### **Declaration of Performance**



#### G4248GPCPR

#### 1. Unique identification code of the product-type:

Earthwool 040, Earthwool P 040, Earthwool KD 040, EarthwoolPlus 2xKD 040, Naturoll 040, Naturoll KD 040, Classic 040, Classic KD 040, Loftroll 040, Loftroll KD 040, Knauf Insulation 040, Knauf Insulation KD 040, Classic N 040, KI KlimaRoll F 040, KI Fit 040, NatuRoll Plus, Earthwool Alu 040, Earthwool P Alu 040, Classic Alu 040, Naturoll Alu 040, Loftroll Alu 040, Knauf Insulation Alu 040, Earthwool E 40 Alu, CLASICN 040 ALU, TI 312RA

#### 2. Intended use or uses:

Thermal Insulation for Buildings (ThIB)

#### 3. <u>Manufacturer:</u>

Knauf Insulation
75. Yıl Mah. 1. Cadde 1/G Kucuk Organize Sanayi
26250 Eskisehir, Turkey
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: TECHNICKY A ZKUSEBNI USTAV STAVEBNI PRAHA s.p. (Notified certification body No. 1020)

AVCP System 3: TEBAR Test Belgelendirme Arastirma ve Gelistirme Tic. A.S. (Notified certification body No. 2164)

#### 6b. European Assessment document: not applicable

European Technical Assessment: not applicable Technical Assessment Body: not applicable

Notified body/ies: not applicable

#### 7. <u>Declared Performances:</u>

See next page

G4248GPCPR 01-02-19 Version 6.0 1/27

#### G4248GPCPR CLASICN 040 ALU



| Essential Characteristics   | G4248G  | PCPR              | Harmonised technical |
|---|---|-------------------|----------------------|
|   | Performance   | CLASICN 040 ALU   | standard             |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λD 0,040          | EN 13162:2012 +      |
| Thermal Nesistance  | Thermal Resistance  | See product label | A1:2015              |
|   | Thickness range (mm)  | 50 - 260          | _                    |
|   |   |                   | _                    |
|   | Thickness tolerance   | T1                |                      |
| Reaction to Fire  | Reaction to fire  | C-s1, d0          |                      |
| 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}            |                      |
| near, wearnering, ageing / degradation  | Thermal conductivity  | NPD               |                      |
|   | Durability characteristics  | NPD {c}           |                      |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD               |                      |
| floors)   | Thickness   | NPD               |                      |
|   | Compressibility   | NPD               | $\neg$               |
|   | 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 dete   | ermined           |                      |

**G4248GPCPR** 01-02-19 Version 6.0 2/27

#### G4248GPCPR Classic 040



| Essential Characteristics   | G4248GP   | CPR               | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | Classic 040       | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label | A1:2015                       |
|   | 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<br>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   | Dynamic stiffness   | NPD               | _                             |
| floors)   | 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 deterr   | mined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 3/27

### G4248GPCPR Classic Alu 040



| Essential Characteristics   | G4248GP0  | CPR               | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | Classic Alu 040   | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label | A1:2015                       |
|   | Thickness range (mm)  | 50 - 260          |                               |
|   | Thickness tolerance   | T1                |                               |
| Reaction to Fire  | Reaction to fire  | C-s1, d0          |                               |
| 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}            |                               |
| 3, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,                                    | Thermal conductivity  | NPD               |                               |
|   | Durability characteristics  | NPD {c}           |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                               |
|   | Point Load  | NPD               |                               |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                               |
| Ourability 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   | Dynamic stiffness   | NPD               | _                             |
| floors)   | 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 deterr   | nined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 4/27

