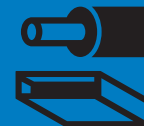


Isover FireProtect 150

Slab



Specification code: MW – EN 13162 – T3 – MU1

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.

PACKAGING, TRANSPORT, WAREHOUSING

Slabs Isover FireProtect 150 with dimension 1000 x 1200 mm are stored on a wooden pallet, piled on top of each other. Available are also slabs 600 x 1200 mm packed into PE foil, delivered as 4 packages on a pallet. Pallet is packed into a shrinkable PE foil. The upper part of the pallet is covered by thicker PE foil. Slabs must be stored in covered places under such conditions to avoid moistening or other degradation.

BENEFITS

- very good thermal insulation performance (low thermal conductivity)
- fire resistance – non-combustible material
- high temperature resistance (possibility of application up to a maximum surface temperature of 700 °C)
- very good sound attenuation (high absorption coefficient)
- environmental friendly and hygienic
- hydrophobicity – Isover insulation materials are made water repellent
- long life span (material is not aging)
- resistant to wood-destroying pests, rodents, and insect
- easy to handle, easy to cut with a sharp knife

RELATED DOCUMENTS

- EC Declaration of Conformity 1390-CPD-0305/11/P

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.

TECHNICAL PARAMETERS

Parameter	Unit	Value					Standard		
THERMAL INSULATING PROPERTIES									
Declared value of the thermal conductivity coefficient λ_D according to EN ISO 13787	$Wm^{-1}K^{-1}$	0.037					EN 13162, EN 12667		
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	$kg.m^{-2}$	$\ll 1$					EN 1609		
Diffusion resistance factor of mineral wool μ	-	1.3					EN 12086		
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}		
	Thickness	20	mm	0.50 (M. H)			0.64		
		40	mm	0.90			0.85		
		60	mm	0.95			0.90		
		100	mm	0.90			0.86		

28. 1. 2014 The information is valid up to date of publishing. The manufacturer reserves right to change the data.