

## wedi Systems (UK) Ltd

Unit 4 Mercury Park  
Mercury Way  
Trafford Park  
Manchester M41 7LY

Tel: 0161 864 2336 Fax: 0161 864 1323

e-mail: [technical@wedi.co.uk](mailto:technical@wedi.co.uk)

website: [www.wedi.co.uk](http://www.wedi.co.uk)



## Agrément Certificate

00/3675

Product Sheet 1 Issue 4

### WEDI BOARDS

### WEDI BUILDING BOARDS

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to wedi Building Boards, a range of boards comprising rigid extruded polystyrene foam, finished on both sides with a polymer-modified mortar facing, reinforced with a glass fibre mesh fabric. The boards are for use as an intermediate substrate to ceramic, natural stone tiling and plaster for internal use on walls and floors.

(1) Hereinafter referred to as 'Certificate'.

#### 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 products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Fourth issue: 31 July 2024

Originally certified on 24 January 2000

A handwritten signature in black ink, appearing to read 'Hardy Giesler'.

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

1<sup>st</sup> Floor, Building 3, Hatters Lane  
Croxley Park, Watford  
Herts WD18 8YG

©2024

tel: 01923 665300  
[clientservices@bbacerts.co.uk](mailto:clientservices@bbacerts.co.uk)  
[www.bbacerts.co.uk](http://www.bbacerts.co.uk)

## 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 wedi Building Boards, 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 products can contribute to satisfying this Requirement. See section 2 of this Certificate.
<b>Requirement:</b>	<b>C2(c)</b>	<b>Resistance to moisture</b>
Comment:		Walls incorporating the products can satisfy this Requirement. See section 3 of this Certificate.
<b>Requirement:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:		The products are acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>7(2)</b>	<b>Materials and workmanship</b>
Comment:		The products are restricted by this Regulation. See section 2 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 products are 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 products are restricted by this Regulation. See section 2 of this Certificate.
<b>Regulation</b>	<b>9</b>	<b>Building standards – construction</b>
Standard:	2.4	Cavities
Comment:		The products can contribute to satisfying this Standard, with reference to clause 2.4.2 <sup>(1)(2)</sup> . See section 2 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Standard:	2.7	Spread on external walls
Comment:		The products are restricted by these Standards, with reference to clauses 2.6.4 <sup>(1)(2)</sup> , 2.6.5 <sup>(1)</sup> , 2.6.6 <sup>(2)</sup> and 2.7.1 <sup>(1)(2)</sup> . See section 2 of this Certificate.
Standard:	3.15	Condensation
Comment:		The products can contribute to satisfying this Standard, with reference to clauses 3.15.1 <sup>(1)</sup> , 3.15.4 <sup>(1)</sup> and 3.15.5 <sup>(1)</sup> . See section 3 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The products can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.

<b>Regulation:</b>	<b>12</b>	<b>Building standards – conversion</b>
<b>Comment:</b>		Comments in relation to the products under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 <sup>(1)(2)</sup> and Schedule 6 <sup>(1)(2)</sup> .
		(1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).



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

<b>Regulation:</b>	<b>23(1)(a)(i)</b>	<b>Fitness of materials and workmanship</b>
<b>Comment:</b>	<b>(iii)(iv)(b)(i)</b>	The products are acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>23 (2)</b>	<b>Fitness of materials and workmanship</b>
<b>Comment:</b>		The products are restricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>29</b>	<b>Condensation</b>
<b>Comment:</b>		The products are acceptable. See section 3 of this Certificate.
<b>Regulation:</b>	<b>35(4)</b>	<b>Internal fire spread – structure</b>
<b>Comment:</b>		The products can contribute to satisfying this Regulation. See section 2 of this Certificate.

## Additional Information

### NHBC Standards 2024

In the opinion of the BBA, wedi Building Boards, 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 9.2 *Wall and ceiling finishes* and 9.3 *Floor finishes*.

## Fulfilment of Requirements

The BBA has judged wedi Building Boards to be satisfactory for use as described in this Certificate. The products have been assessed as an intermediate substrate to ceramic, natural stone tiling and plaster for internal use on walls and floors.

## ASSESSMENT

### Product description and intended use

The Certificate holder provided the following description for the products under assessment. wedi Building Boards consist of rigid extruded polystyrene foam boards, finished on both sides with a polymer-modified cement coating reinforced with glass fibre mesh fabric.

The products are available in the sizes and weights given in Table 1.

**Table 1 Nominal dimensions and weights**

Length (mm) x width (mm) x thickness (mm)	Approximate weight per board (kg)
1250 x 600 x 4	2.3
2500 x 600 x 4	5.3
1250 x 600 x 6	2.4
2500 x 600 x 6	5.4
2500 x 600 x 10	5.0
2500 x 1200 x 10	10.0
2500 x 600 x 12.5	5.8
2500 x 900 x 12.5	8.7
2500 x 1200 x 12.5	11.6
2500 x 625 x 12.5	5.3
2500 x 900 x 12.5	7.95
2500 x 1200 x 12.5	10.6
2500 x 600 x 20	5.5
2500 x 900 x 20	8.3
2500 x 1200 x 20	11.0
2500 x 600 x 30	6.1
2500 x 900 x 30	9.2
2500 x 1200 x 30	12.2
2500 x 600 x 40	6.4
2500 x 600 x 50	6.9
2500 x 900 x 50	10.4
2500 x 1200 x 50	13.8
2500 x 600 x 60	7.7
2500 x 600 x 80	8.4
2500 x 600 x 100	9.9

### Ancillary Items

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

- wedisteck RK — used as a fixing anchor to walls and floors
- wedisteck WE — for special shapes, bath surrounds, shelves and other substructures
- wedisteck BA — to connect and join adjacent boards of minimum thickness 30 mm
- wedi reinforcing tape — for joints in dry areas
- wedi self-adhesive reinforcing tape — for joints in dry areas
- wedi sealing tape — for sealing and reinforcement of boards and corner joints in wet areas
- wedi 520 membrane adhesive — a two-component flexible waterproofing compound used in conjunction with wedi sealing tape, wedi pre-formed corners and wedi sealing gaiters to waterproof joints in wet areas
- wedi 610 adhesive sealant — used in conjunction with wedi self-adhesive reinforcing tape as an alternative method for sealing joints between boards used in wet areas
- wedi dowel fixing — used to fix the board to surfaces unable to bond with adhesive or to supplement adhesive fixing
- wedi pre-formed corners and wedi sealing gaiters
- wedi 320 tile adhesive — a cement-based adhesive for fixing tiles to the wedi building boards.
- unglazed porcelain stoneware tiles, cement-based tile adhesive and grout
- the Certificate holder must be consulted for details of additional screw washers and for suitable flexible cement board tile adhesives to BS EN 12004-1 : 2017 and tile grouts.

