

Technical data sheet

Sorp 10[®]

The **Sorp 10[®]** sound absorber combines room acoustics and core part activation into one function. Reverberation time can be reduced with a stripe arrangement of **Sorp 10[®]** in the bare ceiling. At the same time the influence on the thermal efficiency of the activated ceiling is minimized.



Product

Description

Room acoustic sound absorber **Sorp 10[®]** for regulating the reverberation time also for thermally activated building components.

Area of application

Strip-shaped sound absorber integrated into the building ceilings, especially for use in thermally activated reinforced concrete components with simultaneous function as spacer to the lower reinforcement layer. To achieve a basic reverberation time in office and administration buildings, schools, stairwells, etc. with very little influence on the performance of the thermal activation of building components. Also suitable for increased mechanical stress, low ceiling heights, areas exposed to moisture and industrial areas under extreme requirements.

Properties/ Advantages

- Specially developed for use in thermally activated concrete ceilings
- Strip-shaped sound absorber integrated into the concrete slab
- With only 20% surface coverage, reverberation time optimisation is achieved at an early stage of construction
- Thermal efficiency is only influenced by 3% to 8%
- No loss of room height, no influence on architectural design
- Dual function as sound absorber and spacer
- Classification as building material class A1 - non-combustible without components of combustible building materials
- Due to the location of the absorbers in the concrete ceiling, conversions or renovations are not affected
- The absorber elements are effective throughout the entire life cycle of the building due to their integration in the building shell

Testing

Test report

Measurement of the sound absorption of **Sorp 10[®]** sound absorbers in the reverberation chamber according to DIN EN ISO 354 of the University of Applied Sciences, Stuttgart

Product details

Design	Combination of a fibre concrete U-rail and an absorber strip embedded in it
Packaging	height 35 mm = 175 pcs/pallet wrapped in a cardboard box height 57 mm = 125 pcs/pallet wrapped in a cardboard box
Storage	Protect from moisture and direct sunlight, do not stack pallets on top of each other

Physical properties

	height 35 mm	height 57 mm
Sorp 10®	Extruded fibre-reinforced concrete shell with Reapor core filling (sintered expanded glass granulate)	
Reapor core dimensions	width 50 mm height 30 mm length 1.200 mm	width 50 mm height 50 mm length 1.200 mm
Weight at standard length of 1.200 mm	3.18 kg	4.29 kg
Load bearing limit	> 5.000 N	
Standard installation distance	250 mm centre-to-centre distance	
Installation temperature	+ 5°C to +40°C (down to -8°C with reduced adhesion, to be tested in particular cases)	
Sound absorption	$\alpha_w = 0,40$ (core height 30 mm)	$\alpha_w = 0,45$ (core height 50 mm)
Fire protection	Building material class A1 / Fire resistance class R90/F90	

Treatment of substrate	The surface of the formwork facing should be dry and free from dirt and dust, a thin film of solvent-free form release agent is allowed.
-------------------------------	--

Processing information	Fixing method Adhesive (see installation instructions)
-------------------------------	--

Important notes	<p>To avoid coloured marks on the exposed concrete surfaces, the installation position of the Sorp 10® elements must be determined with the help of a guideline.</p> <p>The Sorp 10® acoustic spacer must be protected from moisture and permanent direct sunlight.</p> <p>When stripping the ceilings and supporting the stripped ceilings, damage to the absorbers must be avoided.</p> <p>Surface damage and contamination of up to 10 % have no measurable effect on the acoustic performance.</p> <p>A visually closed or jointless design of the underside of the ceiling can be achieved by applying an acoustically open plaster or acoustic spray paint.</p>
------------------------	---

Remark:	The usability of the products in the specific installation situation must be checked by the user. This data sheet is constantly updated. We therefore expressly reserve the right to make technical changes without prior notice to the customer. The currently valid version can be found on our homepage at: www.maxfrank.de . Our General Terms and Conditions of Sale apply in addition.
----------------	---