Renderplas Ltd

Number 2 70–72 High Street Bewdley Worcestershire DY12 2DJ Tel: 01299 888333 e-mail: info@renderplas.co.uk website: www.renderplas.co.uk



Agrément Certificate 11/4823 Product Sheet 1

RENDERPLAS RENDER BEADS

POWERBEADS

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate relates to Powerbeads, a range of extruded coloured PVC-U external render beads for use with render on new or existing buildings.

AGRÉMENT 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

Structural stability - the products provide satisfactory fixing and support to the applied render and adequate resistance to mechanical damage (see section 5).

Performance in relation to fire — the products would not be classified as 'non-combustible' when tested in accordance with BS 476-4 : 1970 but, in the opinion of the BBA, will not introduce an additional hazard in respect of the behaviour in fire of the rendered surface (see section 6).

Durability — the products are formed from durable materials and, while there will be some colour loss, will perform adequately as a support for external rendering for a period of at least 25 years (see section 8).

The BBA has awarded this Agrément Certificate to the company named above for the products described herein. These products has 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: 21 March 2011

Simon Wroe Head of Approvals — Materials

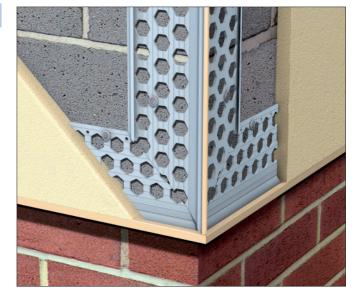
n A Ceeper

Greg Cooper Chief Executive

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

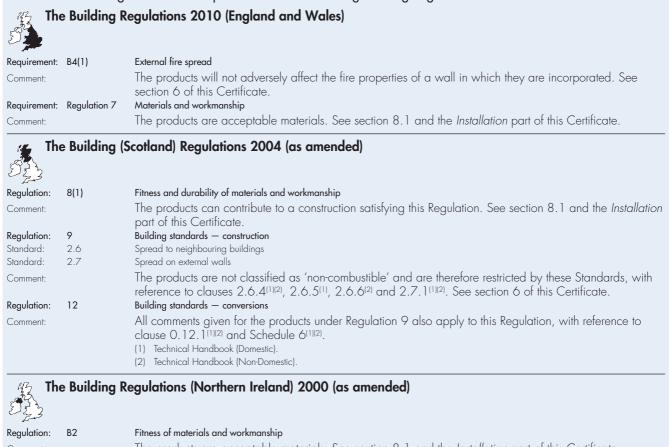
Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

British Board of Agré	ment	tel: 01923 665300
Bucknalls Lane		fax: 01923 665301
Garston, Watford		e-mail: mail@bba.star.co.uk
Herts WD25 9BA	©2011	website: www.bbacerts.co.uk



Regulations

In the opinion of the BBA, Powerbeads, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:



Regulation:	B2	Fitness of materials and workmanship
Comment:		The products are acceptable materials. See section 8.1 and the <i>Installation</i> part of this Certificate.
Regulation:	E5(a)	External fire spread
Comment:		The products will not adversely affect the fire properties of a wall in which they are incorporated. See section 6 of this Certificate.

Construction (Design and Management) Regulations 2007

Construction (Design and Management) Regulations (Northern Ireland) 2007

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

See section: 1 Description (1.2) of this Certificate

Non-regulatory Information

NHBC Standards 2011

In the opinion of the BBA, the use of Powerbeads, in relation to this Certificate, is not subject to the requirements of these Standards.

