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le futur en construction

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European Technical Assessment

**ETA-08/0114
of 02 sept 2020**

(English translation prepared by CSTB – Original version in French language)

GENERAL PART

Technical Assessment Body issuing the European Technical Assessment:

Centre Scientifique et Technique du Bâtiment (CSTB)

Trade name of the construction product:

Procédé FLASHING

Product family to which the construction product belongs:

Product Area Code: 03
One component bitumen – polyurethane resin for flashing application.

Manufacturer:

SOPREMA SAS
14, rue de saint nazaire
BP 70215
67025 STRASBOURG CEDEX 1

Manufacturing plant(s):

SOPREMA SAS
14, rue de saint nazaire
BP 70215
67025 STRASBOURG CEDEX 1

This European Technical Assessment contains:

9 pages including 1 Annex(es) which form 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) n° 030155-00-0402 (adopted draft EAD on march 22 2016) : "ONE COMPONENT BITUMEN-POLYURETHANE RESIN FOR FLASHING APPLICATION"

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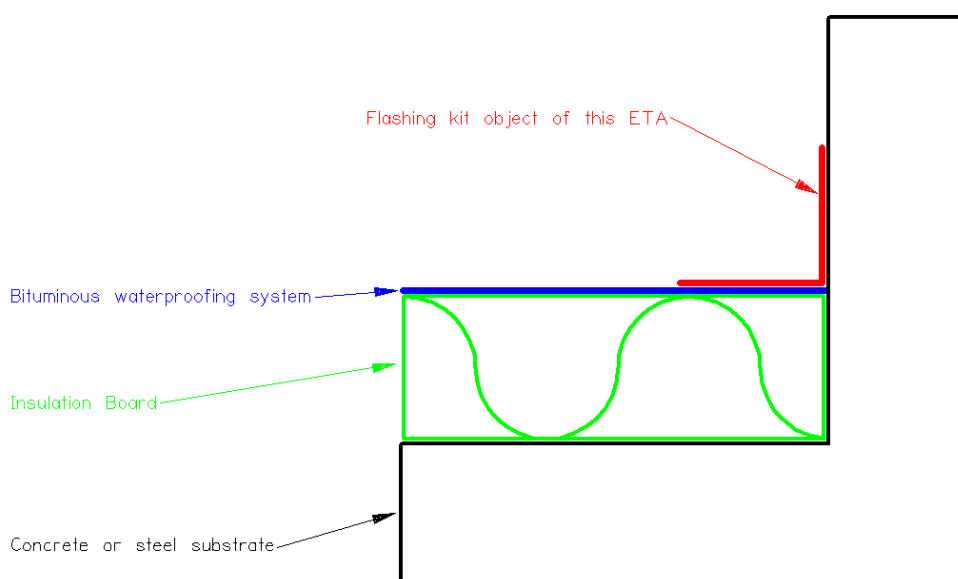
SPECIFIC PART

1. Technical description of the product

The roof waterproofing flashing system consists of one component bitumen-polyurethane resin for flashing application applied directly to bitumen waterproofing membrane used in the horizontal part of the roof.

The roof waterproofing flashing system is composed of:

- 1 layer of « ALSAN FLASHING » or « ALSAN FLASHING JARDIN » resin (900 g/m²)
- 1 layer of reinforcement « ALSAN TOILE DE RENFORT » put on the corner of the flashing with a minimum width of 10 cm
- 1 layer of « ALSAN FLASHING » or « ALSAN FLASHING JARDIN » resin (700g/m²)



The existing or new waterproofing system in horizontal parts of the roof, must be CE marked according to EN 13707 or according to ETAG 006 (used as EAD), and can only be:

- Flexible bituminous sheets mechanically fastened.
- Partially or fully bonded bituminous sheets
- Loose laid flexible bituminous sheets

Admissible substrates are:

- For horizontal part :
 - bitumen sheet with mineral protection
 - bitumen sheet with metallic protection.
 - bitumen sheet with sand finishing
 - bitumen sheet burned film finishing (black sheet)
- For vertical part (acroterion, metallic roofcurb)
 - Concrete (all finish)
 - Steel

The minimum thickness of the roof waterproofing flashing system applied is 1.2 mm.

NB : the width of the overlapping between the roof waterproofing flashing system and the bitumen sheets or the vertical part depend of the national regulation.

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

The roof waterproofing flashing system for the waterproofing of roof surfaces against penetration of atmospheric water.

The roof waterproofing flashing system shows certain levels of performance according to EAD n°15-03-0155-04.02 which facilitates the use taking account of national requirements.

