



UL INTERNATIONAL (UK) LTD  
 Womersley 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](http://www.eota.eu))

## European Technical Assessment

## ETA 15/0036 of 02/02/2015

**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 B1 FIRE SEALANT

**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](http://www.selena.com)

**Manufacturing plant(s)**

A/003

**This European Technical Assessment contains**

11 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 B1 FIRE SEALANT is a sealant used to form linear gap seals where gaps are present in wall and floor constructions and linear joint seals where wall and floor constructions abut.
- 2) The TYTAN B1 FIRE SEALANT is supplied in liquid form contained within 200 ml, 300 ml, 380 mm and 600 ml containers. The sealant is gunned into the aperture in the separating element/elements and around the service or services, to a specified depth utilising mineral fibre insulation backing material.
- 3) TYTAN B1 FIRE SEALANT contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.
- 4) The applicant submitted a written declaration that the product and/or constituents of the product contains no substances which have been 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.

- 5) The use category of TYTAN B1 FIRE SEALANT in relation BWR 4 (safety in use) is IA1, S/W3

### 2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): ETAG 026-3

Detailed information and data is given in Annex A.

The intended use of system TYTAN B1 FIRE SEALANT is to reinstate the fire resistance performance of gaps in and joints in and between flexible wall and rigid wall constructions, gaps in and joints between rigid floor constructions.

- 1) The specific elements of construction that the system TYTAN B1 FIRE SEALANT may be used to provide a gap or joint seal in, are as follows:

Flexible walls:	The wall must have a minimum thickness of 100 mm and comprise steel studs lined on both faces with minimum 2 layers of 12.5 mm thick boards.
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/m <sup>3</sup> .
Rigid floors:	The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m <sup>3</sup> .

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.
- 2) The system TYTAN B1 FIRE SEALANT may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).
- 3) The maximum permitted joint/gap width for system TYTAN B1 FIRE SEALANT is 30 mm.

- 4) The maximum movement capability of system TYTAN B1 FIRE SEALANT when used as a linear joint or gap seal within the scope of this ETA is  $\leq 7.5\%$
- 5) The provisions made in this European Technical Assessment are based on an assumed working life of the TYTAN B1 FIRE SEALANT of 10 years, provided that the conditions laid down in the manufacturers' instructions and datasheet 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.
- 6) Type X: intended for use at conditions exposed to weathering and all lower classes.

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

Product-type: Sealant		Intended use: Linear Joint & Gap Seal
Basic requirement for construction work	Basic Requirement	Performance
<b>BWR 1 Mechanical resistance and stability</b>		
-	None	Not relevant
<b>BWR 2 Safety in case of fire</b>		
EN 13501-1	Reaction to fire	Class D-s2, d0
EN 13501-2	Resistance to fire	Annex A
<b>BWR 3 Hygiene, health and environment</b>		
EN 1026:2000	Air permeability (material property)	No performance determined
ETAG 026-3, Annex C	Water permeability (material property)	No performance determined
Declaration of manufacturer	Release of dangerous substances	Declaration of manufacturer
<b>BWR 4 Safety in use</b>		
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 ISO 11600	Adhesion	No performance determined
<b>BWR 5 Protection against noise</b>		
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	Rw(C;Ctr)= 45 (-3;-10) dB*
EN 10140-3/ EN ISO 717-2	Impact sound insulation	No performance determined
<b>BWR 6 Energy economy and heat retention</b>		
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN 12086	Water vapour permeability	No performance determined
<b>General aspects relating to fitness for use</b>		
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389: 2003	Durability and serviceability	X
<b>BWR 7 Sustainable use of natural resources</b>		
-	-	No performance determined

\* At minimum 12 mm depth

**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 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 Commission<sup>1</sup>, 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).

<b>Product(s)</b>	<b>Intended use(s)</b>	<b>Level(s) or class(es)</b>	<b>System(s)</b>
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 9<sup>th</sup> September 2013 relating to the European Technical Assessment ETA 15/0036 issued on 02/02/15 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.

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<sup>1</sup> 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 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 seal
- Construction of the linear joint seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.

