

Declaration of Performance

G4207CPCPR

1. Unique identification code of the product-type:
Earthwool CarbonZero Roll, CarbonZero Loft Roll, Loft Roll 44, Universal Roll, Frametherm Roll, EKO ROLL 44 (Combi-Cut), GLASS MW ROLL 8,7KG
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:
Knauf Insulation AB
Gardatorget 1
412 50 Goteborg
Sweden
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: (Notified certification body) 0402 - RISE Research Institutes of Sweden AB - - -

AVCP System 3: (Notified testing laboratory) 0402 - RISE Research Institutes of Sweden
AB - - - - -
- 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|-----------------------|-------------------------------|
| | Performance {f} | CarbonZero Loft Roll | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 50 - 260 | |
| | 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|---------------------------|-------------------------------|
| | Performance {f} | Earthwool CarbonZero Roll | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 50 - 260 | |
| | 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|-------------------------|-------------------------------|
| | Performance {f} | EKO ROLL 44 (Combi-Cut) | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 100 - 200 | |
| | 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|-----------------------|-------------------------------|
| | Performance {f} | Frametherm Roll | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 50 - 260 | |
| | 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|-----------------------|-------------------------------|
| | Performance {f} | GLASS MW ROLL 8,7KG | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 60 | |
| | 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|-----------------------|-------------------------------|
| | Performance {f} | Loft Roll 44 | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 100 - 270 | |
| | 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 | G4207CPCPR | | Harmonised technical standard |
|---|---|-----------------------|-------------------------------|
| | Performance {f} | Universal Roll | |
| Thermal Resistance | Thermal conductivity (W/mK) | λ_D 0,044 | EN 13162:2012 + A1:2015 |
| | Thermal Resistance | See performance chart | |
| | Thickness range (mm) | 50 - 260 | |
| | 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 | | | |

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.

| Thermal Resistance Table | | | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| [mm] | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| [m ² K/W] | 1,10 | 1,35 | 1,55 | 1,80 | 2,00 | 2,25 | 2,50 | 2,70 | 2,95 | 3,15 | 3,40 | 3,60 | 3,85 | 4,05 |
| [mm] | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 | 270 | | | | | |
| [m ² K/W] | 4,30 | 4,50 | 4,75 | 5,00 | 5,20 | 5,45 | 5,65 | 5,90 | 6,10 | | | | | |

Signed for an on behalf of the manufacturer by:

Darren Holt - Plant manager
(Name and function)



St. Helens - 16-06-21
(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