### Applications

The products are intended for use in the following applications:

- for internal use as an intermediate substrate to ceramic and natural stone tiling

- as part of a system of tiles, cement-based tile adhesive and grout to install a stable, waterproof tile substrate in showers and wet areas
- the boards may be directly bonded to clean, sound brick, block or concrete walls and may also be used on concrete floors or suspended timber floors. Boards can also be fixed to stud walling/partitions.

## Product assessment – key factors

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

### 1 Mechanical resistance and stability

Data were assessed for the following characteristics.

#### 1.1 Compressive strength

1.1.1 The result of compressive strength tests is given in Table 2.

*Table 2 Compressive strength test results of the XPS insulation*

Product assessed	Assessment method	Requirement	Result
XPS Insulation	BS EN 826 : 2013	> 250 (CS(10\Y)250)	Pass

1.1.2 On the basis of data assessed, the products have satisfactory compressive strength.

#### 1.2 Bond strength

1.2.1 Results of tests on the bond strength are given in Table 3.

*Table 3 Results of bond strength tests*

Product assessed	Assessment method	Requirement	Result
wedi Building Boards bonded to wooden substrate utilising wedi 610 adhesive sealant <sup>(3)</sup>	EOTA TR-004 : 2004, stress at maximum force	Value achieved	275 (kPa)
			298 (kPa) <sup>(1)</sup>
			309 (kPa) <sup>(2)</sup>
wedi Building Boards bonded to metal substrate utilising wedi 610 sealant adhesive <sup>(3)</sup>			205 (kPa)
			204 (kPa) <sup>(1)</sup>
			189 (kPa) <sup>(2)</sup>
wedi Building Boards Arouflex 5000 Tile Adhesive <sup>(3)</sup> Pilkington tiles <sup>(3)</sup>	Tensile bond strength to BBA method	Value achieved	Solid adhesive bed - 272.8 kN·m <sup>-2</sup> Ribbed adhesive bed - 287.5 kN·m <sup>-2</sup>

(1) Stored in a sealed cabinet controlled at 50°C and 90-100% RH for 7 days.

(2) Stored in a sealed cabinet controlled at 50°C and 90-100% RH for 28 days.

(3) These items have not been assessed by the BBA and are outside the scope of this Certificate.

1.2.2 On the basis of data assessed, the products have satisfactory bond strength.

1.2.3 Provided the tiles selected are correctly specified to resist the designed, distributed and concentrated loads, the boards are suitable for use in Categories A1 and A2 and appropriate Type A situations for domestic and residential activities as defined in BS EN 1991-1-1 : 2002 and its UK National Annex, Table NA.2.

#### 1.3 Resistance to impact

1.3.1 Results of resistance to impact tests are given in Table 4.

**Table 4 Results of resistance to impact tests**

Product assessed	Assessment method	Requirement	Result
wedi Building Boards	10 J hard body impact to MOAT 43 : 1987	No penetration	Pass
wedi Building Boards	100 J soft body impact to MOAT 43 : 1987	No dislodgment from fixings	Pass
wedi Building Boards mounted with screws onto wooden battens with Richmond natural paving slabs <sup>(1)</sup> adhered to the front face utilising wedi 320 tile adhesive <sup>(1)</sup> , wedi 610 adhesive sealant <sup>(1)</sup> and wedi reinforcement tape <sup>(1)</sup>	120 J soft body impact to ISO 7892 : 1988	No falling debris capable of injury No impairment to structure	Pass

(1) These items have not been assessed by the BBA and are outside the scope of this Certificate

1.3.2 On the basis of data assessed, a complete tiled assembly will adequately resist the effects of the impacts likely to be expected in service.

#### 1.4 Mechanical properties

1.4.1 Results of bending strength tests are given in Table 5.

**Table 5 Results of bending strength tests**

Product assessed	Assessment method	Requirement	Result
wedi Building Boards Arouflex 5000 Tile Adhesive <sup>(1)</sup> Pilkington Tiles <sup>(1)</sup> Ardex Arduit C2 tile grout <sup>(1)</sup>	Bending strength to BS 5669-1 : 1989	Value achieved	2.02 N · mm <sup>-2</sup>

(1) These items have not been assessed by the BBA and are outside the scope of this Certificate

1.4.2 On the basis of data assessed, the products have suitable mechanical properties for the intended use.

#### 1.5 Cracking

1.5.1 Results of crack bridging tests are given in Table 6.

**Table 6 Results of crack bridging tests**

Product assessed <sup>(1)</sup>	Assessment method	Requirement	Result
wedi Building Board adhered to concrete slab <sup>(2)</sup> utilising Alfix Universalfix <sup>(2)</sup> adhesive	PrEN 1062-7, 4 mm crack	No perforation or through cracking	Pass

(1) Assessment category 1 to ETAG 022-3 : 2010

(2) These items have not been assessed by the BBA and are outside the scope of this Certificate

1.5.2 On the basis of data assessed, the products have satisfactory crack bridging properties.

## 2 Safety in case of fire

Data were assessed for the following characteristics.

### 2.1 Reaction to fire

2.1.1 Results of reaction to fire tests are given in Table 7.

**Table 7 Reaction to fire test results**

Product assessed	Assessment method	Requirement	Result
5 mm wedi Building Board with 2.5 mm XPS insulation core	Ignitability test to EN ISO 11925-2 : 2010	Classification achieved	Class E <sup>(1)</sup> to EN 13501-1 : 2007 + A1 : 2009
100 mm wedi Building board with XPS insulation core			

(1) Classification covers nominal thicknesses of ≥ 5 mm

2.1.2 On the basis of data assessed, the products will be restricted in use under the documents supporting the national Building Regulations in some cases.

