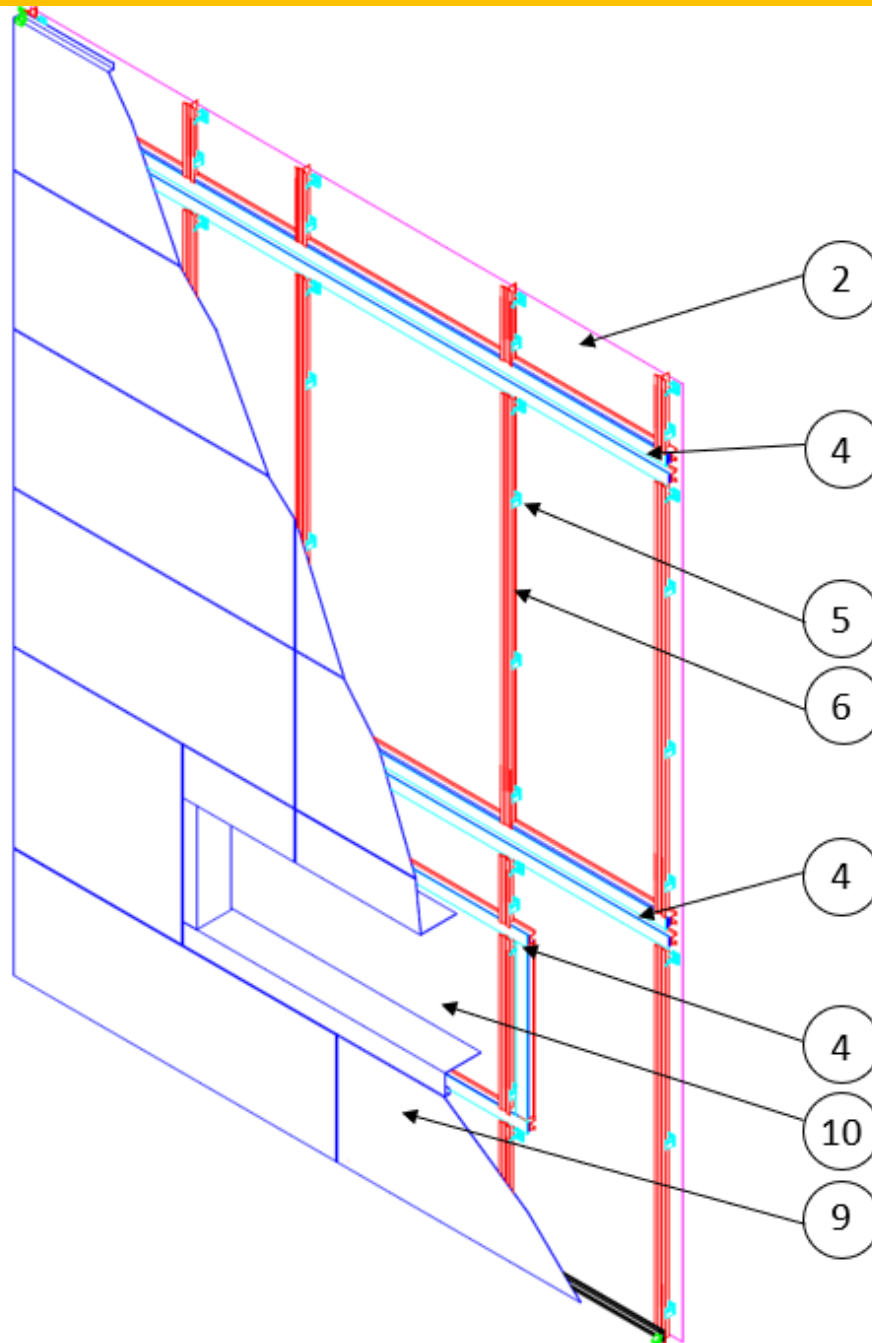


Figure 1

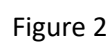
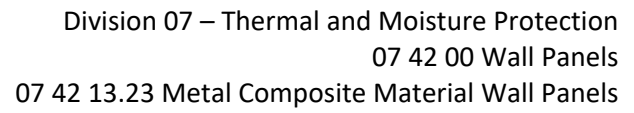




