



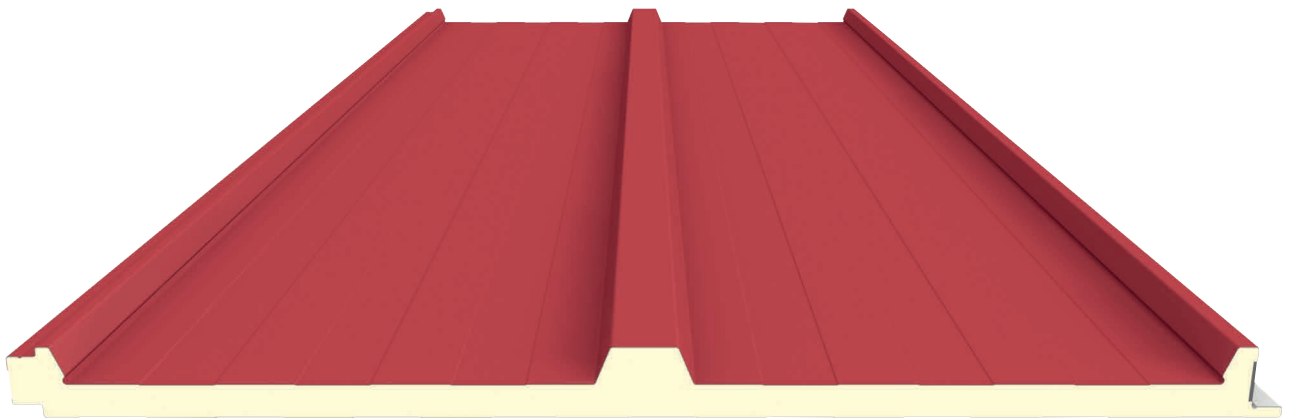
MASTER-C

Master-C roofing panels

MASTER-C panels are structural roof panels composed of steel skins laminated to a minimum 1.6 inch polyisocyanurate foam core (min 2.3 pcf density).

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 1/2 :12).



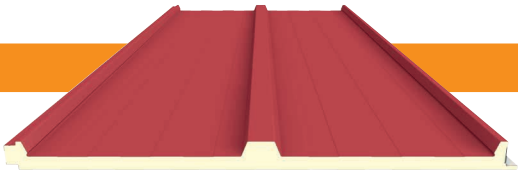
MASTER-C panels have a tongue and groove jointing system with a steel cover cap that hides and protects the fasteners and ensures the watertightness of the system.

External profile of the panel is a three-rib design, available in seven different thicknesses, with two different interior rib designs and a wide range of colours to meet customer needs.



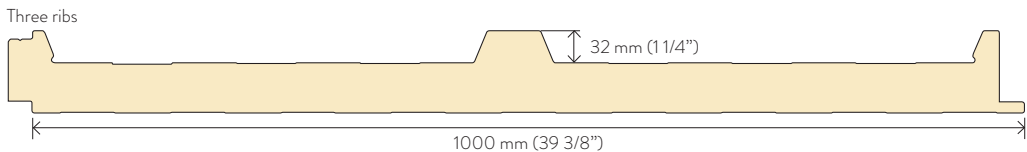
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TECHNICAL SPECIFICATIONS

