



## Egger (UK) Limited

Anick Grange Road  
Hexham  
Northumberland NE46 4JS  
Tel: 01434 602191 Fax: 01434 605103

**Agrément  
Certificate  
No 00/3711**  
Fourth issue\*

Designated by Government  
to issue  
European Technical  
Approvals

## WEYROC PROTECT

Support pour la pose du carrelage  
Unter-bau für die fliesenverlung

# Product




• THIS CERTIFICATE RELATES TO WEYROC PROTECT.

- The product is for use as a floor across joists during house construction where the floor is likely to be exposed to the elements prior to installation of the roof.
- The product provides temporary protection from the elements.
- The product must be installed in accordance with the manufacturer's instructions and the requirements of this Certificate.

## Regulations

### 1 The Building Regulations 2000 (as amended) (England and Wales)

 The Secretary of State has agreed with the British Board of Agrément the requirements of the Building Regulations to which flooring can contribute in achieving compliance. In the opinion of the BBA, Weyroc Protect, if used in accordance with the provisions of this Certificate, will contribute to meeting the relevant requirements.

Requirement: A1	Loading
Comment:	The product has sufficient strength and stiffness to sustain and transmit the design load, without excessive deflection, to the primary structure. See sections 7.2 and 9 of this Certificate.
Requirement: B3(1)(3)	Internal fire spread (structure)
Comment:	The construction detailed in section 8.2 of this Certificate has been assessed as having a fire resistance rating of 30 minutes' loadbearing capacity, 15 minutes' integrity and 15 minutes' insulation. The product has a Class 2 surface. See section 8.1 of this Certificate.
Requirement: Regulation 7	Materials and workmanship
Comment:	The product is acceptable. See section 13 of this Certificate.

# Electronic Copy

## 2 The Building Standards (Scotland) Regulations 1990 (as amended)



In the opinion of the BBA, Weyroc Protect, if used in accordance with the provisions of this Certificate, will satisfy the various Regulations and related Technical Standards as listed below.

Regulation:	10	Fitness of materials and workmanship
Standard:	B2.1	Selection and use of materials, fittings, and components, and workmanship
Comment:		The product can contribute to a construction meeting this Standard. See the <i>Installation</i> part of this Certificate.
Standard:	B2.2	Selection and use of materials, fittings, and components, and workmanship
Comment:		The product is an acceptable material. See section 13 of this Certificate.
Regulation:	11	Structure
Standard:	C2.1	Structure — Stability
Comment:		The product has sufficient strength and stiffness to sustain and transmit the design load, without excessive deflection, to the primary structure. See sections 7.2 and 9 of this Certificate.
Regulation:	12	Structural fire precautions
Standard:	D2.1	Structural protection — Principles
Comment:		The construction detailed in section 8.2 of this Certificate has been assessed as having a fire resistance rating of 30 minutes' loadbearing capacity, 15 minutes' integrity, and 15 minutes' insulation.
Standards:	D6.1 and D6.2	Concealed spaces — Principles
Comment:		Cavity barriers must be provided in accordance with the requirements for the product, which has a Class 2 surface. See section 8.1 of this Certificate.

## 3 The Building Regulations (Northern Ireland) 2000



In the opinion of the BBA, Weyroc Protect, if used in accordance with the provisions of this Certificate, will satisfy the various Building Regulations as listed below.

Regulation:	B2	Fitness of materials and workmanship
Comment:		The product is a durable material. See section 13 of this Certificate.
Regulation:	D1	Stability
Comment:		The product has sufficient strength and stiffness to sustain and transmit the design load, without excessive deflection, to the primary structure. See sections 7.2 and 9 of this Certificate.
Regulation:	E4(1)	Internal fire spread — Structure
Comment:		The construction detailed in section 8.2 of this Certificate has been assessed as having a fire resistance rating of 30 minutes' loadbearing capacity, 15 minutes' integrity, and 15 minutes' insulation.
Regulation:	E4(3)	Internal fire spread — Structure
Comment:		The product has a Class 2 surface. See section 8.1 of this Certificate.