Figure 3

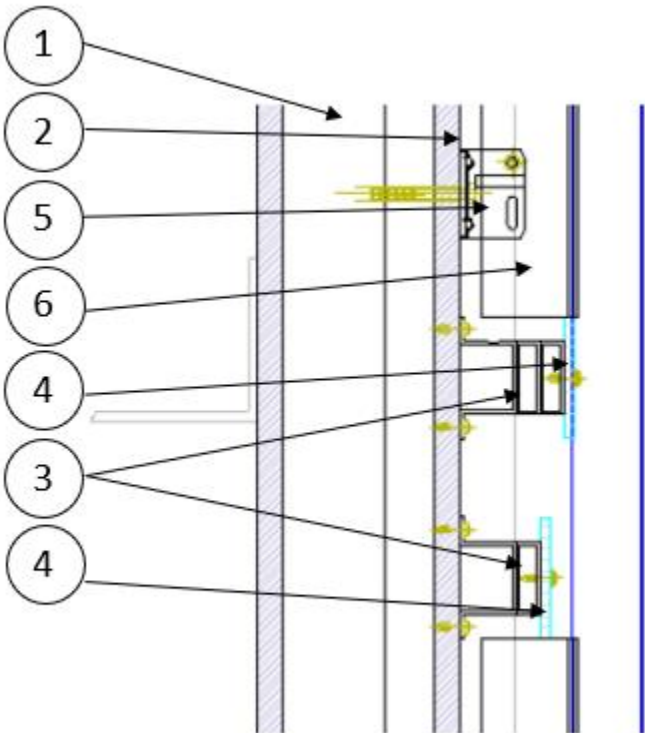
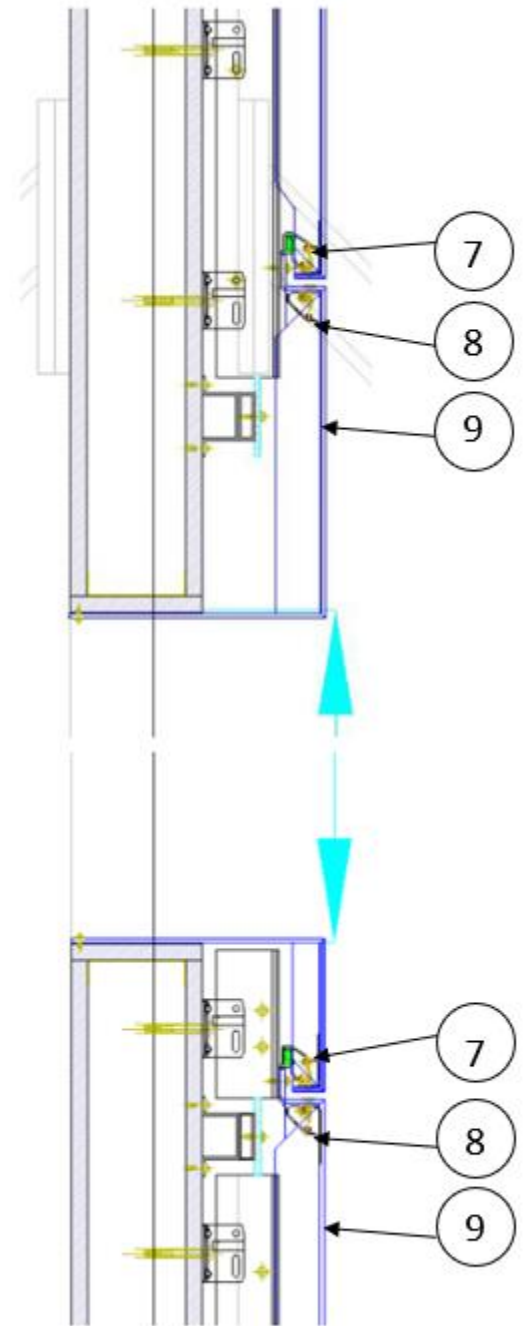


Figure 4





1. **BASE WALL CONSTRUCTION:** Construct a wall assembly that shall comply with the local Building Code or other applicable regulatory requirements as established by the local Authority Having Jurisdiction. The wall shall be one of the following noncombustible constructions:

A. STEEL-FRAMED WALL ASSEMBLY –

WALL FRAMING: Install min. 0.024 in. (0.6 mm) thick galvanized steel studs of min. 1-3/8 in. x 3-5/8 in. x 1-3/8 in. (35 mm x 91.2 mm x 35 mm) section, spaced max. 24 in. on center (oc). Additional studs must be placed behind the hanging brackets (item 4) for fixing the external wall panels.

