PRB SA
16 Rue de la Tour CS10018
Les Achards
F-85150
France

Tel: 01242 524228
e-mail: info@prbsystems.co.uk
website: www.prbsystems.co.uk

Agrément Certificate
22/6327
Product Sheet 2

PRB ONE COAT RENDER SYSTEM

PRB SUPERBRUT

This Agrément Certificate Product Sheet(1) relates to PRB SUPERBRUT, a self-coloured cementitious render, applied as one-coat onto suitably prepared exterior substrates of existing sand/cement render, brickwork, blockwork or concrete on new or existing buildings.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.

KEY FACTORS ASSESSED

Weather resistance — the product tends to shed water and will considerably reduce the amount of water penetrating through to the substrate (see section 6).
Strength and stability — the product has adequate resistance to impact damage and cracking (see section 7).
Behaviour in relation to fire — the product contains less than 1% of organic material and so is unrestricted by the national Building Regulations (see section 9).
Durability — the product, when applied to a suitably prepared sound substrate, will perform satisfactorily for a period in excess of 30 years (see section 11).

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

On behalf of the British Board of Agrément

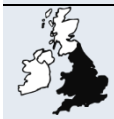
Date of First issue: 15 September 2022

Hardy Giesler
Chief Executive Officer

The BBA is a UKAS accredited certification body – Number 113.
The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk
Readers MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.
Any photographs are for purposes only, do not constitute advice and should not be relied upon.

Regulations

In the opinion of the BBA, SUPERBRUT, 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 presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



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

Requirement:	**B4(1)**	**External fire spread**
Comment:		The product is unrestricted by this Requirement. See sections 9.1 and 9.2 of this Certificate.
Requirement:	**C2(b)(c)**	**Resistance to moisture**
Comment:		Walls rendered with the product can satisfy this Requirement. See sections 6.2 and 8 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The product is acceptable. See section 11.1 and the *Installation* part of this Certificate.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See sections 9.1 and 9.2 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Durability, workmanship and fitness of materials**
Comment:		Use of the product satisfies the requirements of this Regulation. See sections 10 and 11.1 and the *Installation* part of this Certificate.
Regulation	**8(3)**	**Durability, workmanship and fitness of materials**
Comment		The product is unrestricted by this Regulation. See sections 9.1 and 9.2 of the Certificate.
Regulation:	**9**	**Building standards applicable to construction**
Standard:	2.6	Spread to neighbouring buildings
Standard:	2.7	Spread on external walls
Comment:		The product is unrestricted by these Standards, with references to clauses 2.6.4(1)(2), 2.6.5(1), 2.6.6(2) and 2.7.1(1)(2). See sections 9.1 and 9.2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		A wall rendered with the product can satisfy the requirements of this Standard, with reference to clauses 3.10.1(1)(2), 3.10.2(1)(2), 3.10.3(1)(2) and 3.10.5(1)(2). See section 6.2 of this Certificate.
Standard:	3.15	Condensation
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.15.1(1)(2), 3.15.4(1)(2) and 3.15.5(1)(2). See section 8 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product 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 applicable to conversions**
Comment:		Comments in relation to the product 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).

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

Regulation:	**23(1)(a)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The product is acceptable. See section 11.1 and the *Installation* part of this Certificate.
Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See sections 9.1 and 9.2 of the Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		Walls rendered with the product can satisfy this Regulation. See section 6.2 of this Certificate.
Regulation:	**29**	**Condensation**
Comment:		The product can contribute to satisfying this Regulation. See section 8 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The product is unrestricted by this Regulation. See sections 9.1 and 9.2 of this 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.

See sections: 3 *Delivery and site handling* (3.1 and 3.5) and 15 *Mixing* (15.2) of this Certificate.

Additional Information

NHBC Standards 2022

In the opinion of the BBA, SUPERBRUT, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Part 6 *Superstructure (excluding roofs),* Chapter 6.11 *Render.*

CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard BS EN 998-1 : 2016.

Technical Specification

1 Description

1.1 PRB SUPERBRUT is a self-coloured, spray- or hand-applied, one-coat cementitious render available in a variety of standard colours, for use where two-coat traditional renders would normally be specified.

