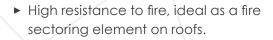
HI-QuadCore 2.0 XT DUAL



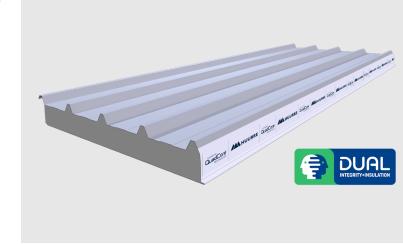
Insulation panel for roofing with certified fire resistance

QuadCore TECHNOLOGY



- ► High thermal efficiency. The QuadCore 2.0 insulation core has a high thermal performance, with an old thermal conductivity of just 0.019 W/mK.
- ► Panel with quick-assembly longitudinal overlapping joint design ensures a high level of watertightness.
- ▶ It does not absorb water, maintaining its performance throughout its useful life, and is not affected by biological agents.







HI-QuadCore 2.0 XT DUAL

High-performance insulation panel



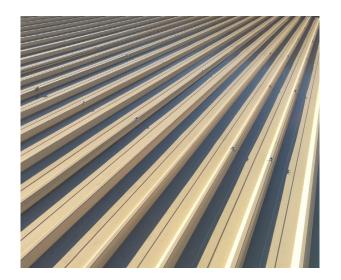
Description and applications

Sandwich panel for roofs with QuadCore 2.0 rigid insulating core and external faces of structural steel profiled sheet.

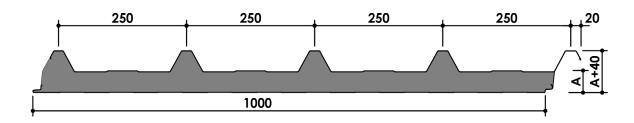
Lightweight enclosure with high insulating power, its interlocking joints and overlapping of the top sheet guarantee a high watertightness of the enclosure.

Available in various steel thicknesses, coatings and colours.

Thermally efficient roofs, of high aesthetic value and quick execution for industrial, commercial, residential, agricultural and public buildings.



Dimensions, mass and thermal performance



Useful width	1,000 m	m				
Draduation langth	2.0 a 13	.5 m				
Production length	13.5 a 16.0 m (special transport)					
Declared thermal conductivity ¹	0.019 W/mK (in view of the ageing core)					
Insulation core thickness (A)	80	100	120	(mm)		
Mass ²	12.42	13.40	14.38	(kg/m²)		
Thermal transmittance ^{1,2}	0.23	0.18	0.15	(W/m ² K)		
Thermal resistance ²	4.43	5.49	6.54	(m ² K/W)		

NOTES: (1) Thermal transmittance determined according to UNE-EN 14509:2014, considering the effect of the ageing of the insulation core, (2) For 0.4/0.5 mm sheets (int/ext).



HI-QuadCore 2.0 XT DUAL Roof panel

High-performance insulation panel



The QuadCore® 2.0 core benefits



High thermal efficiency

The QuadCore 2.0 insulation core has a high thermal performance, with an aged thermal conductivity of only 0.019W/mK.



High fire protection

The QuadCore 2.0 core has an efficient fire performance, providing increased protection in case of fire.



High environmental sustainability

The use of Huurre's HI-QuadCore 2.0 range of panels reduces operational energy losses and reduces transport emissions to the environment.



High durability

As it does not absorb moisture, the performance of the panel does not diminish over time, providing high durability.

Reaction to fire

Reaction to fire classification

EUROCLASS B-s1,d0

B: Very limited contribution to the fire and does not leads to flashover ¹

s1: Reduced or no smoke generation

d0: No inflamed droplets / particles

(1) Best possible classification for an organic type material.

According to standard EN 13501-1:2018.

Classified as Broof (†1, †2, †3) according to standard according to UNE-EN 13501-5:2019, which classifies construction products with regard to non-fire spread and behaviour in the event of an external fire.

Fire resistance El⁽¹⁾ (min)

Panel thickness (mm)

Placement of the panel	Product name	80	100	120
Roof	HI-QuadCore 2.0 XT DUAL REI 30 (1)	⊘	-	-
Roof	HI-QuadCore 2.0 XT DUAL REI 45 (2)	-	Ø	-
Roof	HI-QuadCore 2.0 XT DUAL REI 60 (1)	-	-	⊘

⁽¹⁾ According to EN 13501-2:2023. See installation conditions.





⁽²⁾ According to the thermal evaluation report.

HI-QuadCore 2.0 XT DUAL Roof panel



High-performance insulation panel

Mechanical resistance and usage tables

The following tables show the maximum permissible distances between supports (m) depending on the thickness of the panel (mm) and the uniformly distributed characteristic pressure or suction load (daN/m2). Tables calculated according to EN 14509:2013, both for SLS and ULS in wall position. Consult us for the case of suction loads.

