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Agrément Certificate
14/5162
Product Sheet 1

LANGLEY LIQUID-APPLIED ROOF WATERPROOFING SYSTEM

PARACOAT DUO 20

This Agrément Certificate Product Sheet(1) relates to Paracoat Duo 20, a polyurethane liquid-applied roof waterproofing system. Paracoat Duo 20 is for use on flat and pitched roofs with limited access, on balconies with pedestrian access and walkway areas on roofs.

(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

Weathertightness — the system will resist the passage of moisture to the interior of a building (see section 6).

Properties in relation to fire —the system may enable a roof to be unrestricted under the national Building Regulations (see section 7).

Adhesion — the adhesion of the system is sufficient to resist the effects of any likely wind suction and the effects of thermal or other minor movement likely to occur in practice (see section 8).

Slip resistance — the Paracoat Duo 20 system with Langley Quartz Chippings well distributed on the surface of the system and a layer of Langley Walkway Sealant applied on top, when wet and dry, has a satisfactory co-efficient of friction to enable its use in pedestrian areas (see section 9).

Resistance to mechanical damage — the system will accept, without damage, the limited foot traffic and loads associated with installation and maintenance, and minor structural movements occurring in service (see section 10).

Durability — under normal service conditions, the unprotected system will provide a durable waterproof covering with a service life of at least 20 years (see section 12).

The BBA has awarded this Certificate to the company named above for the system described herein. This system 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 Agrement

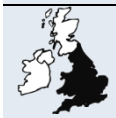
Date of Third issue: 21 December 2021

Originally certificated on 18 March 2015

Hardy Giesler
Chief Executive Officer

Regulations

In the opinion of the BBA, Paracoat Duo 20, 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 system is restricted by this Requirement in some circumstances. See section 7.3 of this Certificate.
Requirement:	**B4(2)**	**External fire spread**
Comment:		On a suitable substructure, the system may enable a roof to be unrestricted under this Requirement. See sections 7.1 and 7.2 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The system will enable a roof to satisfy this Requirement. See section 6.1 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is acceptable. See section 12 and the *Installation* part of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Durability, workmanship and fitness of materials**
Comment:		The system satisfies the requirements of this Regulation. See sections 11.1 and 12 and the *Installation* part of this Certificate.
Regulation:	**9**	**Building standards applicable to construction**
Standard:	2.6	Spread to neighbouring buildings
Comment:		The system is restricted under clause 2.6.4(1)(2) of this Standard in some circumstances. See section 7.4 of this Certificate.
Standard:	2.8	Spread from neighbouring buildings
Comment:		When applied to a suitable substructure, the system may enable a roof to be unrestricted under clause 2.8.1(1)(2) of this Standard. See sections 7.1 and 7.2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The system will enable a roof to satisfy the requirements of this Standard, with reference to clauses 3.10.1(1)(2) and 3.10.7(1)(2). See section 6.1 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The system can contribute to meeting 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 system 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(a)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The system is acceptable. See section 12 and the *Installation* part of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The system will enable a roof to satisfy the requirements of this Regulation. See section 6.1 of this Certificate.
Regulation:	**36(b)**	**External fire spread**
Comment:		On a suitable substructure, the system may enable a roof to be unrestricted under the requirements of this Regulation. See sections 7.1 and 7.2 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* and 9 *Slip resistance* of this Certificate.

Additional Information

NHBC Standards 2021

In the opinion of the BBA, Paracoat Duo 20 , if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 7.1 *Flat roofs, terraces and balconies*.

The NHBC Standards do not cover the use of the system in the refurbishment of existing roofs.

