

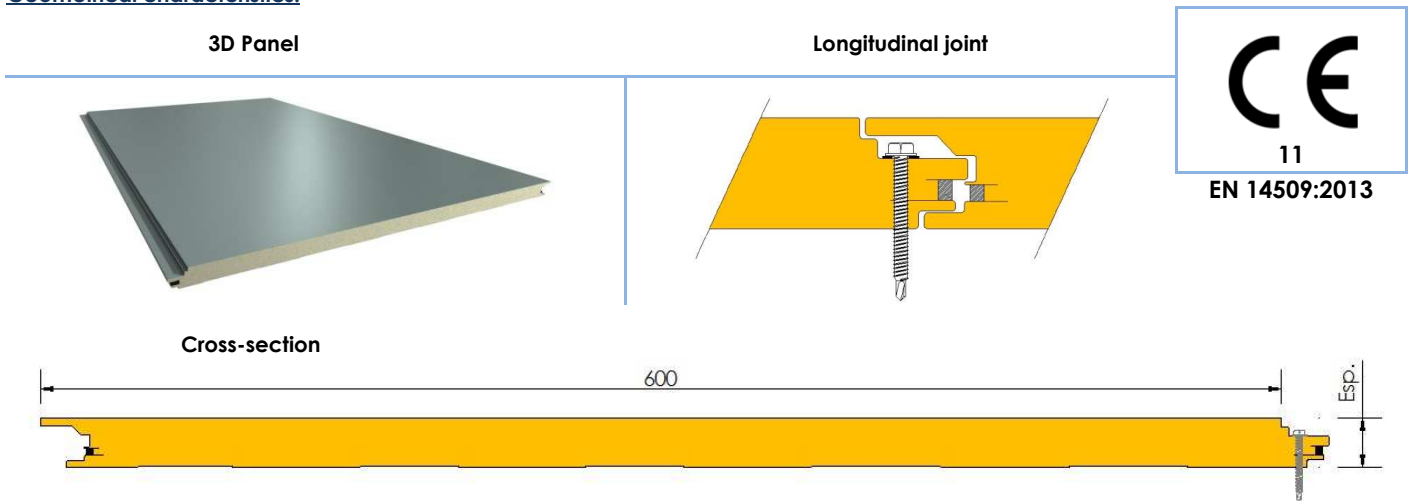
Scope: Self-supporting double skin metal faced insulating polyurethane (PUR) sandwich panel, intended for discontinuous laying in external walls and wall cladding.

Skin metal faces properties (Steel):

Characteristic	Standard ref.
Dimensional tolerance	EN 10143
Steel	EN 10346
Organic coating	EN 10169

Physical characteristics					
Weight (kg/m ²) Ext/Int Thickness: 0,75/0,50 mm	Panel thickness (mm)				
	40	50	60	70	80
Cover width: 600 mm	13,20	13,59	13,98	14,37	14,76

Geometrical characteristics:



Production characteristics (mm):

Thickness range		Total width	Cover width	External thickness		Internal thickness		Minimum length		Recommended maximum length
Max.	Min.			Max.	Min.	Max.	Min.	Production	Cut	
80	40	640	600	0,75	0,70	0,60	0,50	3.000	100	8.000 ⁽¹⁾

⁽¹⁾ Maximum production length: 14.400 mm
 Hoisting facilities during the off-loading and installation, depending on the panel length, must be pre-established.

Declared performances:

Essential characteristic	Standard	Unit	Performance	Comments
Tensile strength perpendicular to faces	EN 1607	Mpa	0,12	
Shear strength	EN 14509	Mpa	0,19	
Shear strength after long-term loading	EN 14509	Mpa	PND	
Shear modulus (core)	EN 14509	Mpa	4,18	
Compressive strength (core)	EN 826	Mpa	0,21	
External fire performance	ENV 1187	-	NPD	
Reaction to fire	EN 13501 - 1	-	B-s2,d0	
Fire resistance	-	-	NPD	
Water permeability	EN 12865	-	Class C	Low requirement applications. Watertight up to 300 Pa
Air permeability (+ / -)	EN 12114	m ³ /h*m ²	(0,42 / 0,47)	With a pressure difference of 50 Pa between the in/outside assembly
Water vapour permeability	EN 14509	Mpa	Pass	
Airborne sound insulation	EN ISO 717 -1	dB	25 (-1;-1)	
Sound absorption	-	-	NPD	
Durability (DUR 1)	EN1607	-	Pass	Very light colours: Reflectivity 75-90
Nominal density	-	Kg/m ³	50	
Dimensional tolerances	EN 14509	-	-	According to table 4

