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## Agrément Certificate

24/7110

Product Sheet 1 Issue 1

### KNAUF OMNIFIT

### OMNIFIT ROLL 34

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to OmniFit<sup>(2)</sup> Roll 34, layers of resin bonded, unfaced glass mineral wool (MW) rolls, for use as insulation between the studs on timber- and steel-frame conventional walls in new and existing domestic and non-domestic buildings with a masonry outer leaf or a ventilated rainscreen cladding system.

(1) Hereinafter referred to as 'Certificate'.

(2) OmniFit is a registered trademark.

#### The assessment includes

##### Product factors:

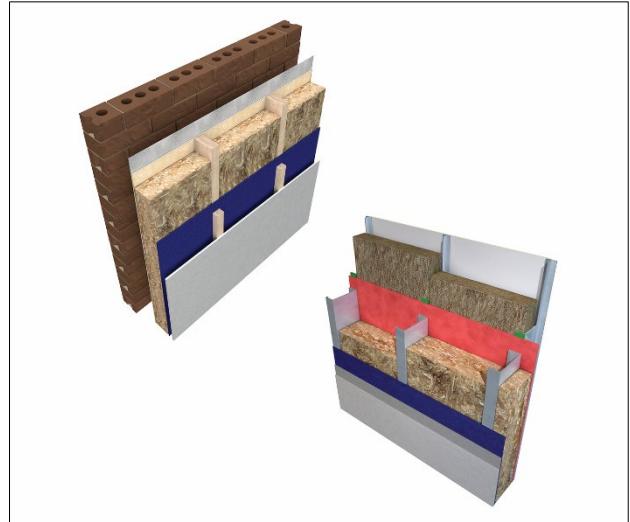
- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

##### Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

##### Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review



#### KEY FACTORS ASSESSED

- Section 1. Mechanical resistance and stability
- Section 2. Safety in case of fire
- Section 3. Hygiene, health and the environment
- Section 4. Safety and accessibility in use
- Section 5. Protection against noise
- Section 6. Energy economy and heat retention
- Section 7. Sustainable use of natural resources
- Section 8. Durability

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of issue: 19 April 2024

Hardy Giesler  
Chief Executive Officer

*This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.*

*The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).*

*Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.*

*The Certificate should be read in full as it may be misleading to read clauses in isolation.*

*Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.*

#### British Board of Agrément

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## SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

### Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that OmniFit Roll 34, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



#### The Building Regulations 2010 (England and Wales) (as amended)

<b>Requirement:</b>	<b>B3(4)</b>	<b>Internal fire spread (structure)</b>
Comment:		The product is unrestricted by this Requirement. See section 2 of this Certificate.
<b>Requirement:</b>	<b>B4(1)</b>	<b>External fire spread</b>
Comment:		The product is unrestricted by this Requirement. See section 2 of this Certificate.
<b>Requirement:</b>	<b>C2(c)</b>	<b>Resistance to moisture</b>
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
<b>Requirement:</b>	<b>L1(a)(i)</b>	<b>Conservation of fuel and power</b>
Comment:		The product can contribute to satisfying this Requirement; however, compensating fabric measures may be required. See section 6 of this Certificate.
<b>Regulation:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>7(2)</b>	<b>Materials and workmanship</b>
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>25B</b>	<b>Nearly zero-energy requirements for new buildings</b>
<b>Regulation:</b>	<b>26</b>	<b>CO<sub>2</sub> emission rates for new buildings</b>
<b>Regulation:</b>	<b>26A</b>	<b>Fabric energy efficiency rates for new dwellings (applicable to England only)</b>
<b>Regulation:</b>	<b>26A</b>	<b>Primary energy rates for new buildings (applicable to Wales only)</b>
<b>Regulation:</b>	<b>26B</b>	<b>Fabric performance values for new dwellings (applicable to Wales only)</b>
<b>Regulation:</b>	<b>26C</b>	<b>Target primary energy rates for new buildings (applicable to England only)</b>
<b>Regulation:</b>	<b>26C</b>	<b>Energy efficiency rating (applicable to Wales only)</b>
Comment:		The product can contribute to satisfying these Regulations; however, compensating fabric/service measures may be required. See section 6 of this Certificate.



#### The Building (Scotland) Regulations 2004 (as amended)

<b>Regulation:</b>	<b>8(1)</b>	<b>Fitness and durability of materials and workmanship</b>
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>8(3)</b>	<b>Fitness and durability of materials and workmanship</b>
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>9</b>	<b>Building standards – construction</b>
Standard:	<b>2.4</b>	Cavities
Comment:		The product is unrestricted by this Standard, with reference to clauses 2.4.2 <sup>(1)(2)</sup> , 2.4.4 <sup>(1)</sup> and 2.4.6 <sup>(2)</sup> . See section 2 of this Certificate.

