Resistant Building Products Limited

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Agrément Certificate 15/5255

Product Sheet 2 Issue 1

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RESISTANT BUILDING PRODUCTS MAGNESIUM OXIDE BOARDS

MULTI PRO AND MULTI PRO TILE BACKER BOARD

This Agrément Certificate Product Sheet (3) relates to Multi Pro and Multi Pro Backer Board, magnesium oxide boards. Multi Pro is for use as a liner board for internal steel or timber frame partition walls and internal ceilings, and Multi-Pro Tile Backer Board is for use as a substrate for ceramic and natural stone tiles. The boards are used in new and existing domestic and non-domestic buildings.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

- · compliance with Building Regulations
- compliance with additional regulatory or nonregulatory 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 First issue: 12 April 2024

Hardy Giesler Chief Executive Officer

Certificate amended on 20 June 2024 to add T&Cs for Irish Building Regulations.

This BBA Agreement 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

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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 Multi-Pro and Multi-Pro Tile Backer Board, 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)

Requirement: A1(1) Loading

Comment: The products are acceptable as set out in section 1 of this Certificate.

Requirement: B3(1)(2)(3)(a) Internal fire spread - structure

Comment: The products can contribute to satisfying this Requirement. See section 2 of this

Certificate.

Requirement: B3(4) Internal fire spread – structure

Comment: The products can contribute to satisfying this Requirement. See section 2 of this

Certificate.

Regulation: 7(1) Materials and workmanship

Comment: The products are acceptable. See sections 8 and 9 of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation: 8(1) Fitness and durability of materials and workmanship

Comment: The use of the products satisfies the requirements of this Regulation. See sections

8 and 9 of this Certificate.

Regulation: 9 Building standards – construction

Standard: 1.1(a)(b) Structure

Comment: The products are acceptable, with reference to clause 1.1.1⁽¹⁾⁽²⁾ of this Standard.

See section 1 of this Certificate.

Standard: 2.1 Compartmentation

Standard: 2.2 Separation

Comment: The products can contribute to satisfying these Standards, with reference to

clauses $2.1.1^{(2)}$, $2.1.12^{(2)}$, $2.2.1^{(1)(2)}$, $2.2.2^{(2)}$, $2.2.3^{(1)(2)}$, $2.2.4^{(2)}$, $2.2.6^{(1)}$, $2.2.7^{(1)}$,

 $2.2.10^{(1)}$, $2.3.1^{(2)}$ and $2.3.2^{(1)(2)}$. See section 2 of this Certificate.

Standard: 2.4 Cavities

Comment: The products can contribute to satisfying this Standard, with reference to clause

2.4.2(1)(2). See section 2 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.

Regulation: 12 Building standards – conversion

Comment: All comments given for the products under Regulation 9, Standards 1 to 6, also

apply to this Regulation, with reference to clause 0.12.1(1)(2) and Schedule 6(1)(2).

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

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

Regulation: 23(1)(a)(i)(iii) Fitness of materials and workmanship

Comment: (b)(i) The products are acceptable. See sections 8 and 9 of this Certificate.

Regulation: 30 Stability

Comment: The products can contribute to satisfying this Regulation. See section 1 of this

Certificate.

Regulation: 35(1)(2)(3) Internal fire spread – structure

Comment: The products can contribute to satisfying this Regulation. See section 2 of this

Certificate

Regulation: 35(4) Internal fire spread – structure

Comment: The products can contribute to satisfying this Regulation. See section 2 of this

Certificate.



The Building Regulations (Ireland) 1997 and subsequent revisions

Requirement: A1 Loading

Comment: The products are acceptable. See section 1 of this Certificate.

Requirement: B3(1)(2)(a)(b) Internal fire spread (structure)

Comment: B8(1)(2) The products can contribute to satisfying these Requirements. See section 2 of

this Certificate.

Requirement: B3(3) B8(3) Internal fire spread (structure)

Comment: The products can contribute to satisfying these Requirements. See section 2 of

this Certificate.

Requirement: D1 Materials and workmanship

Comment: The products are acceptable. See sections 8 and 9 of this Certificate.

Fulfilment of Requirements

The BBA has judged Multi-Pro to be satisfactory for use as a liner board for internal steel or timber frame partition walls and internal ceilings, and Multi-Pro Tile backer board to be satisfactory for use as a substrate for ceramic and natural stone tiles. The boards are used above the damp-proof course (DPC) level, in new and existing domestic and non-domestic buildings.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. Multi-Pro and Multi-Pro Tile Backer Board consists of a mixture of magnesium oxide, calcium carbonate and magnesium chloride and fibreglass mesh reinforcement. The boards have the nominal characteristics given in Table 1.