FLOOR LINE SAFING: Install 4 in. (100 mm) wide strips of ROCKWOOL Ventirock Duo/120, 4-3/4 in. (120 mm) thick (A1 EN 13501-1 classified, dual density 100-40 kg/m³) mineral wool insulation fire stopping on the horizontal channels along the floor line. Alternative Intertek listed mineral wool insulation of same or higher density approved for similar application may be installed.

INTERIOR CLADDING: Install 5/8 in. (15.9 mm) Type X Gypsum boards meeting requirements according to ASTM C1396, or 15 mm thick, KNAUF Cortafuego DF gypsum boards meeting requirements according to EN 520, on steel studs using No. 6 x 1 in. (Ø3.5 mm x 25 mm) self-drilling steel screws.

EXTERIOR SHEATHING: Install 5/8 in. (15.9 mm) Type X Gypsum boards meeting requirements according to ASTM C1396, or 15 mm thick, KNAUF Cortafuego DF gypsum boards meeting requirements according to

EN 520 on steel studs using No. 6 x 1 in. (Ø3.5 mm x 25 mm) self-drilling steel screws.

B. CONCRETE CONSTRUCTION.

C. MASONRY CONSTRUCTION.

2. **WEATHER BARRIER:** Install VAPROSHIELD RevealShield Self-Adhered Water Resistance Barrier and Air Barrier to Exterior Sheathing.
3. **CAVITY BARRIER MOUNTING:** The 6063 T6 aluminum T-Omega profile (see Figure 5) is secured to the base wall studs using min. No. 1/4 in. x 1-9/16 in. x 2-3/8 in. (Ø6.3mm x 40mm x 60mm) self-drilling screws. Stud profiles (see Figure 6) are used to extend the T-Omega profile to the correct height, and are attached to the T-Omega profile using 1/4 in. x 1-9/16 in. x 2-3/8 in. (Ø6.3mm x 40mm x 60mm) self-drilling screws. When attached to a concrete or masonry wall, equivalent fastening must be designed by a licensed design professional.
4. **CAVITY BARRIER:** Use Firefly (FF) 102/50 Fire Ventilated Fire Barrier Intumescent Seal (Intertek Spec ID 55536).

Two rows of the cavity barrier are placed at floor lines. The upper row is constructed using the T-Omega profile and two stud profiles. The lower row is constructed using the T-Omega profile and one stud profile. The rows are separated by 2 in. The Tenmat FF 102/50 cavity barrier is attached to the stud profile using 1/4 in. x 1-9/16 in. x 2-3/8 in. (Ø6.3mm x 40mm x 60mm) self-drilling screws spaced at 20in. oc and must be continuous across the width of the wall (the vertical T-studs are interrupted for the cavity barrier). See Figure 2.



The T-Omega profile with one stud profile is attached around the perimeter of openings. The Tenmat FF102/50 cavity barrier is attached to the stud profile on the four edges of the opening. See Figures 1 and 2.

5. **BRACKET:** The 5005 H24 Aluminum L-section bracket (see Figure 7) is secured to the base wall studs, using 1/4 in. x 1-9/16 in. x 2-3/8 in.-head dia. (Ø6.3mm x 40mm x 60mm) self-drilling steel screws. When attached to a concrete or masonry wall, equivalent fastening must be designed by a licensed design professional.
6. **T-SECTION PROFILE:** 6063 T6 Aluminum T-section studs (see Figure 8) are attached vertically to the Bracket using No. 12 x 3/4 in. (Ø5.5mm x 20mm) self-drilling stainless steel screws.
7. **S-BRACKET:** Aluminum S-shape brackets (see Figures 10 and 11). Fixed to external cladding panel bottom edge, on corners and on mid width, by No. 8 x 3/4 in. (Ø4.2mm x 20mm) self-drilling screws.
8. **Z-BRACKET:** Aluminum Z-shape brackets (see Figures 12, 13, 14 and 15). Fixed between T-Profile and external cladding panel top edge, on corners and on mid width, by No. 8 x 3/4 in. (Ø4.2mm x 20mm) self-drilling screws.

9. EXTERIOR CLADDING PANELS

CERTIFIED PRODUCT: Eco Bierzo Composite S.L. 5/32 in. (4mm) thick STACBOND FR panels.

