

Declaration of Performance

T4305LPCPR

1. Unique identification code of the product-type:
Power-teK BD 450, Thermo-teK BD 050, Thermo-teK BD 050 ALU, Thermo-teK BD 050 VWS, Thermo-teK BD 050 VBS, Thermo-teK BD 050 WBS, Power-teK BD 450 ALU, Thermo-teK BD 060, Thermo-teK BD 060 ALU, Thermo-teK BD 060 VWS, Thermo-teK BD 060 VBS, Thermo-teK BD 060 WBS
2. Intended use or uses:
Thermal Insulation products for building equipment and industrial installations
3. Manufacturer:
Knauf Insulation d.o.o.
Varaždinska 140, 42220 Novi Marof
Croatia
www.knaufinsulation.com - dop@knaufinsulation.com
4. Authorised representative:
Not applicable
5. System or systems of assessment and verification of constancy of performance:
AVCP System 1 for Reaction to Fire
AVCP System 3 for the other characteristics
- 6a. Harmonized Standard:
EN 14303:2009 + A1:2013

Notified body or bodies:
AVCP System 1: (Notified certification body) 0751 - Forschungsinstitut für Wärmeschutz e. V. München
FIW München - - -

AVCP System 3: (Notified testing laboratory) 0751 - Forschungsinstitut für Wärmeschutz e. V. München
FIW München - - - - - - - -
- 6b. European Assessment document: not applicable
European Technical Assessment: not applicable
Technical Assessment Body: not applicable
Notified body/ies: not applicable
7. Declared Performances:
See next page

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Power-teK BD 450	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	450°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	450°C	
Thermal Resistance	Dimensions & Tolerances		50 - 140 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		300	0,108
		400	0,157
450	0,186		
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Power-teK BD 450 ALU	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	MV2	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	450°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	450°C	
Thermal Resistance	Dimensions & Tolerances		50 - 140 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		300	0,108
		400	0,157
450	0,186		
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 050	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250°C	
Thermal Resistance	Dimensions & Tolerances		30 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 050 ALU	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	MV2	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250°C	
Thermal Resistance	Dimensions & Tolerances		40 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 050 VBS	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250°C	
Thermal Resistance	Dimensions & Tolerances		40 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 050 VWS	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250°C	
Thermal Resistance	Dimensions & Tolerances		40 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 050 WBS	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250°C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250°C	
Thermal Resistance	Dimensions & Tolerances		40 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 060	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250 °C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250 °C	
Thermal Resistance	Dimensions & Tolerances		20 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 060 ALU	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	MV2	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250 °C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250 °C	
Thermal Resistance	Dimensions & Tolerances		30 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 060 VBS	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250 °C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250 °C	
Thermal Resistance	Dimensions & Tolerances		30 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 060 VWS	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250 °C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250 °C	
Thermal Resistance	Dimensions & Tolerances		30 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

Essential Characteristics	T4305LPCPR		Harmonised Technical Standard
	Performance	Thermo-teK BD 060 WBS	
Reaction to fire	Reaction to fire	A1	EN 14303:2009 + A1:2013
Acoustic Absorption Index	Sound Absorption	NPD	
Water Permeability	Water Absorption	WS1	
Water Vapour Permeability	Water Vapour Diffusion Resistance	NPD	
Compressive Strength	Compressive Stress or Compressive Strength for Flat Products	NPD	
Rate of release of corrosive substances	Trace quantities of water-soluble ions and the pH-value	CL10	
Release of Dangerous Substances to the indoor environment	Release of Dangerous Substances	NPD	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing / degradation	Durability characteristics	NPD {b}	
Durability of thermal resistance against ageing/degradation	Thermal Conductivity	NPD {c}	
	Dimensional Stability	NPD	
	Maximum service temperature - dimensional stability	250 °C	
	Durability characteristics	NPD	
Durability of reaction to fire against high temperature	Durability characteristics	NPD {d}	
Durability of thermal resistance against high temperature	Durability Characteristics	NPD {c}	
	Maximum service temperature - dimensional stability	250 °C	
Thermal Resistance	Dimensions & Tolerances		30 - 255 / T5
	Thermal conductivity (W/mk) at Temperature in °C	10	0,037
		40	0,039
		50	0,041
		100	0,048
		150	0,058
		200	0,071
		250	0,088
		NPD	NPD
		NPD	NPD
NPD - No performance determined			

8. Appropriate Technical Documentation and / or Specific Technical Documentation:

Not applicable

The performance of the product identified above is in conformity with the set of declared performances.

This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for an on behalf of the manufacturer by:

Stjepan Mršić - Plant manager

(Name and function)



Novi Marof - 07-02-20

(Place and date of issue)

Footnotes

{a} The requirement on a certain characteristic is not applicable in those Member States (MSs) where there are no regulatory requirements on that characteristic for the intended use of the product. In this case, manufacturers placing their products on the market of these MSs are not obliged to determine nor declare the performance of their products with regard to this characteristic and the option 'No performance determined' (NPD) in the information accompanying the CE marking (see ZS.3) may be used. The NPD option may not be used, however, where the characteristic is subject to a threshold level (thermal resistance (thermal conductivity and thickness)).

{b} The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of the product is related to the organic contents, which cannot increase with time.

{c} Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air.

{d} The fire performance of mineral wool does not deteriorate with high temperature. The Euroclass classification of the product is related to the organic content, which remains constant or decreases with high temperature.