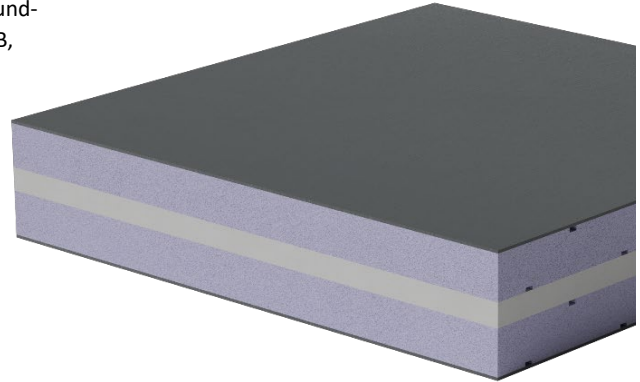


ACOUSTIC sandwich panel

Composition: HPL - XPS - DB - XPS - HPL

Acoustic sandwich panels are a solution dedicated to projects requiring high sound insulation performance. Thanks to the use of a special sound-absorbing core, the panel increases noise resistance up to 36 or 39 dB, depending on the core thickness (8 mm / 16 mm).



Sizes:

3050x1300 mm

Top layer – HPL:

high-pressure, heat-hardening, composite HPL laminate, thickness 1 mm, according to EN 438 standard, raw or covered by decorative foil (RENOLIT, CONTINENTAL, LX Hausys), density: $\geq 1350 \text{ [kg/m}^3\text{]}$ (ISO 1183), fire rating: Ds2d0 (EN 13501-1), non-corrosive and non-oxidative material.

Inner layer – XPS:

closed-cell structure extruded polystyrene (XPS) with grooves, without HBCD, density: $\geq 33 \text{ [kg/m}^3\text{]}$ (EN 1602), thermal conductivity (λ): 0,034 [W/mK] (EN 13164), water absorption: < 1% (EN 12087), fire rating: E (EN 13501-1).

Inner layer – DB:

material which increases acoustic isolation of the panel up to $R_w = 36 \text{ dB}$ and 39 dB , according to the dB thickness



Technical specification:

Thickness ¹		24	28	36	40	44	48
dB thickness	[mm]	8					
U value ²	[W/m ² K]	1,80	1,49	1,10	0,97	0,87	0,79
Sound insulation R _w ^{2,3}	[dB]	36					
Weight ²	[kg/m ²]	21,6	21,8	22	22,1	22,3	22,4
dB thickness	[mm]	-					
U value ²	[W/m ² K]						
Sound insulation R _w ^{2,3}	[dB]						
Weight ²	[kg/m ²]						
dB thickness	[mm]	16					
U value ²	[W/m ² K]	1,45	1,24	1,08	0,96		
Sound insulation R _w ^{2,3}	[dB]	39					
Weight ²	[kg/m ²]	36,5	36,6	36,7	36,9		

¹ Tolerance: ± 1,0 mm;

² Forecast value, determined by calculation method, based on average physico-mechanical properties of sandwich panel elements;

³ Tolerance: ± 3 dB.

Other sizes and thicknesses available on request. Other data regarding the product are available in the LB THERM Panel Using Sheet and in the General Terms and Conditions of Sales. Because of variety usage of our products, the company is not liable for physico-chemical parameters and properties in conditions different than standard, as well as interference in their original structure (painting, lacquering, coating by other materials etc.). This TDS is based on information that is believed to be reliable, but may be subject to change as new information become available. Modification and copying the contents of this document unless specifically authorized by LB THERM Sp. z o.o. are strictly prohibited.