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European Technical Assessment

**ETA 24/0356
of 26/05/2024**

I General Part

**Technical Assessment Body issuing the
ETA and designated according to Article
29 of the Regulation (EU) No 305/2011:
Trade name of the construction product**

Technical and Test Institute for Construction
Prague

TOTAL PROOF PU FIBER 25 SYSTEM

**Product family to which the construction
product belongs**

**LIQUID APPLIED ROOF
WATERPROOFING KITS**

Manufacturer

**DRUCKFARBEN HELLAS S.A.
Megaridos Ave., Kallistiri Area 19300,
Aspropyrgos, Greece**

Manufacturing plant

**DRUCKFARBEN HELLAS S.A.
Megaridos Ave., Kallistiri Area 19300,
Aspropyrgos, Greece**

**This European Technical Assessment
contains**

8 pages including 0 annex which forms an
integral part of this assessment.

**This European Technical Assessment is
issued in accordance with regulation
(EU) No 305/2011, on the basis of**

European Assessment Document (EAD)
No. 030350-00-0402 for "Liquid applied roof
waterproofing kits"

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II Specific part

1 Technical description of the product (definition of the product)

This European Technical Assessment applies to the Liquid applied roof waterproofing kit (LARWK) with designations **TOTAL PROOF PU FIBER 25 SYSTEM**

The kit is composed of the following components, which are factory produced by the manufacturer or a supplier:

Primer: TOTAL PROOF PRIMER AQUA

For an adequate adhesion of the reinforcement and waterproofing top layer a primer is required. It is based on micronised acrylic binder for optimum impregnation properties in porous surfaces.

Reinforcement: TOTAL PROOF FLEECE 110

Reinforcement is non-woven polyester fleece fabric with area weight of 110 g/m²

Protection layer (top layer): TOTAL PROOF PU FIBER 25

Elastomeric hybrid waterproofing membrane with aliphatic polyurethane. Its composition is based on acrylic-aliphatic polyurethane copolymer. It is enhanced with 3D technology fibers creating a uniform, elastic membrane, which offers high mechanical strength, durability and excellent waterproofing on flat roofs. It reflects solar radiation, contributing to energy savings and limiting air conditioning loads during the summer.

Minimal thickness of the protection layer is: 1.5 mm (2.2mm with reinforcement)

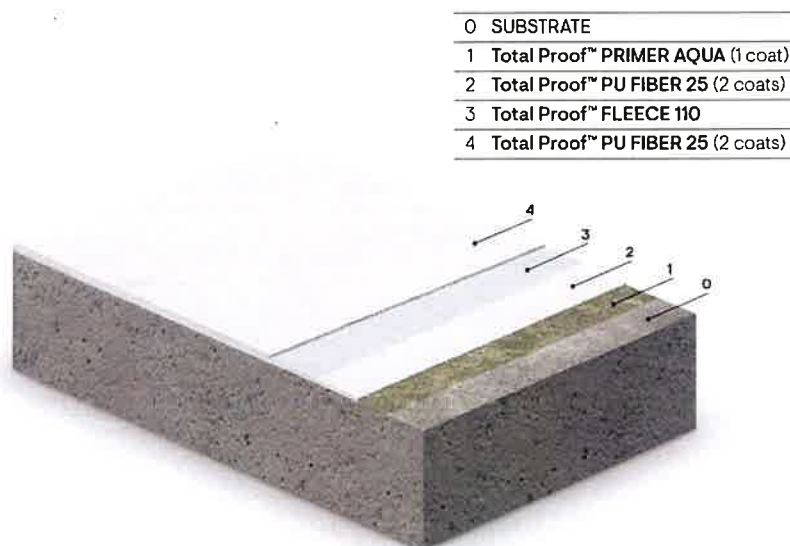


Figure 1. Application stages of TOTAL PROOF PU FIBER 25 SYSTEM

The LARWK is designed, applied and installed in accordance with the ETA holder's instructions.

