

## Liquasil Ltd

Unit 3 Radway Industrial Estate  
Solihull  
West Midlands B90 4NR

Tel: 0121 709 5352 Fax: 0121 711 7900

e-mail: [info@liquasil.com](mailto:info@liquasil.com)

website: [www.liquasil.com](http://www.liquasil.com)



**Agrément Certificate**

**15/5266**

Product Sheet 1

## LIQUASIL ASBESTOS ROOF COATING SYSTEM

### ASBESTOSEAL 20

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to Asbestoseal 20, a one-component, liquid-applied, silicone-based coating for use as an encapsulant with water-repellent properties on pitched asbestos roofs with limited access.

(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

**Encapsulation** — the product provides an effective means of encapsulating asbestos roofs (see sections 4.1, 4.2 and 12).

**Weathertightness** — the product is water repellent and will support water run-off from the roof (see section 6).

**Properties in relation to fire** — the product will not affect the fire classification of the roof (see section 7).

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

**Slip resistance** — the product has, when wet and dry, a satisfactory coefficient of friction to provide adequate slip resistance during installation and maintenance (see section 9).

**Resistance to mechanical damage** — the product will resist without damage the limited foot traffic and loads associated with installation and maintenance (see section 10).

**Durability** — under normal service conditions, the product will have a service life of at least 25 years (see section 12).

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 Third issue: 27 September 2022

Originally certificated on 16 October 2015

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](http://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 illustrative purposes only, do not constitute advice and should not be relied upon.*

#### British Board of Agrément

1<sup>st</sup> Floor, Building 3  
Hatters Lane, Croxley Park  
Watford WD18 8YG

©2022

tel: 01923 665300  
[clientservices@bbacerts.co.uk](mailto:clientservices@bbacerts.co.uk)  
[www.bbacerts.co.uk](http://www.bbacerts.co.uk)

## Regulations

In the opinion of the BBA, Asbestoseal 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)

<b>Requirement:</b>	<b>B4(1)</b>	<b>External fire spread</b>
Comment:		Roofs incorporating the product are restricted by this Requirement in some circumstances. See sections 7.3 and 7.4 of this Certificate.
<b>Requirement:</b>	<b>B4(2)</b>	<b>External fire spread</b>
Comment:		The product can contribute to satisfying this Requirement. See sections 7.1 and 7.2 of this Certificate.
<b>Requirement:</b>	<b>C2(b)</b>	<b>Resistance to moisture</b>
Comment:		The product can contribute to a roof satisfying this Requirement. See section 6 of this Certificate.
<b>Regulation:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:		The product is acceptable. See section 12 and the <i>Installation</i> part of this Certificate.



### The Building (Scotland) Regulations 2004 (as amended)

<b>Regulation:</b>	<b>8(1)(2)</b>	<b>Durability, workmanship and fitness of materials</b>
Comment:		The use of the product satisfies this Regulation. See sections 11 and 12 and the <i>Installation</i> part of this Certificate.
<b>Regulation:</b>	<b>9</b>	<b>Building standards applicable to construction</b>
Standard:	2.6	Spread to neighbouring buildings
Comment:		The product is restricted under clause 2.6.4 <sup>(1)</sup> of this Standard in some circumstances. See sections 7.3, 7.5 and 7.6 of this Certificate.
Standard:	2.8	Spread from neighbouring buildings
Comment:		The product can contribute to satisfying this Standard with reference to clause 2.8.1 <sup>(1)(2)</sup> . See sections 7.1 and 7.2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The product can contribute to the roof satisfying the requirements of this Standard with reference to clauses 3.10.1 <sup>(1)(2)</sup> and 3.10.8 <sup>(1)(2)</sup> . See section 6 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product 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.
<b>Regulation:</b>	<b>12</b>	<b>Building standards applicable to conversions</b>
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 <sup>(1)(2)</sup> and Schedule 6 <sup>(1)(2)</sup> .

(1) Technical Handbook (Domestic).  
(2) Technical Handbook (Non-Domestic).



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

<b>Regulation:</b>	<b>23(a)(i)</b>	<b>Fitness of materials and workmanship</b>
Comment:	<b>(b)(i)</b>	The product is acceptable. See section 12 and the <i>Installation</i> part of this Certificate.

<b>Regulation:</b>	<b>28(b)</b>	<b>Resistance to moisture and weather</b>
Comment:		The product can contribute to satisfying this Regulation. See section 6 of this Certificate.
<b>Regulation:</b>	<b>36(a)</b>	<b>External fire spread</b>
Comment:		Roofs incorporating the product are restricted by this Regulation in some circumstances. See sections 7.3 and 7.4 of this Certificate.
<b>Regulation:</b>	<b>36(b)</b>	<b>External fire spread</b>
Comment:		The product can contribute to satisfying 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*, 4 *Use* (4.4), 13 *General* (13.1, 13.2) and 16 *Repair* (16.2) of this Certificate.

