



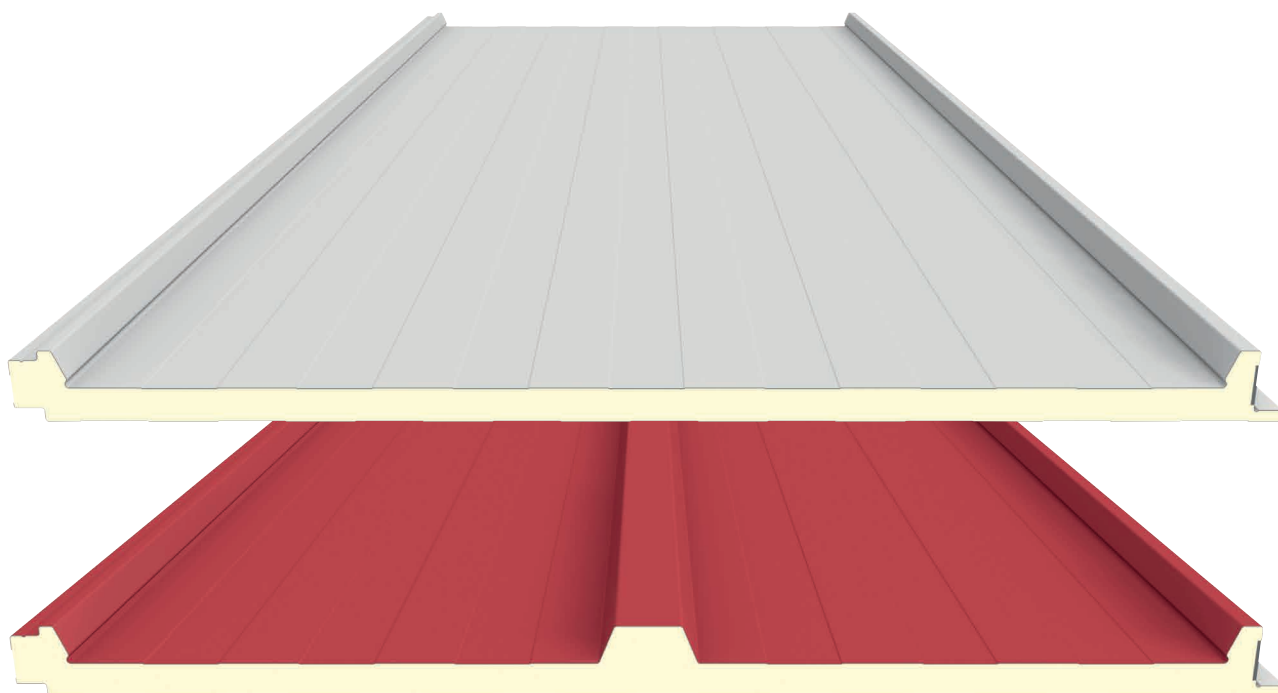
MASTER-C

Master-C roofing panels

MASTER-C panels are continuous production line prefabricated panels, and are composed of two faces of prepainted galvanized steel, bonded to a core of rigid polyurethane (PUR) or polyisocyanurate (PIR) foam, forming a sandwich type element with tongue and groove joints.

MASTER-C panels are specially designed for use in all types of roofs, both for industrial construction and for modular or commercial buildings.

Installation is very simple, and provides total watertightness (roof slopes of over 4%).



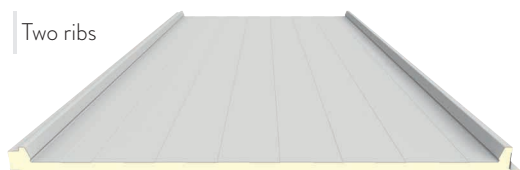
MASTER-C panels have a tongue and groove jointing system with a steel cover cap that hides and protects the fasteners and ensures the watertightness of the system. Regarding the external profile of the panel, there are two different designs, with a choice of two-rib panels and three-rib panels, both available in seven different thicknesses, with two different interior rib designs and a wide range of colours. Additionally, **MASTERPANEL** also offers the option of panels manufactured with PIR (polyisocyanurate) self-extinguishing foam with a B-s1, d0 certification under Euroclasses (UNE-EN 13501).



