





WELL version 2

Product Data for Building Certification






BLOWING WOOL

WELL v2 operates on a points-based system. All optimizations have maximum point-values. The point-value of a feature is determined by its potential for impact. This is defined as the extent to which a feature addresses a specific health and wellness concern or opportunity for health promotion, and the potential impact of effective intervention. **KNAUF INSULATION** put you on the right track for the highest result into the certification process!

Feature	Part	Definition	Knauf Insulation Products contribution	Contributes towards
A01. Fundamental Air Quality 	A01.2 Meet Thresholds for Organic Gases	To provide acceptable air quality levels as determined by public health authorities.	Supafil products are compliant with the German AgBB Testing and Evaluation Scheme and the higher category (A+) of the French labelling. The binder is without added phenol formaldehyde. Products with or without facing are certified for Indoor Air Comfort Eurofins Gold ¹ and Blue Angel ²	Precondition
A05. Enhanced Air Quality 	A05.2 Meet Enhanced Thresholds for Organic Gases	To go above current guidelines to provide enhanced air quality levels that have been linked to improved human health and performance.		1 point
T01. Thermal Performance 	T01.1 Provide acceptable Thermal Environment	To create indoor thermal environments that provide comfortable thermal conditions to the majority of people in support of their health, well-being and productivity.	Blowing Wool products help reducing energy demand through very high insulation efficiency.	Precondition









¹ See annex 1 Indoor Air Confort Gold Eurofins and <https://www.eurofins.com/consumer-product-testing/>

² See annex 2 Blaue Engel and <https://www.blauer-engel.de/en/s/knauf>

Feature	Part	Definition	Knauf Insulation Products contribution	Contributes towards
S01. Sound Mapping 	S01.1 Label Acoustic zone	To create an acoustical plan that identifies internal and external noise sources that can negatively impact the acoustical environment of interior spaces.	Blowing Wool products have high performance acoustic properties ³ . They reduce HVAC background noise, increase sound insulation of building envelope, partitions, ceilings and aid in controlling reverberation time	Precondition
	S01.2 Provide acoustic design plan			
S02. Maximum Noise Levels 	S02.1 Limit Background Noise Levels	To facilitate comfortable interior noise levels. This feature can operate in tandem with Feature S01: Sound Mapping.		3 points
S03. Sound Barriers 	S03.1/S03.2 Design for Sound Isolation at Walls and Doors & achieve sound insulation at walls	To bolster acoustical privacy between rooms. This feature can operate in tandem with Feature S01: Sound Mapping		3 points
X05. Enhanced Material Restrictions 	X05.2 Select Compliant Architectural and Interior Products	To restrict halogenated flame retardants (HFRs), Per- and polyfluoroalkyl substances (PFAS) and select phthalates commonly used in building materials and products. Insulation products, including thermal and acoustic insulation in walls, ceilings, ducts, tubes and pipes, contain 100 ppm (0.01%) by weight or less of halogenated flame retardants (HFR).	Products contain no ingredients listed on the REACH Authorization list, Restriction list or Substances of Very High Concern Candidate list. They are inventoried to at least 0.01% by weight (100ppm) and certified DECLARE LBC Red List Free which means no harmful chemical substances ⁴ . 	1 point