Technical Specification

1 Description

1.1 Paracoat Duo 20 is a polyurethane liquid-applied roof waterproofing system which comprises:

- Paracoat Duo Base Coat — a red, one-part polyurethane for use as the first waterproofing and embedment coat of the roofing system
- Paracoat Duo Top Coat — a one-part polyurethane for use as the second waterproofing coat of the roofing system
- Langley GFM Embedment Fleece — a 225 $g \cdot m^{-2}$ glassfibre mat for use in reinforcing the system
- Langley Quartz Chippings — 0.7 to 1.2 mm aggregate that improves slip and wear properties. Available in light grey, dark grey, black and red
- Langley Walkway Sealant — a sealer coat for Langley Quartz Chippings
- Langley PU Primer — for preparing substrates prior to application of the system and, when required, reactivating Paracoat Duo Base Coat
- Langley Epoxy Metal Primer — a two-part primer for preparing metal substrates, including solar reflecting paint, prior to application of the system
- Langley PVC Primer — for preparing PVC-U surfaces (window sills/rooflight kerbs) prior to application of the waterproofing
- Langley EPDM Primer — for preparing EPDM waterproofing membranes.

1.2 The resins have the nominal characteristics of:

Specific gravity ($g \cdot cm^{-3}$)	
base coat	1.46

top coat/clear sealer coat	1.41
Drying time per coat at 20°C, 50% RH (hours)	12
Flashpoint (°C)	44

Colour	
base coat	red
top coat	dark grey
clear sealer coat	transparent.

1.3 The following items have been assessed by the BBA for use with the system:

- Adepar JS — a self-adhesive, modified bitumen membrane for use as a carrier layer over insulation and the air and vapour control layer (AVCL)
- Paraform Ultra and Tapered Parafoam Ultra — polyurethane insulation boards.

1.4 The following ancillary items are also used with the system but are outside the scope of this Certificate:

- Biowash — for washing down substrates covered with moss and lichen prior to priming
- Parevapo SBS — a modified bitumen AVCL
- LangStik SF — adhesive for insulation boards
- SCR Alliance — nailing layer over timber
- Langley Spray-on Primer — for priming the substrate prior to application of the AVCL.

2 Manufacture

2.1 The liquid components of the system are manufactured by a batch-blending process.

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 manufacturers have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by BSI (Certificate FM 01892).

3 Delivery and site handling

3.1 The resins are delivered to site in cans bearing the Certificate holder's details, product name, hazard labelling, transportation information, batch number and the BBA logo incorporating the number of this Certificate. The components are delivered to site in the pack sizes detailed in Table 1.

Table 1 Pack size

Component	Pack sizes
Paracoat Duo Base Coat	15 litre cans
Paracoat Duo Top Coat	15 litre cans
Langley GFM Embedment Fleece	
roll length	115 m
roll width	1.3 m
Langley Quartz Chippings	25 kg bags
Langley Walkway Sealant	5 litre cans
Langley PU Primer	5 litre cans
Langley Epoxy Metal Primer	5 kg box kits
Langley PVC Primer	5 litre cans
Langley EPDM Primer	5 litre cans

3.2 The resin and primer containers must be kept tightly sealed and must be stored in a cool, ventilated place, away from ignition sources and other chemicals. Storage temperatures of between 0°C and 25°C will give the resins and Langley PU Primer a shelf-life of six months, and Langley Epoxy Metal Primer a shelf-life of 12 months. At higher temperatures the shelf-life will be reduced progressively.

3.3 The Certificate holder has taken the responsibility of classifying and labelling the system components 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).

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Paracoat Duo 20 .

Design Considerations

4 General

4.1 The Paracoat Duo 20 system is satisfactory for use as a roof waterproofing membrane on flat and pitched roofs with limited access.

4.2 The Paracoat Duo 20 system when used with Langley Quartz Chippings well distributed on the surface of the system and a layer of Langley Walkway Sealant applied on top is satisfactory for use as a waterproofing membrane on balconies with pedestrian access and walkway areas on flat roofs.

4.3 The system is for use on substrates of:

- concrete
- mastic asphalt
- metal
- reinforced bitumen membranes (including mineral surfaced)
- single-ply membranes (PVC, TPO and EPDM)
- wood
- insulation boards in conjunction with a carrier membrane.

4.4 Decks to which the system is to be applied must comply with the relevant requirements of BS 6229 : 2018, BS 8217 : 2005 and, where appropriate, *NHBC Standards* 2021, Chapter 7.1.

4.5 Limited access roofs are defined for the purpose of this Certificate as those subjected only to pedestrian traffic for maintenance of the roof covering, cleaning of gutters, etc. Where traffic in excess of this is envisaged, special precautions, such as additional protection to the membrane, must be taken: for example, carborundum grit anti-slip finish incorporated into the final coat.