Technical Specification

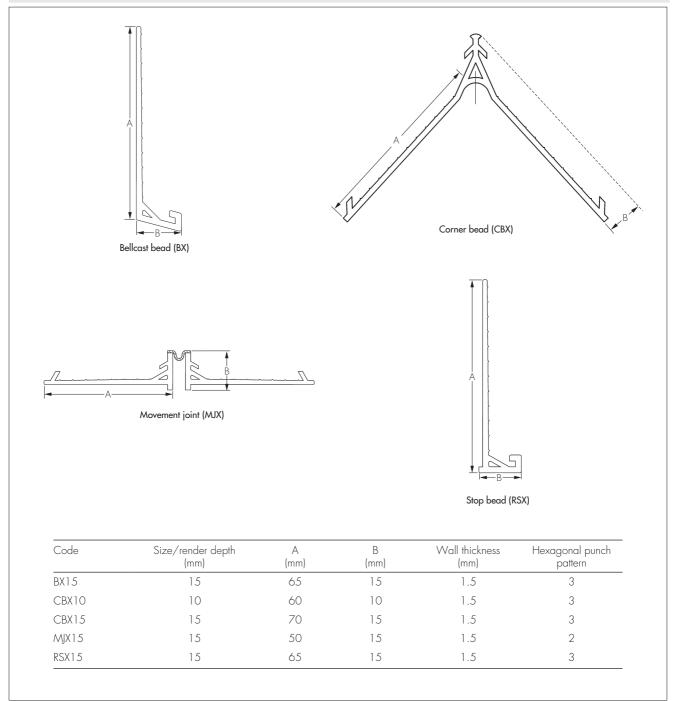
1 Description

1.1 Powerbeads are extruded PVC-U external render beads. The products incorporate a reinforced box section and the back plates incorporate hexagonal holes and a ribbed surface, providing a key for the render.

1.2 The available types (see Figure 1) are:

- Bellcast bead (BX15) to form a reinforced stop (or bellcasting) at the lower edge of external rendering
- Corner bead (CBX10 and CBX15) to form a reinforced arris in external rendering
- Movement joint (MJX15) to form joints and accommodate movement of up to ± 1.5 mm in external rendering
- Stop bead (RSX15) for forming reinforced edges of external renderings.





1.3 The profiles are available in the following range of colours:

• White

• Slate

- Wheat
- Peach

• lvory

• Dove

- BrickSalma
- TerracottaMaize
- SalmonSky
- Willow.

1.4 The profiles are supplied in either 2.5 m or 3 m lengths as detailed in Table 1.

1.5 The profiles are extruded from recycled PVC-U. Quality control is exercised over incoming raw materials, during manufacture and on the final products.

2 Delivery and site handling

2.1 Powerbeads are delivered in either cardboard boxes or polythene sleeves each containing six lengths per pack as detailed in Table 1. Each pack is labelled bearing the Certificate holder's name, product and the BBA identification mark incorporating the number of this Certificate.

Table 1 Packaging o	ole 1 Packaging and weight			
Product	Code	Weight per pack (kg)	Length (m)	Packaging
Bellcast bead	BX15	3.2	3.0	Polythene sleeve
Corner bead	CBX10 CBX15	5.5 8.5	3.0 3.0	Cardboard box Cardboard box
Movement joints bead	MJX15	6.4	2.5	Cardboard box
Stop bead	RSX15	2.8	3.0	Polythene sleeve

2.2 To prevent distortion, packs of profiles should be stored straight, away from direct sunlight and excessive heat. When stored horizontally, they must be supported along their entire length.

Assessment and Technical Investigations

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

Design Considerations

3 Use

Powerbeads are for use with external rendering on walls of masonry, dense concrete or timber-frame construction.

4 Practicability of installation

The profiles are designed to be installed by a competent general builder experienced in external rendering.

5 Structural stability

5.1 The profiles provide adequate fixing and support to the applied render.

5.2 The profiles have adequate resistance to mechanical damage, but can be damaged by severe impacts.

6 Performance in relation to fire

🐲 The profiles would not be classified as 'non-combustible' when tested in accordance with BS 476-4 : 1970 but, in the opinion of the BBA, will not introduce an additional hazard in respect of the behaviour in fire of the rendered surface.

7 Maintenance

As the products are used in a wall structure and have suitable durability maintenance is generally not required.

8 Durability

8.1 The products are formed from durable materials and will perform adequately as a support for external rendering for a period of at least 25 years.

8.2 There will be some loss of colour over this period. This will vary depending on the colour chosen, but will not be excessive and will be consistent over any one aspect faced.

Installation

9 General

9.1 Powerbeads can be cut to length on site using normal hand tools, such as a fine-toothed saw or tin snips.

9.2 Powerbeads will accommodate minor irregularities in the substrate. Any irregularities or voids greater than a depth of 5 mm must be dubbed out with render and allowed to set hard prior to installation of the products.