TWO SUPPORTS

L((m)		Pressure loads (daN/m²)						
Δ	Δ		50	75	100	125	150	175	200
	ess	80	5.07	4.25	3.61	3.14	2.78	2.48	2.24
	ķ	100	5.78	4.98	4.25	3.71	3.29*	2.95*	2.67*
	Thịc	120	6.45	5.68	4.87*	4.27*	3.81*	3.43*	3.11*

 $1 \text{ daN/m}^2 \approx 1 \text{ kg/m}^2$

THREE SUPPORTS

L(m) L(m)			_		Pressure loads (daN/m²)					
Δ	Δ		Δ	50	75	100	125	150	175	200
		ess	80	4.31	3.54*	3.05*	2.71*	2.45*	2.25*	2.09*
		Ķ	100	4.55*	3.74*	3.22*	2.86*	2.58*	2.37*	2.19*
	i	Ĭ	120	4.75*	3.92*	3.38*	2.99*	2.70*	2.48*	2.29*

 $1 \text{ daN/m}^2 \approx 1 \text{ kg/m}^2$

NOTES: No minimum support width is taken into account.

(*) Support width > 50 mm.

Tables valid for light-coloured panels. Please consult us in the case of dark panels.

Minimum outdoor temperature considered -10°C.

TWO SUPPORTS

L((m)			Suction loads (daN/m²)					
Δ	Δ		50	75	100	125	150	175	200
	ess	80	5.84	4.66	4.01	3.59	3.28	3.05	2.87
	ķ	100	6.45	5.12	4.39	3.91	3.57	3.31	3.10
	Thịc	120	7.03	5.55	4.74	4.21	3.84	3.55	3.32

 $1 \text{ daN/m}^2 \approx 1 \text{ kg/m}^2$

THREE SUPPORTS

L(m) L(m)				Suction loads (daN/m²)						
Δ	Δ		Δ	50	75	100	125	150	175	200
		SSe	80	5.84	4.34	3.48	2.96	2.60	2.34	2.14
		ķ	100	6.45	4.76	3.78	3.19	2.79	2.50	2.28
		Thic	120	7.03	5.17	4.07	3.42	2.98	2.66	2.42

 $1 \text{ daN/m}^2 \approx 1 \text{ kg/m}^2$

NOTES: No minimum support width is taken into account.

(*) Support width > 50 mm.

Tables valid for light-coloured panels. Please consult us in the case of dark panels.

Minimum outdoor temperature considered -10 $^{\circ}$ C.





HI-QuadCore 2.0 XT DUAL Roof panel

High-performance insulation panel

Components

Insulating core

QuadCore 2.0 rigid foam with microcells, injected continuously, using an HCFC-free process.

Outer sides

Cold-formed sheet metal from structural steel coil type S220GD, certified quality.top side ribbed, bottom side slightly profiled.standard sheet thicknesses: standard 0.5/0.4mm (ext/int)

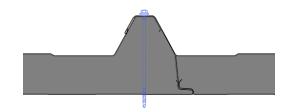
Implementing legislation

Hot-dip galvanised sheet metal according to EN 10346. Organic coatings according to EN 10169.

Coatings

The HI-QuadCore 2.0 XT DUAL panel can be manufactured with various coatings to ensure maximum durability, depending on the intended environment and conditions of use (see coatings datasheet).

Joint detail



Quality and manufacturing standards

HI-Quadcore 2.0 XT DUAL certified panel

 $\mathsf{C}\mathsf{E}$ CE marked in accordance with EN 14509:2013.



HI-QuadCore 2.0 XT DUAL Roof panel

High-performance insulation panel

Additional features

Resistance to biological agents

HUURRE panels, thanks to the closed structure of the insulating core, are resistant to attack by fungi, moulds and other deteriorating biological agents.

Water absorption

The insulating core does not absorb water, thus maintaining its thermal performance throughout its useful life. It can therefore be installed in adverse weather conditions.

Watertightness

The careful tongue and groove design of the panel's concealed joints guarantees absolute watertightness against rainwater. With regard to the watertightness requirement of the CTE, in sections 5.2.6, 5.2.7 and 5.2.8 of EN 14509:2013, it is determined that sandwich panels with metal faces are considered watertight, airtight and water vapourtight, these parameters being relevant only in the joints and fixings depending on the installation.

Sustainability

Both the steel and its metallic and organic coatings are free of SVHC ('Substances of Very High Concern'), in compliance with the requirements of the European REACH regulation.

The insulating core of the panel is injected using a process that does not release HCFCs.

Warranty

The HUURRE HI-QuadCore 2.0 XT DUAL panel is guaranteed for up to 25 years for the functional performance of the panel and up to 35 years for its coatings. Please consult conditions.

Guaranteed and certified quality

HUURRE's Integrated Quality Management System, in accordance with ISO 9001, is certified by AENOR and IQNet (certificate ER-0947/1998).

HUURRE's Environmental Management System, in accordance with ISO 14001, and the Occupational Health and Safety System, in accordance with ISO 45001, are certified by AENOR and IQNet (certificates GA2003/0091 and ESSST-0035/2010 respectively).

The Compliance Management System, in accordance with ISO 37301:2021, is certified by Advanced Certification Ltd.



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Huurre Ibérica S.A.U.

Carrer Serinyà 43 Polígon Industrial el Trust E17244 Cassà de la Selva Girona (Spain)

(+34) 972 463 085

(+34) 972 463 208

□ huurre@huurreiberica.com

