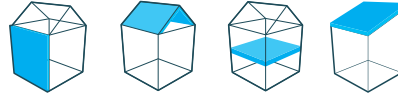


## SUPAFIL® CARBONPLUS

September 2019



### APPLICATIONS



### DESCRIPTION

Supafil® CarbonPlus is an unbonded, virgin glasswool insulation designed with optimal thermal properties and excellent coverage and blowing characteristics. Supafil® CarbonPlus is especially designed for installation in existing cavities that require silicone treated insulation. Supafil® CarbonPlus is a non-combustible glasswool product that requires no mixing on site. Supafil® CarbonPlus should only be installed by Approved Installers, to ensure the highest quality installed performance.

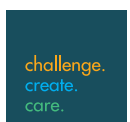
### PERFORMANCE

|                               |   |
|-------------------------------|---|
| <b>Thermal conductivity</b>   | AS/NZS 4859.1.  |
| <b>Fire Hazard Properties</b> | Ignitability: 0, Spread of Flame: 0, Heat Evolved: 0, Smoke Developed: 1. |
| <b>Vapour Resistivity</b>     | 5.00 MN. s.g.m.   |
| <b>Microbial Growth</b>       | Does not support microbial growth.  |
| <b>Corrosion</b>              | No greater than sterile cotton.   |
| <b>Combustibility</b>         | Non-combustible (AS 1530.1-1994).   |

### BENEFITS

- ✓ Maximum performance in walls, underfloor and cathedral/skillion roof cavities.
- ✓ Sustainable - each bag contains the equivalent of over 45 recycled glass bottles.
- ✓ Silicone treated for extra moisture protection.
- ✓ Fast, easy installation by Approved Installers.

### CERTIFICATION



## SUPAFIL® CARBONPLUS

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### ADDITIONAL INFORMATION

#### Specification Guide

The cavity wall insulation shall be Supafil® CarbonPlus 0.038 W/mK (NZ), 0.039 W/mK (AU), 25kg/m<sup>3</sup> and when installed at a density of 28kg/m<sup>3</sup>. Supafil® CarbonPlus will achieve a thermal conductivity of 0.032 W/mK in (NZ) and 0.033 W/mK in (AU) CodeMark™ certified to meet the provisions of the Building Code of Australia and New Zealand. The product will be non-combustible, CFC/HCFC free, zero ODP and GWP, silicone treated glasswool insulation with high post-consumer recycled glass content. It will be manufactured under Quality Assurance Standards ISO 9001:2008 and ISO 14001:2004 by Knauf Insulation and shall be installed in accordance with the instructions issued by them.

#### Specification Compliance

- AS/NZS 4859.1.
- Non-combustible - AS 1530.1.
- CodeMark certification.

#### Durability

- Silicone treated for extra moisture protection.
- Will not rot, mildew or deteriorate.
- Will not settle.
- Performs for the lifetime of the building.
- Non-combustible, non-corrosive.
- Will not sustain vermin.
- Consistent, reliable performance.

#### Acoustic performance

- Supafil® CarbonPlus improves sound transmission class (STC) by between 4 and 10 points.

#### Thermal performance

Supafil® CarbonPlus provides you with a choice of R-Values based on the installed thickness and installed weight per square metre. The table overleaf shows the minimum requirements for obtaining the desired R-Value. The stated thermal resistance (R-Value) is provided by installing the required density at the thickness (per the manufacturer's instructions). Supafil® CarbonPlus when installed at a minimum density of 25kg/m<sup>3</sup>. Supafil® CarbonPlus will achieve a thermal conductivity of 0.038 W/mK (NZ) and 0.039 W/mK (AU) when installed at a density of 28kg/m<sup>3</sup>. Supafil® CarbonPlus will achieve a thermal conductivity of 0.032 W/mK in (NZ) and 0.033 W/mK in (AU). When installed at various thicknesses Supafil® CarbonPlus will achieve R-Values that with NZS 4214 are able to meet the minimum requirements of NZS 4218 and the Energy Efficiency requirements of BCA for walls, skillion roofs and under floors. Supafil® CarbonPlus is not designed for mixing with other products, adhesives or binder systems as these may affect the thermal performance and is not recommended by the manufacturer.

#### Engineered Blow-In insulation system

Supafil® CarbonPlus fills all gaps and voids around service penetrations such as water pipes and electric wiring and any other obstructions or unusual design details, ensuring thermal and acoustic performance is created. Supafil® CarbonPlus allows quicker and more efficient filling of wide cavities where multiple layers of conventional insulation would normally be installed. Supafil® CarbonPlus saves installation time by minimising the steps needed to fully insulate tight corners and hard to reach areas.

#### Packaging

Supafil® CarbonPlus is packaged in a strong, poly bag that offers excellent protection from abuse, dust and moisture. Knauf Insulation packages stack without slipping and are easy to handle and store.

#### Installation

- Fast and easy to install with the added confidence of an Approved Installer
- Easily fills hard to reach and low pitch roofs
- Easily fills insulation cavities.

## SUPAFIL® CARBONPLUS

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### ADDITIONAL INFORMATION (CONT.)

#### Exposure to water or moisture

Insulation does not provide thermal benefit if wet. Glasswool insulation will not sustain mould growth. If the material is wet it should be replaced.

#### Australia National Construction Code Series (NCC 2016) Building Code of Australia (BCA)

- CP1/CP2/CP4 and P2.3.1 – Fire Resistance.
- FP1.4 / P2.2 and FP 1.5 / 2.2.3 - Weatherproofing and Dampness.
- FP5.5 / FP5.3 and P2.4.6 – Sound Insulation.
- GP2.1 and P2.3.3 – Heating Appliances.
- JP1 and P2.6.1 – Energy Efficiency.
- Supafil® CarbonPlus thermal resistance has been determined by AS/NZS 4859.1. and will contribute to meeting these requirements.

#### New Zealand Building Code:

- Clause B2 DURABILITY: Performance B2.3.1(a) not less than 50 years and B2,3,1(b) 15 years. Supafil® CarbonPlus will meet these requirements.
- Clause E3 INTERNAL MOISTURE: Performance E3.3.1. Supafil® CarbonPlus will contribute to meeting this requirement.
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Supafil® CarbonPlus meets this requirement and will not present a health hazard to people.
- Clause H1 ENERGY EFFICIENCY: Performance H1.3.1(a) and H1.3.2 E. Supafil® CarbonPlus will contribute to meeting these requirements.
- Supafil® CarbonPlus thermal resistance has been determined by AS/NZS 4859.1.
- Supafil® CarbonPlus is an acceptable solution in terms of the New Zealand Building Code.

### SPECIFICATIONS

| Nominal Thickness<br>(mm) | Australian R-Value<br>(m <sup>2</sup> K/W) |                        | New Zealand R-Value<br>(m <sup>2</sup> K/W) |                        |
|---------------------------|--|------------------------|---|------------------------|
|                           | at 25kg/m <sup>3</sup>                     | at 28kg/m <sup>3</sup> | at 25kg/m <sup>3</sup>                      | at 28kg/m <sup>3</sup> |
| 50                        | 1.3  | 1.5                    | 1.3   | 1.6                    |
| 90                        | 2.3  | 2.7                    | 2.3   | 2.8                    |
| 100                       | 2.5  | 3.0                    | 2.6   | 3.1                    |
| 140                       | 3.5  | 4.2                    | 3.6   | 4.4                    |
| 190                       | 4.8  | 5.8                    | 5.0   | 5.9                    |
| 240                       | 6.1  | 7.3                    | 6.3   | 7.5                    |

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