



UL INTERNATIONAL (UK) LTD
 Womersh House, Building C,
 The Guildway,
 Old Portsmouth Road,
 Guildford. GU3 1LR.
 United Kingdom.



designated according to Article 29 of the Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment, www.eota.eu)

European Technical Assessment

ETA 16/0040 of 29/01/2016

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: UL International (UK) Ltd

Trade name of the construction product

TYTAN PROFESSIONAL B1 GUN PU
 FOAM / ORBAFOAM FIRE RESISTANT
 POLYURETHAN FOAM

Product family to which the construction product belongs

Fire Stopping and Sealing Product:
 • Linear Joint and Gap Seals

Manufacturer

Selena FM S.A. Ul.
 Strzegomska 2-4
 53-611 Wrocław
 Poland
www.selena.com

Manufacturing plant(s)

G/001

This European Technical Assessment contains

8 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

ETAG 026-3, edition 2011, used as European Assessment Document (EAD).

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of the product

- 1) TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM is a fire resistant, expanding foam used to form a seal to reinstate the fire resistance performance of wall constructions, where they have been provided with linear gaps and joints.
- 2) TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM is supplied contained, premixed within steel canisters. The foam is sprayed into the aperture in or between the separating element/elements, to a specified depth and where required capped with a sealant.
- 3) The applicant has submitted a written declaration that TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM does not contain substances which have to be classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No 1272/2008 and listed in the "Indicative list on dangerous substances" of the EGDS - taking into account the installation conditions of the construction product and the release scenarios resulting from there.

In addition to the specific clauses relating to dangerous substances contained in this European Technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

- 4) The use category of TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3

2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): ETAG 026-2

Detailed information and data is given in Annex A.

- 1) The intended use of TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM is to reinstate the fire resistance performance of rigid wall constructions where there are linear joints and gaps.
- 2) The specific elements of construction that the system TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM may be used to provide a penetration seal in, are as follows:
 - a. Rigid walls: The wall must have a minimum thickness of 150 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m³.

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

- 3) The System TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM may be used to provide a linear joint seal in and between rigid walls. (for details see Annex A).
- 4) The provisions made in this European Technical Assessment are based on an assumed working life of the TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM of 10 years, provided that the conditions laid down in sections 4.2/5.1/5.2 for the packaging/transport/storage/installation/use/repair are met. 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.

- 5) Type $Y_{2(-5/70)}$: intended for use at temperatures below 0°C, but with no exposure to rain nor UV. Includes lower classes.

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

Product-type: Foam		Intended use: Linear Joint Seal	
Basic requirement for construction work	Basic Requirement		Performance
BWR 1 Mechanical resistance and stability			
-	None		Not relevant
BWR 2 Safety in case of fire			
EN 13501-1	Reaction to fire		Class 'F' (untested)
EN 13501-2	Resistance to fire		Annex A
BWR 3 Hygiene, health and environment			
EN 1026:2000	Air permeability (material property)		No performance determined
ETAG 026-2, Annex C	Water permeability (material property)		No performance determined
Declaration of manufacturer	Release of dangerous substances		Use categories: IA1, S/W3 Declaration of manufacturer
BWR 4 Safety in use			
EOTA TR 001:2003	Mechanical resistance and stability		No performance determined
EOTA TR 001:2003	Resistance to impact/movement		No performance determined
EOTA TR 001:2003	Adhesion		No performance determined
BWR 5 Protection against noise			
EN 10140-2/ EN ISO 717-1	Airborne sound insulation		No performance determined
EN 10140-3/ EN ISO 717-2	Impact sound insulation		No performance determined
BWR 6 Energy economy and heat retention			
EN 12664, EN 12667 or EN 12939	Thermal properties		No performance determined
EN ISO 12572 EN 12086	Water vapour permeability		No performance determined
General aspects relating to fitness for use			
Clause B.6.2 & B.15	Durability and serviceability		$Y_{2(-5/70)}$
BWR 7 Sustainable use of natural resources			
-	-		No performance determined

4 ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO ITS LEGAL BASE

According to the decision 1999/454/EC – Commission Decision of date 22nd June 1999 on on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards fire stopping, fire sealing and fire protective products, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, see <http://eur-lex.europa.eu/JOIndex.do>) of the European Commission¹, as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table(s) applies (apply).

