



Declaration of Performance

Kooltherm® K110

1000.CPR.2013.K110.005

Unique identification code of the product-type: **Kooltherm® K110**
 Intended use/es: **Thermal insulation for buildings**
 Manufacturer: **Kingspan Insulation Ltd, Herefordshire HR6 9LA,UK**
 System/s of AVCP: **System 3**
 Harmonised technical specification: **BS-EN 13166:2012+A2:2016**
 Notified body/ies: **AFITI :1168 KIWA:0063. FIW München NB: 0751**

| Essential characteristics | | Performance | | | | | | | | | | | | | | | | | | | | |
|---|--|---|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|-------------|------|-------------|------|
| Thermal resistance | Thermal resistance R_D ((m ² .K)/W) | <table border="1"> <tr><td>d_N 25mm</td><td>1.35</td></tr> <tr><td>d_N 30mm</td><td>1.65</td></tr> <tr><td>d_N 40mm</td><td>2.20</td></tr> <tr><td>d_N 50mm</td><td>2.75</td></tr> <tr><td>d_N 60mm</td><td>3.30</td></tr> <tr><td>d_N 70mm</td><td>3.85</td></tr> <tr><td>d_N 80mm</td><td>4.40</td></tr> <tr><td>d_N 90mm</td><td>5.00</td></tr> <tr><td>d_N 100mm</td><td>5.55</td></tr> <tr><td>d_N 120mm</td><td>6.65</td></tr> </table> | d_N 25mm | 1.35 | d_N 30mm | 1.65 | d_N 40mm | 2.20 | d_N 50mm | 2.75 | d_N 60mm | 3.30 | d_N 70mm | 3.85 | d_N 80mm | 4.40 | d_N 90mm | 5.00 | d_N 100mm | 5.55 | d_N 120mm | 6.65 |
| | d_N 25mm | 1.35 | | | | | | | | | | | | | | | | | | | | |
| | d_N 30mm | 1.65 | | | | | | | | | | | | | | | | | | | | |
| d_N 40mm | 2.20 | | | | | | | | | | | | | | | | | | | | | |
| d_N 50mm | 2.75 | | | | | | | | | | | | | | | | | | | | | |
| d_N 60mm | 3.30 | | | | | | | | | | | | | | | | | | | | | |
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| d_N 100mm | 5.55 | | | | | | | | | | | | | | | | | | | | | |
| d_N 120mm | 6.65 | | | | | | | | | | | | | | | | | | | | | |
| Thermal conductivity λ_D (W/(m.K)) | λ_D 0.018 | | | | | | | | | | | | | | | | | | | | | |
| Thickness tolerance | d_N 20-200mm T1 | | | | | | | | | | | | | | | | | | | | | |
| Reaction to fire | Reaction to fire | C-s2,d0 Exposed Foil face NPD – Non Exposed Tissue face | | | | | | | | | | | | | | | | | | | | |
| Durability of reaction to fire against heat, weathering, ageing / degradation | Durability Characteristics | NPD | | | | | | | | | | | | | | | | | | | | |
| Durability of thermal resistance against heat, weathering, ageing/ degradation | Durability Characteristics | NPD | | | | | | | | | | | | | | | | | | | | |
| | Dimensional stability under specified temperature and humidity condition | DS(70,90) | | | | | | | | | | | | | | | | | | | | |
| | | DS(-20,-) | | | | | | | | | | | | | | | | | | | | |
| Determination of the aged values of thermal resistance and thermal conductivity | R_D and λ_D | | | | | | | | | | | | | | | | | | | | | |
| Compressive strength | Compressive stress or compressive strength | CS(Y)100 | | | | | | | | | | | | | | | | | | | | |
| Tensile / Flexural strength | Tensile strength perpendicular to faces | NPD | | | | | | | | | | | | | | | | | | | | |
| Durability of compressive strength against ageing / degradation | Compressive creep | NPD | | | | | | | | | | | | | | | | | | | | |
| Water permeability | Short term water absorption | NPD | | | | | | | | | | | | | | | | | | | | |



Declaration of Performance

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| | Long term water absorption | NPD |
| | Closed cell content | CV |
| Water vapour permeability | Water vapour transmission | NPD |
| | Closed cell content | CV |
| Release of dangerous substances to the indoor environment | Release of dangerous substances | NPD |
| NPD: No Performance Determined | | |

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

Signed for and on behalf of the manufacturer by:

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Ralph Mannion
Managing Director UK and Ireland
Pembridge, England, UK
Version 5
Version date 1/1/2021
First signed 1/1/2021