2.1.3 In England, the products must not be used as part of an external wall in buildings that have a storey at least 18 m above ground level and which contain one or more dwellings, an institution, a room for residential purposes, student accommodation, care homes, sheltered housing, hospitals, dormitories in boarding schools, hostels, hotel or boarding houses.

2.1.4 In Wales and Northern Ireland, the products must not be used as part of an external wall in buildings that have a storey at least 18 m above ground level and which contain one or more dwellings, an institution, a room for residential purposes (excluding any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools and additionally, in Northern Ireland, nursing homes and places of lawful detention.

2.1.5 In Scotland, the products must not be used as part of an external wall less than 1 m from a relevant boundary, or on buildings more than 11 m in height.

2.1.6 The reaction to fire classification of the 4 mm boards and of the tiled boards may be different, and the classification and permissible areas of use must be established in accordance with the documents supporting the national Building Regulations on a case by case basis.

2.1.7 Any cavities formed by the products must have appropriate cavity barriers and fire stopping as required by the documents supporting the national Building Regulations.

### 3 Hygiene, health and the environment

Data were assessed for the following characteristics.

#### 3.1 Resistance to water and water vapour

3.1.1 The results of resistance to water vapour tests are given in Table 8.

**Table 8 Water vapour resistance test results**

Product	Assessment method	Requirement	Result
wedi Building Board – 4 mm	EN ISO 12572 : 2001	Values achieved	Water vapour diffusion current density - 3.37E-07 kg·m <sup>-2</sup> ·s Water vapour diffusion equivalents - 0.72m Water vapour diffusion resistance number - 139
wedi Building Board – 20 mm			Water vapour diffusion current density - 9.14E-08 kg·m <sup>-2</sup> ·s Water vapour diffusion equivalents - 2.64m Water vapour diffusion resistance number - 133  Water vapour diffusion resistance factor (23 °C – 75/100 % r.h.) = sd > 0.7 m

3.1.2 The water vapour resistance factors in Table 8 must be used in calculations of interstitial condensation to BS 5250 : 2021.

3.1.3 When carrying out condensation risk assessments, the water vapour resistivity of the foam component may be taken as  $460 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}\cdot\text{m}^{-1}$ .

3.1.4 The results of watertightness tests are given in Table 9.

*Table 9 Results of watertightness tests*

Product tested	Assessment method	Requirement	Water vapour resistance factor ( $\mu$ )
wedi Building Board, joined by wedi sealing tape <sup>(1)</sup> and utilising wedi 520 membrane adhesive liquid <sup>(1)</sup> and wedi 520 membrane adhesive Part A powder <sup>(1)</sup>	A BBA test method	No leakage after 14 days	Pass
4 mm and 20 mm wedi Building board	ETAG 022-3 : 2010	No leakage after 7 days	Pass

(1) This item has not been assessed by the BBA and is outside the scope of the Certificate.

3.1.5 On the basis of data assessed, the products have satisfactory resistance to water.

## 4 Safety and accessibility in use

Not applicable.

## 5 Protection against noise

Not applicable.

## 6 Energy economy and heat retention

### 6.1 Thermal conductivity

6.1.1 The results of thermal conductivity tests are given in Table 10.

*Table 10 Results of thermal conductivity tests*

Product	Assessment method	Requirement	Thermal conductivity ( $\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$ )
XPS Insulation	BS EN 12667 : 2001	Value achieved	20 to 70 mm - 0.034 71 to 120 mm - 0.035 121 to 200 mm - 0.036

6.1.2 The boards will provide thermal insulation and, for calculation purposes, the thermal conductivity of the core foam component is given in Table 10 above.

## 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 products were assessed.

8.1.1 The results of the durability tests are given in Table 11.



**Table 11 Results of durability tests**

Product assessed	Assessment method	Requirement	Result
wedi Building Boards Arouflex 5000 tile adhesive <sup>(1)</sup> Pilkington tiles <sup>(1)</sup>	Tensile bond strength to BBA test method following humidity ageing	No significant deterioration	Pass
wedi Building Boards Arouflex 5000 tile adhesive <sup>(1)</sup> Tiles <sup>(1)</sup> wedi sealing tape <sup>(1)</sup> ArDEX Arduit C2 tile grout <sup>(1)</sup>	Thermal cycling to a BBA method	No significant movement	Pass
Unglazed porcelain stoneware tiles bonded to 20 to 40 mm thick wedi Building Boards, with wedi 320 <sup>(1)</sup> adhesive	Resistance to water to BS EN 14891 : 2017	No significant deterioration	Pass
Mapei Keraflex S1 <sup>(1)</sup> adhesive Mapei Adesilex P9 <sup>(1)</sup> adhesive SCHÖNOX PFK Plus <sup>(1)</sup> adhesive SCHÖNOX CFK Plus <sup>(1)</sup> adhesive Sopro`s No.1 <sup>(1)</sup> adhesive Alfix Universalfix <sup>(1)</sup> adhesive Sopro`s FF 450 <sup>(1)</sup> adhesive Sopro`s No.1 schnell <sup>(1)</sup> adhesive ARDEX 77 <sup>(1)</sup> adhesive	Adhesion strength after alkaline exposure test results BS EN 14891 : 2017	No significant deterioration	Pass
4 mm thick wedi Building Boards 20 mm thick wedi Building Boards	Resistance to temperature test to BS EN 12089 : 2013	< 20% deviation from control	Pass
XPS Insulation <sup>(1,2)</sup>	Long term water absorption test to BS EN 12087 : 2013	Water absorption level (EN 13164 : 2012) WL(T)1.5	Pass
XPS Insulation <sup>(1,3)</sup>	Long term water absorption test to BS EN 12088 : 2013	Water absorption level (EN 13164 : 2012) WL(T)3	Pass
Tiled and grouted wedi Building Boards	Resistance to impact following weathering Resistance to 10 J hard body impact to MOAT 43 : 1987 <sup>(4)</sup>	MOAT 43, Clause 3.3.1.2 and 3.3.1.3 No penetration No dislodgment from fixings	Pass
Tiled and grouted wedi Building Boards	Resistance to 100 J soft body impact to MOAT 43 : 1987 <sup>(5)</sup>	No falling debris capable of injury No impairment to structure	Pass
wedi Building Boards <sup>(7)</sup> mounted with screws onto 50 mm C shape metal studding <sup>(1)</sup> with Richmond natural paving slabs <sup>(1)</sup> adhered to the front face utilising wedi 320 tile adhesive <sup>(1)</sup> , wedi 610 adhesive sealant <sup>(1)</sup> and wedi reinforcement tape <sup>(1)</sup>	Resistance to impact Resistance to 120 J soft body impact to ISO 7892 : 1988 <sup>(6)</sup>		Pass

(1) This item has not been assessed by the BBA and is outside the scope of the Certificate .

