

Beltep ROOF 70

Thermal insulation slabs of mineral wool



Specification code: MW-EN13162-T5-DS(70,90)-CS(10)70-TR15-PL(5)850-WS-WL(P)-MU1

TECHNICAL SPECIFICATION

Mineral wool for thermal insulation slabs BELTEP is produced on the base of basalt fiber. Its insulating properties are based on the chaotic arrangement of the fibers and the content between a large number of air pores which have a low thermal conductivity. The production is based on defibring method of the minerals composition melt and additional additives and ingredients. The mineral fibres produced are processed into the final slab shape on the production line. The entire fibre surface is hydrophobic. The slabs in the construction have to be protected suitably (vapour-proof foil, separation

layers, water-proofing membrane of the flat warm decks).

PACKAGING, TRANSPORT, WAREHOUSING

Insulating slabs are packed on the pallets in height up to 1,40 m. The slabs have to be transported in covered vehicles under conditions preventing their wetting or other degradation. They should be stored flat in sheltered space to maximum layer height of 2,80 m.

APPLICATION

One-layer insulating of combined roofs under increased loads.

UNIQUE FEATURES OF WOOL BELTEP

- EASY INSTALLATION
- SAFETY AND ECOLOGICAL COMPATIBILITY
- THERMAL INSULATION PROPERTIES
- MECHANICAL STRENGTH
- CHEMICAL RESISTANCE
- HYDROPHOBIC PROPERTIES
- FIRE PROPERTIES
- A HIGH LEVEL OF NOISE REDUCTION
- DURABLE IN USE

DIMENSIONS AND PACKAGING

Slabs dimensions, mm			Stacking of packages on a pallet					
length	width	thickness	rows	slabs	height with pallet, m	the volume, m ³	net, kg	gross, kg
2000	1200	40	30	30	1,32	2,880	504	576
		50	25	25	1,37	3,000	525	597
		60	21	21	1,38	3,024	529	601
		70	18	18	1,38	3,024	529	601
		80	16	16	1,40	3,072	528	610
		90	14	14	1,38	3,024	529	601
		100	12	12	1,32	2,880	504	576
		110	11	11	1,33	2,904	508	580
		120	10	10	1,32	2,880	504	576
		130	9	9	1,29	2,808	491	563
		140	9	9	1,38	3,024	529	601
		150	8	8	1,32	2,880	504	576

PHYSICAL AND MECHANICAL PROPERTIES

Essential Characteristics	Clauses in this and other European standard(s) related to essential characteristics	Harmonized standard EN 13162:2012+A1:2015	Declared value
Reaction to fire	4.2.6 Reaction to fire	Euroclasses	A1
Thermal resistance	4.2.1 Thermal resistance and thermal conductivity	Thermal conductivity λ (W/mK)	0,038
		Thermal resistance $R=d / \lambda$, (m ² K/W)	1,1÷3,9 See table
	4.2.3 Thickness	Thickness range, (mm)	40 – 150
		Ti class for thickness tolerance	T5
Water permeability	4.3.7.1 Short term water absorption	WS - declared W_p , (kg/m ²)	≤ 1
	4.3.7.2 Long term water absorption	WL(P) - declared W_{ip} , (kg/m ²)	≤ 3
Water vapour permeability	4.3.8 Water vapour transmission	Declared MU_i	MU1
Compressive strength	4.3.3 Compressive stress or compressive strength	CS(10)i declared (kPa)	≥ 70
	4.3.5 Point load	PL(5)I declared (N)	≥ 850
Durability of thermal resistance against heat, weathering, ageing/degradation	4.2.7 Durability characteristics	DS(70,90) declared The relative changes in thickness	≤ 1
Tensile strength	4.3.4 Tensile strength perpendicular to faces	TRi declared (kPa)	≥ 15

Thermal resistance R_D

d, (mm)	40	50	60	70	80	90	100	110	120	130	140	150
R_D , (m ² K/W)	1,1	1,3	1,6	1,8	2,1	2,4	2,6	2,9	3,2	3,4	3,7	3,9

RELATED DOCUMENTS:

- EC compliance certificate 1020 – CPR – 010022606
- Declaration of Performance 0016-DoP-2016/12/01

