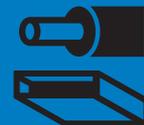


Isover FireProtect® 150

(TECH Slab HT 6.2)
Slab



Specification code: MW – EN 14303 – T4 – ST(+)-700 – WS1

TECHNICAL SPECIFICATION

Mineral wool slabs are bonded plane form pieces of rectangular cross-sections, the thickness of which is notably smaller than the other dimensions. The production is based on the defibering of molten raw materials consisting of minerals and different amounts of artificial resins as binders, mineral oils for dust suppression and hydrophobic means dependent on the application.

Fibres are hydrophobic according to EN 1609.

APPLICATION

Slabs Isover FireProtect® 150 are used for several applications. The ISOVER FireProtect® system provides efficient protection of structural steelwork, contains few components and can be installed without using complex and expensive equipment. The system is tested according to ENV 13381-4 and approved by Norwegian lab SINTEF NBL. It is also used as a semi-product for additional processing. Exceptional thickness tolerance ± 1 mm at a production of FireProtect® slabs is ideal for a production of fire doors. Slabs are also used for fire-stopping solutions when pipes, cables, etc. penetrate fire separation walls. For outdoor application metal steel jacketing is required. Slabs can be manufactured with glass tissue facing (FireProtect® 150F). When exposure to high temperatures and long-term dynamic loads (vibrations), wired mats Orstech DP are recommended instead of slabs.

FireProtect® 150 has a maximum service temperature of 700 °C according to EN 14706. If the slab is with a facing then the surface temperature must not exceed 100 °C on the facing; proper thickness of insulation must be designed to fulfil that. Binders and greasing agents in mineral wool products dissolve and evaporate in areas with temperatures > 150 °C. In the outer, colder areas, no dissolution and evaporation take place.

DIMENSIONS AND PACKAGING

Product	Thickness (mm)	Dimensions (mm)	
		slabs are stored on a pallet	packages on a pallet
Isover FireProtect® 150	20	1000 x 1200	600 x 1200
Isover FireProtect® 150	25	1000 x 1200	-
Isover FireProtect® 150	30	1000 x 1200	600 x 1200
Isover FireProtect® 150	35*	1000 x 1200	-
Isover FireProtect® 150	40	1000 x 1200	600 x 1200
Isover FireProtect® 150	50	1000 x 1200	600 x 1200
Isover FireProtect® 150	60	1000 x 1200	600 x 1200
Isover FireProtect® 150	80*	1000 x 1200	600 x 1200
Isover FireProtect® 150	100*	1000 x 1200	600 x 1200

Other thicknesses and dimensions then stated can be produced at request when fulfilling minimum volume. Thickness tolerance: ± 1 mm, width tolerance: ± 5 mm, length tolerance: ± 8 mm. * Minimal volume need to be consulted with a producer.

TECHNICAL PARAMETERS

Parameter	Unit	Value												Standard				
THERMAL INSULATING PROPERTIES																		
Declared value of the thermal conductivity coefficient λ_D according to EN ISO 13787	°C	10	40	50	100	150	200	250	300	400	500	600	650	700				
	Wm ⁻¹ K ⁻¹	0.036	0.039	0.041	0.047	0.053	0.060	0.068	0.077	0.098	0.123	0.154	0.172	0.192				
Measured value of the thermal conductivity coefficient according to EN 12667	Wm ⁻¹ K ⁻¹	0.034	0.038	0.040	0.045	0.052	0.058	0.066	0.074	0.094	0.118	0.147	0.164	0.183				
Maximum service temperature	°C	700												EN 14706				
Specific heat capacity c_d	J.kg ⁻¹ .K ⁻¹	800												-				
PHYSICAL PROPERTIES																		
Density (thickness 20 and 25 mm)	kg.m ⁻³	165												EN 1602, EN 13470				
Density (thickness ≥ 30 mm)	kg.m ⁻³	150												EN 1602, EN 13470				
Short term water absorption W_p	kg.m ⁻²	<< 1												EN 1609				
Diffusion resistance factor	-	1.0												EN 12086				
Flow resistance Ξ	kPa.s.m ⁻²	91												EN 29053				
FIRE SAFETY PROPERTIES																		
Reaction to fire	-	A1												EN 13501-1				
Melting temperature t_m	°C	≥ 1000												DIN 4102 part 17				
ADDITIONAL PROPERTIES																		
Acoustic absorption coefficient α for perpendicular impact of acoustic waves (-) according to EN ISO 354 and EN ISO 11654	Frequency		Hz	125	250	500	1000	2000	4000									
	Thickness	20	mm	0.05	0.20	0.55	0.85	0.95	1.00									
		40	mm	0.20	0.65	0.90	0.90	0.95	0.95									
		60	mm	0.35	0.85	0.90	0.95	0.95	1.00									
		100	mm	0.45	0.70	0.85	0.95	0.95	1.00									
Definition of single number value according to EN ISO 11654	Single number value		-	α_w				α_{stf}				NCR						
	Thickness	20	mm	0.50 (M. H)				0.64				0.65						
		40	mm	0.90				0.85				0.85						
		60	mm	0.95				0.90				0.90						
		100	mm	0.90				0.86				0.85						

15. 4. 2015 The information is valid up to date of publishing. The manufacturer reserves right to change the data.