(2) Insulation tested with skins.

(3) Insulation tested without skins.

(4) Following 50 cycles of 8 hours spray / 16 hours drying at ambient.

(5) Following 80 cycles of 3 hours radiant heat at 70 °C / 1 hour water spray and 2 hour dwell.

(6) Following 50 cycles of 8 hours spray / 16 hours drying at ambient.

(7) Timber battens at 300 to 350 mm centres having a width of 38 mm and a depth of 89 mm.

## 8.2 Service life

Under normal service conditions, the products will have a life at least equivalent to the structure in which they are incorporated, provided they are 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 specified in this Certificate.

9.1.2 The products can be installed on internal walls and floors of new or existing buildings. The fixing method depends on the substrate.

9.1.3 Masonry walls of new buildings must be designed and constructed in accordance with BS EN 1996-2 : 2006 and its UK National Annex. The walls of existing buildings must be watertight.

9.1.4 The boards must not bridge movement joints. These must be carried through the board/tile bed and sealed in an appropriate manner. The Certificate holder must be consulted for suitable joint solutions, but such advice is outside the scope of this Certificate.

9.1.5 Recessed lighting must not be used with the products.

#### 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.

9.2.3 If mould or fungal growth is present, it must be treated prior to the application of the boards.

9.2.4 If the wall is slightly uneven, contaminated or incompatible with the recommended adhesive, or if heavy stone tiles are to be used, the boards must be mechanically fixed.

9.2.5 When the boards are adhesively fixed, tests must be carried out to ensure adequate adhesion can be achieved. The advice of the Certificate holder must be sought, but such advice is outside the scope of this Certificate.

9.2.6 Boards may be cut using such tools as a padsaw, keyhole saw or craft knife. When working in enclosed areas, precautions must be taken to ensure dust levels are controlled in accordance with the current issue of EH40/2005.

9.2.7 Objects other than lightweight items must be fixed through the boards into the wall behind, using suitable proprietary fixings.

9.2.8 With timber batten systems, services can be incorporated in the void behind the boards (provided the void is at least 20 mm wide), making chasing of the wall unnecessary. When using adhesive systems, or where the services have a greater depth than the void, the wall should be chased rather than the board. It is recommended that services penetrating the board, eg light switches and power outlets, are kept to a minimum.

9.2.9 Installation of the boards requires careful detailing around doors and windows to achieve a satisfactory finish. New work must be designed to accommodate the thickness of the overall installation.

9.2.10 Tiles are fixed to the boards using a suitable flexible cement-based tile adhesive, applied in accordance with the manufacturer's instructions, BS 8000-11 : 2011 and the relevant parts of BS 5385-3 : 2014.

9.2.11 Tiles can be applied onto the boards once the adhesive securing the boards to the wall has adequately set and hardened. On floors, the Certificate holder must be consulted on the minimum tile size to be used for any specific application, but such advice is outside the scope of this Certificate.

9.2.12 Once the tile bed has hardened sufficiently, joints between the tiles can be grouted using an appropriate cement-based grout. Movement joints in the tile bed, eg between adjacent walls, must be sealed with a suitable sealant. The Certificate holder can advise on suitable materials, but such advice and products are outside the scope of this Certificate.

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

9.2.14 The boards have been satisfactorily tested when mechanically fixed or adhesively bonded with wedi 610 adhesive sealant to wood studding and metal studding, and mechanically fixed to metal studding on a masonry brick wall using ten metal wedi washer and screw fixings per square meter, with a stone tile loading<sup>(1)(2)(3)</sup> of 133 kg·m<sup>-2</sup>.

(1) wedi 320 tile adhesive was used as the adhesive to bond the stone tiles to the wedi Building Boards.

(2) Loading weight does not include weight of adhesive and grout.

(3) Studding fixed at 300 mm centres.