Table 1	Nominal characteristics of boards
Characte	eristic (unit)

Characteristic (unit)	Multi-Pro board	Multi-Pro Tile backer board
Thickness (± 0.2 mm)	6, 9, 12 mm	6, 12
Width (± 2 mm)	1200 mm	1200 mm
Length (± 2 mm)	2400 mm, 3050 mm	600 mm, 800 mm, 1220 mm
Edge finish	square	square
Fibreglass mesh layers	2	2
Density (kg-m ⁻³)	1050	1050

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Ancillary Items

Ancillary components necessary for installation of the product, and included in the assessment, are:

 board fixings to timber- frame – 4.8 mm by 42 mm self-drilling stainless steel screws (BMDW4842), to BS EN ISO 3506-1: 2020 at maximum 300 mm centres.

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:

- timber frame the board is fixed to timber frame walls via vertical timber battens, minimum 25 mm deep, C16 soft wood at 600 mm maximum centres, fixed vertically to the main structure
- stainless steel screws self-tapping countersunk head and wood screw for timber stud and self-tapping countersunk head and case-hardened stainless-steel screw
- joint filler, joint tape alkali-resistant
- · alkali-resistant glass fibre mesh tape
- walls
- · acrylic primer for use with Multi-Pro tile backing board
- tile adhesive to BS EN 14411 : 2016
- grout to BS EN 13888 : 2022
- ceramic tiles to BS EN 14411 : 2016
- natural stone modular tiles to BS EN 12057 : 2015.

Applications

- Multi-Pro is for use as a liner board for internal steel or timber frame partitions walls and internal ceilings, with 2 layers of 12mm board for the ceilings.
- Multi-Pro Tile Backer Board is used as a substrate for ceramic and natural stone tiles.

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 and the Republic of Ireland unless otherwise stated.

1 Mechanical resistance and stability

Data were assessed for the following characteristics.

1.1 Mechanical properties

1.1.1 Results of bending strength tests are given in Table 2.

Table 2 Bending strength				
Product assessed	Assessment method	Requirement	Result	
9 mm thick Multi-Pro board	BS EN 12467 : 2012,	7 MPa minimum (Class 2)	Pass	
12 mm thick Multi-Pro board	BS EN 12467 : 2012	7 MPa minimum (Class 2)	Pass	

1.1.2 On the basis of the data assessed, the products with a thickness of 9 and 12 mm have suitable mechanical properties for the intended use. The bending strength of the 6 mm board must be verified by testing.

1.2 Strength and stability

1.2.1 Results of pull-through resistance tests are given in Table 3.

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Table 3 Pull-through resistance				
Product assessed	Assessment Requirement		Result	
Product assessed	method		Dry	After water soak
4.8 mm x 42 mm Evolution bi-metallic self-drilling screw (code BMDW4842) on 9 mm Multi-Pro board	BS EN 1383 :	Value	Mean ⁽¹⁾ = 1266 N sd ⁽³⁾ = 115.2 N	Mean ⁽²⁾ = 958.5 N sd ⁽³⁾ = 162.6 N
4.8 mm x 42 mm Evolution bi-metallic self-drilling screw (code BMDW4842) on 12 mm Multi-Pro board	BS EN 1383 : 1999	achieved	Mean ⁽¹⁾ = 1968 N sd ⁽³⁾ = 234.5 N	Mean ^{2} = 1366 N sd ⁽³⁾ = 116 N

- (1) For 8 test results
- (2) For 6 test results
- (3) Standard deviation
- 1.2.2 On the basis of the data assessed, the design pull-through resistances of 9 mm Multi-Pro board is 0.345 kN (dry conditions) and 0.211 kN (after water soak).
- 1.2.3 On the basis of the data assessed, the design pull-through resistances of 12 mm Multi-Pro board is 0.500 kN (dry conditions) and 0.371 kN (after water soak).
- 1.2.4 The design pull-through resistances of the 6 mm Multi-Pro board should be verified by testing
- 1.2.5 Results of pull-out resistance tests are given in Table 4.

