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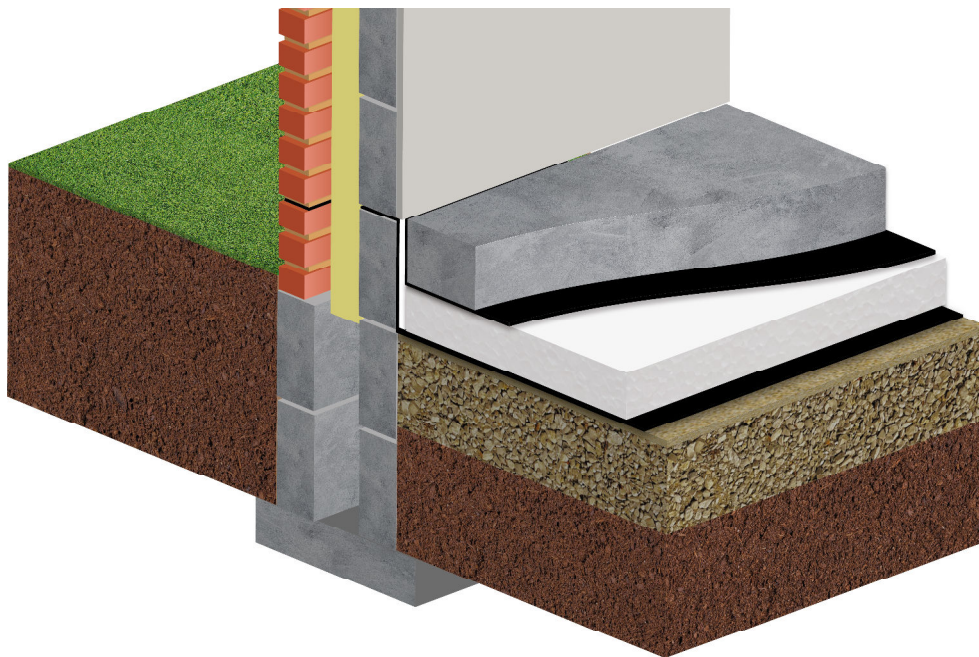
SCOPE OF AGRÉMENT

This Agrément relates to the Expanded Polystyrene Flooring Insulation Board (hereinafter the 'Product'), an expanded polystyrene (hereinafter 'EPS') thermal insulation board which contributes to the thermal performance of floors. The Product is for use in below ground-supported concrete floor bases and shall be covered by a screed or structural concrete topping prior to the application of a resilient floor covering. The Product is suitable for use in both existing and new domestic and non-domestic buildings in the UK.

PRODUCT DESCRIPTION

The Product is available as white (70E, 100E and 150E grade) or grey (70E and 100E grade) rectangular rigid EPS boards in varying thicknesses.

PRODUCT ILLUSTRATION



THIRD-PARTY ACCEPTANCE

NHBC - for detailed information see section 3.3 (Third-Party Acceptance).

STATEMENT

It is the opinion of Kiwa Ltd., that the Product is safe and fit for its intended use, provided it is specified, installed and used in accordance with this Agrément.

Chris Vurley, CEng
 Technical Manager, Building Products

Mark Crowther, M.A. (Oxon)
 Kiwa Ltd. Technical Director

SUMMARY OF AGRÉMENT

This document provides independent information to specifiers, building control personnel, contractors, installers and other construction industry professionals considering the safety and fitness for the intended use of the Product. This Agrément covers the following:

- Conditions of use;
- Production Control, Quality Management System and the Annual Verification Procedure;
- Product components and ancillary items, points of attention for the Specifier and examples of details;
- Installation;
- Independently assessed Product characteristics and other information;
- Compliance with national Building Regulations, other regulatory requirements and Third-Party Acceptance, as appropriate;
- Sources.

MAJOR POINTS OF ASSESSMENT

Moisture control - the Product (see section 2.2.9):

- can contribute to limiting the risk of interstitial and surface condensation;
- has adequate water vapour transmission resistance;
- has adequate resistance to water absorption.