## 4 Construction (Design and Management) Regulations 1994 (as amended) Construction (Design and Management) Regulations (Northern Ireland) 1995 (as amended)

Information in this Certificate may assist the client, planning supervisor, designer and contractors to address their obligations under these Regulations.

See sections: 6 *Delivery and site handling* (6.2 and 6.5), 7 *Design Data — General* (7.4) and 15 *Supervision and workmanship* (15.2).

## Technical Specification

### 5 Description

5.1 Weyroc Protect is manufactured from P5 flooring grade chipboard<sup>(1)</sup> faced on both sides with thermosetting resin impregnated kraft paper, bonded to both faces of the chipboard.

(1) Manufactured to BS EN 312 : 2003.

5.2 The product has characteristics of:

thickness (mm)	18, 22
length (mm)	2400
width (mm)	600, 915, 1220
density (kgm <sup>-3</sup> )	690 to 710
edge profile	tongue-and-groove

5.3 In the manufacturing process, the chipboard and the kraft paper are brought together under the required pressure, temperature and cycle time, and end and edge profiles applied.

5.4 The board is conditioned in the factory to achieve a moisture content of 5% to 10%.

5.5 Ancillary components comprise:

- Weyroc Moisture Resistant PVA Adhesive — to BS EN 204 : 2001 Class D3 for use in bonding board joints and sealing edges and nail heads
- Weyroc D4 Adhesive — to BS EN 204 : 2001 Class D4, for use in wet conditions to bond board joints and sealing edges and nail heads and in the adhesive fixing method

5.6 Quality control on the raw materials and finished product is carried out and includes:

- appearance
- dimensional accuracy
- modulus of rupture
- modulus of elasticity
- internal bond.

### 6 Delivery and site handling

6.1 Each board bears the profiling production date and stamp. Each banded double pack includes the date and shift of production, a green label to denote the identification of the core board and a white label marked Protect.

6.2 The panels are supplied in pack sizes given in Table 1.

Thickness (mm)	No of panels per pack	Approx weight (tonne)
18	80	1.5
22	64	1.5

(1) 2400 mm x 600 mm panel size.

6.3 Boards should be stored off the ground, preferably on bearers, to allow air to circulate. If stored outside, the boards should be protected using weatherproof sheeting.

6.4 Weyroc Moisture Resistant PVA Adhesive and Weyroc D4 Adhesive should be stored under cover, in the original packaging, between temperatures of 5°C and 30°C.

6.5 Weyroc D4 Adhesive is classified as harmful under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3). Containers bear the appropriate hazard warning.

## Design Data

### 7 General

7.1 Weyroc Protect is a flooring product that can be left exposed to the elements for a typical period of five to six weeks during the building process.

7.2 It provides a tough, moisture resistant, non-slip surface, suitable for joisted floors.

7.3 When tested, the board shows compliance to the Class 1, formaldehyde specification given in BS EN 312 : 2003.

7.4 The product can be installed under conditions of light rain<sup>(1)</sup> but a full assessment should be made in each case of any health and safety implications.

(1) Defined as <10 mm in 24 hours continuous precipitation.

### 8 Behaviour in relation to fire



8.1 When tested in accordance with BS 476-7 : 1997, the board achieved a Class 2 surface spread of flame rating.

8.2 An intermediate floor construction incorporating tongue-and-groove Weyroc Protect panels supported on timber joists at least 37 mm wide, a ceiling of 12.5 mm thick plasterboard fixed with 40 mm long galvanized nails at 150 mm centres, joints taped and filled, and backed by timber have been assessed as having a fire resistance rating (in minutes) of:

loadbearing capacity	30
integrity	15
insulation	15

8.3 Where any other form of floor construction incorporating the panel is subject to fire resistance requirements, an appropriate assessment or test must be carried out by a United Kingdom Accreditation Service (UKAS) laboratory accredited for the test concerned.