(b) Installation instruction:

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

**6 Issued on:**

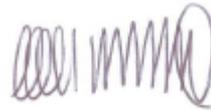
**2<sup>nd</sup> February 2015**

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.**

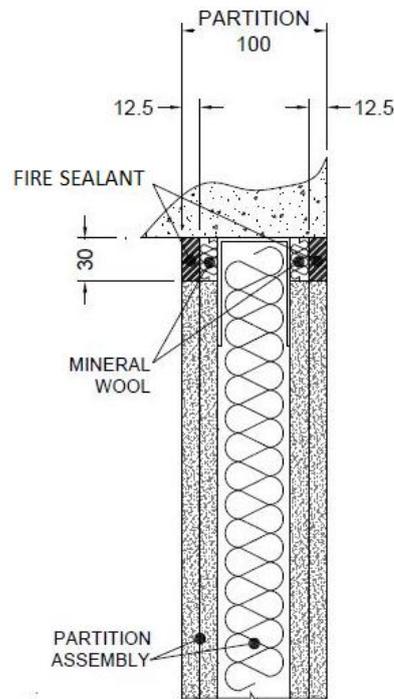
## ANNEX A – Resistance to Fire Classification – TYTAN B1 FIRE SEALANT

**A.1 Flexible and rigid wall constructions according to 1.2.1 with wall thickness of minimum 100 mm**

**A.1.1 Linear joint seals, between head of flexible wall min. 100 mm thick and soffit of concrete floor**

**Joint Seal:** TYTAN B1 FIRE SEALANT to both sides of the wall, joint widths of 30 mm

Construction details:



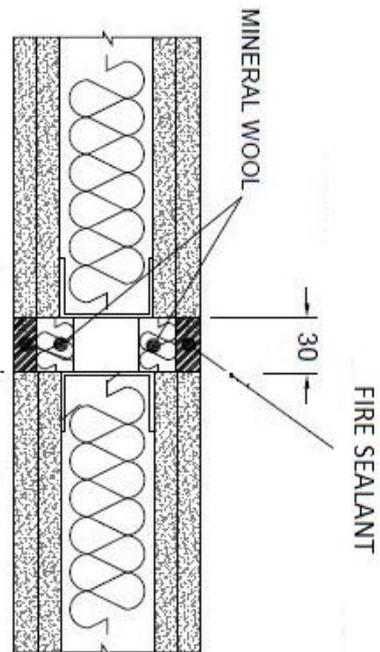
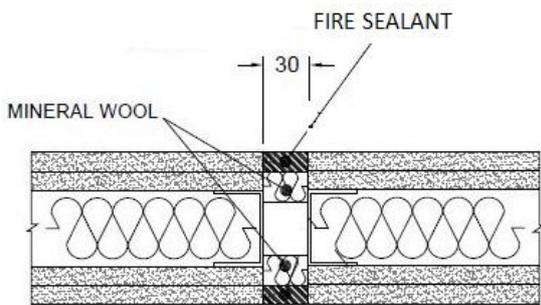
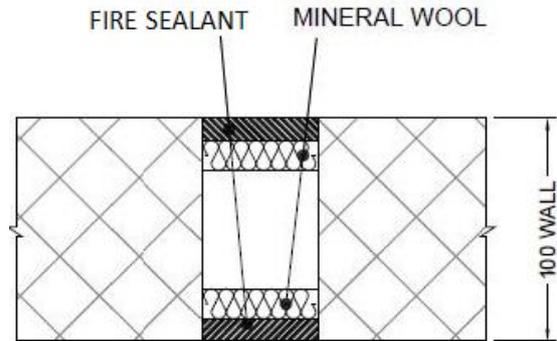
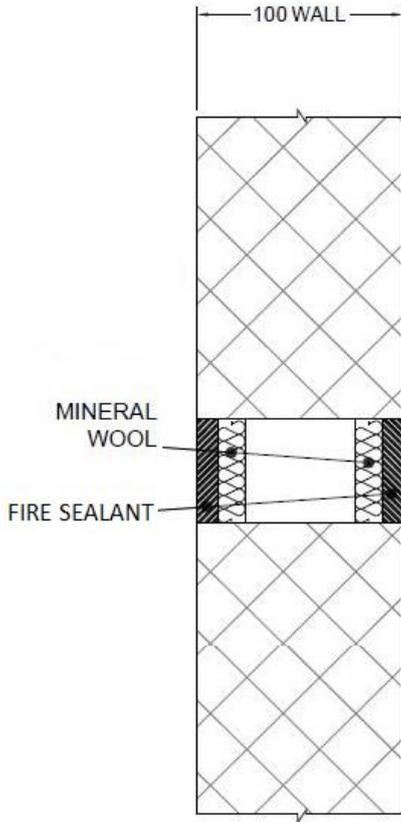
### A.1.1.1