1.2 PRB MONOMESH is a glass fibre mesh with a 8.0 x 8.0 mm weave, used for additional reinforcement.

1.3 PRB AVE MESH is a glass fibre mesh with a 9.5 x 8.5 mm weave, used for additional reinforcement.

1.4 The product is applied to a finished thickness of between 10 and 15 mm, has a weight of between 14.5 and 20 $kg.m^{-2}$, and is finished in a range of textured appearances ranging from smooth, sponge, scraped to light or heavy roughcast.

2 Manufacture

2.1 The product is manufactured using batch processes by blending measured quantities of component materials in suitable mixers.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out 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.

2.3 The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 and ISO 14001 : 2015 by AFAQ / AFNOR CERTIFICATION (Certificate's 1999/12672-13 and 2007/36118-10).

3 Delivery and site handling

3.1 The product is delivered in sealed 20 kg bags on pallets. Each complete pallet contains 49 bags and weighs 1050 kg or 72 bags and weighs 1440 kg.

3.2 The product is a cementitious material and must be stored under cover, in dry conditions and protected from moisture and frost. To avoid warehouse set caused by compaction, the height of bags stacked on a pallet must not exceed 1 m and no more than four pallets should be stacked.

3.3 The product should be used in the order in which it is received and each delivery should be kept separate to avoid confusion. When stored unopened, the product has a shelf-life of 18 months from the date of manufacture.

3.4 Each bag bears the Certificate holder's name, batch number and date of production.

3.5 The Certificate holder has taken the responsibility of classifying and labelling the product under the *CLP Regulation (EC) No 1272 / 2008* on the *classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheet(s). The product must be handled using the routine precautions for Portland cement.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on PRB SUPERBRUT.

Design Considerations

4 Use

4.1 PRB SUPERBRUT is satisfactory for external use as a one-coat render finish on suitably prepared backgrounds of brickwork, blockwork, concrete, suitably prepared sand/cement render and cellular concrete blocks with a density of 500 $kg{\cdot}m^{-3}$ or higher, in areas with exposure zones as specified in section 6.2 and where two-coat traditional renders would normally be specified.

4.2 New constructions to be rendered with the product should be designed and constructed in accordance with the relevant recommendations of BS EN 1996-2 : 2006 and its UK National Annex, and BS EN 13914-1 : 2016. The designer should select a construction appropriate to its location, paying due attention to design, detailing and workmanship and the materials to be used.

4.3 It is essential that such walls are designed and constructed to prevent moisture penetration and the formation of condensation. Substrates must be properly prepared and suitable for receiving a rendered finish.

4.4 The scope of this Certificate covers the product's use on areas of the wall above the damp-proof course level.

4.5 The product is not suitable for application to previously decorated surfaces.

4.6 Additional advice and project specifications for applications onto high or low absorption masonry substrates should be sought from the Certificate holder.

4.7 In common with traditional renders, it is essential that the surface to be rendered is clean and provides a sound mechanical key, to ensure a satisfactory bond between the substrate and the product. In instances where this is not the case, the Certificate holder should be consulted for advice on substrate preparation.

4.8 Bed joint reinforcement should be provided in the first two courses of the external masonry leaf above and below openings. See *NHBC Standards* 2022, Chapter 6.11, Clause 6.11.5 *Accommodation of movement.*

5 Practicability of installation

Installation is designed to be installed by a competent skilled renderer, or a contractor, experienced with this type of product. Suitable installers are available on request from the Certificate holder.

6 Weather resistance

6.1 The product will improve the weather resistance of a wall and provide a new decorative finish.

6.2 The product is suitable for use in exposure zones up to and including the severe wind-driven rain index category, in accordance with PD 6697 : 2019.

6.3 The product tends to shed water and will considerably reduce the amount of water absorbed by the substrate.

7 Strength and stability

The product has adequate resistance to impact and cracking in all normal circumstances. Where the product may be exposed to severe impact (eg on some industrial sites), or is to be applied over existing background cracks, precautions may be required to reduce the risk of damage.

8 Water vapour resistance

The water vapour permeability coefficient (μ) of the render is 11.2.

9 Behaviour in relation to fire

9.1 The render contains less than 1% of organic material and so is unrestricted by the documents supporting the national Building Regulations. This applies to the complete colour range.

