RAVATHERM™ SW

TECHNICAL DATASHEET TDS RTROOF70EN24-1 I 2024.01.12.

RAVATHERM SW Roof 70 MINERAL WOOL THERMAL INSULATION

DESCRIPTION

Permanently high performance mineral wool thermal insulation for new buildings and building renovation.

AREA OF APPLICATION

- **INSULATION OF FLAT ROOFS**

TECHNICAL PARAMETERS

Thermal resistance and thermal conductivity

d_N (mm)	50	60	80	100	120
R_d * (m^2K/W)	1,25	1,50	2,05	2,55	3,05
λ_d (W/mK)	0,039				

Properties	**Performance**	
Point Load	700 N	PL(5)700
Thermal resistance	*	
Dimensional tolerances	T4	
Compressive strength	70 (kPa)	CS(10)
Tensile strength perpendicular to faces	15 (kPa)	TR15
Reaction to fire	A1	
Continuous glowing combustion	The test method is being developed. No declared performance.	
Long term water absorption	≤ 3,0 kg/m2	WL(P)
Short term water absorption	≤ 1,0 kg/m2	WS
Water vapour permeability	MU1	
Compressive creep	NPD	
Durability of reaction to fire against heat, weathering, ageing/degradation	No change with time	
Durability of thermal resistance against heat, weathering, ageing/degradation		
Thermal resistance and thermal conductivity	see above R_d and λ_d	
Durability of thermal conductivity against heat, weathering, ageing/degradation	No change with time	
Dimensional stability under specified temperature or under specified temperature and humidity conditions	≤ 1,0%	DS(70,90)
	NPD	DS(70,-)
Release of dangerous substances to the indoor environment	No known health and environmental hazards	

NPD – No performance determined

EN PRODUCT CODE

MW - EN 13162 – T4 – DS(70,90) – CS(10)70 – TR15 – PL(5)700 – WS – WL(P) – MU1

STORAGE

RAVATHERM SW thermal insulation products can be stored mainly indoors or even outdoors, preferably in the original packaging, on a horizontal and dry surface. Products taken and unpacked from the pallet and products which are not on the pallet must be kept in a dry, covered place. Pallets must be protected from strong sunlight, mechanical damage and contact with large amounts of water.

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APPLICATION/PROPERTIES

RAVATHERM SW products are resistant to solvent- and plasticizer-free materials commonly used in the building industry, such as solvent-free bituminous mixtures, water-based wood preservation agents, lime, cement, mortar, anhydrous gypsum, alcohols, acids and alkalis. It is also resistant to certain organic substances, such as solvent-based wood preservation agents, coal tar and its derivatives (aerosols, etc.), paint thinners and ordinary solvents such as acetone, ethyl acetate, petrol, toluene, chemical testing petrol.
RAVATHERM SW is a resin-bound, bare, loadable mineral wool board with excellent thermal insulation properties. It is not combustible, it does not develop smoke under the influence of heat, there is no dripping of fire, it also prevents the spread of fire. Not only is it soundproof, but also has outstanding sound absorption capabilities. It is hydrophobic, its surface is water-repellent, but at the same time its vapour permeability is almost the same as that of air. It can only be installed in the building structure in dry conditions and conditions. Installation is not recommended in wet weather, the boards must be protected immediately after placing against precipitation! It does not shrink, it does not have thermal expansion. Not harmful to health, but wearing a mask during cutting is advisable due to the microfibers in the material.
RAVATHERM SW Roof is especially suitable for non-walkable flat roofs with thermal insulation placed in two or more layer. For the upper thermal insulation layer, we recommend stonewool boards with a high point load capacity and higher compressive strength.
On large roofs it is advantageous to lay large-format (2400x1200 mm) boards. When applied on a trapezoidal plate, the minimum total thickness of the thermal insulation should be half the size of the rib gap.
RAVATHERM SW Roof thermal insulation plates should be laid in combination with plates with a compressive strength of 70-80 kPa to be used as the upper layer. During construction, the thermal insulation boards must be protected from mechanical damage in areas subject to significant mechanical stress (e.g. around roof walkways) and from mechanical damage resulting from subsequent industrial work processes by applying a load distribution layer!

BENEFITS OF RAVATHERM SW PRODUCTS

- EXCELLENT THERMAL INSULATION PROPERTIES
- EXCELLENT ACOUSTIC PROPERTIES
- NON-COMBUSTIBLE
- HIDROPHOBIC, WATER-REPELLENT
- DURABLE, DO NOT SHRINK, DO NOT ROT
- WATER VAPOUR PERMEABLE
- EASY TO CUT AND APPLY
- RECYCLABLE

GENERAL INFORMATION

RAVATHERM SW stonewool complies with the EU regulation on substances that deplete the ozone layer. The raw material of the product is non-combustible and has a melting point above 1000 °C. The product can withstand an average fire. Its application limit temperature is 750°C. The combustibility classification is based on laboratory tests. The requirements of the valid requirements of construction and the fire performance requirements of buildings must be complied with during the application.
RAVATHERM SW products do not biodegrade in the environment and do not pose an environmental risk to water and soil. The disposal of the boards can be carried out by placing them in landfill. Unpolluted products may be reprocessed.
RAVATHERM SW products are characterized by unmatched heat and sound absorption and excellent fire protection properties. They provide outstanding protection against cold, heat and noise. With their application, significant cost savings can be achieved, the most comfortable conditions can be created for the users of the building.
Our mineral wool products contribute significantly to reducing CO^2 emissions over their lifetime. They also slow down the warming of the atmosphere in a sustainable, environmentally friendly way.
Our products are manufactured within ISO 9001, ISO 14001 and ISO 50001 Integrated Quality, Environment and Energy Management System.

MANUFACTURER

Ravago Building Solutions Hungary Kft.

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Comments:

The information and data provided in this publication provide information to the best of our knowledge and information about the possible applications of the products, but they do not replace the construction plans and the responsibility of the designer and contractors, they do not create a warranty obligation towards the manufacturer. We reserve the right to change the information provided. It is the customer's responsibility to determine the suitability of the product for the given use and to ensure that the location and method of application comply with the applicable standards and regulations. At the same time, we do not allow the use of patents or other industrial or intellectual property rights. When purchasing RAVATHERM SW products, it is recommended that you always follow the latest manufacturer recommendations and recommendations.