4.6 Flat roofs are defined for the purpose of this Certificate as those having a minimum finished fall of 1:80. When designing flat roofs, twice the minimum finished fall should be assumed unless a detailed analysis of the roof is available, including overall and local deflection, direction of falls, etc.

4.7 Pitched roofs are defined for the purpose of this Certificate as those having falls in excess of 1:6.

4.8 Balconies and terraces, to which the systems are to be applied, must be designed in accordance with BS 8579 : 2020.

4.9 Insulation systems or materials used in conjunction with the system must be suitable for the specification and be either:

- as described in BS 6229 : 2018, or
- the subject of a current BBA Certificate and be used in accordance with, and within the limitations of, that Certificate.

4.10 The NHBC requires that the roof membranes, once installed, be inspected in accordance with NHBC Standards 2021, Chapter 7.1, Clause 7.1.12, including the use of an appropriate integrity test, where required. Any damage to the membrane is repaired in accordance with section 15 of this Certificate and reinspected.

5 Practicability of installation

The system should only be installed by contractors who have been trained and approved by the Certificate holder.

6 Weathertightness

6.1 The system will adequately resist the passage of moisture to the interior of a building and so satisfy the requirements of the national Building Regulations.

6.2 To achieve a weathertight coating it is essential that the application rate is as quoted in the Certificate holder's literature for the relevant system.

7 Properties in relation to fire

7.1 A system comprising a 6 mm calcium silicate board, Paracoat Duo Base Coat applied at 1.0 $kg \cdot m^{-2}$ reinforced with 225 $g \cdot m^{-2}$ Langley GFM Embedment Fleece, and Paracoat Duo Top Coat applied at 0.75 $kg \cdot m^{-2}$, achieved an EXT.F.AA classification(1) to BS 476-3: 2004 and so is unrestricted with respect to proximity to a boundary by the documents supporting the national Building Regulations.

(1) Test report reference 349198, issued by Exova Warrington fire. Copies are available from the Certificate holder on request.

7.2 The designation of other specifications should be confirmed by reference to the requirements of the documents supporting the national Building Regulations.

7.3 In England Wales, the system, when used in pitches of greater than 70°, excluding upstands, should not be used on buildings that have a storey at least 18 m above ground level and which contain one or more dwellings, an institution, a room for residential purposes (excluding any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools.

7.4 In Scotland, the system, when used in pitches of greater than 70°, excluding upstands, should not be used on buildings that have a storey more than 11 m above ground level.

8 Adhesion

8.1 The adhesion of the system to concrete, asphalt, reinforced bitumen membranes, single-ply roofing membranes, timber and metal is sufficient to resist the effects of any wind suction, elevated temperatures, thermal shock or minor movement likely to occur in practice.

8.2 Where the system is installed over carrier membranes on insulation, the resistance to wind uplift is dependent on the cohesive strength of the insulation.

9 Slip resistance

9.1 Results of tests on the Paracoat Duo 20 system when used with Langley Quartz Chippings and Langley Walkway Sealant indicate that it has satisfactory slip resistance in both dry and wet conditions and may be used in pedestrian access areas (see Table 2).

9.2 Results of tests on the Paracoat Duo 20 system indicate that it has a satisfactory slip resistance in dry conditions and has a moderate risk of slip when wet, as defined in *The Assessment of Floor Slip Resistance – The UK Slip Resistance Group Guidelines; Issue 3, 2005* (see Table 2).

Table 2 Coefficient of friction

System	Coefficient of friction	
	Dry surface	Wet surface
Paracoat Duo 20(1)	0.88	0.21
Paracoat Duo 20(2)	0.83	0.73

(1) Without Langley Quartz Chippings and Langley Walkway Sealant.
(2) With Langley Quartz Chippings and Langley Walkway Sealant

10 Resistance to mechanical damage

10.1 The system can accept the limited normal foot traffic and light concentrated loads associated with installation and maintenance, and pedestrian traffic on defined walkways. Reasonable care should be taken to avoid puncture by sharp objects or concentrated loads. In cases of doubt advice is available from the Certificate holder.