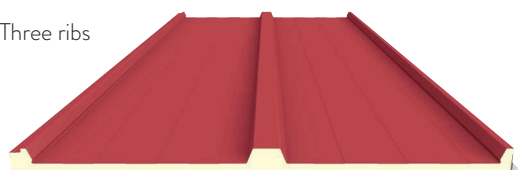
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TECHNICAL SPECIFICATIONS

Two ribs

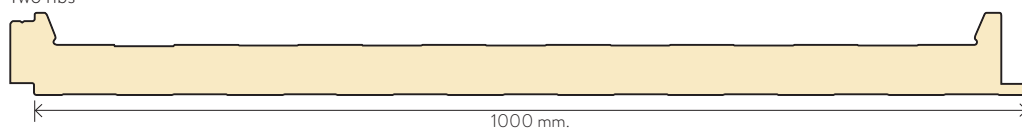


Three ribs

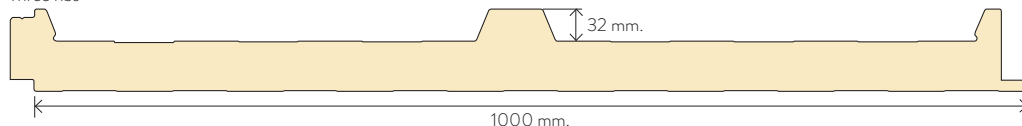


	Values
Panel thickness	30, 40, 50, 60, 80, 100, 120 mm.
Cover Width	1.000 mm.
Length	Up to 16,000 mm (max. recommended 13,000 mm)
Field of application	Roofing
Outer face thickness	0,4 / 0,5 / 0,6 / 0,7 mm
Inner face thickness	0,4 / 0,5 / 0,6 / 0,7 mm
Coatings (see section on Finishes)	Polyester 25 um PVDF 25um / 35um PU 55um (Granite® HDX/PUPA 55) Imitation wood (inner face) PVC 120um (foodsafes)
Outer ribbing	Two ribs / Three ribs
Inner ribbing	Standard / Flat
Core type	Polyurethane (PUR) Polyisocyanurate (PIR)
Core Density	40 kg/m ³ (+/- 10%)
Tensile strength	> 0.060 Mpa
Compressive strength	> 0.100 Mpa
Flexural strength	> 0.100 Mpa
Reaction to fire	Cs3d0 / Bs1d0

Two ribs

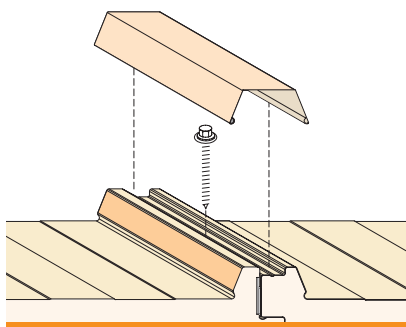


Three ribs



Joint detail.

Other fixing options: see p. 65



Panel thickness	Weight	Thermal transmittance (U-value)		Thermal resistance (R-value)	
mm	kg/m ²	w/m ² k	Kcal/m ² h °C	m ² k/w	Hr ft ² °F/BTU
30	9,61	0,67	0,58	1,50	8,49
40	10,00	0,51	0,44	1,95	11,06
50	10,39	0,41	0,36	2,42	13,74
60	10,78	0,35	0,30	2,90	16,45
80	11,56	0,26	0,22	3,85	21,84
100	12,34	0,21	0,18	4,80	27,20
120	13,12	0,17	0,15	5,74	32,55

Calculations according to EN14509, measuring the surface resistance according to horizontal flow and omitting the influence of the profiled faces. Losses in bolted connections must be calculated by the designer.

FUNCTIONS AND BENEFITS OF MASTER-C PANELS

- Efficient thermal insulation capacity
- High mechanical strength
- The fasteners are hidden and protected
- Exceptional dimensional stability
- Watertight against water vapor
- Resistant to aggressive environments
- A versatile material that allows any configuration
- Quick to install and easy to maintain (easy to clean)
- Easily removable and can be reused
- Made-to measure, avoids waste
- Made with recyclable materials

REACTION TO FIRE



C-s3 d0
N° 3406T18

B-s1 d0
N° 3066T16

intertek

ASTM E84 (MASTER-PIR) Class A

Flame Spread Index: **20**

Smoke developed index: **300**



Permissible overloads (kg/m2)

Panel thickness mm	(L) span distance in cm. Calculations made on 0.50 mm / 0.50 mm panel.											
	150	175	200	225	250	275	300	325	350	375	400	450
30	331	233	172	168	137							
40	409	297	225	213	176	149	127	109				
50	489	364	281	260	218	186	160	139	122	107		
60		432	339	309	261	224	194	170	150	133	119	96
80			458	410	350	304	266	235	209	187	168	138
100					442	386	340	302	271	243	220	182
120						470	416	371	334	301	274	228

Evenly distributed pressure overload for 2 spans (3 supports).