### 9.3 Fixing to floors

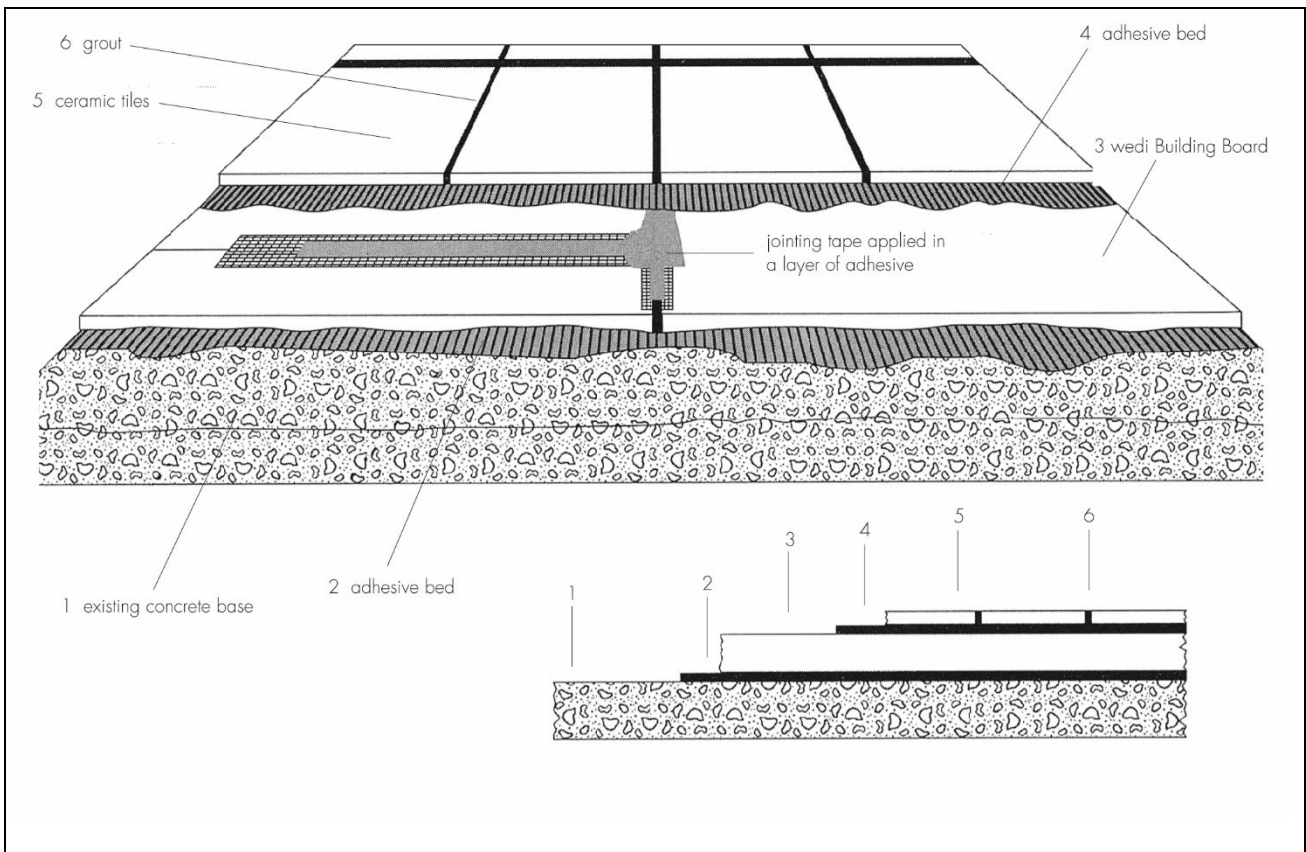
9.3.1 Floors must be flat and able to accept the loads expected for any specific installation.

9.3.2 The level of resistance to concentrated loads will depend on the size and strength of the tiles used to cover the boards.

9.3.3 Provided the tiles selected are correctly specified to resist the designed, distributed and concentrated loads, the boards are suitable for use in Categories A1 and A2 and appropriate Type A situations for domestic and residential activities as defined in BS EN 1991-1-1 : 2002 and its UK National Annex, Table NA.2.

**Fixing to concrete floors** (see Figure 1)

Figure 1 Fixing to concrete floors



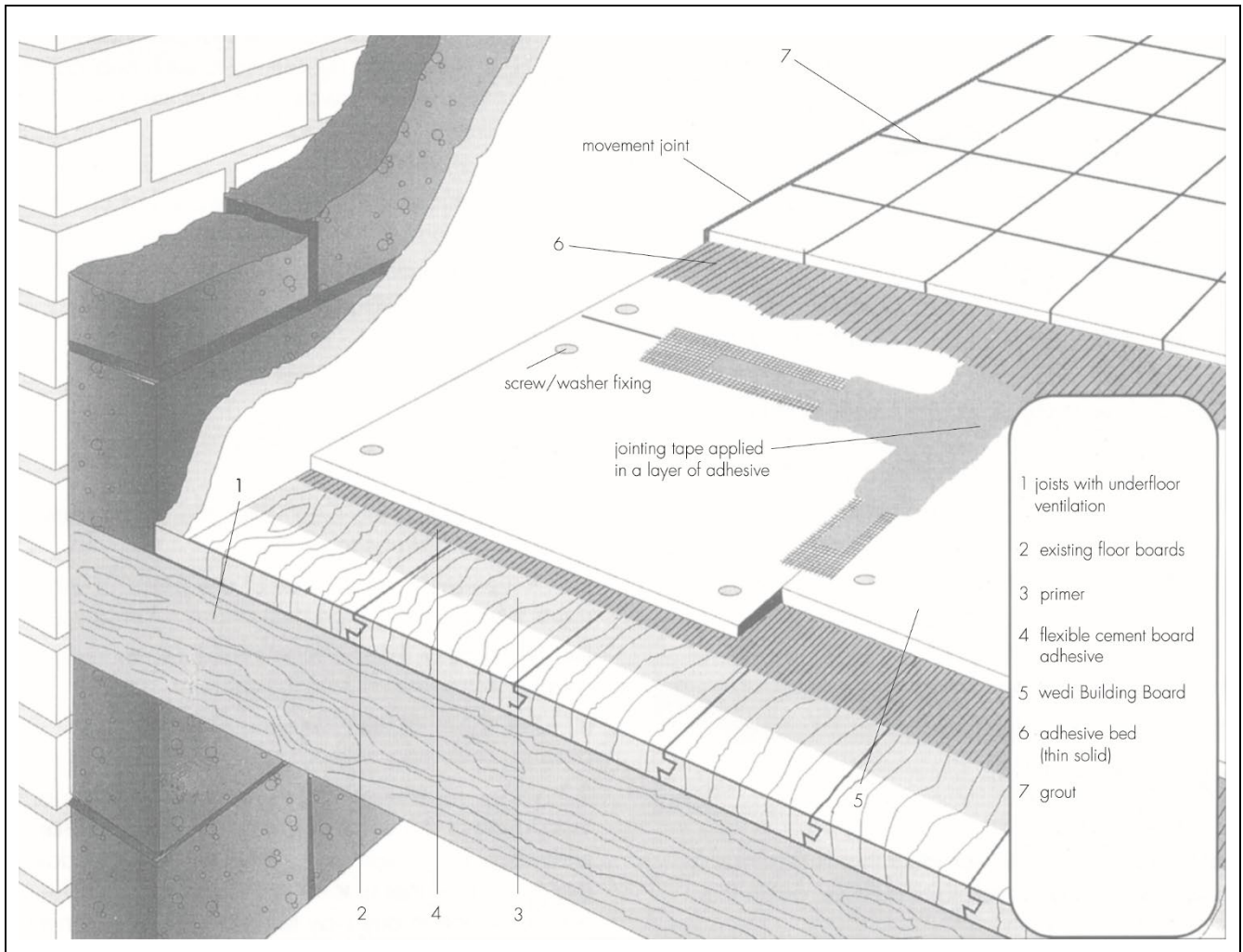
9.3.4 Existing concrete bases and screeds must be mechanically prepared in accordance with BS 8204-1 : 2003 to ensure removal of all traces of existing finishes and contamination, exposing a clean surface. New concrete or screed bases must be cured in accordance with BS 8204-1 : 2003 to allow shrinkage to occur prior to fixing the boards.