10.2 The Paracoat Duo 20 system can achieve a result of I_4 for hard substrate and I_3 for soft substrate with respect to dynamic indentation and L_3 for a hard substrate and L_4 for a soft substrate with respect to static indentation when tested in accordance with EOTA TR006 and EOTA TR007, respectively. The Paracoat Duo 20 system with Langley Quartz Chippings and Langley Walkway Sealant can achieve a result of L_1 for a hard substrate with respect to static indentation in accordance with EOTA TR007, respectively.

10.3 The system is capable of accepting minor structural movement while remaining weathertight.

11 Maintenance

11.1 The system must be the subject of six-monthly inspections and maintenance in accordance with BS 6229 : 2018, Chapter 7, and the manufacturers own maintenance requirements, where relevant, to ensure continued satisfactory performance.

11.2 Where damage has occurred it should be repaired in accordance with section 15 and the Certificate holder's instructions.

12 Durability

Under normal service conditions, the unprotected system will provide a durable waterproof covering with a service life expectancy of at least 20 years.

Installation

13 General

13.1 Installation of Paracoat Duo 20 must be carried out in accordance with the relevant requirements of BS 8000-0 : 2014, BS 8000-4 : 1989, BS 6229 : 2018, Liquid Roofing and Waterproofing Association (LRWA) *Note 7 – Specifier Guidance for Flat Roof Falls*, the Certificate holder's instructions and this Certificate.

13.2 Concrete structures should be designed and built in accordance with BS EN 1992-1-1 : 2004 and its UK National Annex.

13.3 The system must be applied when the air and substrate temperatures are greater than 5°C. Special precautions may be necessary when temperatures exceed 35°C, as shown in the Certificate holder's Technical Data Sheets.

13.4 Detailing (eg upstands) must be carried out in accordance with the Certificate holder's instructions.

13.5 Substrates on which the system is applied must be properly prepared in accordance with the Certificate holder's instructions.

13.6 Adhesion to the substrates will depend on the condition and cleanness of the substrate. Substrates must be visibly dry, sound and free from loose materials or contamination (eg moss or algae).

13.7 Any areas of fungal growth, algae, moss etc must be treated with Biowash to ensure all spores are destroyed.

13.8 High pressure sand-blasting or water-jetting may be used to remove loose or flaking materials and residues following treatment with Biowash, but the substrate must be visibly dry before application of the system.

13.9 Damaged areas of the substrate (eg broken fibre-cement sheets, blistered bitumen or roofing felt) must be removed, replaced or repaired.

13.10 Deck surfaces must be free from sharp projections, such as protruding fixing bolts or concrete nibs.

13.11 Gutters and outlets must be checked to ensure that they are, and remain, clear of all debris.

13.12 Steel substrates should be cleaned of all corrosion by shot-blasting or other suitable method.

13.13 The substrate is primed with the appropriate primer, in accordance with the Certificate holder's instructions, at the coverage rates given in Table 4.

Table 4 Primer application rates

Primer	Coverage rate (m^2 per litre)
Langley PU Primer	6 – 8(1)
Langley Epoxy Metal Primer	10(2)
Langley PVC Primer	5 – 10
Paracoat TPO Primer	15 – 20
Langley EPDM Primer	8 – 10

(1) Dependent on the nature and surface of the substrate.
(2) A higher coverage rate is required for uneven substrates.

13.14 Langley Epoxy Metal Primer is mixed at a ratio of four (Part A) to one (Part B).

14 Application

14.1 Application can be by brush, roller or spray. Brush application is normally used only for small roof areas and for embedding Langley GFM Embedment Fleeceinto the waterproofing.

14.2 Prior to application, checks should be made to ensure the substrate is dry (ie free from rainwater, surface condensation and frost) and that the prevailing weather and site conditions are correct. The following limitations apply:

- application must not take place when the relative humidity is in excess of 95%, or in fog. The temperature/humidity must be such that there is no risk of surface condensation occurring before or during application
- air and substrate temperatures must be in excess of 5°C
- the resin components are conditioned at a temperature of 10°C or greater, for use in airless spray applications
- the primer, where used, must be cured
- the wind speed must be such that it does not interfere with the application or cause overspray. No attempt to spray should be made if the wind speed exceeds 6.7 $m \cdot s^{-1}$ (15 mph), unless precautions such as the use of wind barriers are taken.

