

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

**ETA-20/0690**  
**of 5 October 2020**

English translation prepared by DIBt - Original version in German language

### General Part

Technical Assessment Body issuing the  
European Technical Assessment:

Deutsches Institut für Bautechnik

Trade name of the construction product

Isolor Duraflex

Product family  
to which the construction product belongs

Liquid applied roof waterproofing on the basis of  
polyurethane

Manufacturer

VECHRO S.A.  
Liosion 302  
111 45 ATHEN  
GRIECHENLAND

Manufacturing plant

Produktionsanlage 45

This European Technical Assessment  
contains

6 pages including 2 annexes 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

ETAG 005 Part 6: "Specific stipulations for kits based on  
polyurethane",  
used as EAD according to Article 66 Paragraph 3 of  
Regulation (EU) No 305/2011.

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## Specific part

### 1 Technical description of the product

The liquid applied roof waterproofing "Isolor Duraflex" is a kit, which consists of the components:

- Primer (if required),
- liquid applied roof waterproofing on the basis of a one-component reactive polyurethane,
- polyester fleece as reinforcement.

For an adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer is required. In general, the primer belonging to the substrate is given in the manufacturer technical documents<sup>1</sup>. In single cases the manufacturer is responsible to give guidance which pretreatment/primer is required.

Depending on the levels the minimum layer thickness of the roof waterproofing applied is 1.6 mm respectively 2.9 mm.

As an assembled system these components form a homogeneous seamless roof waterproofing. The components and the system build-up of the roof waterproofing "Isolor Duraflex" are given in Annex A.

### 2 Specification of the intended use in accordance with the applicable EAD

The product is used for the waterproofing of roof surfaces against penetration of atmospheric water.

In the technical file the manufacturer gives information concerning the substrates which the product is suitable for and on how these substrates shall be pre-treated.

The levels of use categories are given in Annex A.

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of working life of the product of 10 respectively 25 years. The indications given on 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.

The levels of use categories and performances given in Section 3 are only valid if the liquid applied roof waterproofing is used in compliance with the specifications and conditions given in Annex B and the installation instructions of the manufacturer stated in the technical file.

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

#### 3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
External fire performance	See Annex A
Reaction to fire	See Annex A

<sup>1</sup> The manufacturer's technical documents comprises all information necessary for the production and the installation of the product as well as for repair of the roof waterproofing made from that and it is deposited with DIBt.

**3.2 Hygiene, health and the environment (BWR 3)**

Essential characteristic	Performance
Water vapour permeability	See Annex A
Watertightness	See Annex A
Release of dangerous substances	The product does not contain dangerous substances specified in TR 034 (Version March 2012)
Resistance to mechanical damage (perforation)	See Annex A, Levels of use categories
Resistance to plant roofs	See Annex A

**3.3 Safety and accessibility in use (BWR 4)**

Essential characteristic	Performance
Resistance to wind loads	See Annex A
Slipperiness	See Annex A

**3.4 General aspects**

The verification of durability and serviceability is part of testing the essential characteristics. Durability and serviceability are only ensured if the specifications of intended use according to Annex B and the specifications of the technical file of the manufacturer are kept.

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

In accordance with ETAG 005 used as EAD, the applicable European legal act is: 98/599/EC

The system to be applied is: 3

In addition, with regard to reaction to fire for products covered by this ETAG the applicable European legal act is: 2001/596/EC

