fermacell AESTUVER product data sheet

AESTUVER Tx fire-protection board

Cement-bound, glass-fibre reinforced light concrete panels for the highest fire safety requirements in underground traffic structures

Product

AESTUVER Tx fire prevention panels for underground traffic structures are cement-bound, glass-fibre reinforced light concrete panels for structural fire protection. The non-flammable, pure mineral fire prevention panels comply with material class A1 as per EN 13501-1.

Applications

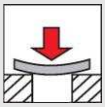
The fire prevention panels can be universally used. However, due to their proven properties, they are primarily used in areas with a constant or recurring moisture load and/or a high mechanical load.

- As cladding that has been screwed or bolted on to the structural concrete to protect against the results of a fire load
- Allows slimline systems for: RWS180, RWS120, HCM120 N1/N2/N3, ISO240

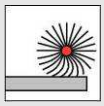
Properties

Non-combustible

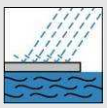
High compression strength



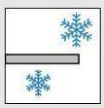
High flexural tensile strength



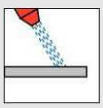
High abrasion resistance



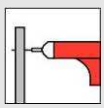
Water resistant



Frost resistant



Cleanable



Easy application

AESTUVER Tx fire-protection board

Characteristics and information

Approval/usage data	
Construction material class (as per EN 13501)	Class A1
Application category regarding weathering effects (as per ETAG 018-1)	Type Z1 , Z2 , Y, X
Component classification for civil engineering structures	International
Tunnel fire testing as per international time-temperature curves	■ RWS120 ■ RWS180 ■ HCM120 N1/N2/N3 ■ ISO240

Material characteristics	
Apparent density (dry)	Approx. 680 – 800 kg/m³
Flexural strength (based on EN12467 (±10%)[1)]	≥ 2.8 N/mm²
Extension/shrinkage reaction to changes in RH of air of 30%(20°C) (as per EN 318)	± 0.1 %
Equilibrium moisture content (20°C / 65% RH) (as per. DIN EN ISO 12570)	Approx. 5%
Bending elasticity modulus (based on EN12467 (±10%)[1)]	≥ 2000 N/mm²
Alkalinity (pH value)	Approx. 10

1) For example: 20 mm AESTUVER Tx fire prevention panel

Dimensional tolerance for equilibrium moisture content for standard panel sizes	
Length, width, thickness	± 1 mm
Diagonal difference	≤ 2 mm

Panel characteristics and sizes				
Panel thickness in mm	20	25	30	35
Weight per m² in kg (at 5% panel moisture)	Approx. 17	Approx. 20	Approx. 25	Approx. 30
Gross density ρ in kg/m³ (dry ± 15%)	800	790	780	780
Panel size in mm	2,600 x 625			

More thicknesses, sizes and cuts on request.