

Supafil® 40

September 2025

Build on us.



Description

Supafil® 40 is a glass mineral blowing wool, designed for use in external full-fill masonry cavity walls. It offers thermal conductivity of 0.040 W/mK at the installed density of 18kg/m³.

Supafil® 40 is non-combustible with the best possible Euroclass A1 reaction to fire classification.

Benefits

- › Holds an Agrément certificate by the BBA for use in all exposure zones, including those in very severe areas subject to certificate requirements.
- › Suitable for use in wider cavities of up to 125mm.*
- › Made with a water-repellent additive to resist moisture ingress.
- › Installed by 'Approved Supafil® Installers', using specific blowing machines, hoses and nozzles as part of a system.

*When treating cavities wider than 125mm please contact our Technical Services Team to review and assess the suitability for installation with the approved installer prior to works commencing on site. Alternatively, designers should consider use of Supafil® 34; BBA certificate number 11/4857.



NON-COMBUSTIBLE
INSULATION

Technical Specifications

SUPAFIL® 40

Weight per bale (kg)	Installed density (kg/m ³)	Thermal conductivity (W/mK)	GWP A1-A3 (kgCO ₂ e/m ²)	GWP A1-C4 (kgCO ₂ e/m ²)	GWP A1-A3 (kgCO ₂ e/kg)	GWP A1-C4 (kgCO ₂ e/kg)	Product code
17.60	18	0.040	1.33	1.58	0.74	0.88	2409790

All dimensions are nominal

The declared unit is 1m² of Supafil® 40 blowing wool with R-value of 2.50 m²K/W

(for a thickness of a 100mm and a declared lambda of 0.040 W/mK).

SUPAFIL® 40

Cavity width (mm)	Brick outer leaf/ cavity/ 100mm block inner leaf U-value (W/m ² K)				
	Dense block (1.13 W/mK)	Medium dense block (0.51 W/mK)	Lightweight block (0.34 W/mK)	Standard aircrete (0.16 W/mK)	Lightweight aircrete (0.11 W/mK)
100	0.33	0.32	0.31	0.28	0.27
85	0.37	0.36	0.35	0.32	0.30
75	0.41	0.39	0.38	0.35	0.32
65	0.45	0.44	0.42	0.38	0.35
50	0.55	0.52	0.50	0.44	0.41

Note: The U-values have been calculated assuming that all walls are lined with 12.5mm standard plasterboard on dabs on standard blocks with 10mm mortar joints.

Wall ties assumed to be stainless steel at 2.5 per m² with a cross-sectional area of 100mm - 12.5mm², >100 - 150mm - 24mm², >150mm - 60mm².

Air gap correction level is zero.

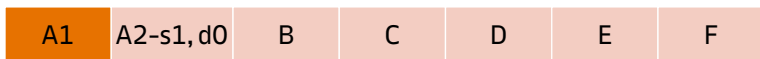
Supafil® 40

Performance

THERMAL (W/mK)

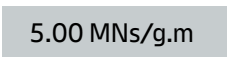


FIRE CLASSIFICATION



Euroclass reaction to fire classification

VAPOUR RESISTIVITY



Applications



External masonry cavity walls blown-in

Typical Build-Ups



Certification, accreditations and industry standards



Application

Supafil® 40 is designed for insulating external masonry cavity walls in new and existing domestic and non-domestic buildings. Supafil® 40 is suitable for cavity widths not less than 50mm. When treating cavities wider than 125mm, please contact our Technical Services Team to review and assess the suitability for installation with the approved installer prior to works commencing on site (alternatively, designers should consider the use of Supafil® 34).

Supafil® 40 can only be used as part of a system using specific blowing machines, hoses and nozzles. A specified drill pattern (locating the injection points that ensure an even fill) must be followed.

Supafil® 40 is formed in-situ and thus has the advantage that it precisely and quickly fills the masonry cavity meaning that the intended thermal performance of the insulated structure will be achieved and not diminished by excess heat loss through imperfect fit.

Supafil® 40 can be installed in any exposure zone subject to conditions outlined in the Agrément certificate by the BBA.

Standards and certification

Supafil® 40 has an Agrément certificate by the BBA under reference number 88/2033 for external masonry walls up to and including 12m in height, with cavity widths not less than 50mm, in new or existing, domestic and non-domestic buildings. The product may also be used in buildings over 12m in height where a height restriction waiver has been issued by the certificate holder.

Supafil® 40 has a product declaration made in conformity with the requirements of BS EN 13162:2012+A1:2015 and are manufactured in accordance with ISO 50001:2018 Energy Management Systems, ISO 14001:2015+A1:2024 Environmental Management Systems, ISO 45001:2023+A1 Occupational Health and Safety Management Systems, and ISO 9001:2015+A1:2024 Quality Management Systems.

All of our mineral wool products are made of non-classified fibres and are certified by EUCEB. EUCEB (European Certification Board of Mineral Wool Products - www.euceb.org) is a voluntary initiative by the mineral wool industry. It is an independent certification authority that guarantees that products are made of fibres which comply with the exoneration criteria for carcinogenicity (Note Q) of the Regulation (EC) 1272/2008.