The STACBOND FR panels consist of two nominally 0.02 in. (0.50 mm) aluminum skins, bonded to both surfaces of an extruded fire-retardant core of thermoplastic resins and mineral charge. Max. nominal panel dimensions are 8 ft. (2436mm) in length and 4.7 ft. (1436mm) in height. The panels are mounted to the T section vertical studs. Bottom panel edge is connected by S-shaped brackets (see Figures 3 and 4), and the top panel edge is fixed to T-Profile along with the z-shape brackets hanging bases, by No. 8 x 3/4 in. (Ø 4.2 x 19mm) self-drilling screws. The panels must be installed with max. 5/16 in. (8mm) open vertical and horizontal joints.

10. **OPENINGS:** Window openings must be framed with min. 0.024 in. steel and covered with one layer of exterior sheathing boards. The exterior cladding panels are formed to provide a flashing edge, which projects along the full section of the opening. See Figure 3. This projected edge is fixed to the supporting wall opening edge using 1/4 in. x 2-3/8 in. (Ø6.3mm x 60mm) self-drilling screws. When attached to a concrete or masonry wall, equivalent fastening must be designated by a licensed design professional.



Perfil Omega 05.19.003	CARACTERÍSTICAS DIMENSIONALES	UNIDADES
Peso	0,9126	kg/m
Inercia	60381,5	mm ⁴
Espesor	2	mm

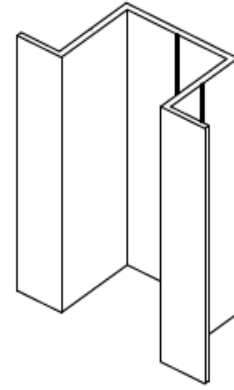
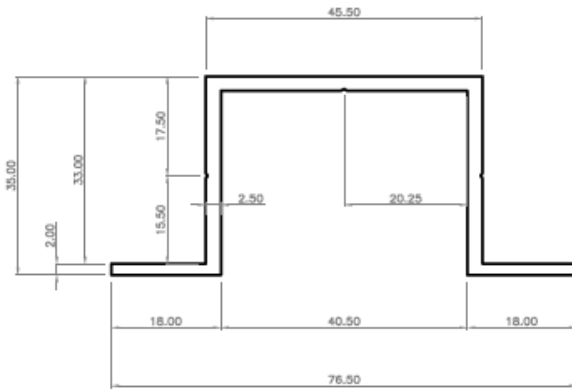
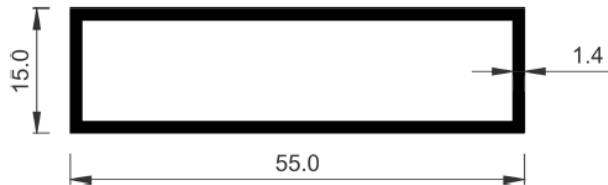


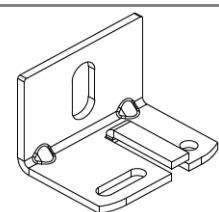
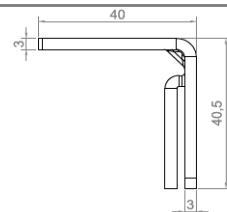
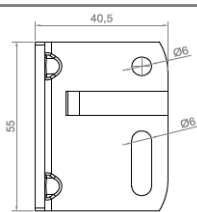
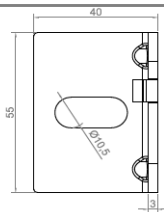
Figure 5



805515	
Descripción	Tubo de 55x15x1.4
Peso (g/m)	510,3
Superficie (dm ² /m)	26,88
Ix (cm ⁴)	0,76
Iy (cm ⁴)	6,34

Figure 6

Separador L 41 05.19.089	CARACTERÍSTICAS DIMENSIONALES	UNIDADES
Peso	0,03086	kg



Este perfil no está incluido ni en DIT ni en ETE

Figure 7



Division 07 – Thermal and Moisture Protection
07 42 00 Wall Panels
07 42 13.23 Metal Composite Material Wall Panels

T-Omega Profile 05.19.061	DIMENSIONAL SPECIFICATIONS	UNITS
Weight	0.741	kg/m
Inertia	81257	mm ⁴
Thickness	2	mm