In the manufacturer's technical dossier (MTD) to this European technical assessment (ETA) the manufacturer gave information concerning substrates which the roof waterproofing flashing system is suitable for and on how these substrates shall be pre-treated.

The verifications which are based on this ETA give reason for the assumption of an intended working life of the roof waterproofing flashing system of 10 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works

3. Performances of the product and references to the methods used for their assessment

Performances of the roof waterproofing flashing system, related to the basic requirements for construction works (hereinafter BWR), were determined according to the EAD n°15-03-0155-04.02.

These performances, given in the following paragraphs, are valid as long as the components are the ones described in § 1 and Annexe 1 of this ETA.

3.1 Mechanical resistance and stability (BWR 1)

Not relevant.

3.2 Safety in case of fire (BWR 2)

Reaction to fire: No performance assessed

External fire performance: No performance assessed

3.3 Hygiene, health and the environment (BWR 3)

3.3.1 Watertightness

Kit is watertight according to Technical Report EOTA 003.

3.3.2 Resistance against ageing

Performance and tensile properties, after exposure of accelerated ageing by heat, artificial weathering and accelerated ageing by hot water are kept.

3.3.3 Resistance to plant roots

Resin ALSAN FLASHING : No performance assessed.
Resin ALSAN FLASHING JARDIN: Resistant to root penetration.

3.3.4 Release of dangerous substances

According to Technical Report EOTA n° 034, the product does not contain dangerous substance.

3.4 Safety and accessibility in use (BWR 4)

3.4.1 Resistance to wind load

Bond strength on admissible substrates is > 50kPa.

3.4.2 Resistance to slipperiness

No performance determined.

3.5 Protection against noise (BWR 5)

No performance determined.

3.6 Energy economy and heat retention (BWR 6)

No performance determined.

3.7 Sustainable use of natural resources (BWR 7)

No performance determined.

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

According to Decision 97/556/EC (Decision of the Commission of 14 July 1997, L 229 of 20.8.1997, p. 15), as amended by Decision 2001/596/EC (Decision of the Commission of 8 January 2001, L 209 of 2.8.2001, p. 33), the systems of AVCP given in the following table apply:

Product	Intended uses	Level or Class	System
Liquid applied roof waterproofing kits	For all roof waterproofing uses	-	3

The systems of AVCP are described in Annex V of Regulation (EU) No 305/2011, as amended by Delegated Regulation (EU) No 568/2014.

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 at the CSTB.

Issued in Marne-la-Vallée on 02 sept 2020

by

Stéphane GILLIOT – DEB/FaCeT - CSTB

Applicable to roof waterproofing : Resin ALSAN FLASHING									
Properties	Number of specimen / tests	Test method	Dimension	Results					
				Smallest values	Highest values	Mean values			
New specimen									
External fire performance	No testing		No performance assessed						
Reaction to fire	No testing		No performance assessed						
Tensile properties									
Maximum tensile strength	5	EN ISO 527-3	Mpa	2,6	3,4	3			
Elongation			%	344	505	431			
Watertightness	3	TR 003	/	Watertight					
Flexibility at low temperature	5	EN 1109	°C	-36					
Resistance to plant root	No testing		No performance assessed						
Delamination									
burned plastic film upper face	5	TR 004	kPa	249	284	269			
Metallic autoprotection				369	424	401			
sand upper face				338	498	408			
mineral protection				336	421	371			
Concrete				899	1234	1107			
Steel				719	1347	935			
Resistance to dynamic indentation									
burned plastic film upper face	5	EN 12691 (method B)	m	2					
Metallic autoprotection									
sand upper face									
mineral protection									
Differential movement of insulation : - 20°C/500 cycles	1	§ 2.2.7 of EAD n°15-03-0155-04.02.	/	No cracks, no loosening of layers, no splits, no loss of adhesion : Watertight					
Differential movement on vertical and horizontal side	1	§ 2.2.8 of EAD n°15-03-0155-04.02.	/	No cracks, no loosening of layers, no splits, no loss of adhesion : Watertight					
Compressibility test for insulation materials compressibility (10%)									
C10 % of insulation	3	§ 2.2.9 of EAD n°15-03-0155-04.02.	kPa	81	91	85			
C10% of applied kit on concrete				80	89	84			
C10% of applied kit on steel				82	95	88			
Charge until ruin on concrete				245	267	254			
Charge until ruin on steel				246	>325	>325			
Determination of the resistance of sliding	3	§ 2.2.10 of EAD n°15-03-0155-04.02.	mm	0,0	0,0	0,0			
Compatibility product / membrane : Peel resistance									
Burned plastic film upper face									
Maximal resistance	3	§ 2.2.11 of EAD n°15-03-0155-04.02.	N/50 mm	Burned plastic film upper face					
Mean resistance				156	205	181			
				139	156	145			
Metallic autoprotection									
Maximal resistance							76	109	89
Mean resistance							36	39	38
Sand upper face									
Maximal resistance							222	231	225
Mean resistance							156	182	166
Mineral protection									
Maximal resistance							271	297	285
Mean resistance							235	259	247
Concrete									
Maximal resistance							222	226	224
Mean resistance							173	183	178
Steel									
Maximal resistance							81	166	131
Mean resistance							61	119	90