Standard: Comment:	2.6	Spread to neighbouring buildings The product is unrestricted by this Standard, with reference to clauses 2.6.5 <sup>(1)</sup> and 2.6.6 <sup>(2)</sup> . See section 2 of this Certificate.
Standard: Comment:	3.15	Condensation The product can contribute to satisfying this Standard, with reference to clauses 3.15.1 <sup>(1)(2)</sup> , 3.15.4 <sup>(1)(2)</sup> and 3.15.5 <sup>(1)(2)</sup> . See section 3 of this Certificate.
Standard: Comment:	6.1(b)(c)	Energy demand The product can contribute to satisfying this Standard, with reference to clauses 6.1.1 <sup>(1)</sup> and 6.1.2 <sup>(2)</sup> ; however, compensating fabric/service measures may be required. See section 6 of this Certificate.
Standard: Comment:	6.2	Building insulation envelope The product can contribute to satisfying this Standard, with reference to clauses 6.2.1 <sup>(1)(2)</sup> , 6.2.3 <sup>(1)</sup> , 6.2.4 <sup>(2)</sup> , 6.2.6 <sup>(1)</sup> , 6.2.7 <sup>(1)(2)</sup> , 6.2.8 <sup>(1)(2)</sup> , 6.2.9 <sup>(1)(2)</sup> , 6.2.10 <sup>(1)(2)</sup> , 6.2.11 <sup>(2)</sup> and 6.2.12 <sup>(1)</sup> ; however, compensating fabric measures may be required. See section 6 of this Certificate.
Standard: Comment:	7.1(a)(b)	Statement of sustainability The product can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting at least a bronze level of sustainability as defined in this Standard. See section 6 of this Certificate.
<b>Regulation:</b> Comment:	<b>12</b>	<b>Building standards – conversion</b> All comments made in relation to the product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 <sup>(1)</sup> and Schedule 6 <sup>(1)</sup> .  (1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).



## The Building Regulations (Northern Ireland) 2012 (as amended)

<b>Regulation:</b> Comment:	<b>23(1)(a)(i)</b> <b>(iii)(b)(i)(ii)</b>	<b>Fitness of materials and workmanship</b> The product is acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b> Comment:	<b>23(2)</b>	<b>Fitness of materials and workmanship</b> The product is unrestricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b> Comment:	<b>29</b>	<b>Condensation</b> The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
<b>Regulation:</b> Comment:	<b>35(4)</b>	<b>Internal fire spread – structure</b> The product is unrestricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b> Comment:	<b>36(a)</b>	<b>External fire spread</b> The product is unrestricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b> Comment:	<b>39(a)(i)</b>	<b>Conservation measures</b> The product can contribute to satisfying this Regulation; however, compensating fabric measures may be required. See section 6 of this Certificate.
<b>Regulation:</b> <b>Regulation:</b> <b>Regulation:</b> Comment:	<b>40(2)</b> <b>43(1)(2)</b> <b>43B</b>	<b>Target carbon dioxide emission rate</b> <b>Renovation of thermal elements</b> <b>Nearly zero-energy requirements for new buildings</b> The product can contribute to satisfying these Regulations; however, compensating fabric/service measures may be required. See section 6 of this Certificate.

## Additional Information

### NHBC Standards 2024

In the opinion of the BBA, OmniFit Roll 34, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.2 *External timber framed walls*, and 6.10 *Light steel framed walls and floors*.

## Fulfilment of Requirements

The BBA has judged OmniFit Roll 34 to be satisfactory for use as described in this Certificate. The product has been assessed for use as insulation between the studs on timber- and steel-frame conventional walls in new and existing domestic and non-domestic buildings with a masonry outer leaf or a ventilated rainscreen cladding system.

## ASSESSMENT

### Product description and intended use

The Certificate holder provided the following description for the product under assessment. OmniFit Roll 34 consists of layers of resin bonded, unfaced glass MW rolls.

The product has the nominal characteristics given in Table 1.

Table 1 Nominal characteristics of OmniFit Roll 34

Characteristic (unit)	Value			
Length (mm)	5200	4200	3500	3000
Width (mm)	1200	1200	1200	1200
Thickness (mm) <sup>(1)</sup>	100	140	150	180

(1) Other thicknesses are available within this range upon request.

### Ancillary Items

The Certificate holder recommends the following ancillary items for use with the product, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- plasterboard lining
- fasteners and fixings
- air and vapour control layer (AVCL)
- breather membrane
- sheathing board
- additional insulation.