### G4248GPCPR Classic KD 040



| Essential Characteristics   | G4248G  | GPCPR GPCPR       | Harmonised technical |
|---|---|-------------------|----------------------|
|   | Performance   | Classic KD 040    | standard             |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +      |
|   | Thermal Resistance  | See product label | A1:2015              |
|   | 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}            |                      |
| neat, weathering, ageing / degradation  | Thermal conductivity  | NPD               |                      |
|   | Durability characteristics  | NPD {c}           |                      |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD               |                      |
| floors)   | Thickness   | NPD               |                      |
|   | Compressibility   | NPD               |                      |
|   | Air flow resistivity  | NPD               | $\dashv$             |
| Acoustic absorptions index  | Sound absorption  | NPD               | 1                    |
| 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 dete   | ermined           |                      |

**G4248GPCPR** 01-02-19 Version 6.0 5/27

### G4248GPCPR Classic N 040



| Essential Characteristics   | G4248G  | GPCPR GPCPR       | Harmonised technical |
|---|---|-------------------|----------------------|
|   | Performance   | Classic N 040     | standard             |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +      |
|   | Thermal Resistance  | See product label | A1:2015              |
|   | 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                                      | Thermal Resistance  | NPD{b}            |                      |
| heat, weathering, ageing / degradation  | Thermal conductivity  | NPD               |                      |
|   | Durability characteristics  | NPD {c}           |                      |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                      |
|   | Point Load  | NPD               |                      |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                      |
| Ourability 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   | Dynamic stiffness   | NPD               | _                    |
| floors)   | 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 dete   | ermined           |                      |

**G4248GPCPR** 01-02-19 Version 6.0 6/27

### G4248GPCPR Earthwool 040



| Essential Characteristics   | G4248GP   | CPR               | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | Earthwool 040     | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label | A1:2015                       |
|   | 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}            |                               |
| 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,                                       | Thermal conductivity  | NPD               |                               |
|   | Durability characteristics  | NPD {c}           |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                               |
|   | Point Load  | NPD               |                               |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                               |
| Ourability 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   | Dynamic stiffness   | NPD               | _                             |
| floors)   | 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 deterr   | mined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 7/27

### G4248GPCPR Earthwool Alu 040



| Essential Characteristics   | G4248GP0  | CPR               | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | Earthwool Alu 040 | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
| mermar Resistance   |   |                   | A1:2015                       |
|   | Thermal Resistance  | See product label |                               |
|   | Thickness range (mm)  | 50 - 260          |                               |
|   | Thickness tolerance   | T1                |                               |
| Reaction to Fire  | Reaction to fire  | C-s1, d0          |                               |
| Durability of reaction to fire against heat, weathering, ageing / degradation | Durability Characteristics  | NPD {a}           |                               |
| Durability of thermal resistance against                                      | Thermal Resistance  | NPD{b}            |                               |
| heat, weathering, ageing / degradation  | Thermal conductivity  | NPD               |                               |
|   | Durability characteristics  | NPD {c}           |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD               |                               |
| floors)   | Thickness   | NPD               |                               |
|   | Compressibility   | NPD               | $\neg$                        |
|   | 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 detern   |                   |                               |

**G4248GPCPR** 01-02-19 Version 6.0 8/27

#### G4248GPCPR Earthwool E 40 Alu



| Essential Characteristics   | G4248GP0  | CPR                | Harmonised technical standard |
|---|---|--------------------|-------------------------------|
|   | Performance   | Earthwool E 40 Alu | Stanuaru                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040           | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label  | A1:2015                       |
|   | Thickness range (mm)  | 50 - 260           |                               |
|   | Thickness tolerance   | T1                 |                               |
| Reaction to Fire  | Reaction to fire  | C-s1, d0           |                               |
| 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}             |                               |
| neat, weathering, ageing / degradation  | Thermal conductivity  | NPD                |                               |
|   | Durability characteristics  | NPD {c}            |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD                |                               |
|   | Point Load  | NPD                |                               |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}            |                               |
| Ourability 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   | Dynamic stiffness   | NPD                |                               |
| floors)   | 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 deterr   | mined              |                               |