Product assessed	Assessment method	Requirement	Result
4.8 mm x 42 mm Evolution bi- metallic self-drilling screw (code BMDW4842) embedded 30 mm into the centre of the wider face of 38 mm x 63 mm C16 timber stud.	BS EN 1383 : 1999	Value achieved	Mean ⁽¹⁾ = 2217 N sd ⁽²⁾ = 534 N

- (1) For 8 test results
- (2) Standard deviation
- 1.2.6 On the basis of the data assessed, the design pull-out resistance is 0.383 kN
- 1.3 Resistance to impact
- ${\bf 1.3.1} \ \ Results \ of \ hard \ body \ impact \ resistance \ tests \ are \ given \ in \ Table \ 5.$

Table 5 Hard body impact resistance			
Product assessed	Assessment method	Requirement	Result
9 mm and 12 mm thick Multi-Pro	Hard body impact resistance to	ETAG 004 : 2013,	Pass
board, supported on timber battens	ETAG 004: 2013, Clause 5.1.3.3	Clause 6.1.3.3	
at 450 mm maximum centres			

1.3.2 Results of soft body impact resistance tests are given in Table 6.

Table 6 Soft body impact resistance			
Product assessed	Assessment method	Requirement	Result
9 mm and 12 mm thick Multi-Pro	Soft body impact	Classification as nor MOAT	Catagories I, and
board, supported on timber battens	resistance to	Classification as per MOAT 43:1987	Categories I ₂ and
at 450 mm maximum centres.	ISO 7892 : 1988	43:1987	13

1.3.3 On the basis of data assessed, the products with a thickness of 9 and 12 mm will resist the effects of normal impacts expected in service. The impact resistance of the 6 mm board must be verified by testing.

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1.4 System design

- 1.4.1 The bond between Multi-Pro tile backer board and ceramic tiles was assessed using tests for a representative sample.
- 1.4.2 On the basis of the data assessed, Multi-Pro tile backer boards have suitable mechanical properties for the intended use. The adequacy of the bond strength of a specific construction must be verified by testing in accordance with EAD 040083-00-0404 : 2019 by a suitably accredited laboratory.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 The product achieved the reaction to fire classification given in Table 7.

Table 7 Reaction to fire classifica	tion		
Product	Construction	Method/Report reference	Result
6 mm Multi-Pro board	-	_	No performance declared
9 mm Multi-Pro board	-	EN 13501-1 : 2018	A1 ⁽¹⁾
12 mm Multi-Pro board		BS EN 13501-1 : 2007	A1 ⁽²⁾

- (1) Classification report from SGS No. SHF2310001042FF. Copies available from the Certificate holder
- (2) Classification report from BRE No.300890. Copies available from the Certificate holder
- 2.1.2 On the basis of data assessed, the 9 mm and 12 mm Multi-Pro boards are not subject to any restriction relating to reaction to fire by the documents supporting the national Building Regulations.
- 2.1.3 Where required, the reaction to fire of the 6 mm Multi-Pro board must be verified by testing.
- 2.1.4 Designers must refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly in respect of requirements for fire resistance, cavity barriers, service penetrations and combustibility limitations for other materials and components used in the overall wall construction (for example, thermal insulation and cladding).

2.2 Resistance to fire

2.2.1 Constructions incorporating the boards achieved the periods of fire resistance shown in Table 8. Users should refer to the referenced test reports, available from the Certificate holder, for the full construction details.

Table 8 Fire resistance duration - Load beari	ng constructions
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Duration (minutes)	Loading	Construction	Test method/ Report reference
92	1.515 kN/m²	The floor assembly had overall nominal dimensions of 4500mm long by 3000 mm wide comprising a timber framework with six C24 grade timber joists at 600 mm centres. The joists had a nominal section size of 219 mm by 45 mm. The flooring was formed from 22 mm thick tongue and grove chipboard, screw fixed to the joist and noggings. The ceiling was formed from two layers of 12 mm thick Multi Pro magnesium oxide board.	BS EN 1365-2 : 2014/ WF 386704 ⁽¹⁾

⁽¹⁾ Copies available from the Certificate holder

2.2.2 Where fire resistance is required by the documents supporting the national Building Regulations, the performance should be confirmed by a suitably experienced and competent individual or by a test from a suitably accredited laboratory.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

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3.1 Resistance to moisture

3.1.1 Results of water impermeability tests are given in Table 9.

Table 9 Water impermeability	,		
Product assessed	Assessment method	Requirement	Result
9 mm thick Multi -Pro board	Water impermeability to BS	No formation of drops of water	Pass
	EN 12467 : 2012, Clause 5.4.5	on the under face of the sheet	

3.1.2 Results of performance in humid environment tests are given in Table 10.

Table 10 Performan	ce in humid environment		
Product assessed	Assessment method	Requirement	Result
9 mm thick Multi -	PAS 670 : 2021,	There should be no liquid droplets on the surface of	Pass
Pro board	Clause 13	the boards, and when comparing the boards tested	
		under humid conditions with the control, the retained	
		strength must be at least 75% or higher.	

