

CUB 3GR PANEL - ULTRA

ROOF PANEL WITH FLASHING



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

INSULATION
High-performance
polyurethane

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

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

USEFUL WIDTH
1000 mm (39.37 in.)

USE
Sloping roof surfaces

Ultra
Sustainability Insulation Fire Protection



TECHNICAL SPECIFICATIONS

Panel designed for sloping roofs with a minimum incline of 5-7% for entire panels without interruptions. Screw system with hidden fastening, composed of a 2 mm thick steel plate with high quality screw that guarantees the anchoring of the panels against the purlin. The solution is completed with a steel profile (flashing) available in the same colors and finishes as those of the panels. The design of this piece guarantees the insulation and absolute watertightness of the building's roof.

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/m ³ (± 2 kg/m ³)
Weight	11.40 kg/m ²
Volume	15.40 m ² /m ³
Useful width	1000 mm (39.37 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-s&-d0
Behavior against fire on the exterior	Broof (t1)
Fire resistance	N.A.

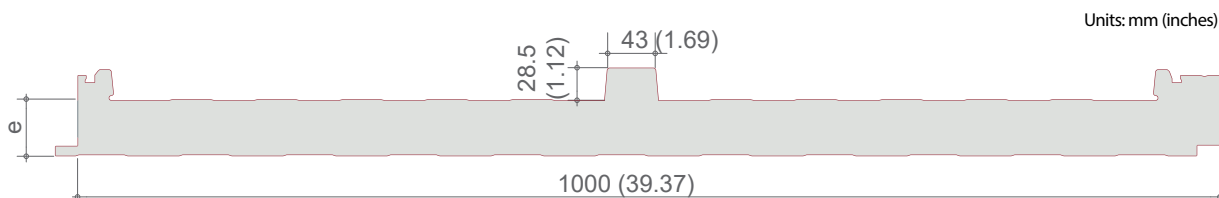
The new high-performance polyurethane-based insulation core offers better performance, improving heat transfer coefficients, fire performance as well as using a more sustainable and environmentally-friendly technology for its manufacture.

THERMAL INSULATION

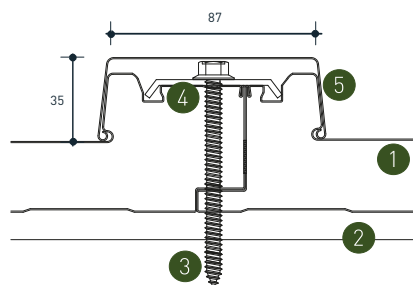
RIBBED PANEL Nominal thickness in mm (in.)	HEAT TRANSFER		WEIGHT (0.5/0.5) Kg/m ²
	K in Kcal/ m ² .h. °C	K in W/m ² .k	
50 (1.97)	0.31	0.36	11.40
60 (2.36)	0.26	0.30	11.80
80 (3.15)	0.19	0.23	12.60
100 (3.94)	0.15	0.18	13.40

The weight includes the proportionality of the accessory elements.

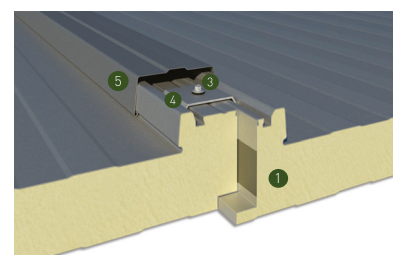
GEOMETRIC SPECIFICATIONS



Units: mm (inches)



- 1 HIANSA ROOF PANEL
- 2 ROOF PURLINS
- 3 HIANSA PANEL FIXING SCREW
- 4 HIANSA PANEL CLAMPING STAPLE
- 5 HIANSA PANEL FLASHING



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.