³ See annex 3 Sound Reduction Index and Sound Absorption examples

⁴ See annex 4 Declare Certificate

<p>X06. VOC Restrictions</p> 	<p>X06.2 Restrict VOC Emissions from Furniture, Architectural and Interior Products (like Insulation).</p>	<p>It requires adherence to emission thresholds for materials placed inside the building envelope.</p>	<p>Supafil products are compliant with the German AgBB Testing and Evaluation Scheme and the higher category (A+) of the French labelling. The binder is without added phenol formaldehyde. Products with or without facing are certified for Indoor Air Comfort Eurofins Gold and Blue Angel.</p>   	<p>2 points</p>
<p>X07. Material Transparency</p> 	<p>X07.1 Select product with Disclosed ingredients X07.2 Select products with Enhanced Ingredient Disclosure X07.3 Select Products with Third-Party Verified Ingredients</p>	<p>To prioritize supply chain and ingredient transparency in offering product specifiers the tools they need to make fully informed choices when selecting healthier products. This WELL feature requires the compilation and availability of product descriptions, with ingredients evaluated and disclosed through transparency labels.</p>	<p>Products contain no ingredients listed on the REACH Authorization list, Restriction list or Substances of Very High Concern Candidate list. They are inventoried to at least 0.01% by weight (100ppm) and certified DECLARE LBC Red List Free which means no harmful chemical substances.</p>	<p>3 points</p>
<p>X08. Materials Optimization</p> 		<p>To take precautionary approach to hazards by emphasizing healthy material selection. It requires screening and labeling of products in accordance with programs that restrict the use of hazardous ingredients in materials and products.</p>	<p>Products contain no ingredients listed on the REACH Authorization list, Restriction list or Substances of Very High Concern Candidate list. They are inventoried to at least 0.01% by weight (100ppm) and certified DECLARE LBC Red List Free which means no harmful chemical substances.</p>  	<p>2 points</p>

Annex 1 : Indoor Air Comfort Gold EUROFINS Certificate





Appendix to Certificate

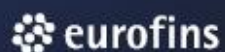
IACG-323-01-33-2017

Knauf Insulation

receives the Indoor Air Comfort Gold certificate with validity 19 June 2022 for below product group, including subgroups and individual products listed in the following table:

Product group	Production site
Knauf Insulation Virgin Blowing Wool and Supafil	Cwmbran, United Kingdom Lannemezan, France St Helens, United Kingdom Vise, Belgium

The products in this group are based on identical or similar recipe and are produced under equivalent conditions. Grouping of the products and inspection of the production process is part of the Indoor Air Comfort Gold certification. A worst-case product, which is representative for the whole group, is being tested frequently.



Product Testing

Annex 2: Blaue Engel certificate



Supafil

Category : Low-Emission Thermal Insulation Material and Suspended Ceilings for Use in Buildings (until 12/2020) (DE-UZ 132)

Website : <https://www.blauer-engel.de/en/products/construction-heating/thermal-insulation-material-indoor-until-12-2020/supafil>

Currently there are no detailed product information provided by company.

Benefits to Environment and Health

1. low emissions
2. low pollutant content
3. no adverse impact on health in the living environment

Annex 3: Sound Reduction Index and Sound Absorption examples for Supafil

STC_c in USA is composite *Sound Transmissions Class* and is equivalent to R_w *Sound Reduction Index* in Europe. α coefficient is the coefficient for *sound absorption*.

System Timber Frame Wall
▶

1 Empty cavity

- ① External Sheathing - OSB panel 15 mm
- ② Wood studs - height 180 mm
centre-to-centre distance 600 mm
- ③ Empty cavity - 180 mm
- ④ Vapor Control Layer
- ⑤ ⑥ Secondary wood structure - 2x27 mm
- ⑦ Standard Type A Gypsum board - 2x12,5 mm

Total thickness of the wall : 274 mm
Sound Reduction Index :
 R_w 44 (-2 ; -8)

2 Blowing Wool (Supafil)

- ① External Sheathing - OSB panel 15 mm
- ② Wood studs - height 180 mm
centre-to-centre distance 600 mm
- ③ Blowing wool - Supafil Timber Frame -
density 35 kg/m³ - 180 mm
- ④ Vapor Control Layer
- ⑤ ⑥ Secondary wood structure - 2x27 mm
- ⑦ Standard Type A Gypsum board - 2x12,5 mm

Total thickness of the wall : 274 mm
Sound Reduction Index :
 R_w 48 (-4 ; -10)