9.3.5 The boards are applied onto the prepared base using a flexible cement-based adhesive. The adhesive must be trowelled out and combed through with the recommended notched trowel to give a ribbed bed (slight depressions of the base are filled at the same time). The boards must be laid with staggered joints on the fresh adhesive and be thoroughly bedded in, to ensure that, as far as is practicable, voids are eliminated and the boards are fully supported.

9.3.6 The adhesive must be allowed to harden before the joints are taped in accordance with the Certificate holder's instructions.

**Fixing to suspended timber floors** (see Figure 2)

Figure 2 Fixing to suspended timber floor



9.3.7 Suspended timber floors must be constructed in accordance with BS 8201 : 2011 and existing floorboards secured and rigidly fixed in accordance with BS 5385-3 : 2014.

*Areas up to 20 m<sup>2</sup>*

9.3.8 The surface of the floorboards must be primed and allowed to dry. Advice on appropriate primers and their application can be supplied by the Certificate holder.

9.3.9 Boards must be bedded onto a flexible cement-based adhesive using the procedure described in section 9.3.5. When dry, the proprietary washer and screw fixings are applied a minimum of 30 mm from the edge of the board at a rate of five per square metre. The screw/washer fixing is tightened into the board until the screw head is flush with the surface. If required, it may be driven flush with the surface using a rubber-headed mallet and the screw re-tightened. In wet areas, it is recommended that the fixing hole is primed with a suitable primer, prior to inserting the fixing. The Certificate holder can advise on suitable materials, but such advice and products are outside the scope of this Certificate.

*Areas over 20 m<sup>2</sup>*

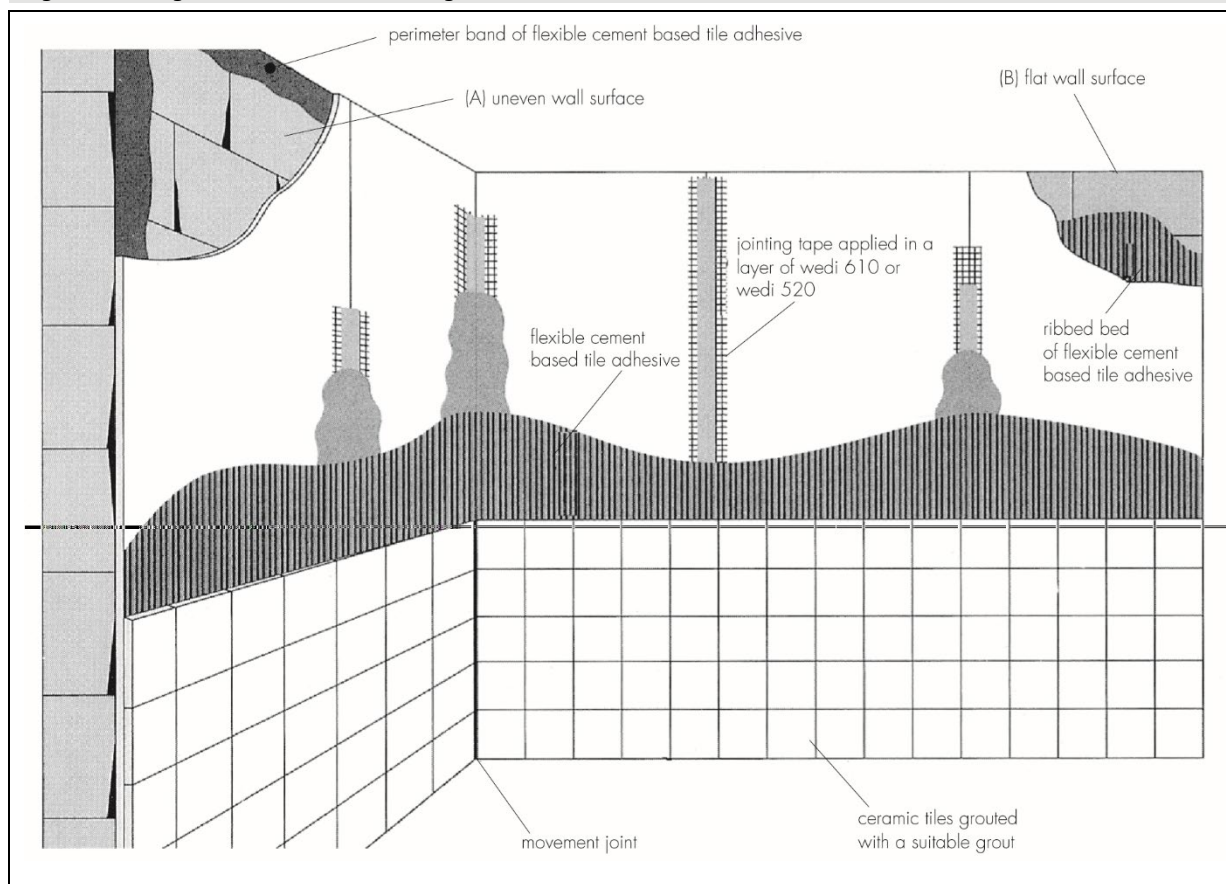
9.3.10 The procedure follows that described in sections 9.3.8 and 9.3.9 but a layer of glass fibre mesh fabric is placed over the board and held in place by the tile adhesive bed. The Certificate holder can advise on suitable materials, but such advice and products are outside the scope of this Certificate.

## 9.4 Fixing on walls

9.4.1 Objects other than lightweight items must be fixed through the boards into the wall behind using suitable proprietary fixings. The recommendations of the Certificate holder must be followed.

**Fixing to walls — direct bonding** (see Figure 3)

*Figure 3 Fixing to walls – direct bonding*



9.4.2 Direct bonding using a flexible cement based tile adhesive is for use on clean and sound brick, block or concrete walls. If any doubt exists as to the adequacy of the bond to be achieved, or for all natural stone tiling, supplementary fixings must be used as described in sections 9.4.6 to 9.4.9.