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 provided for in the applicable EAD

Tasks of the manufacturer:

Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this European technical Assessment.

The manufacturer may only use initial / raw / constituent materials stated in the technical documentation of this European Technical Assessment.

The factory production control shall be in accordance with the Control Plan of 27th October 2015 relating to the European Technical Assessment ETA 16/0040 issued on 29/01/2016 which is part of the technical documentation of this European Technical Assessment. The "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at UL International (UK) Ltd.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

¹ Official Journal of the European Communities L178/52 of 14/7/1999

Other tasks of the manufacturer

Additional information

The manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

(a) Technical data sheet:

- Field of application:
- Building elements for which the linear joint seal or penetration seal is suitable, type and properties of the building elements like minimum thickness, density, and - in case of lightweight constructions – the construction requirements.
- Limits in size, minimum thickness etc. of the joint or penetration seal
- Construction of the linear joint seal or penetration seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.
- Services which the penetration seal is suitable, type and properties of the services like material, diameter, thickness etc. in case of pipes including insulation materials; necessary/allowed supports/fixings (e.g. cable trays)

(b) Installation instruction:

- Steps to be followed
- Procedure in case of retrofitting
- Stipulations on maintenance, repair and replacement

6 Issued on:

29th January 2016

Report by:



C. Johnson
Staff Engineer
Building and Life Safety Technologies

Reviewed by:



C. W. Miles
Business Manager – Europe & Latin America
Building and Life Safety Technologies

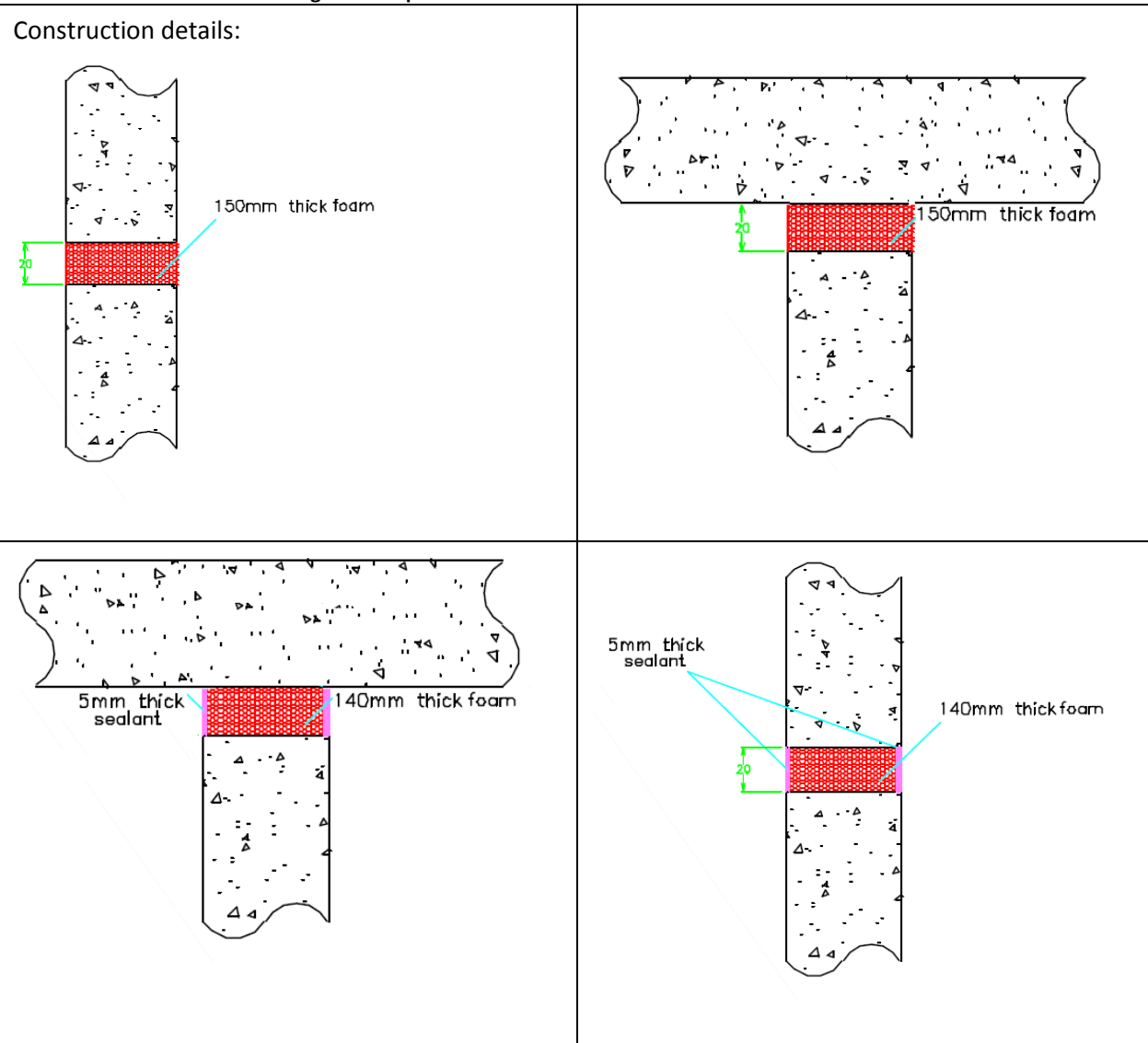
For and on behalf of UL International (UK) Ltd.