2 Specification of the intended use in accordance with the applicable European Assessment Document(hereinafter EAD)

2.1 Intended use

TOTAL PROOF PU FIBER 25 SYSTEM is intended to be used as the waterproofing of roof surfaces against penetration of atmospheric water.

This LARWK is made of no load-bearing construction elements. It does not contribute directly to the stability of the roof on which is installed, but it can contribute its durability by providing enhanced protection from the effects of weathering.

The LARWK can be used for new or existing roofs.

The performance levels of the kit according to the EAD are stated in the Table No. 1. of this ETA.

The provisions made in this ETA are based on an assumed working life of the kit of 25 years (W3), provided that the conditions laid down in sections for the packaging, transport, storage, installation, use, maintenance and repair of this ETA are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as means for choosing the right products in relation to the expected economically reasonable working life of the works.

Assumed intended working life means the when an assessment following the EAD provisions is made and when this working life has elapsed the real working life may be, in normal use conditions, considerably longer without major degradation affecting the Essential Requirements.

Table No. 1 : Declared performance levels of the kit according to their intended use

Performance	Classification/Categorization level
	Minimum thickness 1.5 mm
Working life	category W3 (25 years)
Climatic zone of use	S (severe) and M (moderate)
User loads (most and less compressible substrate)	P3 (normal load)
Roof slopes	S1-S4 (from <5% to >30%)
Minimum surface temperature	TL3 (-20°C)
Maximum surface temperature	TH4 (90°C)

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

The assessment of the intended use of the insulation products was carried out in compliance with the specific part of EAD No. 030350-00-0402 - LIQUID APPLIED ROOF WATERPROOFING KITS.

3.1 Essential characteristics of the product

Table No. 1: Essential characteristic of the product TOTAL PROOF PU HYBRID 25 SYSTEM

No	Essential characteristic and method of verification/assessment	Expression of product performance	
Basic Works Requirements 2: Safety in case of fire			
1	External fire performance (EN 13501-5)	No performance assessed	
2	Reaction to fire (EN 13501-1)	Class E	
Basic Works Requirements 3: Hygiene, health and environment			
3	Content and/or release of dangerous substances	No performance assessed	
4	Resistance to water vapour (EAD 030350-00-0402 Cl. 2.2.4)	μ	≈ 3410 (1.5 mm thickness)
		S_d	≈ 5 m
5	Watertightness (EAD 030350-00-0402 Cl. 2.2.5)	Pass	
6	Resistance to wind loads: - resistance to delamination at 23°C (EAD 030350-00-0402 Cl. 2.2.6)	Pass (> 50 kPa)	
7	Resistance to dynamic indentation at 23°C (EAD 030350-00-0402 Cl. 2.2.7.1)	most compressible substrate	I ₃
		less compressible substrate	I ₃
8	Resistance to static indentation at 23°C (EAD 030350-00-0402 Cl. 2.2.7.2)	most compressible substrate	L ₃
		less compressible substrate	L ₃
9	Resistance to fatigue movement -10°C, 1000 cycles (W3) (EAD 030350-00-0402 Cl. 2.2.8)	Pass	
10	Resistance to low temperatures		
10a	Severe low temperature -20°C Resistance to dynamic indentation at -20°C (EAD 030350-00-0402 Cl. 2.2.9.1)	less compressible substrate	TL3 / I ₃