Strength - the Product can support the design load of reinforced concrete slab or screed toppings for domestic and non-domestic applications (see section 2.2.10).

Fire performance - the Product is classified as European Classification E (combustible), in accordance with BS EN 13501-1 (see section 2.2.11).

Thermal performance - the Product improves the thermal performance of a floor (see section 2.2.12).

Durability - the Product will have a service life durability equivalent to that of the building into which it is incorporated (see section 2.2.13).

CE marking - the Agrément holder has responsibility for CE marking in accordance with all relevant harmonised European Product Standards (see section 2.2.14).

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CHAPTER 1 - GENERAL CONSIDERATIONS

1.1 - CONDITIONS OF USE

1.1.1 Design considerations

See section 2.2.

1.1.2 Application

The assessment of the Product relates to its use in accordance with this Agrément and the Agrément holder's requirements.

1.1.3 Assessment

Kiwa Ltd. has assessed the Product in combination with relevant test reports, technical literature, the Agrément holder's quality plan, DoPs and site visit as appropriate. The NHBC Standards have also been taken into consideration.

1.1.4 Installation supervision

The quality of installation and workmanship must be controlled by a competent person who must be an employee of the installation company.

The Product shall be installed strictly in accordance with the instructions of the Agrément holder and the requirements of this Agrément.

1.1.5 Geographical scope

The validity of this document is limited to England, Wales, Scotland and Northern Ireland, with due regard to Chapter 3 of this Agrément (CDM, national Building Regulations and Third-Party Acceptance).

1.1.6 Validity

The purpose of this BDA Agrément® is to provide for well-founded confidence to apply the Product within the Scope described. The validity of this Agrément is three years after the issue date, and as published on www.kiwa.co.uk/bda.

1.2 - PRODUCTION CONTROL AND QUALITY MANAGEMENT SYSTEM

Kiwa Ltd. has determined that the Agrément holder fulfils all obligations in relation to this Agrément, in respect of the Product.

The initial audit demonstrated that the Agrément holder has a satisfactory Quality Management System (QMS) and is committed to continuously improving their quality plan. Document control and record-keeping procedures were deemed satisfactory. A detailed Production Quality Specification (PQS) has been compiled to ensure traceability and compliance under the terms of this Agrément.

1.3 - ANNUAL VERIFICATION PROCEDURE - CONTINUOUS SURVEILLANCE

To demonstrate that the Product conforms with the requirements of the technical specification described in this Agrément, an Annual Verification Procedure has been agreed with the Agrément holder in respect of continuous surveillance and assessment, and auditing of the Agrément holder's QMS.

This Agrément does not constitute a design guide for the Product. It is intended as an assessment of safety and fitness for purpose only.

2.1 - PRODUCT COMPONENTS AND ANCILLARY ITEMS

2.1.1 Components included within the scope of this Agrément

The following components are integral to the use of the Product:

EPS grade	EPS 70E white or grey	EPS 100E white or grey	EPS 150E white
Nominal density (kg/m ³)	15	20	25
Dimensions	1200 mm wide by 2400 mm long by 25, 50, 75, 100 or 150 mm thick [^] (area 2.88 m ²)		
Description	EPS flooring insulation board with a fire-retardant additive, 98% air, plain edge		

[^] Other sizes available upon request

2.1.2 Ancillary items falling outside the scope of this Agrément

Ancillary items detailed in this section may be used in conjunction with the Product but fall outside the scope of this Agrément:

- vapour control layer (hereinafter 'VCL');
- gas barrier membrane;
- damp-proof membrane (hereinafter 'DPM') in accordance with CP 102;
- vertical perimeter edge strip EPS insulation.

2.2 - POINTS OF ATTENTION TO THE SPECIFIER

2.2.1 Design responsibility

A Specifier may undertake a project-specific design, in which case it is recommended that the Specifier co-operates closely with the Agrément holder. The Specifier or installing contractor is responsible for the final as-built design.