Substrate	Depth (mm)	Backing	Classification
Plasterboard / concrete	12.5 min.	12.5 mm Rockwool Flexi 35 kg/m <sup>3</sup> plus 50 mm steel partition head track	<b>EI 120 – T – X – F – W 30</b>

**A.1.2 linear gap seals, within flexible walls up to 3m high or rigid walls min. 100 mm thick**

**Joint Seal:** TYTAN B1 FIRE SEALANT to both sides of the wall, joint widths of 30 mm

Construction details:



**A.1.2.1**

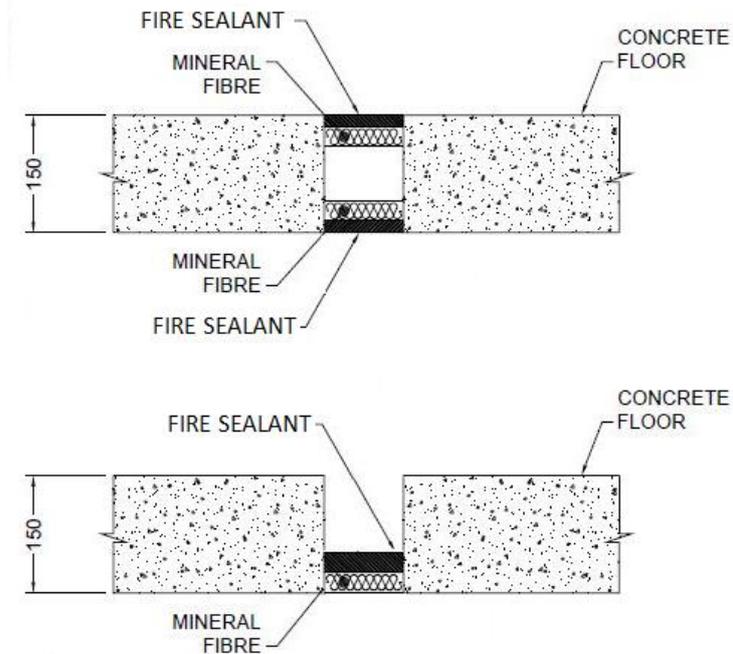
<b>Substrate</b>	<b>Depth (mm)</b>	<b>Backing</b>	<b>Classification</b>
Plasterboard /masonry/ concrete	12.5 min.	12.5 mm Rockwool Flexi 35 kg/m <sup>3</sup>	<b>EI 120 – T – X – F – W 30</b> <b>EI 120 – V – X – F – W 30</b>

**A.2 Rigid floor constructions according to 1.2.1 with floor thickness of minimum 150 mm**

**A.2.1 Linear joint or gap seal, between concrete floors and between the end of concrete floors and rigid walls**

**Joint Seal: TYTAN B1 FIRE SEALANT to one or both sides of the floor, joint widths of 30 mm**

Construction details:



**A.2.1.1**

Substrate	Depth (mm)	Backing	Classification
Concrete	15 min. to both faces	20 mm Rockwool Flexi 33 kg/m <sup>3</sup>	EI 240 – H – X – F – W 30
	25 mm	48 mm AES FIBRE	E 240 – H – X – F – W 30 EI 180 – H – X – F – W 30