**G4248GPCPR** 01-02-19 Version 6.0 9/27

### G4248GPCPR Earthwool KD 040



| Essential Characteristics  | G4248GP   | CPR               | Harmonised technical standard |
|--|---|-------------------|-------------------------------|
|  | Performance   | Earthwool KD 040  | Stanuaru                      |
| Thermal Resistance   | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|  | Thermal Resistance  | See product label | A1:2015                       |
|  | Thickness range (mm)  | 50 - 260          |                               |
|  | Thickness tolerance   | T1                |                               |
| Reaction to Fire   | Reaction to fire  | A1                |                               |
| Durability of reaction to fire against heat,<br>weathering, ageing / degradation | Durability Characteristics  | NPD {a}           |                               |
| Durability of thermal resistance against heat, weathering, ageing / degradation  | Thermal Resistance  | NPD{b}            |                               |
| meat, meathering, ageing / degradation   | Thermal conductivity  | NPD               |                               |
|  | Durability characteristics  | NPD {c}           |                               |
| Compressive Strength   | Compressive Stress / Compressive<br>Strength                        | NPD               |                               |
|  | Point Load  | NPD               |                               |
| Tensile / Flexural strength  | Tensile strength perpendicular faces                                | NPD {d}           |                               |
| Ourability 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  | Dynamic stiffness   | NPD               |                               |
| floors)  | 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 deterr   | mined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 10/27

### G4248GPCPR Earthwool P 040



| Essential Characteristics   | G4248GPCPR  |                   | Harmonised technical |
|---|---|-------------------|----------------------|
|   | Performance   | Earthwool P 040   | standard             |
|   |   |                   |                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λD 0,040          | EN 13162:2012 +      |
|   | Thermal Resistance  | See product label | A1:2015              |
|   | 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}            |                      |
| neat, weathering, ageing / degradation  | Thermal conductivity  | NPD               |                      |
|   | Durability characteristics  | NPD {c}           |                      |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                      |
|   | Point Load  | NPD               | $\dashv$             |
| 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   | Dynamic stiffness   | NPD               |                      |
| floors)   | Thickness   | NPD               |                      |
|   | Compressibility   | NPD               |                      |
|   | Air flow resistivity  | NPD               | $\dashv$             |
| 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 dete   | rmined            |                      |

**G4248GPCPR** 01-02-19 Version 6.0 11/27

### G4248GPCPR Earthwool P Alu 040



| Essential Characteristics   | G4248GPCF   | PR                  | Harmonised technica standard |
|---|---|---------------------|------------------------------|
|   | Performance   | Earthwool P Alu 040 | standard                     |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040            | EN 13162:2012 +              |
|   | Thermal Resistance  | See product label   | A1:2015                      |
|   | Thickness range (mm)  | 50 - 260            | _                            |
|   | Thickness tolerance   | T1                  |                              |
| Reaction to Fire  | Reaction to fire  | C-s1, d0            | $\dashv$                     |
| Durability of reaction to fire against heat, weathering, ageing / degradation | Durability Characteristics  | NPD {a}             |                              |
| Durability of thermal resistance against                                      | Thermal Resistance  | NPD{b}              |                              |
| heat, weathering, ageing / degradation  | Thermal conductivity  | NPD                 |                              |
|   | Durability characteristics  | NPD {c}             |                              |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD                 |                              |
| floors)   | 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 determi  | ined                |                              |

**G4248GPCPR** 01-02-19 Version 6.0 12/27

# G4248GPCPR EarthwoolPlus 2xKD 040



| Essential Characteristics   | G4248GP0  | CPR                    | Harmonised technical standard |
|---|---|------------------------|-------------------------------|
|   | Performance   | EarthwoolPlus 2xKD 040 | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040               | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label      | A1:2015                       |
|   | 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                                      | Thermal Resistance  | NPD{b}                 | _                             |
| heat, weathering, ageing / degradation  | Thermal conductivity  | NPD                    |                               |
|   | Durability characteristics  | NPD {c}                |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD                    | _                             |
| floors)   | 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 detern   | nined                  |                               |

