

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-15/0665
of 11 May 2017

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

"Intusit ED-L" and "Intusit ED-U"

Product family
to which the construction product belongs

Intumescent products for fire sealing and fire stopping
purposes

Manufacturer

DOYMA GmbH & Co
Industriestraße 43- 57
28876 Oyten
DEUTSCHLAND

Manufacturing plant

01 ¹

This European Technical Assessment
contains

6 pages including 1 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)
350005-00-1104

¹ Address known at DIBt

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Specific Part

1 Technical description of the product

Object of this European Technical Assessment (ETA) are the intumescent construction products "Intusit ED-L" and "Intusit ED-U".

In case of fire, exposed to high temperatures, the intumescent product expands and generates foam. This foam seals joints and gaps, closes voids and openings. Thus, the foam restricts the passage and the spread of heat, smoke, flames or any combination of these.

The construction products "Intusit ED-L" and "Intusit ED-U" are flexible intumescent construction products of dark-grey colour, produced in form of mats, strips, tape-profiles of different cross-sections or preformed elements, cuts and stampings. The intumescent constructions products "Intusit ED-L" and "Intusit ED-U" essentially consist of intumescent substances and a binder.

The products are processed by extrusion and may be cut afterwards.

The strips and tapes are produced with a thickness of 1 mm to 3 mm and are traded in rolls/coils.

The technical characteristics relevant for fire sealing and fire stopping effects of the construction products "Intusit ED-L" and "Intusit ED-U" are given in Annex 1.

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

The construction products "Intusit ED-L" and "Intusit ED-U" are assessed on the basis of EAD 350005-00-1104² as an intumescent product for fire sealing and fire stopping purposes without defined final intended use (IU 1).

The construction products "Intusit ED-L" and "Intusit ED-U" are intended to be used as an essential component in construction products, construction elements, assemblies, kits and special constructions which need to meet requirements concerning the safety in case of fire.

In case of fire, the product delays the heat transfer through fire resistant construction products and construction elements by expanding under the impact of high temperatures and thus restricting the spread of fire.

The performance given in section 3 is only valid, if the construction products "Intusit ED-L" and "Intusit ED-U" in use consider the instructions and the conditions stated in section 3.3.

The test and assessment methods on which this European Technical Assessment is based, lead to the assumption of working life of the construction products "Intusit ED-L" and "Intusit ED-U" of at least 10 years in final use.

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.

² Official Journal of the EU N° C 378/02 of 13/11/2015

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

3.1 Safety in case of fire (BWR 2)

3.1.1 Reaction to fire

Essential characteristic	Performance
Reaction to fire	Class E in accordance with EN 13501-1

The intumescent construction products "Intusit ED-L" (thickness 1,2 mm \pm 0,3 mm) and "Intusit ED-U" (nominal thickness 1,0 mm to 3,0 mm; tolerance in thickness 10% for each) meet the reaction to fire requirements of class E in accordance with EN 13501-1³.

3.1.2 Resistance to fire

The performance "resistance to fire" shall be determined separately for every final use and shall be classified, if required for the construction element concerned.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Content and release of dangerous substances	No dangerous substances ⁴

The detailed chemical composition⁵ of the intumescent construction products "Intusit ED-L" and "Intusit ED-U" were assessed by DIBt and are deposited with DIBt.

3.3 General aspects

Durability testing shall be an integral part of assessing the basic works and performance requirements. The following specific provisions for use shall be complied with to ensure the durability of the performance.

The testing under environmental conditions and the assessment of the fire sealing and fire stopping properties and of the performance of the construction products "Intusit ED-L" and "Intusit ED-U" were carried out in accordance with EOTA TR 024, section 4.2.5⁶

The intumescent products "Intusit ED-L" und "Intusit ED-U" were tested for use under environmental conditions of type Y₂ – products intended for use at temperatures below 0 °C, but no impact of rain and no UV-radiation – Indoor application at temperatures between -20 °C and +70 °C and at changing air humidity; temporary, repeated or permanent condensation.

Result:

The intumescent construction products "Intusit ED-L" and "Intusit ED-U" and cuts of them can be used under use conditions of type Y₂, without having to fear essential changes in the relevant fire sealing and fire stopping properties and the resulting performance.

This assessment includes the in-door use under use conditions of type Z₁ and Z₂.

³ EN 13501-1 Fire classification of construction products and building elements, Part 1 Classification using test data from reaction to fire tests and A1:2009

⁴ In accordance with the Regulation (EC) No 1272/2008 of 16/12/2008

⁵ Written declaration for "Intusit ED-U" of 23.05.2013 and for "ED-L" of 07.07.2015

⁶ EOTA TR 024 Characterisation, Aspects of Durability and Factory Production Control for Reactive Materials, Components and products; amended version July 2009

English translation prepared by DIBt

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

In accordance with the European Assessment Document EAD No 350005-00-1104 the Decision of the commission N° 1999/454/EC of 22 June 1999 (OJ of the EU L 178 of 14 July 1999, p 42), amended by EC Decision 2001/596/EC of 8 January 2001(OJ of the EU L 209 of 2 August 2001, p 33) is the legal basis for AVCP.

So system 1 applies for the assessment and verification of constancy of performance (AVCP). See Annex V in conjunction with Article 65 (2) of the Regulation (EU) N° 305/2011 and the following table:

Product	Intended use	characteristic	System
"Intusit ED-L" "Intusit ED-U"	Components effective in view of safety in case of fire (BWR 2) used in construction products, construction elements, kits and special assemblies	reaction to fire, properties relevant for the fire sealing and fire stopping effect	1

5 Technical details necessary for the implementation of the procedure for assessment and verification of constancy of performance (AVCP) system 1, as provided for in the applicable European Assessment Document

The technical details necessary for the implementation of the system for assessment and verification of constancy of performance are laid down in the control plan (confidential part of this ETA) deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 11 May 2017 by Deutsches Institut für Bautechnik

Prof. Gunter Hoppe
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beglaubigt:
Dr.-Ing. Dierke

CHARACTERISTICS OF THE CONSTRUCTION PRODUCTS RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECTS OF "INTUSIT ED-L" AND "INTUSIT ED-U"

Characteristic	Test method ⁷	Range of determined values and tolerances
"Intusit ED-L"		
Nominal thickness	EOTA TR 024 ⁶ , cl. 3.1.2	1,2 mm ± 0,3 mm
Mass per unit area	EOTA TR 024 ⁶ cl. 3.1.5	1,20 kg/m ² ±10 %
Expansion ratio	EOTA TR 024 ⁶ , cl. 3.1.11, method 1 (with a top-load)	4,0 to 8,5
Expansion pressure	EOTA TR 024 ⁶ ; cl. 3.1.12	0,15 N/mm ² to 0,35 N/mm ²
"Intusit ED-U"		
Nominal thicknesses	EOTA TR 024 ⁶ , cl. 3.1.2	1,0 mm to 3,0 mm ±10 % for each
Mass per unit area	EOTA TR 024 ⁶ cl. 3.1.5	Nominal thickness 1 mm: 1,20 kg/m ² ±10 % Nominal thickness 3 mm: 3,60 kg/m ² ±10 %
Expansion ratio	EOTA TR 024 ⁶ , cl. 3.1.11, method 1 (with a top-load)	18,0 to 25,0
Expansion pressure	EOTA TR 024 ⁶ ; cl. 3.1.12 method 4	Nominal thickness 1 mm: 0,50 N/mm ² to 1,00 N/mm ² Nominal thickness 3 mm: 0,35 N/mm ² to 0,85 N/mm ²

⁷ Details of the test method are deposited with DIBt