Declaration of Performance

B4220MPCPR

1. Unique identification code of the product-type:
SUPAFIL CAVITY WALL 034, SUPAFIL TIMBER FRAME 034, SUPAFIL CAVITY XL 034, SUPAFIL MAX FRAME

2. Intended use or uses:
Thermal Insulation for Buildings (ThIB)

3. Manufacturer:
Knauf Insulation Sprl
Rue de Maestricht 95, 4600 Visé
Belgium
www.knaufinsulation.com - dop@knaufinsulation.com

4. Authorised representative:
Not applicable

5. System or systems of assessment and verification of constancy of performance:

AVCP System 4 for Reaction to Fire
AVCP System 3 for the other characteristics

6a. Harmonized Standard:
EN 14064-1:2010

Notified body or bodies:
AVCP System 3: (Notified testing laboratory) 1136 CENTRE SCIENTIFIQUE ET TECHNIQUE DE LA CONSTRUCTION (CSTC), 0672 MPA Stuttgart - OTTO GRAF INSTITUTE

6. European Assessment document: not applicable
European Technical Assessment: not applicable
Technical Assessment Body: not applicable
Notified body/ies: not applicable

7. Declared Performances:
See next page

B4220MPCPR SUPAFIL CAVITY WALL 034

Essential Characteristics	B4220MPCPR		Harmonised technical standard
	Performance	SUPAFIL CAVITY WALL 034	
Reaction to Fire	Reaction to Fire	A1	EN 14064-1:2010
Water permeability	Water absorption	WS	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD	
Thermal Resistance	Thermal conductivity (W/mK)	0.034	
	Insulation thickness	See product label or performance chart	
Water vapour permeability	Water vapour transmission	MU1	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing/degradation	-	NPD {b}	
Durability of thermal resistance against ageing / degradation	Thermal Resistance	NPD {c}	
	Thermal conductivity	NPD	
	Settlement	S1	
NPD - No performance determined			

Performance Chart		
Cavity/Frame width mm	Declared thermal resistancxe level R m².K/W	Minimum Bag Usage Rate (Bags per 100m²)
50	R1,5	10.5
60	R1,8	12.7
70	R2,1	14.8
80	R2,4	16.9
90	R2,6	19.0
100	R2,9	21.1

B4220MPCPR SUPAFIL CAVITY XL 034

Essential Characteristics	B4220MPCPR		Harmonised technical standard
	Performance	SUPAFIL CAVITY XL 034	
Reaction to Fire	Reaction to Fire	A1	EN 14064-1:2010
Water permeability	Water absorption	WS	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD	
Thermal Resistance	Thermal conductivity (W/mK)	0.034	
	Insulation thickness	See product label or performance chart	
Water vapour permeability	Water vapour transmission	MU1	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing/degradation	-	NPD {b}	
Durability of thermal resistance against ageing / degradation	Thermal Resistance	NPD {c}	
	Thermal conductivity	NPD	
	Settlement	S1	
NPD - No performance determined			

Performance Chart		
Cavity/Frame width mm	Declared thermal resistancxe level R m².K/W	Minimum Bag Usage Rate (Bags per 100m²)
100	R2,9	21.1
110	R3,2	22.5
120	R3,5	25.3
130	R3,8	27.4
140	R4,1	29.5
150	R4,4	31.6
160	R4,7	33.7
170	R5,0	35.8
180	R5,3	38.0
190	R5,6	40.1
200	R5,9	42.2
210	R6,2	44.3
220	R6,5	46.4
230	R6,8	48.5
240	R7,1	50.6
250	R7,4	52.7

B4220MPCPR SUPAFIL TIMBER FRAME 034

Essential Characteristics	B4220MPCPR		Harmonised technical standard
	Performance	SUPAFIL TIMBER FRAME 034	
Reaction to Fire	Reaction to Fire	A1	EN 14064-1:2010
Water permeability	Water absorption	WS	
Release of dangerous substances to the indoor environment	Release of dangerous substances	NPD	
Thermal Resistance	Thermal conductivity (W/mK)	0.034	
	Insulation thickness	See product label or performance chart	
Water vapour permeability	Water vapour transmission	MU1	
Continuous glowing combustion	Continuous glowing combustion	NPD	
Durability of reaction to fire against ageing/degradation	-	NPD {b}	
Durability of thermal resistance against ageing / degradation	Thermal Resistance	NPD {c}	
	Thermal conductivity	NPD	
	Settlement	S1	
NPD - No performance determined			