**G4248GPCPR** 01-02-19 Version 6.0 13/27

#### G4248GPCPR KI Fit 040



| Essential Characteristics   | G4248GPCPR  |                   | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | KI Fit 040        | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label | A1:2015                       |
|   | 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<br>Strength                        | NPD               |                               |
|   | Point Load  | NPD               |                               |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                               |
| Ourability 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   | Dynamic stiffness   | NPD               | _                             |
| floors)   | 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 deterr   | mined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 14/27

### G4248GPCPR KI KlimaRoll F 040



| Essential Characteristics   | G4248GPCPR  |                    | Harmonised technical standard |
|---|---|--------------------|-------------------------------|
|   | Performance   | KI KlimaRoll F 040 | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040           | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label  | A1:2015                       |
|   | 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}             |                               |
| 3, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,                                    | Thermal conductivity  | NPD                |                               |
|   | Durability characteristics  | NPD {c}            |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD                |                               |
|   | Point Load  | NPD                |                               |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}            |                               |
| Ourability 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   | Dynamic stiffness   | NPD                | _                             |
| floors)   | 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 deterr   | nined              |                               |

**G4248GPCPR** 01-02-19 Version 6.0 15/27

# G4248GPCPR Knauf Insulation 040



| Essential Characteristics   | G4248GP   | CPR                  | Harmonised technical standard |
|---|---|----------------------|-------------------------------|
|   | Performance   | Knauf Insulation 040 | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040             | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label    | A1:2015                       |
|   | 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}               |                               |
| 3, 4, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,                                    | Thermal conductivity  | NPD                  |                               |
|   | Durability characteristics  | NPD {c}              |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD                  |                               |
|   | Point Load  | NPD                  |                               |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}              |                               |
| Ourability 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   | Dynamic stiffness   | NPD                  |                               |
| floors)   | 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 deterr   | mined                |                               |

**G4248GPCPR** 01-02-19 Version 6.0 16/27

# G4248GPCPR Knauf Insulation Alu 040



| Essential Characteristics   | G4248GPC  | CPR                      | Harmonised technical standard |
|---|---|--------------------------|-------------------------------|
|   | Performance   | Knauf Insulation Alu 040 | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040                 | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label        | A1:2015                       |
|   | Thickness range (mm)  | 50 - 260                 | _                             |
|   | Thickness tolerance   | T1                       |                               |
| Reaction to Fire  | Reaction to fire  | C-s1, d0                 | _                             |
| Durability of reaction to fire against heat, weathering, ageing / degradation | Durability Characteristics  | NPD {a}                  |                               |
| Durability of thermal resistance against                                      | Thermal Resistance  | NPD{b}                   | _                             |
| heat, weathering, ageing / degradation  | Thermal conductivity  | NPD                      |                               |
|   | Durability characteristics  | NPD {c}                  |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD                      |                               |
| floors)   | 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 detern   | nined                    |                               |

**G4248GPCPR** 01-02-19 Version 6.0 17/27

# G4248GPCPR Knauf Insulation KD 040



| Essential Characteristics   | G4248GP   | CPR                     | Harmonised technical standard |
|---|---|-------------------------|-------------------------------|
|   | Performance   | Knauf Insulation KD 040 | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λD 0,040                | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label       | A1:2015                       |
|   | 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}                  |                               |
| neat, neathering, ageing / aegradation  | Thermal conductivity  | NPD                     |                               |
|   | Durability characteristics  | NPD {c}                 |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD                     |                               |
| floors)   | 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 deterr   | mined                   |                               |

