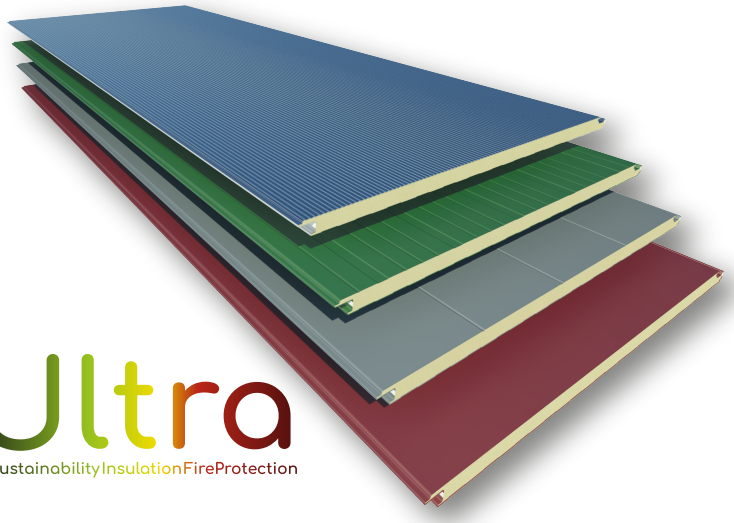
Hiansa Panel
Grupo Hiemesa

REV. 01 - October 2019

FAÇADE PANEL ULTRA - MPF/PRF/SML/LIS

FAÇADE PANEL



Ultra
SustainabilityInsulationFireProtection

EXTERIOR FACE
Pre-painted steel
0.5 mm (0.02 in.)

INTERIOR FACE
Pre-painted steel
0.5 mm (0.02 in.)

USEFUL WIDTH
1100 mm (43.31 in.)

INSULATION
High-performance polyurethane

THICKNESSES mm (in.)
50/60/80/100
(1.97/2.36/3.15/3.94)

USE
Façades

ISO 9001 BUREAU VERITAS Certification

CE

TECHNICAL SPECIFICATIONS

Panel for façade cladding comprised of 2 steel sheets and a polyurethane (PUR) or polyisocyanurate (PIR) insulating foam core on the inside which guarantees maximum thermal insulation. It can be installed both vertically and horizontally. In both cases, the connection between the panels is by means of a tongue-and-groove joint with a screwing system with hidden fastening. Its surface finish can be smooth, semi-smooth, ribbed or micro-profiled.

MAIN CHARACTERISTICS OF THE ULTRA - 50 mm (1.97 in.) PANEL	
Nominal thickness	50 mm (1.97 in.) [±3 mm/0.12 in.]
Average foam density	40 kg/m³ [±2 kg/m3]
Weight	11 40 kg/m²
Volume	20 m²/m³
Useful width	1100 mm (43.31 in.) [±3 mm/0.12 in.]
Straightness	0 mm [±5 mm/0.20 in.]
Contraction - Inflection lengthwise	0 mm [±5 mm/0.20 in.]
Compressive strength	0.076 MPa
Tensile strength	0.082 MPa
Fire resistance - UNE 13501-1	B-s1-d0
Behavior against fire	Broof (t1)
Fire resistance	N.A.

The new high-performance polyurethane-based insulation core offers better performance, improving heat transfer coefficients, fire performance as well as using a more sustainable and environmentally-friendly technology for its manufacture.