3.1.3 On the basis of the data assessed, the product has suitable moisture resistance for the intended use.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Not applicable

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 this product were assessed.
- 8.2 Specific test data were assessed for the following.
- 8.2.1 Results of durability tests are given in Table 11.

Table 11 Di	urability requirements			
Product	Assessment method	Requirement	Result	
assessed				
9 mm	Soak-dry to BS EN 12467 : 2012 Clause	R _L ≥ 0.75	Pass	
Multi-Pro	7.3.6 (25 cycles)			
board	Freeze-thaw to BS EN 12467 : 2012	R _L ≥ 0.75	Pass	
	Clause 7.4.1 (25 cycles)			
	Heat-rain to BS EN 12467 : 2012 Clause	Any visible cracks, delamination, warping and	Pass	
	7.4.2 (25 cycles)	bowing or other defects in the sheets must		
		not be of such degree as to affect their		
		performance in use		

8.2.2 Results of resistance to organic growth tests are given in Table 12.

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Table 12 Resistance to organic/mould growth					
Product assessed	Assessment method	Requirement	Result		
9 mm thick Multi-Pro board	BS EN 60068-2-10 : 2005	Value achieved	Mould growth level 2a ⁽¹⁾		

Growth level 2a – sparse growth visible to the naked eye and/or under the microscope scattered or localized to a few places
covering altogether not more than 25% of the test surface.

8.2.3 On the basis of data assessed, the products with thicknesses of 9 and 12 mm are suitable for applications where they may be subjected to heat, moisture and occasional frost, eg where they are either protected from or not subjected to severe weathering conditions. The durability of the 6 mm board must be verified by testing.

8.4 Service life

Under normal service conditions, the product will have a life of 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 The adequacy of the frame to which the product is fixed is outside the scope of this Certificate and must be verified by a suitably qualified and experienced individual. It must have sufficient strength to resist independently the loads imparted directly by the product, as well as any in plane force effects. It must be weathertight and reasonably airtight and designed and constructed in accordance with the requirements of the national Building Regulations and Standards given below. The contribution of the product to the stability of the frame is assumed to be negligible:
- timber-frame walls must be designed and constructed in accordance with BS EN 1995-1-1: 2004 and
 BS EN 1995-1-2: 2004 and their UK National Annexes, and PD 6693-1: 2019, with workmanship in accordance with
 BS 8000-0: 2014 and BS 8000-5: 1990, and preservative-treated in accordance with BS EN 351-1: 2023 and
 BS 8417: 2011.
- 9.1.3 The subframe must be able to transmit the loads (self-weight of the product) to the main structure. The supporting subframe must have sufficient stiffness, such that its deformation does not affect the performance of the product. The product does do not enhance the structural performance of the wall.
- 9.1.4 The product must be used above damp-proof course level and a minimum of 150 mm above ground level.
- 9.1.5 The Multi-Pro Tile backer boards are suitable materials for bonding ceramic tiles. However, the actual bond achieved between tile adhesive to Multi-Pro Tile backer boards is dependent on the specific tile and adhesive used. The tensile bond strength of ceramic tiles with Multi-Pro Tile backer board must be determined on site using trial tests. A minimum of five specimens must be bonded to the wall and allowed to cure for 28 days. The specimens must then be pulled off the wall using suitable calibrated equipment to determine the bond strength. The bond strength between the adhesive and the substrate wall must comply with the requirements of BS EN 12004-1: 2017 and BS EN 12004-2: 2017.
- 9.1.6 The suitability of any specific installation, including the supporting wall, to support a particular tile loading must be assessed by a suitably experienced and competent individual.