## Product assessment – key factors

The product was assessed for the following key factors, and the outcome of the assessments is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

### 1 Mechanical resistance and stability

Not applicable.

### 2 Safety in case of fire

Data were assessed for the following characteristics.

## 2.1 Reaction to fire

2.1.1 The product was tested for reaction to fire and the classification is given in Table 2.

*Table 2 Reaction to fire classification*

Product assessed	Assessment method	Requirement	Result <sup>(1)</sup>
OmniFit Roll 34	BS EN 13501-1 : 2007	Value achieved	A1

(1) Warringtonfire, report reference 434664, 17 December 2020. Copies can be obtained from the Certificate holder on request.

2.1.2 On the basis of data assessed, the product will be unrestricted by the documents supporting the national Building Regulations.

2.1.3 Designers must refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly in respect of requirements for substrate fire resistance, cavity closers and barriers, fire stopping of service penetrations and combustibility limitations for other materials and components used in the overall wall construction.

## 2.2 Resistance to fire

When the product is incorporated in a wall construction where fire resistance is required by the documents supporting the national Building Regulations, the fire resistance of the wall construction should be confirmed by a suitably experienced and competent individual.

## 3 Hygiene, health and the environment

Data were assessed for the following characteristic.

### 3.1 Water vapour permeability

3.1.1 The product was assessed for water vapour permeability and the result is given in Table 3.

*Table 3 Water vapour resistivity*

Product assessed	Assessment method	Requirement	Result
OmniFit Roll 34	BS EN ISO 10456 : 2007	Declared value	5 MN·s·g <sup>-1</sup> ·m <sup>-1</sup>

3.1.2 For the purposes of assessing the risk of interstitial condensation, the water vapour resistivity value may be taken as stated in Table 3.

## 4 Safety and accessibility in use

Not applicable.

## 5 Protection against noise

Not applicable.

## 6 Energy economy and heat retention

Data were assessed for the following characteristics.

### 6.1 Thermal conductivity

The product was tested for thermal conductivity ( $\lambda_D$ ) and the result is given in Table 4.

*Table 4 Thermal conductivity*

Product assessed	Assessment method	Requirement	Result
OmniFit Roll 34	BS EN 13162 : 2012	Declared value ( $\lambda_D$ )	0.034 W·m <sup>-1</sup> ·K <sup>-1</sup>

## 6.2 Conservation of fuel and power

6.2.1 The U value of a completed wall construction will depend on the insulation thickness, the number and type of fixings, the wall structure, and its internal finish. Example U values are given in Tables 5 to 8.

**Table 5 U values — timber framed wall with a rainscreen cladding external leaf<sup>(1)(2)</sup>**

Target U value ( $\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$ )	OmniFit Roll 34 thickness between the studs, and with additional insulation <sup>(3)</sup> thickness in the cavity (mm)
0.13	— <sup>(6)</sup>
0.15	— <sup>(6)</sup>
0.17	140 + 335 <sup>(5)</sup>
0.18	140 + 280 <sup>(5)</sup>
0.21	140 + 175 <sup>(4)</sup>
0.26	140 + 90 <sup>(4)</sup>
0.28	140 + 70 <sup>(4)</sup>
0.30	140 + 50 <sup>(4)</sup>

(1) Construction, external to internal: 10 mm rainscreen cladding; well-ventilated 50 mm clear cavity; variable thickness (50 – 335 mm) of mineral wool insulation slab ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) single- and double-layered; breather membrane; 9 mm timber OSB (oriented strand board) sheathing board ( $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ); OmniFit Roll 34 within a 140 mm deep timber-frame ( $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ )(15% fraction); AVCL; and 15 mm plasterboard ( $\lambda = 0.25 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).

(2) A fixing correction factor ( $\Delta U_f$ ) of  $0.1 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$  has been applied where relevant, to allow for the thermal bridging of the rainscreen brackets.

(3) The additional insulation is mineral wool ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).

(4) One layer of mineral wool insulation slab used.

(5) Two layers of mineral wool insulation slab used.

(6) See section 6.2.3.

