Model SD CEL1



Mineral thermal and acoustic panel is made of spruce wood fibres bonded with white Portland cement.

The combination of these materials results in a highly decorative product, with a natural tone that integrates easily into any architectural project while providing excellent thermal and acoustic protection.

SD CEL 1 is a natural product and may show colour variations inherent to wood; where a uniform tone is required, the use of painted SD CEL 1 is recommended.

Applications: Natural suspended ceilings and wall linings, sound-absorbing, breathable and fire-resistant.

PEFC™ and FSC®. The wood used comes from sustainably managed forests.

Technical characteristics

→ Panel dimensions length*width (mm)
600*600 with thickness options (mm) 15, 25 and 35.
1200*60 with thickness options (mm) 25 and 35.
2000*60 with thickness options (mm) only 25.

→ Thermal resistance R EN 12667 – m^2K/W,
thickness 15 mm – 0.20, 25 mm – 0.35 and 35 mm – 0.50

→ Flexural strength EN 12089, method A -kPa,
thickness 15 mm – ≥ 3300, 25 mm – ≥ 2000 and 35 mm – ≥ 2150

→ Thermal transmittance – W/m^2K,
thickness 15 mm – 5.00, 25 mm – 2.86 and 35 mm – 2.22

→ Compressive strength at 10% deformation EN 826 – kPa,
thickness 15, 25 and 35mm – ≥ 200

→ Average weight – kg/m^2,
thickness 15 mm – 7, 25 mm – 12 and 35 mm – 15

Thermal conductivity λ EN 12667 – W/mK – 0.070
Reaction to fire EN 13501-1 – Euroclass – B-s1,d0
Water vapour diffusion resistance EN 13168
Maximum service temperature – °C – 200
Moisture absorption capacity – L_t/m^2 – 2–3.5
Specific heat capacity – kJ/kgK – 1.81
Linear thermal expansion coefficient – mm/mK – 0.01
Shear strength – N/mm^2 – 0.28
Bond strength to concrete – N/mm^2 – 0.05
Sound absorption performance – up to α_m = 0.87 between 125–4000 Hz
Thermal storage capacity – kJ/m^2K – 1190–900

SD CEL 1 offers acoustic control, thermal stability and a natural visual finish within a single, clearly defined element.

Its wood wool structure diffuses and absorbs sound, softening reflections and helping to stabilise background noise in everyday use.

In spaces such as restaurants, offices, educational centres or circulation areas, this translates into calmer atmospheres where speech feels more comfortable and less tiring.

The available formats and edge details make it easy to coordinate continuous ceilings and wall linings, or to integrate the panels into standard grid systems.

The visible texture of the wood fibres adds depth and materiality to the surface, working well both in minimalist schemes and in more expressive interiors.

Natural and coloured finishes allow SD CEL 1 to support neutral palettes, highlight specific zones or connect the acoustic treatment to the overall design concept.

The panel complies with EN 13168 and EN 13964, so its performance can be incorporated directly into project specifications and calculations.

The use of PEFC™ and FSC® certified timber reinforces the contribution of the system to sustainable, resource-conscious projects.

Where a higher level of sound absorption is required, the build-up can be extended by adopting the SD CEL 2 configuration, which combines SD CEL 1 with mineral wool while maintaining visual continuity.

This way, SD CEL 1 provides a solid baseline solution that can be easily complemented when projects demand enhanced acoustic performance.



