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**European Technical Assessment Body
for construction products**



European Technical Assessment

**ETA-25/1038
of 19 June 2026**

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

TENMAT FF102, TENMAT FF102B, TENMAT FF102
CAD

Product family
to which the construction product belongs

Intumescent product for fire sealing and fire stopping
purposes

Manufacturer

Tenmat Ltd.
Northbanks Industrial Park
Frank Perkins Way
IRLAM M44 5EW
GROSSBRITANNIEN

Manufacturing plant

Tenmat Ltd.
Northbanks Industrial Park
Frank Perkins Way
IRLAM M44 5EW
GROSSBRITANNIEN

This European Technical Assessment
contains

7 pages including 2 annexes which form an integral part
of this assessment

This European Technical Assessment is
issued in accordance with Article 95(4) of
Regulation (EU) 2024/3110, on the basis of

EAD 350005-00-1104

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Specific Part

1 Technical description of the product

Object of this European technical assessment (ETA) are the intumescent construction products "TENMAT FF102", "TENMAT FF102B" and "TENMAT FF102 CAD".

When exposed to high temperatures in case of fire, the intumescent construction products expand and generate foam and char. This foam and char seal joints and gaps, closes voids and cavities and restrict this way the passage and the spread of heat, smoke, flames or any combination of them.

The construction products are firm, intumescent materials that essentially consist of intumescent substances and binder.

The construction product "TENMAT FF 102" is a factory-made slab or sheet with a length of 2150 mm and a width of 1050 mm, with nominal thicknesses ranging from 1.6 mm to 6.0 mm.

The construction product "TENMAT FF 102B" is a factory-made slab or sheet with a length of 2150 mm and a width of 1050 mm, with nominal thicknesses ranging from 1.8 mm to 3.0 mm.

The construction product "TENMAT FF 102 CAD" is a factory-made slab or sheet with a length of 2150 mm and a width of 1050 mm, with nominal thicknesses ranging from 2.5 mm to 9.5 mm. The construction product may be equipped on one side with PVC film and with a self-adhesive system (SK) on the opposite side¹.

Cut components (e.g. strips and die-cut parts) may be produced from the construction products.

The technical characteristics relevant for the fire sealing and fire stopping effect of the construction products are given in Annex A.

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

The construction products "TENMAT FF102", "TENMAT FF102B" and "TENMAT FF102 CAD" are assessed on the basis of EAD N° 350005-00-1104² as intumescent products for fire sealing and fire stopping purposes without defined final use (IU 1).

The construction products are intended to be used as essential component in, between or on construction products, assemblies, kits and special constructions which meet requirements concerning the safety in case of fire. In case of fire the product delays the heat transfer through fire resistant assemblies, construction products and construction elements by expanding under the impact of high temperatures and restricts the propagation of fire.

The performance "resistance to fire" shall be tested for the final use if requested.

The performances given in section 3 are only valid if the construction products are used in compliance with the specifications and conditions of section 3.2.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the construction products "TENMAT FF102", "TENMAT FF102B" and "TENMAT FF102 CAD" in final use conditions of at least 10 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.

¹ Type, manufacturer and characteristics are deposited with DIBt.

² OJ C 417 of 16.11.2018; p. 24, EAD Nr. 350005-00-1104 „Intumescent products for fire sealing and fire stopping purposes“, Version May 2015

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

3.1.2 Resistance to fire

The performance "Resistance to fire" shall be demonstrated separately for the intended final use.

3.2 General aspects

The detailed chemical composition of the intumescent construction products "TENMAT FF102", "TENMAT FF102B" and "TENMAT FF102 CAD" were assessed at DIBt and are deposited with DIBt.

The verification of durability is part of testing the basic works requirements and of the achievement of the assessed performance. The durability is only presumed if the following provisions for the intended use are considered.

The assessment of the durability with regard to the fire protection performance criteria was carried out for "TENMAT FF102B" and "TENMAT FF102 CAD" for climatic conditions of type

Z₁ - frost-protected indoor use at relative humidity above 85 %, including temporary condensation

Z₂ - dry, frost-protected indoor use

in accordance with EAD N° 350005-00-1104, clause 1.2.2.

The assessment of the durability with regard to the fire protection performance criteria was carried out for "TENMAT FF102" for climatic conditions of type

X - use in conditions exposed to free weathering

in accordance with EAD N° 350005-00-1104, clause 1.2.2.