**Table 6 U values — steel framed wall with a rainscreen cladding external leaf<sup>(1)(2)</sup>**

Target U value ( $\text{W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$ )	OmniFit Roll 34 thickness between the studs, and with additional insulation <sup>(3)</sup> thickness in the cavity (mm)
0.13	— <sup>(6)</sup>
0.15	— <sup>(6)</sup>
0.17	100 + 360 <sup>(5)</sup>
0.18	100 + 310 <sup>(5)</sup>
0.21	100 + 210 <sup>(4)</sup>
0.26	100 + 125 <sup>(4)</sup>
0.28	100 + 110 <sup>(4)</sup>
0.30	100 + 90 <sup>(4)</sup>
0.35	100 + 60 <sup>(4)</sup>

(1) Construction, external to internal: 10 mm rainscreen cladding; well-ventilated 50 mm clear cavity; variable thickness (50 – 360 mm) of mineral wool insulation slab ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) single- and double-layered; breather membrane; 9 mm timber OSB (oriented strand board) sheathing board ( $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ); OmniFit Roll 34 within a 100 mm deep light steel-frame ( $\lambda = 50 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ )(0.2% fraction)(1.2 mm gauge studs at 600 mm centres); AVCL; and 15 mm plasterboard ( $\lambda = 0.25 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).

(2) A fixing correction factor ( $\Delta U_f$ ) of  $0.1 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$  has been applied where relevant, to allow for the thermal bridging of the rainscreen brackets.

(3) The additional insulation is mineral wool ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).

(4) One layer of mineral wool insulation slab used.

(5) Two layers of mineral wool insulation slab used.

(6) See section 6.2.3.

**Table 7 U values — timber framed wall with a masonry external leaf** <sup>(1)(2)</sup>

Target U value (W·m <sup>-2</sup> ·K <sup>-1</sup> )	OmniFit Roll 34 thickness between the studs, and with additional insulation <sup>(3)</sup> thickness in the cavity (mm)
0.13	140 + 125 <sup>(4)</sup>
0.15	140 + 100 <sup>(4)</sup>
0.17	140 + 70 <sup>(4)</sup>
0.18	140 + 60 <sup>(4)</sup>
0.21	140 + 50 <sup>(4)</sup>
0.26	140 + 50 <sup>(4)</sup>
0.28	140 + 50 <sup>(4)</sup>
0.30	140 + 50 <sup>(4)</sup>

- (1) Construction, external to internal: 102.5 mm brick ( $\lambda = 0.77 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ); slightly ventilated 50 mm clear cavity (580 mm<sup>2</sup>·m<sup>-1</sup> opening area); variable thickness (50 – 125 mm) of mineral wool insulation slab ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) single-layered; breather membrane; 9 mm timber OSB (oriented strand board) sheathing board ( $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ); OmniFit Roll 34 within a 140 mm deep timber-frame ( $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ )(15% fraction); AVCL; and 15 mm plasterboard ( $\lambda = 0.25 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).
- (2) Calculations based upon 4.4 per m<sup>2</sup> stainless steel cavity wall ties ( $\lambda = 17 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) with a 6.6 mm<sup>2</sup> cross-sectional area.
- (3) The additional insulation is mineral wool ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).
- (4) One layer of mineral wool insulation slab used.

**Table 8 U values — steel framed wall with a masonry external leaf** <sup>(1)(2)</sup>

Target U value (W·m <sup>-2</sup> ·K <sup>-1</sup> )	OmniFit Roll 34 thickness between the studs, and with additional insulation <sup>(3)</sup> thickness in the cavity (mm)
0.13	100 + 170 <sup>(4)</sup>
0.15	100 + 140 <sup>(4)</sup>
0.17	100 + 120 <sup>(4)</sup>
0.18	100 + 110 <sup>(4)</sup>
0.21	100 + 80 <sup>(4)</sup>
0.26	100 + 50 <sup>(4)</sup>
0.28	100 + 50 <sup>(4)</sup>
0.30	100 + 50 <sup>(4)</sup>
0.35	100 + 50 <sup>(4)</sup>

- (1) Construction, external to internal: 102.5 mm brick ( $\lambda = 0.77 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ); 50 mm clear cavity; variable thickness (50 – 170 mm) of mineral wool insulation slab ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) single-layered; breather membrane; 9 mm timber OSB (oriented strand board) sheathing board ( $\lambda = 0.13 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ); OmniFit Roll 34 within a 100 mm deep light steel-frame ( $\lambda = 50 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) (0.2% fraction)(1.2 mm gauge studs at 600 mm centres); AVCL; and 15 mm plasterboard ( $\lambda = 0.25 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).
- (2) Calculations based upon 4.4 per m<sup>2</sup> stainless steel cavity wall ties ( $\lambda = 17 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ) with a 6.6 mm<sup>2</sup> cross-sectional area.
- (3) The additional insulation is mineral wool ( $\lambda_D = 0.034 \text{ W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ ).
- (4) One layer of mineral wool insulation slab used.

6.2.2 On the basis of data assessed, the product can contribute towards a construction satisfying the national Building Regulations in respect of energy economy and heat retention.

6.2.3 For improved energy or carbon savings, designers must consider appropriate fabric and/or service measures.

## 7 Sustainable use of natural resources

Not applicable.