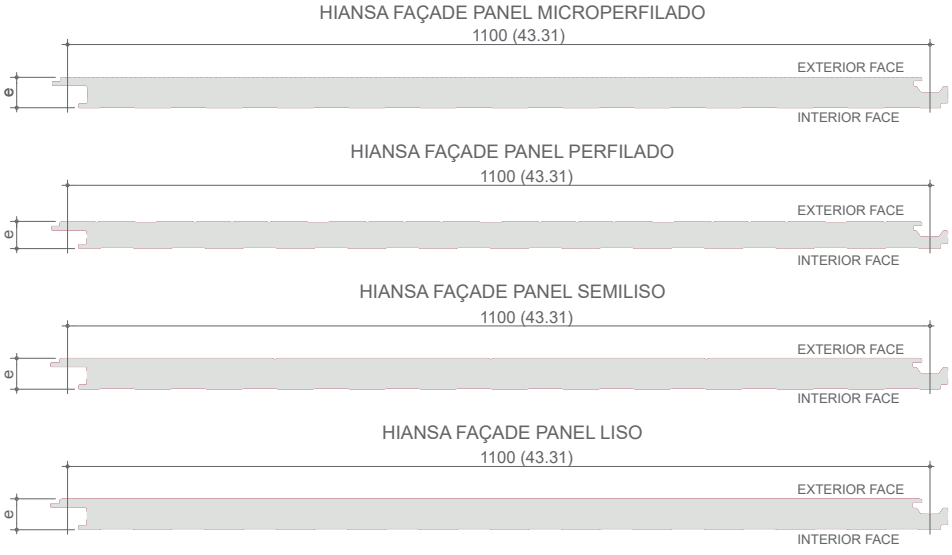
THERMAL INSULATION

RIBBED PANEL	HEAT TRANSFER		WEIGHT [0.5/0.5]
Nominal thickness in mm (in.)	K in Kcal/ m²·h. ºC	K in W/m²·k	Kg/m²
50 (1.97)	0.31	0.36	11.40
60 (2.36)	0.26	0.30	11.80
80 (3.15)	0.10	0.23	12.60
100 (3.94)	0.15	0.18	13.40

The weight includes the proportional part of the accessory elements.

GEOMETRIC SPECIFICATIONS

Units: mm (in.)



Detail of tongue-and-groove joint

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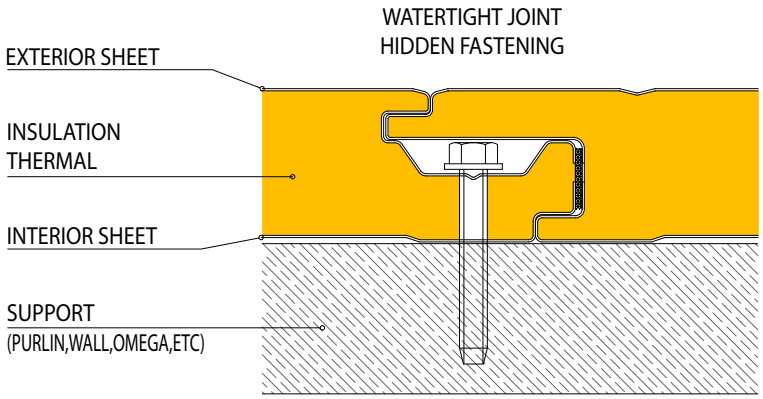
STANDARDS APPLIED

Ref. Standard	Description
EN 14509-2014	Metal double-sided insulated self-supporting sandwich panel. Products made at the factory. Specifications.
EN 13823	Reaction to fire tests of construction products. Construction products, excluding floor coverings exposed to thermal attack caused by a single burning object.
EN 10169	Flat steel products, continuous coated with organic materials (pre-painted). Technical supply conditions.
EN 13501	Classification based on the fire performance of construction products and building elements. Part 1.

