



Designated according to The Construction Products (Amendment etc.) (EU Exit) Regulations 2020

UK Technical Assessment	UKTA-0836-22/6389 of 20/10/2022
Technical Assessment Body issuing the UK Technical Assessment:	British Board of Agrément
Trade name of the construction product:	Protec
Product family to which the construction product belongs:	Product Area Code 03 MEMBRANES, INCLUDING LIQUID APPLIED AND KITS (FOR WATER AND/OR WATER VAPOUR CONTROL).
Manufacturer:	Polyroof Products Limited Furness House Castle Park Industrial Estate Flint Flintshire CH6 5XA
Manufacturing plant(s):	Polyroof Products Limited Furness House Castle Park Industrial Estate Flint Flintshire CH6 5XA
This UK Technical Assessment contains:	7 pages plus one Annex which forms an integral part of the document
This UK Technical Assessment is issued in accordance with The Construction Products (Amendment etc.) (EU Exit) Regulations 2020 on the basis of:	UKAD 030350-00-0402 Liquid applied roof waterproofing kits

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1 Technical description of the product

The kit consists of the following components:

- Protec — a flexible, modified polyester resin
- Polyroof Pigment — a pigment dispersed in polyester resin, available in two standard colours (chromite grey and light grey); other non-standard colours are available on request
- Polyroof Powder Catalyst — 50% dibenzoyl peroxide powder
- Polymat — a 450 g·m⁻² glassfibre mat for reinforcing the system
- Polygrit — an optional surface finish to provide an anti-slip surface if required
- Polyroof Quartz Sand — an alternative to Polygrit
- Uni-Primer Std — a standard primer for preparing concrete substrates
- Uni-Primer DP — an alternative primer for preparing concrete substrates
- Metallic Primer — a primer for preparing metal upstands
- Mordant T Wash — a pre-treatment for galvanized steel and zinc substrates (including upstands)
- Protec Taping Mat — a 450 g·m⁻² glass fibre reinforcing tape (as per Polymat) for use at points of weakness such as detailing, protrusions and over cracks
- Bond Breaker Tape — for use at expansion joints or construction joints to accommodate movement.

The application rates for primers/treatments are given in the following table.

Primer/treatment coverage rates

Primer/treatment	Substrate	Coverage rate (m ² ·litre ⁻¹)
Mordant T Wash	New galvanized steel and zinc	15
Metallic Primer ⁽¹⁾	Metal substrates	8-12
Uni-Primer Std ⁽¹⁾	Substrates other than metal	4-6

(1) Coverage rate is dependent on the condition of the substrate surface.

The kit is used to produce a two-coat application. The application rate, finished thickness and reinforcement are given in the following table.

Kit build-up and thickness (smooth concrete substrate)⁽¹⁾

Component	Kit build-up
Primer (m ² ·litre ⁻¹)	4-6
System	
First coat (litre·m ⁻²)	1.25-1.30
Reinforcement	Polymat
Second coat (litre·m ⁻²)	0.5
Dry film thickness (mm)	2.00-2.25

(1) When applying to very rough, uneven or heavily mineralised surfaces the coverage rate may be significantly reduced and this should be taken into account when estimating material usage.

The amount of catalyst added is dependent on the ambient substrate surface/air temperature. The percentage catalyst addition is given in the following table.

Catalyst proportion against temperature

Temperature (°C)	Catalyst addition for Polyroof Uni-Primer Std (%)	Catalyst addition for Protec (%)
3-10	4-6	4
10-15	3-4	3
15-20	3-4	2-3
20-30	2	2
30-35	2	—

2 Specification of the intended use(s) in accordance with the applicable UK Assessment Document (hereinafter UKAD)

For use as a liquid-applied roof waterproofing on flat and pitched roofs on concrete substrates.

The provisions made in this UK Technical Assessment are based on an assumed working life for the roof of 25 years. The indications given in the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Mechanical resistance and stability (BWR 1)

Not relevant

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to Fire	See Annex A
External fire performance	No performance assessed

3.3 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content, emission and/or release of dangerous substances	No performance assessed
Resistance to water vapour	See Annex A
Watertightness	See Annex A
Resistance to wind loads	See Annex A
Resistance to mechanical damage (perforation)	
Resistance to dynamic indentation	See Annex A
Resistance to static indentation	See Annex A
Resistance to fatigue movements	See Annex A
Resistance to the effects of low and high surface temperature	
Effect of low surface temperatures	See Annex A
Extreme low temperatures	No performance declared
Effects of high surface temperature	See Annex A
Resistance to ageing media	
Resistance to heat ageing	See Annex A
UV radiation in the presence of water	See Annex A
Resistance to water ageing	See Annex A
Resistance of plant roots	No performance assessed
Effects of variations in kit components and site practices	See Annex A
Effects of day joints	See Annex A

3.4 Safety in use (BWR 4)

Essential characteristic	Performance
Slipperiness	No performance assessed

3.5 Protection against noise (BWR 5)

Not relevant

3.6 Energy economy and heat retention (BWR 6)

Not relevant

3.7 Sustainable use of natural resources (BWR 7)

Performance not assessed

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied

4.1 System of assessment and verification of constancy of performance

According to UKAD 030350-00-0402 and Annex V of the Construction Products Regulation (Regulation (EU) 305/2011 as brought into UK law and amended, the system of assessment and verification of constancy of performance (AVCP) 3 applies.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable UKAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with the British Board of Agrément and made available to the UK Approved Bodies involved in the conformity attestation process.

5.1 UKCA marking for the product/ system must contain the following information:

- Identification number of the Approved Body
- Name/address of the manufacturer of the product/ system
- Marking with intention of clarification of intended use
- Date of marking
- UKTA number.

On behalf of the British Board of Agrément



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ANNEX A

CATEGORISATION OF LEVELS OF PERFORMANCE OF PROTEC

This Annex applies to the Protec roof waterproofing kit described in the main body of the UK Technical Assessment.

The substrate applicable to this kit is defined in the main body of the UK Technical Assessment.

The kit has the following characteristics:

- Water vapour diffusion (equivalent air layer thickness) — S_d — 57 m
- Watertightness — pass
- Resistance to wind loads — >50 kPa
- Assembled kit thickness — 2.0 mm to 2.25 mm

The categorisation of levels of performance in accordance with UKAD 030350-00-0402 are:

- External fire performance — $B_{ROOF}(t_4)$
- Reaction to fire — No performance assessed
- Categorisation by working life — W3
- Categorisation by climatic zones — M
- Categorisation by imposed loads — P4
- Categorisation by roof slope — S1 to S4
- Categorisation by surface temperature
lowest — TL3
highest — TH4
- Statement on dangerous substances — No performance assessed
- Root resistance — No performance assessed
- Slipperiness — No performance assessed



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