



POWER-TEK® WIRED MATS

Insulation power for energy efficiency and safety



with ECOSE

challenge. create. care.

A PERFECT MATCH FOR ROUND EQUIPMENT

Our Power-teK[®] Wired Mat is a mineral wool mat that features a galvanised wire mesh on one side. The mat comes with perforated packaging for easy opening and is equipped with a Strapex band as a practical carrying aid. Furthermore, the overlapping wire mesh enables fast and easy installation.

Power-teK[®] Wired Mats come with our exclusive natural binder in ECOSE[®] Technology and provide consistently high thermal, acoustic and fire-resistant performance.

Developed especially to meet stringent industry requirements, our Power-teK[®] Wired Mat is the perfect match for a wide range of industrial applications.



LOGISTICS BENEFIT: **NEW EUROPALLET** FORMAT FOR MORE **EFFICIENT HANDLING** WITH FORKLIFTS AND PALLET TRUCKS.

OVERLAPPING WIRE MESH EASY INSTALLATION

Power-teK[®] Wired Mats have a minimum thickness of 50 mm and feature an overlapping wire mesh. The 100 mm long extension offers easy grip while stretching the loose end before closing. The closure of hooks is therefore quick and easy. If necessary, the overlap of mesh can be folded inside the product to keep the mineral wool fleece in shape.



STRAPEX BAND EASIER TO KEEP TIDY, SAFER TO WORK

The carrying band enables compliance with any regulations that require a minimum amount of wrapping or packaging in the work area: the wrapping can be removed and disposed of in the storage area while keeping the product as a roll. That's how potential accidents caused by loose wrapping can be avoided.



REDUCED WASTE EASIER AND SAFER TO CARRY

Traditional Wired Mats require the wrapping to be kept in place whilst transporting to the installation site. With the Power-tek® Wired Mat, the wrapping can be removed and disposed of at the storage area. The Strapex band keeps the Wired Mat in shape.

OPTIMIZED STITCHING OF MESH SUPERIOR PRODUCT INTEGRITY

Higher-guality stitching using new equipment creates a stronger fixing to keep the steel mesh in place. Furthermore, it maintains product integrity and flexibility during installation, which can save time and money.



OPTIMIZED WIDTH MAKE YOUR CHOICE

Depending on your project needs, you can specify the width of your Wired Mats. As standard we offer widths of 500, 900 and 1000 mm. All our Power-teK[®] Wired Mats come with the same outer diameter, which optimizes logistics and ensures sustainable handling.

EXCELLENT INSULATION PERFORMANCE ENERGY EFFICIENCY AND FIRE PROTECTION

Power-teK[®] Wired Mats provide the perfect combination of thermal insulation, fire protection and sound insulation. Furthermore, all Power-teK[®] Wired Mats have A1 certification and are therefore suitable for high-temperature applications.

APPLICATIONS



Industrial pipelines

challenge.

ECOSE® TECHNOLOGY TECHNICAL INSULATION NEVER FELT BETTER

All our high-performance insulation for industry, HVAC and shipbuilding comes with ECOSE® Technology, our no-addedformaldehyde binder. Developed and refined especially for technical insulation, our products with the natural binder offer the perfect combination of energy efficiency and sustainability for every application.



BENEFITS OF MINERAL WOOL WITH ECOSE[®] TECHNOLOGY

- » Constantly high thermal, acoustic and fire-resistant performance
- » Indoor Air Comfort Gold by Eurofins
- » RAL and EUCEB quality standards
- » Certified safety
- » Compliant with national regulations on product emissions

- » Environmentally friendly
- » No added acrylics or phenol-formaldehyde
- » Natural colour
- » Pleasant to use*
- » Less itchy*
- » Discreet smell*

* In a survey, installers stated that mineral wool insulation materials with ECOSE® Technology are more pleasant to use, less itchy and have a more discreet smell compared to conventional insulation materials.



"Our insulation helps make the world a better place. Especially in hightemperature applications, they can save a great deal of energy to improve comfort across the board. Think green – build blue!" Nenad Z., Quality Manager in Novi Marof (Croatia)



TECHNICAL DATA



Mineral Wool Mat with galvanised wire stitching onto galvanised wire mesh

Product properties	Reference	Descriptio	on/specific	Unit	Standard									
Reaction to fire	-			-	EN 13501-1									
Thermal conductivity	θ	50	°C	EN 12667										
	λ	0.040	0.047	0.067	0.094	0.130	0.173	0.228	W∕(m·K)					
Maximum service temperature	ST(+)			°C	EN 14706									
AS quality	-		≤ 10 ppm E											
Density	ρ			kg∕m³	EN 1602									
Water absorption	W _P			kg/m²	EN 1609									
Water vapour diffusion resistance value	μ			-	EN 14303									
Melting point of fibres	θ		≥ 1000 °C EN 4102-17											
Longitudinal air flow resistance	r		≥ 20 kPa·s/m ² EN 29053											
Silicone-free fibres	-		Manufactured without addition of silicone oil – –											
Wire mesh	-	25 mm x 0.7 mm x 0.3 mm – EN 1022												
Designation code	-	MW-EN14303-T2-ST(+)620-WS1-CL10 - EN 14303												
The technical details are for information only. Please refer to the data sheet for complete current details. www.ki-ts.com														

