

## HIGH TEMPERATURE BOARDS (POWER-TEK BD 350-550)



February 2019



### APPLICATIONS



### DESCRIPTION

High Temperature Boards are non-combustible Rock Mineral Wool slabs, designed to resist high temperatures and provide thermal and acoustic performance, for use in applications up to 700°C.

### PERFORMANCE

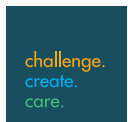
	350	550	640	660	700
Max. service temperature	350 °C (EN 14706)	550 °C (EN 14706)	640 °C (EN 14706)	660 °C (EN 14706)	700 °C (EN 14706)
Reaction to fire	A1 (13501-1)	A1 (13501-1)	A1 (13501-1)	A1 (13501-1)	A1 (13501-1)
Apparent density	80 kg/m <sup>3</sup> (EN 1602)	60 kg/m <sup>3</sup> (EN 1602)	80 kg/m <sup>3</sup> (EN 1602)	100 kg/m <sup>3</sup> (EN 1602)	140 kg/m <sup>3</sup> (EN 1602)
Declaration of performance	<a href="http://dopki.com/T4305PPCPR">http://dopki.com/T4305PPCPR</a>	<a href="http://dopki.com/T4208GPCPR">http://dopki.com/T4208GPCPR</a>	<a href="http://dopki.com/T4305PPCPR">http://dopki.com/T4305PPCPR</a>	<a href="http://dopki.com/T4305QPCPR">http://dopki.com/T4305QPCPR</a>	<a href="http://dopki.com/T4305CPCPR">http://dopki.com/T4305CPCPR</a>

### STANDARD FORMATS

	350	550	640	660	700
Thickness (mm)	40 - 100	25 - 100	20 - 200	20 - 200	20 - 200
Width (mm)	600	600	600	600	600
Length (mm)	1200	1200	1000	1000	1000

\* Other dimensions on request.

### CERTIFICATION



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### SPECIFICATIONS

#### Power-teK BD 350

Description	Sign	Description/data								Unit	Standard
Thermal conductivity depending on temperature	$\vartheta$	50	100	150	200	250	300	350		°C	DIN EN 12667
	$\lambda$	0.041	0.050	0.062	0.076	0.094	0.113	0.136		W/(mK)	
Total water absorption	$W_p$	≤ 1								kg/m <sup>2</sup>	EN 1609
Water vapour diffusion resistance	$\mu$	1								-	EN 14303
Silicone free	-	Produced without addition of silicone oil								-	-
Melting point of fibres	-	≥ 1000								°C	DIN 4102-17
Longitudinal air flow resistance	$r$	≥ 5000								kPa*s/m <sup>2</sup>	EN 29053

Declared material properties are obtained in the production process and ensured by the factory production control in accordance with the European Standard at the time of manufacture. Observing storage and handling guidelines will maintain performance within published tolerances.

#### Power-teK BD 550

Description	Sign	Description/data								Unit	Standard
Thermal conductivity depending on temperature	$\vartheta$	50	100	200	300	400	500	550		°C	DIN EN 12667
	$\lambda$	0.040	0.046	0.067	0.094	0.130	0.175	0.201		W/(mK)	
AS quality	-	≤ 10								ppm	EN 13468
Total water absorption	$W_p$	≤ 1								kg/m <sup>2</sup>	EN 1609
Water vapour diffusion resistance	$\mu$	1								-	EN 14303
Silicone free	-	Produced without addition of silicone oil								-	-
Melting point of fibres	-	≥ 1000								°C	DIN 4102-17
Longitudinal air flow resistance	$r$	≥ 15000								kPa*s/m <sup>2</sup>	EN 29053

Declared material properties are obtained in the production process and ensured by the factory production control in accordance with the European Standard at the time of manufacture. Observing storage and handling guidelines will maintain performance within published tolerances.