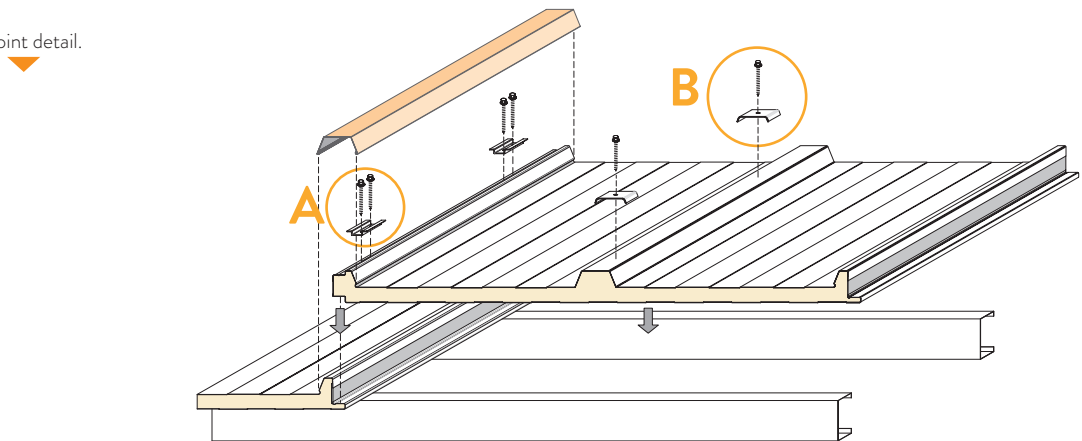


Three ribs

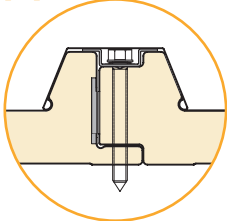
	Values
Panel thickness	40, 50, 60, 80, 100, 120 mm. 1 9/16, 1 31/32, 2 3/8, 3 5/32, 3 15/16, 4 23/32 inch.
Cover Width	1000 mm. (39 3/8")
Length	Up to 11.900 mm. (39 ft.)
Field of application	Roofing
Outer face thickness	mm 0.5 / 0.6 / 0.7
Inner face thickness	GAUGE 26 / 24 / 22
Exterior face	G90 galvanized or AZ50 aluminium-zinc, coated steel in 26 GA and above
Interior face:	G90 galvanized or AZ50 aluminium-zinc, coated steel in 26 GA and above
Coatings (see section on Finishes)	Polyester 25 um (1 mil)
	PVDF 25um / 35um (1 mil / 1.38 mils)
	PU 55um (Granite® HDX/SDP 50) (2.16 mils)
	Imitation wood (inner face)
	PVC 120um (4.8mil) (foodsafe)
Outer ribbing	Three ribs
Inner ribbing	Standard / Flat
Core type	Polyisocyanurate (PIR)
Core Density	40 kg/m³ (+/- 10%) (2.3 PCF)



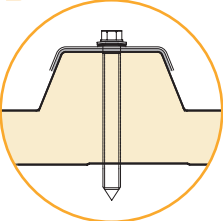
Joint detail.



A Seam Plate:



B Bearing Plate:



Panel Thickness		Panel weight	U-Value		R-Value
mm	inch		BTU/Hr ft² °F	Hr ft² °F/BTU	
40	1 9/16	2.23	0.090	11.06	
50	1 31/32	2.31	0.073	13.74	
60	2 3/8	2.40	0.061	16.45	
80	3 5/32	2.56	0.046	21.84	
100	3 15/16	2.72	0.037	27.20	
120	4 23/32	2.89	0.031	32.55	

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



ASTM E84 (MASTER-PIR) Class A

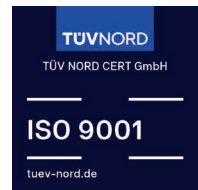
Flame Spread Index: **20**

Smoke developed index: **300**



C-s3 d0
N° 3406T18

B-s1 d0
N° 3066T16



Testing and approvals:

Master Panel roofing panels meet the most demanding requirements. We have large experience in producing insulated metal panels in our continuous production line and we have obtained the #FLapproval with reference #FL21699.

TEST	TEST METHOD	RESULTS
Fire	ASTM E 84	Flame spread index 20 Smoke developed index 300
Permeability	ASTM E 2140	No water leaks while maintaining continuously 6" head of water for 6 h
Strength	ASTM E 8	> 32 ksi steel
Wind Uplift	ASTM E 1592 FM4471	FM Windstorm Classification 1-270: Min 1.6" panel installed at 1 ft span on min. 16 ga purlins FM Windstorm Classification 1-75: Min 1.6" panel installed at 4 ft span on min. 16 ga purlins

