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## European Technical Assessment

**ETA-24/1219**  
of 22.12.2025

### General Part

**Technical Assessment Body issuing the European Technical Assessment:**

ITC Division CSI – Centre of Civil Engineering

**Trade name of the construction product**

TritoFlex 2K; TritoFlex 1K S; TritoFlex 1K B;  
TritoCryl 2K

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

Liquid applied roof waterproofing kits

**Holder of the assessment**

Triton Inc.  
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Unit 2  
Cedar Rapids, Iowa, USA 52404

**Manufacturing plant(s)**

Triton Inc.  
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Cedar Rapids, Iowa, USA 52403

**This European Technical Assessment contains**

8 pages including 0 Annex which form an integral part of this assessment

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

EAD 030350-00-0402 Liquid applied roof waterproofing kits

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## Specific part

### 1. Technical description of the product

#### 1.1. Definition of the construction product

This European Technical Assessment relates to a Liquid applied roof waterproofing kit (LARWK) in accordance with EAD 030350-00-0402.

The kit consists of a liquid waterproofing membranes TritoFlex 2K ;TritoFlex 1K S; TritoFlex 1K B and an acrylic topcoat TritoCryl 2K, applied in situ by brush, roller, or airless spray to form a continuous, seamless waterproofing layer.

TritoFlex 2K; TritoFlex 1K S; TritoFlex 1K B are water-based, elastomeric membranes based on modified polymers. The material is supplied in a liquid form and cures to a flexible and durable membrane with uniform thickness. It is used without a reinforcement layer. The topcoat TritoCryl 2K is used as a UV-resistant protective finish layer.

Suitable substrates: metal (e.g. steel) and concrete

For kit components see Table 1.1 below.

Table 1.1: An overview of kit components and its consumption during application.

<b>Components of the kit</b>	<b>Trade names of the components</b>	<b>Consumption</b>
Waterproofing membrane	TritoFlex 2K; TritoFlex 1K S; TritoFlex 1K B	Typical consumption: 1.7–2.2 kg/m <sup>2</sup> to achieve a dry film thickness of approx. 1.5 mm.
Topcoat	TritoCryl 2K	Typical consumption: 1.0 kg/m <sup>2</sup> to achieve a dry film thickness of about 0.5 mm.

The minimum layer thickness of the assembled system must be 3.0 mm.

The components of the kit were properly identified, and the detailed identification data are kept by the Technical Assessment Body (TAB) as confidential information.

The application is carried out on site, and the performance of the kit depends on proper surface preparation, application method and curing. The manufacturer is responsible for ensuring that all relevant information concerning design, preparation, installation and maintenance is clearly communicated to installers and users. This information is provided in the Manufacturer's Technical Documentation (MTD) and may include reproductions of the relevant parts of this ETA.

To achieve the declared minimum dry film thickness, the application rate (kg/m<sup>2</sup>) specified in the Manufacturer's Technical Documentation shall be followed. The installation must be carried out by qualified personnel, who shall ensure uniform coverage of all layers and verify substrate suitability prior to application. The recommended application temperature is +5 °C to +40 °C, and the substrate temperature shall not exceed +45 °C, unless otherwise specified by the manufacturer. Damaged or deteriorated areas of the waterproofing layer shall be repaired according to the maintenance and repair procedures provided in the MTD.

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

### **2.1. Intended use**

The intended use of LARWK is the waterproofing of the roofs, terraces and balconies preventing the passage of water from one plane to another.

The LARWK is made of non-load bearing construction elements. It does not contribute directly to the stability of the roof on which is installed, but it can contribute to its durability by providing enhanced protection from the effect of weathering.

This LARWK can be used on new or existing (retrofit) roofs. It can be used on vertical surfaces (singular details).

The LARWK is characterized as below:

Expected working life: W2 (10 years)

Climatic zone of use: S (Severe climate)

User load: P1 (low, non-accessible)

Roof slopes: S1 – S4 (see Table 13 of EAD 030350-00-0402)

Minimum surface temperatures: Extreme low temperature TL4 (-30°C) and Severe low temperature TL3 (-20°C)

Maximum surface temperatures: Severe high temperature TH4 (90°C)

### **2.2. Working life/Durability**

The provisions made in this European Technical Assessment are based on an assumed working life of the tubular daylighting device for the intended use of 10 years (W2) when installed in the works provided that the kit is subject to appropriate installation (see CI 1-2). These provisions are based upon the current state of the art and the available knowledge and experience.

When assessing the kit, the intended use as foreseen by the manufacturer shall be considered. Under normal use conditions, the real working life may be considerably longer without major degradation affecting the basic requirements for works.

The indications given as to the working life of the construction kit cannot be interpreted as a guarantee neither given by the kit manufacturer or his representative nor by EOTA nor by Technical Assessment Body but are regarded only as a means for expressing the expected economically reasonable working life of the product.

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

The essential characteristics of the kit and methods of verification were carried out in compliance with the EAD 030350-00-0402 Liquid applied roof waterproofing kits.

