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Agrément Certificate 87/1881 Product Sheet 1

TOR COATINGS WOOD STAIN

ARCHITECTURAL SOLIGNUM

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate relates to Architectural Solignum, a permeable alkyd-based, opaque, high-build matt finish wood stain, for use internally or externally on joinery and sawn, planed or sand-blasted timber cladding and fencing.

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

Control of substrate moisture content — the product is permeable to water vapour and, as a result, the moisture content of the painted timber is likely to remain stable in service (see section 6).

Durability — when applied correctly, the product will perform satisfactorily, with good colour retention, for at least five years (see section 9).

The BBA has awarded this Agrément Certificate to the company named above for the product described herein. The 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: 26 March 2012

Originally certificated on 29 June 1987

Simon Wroe

Head of Approvals — Materials

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 Bucknalls Lane

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Regulations

These Regulations restrict the situations where timber cladding can be used. Where timber is permitted, the BBA considers the use of Architectural Solignum to be unrestricted:



The Building Regulations 2010 (England and Wales)



The Building (Scotland) Regulations 2004 (as amended)



The Building Regulations (Northern Ireland) 2000 (as amended)

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 sections:

3 Delivery and site handling (3.3 and 3.4), 11 Preparation (11.2) and 12 Application (12.3 and 12.4) of this Cartificate

Additional Information

NHBC Standards 2011

NHBC accepts the use of Architectural Solignum, when installed and used in accordance with this Certificate, in relation to NHBC Standards, Chapter 8.5 Painting and decorating.

Technical Specification

1 Description

- 1.1 Architectural Solignum is a solution of alkyd resin in white spirit with pigments, fungicide and other additives for use as a matt finish wood stain on internal and external timber. The product contains no added lead and is available in a range of standard colours, details of which are available from the Certificate holder.
- 1.2 Intermediate colours may be obtained by mixing the standard colours in proportions of 1:1 to 1:5. The component colours should be stirred thoroughly before being mixed.
- 1.3 The Certificate holder can supply intermediate colours in a minimum quantity of 250 litres.

2 Manufacture

- 2.1 The product is produced in a batch-blending process.
- 2.2 To ensure product quality is consistently maintained to the required specification, the BBA has:
- agreed with the Certificate holder 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 as part of a surveillance process to ensure that standards are maintained and that the product remains as Certificated.
- 2.3 The management systems of Tor Coatings Ltd have been assessed and registered as meeting the requirements of BS EN ISO 9001: 2008 by SGS (GB04/63409).

3 Delivery and site handling

- 3.1 The product is supplied in 1 litre or 5 litre tins or 25 litre pails, each marked with the manufacturer's name, batch number and code and the BBA identification mark incorporating the number of this Certificate.
- 3.2 The product has a shelf-life of one year. Settlement of pigments will occur but can be readily dispersed by stirring before use.
- 3.3 The product is flammable, with a flashpoint of 42°C, and must be stored in a cool place away from naked flames.

3.4 The product is classified as 'flammable', 'harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment' and 'vapours may cause drowsiness and dizziness' under *The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009* (CHIP4)/Classification, Labelling and Packaging of Substances and Mixtures (CLP Regulation) 2009. Precautions are necessary during use to avoid contact with the skin. Should contact occur it must be washed off promptly. If it comes into contact with the eyes, they should be flushed with running water for several minutes and medical attention sought.

Assessment and Technical Investigations

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

Design Considerations

4 Use

- 4.1 Architectural Solignum is satisfactory for use as a wood stain:
- on new sawn or planed timbers, ie internal or external joinery, cladding or fencing
- as a redecoration for previously painted or varnished timber surface, prepared in accordance with section 12.
- 4.2 In normal conditions of external exposure, a two-coat application is made to cladding, window frames and doors, with a third coat on horizontal surfaces such as sills. For internal conditions one coat may be sufficient, and may be given a topcoat of polyurethane varnish.

5 Practicability of installation

The product is designed to be installed by a competent painter and decorator experienced with this type of product.

6 Control of substrate moisture content

- 6.1 In painted joinery, water can enter the substrate through joints and defects in the paint film. The substrate, therefore, can reach a high moisture content. With an impermeable paint, natural drying is slow and the moisture content of the substrate will remain high; consequently the paint may perform badly and the substrate (if not preserved) may decay.
- 6.2 Architectural Solignum is permeable to water vapour and the substrate will dry more readily after exposure to wet conditions. The moisture content of the timber substrate is therefore likely to remain relatively stable in service.

