LR | LR DUAL Mineral wool panels



Insulating panels for walls and ceilings



- Rigid mineral wool insulation core with high thermal performance (thermal conductivity of only 0.042 W/mK).
- Suitable for interior partition walls and ceilings.
- Structural steel sheets with flat or slighly profiled finish, with different longlasting coating options.
- Mineral wool lamellas arranged perpendicular to the faces of the panel, which improve the mechanical performance of the panel.
- ► Available in four different thicknesses.

CE







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Insulating panels for walls and ceilings



Description and applications

Sandwich panel for **walls and ceilings** with a **mineral wool core** and pre-lacquered galvanized steel faces, available in different coatings.

LR DUAL is specially designed to offer very good fire resistance and is ideal for fire compartmentation.

LR and **LR DUAL** panels have a certifed reaction to fire Euroclass A2-s1,d0.

LR DUAL panel has a certified fire resistance of up to 180 minutes (El 180) and integrity of up to 240 minutes in ≥100 mm-thick panels. Fire resistance of up to 90 minutes (El 90) and integrity of up to 120 minutes for ≥80 mm-thick panels (consult assembly conditions).



Dimensions, weight and thermal properties

†	- 1120 / 1150
7	
2	<u>}</u>

LR PANEL

Useful widht / Density	1,120 or 1,150 mm / 100 kg/m ³							
Manufacturing length	from 2.0 to 12.5 m							
Thermal conductivity (λ)	0,042 W/mK							
Available thicknesses (A)	60	80	100	125	150	(mm)		
Thermal transmittance ¹	0.68	0.51	0.41	0.33	0.28	(W/m²K)		
Self-weight ¹	14.43	16.43	18.43	20.93	23.43	(kg/m²)		

LR DUAL PANEL

Useful widht / Density	1,120 or 1,150 mm / 120 kg/m ³							
Manufacturing lenght	from 2.0 to 12.5 m							
Thermal conductivity (λ)	0.042 W/mK							
Available thicknesses (A)	80	100	125	150	(mm)			
Thermal transmittance ¹	0.51	0.41	0.33	0.28	(W/m²K)			
Self-weight ¹	18.01	20.41	23.41	26.41	(kg/m²)			

(1) Calculated for 1,150mm width and 0.5/0.5 mm steel sheet thickness (int/ext).



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Components

Insulating core

Mineral wool lamellas arranged perpendicular to the faces of the panel, which improve the mechanical performance of the panel.

Steel sheeting

Cold-profiled S220GD structural hot-galvanised steel sheet with certified quality.

It is essential to respect the outer face (transparent film) and the inner side (blue film).

Applicable standards

Hot galvanized sheet according to EN 10346. Organic coatings according to EN 10169.

Tongue and groove joint

Double tongue and groove joint that allows the placement of a silicone sealing on each face in the specific flange.



This panel is not indicated for use as a freezing chamber (T>0°C) without adequate treatment of the joints during assembly. In the case of the panel in the ceiling position, it may be damaged when walking over it during the installation or maintenance process. Therefore, the applied loads must be in accordance with what is indicated in the technical sheet and it is also advisable to place protection in the passage area to avoid delaminations.

	Standard manufacturing	Other options
Colours	Pirineo white 1006 RAL 9010	Consult
Profiled	Standard profiled Flat	-
Thicknesses	0.5 mm	0.6 mm (on demand)

Reaction to fire

Finishing options

Fire reaction classification

EUROCLASS A2-s1,d0

A2: Does not significantly contribution to the fire

- s1: Little or no smoke production
- d0: No flaming droplets / particles

Reaction to fire according to UNE-EN 13501-1:2019. Tested under the names of "PANEL LR" and "PANEL LR DUAL"

Certified⁽¹⁾ fire resistance (min)

Panel position	Product name	80	100	125	150
Suspended ceiling	LR DUAL EI 90 TS	-	\oslash	\oslash	\oslash
	LR DUAL EI 90 PV (2,3)	\oslash	\oslash	\bigotimes	\bigotimes
Wall (vertical)	LR DUAL EI 120 PV ^(2,4)	-	\oslash	\bigotimes	\bigotimes
	LR DUAL EI 180 PV (5)	-	\oslash	\bigotimes	\oslash
Wall (horizontal)	LR DUAL EI 120 PH	-	\oslash	\bigotimes	\oslash

(1) According to EN 13501-2:2016 and in the case of a suspended ceiling: EN 13501-2:2019.

(2) With extension of the application of results in accordance with the EXAP EN 15254-5:2020 standard.

(3) Tested under the name "LR 80 Dual Panel (El 90)"

(4) Tested under the name "LR 100 Dual Panel (EI120)"

(5) Tested under the name "LR 100 Dual Panel (EI180)"



LR | LR DUAL Mineral wool panels

Insulating panels for walls and ceilings



Available coatings

Table of coatings choice to guarantee the maximum durability of the panel, considering the classification of CPI1 and RC1 suitable for healthy environments, and CPI5 and RC5 suitable for very aggressive environments.

	Outo	Outdoor environment									Indoor environment			
		Urban/ Industrial		Marine			Resistan	Resistance		Non-agressive environments				
	Rural without pollution	Moderate	Severe	Between 3 and 20 km	< 3 km (l)	Mixed	Outdoor corrosion category	N	Low humidity	Medium humidity	Aggressive a or very humic environments	Resistance Indoor corrosio category		
Polyester 25 µ	\oslash	\oslash	()	0	\otimes	⊗	()	()	\oslash	\oslash	Ai3 ²	CPI2		
ΡΕΤ 50 μ	۲	\otimes	\otimes	8	\otimes	\otimes	NA	NA	\odot	\oslash	Ai5	CPI5		

Suitable coating Suitable coating () Check with HUURRE IBÉRICA (1) Please contact us for distances < 300 m. (2) Check conditions. (NA) Non applicable. Consult with our Technical Department for other coatings.

Mechanical resistance and usage tables for LR | LR DUAL panels

The following tables indicate the **maximum distance between supports L (m)** according to the panel thickness (mm) and the evenly distributed loads at pressure (daN/m²).

		(Charg	es (do	nN/m²)		Charges (daN/m²)					
SULLOWIS	Thickness	60	80	100	120	150	3011 0 K13	Thickness	60	80	100	120	150
	60 mm	3.5	2.7	2.1	1.8	1.4	L (m)	60 mm	3.8	3.0	2.4	2.0	1.6
L (m)	80 mm	4.1	3.5	3.2	2.6	2.1	L (m)	80 mm	4.9	4.2	3.8	3.4	3.1
	100 mm	4.6	4.0	3.5	3.2	2.6	7	100 mm	5.4	4.7	4.2	3.8	3.4
	150 mm	5.6	4.9	4.3	4.0	3.5		150 mm	6.2	5.4	4.8	4.4	3.9

The values indicated refer to uniformly distributed downward loads that guarantee a deflection \leq L / 200 and a safety factor of 2.5 in relation to the ultimate load. Calculated for a width of 1,150mm.

Manufacturing quality and standards

LR and LR DUAL panel certifications



CE marking according to EN 14509:2013 standard.

Avis Technique d'Application CSTB - 2.3/16-1769_V2 under the name "Panel LR".

Huurre Ibérica S.A.U.

Sustainability

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



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