**Table No. 1**

No	Essential characteristic	Assessment method	Expression of product performance	
<b>Basic Works Requirement 2: Safety in case of fire</b>				
1	<b>External fire performance of roofs</b>	2.2.1	B <sub>ROOF</sub> (t1)	
2	<b>Reaction to fire</b>	2.2.2	E	
<b>Basic Works Requirement 3: Hygiene, health and the environment</b>				
3	<b>Content, emission and/or release of dangerous substances</b>	2.2.3	No performance assessed	
4	<b>Resistance to water vapour</b> Water vapour resistance factor $\mu$	2.2.4	$\geq 5500$	
5	<b>Watertightness</b> (Cl. A.4.11 EAD 030350-00-0402)	2.2.5	Watertight	
6	<b>Resistance to wind loads</b> →Resistance to delamination at 23°C (Cl. A.4.1 EAD 030350-00-0402)	2.2.6	concrete	steel
			$\geq 0.85$ MPa	$\geq 0.85$ MPa
7	<b>Resistance to mechanical damage (perforation)</b> Resistance to dynamic indentation at 23°C (Cl. A.4.3 EAD 030350-00-0402) Resistance to static indentation at 23°C (Cl. A.4.4 EAD 030350-00-0402)	2.2.7	steel	
			I <sub>1</sub>	
			L <sub>1</sub>	
8	<b>Resistance to fatigue movement</b> (Cl. A.4.5 EAD 030350-00-0402) -10°C, W2 → 500 cycles	2.2.8	Pass and watertight	
9	<b>Resistance to the effects of low and high surface temperatures</b> Resistance to low temperature Extreme low temperatures -30°C – crack bridging capability (čl. A.4.10 EAD 030350-00-0402) Resistance to high temperature TH 90°C  Delamination strength test at 40°C  Tensile properties at -20°C/initial values at 23°C - Maximum tensile strength - Elongation at maximum tensile strength	2.2.9	Dynamic indentation at -20°C - steel I <sub>1</sub>	
			Crack bridging ability - Pass	
			Resistance to static indentation at 90°C steel L <sub>1</sub>	
			concrete	steel
			$\geq 0.85$ MPa	$\geq 0.84$ MPa
			$\geq 1.30 / \geq 0.85$ MPa	
$\geq 40 / \geq 100$ %				

No	Essential characteristic	Assessment method	Expression of product performance
10	<b>Resistance to ageing media (heat and water)</b> Resistance to heat ageing at 70°C- (CI. A.4.8 EAD 030350-00-0402) S climate, W2 –200 days of exposure  Tensile properties after heat ageing <ul style="list-style-type: none"> <li>- Maximum tensile strength</li> <li>- Elongation at maximum tensile strength</li> </ul> Resistance to water ageing – (60±2) °C for 30 days (CI. A.4.9 of EAD 030350-00-0402)  Delamination strength test at 23°C after water ageing  Tensile properties after water ageing <ul style="list-style-type: none"> <li>- Maximum tensile strength</li> <li>- Elongation at maximum tensile strength</li> </ul>	2.2.10.1-2.2.10.3	Resistance to dynamic indentation at -20°C after heat ageing – steel I <sub>1</sub>
			Resistance to fatigue movement after heat ageing -10°C, 50 cycles Pass
			≥ 1.70 MPa
			≥ 70 %
			Resistance to static indentation at 90°C after water ageing - steel L <sub>1</sub>
			concrete   steel
			≥ 0.80 MPa   ≥ 0.80 MPa
			≥ 0.90 MPa ≥ 85 %
11	<b>Resistance to UV radiation in the presence of moisture</b> CI. A.4.7 EAD 030350-00-0402 Climate S, W2 – radiant exposure 400 MJ/m2 Tensile properties after UV ageing <ul style="list-style-type: none"> <li>- Maximum tensile strength</li> <li>- Elongation at maximum tensile strength</li> </ul>	2.2.10.2	Resistance to dynamic indentation at -10°C after UV ageing – steel I <sub>1</sub>
			≥ 1.6 MPa
			≥ 60 %
12	<b>Resistance to plant roots</b>	2.2.11	Not relevant Requested only for user load category P4
13	<b>Effects of variations in kit components and site practices</b>	2.2.12	No performance assessed
14	<b>Effect of day joints-</b> according to CI. 2.2.13 of EAD 030350-00-0402 Resistance to delamination - concrete (CI. A.4.1 EAD 030350-00-0402) of fresh LARWK	2.2.13	≥ 1.4 MPa
<b>Basic Works Requirement 4: Safety in use</b>			
15	<b>Slipperiness</b> Dynamic coefficient of friction μ under dry conditions	2.2.14	dry slip = DS (μ ≥ 0.30)

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

##### **4.1. AVCP system**

According to the Decision 1998/599/EC as amended by Decision 2001/596/EC of the European Commission, the system of verification of constancy of performance (AVCP system) **3** is applicable.

In addition, with regard to external fire performance (for products requiring testing) according to Commission Decision 98/599/EC, and reaction to fire according to Commission Decision 2001/596/EC, the applicable AVCP system is System **3**.

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

Technical details of the actions to be undertaken by the manufacturer in relation to the FPC are laid down in the "Control plan" which specifies the type and frequency of checks/tests conducted during production and on the final product. This includes the checks conducted during manufacturing process on characteristics that cannot be inspected at a later stage and for checks on the final product. Manufacturer and ITC – Division CSI have agreed a Control Plan which is deposited with ITC- Division CSI in documentation which accompanies the ETA.

All elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures.

Basic manufacturing process is described in sufficient details to support the proposed FPC methods.

Manufacturer's documentation includes:


- detailed description of the product components,
- incoming's materials specifications and declarations,
- references to European and/or international standards.

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

The records shall be kept at least for ten years and presented to ITC – Division CSI on request.

In cases where the provisions of the European Technical Assessment and its Control Plan are no longer fulfilled, the ITC – Division CSI should withdraw the ETA without any delay.

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