9.2 The render is not subject to any restriction on building height or proximity to boundaries.

9.3 Designers should refer to the relevant national Building Regulations and guidance for alternative approaches and detailed conditions of use, particularly in respect of requirements for substrate fire performance and combustibility limitations for other materials and components used in the overall wall construction (for example, thermal insulation).

10 Maintenance

Regular maintenance checks should be carried out to ensure that architectural details for shedding water clear of the building are present and functioning. External plumbing, fittings, gutters and downpipes must be in good condition to minimise water penetration into the render. Any damage to the render should be repaired immediately (see section 19).

11 Durability

11.1 The product, applied to a suitable, sound substrate, will perform satisfactorily for a period in excess of 30 years.

11.2 The product may become discoloured over time, the rate depending on the local environment. The appearance can normally be restored by cleaning with water and a suitable brush. In industrial atmospheres, light-coloured renders should be avoided.

11.3 The product has adequate colourfastness for a period in excess of 20 years but will be discoloured by water runs, and care should be taken to ensure that the measures given in section 10 are taken.

11.4 The product may suffer from algal growth in a similar manner to traditional external rendered finishes. For additional preventative advice, the Certificate holder should be consulted.

11.5 In common with traditional renders, the product may be susceptible to lime bloom. The incidence of this may be reduced by proper protection and by avoiding application in adverse weather conditions. The effect is less noticeable on white or paler colours. For additional preventative advice, the Certificate holder should be consulted.

Installation

12 General

12.1 Application of the product must be carried out strictly in accordance with this Certificate, the Certificate holder's instructions and specifications, and the relevant recommendations of BS EN 13914-1 : 2016. The Certificate holder should be consulted to provide a specification for each job. When use of the product for the first time is being considered, the Certificate holder should be consulted.

12.2 The product should not be applied in rain or mist, at temperatures above 35°C or below 5°C, or if exposure to frost is likely to occur during drying. In common with traditional sand/cement renders, the product must not be applied to frost-bound walls.

12.3 In sunny weather, work should commence on the shady side of the building and be continued round, following the sun to prevent the render drying out too rapidly.

12.4 To minimise colour shade variations and to avoid dry line jointing, continuous surfaces should be completed without a break. If breaks cannot be avoided, they should be made where services or architectural features, such as reveals or lines of doors and windows, will help to mask cold joints. Where long, uninterrupted runs are planned, bags of the product should be checked for batch numbers; bags with different batch numbers should be checked for colour consistency.

13 Site survey and preliminary work

13.1 Advice concerning site survey and preliminary work for application of the product is available to the designer or rendering contractor on request from the Certificate holder.

13.2 A pre-application survey of the property must be carried out to determine its suitability to receive the product and whether repairs to the building structure are necessary before application. A specification must also be prepared by the designer for each elevation indicating:

- preliminary treatment of the background
- the position of beads
- detailing around windows, doors and at eaves
- damp-proof course level
- exact position of movement joints
- areas where flexible sealants must be used
- any alterations to external plumbing, fixtures and fittings.

13.3 The mortar in new masonry must conform to the brick/block manufacturer's recommendations.

13.4 All necessary repairs to the building structure must be completed before application.

13.5 It is recommended that external plumbing to existing buildings be removed and, where necessary, alterations made to underground drainage to accommodate its repositioning on the finished face of the render.

13.6 On existing buildings, purpose-made over-sills may be necessary to extend beyond the finished face of the product. Sills should have an efficient throat or drip on the underside and be designed to prevent water running onto the wall below, or into the jambs. New buildings should incorporate suitably wide sills.

13.7 In common with traditional renders, new walls to be rendered should be left for as long as possible to dry out and to minimise subsequent substrate movement. Where this may not be practical, the Certificate holder should be consulted for additional advice.

13.8 At the top of walls, the product must be protected by an adequate overhang or by adequately sealed, purpose-made flashing.

14 Preparation of substrate

14.1 All damage to the substrate from frost attack, salts or corrosion must be carefully repaired. Damaged bricks or blocks must be replaced and any holes or insufficiently filled joints repaired using a suitable mortar. Loose and spalling render or projecting mortar joints should be removed, and uneven surfaces must be levelled using an appropriate render to minimise variations in the thickness of the product. For additional advice, the Certificate holder should be consulted.

