

FIBRANgeo MW-560

Stonewool wired mat with galvanised mesh and stitching wire



0474 / 07



Product Description

FIBRANgeo MW-560 Stonewool wired mat with galvanised mesh and stitching wire is industrially produced from molten rock spun into fibres.

It is classified as thermal insulation mineral wool product for use in ship building industry for fire insulation applications and also for thermal and acoustic comfort.

FIBRANgeo MW-560 is produced from mineral rock, initially fused in an electric furnace at 1520°C and then spun into fibres. The loose stonewool fibres, with the addition of adhesive resin, oil and special silicon compounds that provide hydrophobicity, become cohesive, elastic, non-hygroscopic and water-repellent. The product is then stitched on galvanized wired mesh with galvanized wire, formed into rolls and finally shrink-wrapped in PE film in packages.

The non-use of fossil fuels (e.g. coke) as a main production fuel minimises polluting gas emissions in the environment.

Advantages

- Excellent thermal insulation
- Excellent sound absorption and sound reduction
- Non-combustible material with excellent fire resistance
- Insulating properties remain unchanged in high temperatures
- Open hive structure material with very low water vapour diffusion resistance, similar to the resistance of air
- Water repellent and non-hygroscopic
- Natural, inorganic, odourless, chemically inert, suitable for use over stainless steel
- Lightweight, easy to handle, cut and install
- Resistant to vibrations
- Does not allow the development of micro-organisms, insects or rodents
- Recyclable
- Friendly to the environment and to the end user

Applications

FIBRANgeo MW-560 is suitable for use in the ship building industry.

Fire – Thermal – Acoustic insulation of:

- Steel -Bulkhead constructions
- Steel- Deck constructions
- Pipe work
- Smoke exhaust ducts
- Tanks
- Air ducts

Packaging

Thickness [mm]	Width [mm]	Length [mm]	Quantity/ Roll [m ² / Roll]
30	1000	6.000	6,00
40	1000	5.000	5,00
50	1000	5.000	5,00
60	1000	3.000	3,00
80	1000	3.000	3,00
100	1000	2.500	2,50

Other dimensions are available upon request.



Facings

FIBRANgeo MW-560 is available with the following variants

- FIBRANgeo **MW-560 SS** Stainless steel mesh and stainless steel stitching wire
- FIBRANgeo **MW-560 GS** Galvanized steel mesh and stainless steel stitching wire

Technical Characteristics

Technical Characteristics	Symbol EN-13162	Unit	Value	EN standard
Declared thermal conductivity at 10 °C	λ_D	W/(mK)	0,035	EN 12667 EN 13787
Maximum Service Temperature	ST(+)	°C	650	EN 14706
Nominal thickness	d_N	mm	30 - 100	EN 823
Fire classification	-	Class	A1 (Non-combustible)	EN 13501-1
Melting temperature	-	°C	>1000	DIN 4102-17
Specific heat capacity	c	kJ/kg*K	0,84	-
Thickness tolerance	T	Class	T2 (-5%, +15 %)	EN 14303
Short Term Water Absorption for 24 h	WS	kg/m ²	<1	EN 1609
Water vapour diffusion resistance factor μ	MU	-	1	EN 12086
Water leachable chloride, fluoride and PH-value	CL, F, PH	mg/kg	< 10 AS-quality for use over stainless steel. PH-value neutral to slightly alkaline	EN 13468 ASTM C795 ASTM C692 ASTM C871
Air flow resistivity, r	AF_r	kPa s/m ²	55	EN 29053
Weighted Sound Absorption Coefficient α_w (Thickness 50 mm)	AW	-	1 (Class A)	EN ISO 11654 EN ISO 354
Density, ρ	-	kg/m ³	65	EN 1602

 Declared Thermal Conductivity λ_D

Mean Temperature	θ_M	°C	50	100	150	200	250	300	350	400	500	600	650	EN 14303
Declared Thermal Conductivity	$\lambda_{N,P}$	W/mK	0,039	0,046	0,054	0,063	0,075	0,087	0,101	0,116	0,151	0,193	0,221	EN 12667 EN 13787



0474 / 07



Certifications

All FIBRANgeo stonewool insulation products meet the QUALITY and SAFETY requirements of Marine Equipment Directive (MED) 96/68/EC and the amendment 2012/32/EC.

The quality of FIBRANgeo for marine applications is assured in accordance with EN 14303, EN 13162, EN ISO 13787 and EN 13172 standards.

These standards establish the type and frequency of measurements executed both by recognised and independent institutions, as well as by FIBRAN laboratories.

EUCEB Certification

All FIBRANgeo stonewool insulation products also carry the certification mark EUCEB (European Certification Board for Mineral Wool Products). EUCEB is an independent organization whose procedures ensure compliance of mineral wool insulation products with the Directive's 97/69/EC, Note Q, regarding their fibres biosolubility and their non-classification as 'carcinogenic' materials.

Moreover, according to EC Regulation 790/2009 (August 10, 2009) they are not classified as products that cause skin irritation.

ISO 9001:2008 Certification

The quality management system of FIBRAN S.A. complies with EN ISO 9001:2008 for the design and manufacture of Mineral Wool (MW), as certified by the independent body TÜV NORD CERT, with initial Certificate Registration No. 04 100 960680.

Handling and Storage

FIBRANgeo products should be stored indoors. If stored outdoors, they must be protected from impregnation. Pallets shrink-wrapped weather tightly in PE film may be stored outside. Separate packages should be placed on a flat pallet, not in direct contact with the ground.

If part of the product gets wet, it must be dried before installation. Stonewool dries quickly and its insulating properties remain unchanged after drying.

FIBRANgeo products are chemically inert and do not allow the growth of micro-organisms, insects or rodents.

Handling, loading and unloading of the products should be carried out with care, to avoid damage both the packaging and the boards' edges.

Application and Personal Protection

For the selection and application of FIBRANgeo products all design requirements should be taken into consideration.

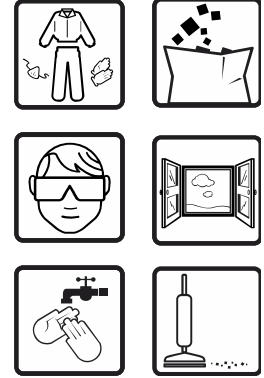
FIBRANgeo products should be protected from impregnation, prior to and during application.

The packaging film should be removed with care just before installation.

Working areas should be kept clean. Unnecessary or extensive contact of the skin and eyes with products off-cuts, fibres and dust should be avoided, and protective wear should be used (gloves, goggles, hats).

Sufficient ventilation of the working areas should be ensured, whilst power cutting tools should always be provided with a mechanical system of dust intake.

Stonewool products are not considered hazardous waste. Waste disposal should be carried out according to State and Local regulations.



THESSALONIKI
 FIBRAN S.A.
 6th km Thessaloniki-Oreokastro Rd.
 P.O. Box 40306, A.C. 560 10
 Thessaloniki, Greece
 Tel. +30 2310 682 425 , 692 700
 Fax. +30 2310 683 131



info@fibran.gr
 www.fibran.gr

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