## 8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in the product were assessed.

8.2 Specific test data were assessed as given in Table 9.

Table 9 Dimensional stability

Product assessed	Assessment method	Requirement	Result
OmniFit Roll 34	BS EN 1604 : 2013 (70°C and 90% RH for 48 hours)	Length, width and reduction in thickness ≤ 1% change	Pass

### 8.3 Service life

Under normal service conditions, the product will have a life at least equivalent to the structure in which it is incorporated, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

## PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

## 9 Design, installation, workmanship and maintenance

### 9.1 Design

9.1.1 The design process was assessed by the BBA and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 Timber- and steel-framed wall constructions must be designed and constructed in accordance with the relevant recommendations of:

- BS 5250 : 2021
- BS 8000-3 : 2020
- BS EN 351-1 : 2023
- BS EN 845-1 : 2013
- BS EN 1993-1-2 : 2005 and its UK National Annex
- BS EN 1993-1-3 : 2006 and its UK National Annex
- BS EN 1995-1-1 : 2004 and its UK National Annex
- BS EN 1996-1-1 : 2005 and its UK National Annex
- BS EN 1996-1-2 : 2005 and its UK National Annex
- BS EN 1996-2 : 2006 and its UK National Annex
- BS EN 1996-3 : 2006 and its UK National Annex.

9.1.3 This application requires an air and vapour control layer (AVCL) behind the internal fire-resistant lining board, which must be a minimum thickness of 0.125 mm (500 gauge) polyethylene.

9.1.4 Care must be taken in the overall design and construction of walls incorporating the product to ensure the provision of appropriate:

- cavity trays and damp-proof courses (DPC)
- cavity barriers and fire dampers
- resistance to the ingress of precipitation, moisture and dangerous gases from the ground
- resistance to sound transmission when flanking separating walls and floors.

9.1.5 It is essential that external masonry cavity walls are designed and constructed to incorporate the precautions in this Certificate to prevent moisture penetration.

9.1.6 Window and door opening reveals must be constructed incorporating a cavity barrier/closer/DPC, as required.

9.1.7 It is recommended that services which penetrate the dry lining (eg light switches, power outlets) are kept to a minimum to limit damage to the AVCL. In addition, to preserve the fire resistance of the wall, any penetrations must be enclosed in appropriate fire rated sealant, plasterboard, stone mineral wool or a suitably tested proprietary fire-rated system.

9.1.8 As with other insulation products, it may be necessary in some cases to de-rate electrical cables buried in insulation. BS 7671 : 2018 recommends that where wiring is completely surrounded by insulation it may need to be de-rated to as low as half its free air-current-carrying capacity. Guidance must be sought from a qualified electrician.

9.1.9 The guidance given in the documents supporting the national Building Regulations must be followed when the product is installed in close proximity to certain pipes and/or heat-producing appliances.

9.1.10 Calculations of the thermal transmittance (U value) of a wall must be carried out in accordance with BS EN ISO 6946 : 2017, BRE Report BR 443 : 2019 and BRE Digest 465.

9.1.11 Care must be taken in the overall design and construction of junctions with other elements and openings to minimise thermal bridges and air infiltration. Detailed guidance can be found in the documents supporting the national Building Regulations.

#### *Interstitial condensation*

9.1.12 Walls will adequately limit the risk of interstitial condensation when they are designed and constructed in accordance with BS 5250 : 2021.

9.1.13 If the product is to be used in the external wall of rooms expected to have high humidity, care must be taken to provide adequate permanent ventilation to avoid possible problems from the formation of interstitial condensation.

#### *Surface condensation*

9.1.14 In England and Wales, walls will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed  $0.7 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$  at any point, and the junctions with other elements are designed in accordance with the guidance referred to in section 9.1.11 of this Certificate.

9.1.15 For buildings in Scotland, wall constructions will be acceptable when the thermal transmittance (U value) does not exceed  $1.2 \text{ W}\cdot\text{m}^{-2}\cdot\text{K}^{-1}$  at any point, and the junctions with other elements are designed in accordance with the guidance referred to in BS 5250 : 2021. Further guidance may be obtained from BRE Report BR 262 : 2002, BRE Digest 465 and section 9.1.11 of this Certificate.

### 9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance are provided in Annex A of this Certificate.

9.2.3 Existing constructions must be in a good state of repair, with no evidence of rain penetration or damp. Defects must be made good prior to installation.

9.2.4 Any mould or fungal growth found to be present must be treated.

9.2.5 Installation must not be carried out until the moisture content of any timber is less than 20% by mass.

9.2.6 Wetting must be avoided during site storage and installation.

### 9.3 Workmanship

Practicability of installation was assessed by the BBA on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, the product must only be installed by a competent general builder, or a contractor, experienced with this type of product.