ANNEX A – Resistance to Fire Classification – TYTAN PROFESSIONAL B1 GUN PU FOAM / ORBAFOAM FIRE RESISTANT POLYURETHAN FOAM

A.1 Rigid wall constructions with wall thickness of minimum 150 mm

A.1.1 Linear joint or gap seal, horizontally oriented

Penetration Seal: Seal for horizontal gaps in walls and joint between head of wall and floor soffit. Wall sealed to full depth or minimum 150 mm if wall is of greater depth.



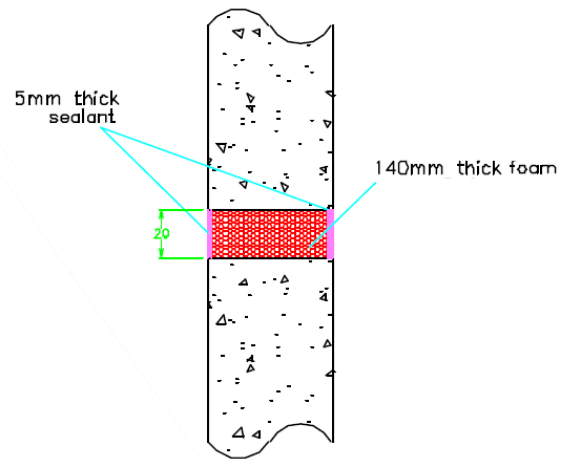
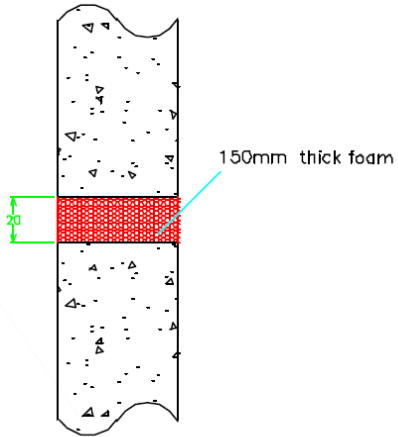
A.1.1.1

Substrate	Depth (mm)	Facing	Classification
Masonry/ concrete	140 min.	5 mm Tytan B1 Fire Sealant to both faces	EI 240 – H – X – F – W 20
	150 min.	None	EI 180 – H – X – F – W 20

A.1.2 Linear joint or gap seal, vertically oriented

Penetration Seal: Seal for vertical gaps in walls and joint between walls. Wall sealed to full depth or minimum 150 mm if wall is of greater depth.

Construction details:



A.1.2.1

Substrate	Depth (mm)	Facing	Classification
Masonry/ concrete	140 min.	5 mm Tytan B1 Fire Sealant to both faces	EI 240 – V – X – F – W 20
	150 min.	None	EI 60 – V – X – F – W 20