10 Procedure

10.1 The correct size of profile should be selected for the particular application (see Figure 1) and cut to length.

10.2 The profile is levelled to ensure it is plumb and fixed to the wall every 500 mm to 700 mm with corrosionresistant nails or clout nails, using the pre-drilled holes provided. When using wall plug fixings, the profile should be levelled and a hole drilled through the profile into the substrate, the fixing is hammered through and the profile secured. Care should be taken not to deform the profile. Galvanized steel fixings can be used, in accordance with BS EN 13914-1 : 2005, but stainless steel should be used in corrosive or coastal locations (ie less than 5 km from the sea).

10.3 Alternatively, the profile can be fixed by pressing it firmly into render dabs applied to the substrate every 500 mm to 700 mm.

10.4 Render is subsequently applied over the bead in a conventional manner, ensuring that it is fully compacted and placed to the edge of the nosing.

10.5 The external rendering must be applied in accordance with BS EN 13914-1 : 2005 and the render manufacturer's instructions.

10.6 When the render requires a scrapped or textured finish, care must be taken not to damage the flexible membrane of the movement joint.

Technical Investigations

11 Tests

Tests were carried out and the results assessed to determine:

- impact resistance
- heat ageing characteristics
- resistance to artificial weathering
- pull-out resistance of fixings
- pull-out resistance from render
- effectiveness of the movement joint.

12 Investigations

12.1 The manufacturing process and the methods adopted for quality control were examined and details were obtained of the quality and composition of the materials used.

12.2 A postal user survey was carried out to assess the products' performance in use.

12.3 Visits were made to a site to witness the installation of the products.

Bibliography

BS 476-4 : 1970 Fire tests on building materials and structures - Non-combustibility test for materials

BS EN 13914-1 : 2005 Design, preparation and application of external rendering and internal plastering — External rendering

13 Conditions

13.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page no other company, firm or person may hold or claim any entitlement to this Certificate
- 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.

13.2 Publications and documents referred to in this Certificate are those that the BBA deems to be relevant at the date of issue or re-issue of this Certificate and include any: Act of Parliament; Statutory Instrument; Directive; Regulation; British, European or International Standard; Code of Practice; manufacturers' instructions; or any other publication or document similar or related to the aforementioned.

13.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant 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.

13.4 In granting this Certificate, the BBA is not responsible for:

- 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
- individual installations of the product/system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

13.5 Any information relating to the manufacture, supply, installation, use and maintenance 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 and maintained. It does not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date 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. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the manufacture, supply, installation, use and maintenance of this product/system.

Renderplas Ltd

Number 2 70–72 High Street Bewdley Worcestershire DY12 2DJ Tel: 01299 888333 e-mail: info@renderplas.co.uk website: www.renderplas.co.uk



Agrément Certificate 11/4823 Product Sheet 2

RENDERPLAS RENDER BEADS

TRADE EXTERNAL RENDER BEADS

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate relates to Trade External Render Beads, a range of coloured PVC-U extrusions for use with render on new or existing buildings.

AGRÉMENT 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

Structural stability — the products provide satisfactory fixing and support to the applied render and adequate resistance to mechanical damage (see section 5).

Performance in relation to fire — the products would not be classified as 'non-combustible' when tested in accordance with BS 476-4 : 1970 but, in the opinion of the BBA, will not introduce an additional hazard in respect of the behaviour in fire of the rendered surface (see section 6).

Durability — the products are formed from durable materials and, while there will be some colour loss, will perform adequately as a support for external rendering for a period of at least 25 years (see section 8).

The BBA has awarded this Agrément Certificate to the company named above for the products described herein. These products has 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: 21 March 2011

Simon Wroe Head of Approvals — Materials

TA Ceeper

Greg Cooper Chief Executive

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 are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

British Board of Agrément		tel: 01923 665300
Bucknalls Lane		fax: 01923 665301
Garston, Watford		e-mail: mail@bba.star.co.uk
Herts WD25 9BA	©2011	website: www.bbacerts.co.uk



Regulations

In the opinion of the BBA, Trade External Render Beads, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:



5 23		
Regulation:	B2	Fitness of materials and workmanship
Comment:		The products are acceptable materials. See section 8.1 and the <i>Installation</i> part of this Certificate.
Regulation:	E5(a)	External fire spread
Comment:		The products will not adversely affect the fire properties of a wall in which they are incorporated. See section 6 of this Certificate.