### 9 Impact resistance

When tested to BS EN 1128 : 1996, the boards performed in a satisfactory manner.

### 10 Slip resistance

Slip resistance values indicate that the Weyroc Protect panels will provide a satisfactory performance. The results of the performance tests and the classification of slip resistance are given in Table 2.

Table 2 Slip resistance<sup>(1)</sup>

Results of test	4S rubber (shoes) SRV	Classification
—	<25	dangerous
—	25–34	marginal
56 (Dry) 37 (wet)	35–64	satisfactory
—	>64	excellent

(1) TRL pendulum test.

## 11 Resistance to standing water

11.1 When tested in accordance with a BBA test method, a floor assembly performed in a satisfactory manner.

11.2 Weyroc Protect does not require joints, exposed edges and nail heads to be sealed using water-resistant tape (see 14.9 and 14.10 for sealing instructions).

11.3 In very severe weather conditions, some water penetration may be expected. This could result in some swelling around joints and nail fixings.

## 12 Water vapour permeability

When tested in accordance with BS 3177 : 1959, the board gave a water vapour resistance of  $65.76 \text{ MNsg}^{-1}$ .

## 13 Durability



The durability of the material is satisfactory. Provided the board is used in accordance with the Certificate holder's instructions, and is fixed to satisfactory, stable and durable substrates, the product should have a life equal to the building in which it is installed. Under normal conditions of occupancy it is unlikely to suffer damage, but if damage does occur, repairs can be carried out by following the Certificate holder's advice.

## Installation

### 14 General

#### Design considerations

14.1 Weyroc Protect may be fixed either using mechanical fasteners or Weyroc D4 Adhesive in combination with an initial row of mechanical fasteners (see sections 14.6 to 14.10 and 14.11 to 14.16, respectively).

14.2 Future access to any pipes and services running between joists should be ensured. Joists should be trimmed to all four edges of any removable trap or duct cover. Fixing of traps and

covers should be with 50 mm by 8 gauge countersunk wood-screws in pre-drilled holes.

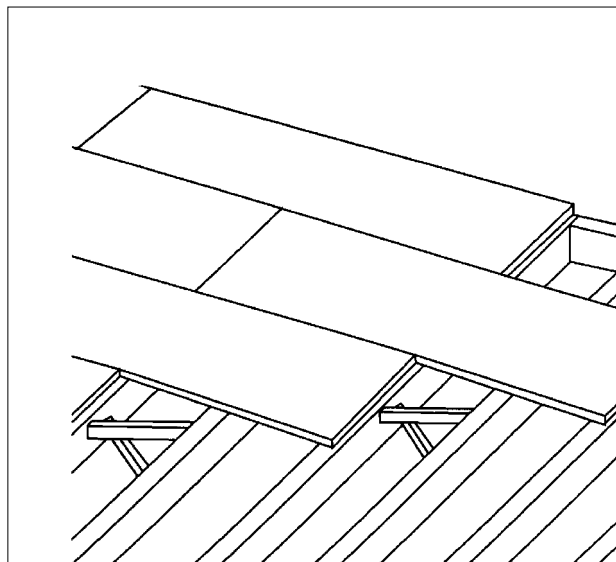
14.3 On joists up to 450 mm centres, 18 mm panels may be used but on joists up to 610 mm centres, 22 mm panels must be used.

#### Laying

14.4 The tongued-and-groove flooring panels should be laid on top of the joists with the longest edges at right angles. Short end joints should be staggered by approximately half a board in a brick bond pattern with these ends falling on the centre line of the joist (see Figure 1). If they overhang, additional timber supports or noggings should be provided. Although long edges need no intermediate support between joists, support noggings should be fixed at floor perimeters where unsupported edges abut a wall.

14.5 Laying should start with a single row of panels parallel to the longest wall allowing for a suitably-sized expansion gap (minimum 12 mm) between the wall and edge of the panel. The second row should start with a half panel ensuring the brick bond pattern (see Figure 1).