POWER-TEK® WM 640 GGN

Mineral Wool Mat with galvanised wire stitching onto galvanised wire mesh

Product properties	Reference	Description/specifications								Standard		
Reaction to fire	_			-	EN 13501-1							
Thermal conductivity*	θ	50	100	200	300	400	500	600	°C	EN 12667		
	λ	0.040	0.046	0.062	0.084	0.112	0.146	0.190	W/(m·K)			
Maximum service temperature*	ST(+)			°C	EN 14706							
AS quality*	-		≤ 10 ppm EN 13468									
Density	ρ			kg/m³	EN 1602							
Water absorption*	W _P			kg/m²	EN 1609							
Water vapour diffusion resistance value	μ			-	EN 14303							
Melting point of fibres	θ			°C	EN 4102-17							
Longitudinal air flow resistance	r			kPa·s/m²	EN 29053							
Silicone-free fibres	_		Manufactured without addition of silicone oil – –									
Wire mesh	-			-	EN 10223-2							
Insulation material code*	-	10.01.02.40.08								AGI Q132		
Designation code	-	MW-EN14303-T2-ST(+)640-WS1-CL10 - EN 14303										
* VDI 2055 monitored. The technical details are for information only. Please refer to the data sheet for complete current details. www.ki-ts.com												

POWER-TEK[®] WM 660 GGN

Mineral Wool Mat with galvanised wire stitching onto galvanised wire mesh

Product properties	Reference	Description/specifications								Unit	Standard	
Reaction to fire	-	A1									EN 13501-1	
Thermal conductivity*	θ	50	100	200	300	400	500	600	650	°C	EN 12667	
	λ	0.040	0.046	0.060	0.079	0.102	0.131	0.166	0.186	W/(m·K)	-	
Maximum service temperature*	ST(+)			°C	EN 14706							
AS quality*	-			ppm	EN 13468							
Density	ρ			kg∕m³	EN 1602							
Water absorption*	W _P			kg/m²	EN 1609							
Water vapour diffusion resistance value	μ	1								-	EN 14303	
Melting point of fibres	θ	≥ 1000									EN 4102-17	
Longitudinal air flow resistance	r		≥ 50 kPa·s/m									
Silicone-free fibres	-		Man	ufacture	d without	addition	of silicon	e oil		-	-	
Wire mesh	-			-	EN 10223-2							
Insulation material code*	-	10.01.03.50.10								-	AGI Q132	
Designation code	-	MW-EN14303-T2-ST(+)660-WS1-CL10 - EN 14303									EN 14303	
* VDI 2055 monitored. The technical details are for information only. Please refer to the data sheet for complete current details. www.ki-ts.com												

POWER-TEK® WM 680 GGN

Mineral Wool Mat with galvanised wire stitching onto galvanised wire mesh

Product properties	Reference	Description/specifications								Unit	Standard
Reaction to fire	-	A1								-	EN 13501-1
Thermal conductivity	θ	50 100 200 300 400 500 600 650									EN 12667
	λ	0.040	0.047	0.061	0.078	0.098	0.125	0.159	0.179	W/(m·K)	_
Maximum service temperature	ST(+)	680									EN 14706
AS quality	-			ppm	EN 13468						
Density	ρ			kg/m³	EN 1602						
Water absorption	W _P	≤ 1.0									EN 1609
Water vapour diffusion resistance value	μ	1									EN 14303
Melting point of fibres	ϑ	≥ 1000 °C EN 4									EN 4102-17
Longitudinal air flow resistance	r		≥ 65 kPa·s/m² E								
Silicone-free fibres	-		Man	-	-						
Wire mesh	-	25 mm x 0.7 mm x 0.3 mm								-	EN 10223-2
Designation code	-	MW-EN14303-T2-ST(+)680-WS1-CL10 - EN 14303									EN 14303
The technical details are for information only. Please refer to the data sheet for complete current details. www.ki-ts.com											

ALL OUR POWER-TEK® WIRED MATS ARE ALSO AVAILBLE AS:

· Power-teK® WM GSN: As for Power-teK® WM GGN, however with V2A stitching wire stitched onto galvanised wire mesh

· Power-teK[®] WM SSN: As for Power-teK[®] WM GGN, however with V2A stitching wire stitched onto V2A wire mesh

 $\cdot \operatorname{Power-teK^{\otimes}}$ WM GGA: As for Power-teK^{\otimes} WM GGN, however with intermediate aluminium foil

 $\cdot \, Power-teK^{\otimes} \, WM \, \text{GSA:} \, As \, for \, Power-teK^{\otimes} \, WM \, \text{GSN}, \, however \, with \, intermediate \, aluminium \, foil$

 $\cdot \, Power-teK^{\otimes} \, WM \, SSA: As for \, Power-teK^{\otimes} \, WM \, SSN,$ however with intermediate aluminium foil

· Power-teK WM GGV: As for Power-teK WM GGN, however with intermediate white veil (not available for WM 680)

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CONTACT

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EXPER-TEAM ONLINE

Stay up to date with to the latest news as well as upcoming events and watch our application videos at **www.ki-ts.com/exper-team**



Company profile

Knauf Insulation is one of the most respected names in the insulation industry worldwide with 40 years of experience and is still growing fast, with over 5,500 employees in more than 35 countries and more than 38 manufacturing sites. As part of the family–owned Knauf Group Knauf Insulation Technical Solutions provides solutions for customer requirements in industry, marine applications, heating, ventilation and air conditioning. Our profound market understanding and insulation know-how enables us to provide a broad range of products to meet your specific needs. All rights reserved, including those of photomechanical reproduction and storage in electronic media. Commercial use of the processes and work activities pre-

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