#### Power-teK BD 640

Description	Sign	Description/data								Unit	Standard
Thermal conductivity depending on temperature	$\vartheta$	50	100	200	300	150	500	600		°C	DIN EN 12667
	$\lambda$	0.040	0.049	0.067	0.092	0.123	0.163	0.215		W/(mK)	
AS quality	-	≤ 10								ppm	EN 13468
Total water absorption	$W_p$	≤ 1								kg/m <sup>2</sup>	EN 1609
Water vapour diffusion resistance	$\mu$	1								-	EN 14303
Silicone free	-	No emissions by lacquering disturbing substances								-	-
Melting point of fibres	-	≥ 1000								°C	DIN 4102-17
Longitudinal air flow resistance	$r$	≥ 15								kPa*s/m <sup>2</sup>	-
Specific heat capacity	$C_p$	1030								J/(kgK)	EN ISO 10456
Designation code	-	MW-EN 14303-T5-ST(+)-640-WS1-CL10								-	EN14303

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### SPECIFICATIONS

#### Power-teK BD 660

Description	Sign	Description/data								Unit	Standard
Thermal conductivity depending on temperature	$\vartheta$	50	100	200	300	400	500	600		°C	DIN EN 12667
	$\lambda$	0.039	0.044	0.060	0.078	0.102	0.132	0.169		W/(mK)	
AS quality	-	≤ 10								ppm	EN 13468
Total water absorption	$W_p$	≤ 1								kg/m <sup>2</sup>	EN 1609
Water vapour diffusion resistance	$\mu$	1								-	EN 14303
Silicone free	-	No emissions by lacquering disturbing substances								-	-
Melting point of fibres	-	≥ 1000								°C	DIN 4102-17
Longitudinal air flow resistance	$r$	≥ 15								kPa*s/m <sup>2</sup>	-
Specific heat capacity	$C_p$	1030								J/(kgK)	EN ISO 10456
Designation code	-	MW-EN 14303-T5-ST(+)-660-WS1-CL10								-	EN14303

Declared material properties are obtained in the production process and ensured by the factory production control in accordance with the European Standard at the time of manufacture. Observing storage and handling guidelines will maintain performance within published tolerances.

#### Power-teK BD 700

Description	Sign	Description/data									Unit	Standard
Thermal conductivity depending on temperature	$\vartheta$	50	100	200	300	400	500	600	700		°C	DIN EN 12667
	$\lambda$	0.041	0.045	0.059	0.075	0.095	0.119	0.147	0.178		W/(mK)	
AS quality	-	≤ 10									ppm	EN 13468
Total water absorption	$W_p$	≤ 1									kg/m <sup>2</sup>	EN 1609
Water vapour diffusion resistance	$\mu$	1									-	EN 14303
Silicone free	-	No emissions by lacquering disturbing substances									-	-
Melting point of fibres	-	≥ 1000									°C	DIN 4102-17
Longitudinal air flow resistance	$r$	≥ 60									kPa*s/m <sup>2</sup>	-
Specific heat capacity	$C_p$	1030									J/(kgK)	EN ISO 10456
Designation code	-	MW-EN 14303-T5-ST(+)-700-WS1-CL10									-	EN14303

Declared material properties are obtained in the production process and ensured by the factory production control in accordance with the European Standard at the time of manufacture. Observing storage and handling guidelines will maintain performance within published tolerances.

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### ADDITIONAL INFORMATION

#### Application

The product is recommended for thermal, fire and sound insulation of the defined applications within technical insulation. Containers, Boilers and tanks, Machine insulation, Sound insulations, Thermally resistant constructions, Drying systems

#### Handling

Our products are easy to handle and easy to install. It is supplied packaged in cardboard boxes or wrapped in foil (depending on the product) which are designed for short term protection only. Further product information is mentioned on every pack.

#### Storage

For longer term protection on site, it is recommended to store the product either indoors or under a roof and off the ground.

#### Note

Also available with aluminium facing.



Knauf Insulation mineral wool products made with ECOSE Technology® benefit from a no added formaldehyde binder, which is up to 70% less energy intensive than traditional binders and is made from rapidly renewable bio-based materials instead of petroleum-based chemicals. The technology has been developed for Knauf Insulation's glass and rock mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Insulation products made with ECOSE Technology® contain no dye or artificial colours.