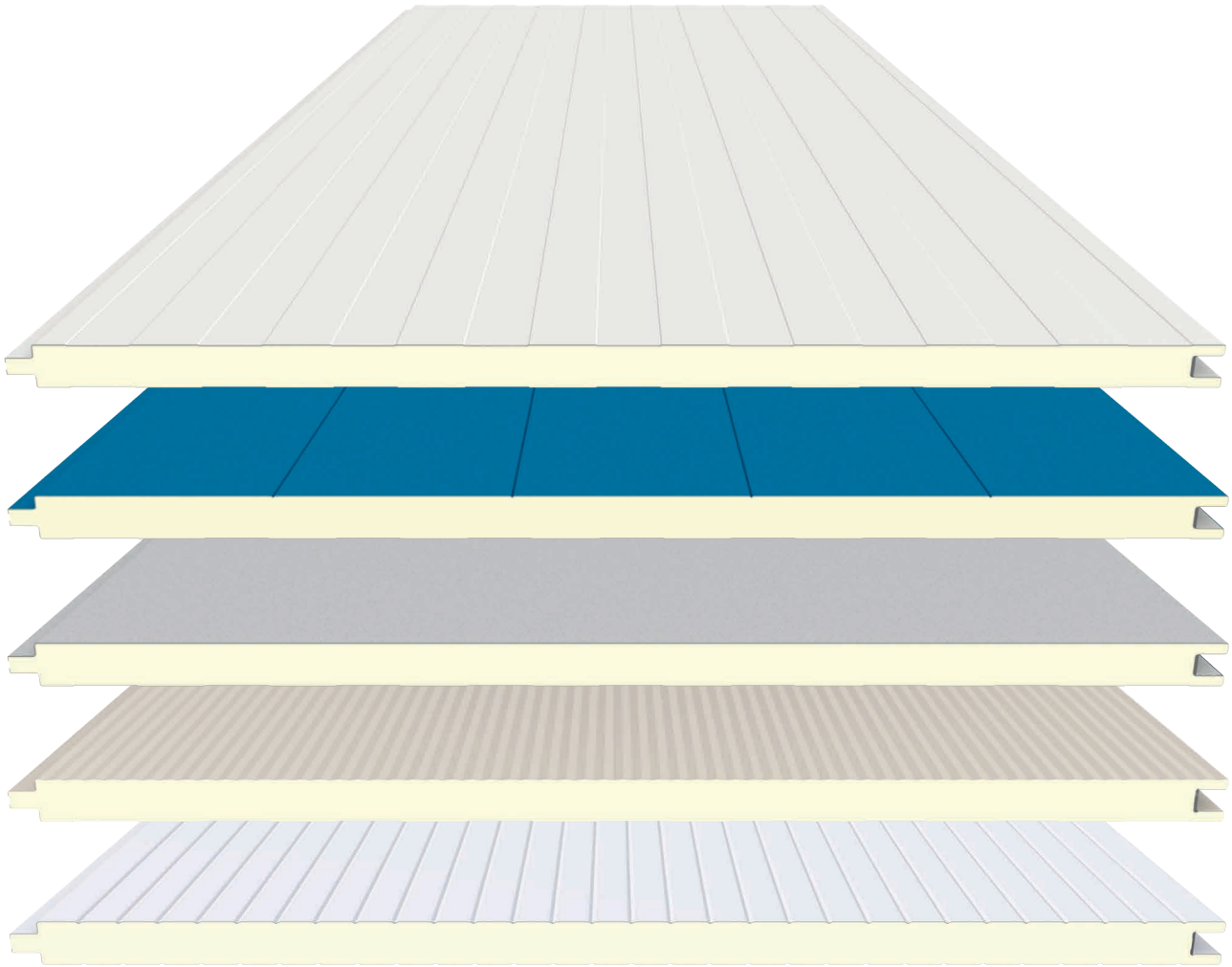
MASTER-MODUL

Master-Modul
modular construction panels

MASTER-MODUL 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-MODUL panels are specially designed for use in modular constructions, prefabricated housing, false ceilings and interior partition walls.