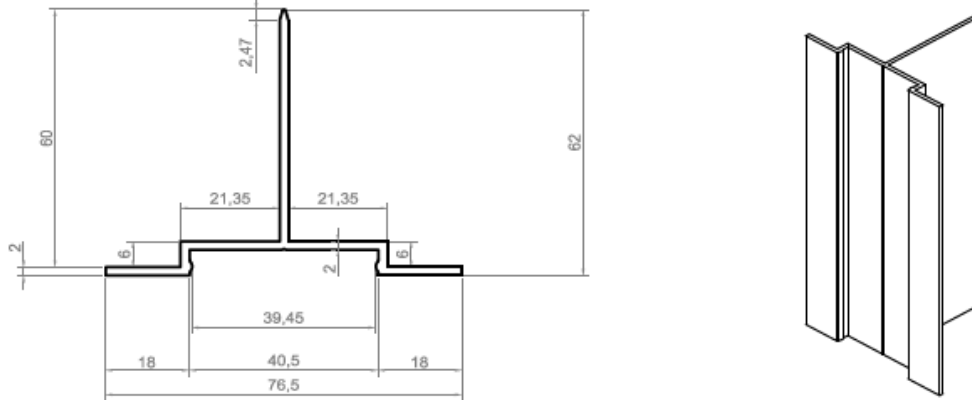


Figure 8



Figure 9



Division 07 – Thermal and Moisture Protection
07 42 00 Wall Panels
07 42 13.23 Metal Composite Material Wall Panels

Short S Bracket 05.19.096	DIMENSIONAL SPECIFICATIONS	UNITS
Weight	0.0219	kg

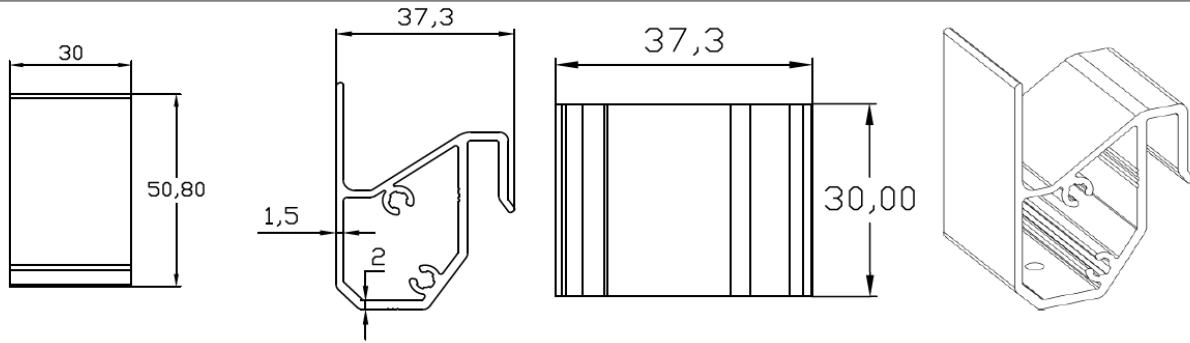


Figure 10

Long S Bracket 05.19.097	DIMENSIONAL SPECIFICATIONS	UNITS
Weight	0.05119	kg

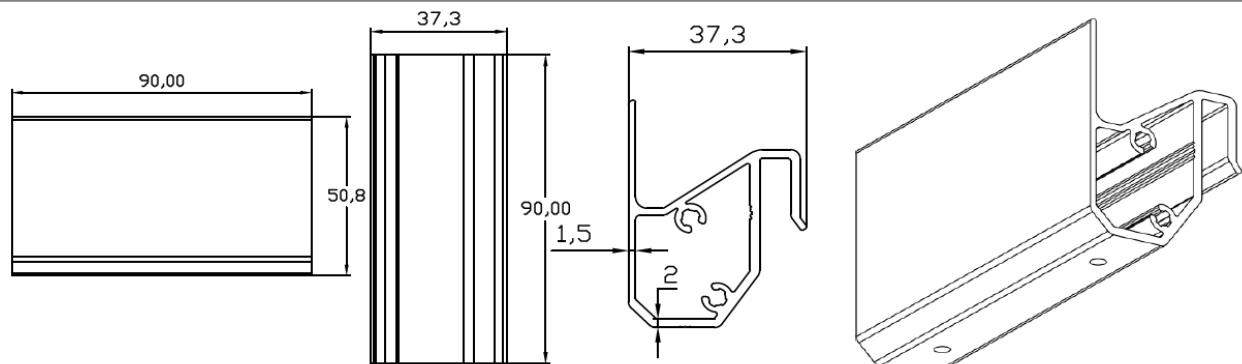


Figure 11



Short Z Bracket 05.19.094	DIMENSIONAL SPECIFICATIONS		UNITS
Weight	0.03891		kg

Figure 12

Long Z Bracket 05.19.095	DIMENSIONAL SPECIFICATIONS		UNITS
Weight	0.07397		kg

Figure 13



SZ horizontal stiffener long bracket 05.19.101	DIMENSIONAL SPECIFICATIONS	UNITS
Weight	0.03829	kg