Construction (Design and Management) Regulations 2007

Construction (Design and Management) Regulations (Northern Ireland) 2007

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

See section:

1 Description (1.2) of this Certificate

Non-regulatory Information

NHBC Standards 2011

In the opinion of the BBA, the use of Trade External Render Beads, in relation to this Certificate, is not subject to the requirements of these Standards.

Technical Specification

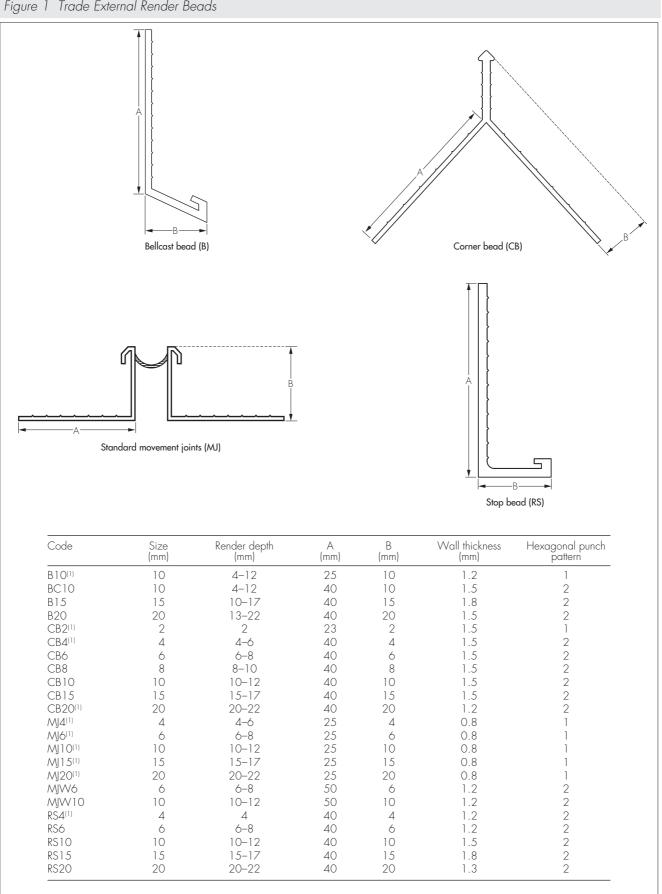
1 Description

1.1 Trade External Render Beads are PVC-U extrusions designed for use with render in external applications. The back plates incorporate hexagonal holes and a ribbed surface, providing a key for the render.

1.2 The available types (see Figure 1) are:

- Bellcast beads to form a reinforced stop (or bellcasting) at the lower edge of external rendering
- Corner beads to form a reinforced arris in external rendering
- Movement joints to form joints and accommodate movement of up to ±2.5 mm for standard joints (MJ) and ±1.5 mm for wide joints (MJW) in external rendering
- Stop beads for forming reinforced edges of external renderings.

Figure 1 Trade External Render Beads



1.3 The profiles are available in the following range of colours⁽¹⁾:

- White • Brick • lvory • Terracotta • Salmon Wheat Peach • Maize ٠ • Dove Slate •
- Sky • Willow. (1) CB20, MJ6, MJ10, MJ15 and MJ20 are available in White and Ivory. B10, RS4, CB2, CB4 and MJ4 are only stocked in White, other

colours are available from the Certificate holder subject to a minimum order size.

1.4 The profiles are supplied in 2.5 m lengths as detailed in Table 1.

1.5 The profiles are extruded from recycled PVC-U. Quality control is exercised over incoming raw materials, during manufacture and on the final products.

2 Delivery and site handling

2.1 Trade External Render Beads are delivered in cardboard boxes or tubes, the number of beads and weight of each pack is detailed in Table 1. Each pack is labelled bearing the Certificate holder's name, product and the BBA identification mark incorporating the number of this Certificate.