MASTERPANEL offers various different configurations according to the project they will be used in, it comes in three different thicknesses, five outer ribbing designs and three inner ribbing designs, as well as a wide range of available 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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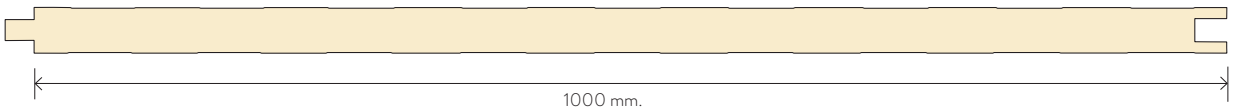
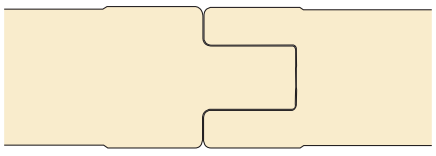
TECHNICAL SPECIFICATIONS

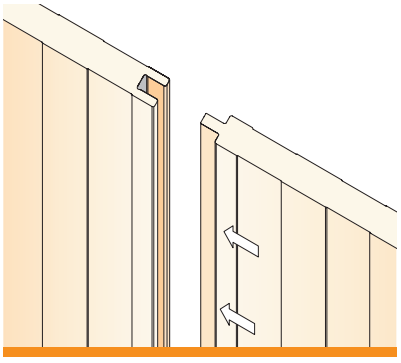
Standard | Lined | Flat | Micro-rib | Micro-lined

	Values
Panel thickness	35, 40, 50 mm.
Cover Width	1.000 mm.
Length	Up to 16,000 mm. (max. recommended 9,000 mm)
Field of application	Modular Construction
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 25um
	PVDF 25um / 35um
	PU 55um (Granite® HDX/PUPA 55)
	Imitation wood (inner face)
	PVC 120um (foodsafe)
Outer ribbing	Standard / Lined / Flat / Micro-rib / Micro-lined
Inner ribbing	Standard / Flat / Micro-lined
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



Joint detail.





Panel thickness	Weight	Thermal transmittance (U-value)		Thermal resistance (R-Value)	
mm	kg/m^2	w/m^2 k	Kcal/m^2 h ^{0}C	m^2 k/w	Hr ft^2 ^{0}F/BTU
35	8,96	0,66	0,56	1,53	8,65
40	9,16	0,57	0,49	1,76	9,96
50	9,55	0,45	0,38	2,24	12,72

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-MODUL** PANELS

- Efficient thermal insulation capacity
- High mechanical strength
- 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

AFITI LICOF

C-s3 d0
Nº 3406T18

B-s1 d0
Nº 3066T16

intertek

ASTM E84 (MASTER-PIR) Class A
Flame Spread Index: **20**
Smoke developed index: **300**

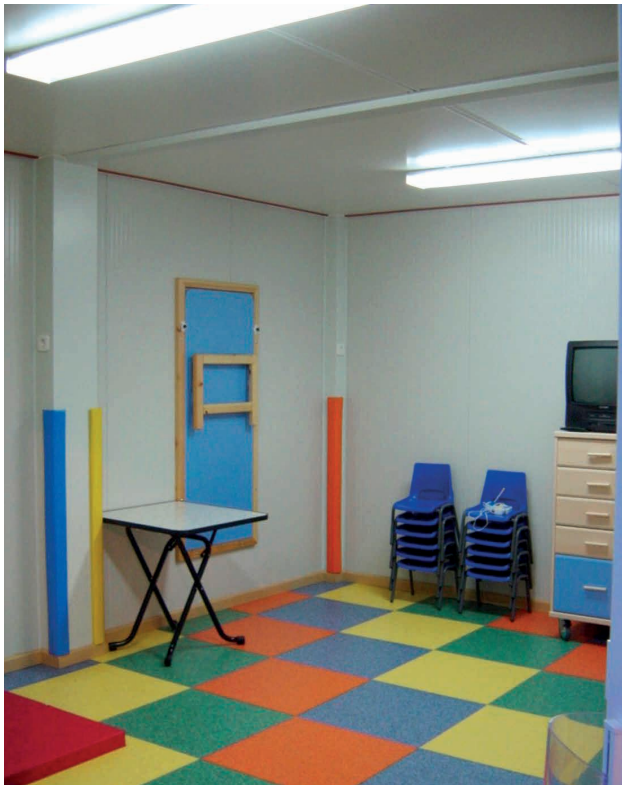
TÜV NORD CERT GmbH ISO 9001

CE

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
35	207	162	129	104	84	69	58	48			
40	245	193	155	126	103	85	71	60	51		
50	284	226	182	149	123	102	86	73	62	53	46

Evenly distributed pressure overload for 1 span (2 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.



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