

ETA-Danmark A/S Göteborg Plads 1 DK-2150 Nordhavn Tel. +45 72 24 59 00 Fax +45 72 24 59 04 Internet www.etadanmark.dk Authorised and notified according to Article 29 of the Regulation (EU)
No 305/2011 of the European Parliament and of the Council of 9 March 2011



European Technical Assessment ETA-20/0914 of 2020/11/25

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

Protec

Product family to which the above construction product belongs:

Roof waterproofing

Manufacturer:

Polyroof Products
Limited Furness House
Castle Park Industrial

Estate Flint

Flintshire CH6 5XA United Kingdom

Manufacturing plant:

Polyroof Products Limited Furness House Castle Park Industrial

Estate Flint

Flintshire CH6 5XA United Kingdom

This European Technical Assessment contains:

7 pages including 1 annex which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of: European Assessment document (EAD) no. European Assessment Document EAD 030350-00-0402 for Liquid applied roof waterproofing kits

This version replaces:

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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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
- \bullet 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 glassfibre 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 in accordance with the applicable EAD

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

The provisions made in this European 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 or the Technical Assessment Body, 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)

Characteristic	Classification	
External fire performance	See Annex A	
Reaction to fire	No performance assessed	

3.3 Health, hygiene and the environment (BWR 3)

Characteristic	Category	
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		
temperatures		
Effect of low surface temperatures	See Annex A	
Extreme low temperatures	No performance assessed	
Effects of high surface temperature See Annex A		
Resistance to ageing media		
Resistance to heat ageing		
UV radiation in the presence of water	See Annex A	
Resistance to water ageing	See Annex A	
Resistance to plant roots No performance assess		
Effects of variations in kit components and site practices See Annex A		
Effects of day joints	See Annex A	

3.4 Safety in use (BWR4)

Characteristic	Category	
Resistance to wind loads	See Annex A	
Slipperiness	No performance assessed	

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

According to the Decision 98/599/EC and amended by Decision 2001/596/EC of the European Commission, the system of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table applies.

Product	Intended use	Level or class	System
Liquid applied roof	For all roof	_	3
waterproofing kits	waterproofing uses		

5 Technical details necessary for the implementation of the AVCP system, as outlined in the applicable EAD

Technical details necessary for the implementation of the Assessment and Verification of Constancy of Performance (AVCP) are laid down in the control document deposited at ETA-Danmark A/S prior to CE marking.

Issued in Copenhagen on 2020-11-25 by

Thomas Bruun

Managing Director, ETA-Danmark A/S

ANNEX A CATEGORISATION OF LEVELS OF LEVELS OF PERFORMANCE OF PROTEC

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

The substrate applicable to this kit is defined in the main body of the European Technical Assessment. The kit has the following characteristics:

- water vapour diffusion (equivalent air layer thickness) $-S_d 57$ m
- 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 EAD 030350-00-0402 are:

- External fire performance B_{ROOF}(t4)
- 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.