## **BSE 90**



# Self-contained fire protection unit

OWAlifetime collection





- OWAcoustic tile 1
- C profile 2
- Gypsum board strips 3
- 4 Metal cross brace
- 5 Brace fixing clip
  6 Wall angle no. 51/02, 2 mm thick
  7 Shadow wall angle no. 56/22, 2 mm thick
- 8 Mineral wool strips, height  $\geq$  120 mm, density  $\geq$  40 kg/m<sup>3</sup>, A1
- Silicate board strips, height  $\geq$  120 mm,  $\geq$  20 mm thick 9

### Important:

The adjacent walls and the soffit must comply with the fire resistance criteria of F 90 (DIN 4102). The same applies to the overlying, load-bearing structure (steel beam ceiling, roof, etc.) for F 90 - Requirements as above.



## Important points:

- OWA manufactures and supplies ceiling elements which can be simply installed in a logical method.
- Same element structure in case of fire attack from above and from below.
- Clear spanning elements in lengths up to 2500 mm, without direct suspension. Elements containing light fixtures do not require independent suspension from the soffit, an advantage when the ceiling void contains service supply installations.
- Easy access to the ceiling void and demountable at any point. As a result, the ideal conditions for fast maintenance and repair work on power lines laid there.
- Simple junctions at solid and partition walls.

## Technical data | mineral tiles

Dimensions	Width: 312.5 mm   lenghts: 2000 mm, 2500 mm	
Dessin	Cosmos/N	
Thickness	110 mm (OWAcoustic <sup>®</sup> premium)	
Weight	Approx. 35.0 kg/m <sup>2</sup>	
Reaction to fire	OWAcoustic® tile: Gypsum board strips: Mineral wool strips:	A2 in accordance with DIN 4102 A2-s1,d0 A1
Minimum suspension depth	Required lifting height when installed from wall to wall: > 580 mm <b>Important:</b> For installations in the ceiling void, the required lifting height should be calculated from the lower edge of the installation.	

Wall perimeter in case of fire from above:



## Fixing material for wall angles at solid walls:

Metal hammer-in anchors, metal anchors or screws with approval (e.g. ETA) for fire protection; depending on the existing subsurface. Fixing distance  $\leq$  150 mm.

Wall perimeter in case of fire from above and below:



Wall perimeter on gypsum board walls:



## Fixing wall angles to Gypsum board walls:

Using drywall screws 3.8 x 45 mm, fixing distance  $\leq$  140 mm. In each case, fix two screws in each supporting profile of the Gypsum board walls. At least 2/3 of the elements must rest on the available contact surface of the perimeter trim.

#### Installation example:



When installing, ensure that the elements are only lightly pushed together. During installation it must be checked that the elements can be dismantled.

clear spanning from wall to wall

## Cross section of the surface-mounted light fixture: $(\leq 6 \text{ kg})$

Special BSE 90 elements are produced by the manufacturer for the installation of surface-mounted light fixtures. They must be ordered separately in all cases.



Position under the BSE element. Affix onsite using 3 x self-tapping screws 4.8 x 50 mm inserted into the C profile at a distance of  $\leq$  600 mm between the screws.

#### System description:

#### BSE 90 – self-contained fire protection unit

#### **Quality requirements for mineral tiles:**

OWAcoustic mineral tiles firmly bound with a primer coat on both sides. The tile is free from asbestos. No formaldehyde is added in the manufacturing process of the mineral tiles. The mineral wool used for the manufacture of the tile is bio-soluble. The criteria for non-classification as a carcinogenic substance in accordance with the Chemicals Prohibition Ordinance (Section 1 Appendix, Paragraph 23 biopersistent fibres) are met and guaranteed by the ,RAL seal of approval for mineral wool'. Verification of fitness for use according to EU CPR: CE marking and Declaration of Performance (DoP).

 Mineral tiles accordance with DIN EN 13964 and DIN 18177.

 Air permeability class:
 PM 1

 Formaldehyde class:
 FH 1

 Emission of VOC:
 TVOC 1

#### **Construction description:**

Angle sections, matt white, 50/35 - 2.0 mm (no. 51/02) are to be affixed along the walls or the ceiling perimeters using approved fixing material.

A strip of mineral wool (gross density > 40 kg/m<sup>3</sup>) must be inserted between the BSE element and the wall angle. Configuration as per the test certificate. The BSE 90-elements must be placed on the wall mouldings and aligned so that they just touch. Ensure that the load transfer from the BSE 90 OWAcoustic fire protection elements is taken into account.

#### **Product Warranties**

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