### 9.4 Maintenance and repair

As the product is confined within the stud cavity and has suitable durability, maintenance is not required.

## **10 Manufacture**

10.1 The production processes for the product have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

## **11 Delivery and site handling**

11.1 The Certificate holder stated that the product is delivered to site in packaging bearing the Certificate holder's name, product name, manufacturing date, CE marking, health and safety information and the BBA logo incorporating the number of this Certificate.

11.2 Delivery and site handling must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The product must be stored clear of the ground, on a clean, level surface, and preferably under cover to protect them from prolonged exposure to moisture or mechanical damage.

11.2.2 Dust masks, gloves and long-sleeved clothing should be worn when cutting and handling the product.

11.2.3 Damaged, contaminated or wet product must not be used.

Supporting information in this Annex is relevant to the product but has not formed part of the material assessed for the Certificate.

### Construction (Design and Management) Regulations 2015

### Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

### CE marking

The Certificate holder has taken the responsibility of CE marking the product, in accordance with harmonised European Standard EN 13162 : 2012.

### Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018 and ISO 50001 : 2018 by TÜV Nord (Certificates 44100190742, 44104190742, 44126190742 and 44764190742, respectively).

### Additional information on installation

- A.1 Installation of the product must be in accordance with the Certificate holder's instructions and this Certificate. See Figures 1 to 4 for typical installation details.
- A.2 The product should be cut slightly wider than the cavity to be filled to ensure a tight fit between the timber or steel studs and positioned against the inner face of the sheathing board or level with the external face of the timber or steel studs.
- A.3 The product can be cut using a fine-toothed saw or sharp knife, but care must be taken to prevent damage, particularly to edges.
- A.4 Cavity barriers should be provided at the junction of the external wall and roof space as required by the documents supporting the national Building Regulations.
- A.5 A sealed polyethylene AVCL with lapped and sealed joints is placed over the stud face before applying the internal finish.



