

## Technical data sheet

### Sorp10®-Integrated sound absorption system for thermally active concrete slabs

#### Properties:

- Developed specifically for application in thermally active concrete slabs
- Cast in sound absorbing strips
- A surface area coverage of only 20% ensures very high sound reduction performance from the construction phase onwards
- Minimal influence on thermal efficiency (3% to 8%)
- No loss of room height, no influence on architectural design
- Dual function as sound absorber and spacer
- Sorp10® does not add any fire risk to the building, corresponds to building material class A1
- Conversions, renovations are not affected due to position of absorbers within concrete slab

#### Application:

Cast in acoustic strip absorbers have been developed for use in thermally active concrete slabs with additional functionality as a spacer. To be used for sound absorption in offices, administration buildings, schools, staircases etc. with a very insignificant influence on the thermal efficiency. Suitable for mechanical exposure, low ceiling heights, moisture affected areas, industrial areas subject to extreme requirements (chemical plants, etc.)

#### 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.

#### Technical data:

Sorp10®	Extruded fibre-reinforced concrete shell with Reapor core filling (sintered expanded glass granulate)
Reapor core dimensions	Width: 50 mm, height: 30 or 50 mm, length: 1,200 mm
Weight at standard length of 1,200mm	Height: 36 mm = 3.18 kg Height: 57 mm = 4.75 kg
Load-bearing limit	> 5,000 N
Standard installation distances	250 mm centre-to-centre distance
Installation temperature type 1	-10°C to +50°C
Installation temperature type 2	+5°C to +40°C (up to -8°C with reduced adhesion, to be tested in particular cases)
Acoustic performance (reverberation room)	$\alpha_w = 0.40$ (core height 30 mm) / $\alpha_w = 0.45$ (M) (core height 50 mm)
Fire protection	Building material class A1 / fire resistance class R90

#### Processing information:

- Type 1 stapled fixing (see installation guide)  
 Type 2 fixing with adhesive foil (see installation guide)

#### Important notes:

Be sure to use suitable pigment powder when marking with a chalk line (watch out for colour marks on visible areas).  
 When removing the formwork panels from underneath the slab, be sure not to damage the absorbers.  
 To properly support the exposed slab and avoid potential damage to the absorbers care must be taken in the arrangement of the slab supports. (If required, damaged absorbers can be replaced.)  
 Damage to and contamination of the surface of the absorber by up to a maximum of 10% of their surface area is acceptable. This does not result in significant reductions in the relevant acoustic performance.  
 An optically jointless slab surface is possible with the application of an acoustically compatible render/ plaster. Sprayed paint coatings are also possible.

Recommendations with regard to product application given in the present technical data sheet for practical assistance of product users are based on our experience and our present scientific and practical body of knowledge. These recommendations, however, are given without engagement and do not establish a contractual relationship or subsidiary duties. These recommendations do not relieve users of their liability and of their own responsibility to test, whether our product is adequate for the intended purpose of application.