### Additional Information

#### NHBC Standards 2022

In the opinion of the BBA, Asbestoseal 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 7.2 *Pitched roofs*.

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

### Technical Specification

#### 1 Description

1.1 Asbestoseal 20 is a one-component, liquid-applied, water-repellent, silicone-based polymer coating for use in encapsulating weathered asbestos roofing.

1.2 Asbestoseal 20 is applied to a minimum dry film thickness of 250 µm to achieve 3.2 m<sup>2</sup> per litre coverage, or 300 µm to achieve 2.6 m<sup>2</sup> per litre coverage. The standard product is available in grey. All RAL colours are available upon request, but the colour retention properties are outside of the scope of this Certificate.

1.3 Also for use with the product and within the scope of this Certificate is Asbestoseal Non Sag-Sealer, a thixotropic coating to be used on joint detail, cracks and small holes, fixings and overlaps.

1.4 Other items or components which may be used in conjunction with the product, but which are outside the scope of this Certificate, are:

- Liquasil SWT Corrosion Primer — for metal roof fixings and where specified, to prime asbestos cement roof sheets
- Asbestoseal SF — a solvent-free version of Asbestoseal 20
- optional polyester reinforcement fleece for bridging larger holes and cracks
- Asbestoseal Asbestos Cement Stabiliser — for de-laminated and porous roof surfaces
- Liquasil Glaze Protect — liquid laminate for repairing and protecting glass and GRP roof lights.

#### 2 Manufacture

2.1 The product is 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 manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by BSI (Certificate FM01580).

### 3 Delivery and site handling

3.1 Asbestoseal 20 is packed in 5 or 20 litre airtight containers, with a nominal weight of 1 kg per litre, bearing the Certificate holder's details, name of the product, hazard labels, transportation information, colour, expiry date and batch number.

3.2 The product must be stored between 5 and 25°C under well-ventilated, dry and frost-free conditions, away from sources of ignition, direct sunlight, oxidising agents and acids.

3.3 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).

## Assessment and Technical Investigations

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

### Design Considerations

#### 4 General

4.1 Asbestoseal 20 is satisfactory for use in encapsulating weathered asbestos roof sheets on pitched roofs with limited access.

4.2 Asbestoseal 20 is not a waterproofing coating, but when applied to a suitably weathertight substrate provides water repellency.

4.3 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. Should traffic in excess of this be envisaged, special precautions, such as additional protection to the roof coating, must be taken.

4.4 Precautions must be taken before work is undertaken on fibre-reinforced asbestos roof sheets to avoid airborne asbestos fibres. Reference should be made to HSE *Health and safety guidance* HSG 33 and HSE *Asbestos essentials* A10 *Cleaning debris from guttering on an asbestos cement roof*, A12 *Cleaning weathered asbestos cement roofing and cladding* and EM9 *Disposal of asbestos waste*.

#### 5 Practicability of installation

The product must only be installed by installers who have been trained by the Certificate holder and who have successfully completed an asbestos awareness course. Installers must comply with the requirements of HSG 33.

## 6 Weathertightness



Asbestoseal 20, when used in accordance with this Certificate, will provide a roof with enhanced water-repellent properties.

## 7 Properties in relation to fire



7.1 A system comprising a 1 mm thick steel substrate, a coat of light-brown primer and a 0.1 mm coat of the product achieved a rating of EXT.S.AB<sup>(1)</sup>, when tested in accordance with BS 476-3 : 2004.

(1) Report reference P110485-1000, Issue 1, issued by BRE Global Ltd. A copy of the report is available from the Certificate holder.

7.2 The classification and permissible areas of use of other colours and constructions should be established in accordance with the requirements of the documents supporting the national Building Regulations.

7.3 The Certificate holder has not declared a reaction to fire classification for the product in accordance with BS EN 13501-1 : 2018.



7.4 In England, Wales and Northern Ireland, when applied to a roof pitch in excess of 70°, the product should not be used on buildings less than one metre from a boundary or with a storey more than 18 m from the ground.



7.5 In Scotland, when applied to a roof pitch in excess of 70°, the product may be used on buildings more than 1 m from a boundary and, on houses, 1 m or less from a boundary. With minor exceptions, the coating should be included in calculations of unprotected area, except on houses where the external wall behind has the appropriate fire resistance.

7.6 In Scotland, when applied to a roof pitch in excess of 70°, the product should not be used on any building with a storey more than 11 m above the ground, or on any entertainment or assembly building with a total storey area more than 500 m<sup>2</sup>, or on any hospital or residential care building with a total storey area more than 200 m<sup>2</sup>.