Figure 2 Steel-frame with cladding outer leaf

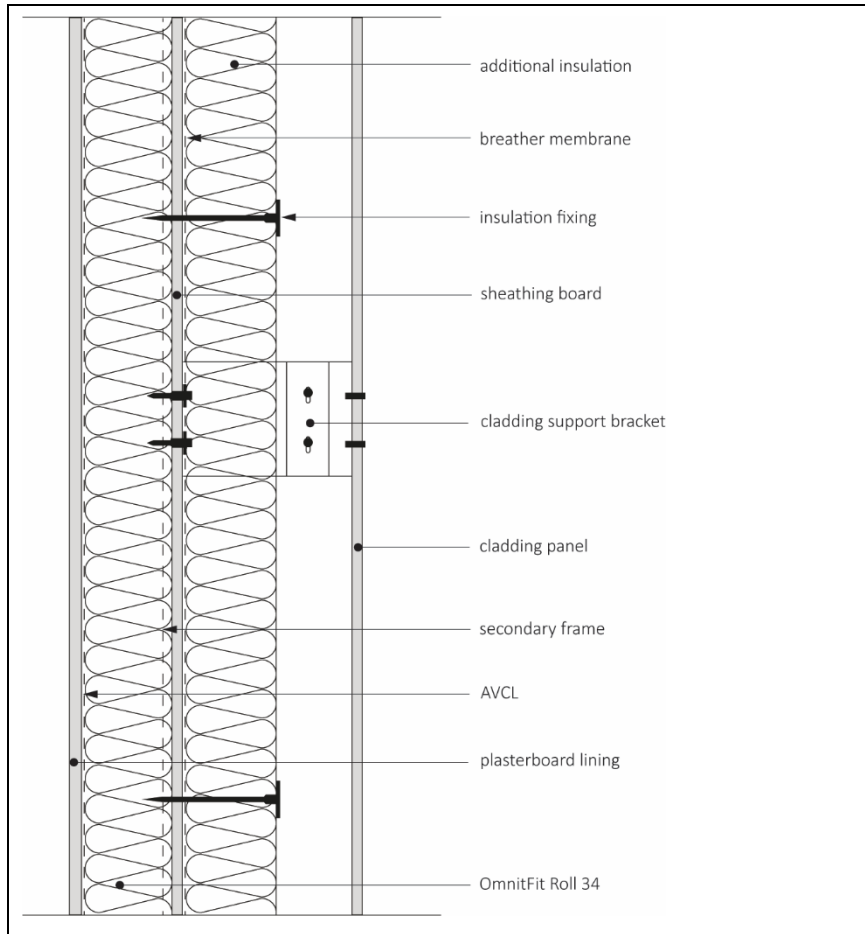


Figure 3 Timber-frame with masonry outer leaf

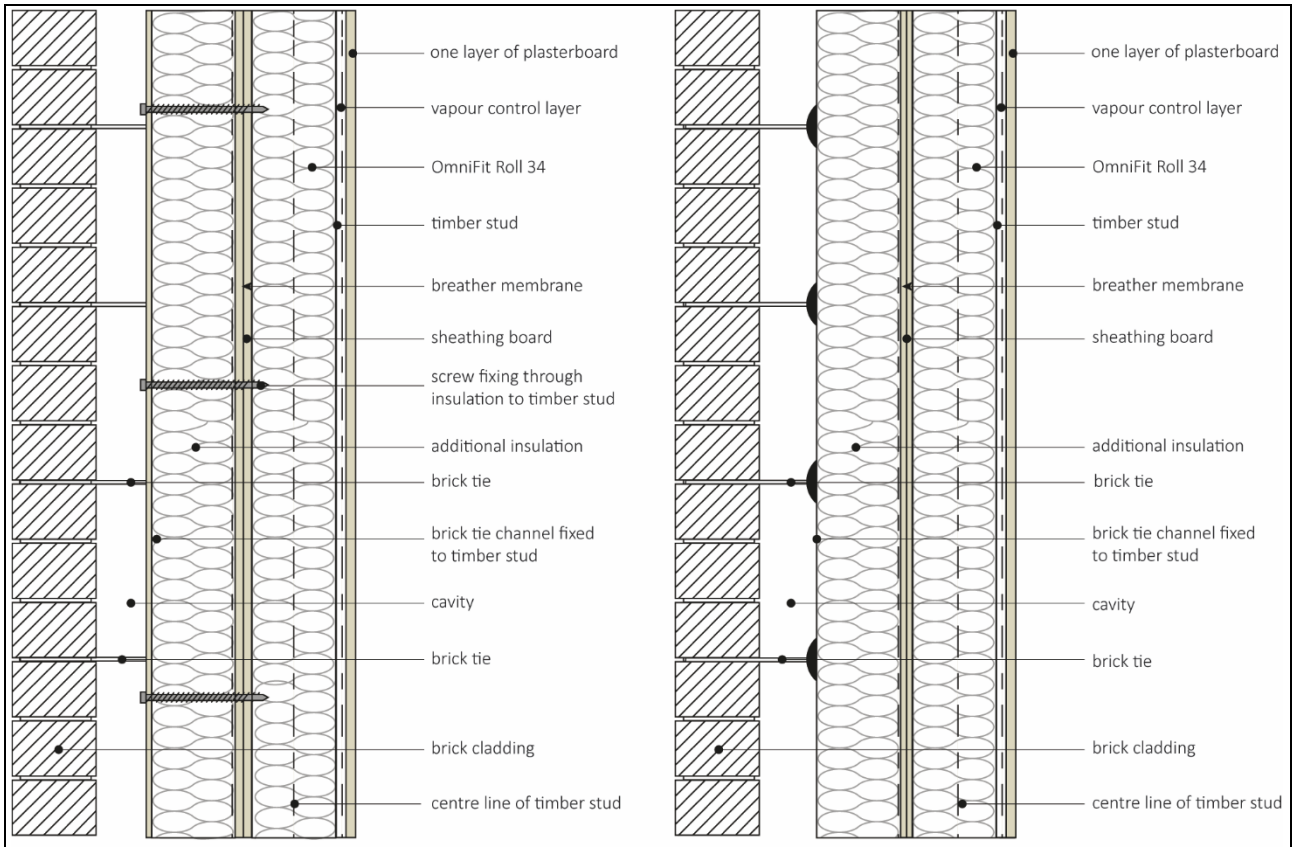
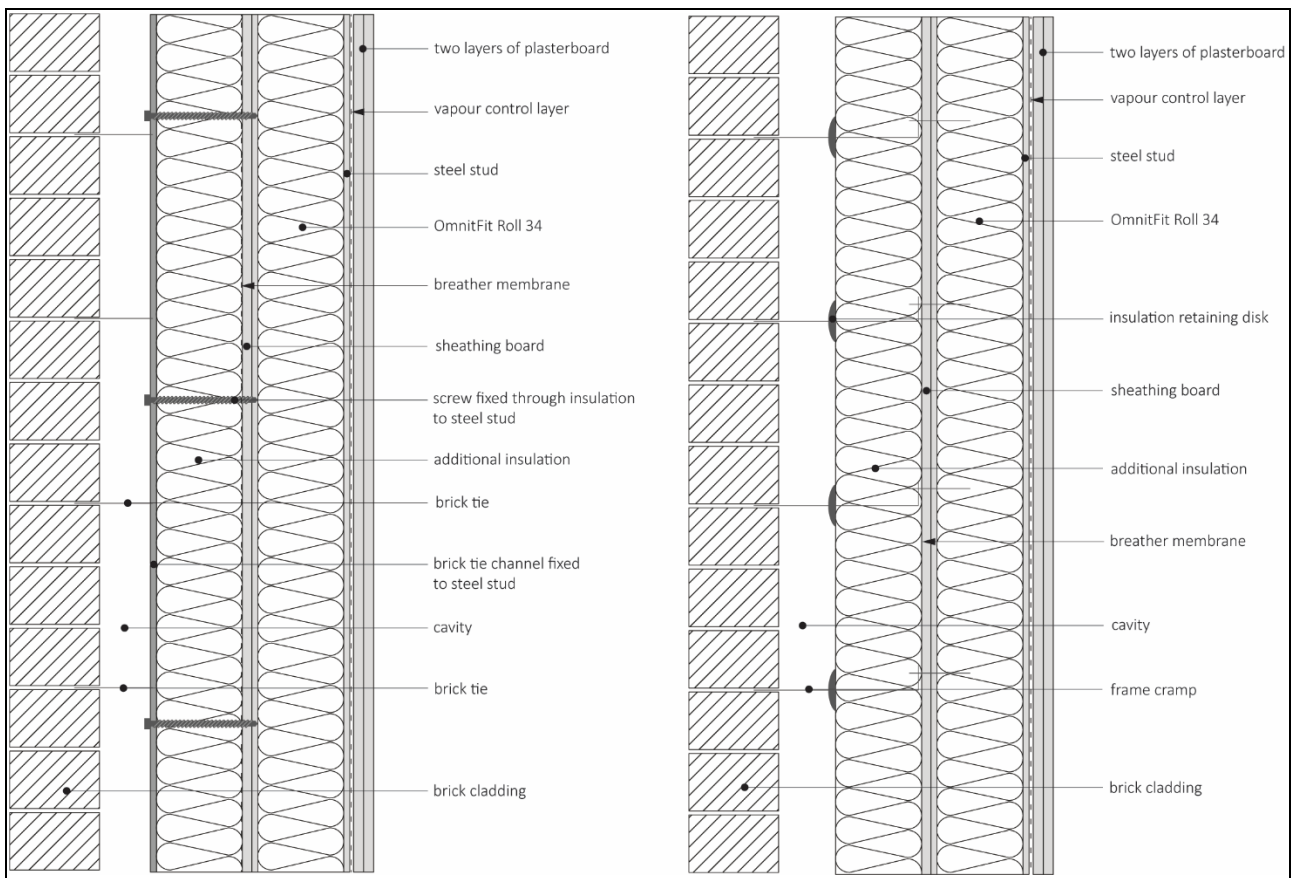


