

European Technical Assessment

ETA 21/0566
of 02.08.2021



General part

Technical Assessment Body issuing the ETA: ITeC

ITeC has been designated according to Article 29 of Regulation (EU) No 305/2011 and is member of EOTA (European Organisation for Technical Assessment).

Trade name of the construction product

DUNASTRIP D20

Product family to which the construction product belongs

Intumescent products for fire sealing and fire stopping purposes.

Manufacturer

MERCOR DUNAMENTI ZRT

2131 Göd, Nemeskéri K. M. út 39
1149 Budapest, Pósa Lajos u. 16
Hungary

Manufacturing plant(s)

2131 Göd, Nemeskéri K. M. út 39
1149 Budapest, Pósa Lajos u. 16
Hungary

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) 305/2011, on the basis of

European Assessment Document EAD 350005-00-1104.

General comments

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full (excepted the confidential Annex(es)).

Specific parts of the European Technical Assessment

1 Technical description of the product

DUNASTRIP D20 is a dark grey, flexible intumescent strip made of a thermo expansive foam used as fire sealing and fire stopping product. Exposed to high temperatures in case of fire, DUNASTRIP D20 expands and creates a foam which closes gaps, seals voids and cavities and restricts the passage of heat, smoke, flames or any combination of them. DUNASTRIP D20 has the characteristics shown in the next table.

Table 1: Characteristics of DUNASTRIP D20.

Characteristic	Nominal value
Thickness	2 mm ± 0,3 mm
Width	(10 mm – 60 mm) ± 0,5 mm
Length of the roll	30 m
Density	1,4 g/cm ³ ± 10 %

2 Specification of the intended use(s) in accordance with the applicable EAD

DUNASTRIP D20 is intended to be used as a component for the fire sealing and fire protection of constructions, elements and assemblies, which shall meet requirements concerning the safety in case of fire.

DUNASTRIP D20 prevents and restricts the heat transmission and the fire spread by creating a foam. DUNASTRIP D20 is on the market without a specific end-use, but it is intended to be component of various fire sealing or fire stopping constructions and assemblies, e.g.: fire doors, glazing systems, fire resistant shutters, dampers, cabinets, partition penetrations, specific pipe or cable penetration seals, etc. (product under Intended use 1 (IU1): No specific end-use, in accordance with section 1.2.1 of EAD 350005-00-1104).

DUNASTRIP D20 is intended for the environmental conditions as defined for use category Type Z₂ (use at dry internal conditions without frost, relative humidity between 50 % and 85 % and temperatures between +5 °C and 35 °C) in accordance with section 1.2.2 of EAD 350005-00-1104

The provisions made in this ETA are based on a working life of DUNASTRIP D20 of at least 10 years, provided that the conditions laid down in the manufacturer's instructions for the installation, use and maintenance are met. These provisions are based upon the current state of the art and the available knowledge and experience.

The indications given as to the working life of the product cannot be interpreted as a guarantee but are regarded only as a means for choosing the appropriate products in relation to the expected economically reasonable working life of the works.

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

3.1 Performance of the product

The assessment of DUNASTRIP D20 has been performed in accordance with EAD 350005-00-1104 *Intumescent products for fire sealing and fire stopping purposes (May 2015)*.

Table 2: Performance of the product.

Product: DUNASTRIP D20		Intended use: fire sealing and fire stopping
Basic requirement	Essential characteristic	Performance
BWR 2 Safety in case of fire	Reaction to fire	E
	Resistance to fire	See 3.2.2
	Durability	Type Z ₂

DUNASTRIP D20 has been characterised in accordance with section 2.2 of EAD 350005-00-1104 and EOTA Technical Report 024¹. The obtained values and test methods are given in Annex A of this ETA.

3.2 Methods used for the assessment

3.2.1 Reaction to fire

The performance of DUNASTRIP D20 has been tested according to EN ISO 11925-2² and determined according to EN 13501-1³ and Regulation (EU) 2016/364.

3.2.2 Fire resistance

The resistance to fire will be demonstrated for one specific final use and cannot be generally assessed, since the resistance to fire essentially depends on the end-use constructive element. The intumescent product itself does not have a fire resistance performance, but if it is used in a final assembly (end-use). The end-use assembly incorporating DUNASTRIP D20 will be classified according to EN 13501-2⁴, as relevant.

3.2.3 Durability

DUNASTRIP D20 has been tested and assessed for the environmental use category Type Z₂ in accordance with section 2.2.2.7 of EAD 350005-00-1104 and the EOTA Technical Report 024.

¹ EOTA TR 024 Technical description and assessment of reactive products effective in case of fire, Edition August 2019.

² EN ISO 11925-2 Reaction to fire tests. Ignitability of products subjected to direct impingement of flame. Part 2: Single-flame source test.

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

⁴ EN 13501-2 Fire classification of construction products and building elements. Part 2: Classification using data from fire resistance tests, excluding ventilation services.

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

According to the Decision 1999/454/EC of the European Commission, the system of AVCP (see EC delegated Regulation (EU) No 568/2014 amending Annex V to Regulation (EU) 305/2011) given in the following table applies.

Table 3: AVCP System.

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Fire stopping and fire sealing products	For fire compartmentation and/or fire protection or fire performance	Any	1

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

All the necessary technical details for the implementation of the AVCP system are laid down in the *Control Plan* deposited with the ITeC and agreed in accordance with EAD 350005-00-1104, section 3.

The *Control Plan* is a confidential part of the ETA and only handed over to the notified product certification body involved in the assessment and verification of constancy of performance.

The factory production control operated by the manufacturer shall be in accordance with the above-mentioned *Control Plan*.

Issued in Barcelona on 2 August 2021

by the Catalonia Institute of Construction Technology.



Ferran Bermejo Nualart
Technical Director, ITeC

ANNEX A. Characterisation of DUNASTRIP D20

DUNASTRIP D20 has been characterised in accordance with section 2.2 of EAD 350005-00-1104 and EOTA Technical Report 024 as shown in the next table.

Table A1: Characterisation of DUNASTRIP D20.

Characteristic	Test method	Performance	
Dimensions	TR 024, section 1.2.2	Thickness	Within the tolerances given in table 1
		Width	
Mass per unit area	TR 024, section 1.2.5	2,862 kg/m ²	
Ash content	TR 024, section 1.2.8 (750 °C, 3 h)	26,59 %	
Expansion ratio	TR 024, section 1.2.11	Average value	11,55
		Characteristic value	11,40
Expansion pressure	TR 024, section 1.2.12	0,469 N/mm ² (at 500 °C approximately)	
Thermogravimetry *	TR 024, section 1.2.9 Part 1	Volatile content	55,8 %
		Residual inorganic content	44,2 %
Flexibility	EN 495-5	Surface cracking (at -5 °C)	

* The thermogravimetric graph is kept confidential at ITeC files.