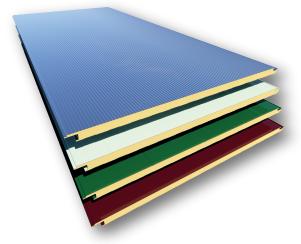
# **HF - FAÇADE PANEL**

## HF - FAÇADE PANEL



### EXTERIOR FACE

Pre-painted steel ≥0.5 mm thickness

#### INTERIOR FACE

Pre-painted steel ≥0.5 mm thickness

#### **USEFUL WIDTH**

1100 mm (43.31 in.)

## INSULATION

Polyisocyanurate High-density PIR

#### THICKNESSES mm (in.)

50/60/80/100 (1.97/2.36/3.15/3.94)

#### USE

Exterior façade with fire-resistant roof







# TECHNICAL SPECIFICATIONS

Panel for façade cladding comprised of 2 galvanized steel sheets and a high-density polyisocyanurate (PIR) pre-painted insulating foam core on the inside which guarantees maximum thermal insulation and behavior against fire. It can be installed both vertically and horizontally.

In both cases, the joint between panels is by means of a tongue-and-groove joint with a hidden fixing system by means of 2 screws of minimum  $\emptyset 5.5$  mm and a support clip. Its micro-profile surface finish.

## THERMAL INSULATION AND WEIGHT

RIBBED PANEL	HEAT TR	WEIGHT (0.5/0.5)		
Nominal thickness in mm (in.)	K in Kcal/ m².h. °C	K in W/m²⋅k	Kg/m²	
50 (1.97)	0.36	0.43	11.40	
60 (2.36)	0.30	0.36	11.80	
80 (3.15)	0.23	0.27	12.60	
100 (3.94)	0.18	0.21	13.40	

The weight includes the proportional part of the accessory elements.

# MAIN CHARACTERISTICS OF THE 50 mm (1.97 in.) - HF PANEL

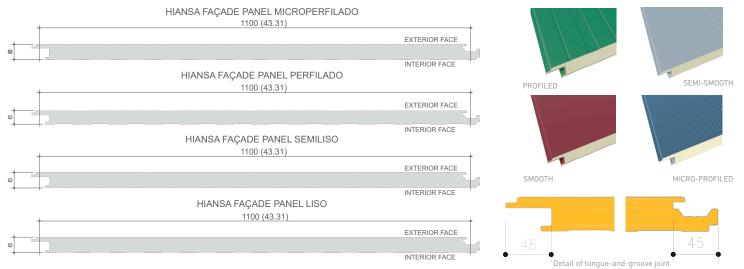
Nominal thickness	50 mm (1.97 in.) (±3 mm/0.12 in.)				
Average foam density	40 kg/m3 (±10%)				
Weight	11.40 kg/m²				
Volume	20 m <sup>2</sup> /m <sup>3</sup>				
Useful width	1100 mm (43.31 in.) (±3 mm/0.12 in.)				
Straightness	0 mm (±5 mm/0.20 in.)				
Contraction - Inflection lengthwise	0 mm (±5 mm/0.20 in.)				
Fire resistance PIR-UNE 13501-1	B-s1-d0				
FM - Approval Standard 4880 - Class 1	Fire Rating of Building Panels				
FM - Approval Standard 4881 - Class 1	Exterior Wall System				
FM - Wind load test	TROPICAL CYCLONE ±45 psf (±220 kg/m²)				
FM - Hail Load Test	CATEGORY SH (Severe Hail)				
FM - Height limitation	9.10 m				
FM - Minimum panel length	2.40 m				
FM - Finished trim	Pre-painted steel 150*150*1.2 mm (minimum)				
FM - Fastening	Screws w/150 mm in panel/trims (minimum)				
FM - Sealed	NOT necessary				
FM - Maximum separation of supports / esp.	2400 mm / 3 mm (94.49 in./0.12 in.)				