Figure 4 Steel-frame with masonry outer leaf



## Bibliography

- BRE Digest 465 : 2002 *U-values for light steel frame construction*
- BRE Report BR 262 : 2002 *Thermal insulation: avoiding risks*
- BRE Report BR 443 : 2019 *Conventions for U-value calculations*
- BS 5250 : 2021 *Management of moisture in buildings — Code of practice*
- BS 7671 : 2018 + A2 : 2022 *Requirements for Electrical Installations — IET Wiring Regulations*
- BS 8000-3 : 2020 *Workmanship on building sites — Code of practice for masonry*
- BS EN 351-1 : 2023 *Durability of wood and wood-based products — Preservative-treated solid wood — Classification of preservative penetration and retention*
- BS EN 845-1 : 2013 + A1 : 2016 *Specification for ancillary components for masonry — Wall ties, tension straps, hangers and brackets*
- BS EN 1604 : 2013 *Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions*
- BS EN 1993-1-2 : 2005 *Eurocode 3: Design of steel structures — General rules — Structural fire design*
- NA to BS EN 1993-1-2 : 2005 *UK National Annex to Eurocode 3: Design of steel structures — General rules — Structural fire design*
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- BS EN ISO 6946 : 2017 *Building components and building elements — Thermal resistance and thermal transmittance — Calculation method*
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- ISO 9001 : 2015 *Quality management systems — Requirements*
- ISO 14001 : 2015 *Environmental management systems — Requirements with guidance for use*

ISO 50001 : 2018 *Energy management systems — Requirements with guidance for use*

ISO 45001 : 2018 *Occupational health and safety management systems — Requirements with guidance for use*

### Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.