14.2 The relevant recommendations of BS EN 13914-1 : 2016 must be followed if a satisfactory bond is to be achieved. In particular, the surface to be rendered must provide a good mechanical key and adequate suction, and be free from paint, oil, soot, efflorescence, dust, lichens, mould and similar growth, or anything else that could prevent a satisfactory bond.

14.3 It is essential that the substrate to be rendered is clean. This applies to both new and old surfaces.

14.4 Additional advice and a project specification should be sought from the Certificate holder for use:

- on low suction smooth substrates
- on high suction substrates
- on different substrate materials
- on wet substrates or substrates with wet patches
- on irregular surfaces.

14.5 Wherever possible, independent scaffolding should be used to avoid the need to subsequently make good putlog holes and other breaks in the work.

15 Mixing

15.1 The product is added to clean water at a rate of approximately 4.6 to 5.4 litres of water per 20 kg of product, and thoroughly mixed using a drill and paddle, continuous spray-rendering machine or free fall mixer, for a minimum of 10 minutes until the correct workability is achieved. Advice should be sought from the Certificate holder regarding suitable equipment and water/render ratios for the mechanical spray application.

15.2 Where excessive concentrations of dust may accumulate, the measures defined in the Health and Safety Executive Publication EH40/05 *Occupational Exposure Limits* (2nd Edition 2011, amended March 2013) for unlisted substances must be adhered to.

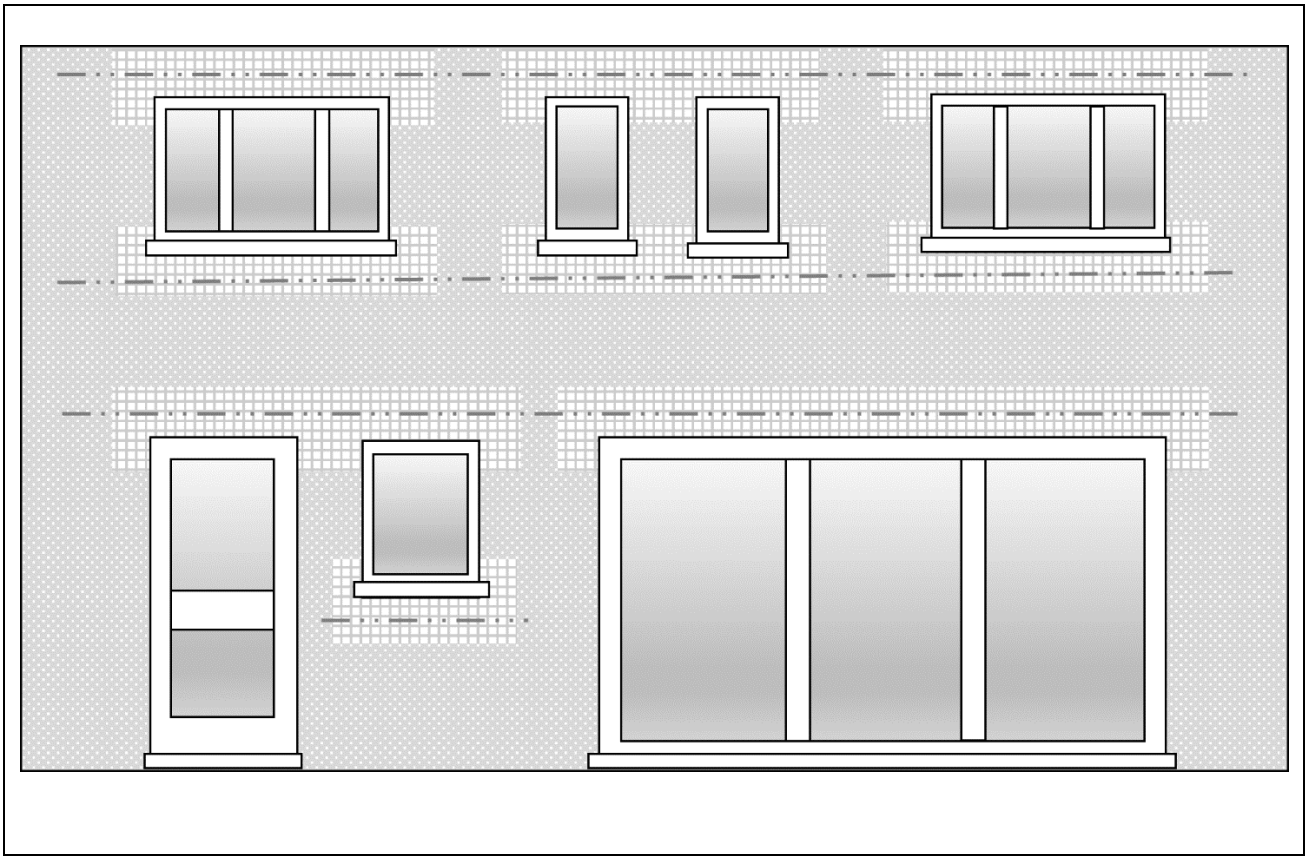
15.3 In common with traditional renders, slumping of the material may occur if the mix is too wet, increasing the risk of settlement cracks developing.