COEFFICIENT D'ABSORPTION ACOUSTIQUE α_s D'UN ISOLANT PROJETE

Essai 1
Date 11/04/16
Poste ALPHA

AA75

DEMANDEUR, FABRICANT KNAUF INSULATION

APPELLATION JETSPRAY

APTITUDE A L'EMPLOI Non vérifiée

CONFIGURATION Isolant projeté d'épaisseur 60 mm

CARACTERISTIQUES PRINCIPALES

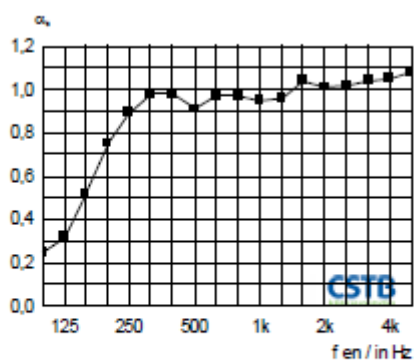
Dimensions en mm : 3000 x 3600
Surface en m² : 10,8
Epaisseur en mm : 60
Masse surfacique en kg/m² : 4,3
Montage type : I

CONDITIONS DE MESURES

Salle vide :
Température : 20 °C
Humidité relative : 54 %

Salle avec matériau :
Température : 20 °C
Humidité relative : 51 %


RESULTATS



f	α_s
100	0,25
125	0,32
160	0,52
200	0,75
250	0,89
315	0,98
400	0,98
500	0,91
630	0,97
800	0,97
1000	0,95
1250	0,98
1600	1,04
2000	1,01
2500	1,02
3150	1,04
4000	1,05
5000	1,08
Hz	

$\alpha_w = 1,00$
classement / class: A

Annex 4: DECLARE labels



Declare.

SUPAFIL®
(Loft, Thermoloft, Optiloft, Cavity, Timber Frame, Max Frame, CarbonPlus & Spray Blowing Wool)
Knauf Insulation

Final Assembly: Multiple Locations in Europe
Life Expectancy: Life of structure Year(s)
End of Life Options: Salvageable/Reusable in its Entirety, Landfill (100%)

Ingredients:
Glass mineral wool: EC: 926-099-9 Man-Made Vitreous (silicate) Fibers; **Silicone:** Siloxanes and Silicones, Me-H; **Dust Oil:** Distillates (petroleum), solvent-dewaxed light paraffinic; **Antistatic Agent:** Quaternary ammonium compounds, alkyl phosphate potassium salt, Et sulfates


Living Building Challenge Criteria: Compliant

I-13 Red List:
☒ LBC Red List Free % Disclosed: 100% at 100ppm
☐ LBC Red List Approved VOC Content: Not Applicable
☐ Declared

I-10 Interior Performance: AgBB Scheme French A+ 2011
I-14 Responsible Sourcing: Not Applicable

KNF-0040
EXP. 01 NOV 2021
Original Issue Date: 2020

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Declare.

SUPAFIL® PARTY WALL
Knauf Insulation

Final Assembly: Cwmbran, United Kingdom; St Helens, United Kingdom
Life Expectancy: Life of structure Year(s)
End of Life Options: Salvageable/Reusable in its Entirety, Landfill

Ingredients:
Glass mineral wool: EC: 926-099-9 Man-Made Vitreous (silicate) Fibers; **Silicone:** Siloxanes and Silicones, Me-H; **Dust Oil:** Distillates (petroleum), solvent-dewaxed light paraffinic; **Antistatic Agent:** Quaternary ammonium compounds, alkyl phosphate potassium salt, Et sulfates; **Pigment:** Copper (II) phthalocyanine

Living Building Challenge Criteria: Compliant

I-13 Red List:
☒ LBC Red List Free % Disclosed: 100% at 100ppm
☐ LBC Red List Approved VOC Content: Not Applicable
☐ Declared

I-10 Interior Performance: AgBB Scheme French A+ 2011
I-14 Responsible Sourcing: Not Applicable

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