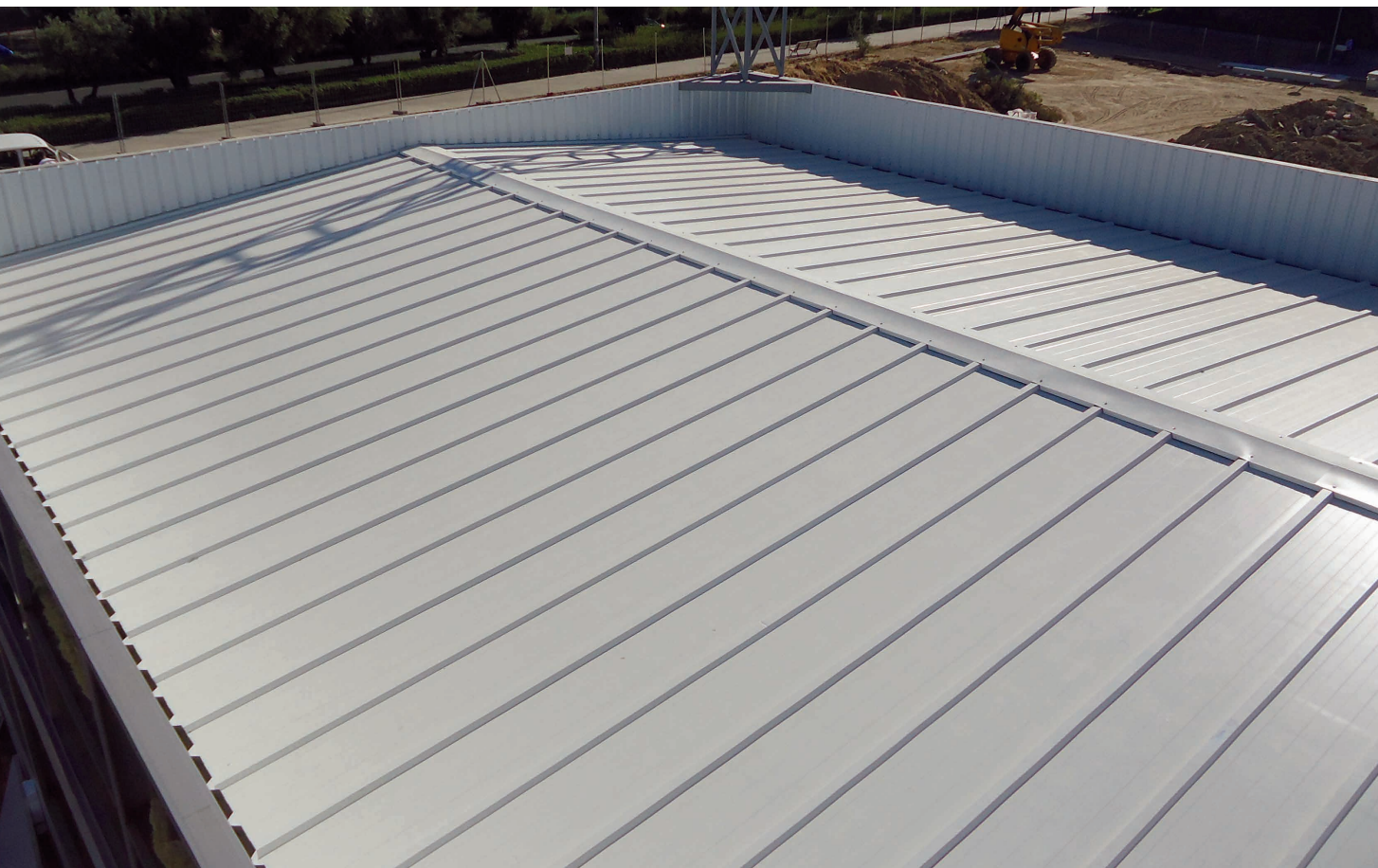
Allowable Inward and Outward Loads (psf). Minimum 2.44" thick 26-26 ga., Three Rib Profile

Panel Span (ft)	Span Condition		
	Single Span	Two Span	3 or more Spans
1	121.8	131.9	137.5
1.5	81.2	88.4	99.7
2	60.9	66.6	74.8
2.5	48.7	53.5	59.9
3	40.6	44.7	49.9
3.5	34.8	38.4	42.8
4	30.5	33.6	37.5

NOTES:

- Allowable inward and outward loads are based on panel an connection strength and deflection limit of L/240.
- Allowable loads are obtained from ASTM E1592 test an calculated with a factor of safety 2.0 for connection.
- Panels will be fastened along each panel seam with (2) #12-24 x 4-1/4" HWH fasteners with 1/2" bonded sealing washer installed through 2-3/8" X 1-9/16" x 16 ga. bearing plate prior to installing the 24 ga. steel cap.
- (1) #12-24 x 4-1/4" HWH fastener with 1/2" bonded sealing washer will be installed through 1-9/16" x 20 ga. bearing plate with sealing rubber along the intermediate rib of each panel at each purling.
- #12-24 x 1" HWH fasteners with 1/2" bonded sealing washers will be installed staggered 2.5 -ft o.c on either side of the seam cap.
- The structural capacity of the panel supports are not considered and must be examined independently.

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This document is not a safety manual.

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

MASTER PANEL, S.L. reserves the right to modify the content of this document without prior notice.

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



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