Result: The intumescent construction products "TENMAT FF102B" and "TENMAT FF102 CAD" may be used permanently in dry, frost-protected rooms and with changing relative humidity without the expectation of essential changes in the relevant fire sealing and fire stopping properties and the resulting performance. "TENMAT FF102" may be used under outdoor conditions exposed to free weathering without the expectation of essential changes in the relevant fire sealing and fire stopping properties and the resulting performance.

³ EN 13501-1:2019-05

Fire classification of construction products and building elements, Part 1: Classification using data from reaction to fire tests

Additionally, "TENMAT FF102", "TENMAT FF102B" and "TENMAT FF102 CAD" were tested under specific use conditions in accordance with EOTA TR 024:

- Exposure to constant temperatures of up to 80 °C for 40 days in accordance with EOTA TR 024, clause 2.3.2.1
- Subsequent to over-painting in accordance with EOTA TR 024, clause 2.3.3 (water-based emulsion paint, alkyd or polyurethane resin paint)
- Exposure to close contact with metals and plastics in accordance with EOTA TR 024, clause 2.3.6 (aluminium, steel and galvanized steel, PVC and polyurethane)
- Exposure to permanent wetness in accordance with EOTA TR 024, clause 2.3.4
- Exposure to various chemicals in accordance with EOTA TR 024, clause 2.3.5 (hydrochloric acid vapors, ammonium hydroxide vapors, sulfuric acid solution and test fuel)

The characteristics "expansion ratio" and "expansion pressure" did not change essentially due to the exposure.

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

In accordance with EAD No. 350005-00-1104² the applicable legal act is: commission decision 1999/454/EU⁴, amended by commission decisions 2001/596/EG⁵ on the assessment and verification of constancy of performance (AVCP) (see Annex V in conjunction with Article 65(2) of Regulation (EU) No 305/2011).

The system to be applied is: **System 1**

Construction products	Intended use	Characteristic	System
"TENMAT FF102", "TENMAT FF102B" "TENMAT FF102 CAD"	Components effective in the view of safety in case of fire (BWR) used in construction elements, kits and assemblies	- Reaction to fire - Characteristics relevant for the fire sealing and fire stopping effects	1

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 19 June 2026 by Deutsches Institut für Bautechnik

Johanna Held
Head of Section

beglaubigt:
Haberstroh

⁴ OJ L 178 of 14.07.1999, p. 42

⁵ OJ L 209 of 02.08.2001, p. 33

CHARACTERISTICS RELEVANT FOR THE FIRE SEALING AND FIRE STOPPING EFFECTS OF THE CONSTRUCTION PRODUCTS

Characteristic	Range and tolerances	Test method
"TENMAT FF102"		
nominal thickness	1.6 mm ± 0.3 mm to 6.0 mm ± 0.5 mm	see control plan
mass per area	1.5 kg/m² ± 10 % (1.6 mm nominal thickness) to 5.9 kg/m² ± 10 % (6.0 mm nominal thickness)	
loss of mass at a certain temperature	12.5 % to 22.5 %	
expansion ratio	16.0 to 26.0	
expansion pressure	0.25 N/mm² to 0.85 N/mm²	
"TENMAT FF102B"		
nominal thickness	1.8 mm to 3.0 mm ± 0.3 mm	see control plan
mass per area	1.8 kg/m² ± 10 % (1.8 mm nominal thickness) to 3.0 kg/m² ± 10 % (3.0 mm nominal thickness)	
loss of mass at a certain temperature	13.0 % to 23.0 %	
expansion ratio	11.0 to 21.0	
expansion pressure	0.20 N/mm² to 0.65 N/mm²	
"TENMAT FF102 CAD"		
nominal thickness	2.5 mm ± 0.3 mm to 9.5 mm ± 0.5 mm	see control plan
mass per area	2.7 kg/m² ± 10 % (2.7 mm nominal thickness) to 8.7 kg/m² ± 10 % (9.5 mm nominal thickness)	
loss of mass at a certain temperature	30.0 % to 40.0 %	
expansion ratio	13.0 to 24.0	
expansion pressure	0.25 N/mm² to 0.6 N/mm²	

TENMAT FF102, TENMAT FF102B, TENMAT FF102 CAD

Description of construction products - essential characteristics

Annex A

List of references

EN 13501-1:2019-05	Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests
DIN EN ISO 11925-2:2020-07	Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test
EOTA TR 024:2019-08	Technical description and assessment of reactive products effective in case of fire

TENMAT FF102, TENMAT FF102B, TENMAT FF102 CAD	Annex B
List of reference document	