Product	Code	Number of beads per pack	Weight per pack (kg)
Bellcast bead	B10 BC10 B1 <i>5</i> B20	25 25 25 25 25	4.5 6.7 11.1 12.9
Corner bead	CB2 CB4 CB6 CB8 CB10 CB15 CB20	25 25 25 25 25 25 25 6	4.4 11.7 12.0 12.1 12.3 13.7 3.5
Movement joints bead	MJ4 MJ6 MJ10 MJ15 MJ20 MJW6 MJW10	25 25 25 25 25 25 6 6	5.3 5.9 7.1 7.3 7.6 3.5 3.6
Stop bead	RS4 RS6 RS10 RS15 RS20	25 25 25 25 25 25	4.4 4.7 7.7 10.0 8.4

2.2 To prevent distortion, packs of profiles should be stored straight, away from direct sunlight and excessive heat. When stored horizontally, they must be supported along their entire length.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Trade External Render Beads.

Design Considerations

3 Use

Trade External Render Beads are for use with external rendering on walls of masonry, dense concrete or timber-frame construction.

4 Practicability of installation

The products are designed to be installed by a competent general builder experienced in external rendering.

5 Structural stability

- 5.1 The profiles provide adequate fixing and support to the applied render.
- 5.2 The profiles have adequate resistance to mechanical damage, but can be damaged by severe impacts.

6 Performance in relation to fire



The profiles would not be classified as 'non-combustible' when tested in accordance with BS 476-4 : 1970 but, in the opinion of the BBA, will not introduce an additional hazard in respect of the behaviour in fire of the rendered surface.

7 Maintenance

As the products are used in a wall structure and have suitable durability maintenance is generally not required.

8 Durability



🐲 8.1 The products are formed from durable materials and will perform adequately as a support for external rendering for a period of at least 25 years.

8.2 There will be some loss of colour over this period. This will vary depending on the colour chosen, but will not be excessive and will be consistent over any one aspect faced.

9 General

9.1 Trade External Render Beads can be cut to length on site using normal hand tools, such as a fine-toothed saw or tin snips.

9.2 Any irregularities in the substrate must be dubbed out with render and allowed to set hard prior to installation of the products.

10 Procedure

10.1 The correct size of profile should be selected for the particular application (see Figure 1) and cut to length.

10.2 The profile is levelled to ensure it is plumb and is fixed by pressing it firmly into a continuous bed of render which has been previously applied to the substrate. Galvanized or stainless steel fixings can be used to provide temporary support to assist in levelling the product. Where appropriate, temporary fixings should be removed prior to rendering.

10.3 Render is subsequently applied over the bead in a conventional manner, ensuring that it is fully compacted and placed to the edge of the nosing.

10.4 The external rendering must be applied in accordance with BS EN 13914-1 : 2005 and the render manufacturer's instructions.

10.5 When the render requires a scrapped or textured finish, care must be taken not to damage the flexible membrane of the movement joint.

11 Tests

Tests were carried out and the results assessed to determine:

- impact resistance
- heat ageing characteristics
- resistance to artificial weathering
- pull-out resistance of fixings
- pull-out resistance from render •
- effectiveness of the movement joint.

12 Investigations

12.1 The manufacturing process and the methods adopted for quality control were examined and details were obtained of the quality and composition of the materials used.

12.2 A postal user survey was carried out to assess the products' performance in use.

12.3 Visits were made to a site to witness the installation of the products.

Bibliography

BS 476-4 : 1970 Fire tests on building materials and structures - Non-combustibility test for materials

BS EN 13914-1 : 2005 Design, preparation and application of external rendering and internal plastering - External rendering

13 Conditions

13.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page no other company, firm or person may hold or claim any entitlement to this Certificate
- 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.

13.2 Publications and documents referred to in this Certificate are those that the BBA deems to be relevant at the date of issue or re-issue of this Certificate and include any: Act of Parliament; Statutory Instrument; Directive; Regulation; British, European or International Standard; Code of Practice; manufacturers' instructions; or any other publication or document similar or related to the aforementioned.

13.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant 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.

13.4 In granting this Certificate, the BBA is not responsible for:

- 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
- individual installations of the product/system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

13.5 Any information relating to the manufacture, supply, installation, use and maintenance 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 and maintained. It does not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date 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. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the manufacture, supply, installation, use and maintenance of this product/system.