Figure 1 Laying pattern

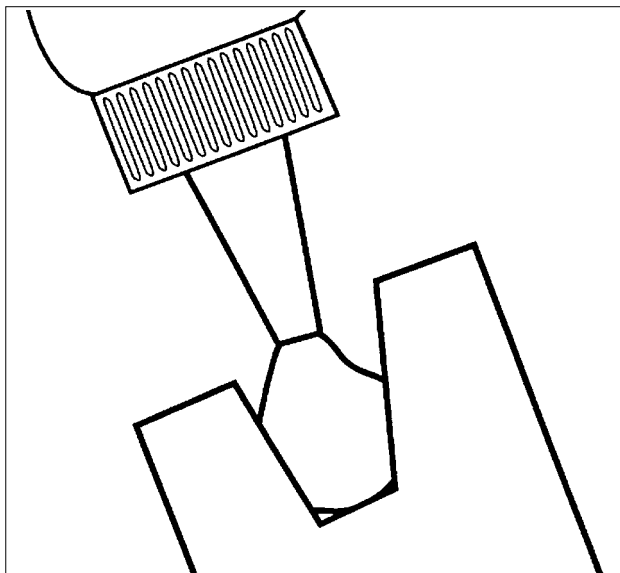


#### Mechanical fixing

14.6 A liberal application of Weyroc D4 Adhesive<sup>(1)</sup> should be made to the groove and shoulder of the tongue of the profile joint to the edges of each panel to ensure that the entire joint is bonded, once the panels are butted tightly together (see Figure 2). Any extruded residues should be left until dry and removed by brushing/scraping.

(1) Weyroc Moisture Resistant PVA Adhesive may be used if installing in dry conditions. In this case, application should be made to the groove only

Figure 2 Glueing



14.7 Panels should be fixed to the joists and noggings using 10 gauge annular ring-shank nails of length 2.5 times the thickness of the panel. Nails should be spaced 25 mm from each long edge with two more equidistant, between. Nails should be hammered flush with the surface of the panel.

14.8 Where nailing could damage ceilings or joists, panels should be fixed using countersunk screws in pre-drilled holes.

### Sealing

14.9 All perimeter and exposed edges of the boards should be sealed by coating by brush with the Weyroc D4 Adhesive<sup>(1)</sup>.

14.10 Nail heads may be protected by applying a thin covering of the Weyroc D4 Adhesive<sup>(1)</sup>.

(1) Weyroc Moisture Resistant PVA Adhesive may be used if installing in dry conditions.

### Adhesive fixing<sup>(1)</sup>

14.11 A liberal bead of Weyroc D4 Adhesive (minimum 5 mm diameter) should be made to the top of the joists.

14.12 The first row of boards should be positioned and mechanically-fixed to alternate joists as described in section 14.7.

14.13 Subsequent rows may be fixed using Weyroc D4 Adhesive only (ie there is not need for further mechanical fixing).

14.14 The tongue-and-groove joints should be bonded using Weyroc D4 Adhesive as described in section 14.6.

14.15 Nail heads should be protected using Weyroc D4 Adhesive as described in section 14.10.

14.16 Some foaming of Weyroc D4 Adhesive may be experienced in wet conditions, but this will not adversely affect the bond strength.

(1) Marketed as the 'Rapid Deck' system.

## 15 Supervision and workmanship

15.1 The level of supervision during installation of the Weyroc Protect and the associated structure must be sufficient to ensure the quality of workmanship described in BS 8000-5 : 1990.

15.2 Before the start of work on the installed floor, during periods of severe weather it is advisable to remove any pools of standing water, should they occur.

## Technical Investigations

The following is a summary of the technical investigations carried out on Weyroc Protect.

### 16 Tests

Tests were conducted to determine:

- standing water resistance
- moisture content of standing water specimens in accordance with BS EN 322 : 1993
- tensile and shear bond strengths of adhesively fixed installations
- effect of wet installation on bond strengths
- water vapour permeability in accordance with BS 3177 : 1959
- resistance to hard body impact in accordance with BS EN 1128 : 1996
- slip resistance in wet and dry conditions in accordance with the TRL pendulum test.