No	Essential characteristic and method of verification/assessment	Expression of product performance	
10b	Extreme low temperature -30°C Crack bridging ability at -30°C (EAD 030350-00-0402 Cl. 2.2.9.2)	No performance assessed	
11	Resistance to high temperature:		
11a	Resistance to static indentation at 90° (EAD 030350-00-0402 Cl. 2.2.9.3)	less compressible substrate	TH4 / L ₃
12	Resistance to heat ageing		
12a	Resistance to dynamic indentation – after 200 days at 80°C - at -20°C (EAD 030350-00-0402 Cl. 2.2.10.1)	less compressible substrate	I ₄
12b	Resistance to dynamic indentation - after 100 days at 80°C - at -20°C (EAD 030350-00-0402 Cl. 2.2.10.1)	less compressible substrate	I ₃
12c	Resistance to fatigue movement at -10°C, - after 200 days at 80°C 50 cycles (EAD 030350-00-0402 Cl. 2.2.10.1)	Pass	
12d	Resistance to fatigue movement at -10°C, - after 100 days at 80°C 50 cycles (EAD 030350-00-0402 Cl. 2.2.10.1)	Pass	
13	Resistance to UV radiation in the presence of moisture W2 - radiant exposure 400 MJ/m² W3 - radiant exposure 1000 MJ/m²		
13a	Climate S after exposure:		
13a-1	Resistance to dynamic indentation at -10°C after radiant exposure 400 MJ/m² (EAD 030350-00-0402 Cl. 2.2.10.2)	less compressible substrate	I ₃
13a-2	Resistance to dynamic indentation at -10°C after radiant exposure 1000 MJ/m² (EAD 030350-00-0402 Cl. 2.2.10.2)	less compressible substrate	I ₄
14	Resistance to water ageing (W2- 90 days; W3 – 180 days)		
14a	Resistance to static indentation at 80°C after after water exposure 90 days (EAD 030350-00-0402 Cl. 2.2.10.3)	less compressible substrate	L ₃
14b	Resistance to static indentation at 80°C after after water exposure 180 days (EAD 030350-00-0402 Cl. 2.2.10.3)	less compressible substrate	L ₃
14c	Resistance to delamination at 23°C after water exposure 90 days	Pass (> 50 kPa)	

No	Essential characteristic and method of verification/assessment	Expression of product performance
	(EAD 030350-00-0402 Cl. 2.2.10.3)	
14d	Resistance to delamination at 23°C after water exposure 180 days (EAD 030350-00-0402 Cl. 2.2.10.3)	Pass (> 50 kPa)
15	Resistance to plant roots (EAD 030350-00-0402 Cl. 2.2.11)	No performance assessed
16	Effects of variations in kit components and site Practices EAD 030350-00-0402 Cl. 2.2.12)	No performance assessed
17	Effects of day joints EAD 030350-00-0402 Cl. 2.2.13)	No performance assessed
Basic Works Requirements 4: Safety in use		
18	Slipperiness EAD 030350-00-0402 Cl. 2.2.14)	No performance assessed

Note: The mineral wool insulation material is considered as the most compressible substrate and concrete as the less compressible substrate.

3.2 Identification of the components

All components of the kit were clearly identified and the received data are confidential and are deposited by TZÚS Praha, s.p..

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

4.1 AVCP System

According to the decision 1999/91/EC of the European Commission as amended by Commission Decision 2001/596/EC of 08.01.2001, the AVCP **system 3** (further described in clause 1.4 of Annex V, to Regulation (EU) No 305/2011) applies.

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

In order to help the Notified Body to make an evaluation of conformity, the Technical Assessment Body issuing the ETA shall supply the information detailed below. This information shall initially be prepared or collected by the Technical Assessment Body and shall be agreed with the manufacturer. The following gives guidance on the type of information required:

1) The ETA

Where confidentiality of information is required, this ETA makes reference to the manufacturer's technical documentation which contains such information.

2) Basic manufacturing process

The basic manufacturing process is described in sufficient detail to support the proposed FPC methods.

3) Product and materials specifications

The manufacturer's documentation includes:

- detailed drawings (possibly including manufacturing tolerances),
- incoming (raw) materials specifications and declarations,
- references to European and/or international standards,
- technical data sheets.

4) Control Plan (as a part of FPC)

The manufacturer and the Technical and Test Institute for Construction Prague- branch Prague have agreed a control plan which is deposited with the Technical and Test Institute for Construction Prague – branch Prague in documentation which accompanies the ETA. The control plan specifies the type and frequency of checks/tests conducted during production and on the final product. This includes the checks conducted during manufacture on properties that cannot be inspected at a later stage and for checks on the final product.

Issued in Prague on 26.05.2024

By

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Head of the Technical Assessment Body