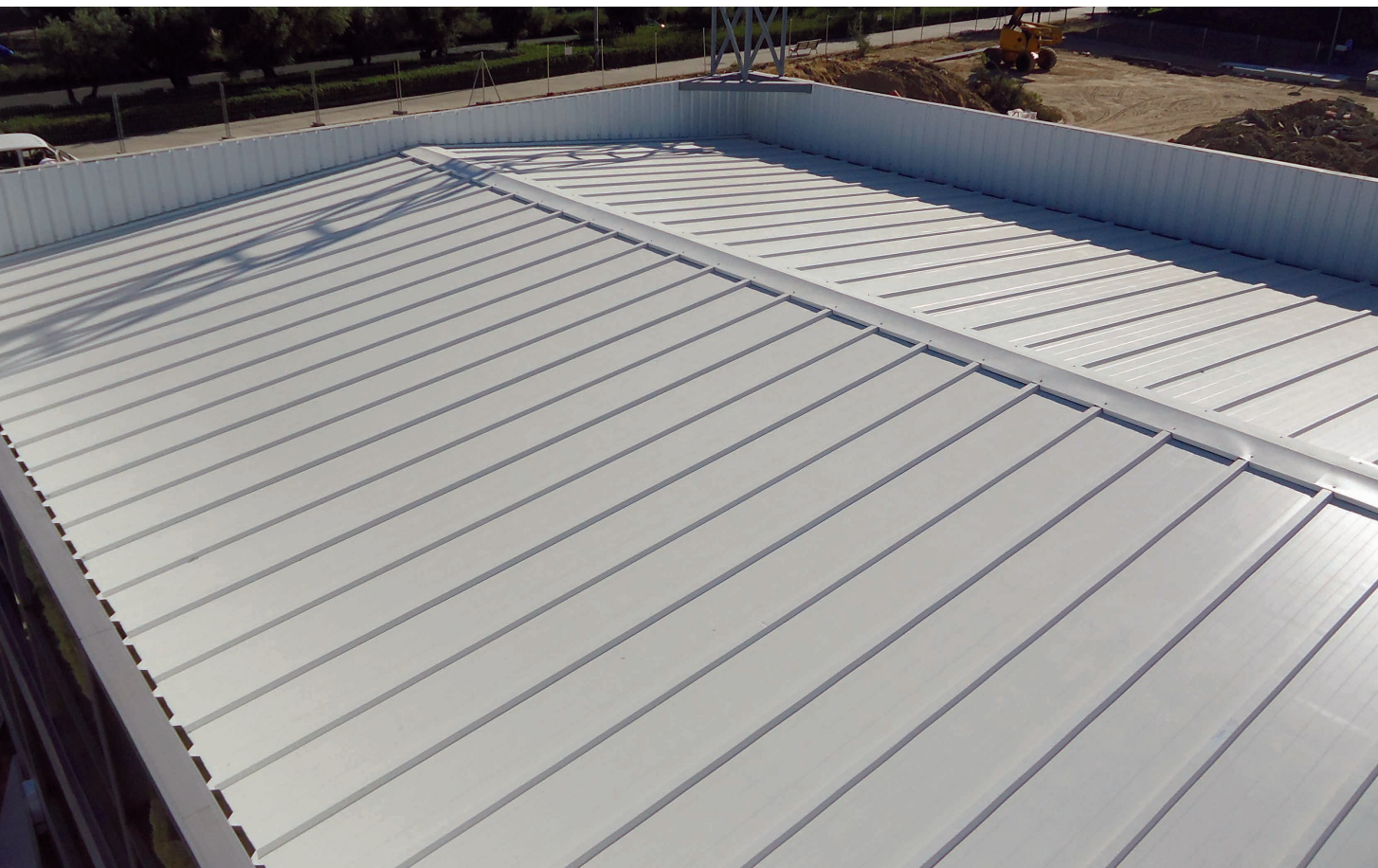
Calculated for a Service Limit State of deformations $L / 200$. According to EN14509.

Overloads not factored. The designer must carry out the calculations in accordance with the applicable regulations.

Admissible overloads valid for three-rib profile. For admissible overloads of the two-rib profile, consult our technical department.



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Polígono Industrial La Cárdena
Camino de Toledo, s/n • 45221 Esquivias / Toledo / Spain
Tfno.: +34 925 519 926
www.magon.es
masterpanel@magon.es

This document is not a safety manual.

The content and recommendations in the catalogue are informative and non-binding.

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General Sales Conditions available on our website www.magon.es



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