# FM GLOBAL - FM APPROVED

HIANSA PANEL has managed, through an extensive testing campaign, to obtain certification of its FAÇADE panel (in all its types of profiles) for vertical exterior cladding of buildings by the world famous insurance company FM GLOBAL, obtaining approval in accordance with the Class 4880 standards: CLASS 1 FIRE RATING OF BUILDING PANELS and Class 4881: CLASS 1 EXTERIOR WALL ASSEMBLIES.



## GEOMETRIC SPECIFICATIONS





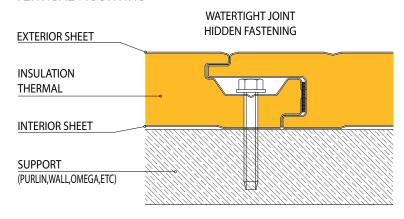
## STANDARDS APPLIED

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.				

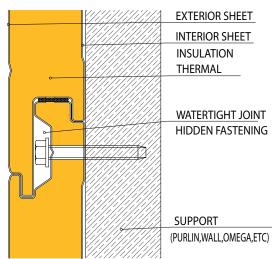
## CONSTRUCTION DETAILS

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. In the case of horizontal installation, express reference must be made at the moment of ordering the material in order to include the corresponding waterproof gasket.

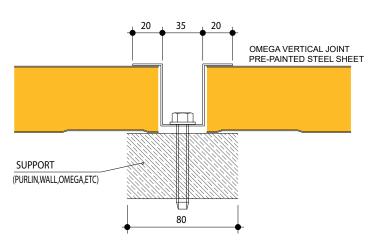
### VERTICAL MOUNTING



### HORIZONTAL MOUNTING



## DETAIL OMEGA VERTICAL JOINT





To ensure FM Approvals Standard Class 4881 for outdoor installation of buildings, the fastening system is required to be composed of 2 self-tapping type screws with FM certification, a minimum diameter of 5.5 mm, and with sufficient length depending on the thickness of the panel and support clip. The maximum separation of support elements of the panel will be 2400 mm and have a minimum thickness in steel of 3 mm with a minimum elastic limit of 250 MPa. In addition, if the assembly is performed indoors, it must be completed with trims of minimum dimensions 150\*150\*1.2 mm and with fastenings every 150 mm maximum. NO sealing of joints will be necessary for this purpose.



# **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	0.6/0.5	0.5/0.5	0.6/0.5	0.5/0.5	0.6/0.5	0.5/0.5	0.6/0.5		
SPAN (L) FOR 1 OPENING	1.5	541/541	550/550	587/690	587/698	587/933	587/933	587/933	587/933		
	2.0	337/337	345/345	440/440	440/450	440/656	440/668	440/656	440/668		
	2.5	221/221	229/229	295/295	305/305	352/450	352/449	352/450	352/449		
	3.0	151/151	158/158	206/206	214/214	293/312	293/312	293/312	293/312		
	3.5	106/106	112/112	147/147	154/154	229/229	249/229	229/229	249/229		
	4.0	77/77	81/81	108/108	114/114	176/176	188/176	176/176	188/176		
	4.5	57/57	60/60	81/81	85/85	137/137	144/139	137/137	144/139		
SPAN (L) FOR 2 OPENINGS	1.5	214/581	209/581	203/699	197/698	185/933	179/933	185/933	179/933		
	2.0	175/389	171/394	167/495	163/500	154/700	150/700	154/700	150/700		
	2.5	148/277	145/280	142/337	139/336	132/450	128/449	132/450	128/449		
	3.0	128/173	126/194	123/234	121/234	115/312	113/312	115/312	113/312		
	3.5	113/105	111/143	109/141	107/172	130/228	100/229	130/228	100/229		
	4.0	101/69	88/109	98/92	96/131	93/146	91/176	93/146	91/176		
	4.5	76/49	62/82	89/64	81/104	84/100	83/139	84/100	83/139		

Permissible service loads, uniformly distributed in kg/m². The tables have been obtained based on a calculation methodology established in accordance with the provisions of the EAE-2012 standard and the EC-3, considering only the upper steel sheet as a structural element. These results comply with the Ultimate Limit States of normal and tangential stresses prescribed in said standards and with a limitation of the Serviceability Limit State for deformations of L/200.