Declaration of Performance

G4207OPCPR

1. Unique identification code of the product-type:

   DriTherm 32 Ultimate, EcoBatt Slab, Factory Clad 32, FrameTherm Roll 32, FrameTherm Slab 32, Glass Slab 032 Foil faced, Kalzip Plus 32, Rafter Roll, Universal Slab CS48

2. Intended use or uses:

   Thermal Insulation for Buildings (ThIB)

3. Manufacturer:

   Knauf Insulation Ltd.
   PO Box 10, Stafford Road, WA10 3NS St.Helens, Merseyside
   UK
   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 13162:2012 + A1:2015

   Notified body or bodies:

   AVCP System 1: BSI (Notified certification body No. 0086)
   AVCP System 3: BSI (Notified certification body No. 0086)

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	G4207OPCPR		Harmonised technical standard
	Performance	DriTherm 32 Ultimate	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	25-150	
	Thickness tolerance	T4	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	WS	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	EcoBatt Slab	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	80-95	
	Thickness tolerance	T4	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	Factory Clad 32	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	80	
	Thickness tolerance	T4	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	WS	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	FrameTherm Roll 32	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	90-140	
	Thickness tolerance	T1	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	FrameTherm Slab 32	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	90-140	
	Thickness tolerance	T1	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

G4207OPCPR Glass Slab 032 Foil faced

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	Glass Slab 032 Foil faced	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	100	
	Thickness tolerance	T4	
Reaction to Fire	Reaction to fire	F	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	Kalzip Plus 32	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	80-120	
	Thickness tolerance	T1	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	Rafter Roll	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	75-100	
	Thickness tolerance	T1	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
NPD - No performance determined			

Essential Characteristics	G4207OPCPR		Harmonised technical standard
	Performance	Universal Slab CS48	
Thermal Resistance	Thermal conductivity (W/mK)	0,032	EN 13162:2012 + A1:2015
	Thermal Resistance	See product label	
	Thickness range (mm)	25-75	
	Thickness tolerance	T4	
Reaction to Fire	Reaction to fire	A1	
Durability of reaction to fire against heat, weathering, ageing / degradation	Durability Characteristics	NPD {a}	
Durability of thermal resistance against heat, weathering, ageing / degradation	Thermal Resistance	NPD{b}	
	Thermal conductivity	NPD	
	Durability characteristics	NPD {c}	
Compressive Strength	Compressive Stress / Compressive Strength	NPD	
	Point Load	NPD	
Tensile / Flexural strength	Tensile strength perpendicular faces	NPD {d}	
Durability of compressive Strength against ageing / degradation	Compressive creep	NPD	
Water Permeability	Short term water absorption	NPD	
	Long term water absorption	NPD	
Water vapour permeability	Water vapour transmission, water vapour diffusion resistance factor	NPD	
Impact noise transmissions index (for floors)	Dynamic stiffness	NPD	
	Thickness	NPD	
	Compressibility	NPD	
	Air flow resistivity	NPD	
Acoustic absorptions index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD {e}	
Continuous glowing combustion	Continuous glowing combustion	NPD {e}	
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:

David Atkinson - Plant manager

(Name and function)

St. Helens - 05-12-17

(Place and date of issue)

{a} No change in reaction to fire properties for MW Products. The fire performance of MW does not deteriorate with time. The Euroclass classification of the product is related to the organic content, which cannot increase with time.
{b} Thermal conductivity of MW 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
{c} For dimensional stability thickness only
{d} This characteristic also covers handling and installation
{e} European test methods are under development
{f} Also valid and applicable for multilayers