2.2.2 Applied building physics (heat, air, moisture)

A competent specialist shall check the physical behaviour of a project specific design incorporating the Product and if necessary can offer advice in respect of improvements to achieve the final specification. The Specialist can be either a qualified employee of the Agrément holder or a suitably qualified consultant (in which case it is recommended that the consultant Specialist co-operates closely with the Agrément holder).

2.2.3 General design considerations

The requirement for limiting heat loss through floors, including the effect of thermal bridging, can be satisfied if the thermal transmittance (hereinafter 'U-value') of a floor incorporating an appropriate thickness of the Product does not exceed the maximum and target U-value requirement in the national Building Regulations.

Guidance on linear thermal transmittance, heat flows and surface temperature factors can be found in the documents supporting the national Building Regulations and BS EN ISO 10211, BRE Information Paper IP1/06, BRE Report 262 and BRE Report 497.

Account should be taken of Government Accredited Construction Details for Part L - Masonry detail illustrations in England and Wales, Accredited Construction Details for Scotland, Accredited Construction Details for Northern Ireland, and energy measures in PAS 2030 and PAS 2035.

The ability of a floor construction to resist the loads in service shall be determined by a Structural Engineer.

New concrete ground-supported floor bases shall be designed and constructed in accordance with the national Building Regulations, British Standards and Codes of Practice.

Care shall be taken in the design and construction at junctions with external walls and service penetrations to minimise thermal bridges and air infiltration.

The Product shall not be applied over junctions with external walls required to provide a minimum period of fire resistance. Care shall be taken to ensure continuity of fire resistance at junctions with fire-resisting elements, in accordance with the national Building Regulations.

In accordance with the provisions of the national Building Regulations and to prevent the risk of fire, the Product shall be separated from heat-emitting fixed combustion appliances, fireplaces and any potential source of ignition where the temperature is in excess of 70 °C, by non-combustible insulating material.

Do not apply the Product over electrical cables, existing vents or ventilation gaps.

Due consideration shall be taken to the routing and incorporation of gas and water pipes in accordance with the project-specific design.

With hot pipes, the Product shall be cut back to maintain air space.

A suitable ground gas/volatile organic compound (hereinafter 'VOC') protective membrane will be required below the Product where the presence of gas or VOCs may occur.

In accordance with CP 102, ground-supported concrete floor bases shall incorporate a suitable DPM laid on a blinded sub-base beneath the Product to resist moisture from the ground. In accordance with BS 8215, the DPM should lap under a damp-proof course (hereinafter 'DPC') for the full thickness of the inner wall leaf.

Where a structural concrete topping is placed over the Product, vertical perimeter edge strips should be provided to fully separate the structural concrete topping edge from adjacent perimeter walls.

Any cavity wall insulation shall be extended by minimum of 150 mm below the top of the vertical perimeter edge strips or be extended below the DPC level to provide edge insulation to a floor.

2.2.4 Project-specific design considerations

No pre-installation survey is required for the installation of the Product - see section 2.4.3.

2.2.5 Permitted applications

Only applications designed according to the specifications given in this Agrément are permitted. In each case the Specifier will have to co-operate closely with the Agrément holder.

2.2.6 Installer competence level

The Product shall be installed strictly in accordance with the instructions of the Agrément holder and the requirements of this Agrément.

Installation can be undertaken by competent persons experienced in this sort of work.

2.2.7 Delivery, storage and site handling

The Product is delivered to site in suitable packaging, bearing the Product name, the Agrément holder's name and the BDA Agrément® logo incorporating the number of this Agrément. Packs of Product are wrapped in polythene.

Store the Product in accordance with the Agrément holder's requirements. Care shall be taken to:

- avoid exposure to direct sunlight for extended periods of time;
- avoid exposure to high or low temperatures for extended periods of time;
- store in a well-ventilated covered area to protect from rain, frost and humidity;
- store away from possible ignition sources.

The Product should be stacked on a flat, dry base, clear of the ground and secured to avoid wind damage.

Care shall be taken to avoid contact with organic solvents and materials containing organic components.