7 Design of window joinery

- 7.1 After exposure, coated joinery may develop fine cracks at sharp corners which will permit water penetration and affect durability. Therefore window joinery should be designed with rounded or bevelled corners and sloping sills. It is advantageous to use water-repellent preservatives to reduce water uptake, should cracking occur.
- 7.2 At the interface of glass and putty the product is not normally capable of giving the protection provided by a gloss paint system. Suitable specifications for use with the product are:
- beaded glazing with 20 mm beads of preservative-treated softwood
- beaded glazing with rigid, high-density tropical hardwood beads (beads should be rounded or bevelled, and glazing should be bedded with a non-setting, polymer-based sealant)
- factory-produced, gasket-glazed glazing units.

8 Maintenance

The product does not require maintenance.

9 Durability

- 9.1 The coating will perform satisfactorily, when applied correctly, with good colour retention, for at least five years. When applied to internal timbers, the product will perform satisfactorily for a longer period.
- 9.2 The coating may be discoloured by water runs. To prevent this, the normal architectural details for shedding water clear of the building should be present and functioning.

Installation

10 General

- 10.1 Application of Architectural Solignum should be carried out in accordance with the relevant Clauses of BS 6150 : 2006 and BS 8000-12 : 1989.
- 10.2 The product should be applied in dry conditions to properly prepared substrates. It should not be applied at temperatures below 5°C, nor when rain is expected.
- 10.3 For internal application, adequate ventilation must be provided.

10.4 The product must be stirred well prior to application, and at intervals during application.

11 Preparation

- 11.1 When using Architectural Solignum, timber must be free from defects and resin exudation. Planed timbers should have rounded or bevelled edges.
- 11.2 New softwood timbers should be pre-treated with an over paintable preservative in accordance with BS EN 351-1: 2007. The heartwood of durable hardwood species does not require preservative treatment.
- 11.3 Knotting should not be used.
- 11.4 The timber must be free from residual solvent (if an organic solvent preservative is used) or be adequately dry (if a water-based preservative is used).
- 11.5 Joinery should be given one coat of Architectural Solignum before it is installed.

12 Application

New work

- 12.1 Any holes are filled with flexible exterior filler and sanded to a smooth finish. The product is stirred thoroughly and applied by brush or low-pressure spray at a coverage rate of 4 to 8 m² per litre for sawn timber and 8 to 12 m² per litre for planed timber.
- 12.2 At least 24 hours must be allowed between coats. Freshly coated work should be protected from rain.

Redecoration (existing paintwork or stain)

- 12.3 When redecorating it is preferable to remove the existing finish, either chemically or with a blowlamp or hot-air stripper. Large areas, however, may be stripped by abrasive blasting (using a carefully controlled grit size): this method is advantageous as it removes both flaking paint and weathered wood.
- 12.4 Where necessary, defects are made good and charred wood and traces of chemical stripper removed. Exposed timber should be treated with a fungicide and allowed to dry.
- 12.5 Alternatively, existing paintwork in reasonable condition is scraped to remove any loose and flaking paint, filled, sanded and cleaned. The product is applied as described in sections 12.1 and 12.2.

Technical Investigations

The following is a summary of the technical investigations carried out on Architectural Solignum.

13 Tests

Tests were carried out, and the results assessed, to determine:

- resistance to water and changes in moisture content of treated timber
- colour stability
- resistance to erosion
- effect of natural weathering
- storage stability
- Munsell colour values
- drying time.

14 Investigations

- 14.1 As part of the assessments resulting in the issue of previous Certificates the following investigations were conducted:
- data relating to toxicity were assessed
- an assessment was made of the results of mixing different colours of the product
- user surveys were carried out to establish performance in use and maintenance requirements
- visits were made to established sites and to sites in progress.
- 14.2 The manufacturing process and quality control procedures were evaluated and details were obtained of the quality and composition of the materials used.

Bibliography

BS 6150: 2006 Painting of buildings — Code of practice

BS 8000-12 : 1989 Workmanship on building sites - Code of practice for decorative wallcoverings and painting

BS EN 351-1 : 2007 Durability of wood on wood-based products - Preservative-treated solid wood - Classification

of preservative penetration and retention

BS EN ISO 9001: 2008 Quality management systems — Requirements

Conditions of Certification

15 Conditions

15.1 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.
- 15.2 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.
- 15.3 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.
- 15.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.
- 15.5 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
- individual 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.
- 15.6 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.