16 Application

16.1 The thickness of the finished coating at the lowest point should be 15 mm thick for a 12 mm scraped render finish or 12 mm for a float or prior to applying the textured/roughcast finish. If a heavy roughcast finish is applied, the render thickness could be reduced to 10 mm prior to applying the textured/roughcast finish.

16.2 The product is applied by hand using a hawk and trowel, or spray applied using suitable equipment, to the required thickness to allow for mesh to be installed 6 to 7 mm from the finished surface. As a minimum for new blockwork, reinforcing mesh is applied around all openings, including reveals, and is immediately embedded into the basecoat, at corners of openings (see Figure 1). For large section bifold doors, an additional 500 mm x 300 mm reinforcing mesh should also be applied and embedded diagonally at the corners of openings. The application of full mesh with the addition of stress patches is considered a recommended benefit by the Certificate holder.

Figure 1 Reinforcement at openings



16.3 Once the first pass stiffens, the second pass is applied to an overall thickness of between 10 and 15 mm subject to the desired finish, and is levelled to a uniform thickness.

16.4 Scraping should take place when the render sets but before it fully hardens (typically between 4 and 36 hours - subject to substrate and weather conditions) to achieve an even finish, colour and textured finish. It is essential that all areas are textured at the same stage of readiness, and no areas however small should be left un-scraped, to achieve an even shade of finish.

16.5 Following completion of the texturing process, any loose material should be removed using a soft brush and any minor repairs carried out using the excess material.

17 Curing

17.1 Care must be taken to protect the product from drying too rapidly owing to exposure to direct sunlight or drying wind.

17.2 The product must be protected from rain, mist and cold (less than 5°C on a falling thermometer) during the early curing period, as drying could be excessively prolonged under such circumstances.

17.3 Hessian sheeting or similar sheeting is recommended for curing and should be arranged to hang clear of the face of the wall so as not to form a tunnel through which the wind could increase the evaporation of water from the render. The sheeting must not be in contact with the product as this will produce a patchy appearance.

18 Finishing

On completion of the render installation, the surface is checked to ensure an even and consistent finish.

19 Repair

Any damage to the render must be repaired immediately in accordance with the relevant recommendations of BS EN 13914-1 : 2016. The advice of the Certificate holder should be sought for particular installations.

Technical Investigations

20 Tests

20.1 Tests were carried out on PRB SUPERBRUT and the results assessed to determine:

- bond strength following wet/heat and freeze/thaw cycling
- impact resistance following wet/heat and freeze/thaw cycling
- flexural and compressive strength
- water vapour resistance.
- Water absorption by capillarity.

20.2 An assessment was made of data relating to reaction to fire.

21 Investigations

The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

Bibliography

BS EN 998-1 : 2016 *Specification for mortar for masonry — Rendering and plastering mortar*

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 13914-1 : 2016 *Design, preparation and application of external rendering and internal plastering — External rendering*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

PD 6697 : 2019 *Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2*

22 Conditions

22.1 This Certificate:

- relates only to the product/system 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.

22.2 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.

22.3 This Certificate will remain valid for an unlimited period provided that the product/system 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.

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

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

22.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system 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.