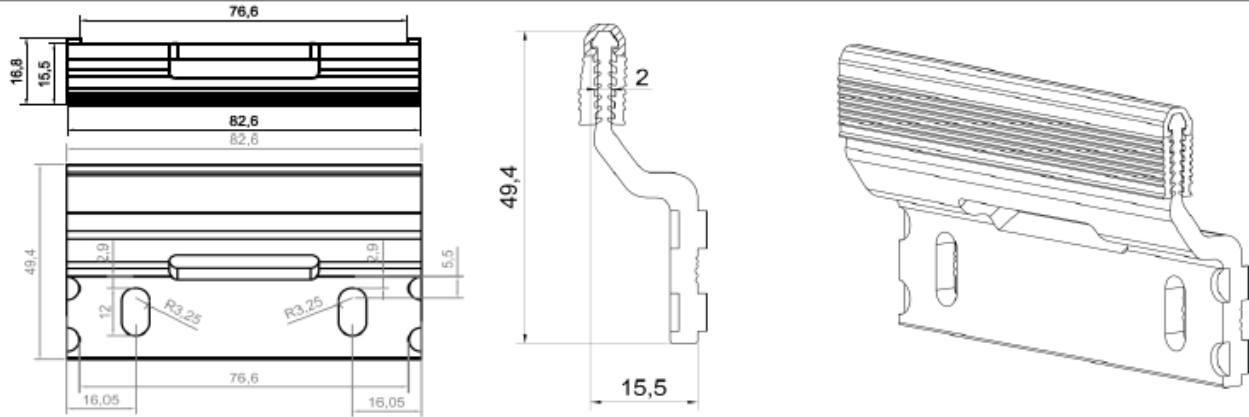


Figure 14

Starter profile SZ 05.19.099	DIMENSIONAL SPECIFICATIONS	UNITS
Weight	0.457	kg

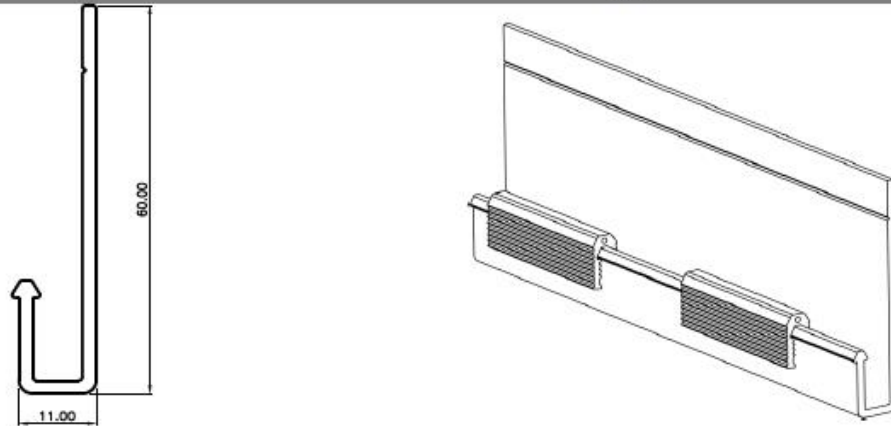


Figure 15



This Design Listing is intended to provide guidance for on-site verification of the installation of system components and shall not be used in place of the manufacturer's published installation instructions. The manufacturer is responsible for providing installation instructions and requirements that ensure compliance with the system as tested and evaluated by Intertek. Installation must comply with this Design Listing, the manufacturer's installation instructions, and the applicable Code. In the event of conflict, this Design Listing governs.

Compliance of the assembly described in this Design Listing with the referenced standard(s) is contingent upon verification that the field-constructed assembly is consistent with the assembly described herein. Intertek-certified products may be verified by the authorized Intertek label. Products not bearing the Intertek label shall be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.

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Refer to the listing report in the Directory of Building Products (<https://bpdirectory.intertek.com>) for the applicable edition of the referenced standard(s).