The Product shall be stored either under cover or protected with opaque light-coloured polythene sheeting.

Care should be taken to avoid damage during transportation, handling and storage. Boards with minor damage can still be used if damaged areas are removed.

The Product shall be discarded if wet.

2.2.8 Maintenance and repair

Once installed, the Product does not require regular maintenance.

For advice in respect of repair, consult the Agrément holder.

Performance factors in relation to the Major Points of Assessment

2.2.9 Moisture control

Water vapour transmission

Due to the nature of the cell structure, the Product has a low level of water vapour transmission (high water vapour resistance), in accordance with BS EN 12086 Method A.

Condensation risk

Floors incorporating the Product can adequately limit the risk of interstitial and surface condensation when designed in accordance with BS 5250 and BRE Report 262.

A Condensation Risk Analysis can be carried out by the Agrément holder, in accordance with BS 5250, BS EN ISO 13788 or BS EN 15026.

Water permeability

Due to the nature of the cell structure, the Product is water resistant.

The Product has adequate resistance to long-term water absorption by immersion, in accordance with BS EN 12087.

2.2.10 Strength

The Product has adequate:

- compressive strength, in accordance with BS EN 826;
- compressive creep, in accordance with BS EN 1606;
- bending strength, in accordance with BS EN 12089.

The Product can sustain and transmit the design load and imposed floor loads of structural solid reinforced concrete floor topping to the concrete base.

EPS 70E and EPS 100E are suitable for domestic occupancies when covered with a suitable floor overlay and finish, and can resist a uniformly distributed load of 1.5 kN/m² or a concentrated load of 2 kN for category A1 and A2 (domestic) situations, as defined in BS EN 1991-1-1.

EPS 100E and EPS 150E are suitable for both domestic and non-domestic occupancies when covered with a suitable floor overlay and finish and are capable of resisting a uniformly distributed load of 3 kN/m² for category B (offices) and 4 kN/m² for category C33 (non-domestic), or a concentrated load of 2.7 kN for category B (offices) and 4.5 kN for category C33 (non-domestic), as defined in BS EN 1991-1-1.

2.2.11 Fire performance

The Product is classified as European Classification E (combustible), in accordance with BS EN 13501-1.

The reaction to fire performance of EPS products does not deteriorate with time.

The Product will not contribute to the development stages of a fire when contained within a floor incorporating an overlay.

2.2.12 Thermal performance

Due to the nature of the cell structure, the Product has adequate thermal resistance in accordance with BS EN 12667.

The thermal conductivity of EPS products does not change with time.

A U-value calculation of a completed floor should be carried out in accordance with BS EN ISO 6946 and BS EN ISO 13370 (taking into consideration BS EN ISO 10211, BS EN 15037-4 Annex F and BRE Report 443). Design and declared thermal values can be found in BS EN ISO 10456.

2.2.13 Durability

The Product will have a service life durability equivalent to that of the building into which it is incorporated. The expected lifespan of the building itself should be at least 60-years.

The Product is rot-proof, has a stable cell structure and is dimensionally stable. There is no reduction in performance over its lifetime.

The Product is protected in service from organic solvents and substances liable to cause deterioration.

2.2.14 CE marking

The harmonised European standard for the Product is BS EN 13163.