Roof waterproofing "ALSAN FLASHING"
Roof waterproofing flashing system
Characteristics of " Procédé FLASHING"
ANNEX 1 (1/4)

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Applicable to roof waterproofing : Resin ALSAN FLASHING									
Properties	Number of specimen / tests	Test method	Dimension	Results					
				Smallest values	Highest values	Mean values			
Resistance to thermal ageing (TR 011) during 84 days at 70°C									
Flexibility at low temperature	5	EN 1109	°C	-36					
Tensile properties									
Maximum tensile strength	5	EN ISO 527-3	Mpa	2,3	3,7	3,1			
Elongation			%	459	536	510			
Resistance to thermal ageing (TR 011) during 1 month at 80°C									
Differential movement of insulation : - 20°C/200 cycles	1	§ 2.2.8 of EAD n°15-03-0155-04.02.	/	No cracks, no loosening of layers, no splits, no loss of adhesion : Watertight					
Compatibility product / membrane : Peel resistance									
Burned plastic film upper face				Burned plastic film upper face					
Maximal resistance	3	§ 2.2.11 of EAD n°15-03-0155-04.02.	N/50 mm	155	173	167			
Mean resistance				127	145	134			
Metallic autoprotection				Metallic autoprotection					
Maximal resistance				159	205	178			
Mean resistance				54	113	89			
Sand upper face				Sand upper face					
Maximal resistance				198	238	215			
Mean resistance				159	162	161			
Mineral protection				Mineral protection					
Maximal resistance				246	261	254			
Mean resistance				221	237	227			
Concrete				Concrete					
Maximal resistance				179	320	242			
Mean resistance				162	253	207			
Steel				Steel					
Maximal resistance				235	270	248			
Mean resistance	170	204	184						
Resistance to UV ageing (TR 010) during 1000h at 60°C									
Flexibility at low temperature	5	EN 1109	°C	-36					
Tensile properties									
Maximum tensile strength	5	NF EN ISO 527-3	MPa	2,1	2,8	2,5			
Elongation			%	399	530	478			
Resistance to stagnant water ageing (TR 012) during 30 days at 60°C									
Resistance to dynamic indentation									
burned plastic film upper face	5	EN 12691 (method B)	m	2					
Metallic autoprotection									
sand upper face									
mineral protection									
Compatibility product / membrane : Peel resistance									
Concrete				Concrete					
Maximal resistance	5	§ 2.2.11 of EAD n°15-03-0155-04.02.	N/50 mm	170	222	197			
Mean resistance				160	206				
Steel				Steel					
Maximal resistance				170	217	188			
Mean resistance	130	163	144						

Roof waterproofing "ALSAN FLASHING"
Roof waterproofing flashing system
Characteristics of " Procédé FLASHING "
ANNEX 1 (2/4)
 of ETA-08/0114