Thermal transmittance:

Thickness (mm)	40	50	60	70	80
U (W/m ² *K)	0,77	0,60	0,53	0,43	0,39

Permissible span:
- Single span:

		Positive loads (daN/m ²):							Negative loads ⁽⁵⁾ (daN/m ²):						
Maximum permissible span (m):		50	75	100	125	150	175	200	50	75	100	125	150	175	200
Thickness(mm):	Colour ⁽⁴⁾ :														
40	I- Very light	3,70	3,10	2,70	2,40	2,20	2,00	1,90	3,70	3,10	2,70	2,40	2,20	2,00	1,90
	II- Light	2,90	2,90	2,70	2,40	2,20	2,00	1,90	2,90	2,90	2,70	2,40	2,20	2,00	1,90
	III- Dark	2,10	2,10	2,10	2,10	2,10	2,00	1,90	2,10	2,10	2,10	2,10	2,10	2,00	1,90
50	I- Very light	4,30	3,60	3,20	2,90	2,60	2,40	2,30	4,30	3,60	3,20	2,90	2,60	2,40	2,30
	II- Light	3,60	3,60	3,20	2,90	2,60	2,40	2,30	3,60	3,60	3,20	2,90	2,60	2,40	2,30
	III- Dark	2,70	2,70	2,70	2,70	2,60	2,40	2,30	2,70	2,70	2,70	2,70	2,60	2,40	2,30
60 ⁽⁶⁾	I- Very light	4,50	4,20	3,70	3,30	3,00	2,80	2,60	4,50	4,20	3,70	3,30	3,00	2,80	2,60
	II- Light	4,40	4,20	3,70	3,30	3,00	2,80	2,60	4,40	4,20	3,70	3,30	3,00	2,80	2,60
	III- Dark	3,30	3,30	3,30	3,30	3,00	2,80	2,60	3,30	3,30	3,30	3,30	3,00	2,80	2,60
70/80	I- Very light	4,50	4,50	4,20	3,80	3,40	3,20	3,00	4,50	4,50	4,20	3,80	3,40	3,20	3,00
	II- Light	4,50	4,50	4,20	3,80	3,40	3,20	3,00	4,50	4,50	4,20	3,80	3,40	3,20	3,00
	III- Dark	3,80	3,80	3,80	3,80	3,40	3,20	3,00	3,80	3,80	3,80	3,80	3,40	3,20	3,00

- Double span:

