



September 2011

Wired Mat WM 640

Description

Wired Mat WM 640 is a medium density, non-combustible rock mineral wool mat. The standard Wired Mat WM 640 GG is supplied with galvanized steel mesh and stitched with galvanized steel wire. The mesh makes the Wired Mat a firm, but flexible insulation mattress, withstanding high operating temperatures.

Also available as Wired Mat WM 640 SG and Wired Mat WM 640 S

Wired Mat WM 640 can also be supplied with galvanized steel mesh and stainless wire (SG) or stainless steel mesh and stainless wire (S).

Application

Wired Mat WM 640 is recommended for thermal, acoustic and fire insulation in various industrial and HVAC applications:

- | | |
|---|---|
| <ul style="list-style-type: none">• Industrial pipe works• Vessels• Columns• Boilers | <ul style="list-style-type: none">• Tanks• Ducts• Parts like: Elbows, Valves, T-pieces, Reductions, Flanges |
|---|---|

It can be used for continuous operating temperatures up to 640°C, and works particularly well for the insulation of large diameter and high temperature pipe work.

It is suitable for wrapping any large curved surface or cutting to fit over irregular shaped surfaces. The wired mat significantly reduces noise generated by liquid and granular materials transported through pipe work at high velocity.

This product is also applicable in ship building industry and for application with austenitic steel.

Performance

Thermal insulation

Wired Mat WM 640 has a thermal conductivity of 0,040 W/mK at 50°C

Fire insulation

Wired Mat WM 640 is classified as non-combustible to Class A1

Max. service temperature (MST)

Wired Mat WM 640 has a maximum service temperature of 640°C

Benefits

- Resistant to high temperatures
- Non-combustible
- Water repellent
- Chemically inert
- No deterioration of performance over time
- Easy to install
- Easy to cut
- Resilient, strong and flexible

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Property	Sign	Description/Data				Unit	Test method	Standards
Maximum service temperature	–	640				°C	DIN EN 14706	AGI Q 132 edition 2006
Heat conductivity in relation to temperature	†	50	100	200	300	°C	DIN EN 12667	
	λ	0,040	0,046	0,064	0,087	W/(m.K)		
	†	400	500	600		°C		
	λ	0,117	0,158	0,205		W/(m.K)		
Nominal density	RD	80				kg/m ³	DIN EN 1602	
Designation code	–	10.01.02.64.08				–		
AS-Quality	–	≤ 10				ppm	DIN EN 13468	
Water absorption	–	≤ 1				kg/m ²	DIN EN 1609	
Silicone free	–	Produced without addition of silicone oil						
Fire behaviour	–	class A1				–	Organic content < 1 % DIN EN 13501-1	
Melting point of fibres		> 1000				°C	DIN 4102-17 DIN 4102-17	
Sulfite sulfur content	–	< 0,1				Mass %	DIN 38405 DIN 38405	
Water vapour diffusion resistance value	μ	~ 1				–	DIN EN 12086	
Wire mesh Wire	–	25 mm x 0,7 mm 0,3 mm				–	DIN EN 10223-2 AGI Q 132	

Delivery programme

Thickness (mm)	30	40	50	60	70	80	90	100	110	120
Length (mm)	6000	5500	4000	3500	3500	3000	2500	2500	2000	2000
Width (mm)	500 or 1000									
M ² /roll (500)	3,00	2,75	2,00	1,75	1,75	1,50	1,25	1,25	1,00	1,00
M ² /roll (1000)	6,00	5,50	4,00	3,50	3,50	3,00	2,50	2,50	2,00	2,00

Other dimensions are available on request.

New palletizing standard

500mm-wide rolls

45 units per pallet
1200x1200x2650 (WxDxH)

1000mm-wide rolls

21 units per pallet
1200x1200x2550 (WxDxH)

Handling & storage

Wired Mat WM 640 is easy to handle and install. It is supplied in polyethylene packs which are designed for short term protection only. For longer term protection on site, it is recommended to store the product either indoors, or under cover and off the ground. Product information is mentioned on every pack.

Wired Mat WM 640 should not be left permanently exposed to the elements.

Knauf Insulation Process Solutions is dedicated exclusively to meet the needs of its customers in the Industrial and HVAC markets.

Our main product range includes wired mats, pipe sections, fire protection boards, lamella mats, duct boards and loose wool.

Each product within the range offers unique benefits, not only for our clients, but also for the designer, specifier, stockist and installer.

Knauf Insulation

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Production Plant

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