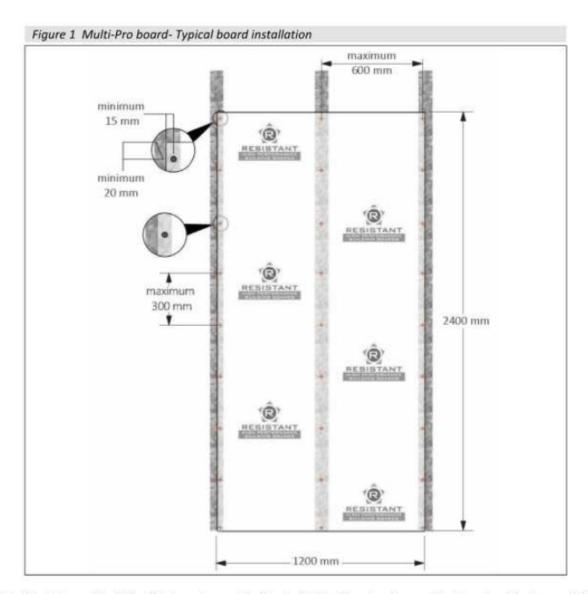
9.2 Installation

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

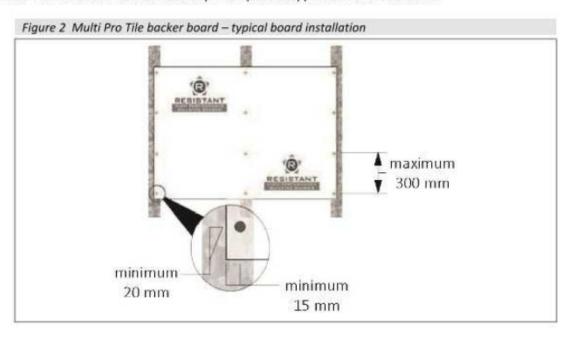
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- 9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance is provided in Annex A.
- 9.2.3 The level of supervision during installation of the Multi-Pro boards and the associated structure, must be sufficient to ensure the quality of workmanship.
- 9.2.4 The Multi-Pro board is secured to either timber or steel stud work using stainless steel screws, depending on whether the frame is a steel or timber on walls and secured timber joists using stainless steel screws on ceilings.
- 9.2.5 Framing grade timber studs/joists or galvanized steel framework must be provided at a maximum 600 mm centres. Care must be taken to ensure that studs/joists are straight and properly aligned.
- 9.2.6 Fixing must start from the centre, working outwards towards the edges to avoid distortion within the board.
- 9.2.7 The installation detail is as follows (Figure 1):
- maximum timber/steel stud/joist spacing = 600 mm
- maximum fixings centres = 300 mm
- minimum fixings distance from the board edge = 15 mm
- minimum fixings distance from the board corner (both horizontal and vertical) = 20 mm.
- 9.2.8 When fixing to steel frame and on internal walls butt joints must be used. The screws must not be overtightened.
- 9.2.9 Multi-Pro boards must be installed staggered to avoid four corners meeting at one point.
- 9.2.10 Where Multi-Pro boards are installed over areas with fixtures and fittings, cut-outs must be carried out before installation.
- 9.2.11 Studding, framing and joists must be adequately supported by noggins to ensure rigidity.
- 9.2.12 Multi-pro fitted as a large sized sheet to either a wall or a ceiling must receive a coat of acrylic primer to receiving face and all edges prior to receiving any surface finish such as paint or plaster.
- 9.2.13 Multi-Pro Tile backer boards must be attached onto vertical studs in a symmetrical fashion. They must be attached horizontally on the subframe, with fixings at 300 mm maximum centres vertically and 600 mm maximum centres horizontally (Figure 2). All fixings must be made directly into studs or into a nogging fixed firmly between the studs.
- 9.2.14 Multi-Pro Tile boards must be sealed on the tile-receiving face and all edges, with an acrylic primer.

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- 9.2.15 Joints between Multi-Pro Tile boards must be filled with the tile adhesive, and feathered out to form a 150 mm wide joint and taped using 50 mm wide, alkali-resistant, glass fibre mesh tape.
- 9.2.16 Multi-Pro Tile Backer boards must be primed prior to application of tile adhesive.



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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, installation of the product must be carried out by a competent general builder, or a contractor experienced with this type of product.