## 8 Adhesion

The adhesion of the product is sufficient to resist the effects of any likely wind suction, elevated temperatures, thermal shock or minor movement likely to occur in practice.

## 9 Slip resistance

Asbestoseal 20 has satisfactory slip resistance in both dry and wet conditions.

## 10 Resistance to mechanical damage

10.1 The product, when encapsulating an appropriate substrate, is capable of accepting minor structural movements.

10.2 The product can accept light foot traffic<sup>(1)</sup> and light concentrated loads associated with installation and maintenance. Care should be taken to avoid puncture by sharp objects or concentrated loads.

(1) Asbestos cement roofs are fragile and should not be trafficked. Suitable walk boards or dedicated man-safe systems should be employed if the roof is to be trafficked.

## 11 Maintenance



11.1 Asbestos pitched roofs encapsulated with the product must be the subject of six-monthly inspections, in autumn after leaf fall and in spring, to ensure that vegetation and other debris are cleared from the roof, and that drains remain clear and functional. All works should be carried out in accordance with HSE *Asbestos Essentials* A10, A12 and EM9.

11.2 Any damage should be repaired in accordance with section 15 of this Certificate and the Certificate holder's instructions.

## 12 Durability



Under normal service conditions, the product will have a service life of at least 25 years.

## Installation

### 13 General

13.1 Application of Asbestoseal 20 must be in accordance with the Certificate holder's instructions and this Certificate. The measures given in HSE *Asbestos Essentials A16 Painting asbestos cement sheets* should also be followed to reduce the exposure and minimise the risks associated with asbestos.

13.2 Substrates to which the product is to be applied must be thoroughly clean and completely dry and free from sharp projections. The Certificate holder's advice must be sought in regard to the suitability of the substrate to receive the product, suitable cleaning procedures and the use of a proprietary surface cleaner/fungicidal wash where required. Asbestos containing waste produce, must be disposed of in accordance with HSE *Asbestos Essentials EM9 and A10*.

13.3 Detailing, such as at upstands, penetrations, joints and fixings, must be carried out in accordance with the Certificate holder's instructions before proceeding with the main roof area.

13.4 Adhesion checks must be carried out to ensure that the product is compatible with the existing surfaces. The Certificate holder must be consulted for details of suitable test methods and requirements before use.

### 14 Procedure

14.1 Installation must be carried out in accordance with the Certificate holder's instruction and this Certificate.

14.2 Prior to application, checks must be made to ensure that the substrate is dry (ie free from rainwater, surface condensation and frost) and that the prevailing weather and site conditions are suitable.

14.3 The asbestos cement roof surface must be thoroughly cleaned and allowed to dry prior to application of the product.

14.4 Any metal fixings protruding through the roof surface must be treated with a suitable anti-corrosion treatment specified by the manufacturer.

14.5 Asbestoseal Non-Sag Sealer is applied before application of Asbestoseal 20 on any damaged or debonded areas.

14.6 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.

14.7 Air and substrate temperatures must be in excess of -5°C.

14.8 If the product is spray-applied, 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  $6.7 \text{ m}\cdot\text{s}^{-1}$  (approximately 15 mph), unless precautions, such as the use of wind barriers, are taken.

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

14.10 The product can be applied by airless spray, brush or roller, at an application rate of 3.2 or 2.6 m<sup>2</sup> per litre , to give an applied dry film thickness of 250 or 300 µm respectively. On rough, porous or undulating substrates a higher coverage rate will be required. In this situation the advice of the Certificate holder must be sought.

14.11 The product must be stirred before use until homogeneous, applied undiluted with a roofing brush, roller or spray, and spread evenly to avoid patches and create a smooth flawless finish.

14.12 Asbestoseal 20 is applied at a coverage rate of 3.2 m<sup>2</sup> per litre.

## 15 Repair

15.1 Minor damage can be repaired by removing the damaged material and reapplying it to the same specification.

15.2 The guidance given in HSE 33, A13 *Repairing damaged asbestos cement* should be followed as good practice to ensure adequate levels of work.

## Technical Investigations

## 16 Tests

Tests were carried out and the results assessed to determine:

- delamination strength
- water vapour permeability
- infrared analysis
- dynamic indentation
- static indent
- tensile properties
- fatigue cycling
- water resistance
- effect of day joint delamination
- slip resistance.

## 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 to BS 476-3 : 2004 were assessed.

17.3 Visits were made to existing sites to assess the performance of the product.

## Bibliography

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

BS EN 13501-1 : 2018 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*

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

HSG 33 HSE *Asbestos essentials*

A10 *Cleaning debris from guttering on an asbestos cement roof*

A12 *Cleaning weathered asbestos cement roofing and cladding*

EM9 *Disposal of asbestos waste.*

A16 *Painting asbestos cement sheets*

A13 *Repairing damaged asbestos cement*



### 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.