14.3 Work should only commence on an area if it can be sprayed to the full thickness before weather changes occur.

14.4 Paracoat Duo Base Coat is applied at a coverage rate of 1.0 $kg \cdot m^{-2}$. On rough, porous or undulating substrates a higher coverage rate will be required and the advice of the Certificate holder must be sought.

14.5 Langley GFM Embedment Fleece reinforcement is embedded in the base coat while the membrane is still wet, in accordance with the Certificate holder's instructions.

14.6 Once the base coat is partially cured, the top coat is applied at a coverage rate of 0.75 $l \cdot m^{-2}$.

14.7 For balconies with pedestrian access and walkway areas on flat roofs, Langley Quartz Chippings are broadcast into the wet top coat at a coverage rate of 3-5 $kg \cdot m^{-2}$. A finishing coat of Langley Walkway Sealant is applied at a coverage rate of 0.75 $l \cdot m^{-2}$.

14.8 The finished dry thickness of the base coat and top coat combined should not be less than 1.5 mm. The dry thickness of Langley Walkway Sealant in the system should not be less than 1 mm.

15 Repair

The repair of minor damage to the system can be achieved effectively by cleaning back to the unweathered material and recoating the damaged area with the membrane at the total application rate stated in section 14.

Technical Investigations

16 Tests

16.1 Tests were conducted on the Paracoat Duo 20 system and the results assessed to determine:

- watertightness
- tensile strength and elongation at break
- tensile bond strength on concrete, mastic asphalt, steel, bitumen felt, plywood, PVC roofing membrane, TPO roofing membrane and EPDM roofing membrane
- dynamic indentation at 23°C and –30°C on PIR insulation with bonded bitumen carrier membrane and steel
- static indentation at 23°C and 90°C on PIR insulation with bonded bitumen carrier membrane and steel
- fatigue cycling

- coefficient of friction
- UV aged for 800 MJ·m^{-2} at 50°C — repeat tensile strength and dynamic indentation at –10°C
- heat aged for 160 days at 70°C — repeat tensile strength, dynamic indentation at –30°C and fatigue cycling
- water exposure for 144 days at 60°C — repeat tensile bond strength for all substrates and static indentation
- the effect of application temperatures — repeat tensile strength and dynamic indentation at 23°C.

16.2 Tests were conducted on the Paracoat Duo 20 system with Langley Quartz Chippings and Langley Walkway Sealant and the results assessed to determine:

- watertightness
- static indentation at 23°C and 90°C on steel
- coefficient of friction
- water exposure for 144 days at 60°C — and static indentation.

16.3 Infra-red characterisation tests on the resins were carried out for reference purposes.

17 Investigations

17.1 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.

17.2 Data on fire performance were evaluated.

Bibliography

BS 476-3 : 2004 *Fire tests on building materials and structures. Classification and method of test for external fire exposure to roofs*

BS 6229 : 2018 *Flat roofs with continuously supported coverings — Code of practice*

BS 8000-0 : 2014 *Workmanship on construction sites — Introduction and general principles*
BS 8000-4 : 1989 *Workmanship on construction sites — Code of practice for waterproofing*

BS 8217 : 2005 *Reinforced bitumen membranes for roofing — Code of practice*

BS 8579 : 2020 *Guide to the design of balconies and terraces*

BS EN 1992-1-1 : 2004 + A1 : 2014 *Eurocode 2 — Design of concrete structures — General rules and rules for buildings*
NA to BS EN 1992-1-1 : 2004 + A1 : 2014 UK National Annex to *Eurocode 2 — Design of concrete structures — General rules and rules for building*

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

EOTA Technical Report TR-006 : May 2004 *Determination of the resistance to dynamic indentation*
EOTA Technical Report TR-007 : June 2003 *Determination of the resistance to static indentation*

18 Conditions

18.1 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.

18.2 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.

18.3 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.

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

18.5 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.

18.6 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.