2.3 - EXAMPLES OF TYPICAL DETAILS

Diagram 1 - Laying pattern detail

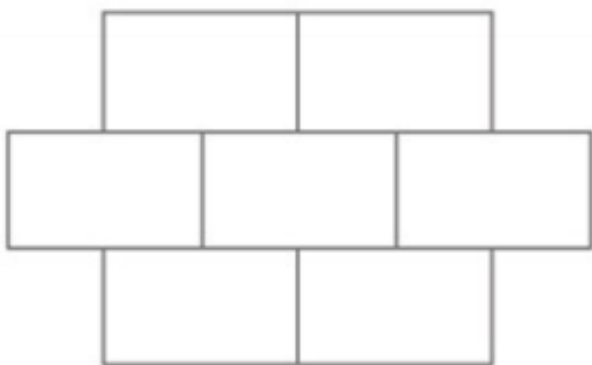
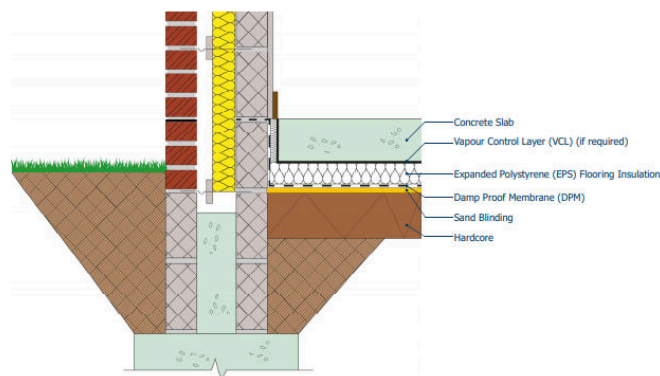


Diagram 2 - Concrete slab overlay detail



The Product shall be installed strictly in accordance with the instructions (hereinafter 'Installation Manual') of the Agrément holder and the requirements of this Agrément.

2.4.1 Installer competence level

See section 2.2.6.

2.4.2 Delivery, storage and site handling

See section 2.2.7.

2.4.3 Project-specific installation considerations

No pre-installation survey is required for the installation of the Product.

Prior to application of the Product, the sub-base shall be dry. Hardcore sub-base surfaces shall be compacted, flat and smooth or blinded with a levelling layer of compacted sand.

A suitable DPM or ground gas/VOC protective membrane shall be laid on top of a blinded concrete base beneath the Product.

The Product can be cut to size using a sharp knife or fine-toothed saw.

Take care not to damage or puncture a DPM during installation of the Product.

2.4.4 Preparation

The following works shall be undertaken before the installation of the Product:

- lay a DPM or gas membrane on top of a sand blinding layer covering compacted hardcore base;
- the DPM should turn up vertically at the edge of a floor and be taken through the inner and exterior wall at the height of an intended finished floor level;
- overlap each roll DPM by 150 mm and seal joints with an appropriate tape.

2.4.5 Outline installation procedure

The detailed installation sequence can be found in full in the Agrément holder's Installation Manual.

The key sequence for installation is:

- cut and lay the Product with close, staggered cross-joints over a floor, butting up against the perimeter wall;
- cut edges of boards shall be laid at a wall perimeter, service pipe or threshold.

The Product can be laid in a single or double layer, avoiding gaps and voids. Where a double layer is employed, each layer shall be staggered to the other and through-joints shall be avoided. Spreader boards shall be used to protect the Product during laying.

Although the Product can withstand light foot traffic, care should be taken not to walk over the installed Product. If a temporary working platform is required, the Product shall be covered with a suitably rigid board. When wheelbarrows are used, planks shall be placed to spread the wheel load. Spot boards shall be used when tipping and shovelling.

Where a concrete slab is laid over the Product, perimeter edge strips shall be cut and placed around the floor edges, taped at the joints to prevent cold bridging. These shall be of sufficient depth to fully separate the concrete slab from the walls.

To avoid damage to the Product, a structural concrete topping should be laid as soon as possible after the boards have been installed.

2.4.6 Finishing

The following finishing is required on completion of the installation:

- if required, a polyethylene VCL should be laid over the Product before casting a reinforced concrete slab overlay. A VCL should have 150 mm overlaps, taped at the joints and returned by 100 mm at the walls;
- pour a self-levelling concrete topping or place a reinforced structural concrete slab topping;
- if reinforcement spacing blocks are used, they should spread the reinforcement and working loads sufficiently to prevent damage to the Product or to a VCL. Spacers for supporting reinforcement should be located on spreader plates minimum four per m² and minimum 50 mm by 50 mm over the Product;
- the concrete slab is laid to the required thickness and compacted, tamped or power-floated to provide a required finish.