**Adhesive strips or mortar dabs — uneven wall surfaces [(A) in Figure 3]**

9.4.3 The board (minimum thickness 20 mm) is cut to length and adhesive is applied to the wall surface to provide perimeter strips or dabs. Whilst the adhesive is still fresh and moist, the board is placed in position and, using a timber batten, thoroughly tamped to ensure good all round contact and a true surface.

9.4.4 The adhesive is allowed to set and harden before the jointing tape is applied in a fresh layer of adhesive with a taping knife or similar, ensuring that it is firmly bedded and free from trapped air bubbles. Immediately after the tape has been fixed, a fresh layer of adhesive or, in wet areas, a suitable tape and adhesive, is applied over it and feathered off with the surface of the board. The Certificate holder can advise on suitable materials, but such advice and products are outside the scope of this Certificate. When this adhesive has set, but not necessarily dried, the tiles can be applied using the appropriate adhesive.

**Thin-bed adhesive — flat wall surface [(B) in Figure 3]**

9.4.5 The adhesive is applied either to the existing sound wall surface or directly to the board, and combed out with an 8 by 8 mm toothed and notched trowel over the complete board area, to provide a ribbed adhesive bed. The board is offered up to the wall surface and tapped level. The boards are butt-jointed and all joints are reinforced with the appropriate jointing tape as described in section 9.4.4.

### **Fixing to walls — mechanical fixing**

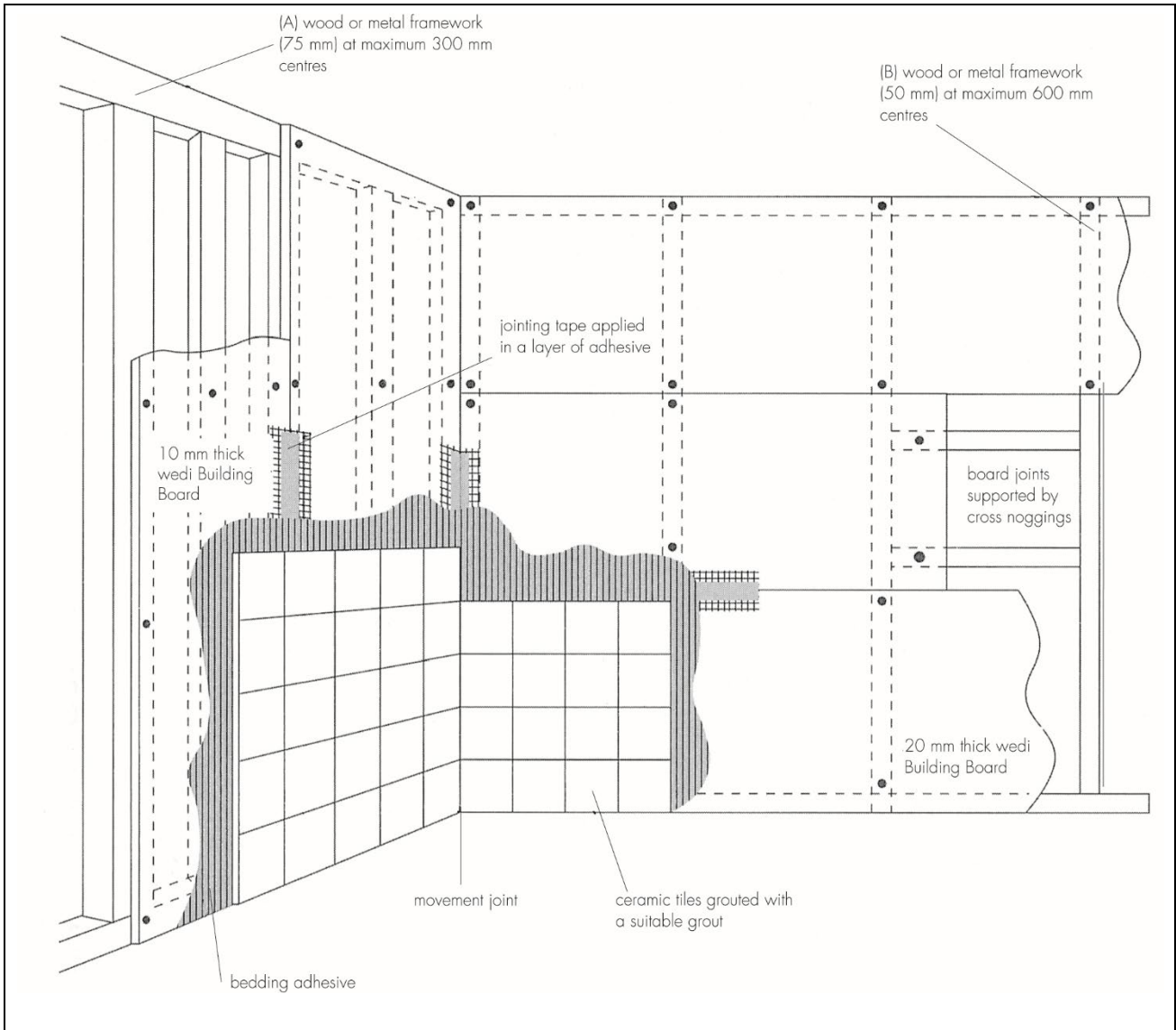
9.4.6 On flat, structurally sound walls where conditions exist that will prevent adhesion (eg the surface is contaminated or insufficiently sound), the board can be fixed using dowel fixings. The Certificate holder can advise on suitable materials, but such advice and products are outside the scope of this Certificate.

9.4.7 For ceramic tiling, dowel or screw and washer fixings are used at a rate of five per square metre. For natural stone tiling intended for adhesive fixing at a weight of up to  $60 \text{ kg}\cdot\text{m}^{-2}$ , this must be increased to eight per square metre. For tile weights over  $60 \text{ kg}\cdot\text{m}^{-2}$ , the Certificate holder must be consulted, but such advice is outside the scope of this Certificate. See also section 9.2.14.