9.4 Maintenance and repair

- 9.4.1 Ongoing satisfactory performance of the product in use requires that it is suitably maintained. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate.
- 9.4.2 The following requirements apply in order to satisfy the performance assessed in this Certificate:
- 9.4.2.1 For internal lining application, the boards will normally be covered with finishes and 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 product name, thickness, width, length, batch number and number of boards per pallet.
- 11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate, including:
- 11.2.1 The boards must be stored horizontally in a ventilated and dry environment on a flat level, raised surface under cover indoors or protected from the weather. The boards must not be kept upright for long periods of time.
- 11.2.2 Boards should be carried on edge and extra precaution should be taken to protect the visible front edge and corners. The larger $2400 \times 1200 \text{ mm}$ and $3050 \times 1200 \text{ mm}$ boards must always be lifted by at least two people and not dragged across each other to prevent unnecessary scratching or damage.

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ANNEX A - SUPPLEMENTARY INFORMATION †

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.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001: 2015 by NQA (Certificate 45714).

Additional Guidance

- A.1 Walls to be tiled should comply with the requirements of BS 5385-1: 2018, including the provision of movement joints as appropriate. Where necessary, reference should also be made to BS 5385-4: 2015.
- A.2 For installations with a sub-frame other than those described in this Certificate, impact resistance tests must be carried out in accordance with MOAT 43: 1987 by a UKAS-accredited laboratory, and appropriate impact Use Categories determined in accordance with this Standard. The classification determined from the tests will depend on the distance between the centres of support and will establish the areas where the completed cladding system can be used.
- A.3 The surface of the boards is wiped with a damp sponge to remove residual dirt and dust. Tiles should be installed and grouted in accordance with the tile manufacturer's instructions, BS 5385-1: 2018, BS 5385-4: 2015, and conventional good practice.

Additional information on installation

Installation must be in accordance with the Certificate holder's instructions and this Certificate.

- A.4 The boards can be scored using a utility knife and snapped. Suitable dust control measures must be taken (eg protective safety glasses and respiratory masks) observing all necessary health and safety regulations. The Certificate holder should be consulted for material safety data sheets and advice, but such advice is outside the scope of this Certificate. When working in enclosed areas, precautions should be taken to ensure dust levels are controlled in accordance with the current issue of EH40/2005 and the measures defined in Health and Safety Executive Guidance Note EH44 should be followed.
- A.5 Reasonable precautions must be taken to ensure the boards are not damaged during installation and during applications of the over cladding.
- A.6 Damaged boards must not be used. The boards must be stored, handled and used in accordance with this Certificate and the Certificate holder's installation and health and safety instructions.
- A.7 Where expansion joints occur in the timber- or steel-frame, the sheathing board must not be installed across these joints.
- A.8 The design must ensure adequate capacity of fixings used to attach the board to the support frame against wind suction actions.
- A.9 Wall claddings must be fixed through the board into the structural framing. The over-cladding or façade manufacturer must be consulted for fixing specifications. Any damaged board must be replaced before fixing the façade.

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A.10 Detailed guidance can be found in the documents supporting the national Building Regulations for the provisions that are applicable when the product is installed in close proximity to certain flue pipes and/or heat-producing appliances.

A.11 If necessary, a 4 mm gap can be left between boards if there is a possibility of movement in the structure or building.

Bibliography

BS 476-21: 1987 Fire tests on building materials and structures — Methods for determination of the fire resistance of loadbearing elements of construction

BS 5385-1: 2018 Wall and floor tiling — Design and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions — Code of practice

BS 5385-4: 2015 Wall and floor tiling — Design and installation of ceramic and mosaic tiling in specific conditions — Code of practice

BS 8000-0: 2014 Workmanship on construction sites — Introduction and general principles

BS 8000-5: 1990 Workmanship on building sites — Code of practice for carpentry, joinery and general fixings

BS 8417: 2011 + A1: 2014 Preservation of wood — Code of practice

BS EN 351-1: 2023 Durability of wood and wood-based products — Preservative-treated solid wood — Classification of preservative penetration and retention

BS EN 1365-2: 2014 Fire resistance tests for loadbearing elements — Floors and roofs

BS EN 1383: 1999 Timber structures — Test methods — Pull-through resistance of timber fasteners

BS EN 1993-1-1: 2022 Eurocode 3 — Design of steel structures – General rules and rules for buildings

NA + A1 : 2014 to BS EN 1993-1-1 : 2005 + A1 : 2014 UK National Annex to Eurocode 3 — Design of steel structures — General rules and rules for buildings

BS EN 1993-1-2: 2005 Eurocode 3 — Design of steel structures - General rules - Structural fire design

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Conditions of Certificate

Conditions

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