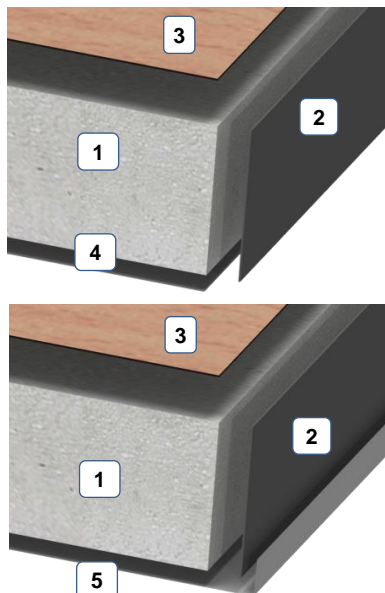


PSi 30

the panel consists of mineral support material inert monolayer original KNAUF INTEGRAL, density $\geq 1600 \text{ kg / m}^3$ with a nominal thickness of 30 mm, of calcium sulphate bound with fibers with high mechanical resistance. The material is certified to class A1 according to EN 13501-1. It also has several important certifications in the environmental field, such as IBR or VOC. The bottom side is coated, according to the needs, with a choice of materials that improve the characteristics. The panels are edged in plastic material antisqueak, a nominal thickness of 0.45 mm and a height equal to that of the panel. The nominal size of the panel depends on the caliber of the ceramic. The reduced dimensional tolerance causes the panel falls into Class 1 according to the reference standard EN 12825.



Composition:

1. Core:

modular monolayer panel of calcium sulphate, high density (1.600 kg / mc) constituted of gypsum and cellulose fibers totally free from asbestos and particles of wood. Obtained with processes that ensure high homogeneity of mechanical characteristics and dimensional stability of the product.

2. Edge Trim:

made of plastic material compound antisqueak, a nominal thickness of 0.45 mm and a height equal to that of the panel, totally free from PVC and self-extinguishing (class V0 UL94 standard).

3. Top finish:

HPL, PVC, linoleum, rubber, carpet, Flooring, Porcelain, Terracotta, marble, granites and reassembled, aluminum, steel sheet

4. Bottom finish:

Aluminum foil thickness. 0.05mm ensures excellent barrier against humidity and fire and electrical continuity to the floor
Plate phenolic laminate that increases the stiffness, the mechanical characteristics and constitutes a moisture barrier

5. Bottom finish:

Steel plate / pan of galvanized steel of thickness 0.5 / 0.9 mm which increases the stiffness, the mechanical characteristics and an excellent moisture barrier

Nominal characteristics

Dimension	600x600 mm
Thickness	30 mm
Panel weight	16,3 kg \pm 5%
Weight SQM	45,5 kg \pm 5%
Density	1.600 kg/mc \pm 5%

Physical characteristics

Dimensional deviations with resilient	classe 1 (UNI EN 12825/03)
Dimensional deviations with ceramic	classe 2 (UNI EN 12825/03)
Electrical resistance, top finish excluded	$1 \times 10^9 \text{ ohm max}$ (EN 1081)
Self-extinguishing edging	V0 (UL 94)
Walking sound level at 500 Hz	20 dB
Fire rating	REI 30 (UNI EN 13501-2/09)
Fire reaction rating	Bfl-S1 (UNI EN 13501-1/09)
Dimensional variation after 24h in water	0,77% (EN317/93)
Water absorption after immersion 24H	18% (ISO 769/72)

Mechanical characteristics (EN 12825)

Panels with resilient and parquet as top finishes

Bottom finish		Aluminium					Steel sheet / Steel tray							
		SAS	STS	STR	STO	STC	SAS	STS	STR	STO	STC			
Type of undestructure														
Concentrated load - centro of the side	kN	1,8	1,9	2,3	2,3	2,8	2,1	2,4	2,8	2,8	3,2			
Concentrated load - centre of the panel	kN	2,7	2,8	3,0	3,0	3,8	3,4	3,5	3,7	3,7	4,5			
Ultimate load	kN	7,0	7,3	9,8	10,0	11,5	9,8	12,0	13,0	13,8	15,0			
Distributed load	kN/m ²	15,0	15,2	17,5	17,6	18,0	17,0	17,5	20,5	21,0	21,5			
Class according to EN 12825		2/A	2/A	4/A	5/A	5/A	4/A	6/A	6/A	6/A	6/A			

Panels with laminate as top finishes

Bottom finish		Aluminium					Steel sheet / Steel tray							
		SAS	STS	STR	STO	STC	SAS	STS	STR	STO	STC			
Type of undestructure														
Concentrated load - centro of the side	kN	1,9	2,0	2,7	2,7	3,2	3,0	3,1	3,2	3,2	3,6			
Concentrated load - centre of the panel	kN	3,1	3,3	3,5	3,5	4,1	3,8	3,9	4,2	4,2	4,7			
Ultimate load	kN	7,8	9,5	10,2	10,3	12,1	11,6	13,5	14,1	14,2	16,2			
Distributed load	kN/m ²	17,0	17,5	20,0	20,5	21,0	19,0	19,5	22,0	22,0	23,0			
Class according to EN 12825		2/A	4/A	5/A	5/A	6/A	5/A	6/A	6/A	6/A	6/A			

Panels with porcelain tile, cotto tile, natural or recomposed marble and granite as top finishes

Bottom finish		Aluminium					Steel sheet / Steel tray							
		SAS	STS	STR	STO	STC	SAS	STS	STR	STO	STC			
Type of undestructure														
Concentrated load - centro of the side	kN	2,6	2,7	2,9	2,9	3,3	2,9	3,3	3,6	3,6	4,0			
Concentrated load - centre of the panel	kN	4,0	4,1	4,3	4,3	4,9	5,1	5,2	5,4	5,4	5,8			
Ultimate load	kN	9,0	10,1	10,6	10,8	14,0	13,1	14,0	15,1	15,4	18,0			
Distributed load	kN/m ²	19,0	19,5	21,0	21,0	21,5	20,0	21,0	24,0	24,0	26,0			
Class according to EN 12825		4/A	5/A	5/A	5/A	6/A	6/A	6/A	6/A	6/A	6/A			

The concentrated and distributed loads refer to a 2,5 mm deflection.

Deformations major than 1 mm may cause the ceramic to crack

*1 KG = 9,81 N