9.4.8 Joints between boards should be sealed using the appropriate sealing tape as described in section 9.4.4.

### **Fixing to stud walling/partitions (see Figure 4)**

**Figure 4 Fixing to stud walling/partitions**



9.4.9 The system shown in Figure 4 uses timber or metal studding designed to provide rigid support for the board. The unsupported span of the framework depends on the thickness of the board to be affixed (see Table 12). All board edges must be supported.

**Table 12 Framework – unsupported span**

Board thickness (mm)	Max unsupported span (mm)
10.0	300 <sup>(1)</sup>
12.5	400
20.0	600 <sup>(2)</sup>

(1) Illustrated as (A) in Figure 4.

(2) Illustrated as (B) in Figure 4.

9.4.10 The board is fixed to the framework using a proprietary washer and screw fixing. These are fixed at the rate of five per square metre and two per batten (600 mm centres) for ceramic tiles and eight per square metre for natural stone tiles. The screw/washer fixing is tightened up to the board’s surface and the washer driven to be flush with the board surface using a rubber-headed mallet. The screw is then retightened.

9.4.11 Alternatively, the boards can be bonded to the framework using a suitable adhesive sealant. The Certificate holder can advise on suitable materials, but such advice and products are outside the scope of this Certificate.

9.4.12 All joints are taped (reinforcing or sealing) following the procedure given in section 9.4.4.



## 9.5 Workmanship

Practicability of installation was assessed by BBA, on the basis of the Certificate holder's information and a site visit to witness an installation in progress. To achieve the performance described in this Certificate, installation of the products must be carried out by a competent general builder or contractor experienced with this type of product.

## 9.6 Maintenance and repair

9.6.1 As the products are confined within the wall structure and have suitable durability, maintenance is not required.

9.6.2 In the event of damage, boards must be replaced before tiling and reinstating the damaged section to the original specification in accordance with the relevant parts of Section 9. If any damage occurs to the tiled boards, it must be repaired as soon as practicable.

## **10 Manufacture**

10.1 The production processes for the products 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 products are delivered on pallets and can be offloaded either by mechanical handling equipment or by manually removing individual boards. Each stack incorporates a label bearing the Certificate holder's name and size of sheet 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 Boards must be stored flat, under cover, on a dry, level surface away from sources of ignition and exposure to sunlight. Stacks of loose boards must not exceed 1 m in height.

## ANNEX A – SUPPLEMENTARY INFORMATION

Supporting information in this Annex is relevant to the products 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 ETAG 022-3 : 2010.

### UKCA marking

The Certificate holder has taken the responsibility of UKCA marking the product in accordance with UKAD 030437-00-0503.

### Management Systems Certification for production

The management system of the manufacturer has been assessed and registered by GUTcert as meeting the requirements of BS EN ISO 9001 : 2015, BS EN ISO 50001 : 2018 and BS EN ISO 14001 : 2018 (Certificate numbers Q-22-23254-EN, B-22-23254-EN and U-21-23254-EN respectively).

## Bibliography

- BS 5250 : 2021 *Management of moisture in buildings— Code of practice*
- BS 5385-3 : 2014 *Wall and floor tiling — Design and installation of internal and external ceramic and mosaic floor tiling in normal conditions — Code of practice*
- BS 8000-11 : 2011 *Workmanship on building sites — Internal and external wall and floor tiling — Ceramic and agglomerated stone tiles, natural stone and terrazzo tiles and slabs, and mosaics — Code of practice*
- BS 8201 : 2011 *Code of practice for installation of flooring of wood and wood-based panels*
- BS 8204-1 : 2003 + A1 : 2009 *Screeds, bases and in situ floorings — Concrete bases and cementitious levelling screed to receive floorings — Code of practice*
- BS EN 826 : 2013 *Thermal insulating products for building applications. Determination of compression behaviour*
- BS EN 1991-1-1 : 2002 *Eurocode 1 : Actions on structures — General actions— Densities, self-weight, imposed loads for buildings*  
NA to BS EN 1991-1-1 : 2002 *UK National Annex to Eurocode 1 : Actions on structures — General actions — Densities, self-weight, imposed loads for buildings*
- BS EN 1996-2 : 2006 *Eurocode 6 : Design of masonry structures — Design considerations, selection of materials and execution of masonry*  
NA to BS EN 1996-2 : 2006 *UK National Annex to Eurocode 6 : Design of masonry structures — Design considerations, selection of materials and execution of masonry*
- BS EN 12004-1 : 2017 *Adhesives for ceramic tiles Requirements, assessment and verification of constancy of performance, classification and marking*
- BS EN 12087 : 2013 *Thermal insulating products for building applications — Determination of long term water absorption by immersion*
- BS EN 12088 : 2013 *Thermal insulating products for building applications — Determination of long term water absorption by diffusion*
- BS EN 12089 : 2013 *Thermal insulating products for building applications. Determination of bending behaviour*
- BS EN 12667 : 2001 *Thermal performance of building materials and products — Determination of thermal resistance by means of guarded hot plate and heat flow meter methods — Products of high and medium thermal resistance*
- BS EN 13164 : 2012 + A1 : 2015 *Thermal insulation products for buildings — Factory made extruded polystyrene foam (XPS) products — Specification*
- BS EN 14891 : 2017 *Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives — Requirements, test methods, assessment and verification of constancy of performance, classification and marking*
- BS EN ISO 9001 : 2015 *Quality management systems. Requirements*
- BS EN ISO 50001 : 2018 *Energy management systems. Requirements with guidance for use*
- BS EN ISO 14001 : 2015 *Environmental management systems. Requirements with guidance for use*
- BS EN ISO 11925-2 : 2010 *Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Single-flame source test*
- EN 13501-1 : 2007 + A1 : 2009 *Fire classification of construction products and building elements — Classification using test data from reaction to fire tests*

EOTA TR-004 : 2004 *Determination of the resistance to delamination*

EH40/2005 *Workplace exposure limits*

ETAG 022-3 : 2010, *Part 3 Kits based on inherently watertight boards*

ISO 7892 : 1988 *Vertical building elements — Impact resistance tests — Impact bodies and general test procedures*

MOAT 43 : 1987 *UEAtc Directive for Impact Testing Opaque Vertical Building Components*

### 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.