



August 2015

Supafil® CarbonPlus

For double brick masonry cavities

Description

Supafil CarbonPlus is designed for installation into existing double brick masonry cavities. Supafil CarbonPlus is an unbonded, non-combustible glasswool product which requires no mixing on site.

Application

Supafil CarbonPlus is specifically designed to be used in existing masonry cavity walls with a minimum cavity width of 40mm.

Certification

CodeMark certification for Supafil CarbonPlus approves the application and installation procedure for this product. The product is for use in existing masonry cavity walls, subject to the conditions detailed in CodeMark certificate GM-CM30057 (AU).

Performance

Thermal Conductivity (AS/NZS 4859.1)

- R-1.3 @ 50mm, 25kg/m³

Benefits

- Maximum - performance in walls, underfloor and cathedral/skillion roof cavities.
- Silicone treated for extra moisture protection.
- Sustainable. Up to 80% recycled glass content.
- Each bag contains the equivalent of over 45 recycled glass bottles.
- Fast, easy installation by Approved Installers.

Supafil® CarbonPlus

Permanence

- Non-combustible, non-corrosive.
- Will not rot, mildew or deteriorate.
- Silicone treated for continued durability in high moisture areas.

Durability

- Silicone treated for extra moisture protection.

Noise reduction

- Supafil CarbonPlus reduces sound passing thorough cavity walls.

Energy conservation

- Reduces fuel usage and utility bills for heating and air conditioning.

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 is designed to be installed at a minimum density of 25kg/m³. Supafil CarbonPlus will achieve a thermal conductivity of 0.038 W/mK (NZ) and 0.039W/mK (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.

Gaps, voids and penetrations

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.

Technical data

Fire Hazard Properties

- Ignitability: 0
- Spread of flame: 0
- Heat evolved: 0
- Smoke developed: 1 (When tested in accordance to AS/NZS 1530.3:1999).

Vapour resistivity

- Water vapour resistivity of 5.00 MN. s.g.m.

Corrosion

- No greater than sterile cotton.

Microbial growth (ASTM C 1338)

- Does not support microbial growth.

Non-combustibility

- Non-combustible (AS 1530.1-1994).

Specification Guide

The cavity wall insulation shall be Supafil CarbonPlus 0.038 W/mK (NZ), 0.039 W/mK (AU), 25kg/m³, CodeMark certified to meet the provisions of the BCA. 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.

For more information please visit
www.knaufinsulation.com.au

Supafil® CarbonPlus

Equipment required

To achieve the R-Value, this product must be applied with a pneumatic blowing machine and a corrugated hose with a minimum 5mm internal corrugation, a minimum length of 45m and a diameter of at least 60mm. Coils in the hose should not be less than 10m in diameter.

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.

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 2015) 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 requirement.
- 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.

Technical Data

| Weight per bale (kg) | Installed density (kg/m³) | Thermal conductivity (W/mK) |
|----------------------|---------------------------|-----------------------------|
| 15.5 | 25 | 0.039 |

| Cavity width (mm) | Declared thermal resistance (m²K/W) (R-Value) | Minimum bag usage rate (bags per 100m²) |
|-------------------|---|---|
| 50 | 1.3 | 8.0 |

Australia

Knauf Insulation Pty Ltd
Unit 1, 44 Borthwick Ave
Murarrie QLD 4172
Australia

Sales

(AU) 1800 562 834

Technical Support

+61 7 3393 7300

For more information please visit
www.knaufinsulation.com.au