### 17 Investigations

17.1 An examination was made of data relating to surface spread of flame to BS 476-7 : 1997.

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

17.3 A site in progress was examined to establish the practicability of installation.

17.4 A user survey of builders who had used Weyroc Protect was conducted to establish the practicability of installation and performance in use.

## Additional Information

The management systems of Egger (UK) Limited have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2000 by OQS Certification and Evaluation Ltd (Certificate No 184/0).

## Bibliography

BS 476-7 : 1997 *Fire tests on building materials and structures — Method of test to determine the classification of the surface spread of flame of products*

BS 3177 : 1959 *Method for determining the permeability to water vapour of flexible sheet materials used for packaging*

BS 8000-5 : 1990 *Workmanship on building sites — Code of practice for carpentry, joinery and general fixings*

BS EN 204 : 2001 *Classification of thermoplastic wood adhesives for non-structural applications*

BS EN 312 : 2003 *Particleboards — Specifications*

BS EN 322 : 1993 *Wood-based panels — Determination of moisture content*

BS EN 1128 : 1996 *Cement-bonded particleboards — Determination of hard body impact resistance*

BS EN ISO 9001 : 2000 *Quality management systems — Requirements*

## Conditions of Certification

### 18 Conditions

18.1 This Certificate:

- (a) relates only to the product that is described, installed, used and maintained as set out in this Certificate;
- (b) is granted only to the company, firm or person identified on the front cover — no other company, firm or person may hold or claim any entitlement to this Certificate;
- (c) is valid only within the UK;
- (d) has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective;
- (e) is copyright of the BBA;
- (f) is subject to English law.

18.2 References in this Certificate to any Act of Parliament, Regulation made thereunder, Directive or Regulation of the European Union, Statutory Instrument, Code of Practice, British Standard, manufacturers' instructions or similar publication, are references to such publication in the form in which it was current at the date of this Certificate.

18.3 This Certificate will remain valid for an unlimited period provided that the product and the manufacture and/or fabrication including all related and relevant processes thereof:

- (a) are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA;

(b) continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine; and

(c) are reviewed by the BBA as and when it considers appropriate.

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

- (a) the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product;
- (b) the right of the Certificate holder to market, supply, install or maintain the product; and
- (c) the actual works in which the product is installed, used and maintained, including the nature, design, methods and workmanship of such works.

18.5 Any recommendations relating to the use or installation of this product which are contained or referred to in this Certificate are the minimum standards required to be met when the product is used. They do 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 or in the future; nor is conformity with such recommendations to be taken as satisfying the requirements of the 1974 Act or of any present or future 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 installation and use of this product.



In the opinion of the British Board of Agrément, Weyroc Protect is fit for its intended use provided it is installed, used and maintained as set out in this Certificate. Certificate No 00/3711 is accordingly awarded to Egger (UK) Limited.

On behalf of the British Board of Agrément

Date of Fourth issue: 17th January 2005

A handwritten signature in black ink, appearing to read 'P. Q. Newson', is written over a light grey background.

Chief Executive

*\*Original Certificate issued on 15th May 2000. This amended version includes reference to revised Building Regulations and Standards, addition of Weyroc D4 Adhesive component and adhesive fixing method, additional information on installation in wet conditions and new Conditions of Certification.*

# Electronic Copy

---

**British Board of Agrément**

P O Box No 195, Bucknalls Lane  
Garston, Watford, Herts WD25 9BA  
Fax: 01923 665301

©2005

e-mail: [mail@bba.star.co.uk](mailto:mail@bba.star.co.uk)  
website: [www.bbacerfs.co.uk](http://www.bbacerfs.co.uk)



For technical or additional information,  
contact the Certificate holder (see  
front page).  
For information about the Agrément  
Certificate, including validity and  
scope, tel: Hotline 01923 665400,  
or check the BBA website.