Performance Chart

Cavity/Frame width mm	Declared thermal resistancxe level R m².K/W	Minimum Bag Usage Rate (Bags per 100m²)
40	R1,2	8.4
50	R1,5	10.5
60	R1,8	12.7
70	R2,1	14.8
80	R2,4	16.9
90	R2,6	19.0
100	R2,9	21.1
110	R3,2	22.5
120	R3,5	25.3
130	R3,8	27.4
140	R4,1	29.5
150	R4,4	31.6
160	R4,7	33.7
170	R5,0	35.8
180	R5,3	38.0
190	R5,6	40.1
200	R5,9	42.2
210	R6,2	44.3
220	R6,5	46.4
230	R6,8	48.5
240	R7,1	50.6
250	R7,4	52.7
260	R7,6	54.8
270	R7,9	56.9
280	R8,2	59
290	R8,5	61.1
300	R8,8	63.3

B4220MPCPR SUPAFIL MAX FRAME

Essential Characteristics	Closed Construction :	Rafters and Walls
	Harmonized Standard:	SUPAFIL MAX FRAME
Thermal conductivity (W/mK)	EN 12667	0.034
Thermal Resistance	EN 12667	See product label or performance chart
Settlement	Ref. 4.2.3.2	S1
Reaction to Fire	EN 13501-1	A1
Short term water absorption	EN 1609	WS1
Water vapour transmission	EN 12086	MU1

Performance Chart **Closed Frame Construction** **Rafters and Walls**

SUPAFIL MAX FRAME	35 kg/m³	Angle 0 - 30°	λD=0,034 W/mK
Cavity/Frame width mm	Declared thermal resistancxe level R m².K/W		Minimum Bag Usage Rate (Bags per 100m²)
70	R2,1		1.41
80	R2,4		1.61
90	R2,6		1.81
100	R2,9		2.01
110	R3,2		2.21
120	R3,5		2.41
130	R3,8		2.61
140	R4,1		2.82
150	R4,4		3.02
160	R4,7		3.22
170	R5,0		3.42
180	R5,3		3.62
190	R5,6		3.82
200	R5,9		4.02
210	R6,2		4.22
220	R6,5		4.43
230	R6,8		4.63
240	R7,1		4.83
250	R7,4		5.03
260	R7,6		5.23
270	R7,9		5.43
280	R8,2		5.63
290	R8,5		5.83
300	R8,8		6.03

B4220MPCPR SUPAFIL MAX FRAME

Performance	Dry Open Loft Application	
	Reaction to Fire	SUPAFIL MAX
Release of dangerous substances to the indoor environment	EN 12667	0.045
Release of dangerous substances	EN 12667	Durability of reaction to fire against ageing/degradation
Thermal Resistance	Ref. 4.2.3.2	S1
Insulation thickness	EN 13501-1	A1
Water vapour permeability	EN 1609	WS1
Continuous glowing combustion	EN 12086	MU1

Performance Chart **Open Construction :** **Lofts**

SUPAFIL MAX FRAME	12 kg/m³		λD=0,045 W/mK	
Declared thermal resistancxe level R m².K/W	Thickness after settlement mm	Minimum installed thickness mm	Minimum coverage kg/m²	Minimum Bag Usage Rate (Bags per 100m²)
R2,0	90	95	1.1	0.62
R2,5	113	115	1.4	0.78
R3,0	135	140	1.7	0.93
R3,5	158	160	1.9	1.09
R4,0	180	185	2.2	1.24
R4,5	203	205	2.5	1.4
R5,0	225	230	2.7	1.55
R5,5	248	250	3	1.71
R6,0	270	275	3.3	1.86
R6,5	293	295	3.6	2.02
R7,0	315	320	3.8	2.17
R7,5	338	345	4.1	2.33
R8,0	360	365	4.4	2.48
R8,5	383	390	4.6	2.64
R9,0	405	410	4.9	2.79
R9,5	428	435	5.2	2.95
R10,0	450	455	5.4	3.1
R10,5	473	480	5.7	3.26
R11,0	495	500	6	3.41
R11,5	518	525	6.3	3.57
R12,0	540	545	6.5	3.72
R12,5	563	570	6.8	3.88
R13,0	585	595	7.1	4.03
R13,5	608	615	7.3	4.19
R14,0	630	640	7.6	4.34
R14,5	653	660	7.9	4.5
R15,0	675	685	8.1	4.66

8. Appropriate Technical Documentation and / or Specific Technical Documentation:
Not applicable
The performance of the product identified above is in conformity with the set of declared

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 an on behalf of the manufacturer by:

Olivier Douxchamps - Plant Manager

(Name and function)

(Signature)

Visé - 11/06/2021

(Place and date of issue)