**G4248GPCPR** 01-02-19 Version 6.0 18/27

#### G4248GPCPR Loftroll 040



| Essential Characteristics   | G4248G  | iPCPR             | Harmonised technical |
|---|---|-------------------|----------------------|
|   | Performance   | Loftroll 040      | standard             |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +      |
|   | Thermal Resistance  | See product label | A1:2015              |
|   | Thickness range (mm)  | 50 - 260          |                      |
|   | Thickness tolerance   | T1                | _                    |
| Reaction to Fire  | Reaction to fire  | A1                | $\dashv$             |
| 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}            |                      |
| near, weathering, ageing / degradation  | Thermal conductivity  | NPD               |                      |
|   | Durability characteristics  | NPD {c}           |                      |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                      |
|   | Point Load  | NPD               | _                    |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                      |
| Ourability 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   | Dynamic stiffness   | NPD               |                      |
| floors)   | 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 dete   | ermined           |                      |

**G4248GPCPR** 01-02-19 Version 6.0 19/27

### G4248GPCPR Loftroll Alu 040



| Essential Characteristics   | G4248GPCPR  |                   | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | Loftroll Alu 040  | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label | A1:2015                       |
|   | Thickness range (mm)  | 50 - 260          |                               |
|   | Thickness tolerance   | T1                |                               |
| Reaction to Fire  | Reaction to fire  | C-s1, d0          |                               |
| 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<br>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   | Dynamic stiffness   | NPD               | _                             |
| floors)   | 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 detern   | nined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 20/27

### G4248GPCPR Loftroll KD 040



| Essential Characteristics                                       | G4248GP   | CPR               | Harmonised technical standard |
|---|---|-------------------|-------------------------------|
|   | Performance   | Loftroll KD 040   | Standard                      |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +               |
|   | Thermal Resistance  | See product label | A1:2015                       |
|   | Thickness range (mm)  | 50 - 260          |                               |
|   | Thickness tolerance   | T1                |                               |
| Reaction to Fire  | Reaction to fire  | A1                |                               |
| Durability of reaction to fire against heat,                    | Durability Characteristics  | NPD {a}           |                               |
| weathering, ageing / degradation                                |   |                   |                               |
| Durability of thermal resistance against                        | Thermal Resistance  | NPD{b}            |                               |
| heat, weathering, ageing / degradation                          | Thermal conductivity  | NPD               |                               |
|   | Durability characteristics  | NPD {c}           |                               |
| Compressive Strength  | Compressive Stress / Compressive<br>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                           | Dynamic stiffness   | NPD               |                               |
| floors)   | 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 deterr   | mined             |                               |

**G4248GPCPR** 01-02-19 Version 6.0 21/27

#### G4248GPCPR Naturoll 040



| Essential Characteristics   | G4248G  | PCPR              | Harmonised technical       |
|---|---|-------------------|----------------------------|
|   | Performance   | Naturoll 040      | standard                   |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +<br>A1:2015 |
|   | Thermal Resistance  | See product label | A1:2015                    |
|   | 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}            |                            |
| neat, weathering, ageing / degradation  | Thermal conductivity  | NPD               |                            |
|   | Durability characteristics  | NPD {c}           |                            |
| Compressive Strength  | Compressive Stress / Compressive<br>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   | Dynamic stiffness   | NPD               | _                          |
| floors)   | 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 dete   | ermined           |                            |

**G4248GPCPR** 01-02-19 Version 6.0 22/27

### G4248GPCPR Naturoll Alu 040



| Essential Characteristics   | G4248GP0  | G4248GPCPR        |                 |
|---|---|-------------------|-----------------|
|   | Performance   | Naturoll Alu 040  | standard        |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 + |
|   | Thermal Resistance  | See product label | A1:2015         |
|   | Thickness range (mm)  | 50 - 260          |                 |
|   | Thickness tolerance   | T1                |                 |
| Reaction to Fire  | Reaction to fire  | C-s1, d0          |                 |
| Ourability 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}            |                 |
| meaty meathering, ageing y degradation  | Thermal conductivity  | NPD               |                 |
|   | Durability characteristics  | NPD {c}           |                 |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                 |
|   | Point Load  | NPD               |                 |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                 |
| Ourability 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   | Dynamic stiffness   | NPD               | _               |
| floors)   | 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 detern   | nined             |                 |