Supafil® products carry the CCPI mark, helping to provide assurance to product users that the product information for these products is clear, accurate, accessible, up-to-date and unambiguous. The CCPI is playing a pivotal role in driving up standards in product information as the construction industry adapts to a new and improved building safety regime.

Thermal Modelling

The U-value of a proprietary built element (rainscreen façade/ masonry cavity wall/garage soffit etc.) or system is dependent on the material properties and the degree of thermal bridging in the system.

Calculations should be created using 2D or 3D modelling programs which comply with the methodologies detailed in BS EN ISO 6946:2017 or BS EN ISO 10211:2017 and using guidance from BR443:2019.

We offer simplified calculations to BS EN ISO 6946:2017 and where required numerically modelled U-value calculations using software that is compliant with BS EN ISO 10211:2017.

System Testing

Knauf Insulation maintains declared product characteristics and qualities which are defined in detail in its Declaration of Performances (DoPs) and product literature. The product literature also includes information relating to Knauf Insulation's requirements and recommendations for installation of its products when being used as part of a system.

Any party using, or planning to use, our products in a system (with or without system testing) where performance may be dependent on product characteristics not declared on our DoPs or our product literature, must contact our Technical Services Team.

Knauf Insulation will not accept liability for any failure in system performance due to product characteristics not declared on DoPs or product literature, or not agreed in a Service Level Agreement. In such an event, any warranty given in relation to those products will be invalidated.

Real Performance

Supafil® 40 is an in-situ formed product. This means that it takes the shape of the void/cavity in which it is formed and therefore naturally accommodates the actual dimensions and variations in spaces to be filled.

The methods specified in the product installation manuals and confirmed in the Agrément Certificate from the BBA result in the correct density and a complete fill being achieved. This means there are no voids in the Supafil® 40 or between the Supafil® 40 and the substrate or the edges of the cavities.

Achieving a complete fill supports real thermal performance by eliminating cold bridging due to gaps in the insulation and extra heat loss in the structure by air movement around the insulation from the warm surface to the cold surface.

Moisture Resistance

Supafil® 40 is manufactured with a water repellent additive.

Durability and Fitness for Use

Supafil® 40 is odourless, rot proof, non hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

The product is the subject of an assessment by BBA that has determined that the product is suitable for use in masonry cavity walls and will have a service life equivalent to the structure in which it is incorporated. The BBA assessment includes thermal performance, weather tightness, effectiveness against rising damp and durability. Refer to Agrément Certificate 88/2033 for full details.

Supafil® 40

Sustainability

Supafil® 40 is a virgin glass mineral blowing wool which generates low levels of dust and VOCs and which has been awarded the Eurofins GOLD Certificate for 'Indoor Air Comfort'.

All our glass mineral wool products have been awarded the Declare 'Red List Free' label. The Declare label is a third-party accreditation and is similar to a food nutrition label but for building products; it is a straightforward ingredient list and allows product transparency disclosure because it identifies where a product comes from and what it is made of. Declare 'Red List Free' certifies that there is no harmful chemical from the red list in our products.

Our glass mineral wool is made with up to 80% recycled content (incl. glass from windows, bottles and jars).

Supafil® 40 contains no ozone-depleting substances or greenhouse gases. The overall environmental performance of our products is reported in their EPDs (Environmental Product Declarations) which are available on our website. EPDs are available for all our products in accordance with ISO 14025:2023, ISO 21930:2017 and EN 15804+A2:2019.

download on our website for relevant products.

We have received the BES6001(v4.0) 'Very Good' rating for our three manufacturing plants, which proves that our products are made with constituent materials that are responsibly sourced.

Our industry-leading compression-packaging technology allows us to load more product per pack or pallet, and therefore onto each truck that leaves our factories. This means less packaging used per m² of insulation, fewer vehicles on our roads, so less associated CO₂ emissions. It also means less transport, handling and storage space required for our customers.

Our individual products and the pallets they sit on are wrapped in low-density polyethylene (LDPE4) plastic, which is made of 30-50% (depending on the supplier) recycled plastic content and is fully recyclable.

Handling & Storage

Supafil® 40 should be stored properly and handled in such a way as to ensure that the product remains clean and undamaged.

The polyethylene packs / shrink-wrapped pallets used for the supply of Supafil® 40 are designed for short-term protection only. For longer term protection on site, the product should either be stored indoors or under cover and off the ground. Supafil® 40 should not be left permanently exposed to the elements.

If the main hood is removed or damaged, the remaining packs should be kept under cover indoors or protected from the elements by a weatherproof cover. In coastal locations where weather is more extreme and bird damage is more common, use additional covering or store indoors.

The product must be protected from prolonged exposure to sunlight and stored dry. If damaged, the product should be discarded. Damaged, contaminated or wet product must not be used.

Integration with Kinetik®

Kinetik® is our app-based site reporting system, used by Approved Supafil® Installers, on projects throughout the UK.

The app creates an instant digital record of installations and provides Supafil® customers with data showing that their specified products have been installed on site.

Knauf Insulation Ltd

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