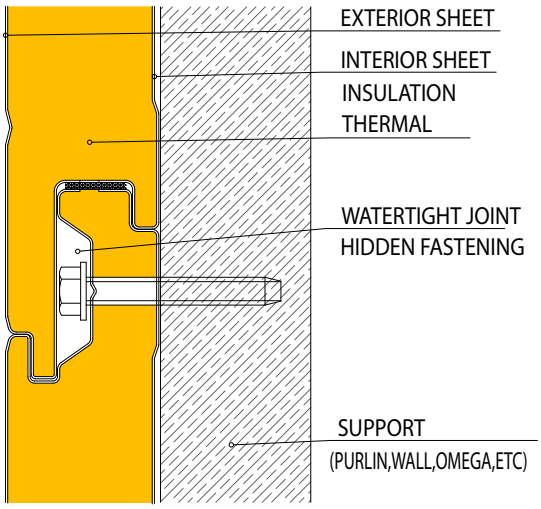
CONSTRUCTION DETAILS

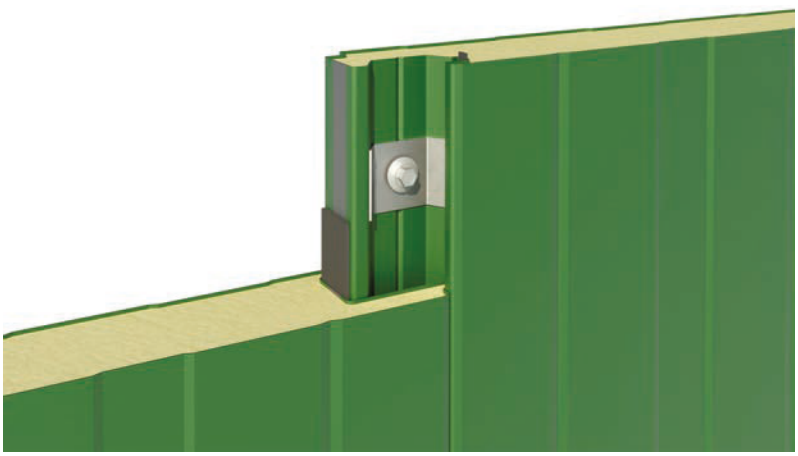
The panel can be mounted both vertically and horizontally by means of the tongue-and-groove joint, ensuring in both cases the continuity of the exterior wall, which guarantees optimal thermal and acoustic performance.

HORIZONTAL MOUNTING



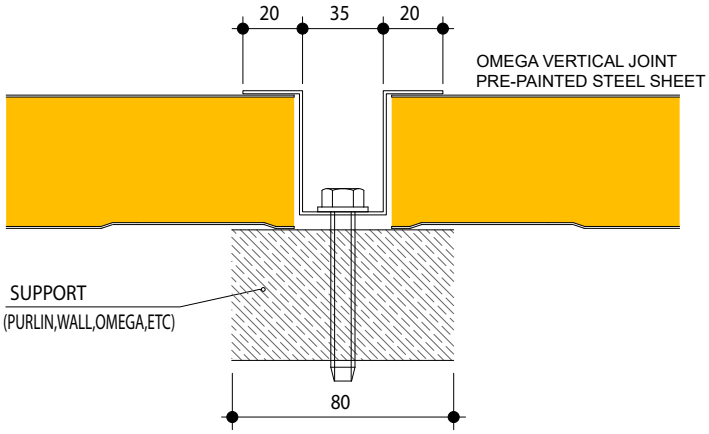
VERTICAL MOUNTING





CONSTRUCTION DETAILS

DETAIL OMEGA VERTICAL JOINT



RESISTANCE TABLES

FAÇADE PANEL MAXIMUM PRESSURE AND SUCTION LOAD VALUES (m/n) in kp/m²					
Panel thickness (mm)	d	50	60	80	100
Thickness of faces (mm)	e1/e2	0.5/0 5	0.5/0.5	0.5/0.5	0.5/0.5
SPAN (L) FOR 1 OPENING	1.5	541/541	587/690	587/933	587/933
	2.0	337/337	440/440	440/656	440/656
	2.5	221/221	295/295	352/450	352/450
	3.0	151/151	206/206	293/312	293/312
	3.5	106/106	147/147	229/229	229/229
	4.0	77/77	108/108	176/176	176/176
	4.5	57/57	81/81	137/137	137/137
SPAN (L) FOR 2 OPENINGS	1.5	214/581	203/699	185/933	185/933
	2.0	175/389	167/495	154/700	154/700
	2.5	148/277	142/337	132/450	132/450
	3.0	128/173	123/234	115/312	115/312
	3.5	113/105	109/141	130/228	130/228
	4.0	101/69	98/92	93/146	93/146
	4.5	76/49	89/64	84/100	84/100

Permissible service loads, uniformly distributed in kg/m2. The tables have been obtained based on the experimental results determined in the laboratory and the established calculation methodology, in accordance with the provisions of the UNE-EN 14509 standard. These results comply with the Ultimate Limit States prescribed in said standards and with a limitation of the Serviceability Limit State for deformations of L/200.