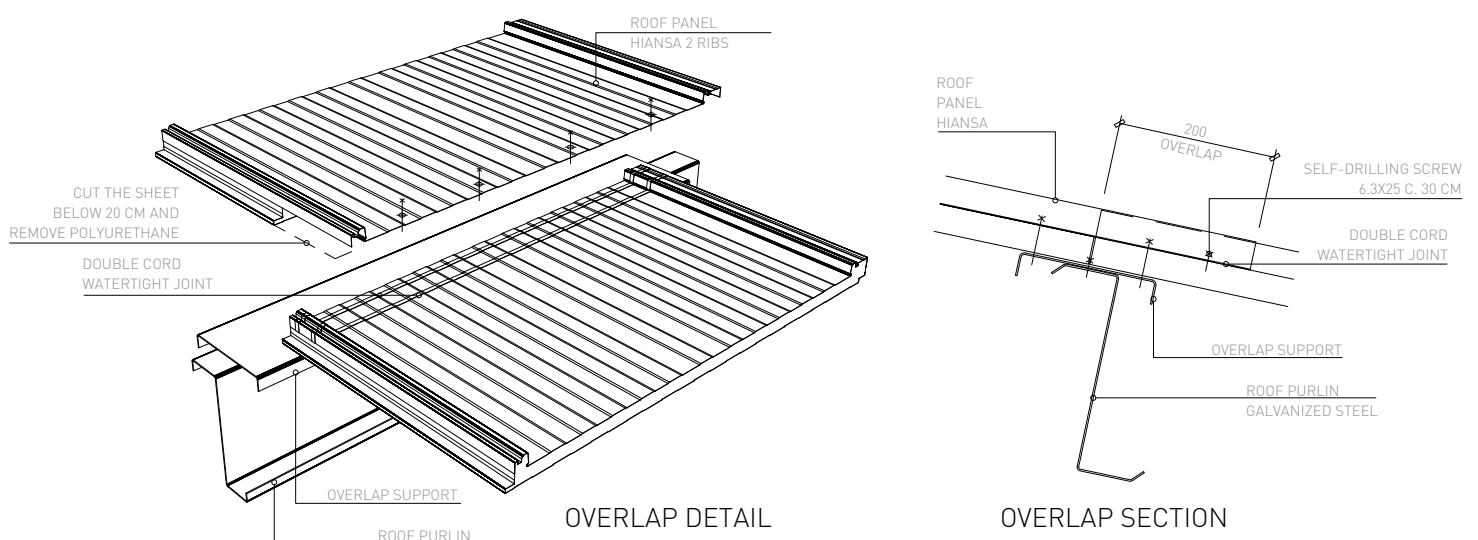
CONSTRUCTION DETAILS TRANSVERSE OVERLAP 2GR/3GR

CONDITIONS OF THE ROOF FOR MAKING THE OVERLAP

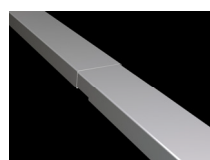
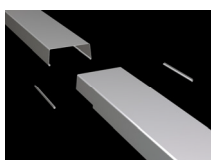
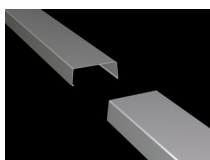
- The roof must have a slope greater than 10%.
- The purlin on which the transverse overlap of panels will be carried out shall have a minimum width of 100 mm.
- The minimum length of the overlap will be 200 mm.
- There must be a minimum offset of 50 cm between overlapping panels and overlapping flashing.

Transverse overlap between roof panels with flashing (designed for waters of considerable length, where the maximum panel size is insufficient).

The roof insulation panels are created with an efficient overlap system (length 200 mm) from the same manufacturing line on request. The overlap between two consecutive panels thus becomes a safe and simple operation since the product undergoes quality control in the same factory.



To resolve the overlap between the flashings of the panel, proceed as indicated in the following figures, taking into account to never perform the panel overlap at the same point as the flashing overlap.



RESISTANCE TABLES

ROOF PANEL 3 RIBS						
MAXIMUM PRESSURE AND SUCTION LOAD VALUES (m/n) in kp/m ²						
Panel thickness (mm)	d	50	60	80	100	120
Thickness of faces (mm)	e1/e2	0.5/0.5	0.5/0.5	0.5/0.5	0.5/0.5	0.5/0.5
SPAN (L) FOR 1 OPENING	1.5	280/283	279/283	278/282	278/282	278/282
	2.0	206/210	206/209	205/209	205/209	205/209
	2.5	162/166	162/165	161/165	161/165	161/165
	3.0	133/136	132/136	131/135	131/135	131/135
	3.5	112/115	111/115	110/114	110/114	110/114
	4.0	96/100	96/99	95/99	95/99	95/99
	4.5	84/88	83/87	82/86	82/86	82/86
SPAN (L) FOR 2 OPENINGS	1.5	280/283	279/283	278/282	278/282	278/282
	2.0	206/210	206/209	205/209	205/209	205/209
	2.5	162/166	162/165	161/165	161/165	161/165
	3.0	133/136	132/136	131/135	131/135	131/135
	3.5	112/115	111/115	110/114	110/114	110/114
	4.0	96/99	96/99	95/99	95/99	95/99
	4.5	70/70	83/87	82/86	82/86	82/86

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.