The system to be applied is: 3

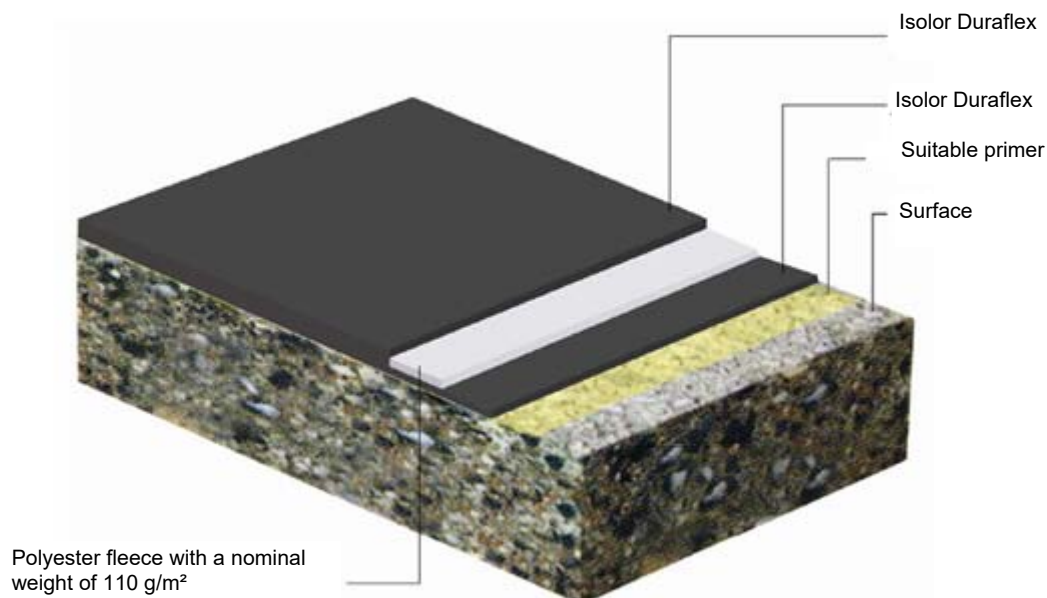
**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 5 October 2020 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow  
Head of Department

*beglaubigt:*  
Gnamou



Applicable to the roof waterproofing "Isolor Duraflex" depending on the minimum layer thickness

Minimum layer thickness	1.6 mm	2.9 mm
minimum quantity consumed:	2.4 kg/m <sup>2</sup>	4.1 kg/m <sup>2</sup>
<u>Levels of use categories according to ETAG 005 with relation to:</u>		
Working life:	W2 (10 years)	W3 (25 years)
Climatic zones	M and S (moderate and severe climatic)	
Resistance to mechanical damage (perforation) (compressible and non-compressible substrates)	P1 to P3 (from low to normal)	P1 to P4 (from low to high)
Roof slope	S1 to S4 (from < 5° to > 30°)	
Lowest surface temperature	TL3 (-20 °C)	TL4 (-30 °C)
Highest surface temperature	TH4 (90 °C)	
Use category related to BWR 3:	I/A 3, S/W 2	
<u>Performance of the product:</u>		
External fire performance	EN 13501-5	F <sub>ROOF</sub>
Reaction to fire	EN 13501-1	E
Water vapour diffusion resistance factor $\mu$	$\mu \approx 1830$	
Watertightness	pass	
Statement on dangerous substances	see section 3.2	
Resistance to plant roots	no performance assessed	
Resistance to wind loads	$\geq 50$ kPa	
Resistance to slipperiness	no performance assessed	

Isolor Duraflex,  
VECHRO S.A.

System built-up, levels of use categories and performances of the product

Anhang A

### Installation

The levels of use categories and the performances of the roof waterproofing can be assumed only, if the installation is carried out according to the installation instructions stated in the technical file of the manufacturer, in particular taking account of the following points:

- installation by appropriately trained personnel
- installation of only those components which are marked components of the kit
- installation with the required tools and adjuvants
- precautions during installation
- inspecting the roof surface for cleanliness and correct preparation, if need be, applying a primer before applying the product
- inspecting compliance with suitable weather and curing conditions
- ensuring a thickness of the cured waterproofing of at least 1.6 mm respectively 2.9 mm by processing appropriate minimum quantities of material
- inspections during installation and of the finished product and documentation of the results

<b>Isolor Duraflex</b>	Annex B
<b>Intended use</b> Specifications	