Applicable to roof waterproofing : Resin ALSAN FLASHING JARDIN									
Properties	Number of specimen / tests	Test method	Dimension	Results					
				Smallest values	Highest values	Mean values			
New specimen									
External fire performance	No testing		No performance assessed						
Reaction to fire	No testing		No performance assessed						
Tensile properties									
Maximum tensile strength	5	EN ISO 527-3	Mpa	4,4	5,5	5,1			
Elongation			%	418	463	435			
Watertightness	3	TR 003	/	Watertight					
Flexibility at low temperature	5	EN 1109	°C	-36					
Resistance to plant root	6	EN 13 948	/	No root penetration - Watertight					
Delamination									
burned plastic film upper face	5	TR 004	kPa	249	284	269			
Metallic autoprotection				369	424	401			
sand upper face				338	498	408			
mineral protection				336	421	371			
Concrete				899	1234	1107			
Steel				599	827	752			
Resistance to dynamic indentation									
burned plastic film upper face	5	EN 12691 (method B)	m	2					
Metallic autoprotection									
sand upper face									
mineral protection									
Differential movement of insulation : - 20°C/500 cycles	1	§ 2.2.7 of EAD n°15-03-0155-04.02.	/	No cracks, no loosening of layers, no splits, no loss of adhesion : Watertight					
Differential movement on vertical and horizontal side	1	§ 2.2.8 of EAD n°15-03-0155-04.02.		No cracks, no loosening of layers, no splits, no loss of adhesion : Watertight					
Compressibility test for insulation materials compressibility (10%)									
C10 % of insulation	3	§ 2.2.9 of EAD n°15-03-0155-04.02.	kPa	81	91	85			
C10% of applied kit on concrete				80	89	84			
C10% of applied kit on steel				82	95	88			
Charge until ruin on concrete				245	267	254			
Charge until ruin on steel				246	>325	>325			
Determination of the resistance of sliding	3	§ 2.2.10 of EAD n°15-03-0155-04.02.	mm	0,0	0,0	0,0			
Compatibility product / membrane : Peel resistance									
Burned plastic film upper face				Burned plastic film upper face					
Maximal resistance	3	§ 2.2.11 of EAD n°15-03-0155-04.02.	N/50 mm	99	121	106			
Mean resistance				62	92	77			
Metallic autoprotection				Metallic autoprotection					
Maximal resistance				136	187	166			
Mean resistance				98	132	109			
Sand upper face				Sand upper face					
Maximal resistance				108	115	113			
Mean resistance				77	85	81			
Mineral protection				Mineral protection					
Maximal resistance				202	242	212			
Mean resistance				160	218	182			
Concrete				Concrete					
Maximal resistance				163	186	176			
Mean resistance				125	146	138			
Steel				Steel					
Maximal resistance				121	133	130			
Mean resistance				80	94	88			
Roof waterproofing "ALSAN FLASHING JARDIN"				ANNEX 1 (3/4) of ETA-08/0114					
<i>Roof waterproofing flashing system</i>									
Characteristics of " Procédé FLASHING "									

Appllicable to roof waterproofing : Resin ALSAN FLASHING JARDIN									
Properties	Number of specimen / tests	Test method	Dimension	Results					
				Smallest values	Highest values	Mean values			
Resistance to thermal ageing (TR 011) during 84 days at 70°C									
Flexibility at low temperature	5	EN 1109	°C	-35					
Tensile properties									
Maximum tensile strength	5	EN ISO 527-3	Mpa	4,1	4,5	4,3			
Elongation			%	471	495	478			
Resistance to thermal ageing (TR 011) during 1 month at 80°C									
Differential movement of insulation : - 20°C/200 cycles	1	§ 2.2.8 of EAD n°15-03-0155-04.02.	/	No cracks, no loosening of layers, no splits, no loss of adhesion : Watertight					
Compatibility product / membrane : Peel resistance									
Burned plastic film upper face				Burned plastic film upper face					
Maximal resistance	3	§ 2.2.11 of EAD n°15-03-0155-04.02.	N/50 mm	155	173	167			
Mean resistance				127	145	134			
Metallic autoprotection				Metallic autoprotection					
Maximal resistance				159	205	178			
Mean resistance				54	113	89			
Sand upper face				Sand upper face					
Maximal resistance				198	238	215			
Mean resistance				159	162	161			
Mineral protection				Mineral protection					
Maximal resistance				246	261	254			
Mean resistance				221	237	227			
Concrete				Concrete					
Maximal resistance				292	325	306			
Mean resistance				195	274	234			
Steel				Steel					
Maximal resistance				118	178	144			
Mean resistance	80	113	97						
Resistance to UV ageing (TR 010) during 1000h at 60°C									
Flexibility at low temperature	5	EN 1109	°C	-36					
Tensile properties									
Maximum tensile strength	5	NF EN ISO 527-3	MPa	3,9	4,8	4,5			
Elongation			%	471	495	478			
Resistance to stagnant water ageing (TR 012) during 30 days at 60°C									
Resistance to dynamic indentation									
burned plastic film upper face	5	EN 12691 (method B)	m	2					
Metallic autoprotection									
sand upper face									
mineral protection									
Compatibility product / membrane : Peel resistance									
Concrete				Concrete					
Maximal resistance	5	§ 2.2.11 of EAD n°15-03-0155-04.02.	N/50 mm	224	250	237			
Mean resistance				cohesive failure					
Steel				Steel					
Maximal resistance				207	228	219			
Mean resistance				cohesive failure					

Roof waterproofing "ALSAN FLASHING JARDIN"

Roof waterproofing flashing system

Characteristics of " Procédé FLASHING "

ANNEX 1 (4/4)

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