		Positive loads (daN/m ²):							Negative loads ⁽⁵⁾ (daN/m ²):						
Maximum permissible span (m):		50	75	100	125	150	175	200	50	75	100	125	150	175	200
Thickness(mm):	Colour ⁽⁴⁾ :														
40	I-Very light	4,50	3,80	3,30	2,90	2,60	2,30	2,20	4,50	3,80	3,30	2,90	2,60	2,30	2,20
	II-Light	4,50	3,80	3,30	2,90	2,60	2,30	2,20	4,50	3,80	3,30	2,90	2,60	2,30	2,20
	III-Dark	4,50	3,80	3,30	2,90	2,60	2,30	2,20	4,50	3,80	3,30	2,90	2,60	2,30	2,20
50	I-Very light	4,50	4,50	3,90	3,50	3,10	2,80	2,60	4,50	4,50	3,90	3,50	3,10	2,80	2,60
	II-Light	4,50	4,50	3,90	3,50	3,10	2,80	2,60	4,50	4,50	3,90	3,50	3,10	2,80	2,60
	III-Dark	4,50	4,50	3,90	3,50	3,10	2,80	2,60	4,50	4,50	3,90	3,50	3,10	2,80	2,60
60 ⁽⁶⁾	I-Very light	4,50	4,50	4,50	4,00	3,60	3,30	3,00	4,50	4,50	4,50	4,00	3,60	3,30	3,00
	II-Light	4,50	4,50	4,50	4,00	3,60	3,30	3,00	4,50	4,50	4,50	4,00	3,60	3,30	3,00
	III-Dark	4,50	4,50	4,50	4,00	3,60	3,30	3,00	4,50	4,50	4,50	4,00	3,60	3,30	3,00
70/80	I-Very light	4,50	4,50	4,50	4,50	4,10	3,80	3,30	4,50	4,50	4,50	4,50	4,10	3,80	3,50
	II-Light	4,50	4,50	4,50	4,50	4,10	3,80	3,30	4,50	4,50	4,50	4,50	4,10	3,80	3,50
	III-Dark	4,50	4,50	4,50	4,50	4,10	3,80	3,30	4,50	4,50	4,20	3,90	3,70	3,60	3,40

- Triple span:

		Positive loads (daN/m ²):							Negative loads ⁽⁵⁾ (daN/m ²):						
Maximum permissible span (m):		50	75	100	125	150	175	200	50	75	100	125	150	175	200
Thickness(mm):	Colour ⁽⁴⁾ :														
40	I-Very light	4,40	3,60	3,20	2,80	2,50	2,30	2,10	4,40	3,60	3,20	2,80	2,50	2,30	2,10
	II-Light	4,40	3,60	3,20	2,80	2,50	2,30	2,10	4,40	3,60	3,20	2,80	2,50	2,30	2,10
	III-Dark	4,40	3,60	3,20	2,80	2,50	2,30	2,10	4,40	3,60	3,20	2,80	2,50	2,30	2,10
50	I-Very light	4,50	4,30	3,80	3,40	3,00	2,80	2,60	4,50	4,30	3,80	3,40	3,00	2,80	2,60
	II-Light	4,50	4,30	3,80	3,40	3,00	2,80	2,60	4,50	4,30	3,80	3,40	3,00	2,80	2,60
	III-Dark	4,50	4,30	3,80	3,40	3,00	2,80	2,60	4,50	4,30	3,80	3,40	3,00	2,80	2,60
60 ⁽⁶⁾	I-Very light	4,50	4,50	4,30	3,90	3,50	3,20	3,00	4,50	4,50	4,30	3,90	3,50	3,20	3,00
	II-Light	4,50	4,50	4,30	3,90	3,50	3,20	3,00	4,50	4,50	4,30	3,90	3,50	3,20	3,00
	III-Dark	4,50	4,50	4,30	3,90	3,50	3,20	3,00	4,50	4,50	4,30	3,90	3,50	3,20	3,00
70/80	I-Very light	4,50	4,50	4,50	4,40	4,00	3,70	3,40	4,50	4,50	4,50	4,40	4,00	3,70	3,40
	II-Light	4,50	4,50	4,50	4,40	4,00	3,70	3,40	4,50	4,50	4,50	4,40	4,00	3,70	3,40
	III-Dark	4,50	4,50	4,50	4,40	4,00	3,70	3,40	4,50	4,50	4,50	4,40	4,00	3,70	3,40

Notes:

Load factor for variable actions: 1.50

⁽⁴⁾ Colour groups:

 I: Very light colours (RG = 75-90 y T_{ext}= + 55 °C)

 II: Light colours (RG = 40-74 y T_{ext}= + 65 °C)

 III: Dark colours (RG = 8-39 y T_{ext}= + 80 °C)

⁽⁵⁾ Maximum permissible span of the panel. Depending on the fixing type they could be lower.

⁽⁶⁾ Not tested value (evaluated from the immediately lower one).

 For any further clarification, you can contact Technical Department (tecnico@europafil.com or by phone)

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