**G4248GPCPR** 01-02-19 Version 6.0 23/27

#### G4248GPCPR Naturoll KD 040



| Essential Characteristics   | G4248G  | GPCPR             | Harmonised technical |
|---|---|-------------------|----------------------|
|   | Performance   | Naturoll KD 040   | standard             |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 +      |
|   | Thermal Resistance  | See product label | A1:2015              |
|   | 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}            |                      |
| meat, meathering, ageing / degradation  | Thermal conductivity  | NPD               |                      |
|   | Durability characteristics  | NPD {c}           |                      |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                      |
|   | Point Load  | NPD               |                      |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                      |
| Ourability 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   | Dynamic stiffness   | NPD               |                      |
| floors)   | 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 dete   | ermined           |                      |

**G4248GPCPR** 01-02-19 Version 6.0 24/27

### G4248GPCPR NatuRoll Plus



| Essential Characteristics   | G4248GP0  | G4248GPCPR        |                 |
|---|---|-------------------|-----------------|
|   | Performance   | NatuRoll Plus     | standard        |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040          | EN 13162:2012 + |
|   | Thermal Resistance  | See product label | A1:2015         |
|   | Thickness range (mm)  | 50 - 260          |                 |
|   | Thickness tolerance   | T1                |                 |
| Reaction to Fire  | Reaction to fire  | A1                |                 |
| Ourability 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}            |                 |
| meat, meathering, ageing / degradation  | Thermal conductivity  | NPD               |                 |
|   | Durability characteristics  | NPD {c}           |                 |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        | NPD               |                 |
|   | Point Load  | NPD               |                 |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}           |                 |
| Ourability 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   | Dynamic stiffness   | NPD               |                 |
| floors)   | 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 detern   | nined             |                 |

**G4248GPCPR** 01-02-19 Version 6.0 25/27

#### G4248GPCPR TI 312RA



| Essential Characteristics   | G4248G  | Harmonised technical |                 |
|---|---|----------------------|-----------------|
|   | Performance   | TI 312RA             | standard        |
| Thermal Resistance  | Thermal conductivity (W/mK)   | λο 0,040             | EN 13162:2012 + |
|   | Thermal Resistance  | See product label    | A1:2015         |
|   | Thickness range (mm)  | 50 - 260             |                 |
|   | Thickness tolerance   | T1                   |                 |
| Reaction to Fire  | Reaction to fire  | C-s1, d0             |                 |
| 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}               | _               |
| neat, weathering, ageing / degradation  | Thermal conductivity  | NPD                  |                 |
|   | Durability characteristics  |                      |                 |
| Compressive Strength  | Compressive Stress / Compressive<br>Strength                        |                      |                 |
|   | Point Load  | NPD                  |                 |
| Tensile / Flexural strength   | Tensile strength perpendicular faces                                | NPD {d}              |                 |
| Ourability 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   | Dynamic stiffness   | NPD                  |                 |
| floors)   | 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 dete   | ermined              |                 |

**G4248GPCPR** 01-02-19 Version 6.0 26/27



#### 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  |
| [m²K/W]                  | 1,25 | 1,50 | 1,75 | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 |
| [mm]                     | 190  | 200  | 210  | 220  | 230  | 240  | 250  | 260  |      |      |      |      |      |      |
| $[m^2K/W]$               | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 |      |      |      |      |      |      |

Erkan Uçok - Plant manager (Name and function)

Eskisehir - 01-02-19

(Place and date of issue)

eley

G4248GPCPR 01-02-19 Version 6.0 27/27

<sup>{</sup>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.

<sup>{</sup>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

<sup>{</sup>c} For dimensional stability thickness only

<sup>(</sup>d) This characteristic also covers handling and installation

<sup>{</sup>e} European test methods are under development

<sup>{</sup>f} Also valid and applicable for multilayers