2.5 - INDEPENDENTLY ASSESSED PRODUCT CHARACTERISTICS

2.5.1 Moisture control

Test	Standard	EPS 70E	EPS 100E	EPS 150E
Water vapour diffusion resistance factor	BS EN 12086	20 to 40	30 to 70	30 to 70
Water vapour permeability	BS EN 12086	0.015 to 0.030 mg/(Pahm)	0.009 to 0.020 mg/(Pahm)	0.009 to 0.020 mg/(Pahm)

2.5.2 Strength

Test	Standard	EPS 70E	EPS 100E	EPS 150E
Compressive creep	BS EN 1606	CC(2/1.5/50)0.3σ10	CC(2/1.5/50)0.3σ10	CC(2/1.5/50)0.3σ10
Compressive strength (stress) at 10 % deformation (23 °C and 50 % RH)	BS EN 826	minimum 70 kPa [^] - CS(10)70	minimum 100 kPa [^] - CS(10)100	minimum 150 kPa [^] - CS(10)150
Bending strength (cross-breaking strength) (23 °C and 50 % RH)	BS EN 12089	minimum 115 kPa [^] - BS120	minimum 150 kPa [^] - BS160	minimum 200 kPa [^] - BS200

[^] 100 mm thickness

2.5.3 Fire performance

Test	Standard	EPS 70E	EPS 100E	EPS 150E
Reaction to fire classification	BS EN 13501-1	European Classification E (combustible)		

2.5.4 Thermal performance

Test	Standard	EPS 70E	EPS 100E	EPS 150E
Declared thermal conductivity (λ _D) at 10 °C	BS EN 12667	0.038 W/mK for white 0.032 W/mK for grey	0.036 W/mK for white 0.030 W/mK for grey	0.034 W/mK

2.5.5 Other

Test	Standard	EPS 70E	EPS 100E	EPS 150E
Dimensional stability under constant normal laboratory conditions (23 °C, 50 % RH)	BS EN 1603	DS(N)5		
Dimensional stability under specified temperature and humidity conditions (70 °C, 90 % RH)	BS EN 1604	DS(70,90)1		
Release of dangerous component substances	BS EN ISO 16000-10	EPS does not release any dangerous substances above the concentration value limits		

CHAPTER 3 - CDM, NATIONAL BUILDING REGULATIONS AND THIRD-PARTY ACCEPTANCE

3.1 - THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS 2015 AND THE CONSTRUCTION (DESIGN AND MANAGEMENT) REGULATIONS (NORTHERN IRELAND) 2016

Information in this Agrément may assist the client, Principal Designer/CDM co-ordinator, designer and contractors to address their obligations under these Regulations.

3.2 - THE NATIONAL BUILDING REGULATIONS

In the opinion of Kiwa Ltd., the Product, if installed and used in accordance with Chapter 2 of this Agrément, can satisfy or contribute to satisfying the relevant requirements of the following national Building Regulations.

This Agrément shall not be construed to confer compliance of any project-specific design with the national Building Regulations.

3.2.1 - ENGLAND THE BUILDING REGULATIONS 2010 AND SUBSEQUENT AMENDMENTS

- A1(1) Loading - the Product can sustain and transmit combined dead and imposed floor loads safely to the ground
- C2(c) Resistance to moisture - floors incorporating the Product can adequately protect a building from interstitial and surface condensation
- L1(a)(i) Conservation of fuel and power - the Product can limit heat gains and losses through a floor
- Regulation 7(1) Materials and workmanship - the Product is manufactured from suitably safe, durable materials for the application and can be installed to give a satisfactory performance
- Regulation 23(1) Requirements relating to thermal elements - the Product can contribute to a building envelope complying with the requirements of L1(a)(i)
- Regulation 26 CO₂ emission rates for new buildings - the Product can contribute to a building to not exceed its CO₂ emission rate
- Regulation 26A Fabric energy efficiency rates - the Product can contribute to satisfying this Requirement

3.2.2 - WALES THE BUILDING REGULATIONS 2010 AND SUBSEQUENT AMENDMENTS

- A1(1) Loading - the Product can sustain and transmit combined dead and imposed loads safely to the ground
- C2(c) Resistance to moisture - floors incorporating the Product can adequately protect a building from interstitial and surface condensation
- L1(a)(i) Conservation of fuel and power - the Product can limit heat gains and losses through a floor
- Regulation 7(1) Materials and workmanship - the Product is manufactured from suitably safe, durable materials for the application and can be installed to give a satisfactory performance
- Regulation 23(1) Requirements relating to thermal elements - the Product can contribute to a building envelope complying with the requirements of L1(a)(i)
- Regulation 26 CO₂ emission rates for new buildings - the Product can contribute to a building to not exceed its CO₂ emission rate
- Regulation 26A Primary energy consumption rates for new buildings - the Product can contribute to satisfying this Regulation
- Regulation 26B Fabric performance values for new dwellings - the Product can contribute to satisfying this Requirement

3.2.3 - SCOTLAND THE BUILDING (SCOTLAND) REGULATIONS 2004 AND SUBSEQUENT AMENDMENTS

3.2.3.1 Regulation 8(1) Durability, workmanship and fitness of materials

- The Product is durable and fit for its intended purpose

3.2.3.2 Regulation 9 Building standards - construction

- 1.1(a)(b) Structure - floors incorporating the Product can sustain loads without collapsing or deforming
- 3.15 Condensation - floors incorporating the Product can protect a building from moisture caused by surface or interstitial condensation
- 6.1(b) Carbon dioxide emissions - the Product will contribute to energy conservation of a building
- 6.2 Building insulation envelope - the Product will contribute to the insulation envelope to resist thermal transfer
- 7.1(a)(b) Statement of sustainability - the Product can contribute to satisfying the relevant Requirements of Regulation 9, Standards 1 to 6, and will therefore contribute to a construction meeting a bronze level of sustainability as defined in this Standard. In addition, the Product can contribute to a construction meeting a higher level of sustainability as defined in this Standard

3.2.3.3 Regulation 12 Building standards - conversions

- All comments given under Regulation 9 also apply to this Regulation, with reference to Schedule 6

3.2.4 - NORTHERN IRELAND THE BUILDING REGULATIONS (NORTHERN IRELAND) 2012 AND SUBSEQUENT AMENDMENTS

- 23(a)(b) Fitness of materials and workmanship - floors incorporating the Product are suitable and can be adequately prepared and applied
- 29 Condensation - floors incorporating the Product can adequately protect a building from moisture in the form of interstitial condensation
- 30(a) Stability - floors incorporating the Product can sustain and transmit combined dead and imposed loads safely to the ground
- 39(a)(i) Conservation measures - the Product will limit heat gains and losses through a floor
- 40(2) Target carbon dioxide emission rate - the Product will contribute to a building not exceeding its target CO₂ emission rate

3.3 - THIRD-PARTY ACCEPTANCE

NHBC - In the opinion of Kiwa Ltd., the Product, if installed, used and maintained in accordance with this Agrément, can satisfy or contribute to satisfying the relevant requirements in relation to NHBC Standards, Chapters 5.1 Substructure and ground bearing floors.

CHAPTER 4 - SOURCES

- BS EN ISO 6946:2017 Building components and building elements. Thermal resistance and thermal transmittance. Calculation methods
- BS EN ISO 9001:2015 Quality management systems - requirements
- BS EN ISO 10211:2017 Thermal bridges in building construction. Heat flows and surface temperatures. Detailed calculations
- BS EN ISO 10456:2007 Building materials and products. Hygrothermal properties. Tabulated design values and procedures for determining declared and design thermal values
- BS EN ISO 13370:2017 Thermal performance of buildings. Heat transfer via the ground. Calculation methods
- BS EN ISO 13788:2012 Hygrothermal performance of building components and building elements. Internal surface temperature to avoid critical surface humidity and interstitial condensation. Calculation methods
- BS EN ISO 16000-10:2006 Indoor air. Determination of the emission of volatile organic compounds from building products and furnishing. Emission test cell method
- BS EN 206:2013+A1:2016 Concrete. Specification, performance, production and conformity
- BS EN 826:2013 Thermal insulating products for building applications. Determination of compression behaviour
- BS EN 1603:2013 Thermal insulating products for building applications. Determination of dimensional stability under constant normal laboratory conditions (23°C/50% relative humidity)
- BS EN 1604:2013 Thermal insulating products for building applications. Determination of dimensional stability under specified temperature and humidity conditions
- BS EN 1606:2013 Thermal insulating products for building applications. Determination of compressive creep
- BS EN 1991-1-1:2002 Eurocode 1 Actions on structures. General actions. Densities, self-weight, imposed loads for buildings
- BS EN 1992-1-1:2004+A1:2014 Eurocode 2 Design of concrete structures. General rules and rules for buildings
- BS EN 12086:2013 Thermal insulating products for building applications. Determination of water vapour transmission properties
- BS EN 12087:2013 Thermal insulating products for building applications. Determination of long term water absorption by immersion
- 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 13163:2012+A2:2016 Thermal insulation products for buildings. Factory made expanded polystyrene (EPS) products. Specification
- BS EN 13501-1:2018 Fire classification of construction products and building elements. Classification using data from reaction to fire tests
- BS EN 15026:2007 Hygrothermal performance of building components and building elements. Assessment of moisture transfer by numerical simulation
- BS EN 15037-4:2010+A1:2013 Precast concrete products. Beam-and-block floor systems. Expanded polystyrene blocks
- BS 5250:2011+A1:2016 Code of practice for control of condensation in buildings
- BS 6093:2006+A1:2013 Design of joints and jointing in building construction. Guide
- BS 8204-1:2003+A1:2009 Screeds, bases and in situ floorings. Concrete bases and cementitious levelling screeds to receive floorings. Code of practice
- BS 8204-2:2003+A2:2011 Screeds, bases and in situ floorings. Concrete wearing surfaces. Code of practice
- BS 8215:1991 Code of practice for design and installation of damp-proof courses in masonry construction
- BS 8500-1:2015+A2:2019 Concrete. Complementary British Standard to BS EN 206. Method of specifying and guidance for the specifier
- BS 8500-2:2015+A2:2019 Concrete. Complementary British Standard to BS EN 206. Specification for constituent materials and concrete
- Accredited Construction Details for Scotland
- BRE Information Paper 1/06:2006 Assessing the effects of thermal bridging at junctions and around openings
- BRE Report 262:2002 Thermal insulation: avoiding risks
- BRE Report 443:2006 Conventions for U-value calculations
- BRE Report 497:2016 Conventions for calculating linear thermal transmittance and temperature factors
- CP 102:1973 Code of practice for protection of buildings against water from the ground
- Government Accredited Construction Details for Part L - England and Wales
- NHBC Standards 2020
- PAS 2030:2019 Specification for the installation of energy efficiency measures in existing buildings
- PAS 2035:2019 Retrofitting dwellings for improved energy efficiency - Specification and guidance
- TR 34 Concrete industrial ground floors - a guide to design and construction:2018

Remark: apart from these sources, technical information and confidential reports have been assessed; any relevant documents are in the possession of Kiwa Ltd. and kept in the Technical Assessment File of this Agrément. The Installation Manual for the Product may be subject to change, and the Agrément holder should be contacted for clarification of revisions.

CHAPTER 5 - AMENDMENT HISTORY

Revision	Amendment description	Amended by	Approved by	Date
-	First Issue	C Devine	C Vurley	November 2020
A	Updated contact details	C Devine	C Vurley	September 2021

CHAPTER 6 - CONDITIONS OF USE

This Agrément may only be reproduced and distributed in its entirety.

Where a National Annex exists in respect of a BS EN (or other) standard, its use is deemed mandatory wherever the original standard is referenced.

Kiwa Ltd. has used due skill, care and attention in the preparation of this BDA Agrément®.

Whilst all due diligence has been used, no liability or warranty is extended by Kiwa Ltd.

For full terms and conditions refer to Kiwa Ltd.