Ovaj prijevod sastoji se
od 11 stranica
Broj: 167/2020
Datum: 18. ožujka 2020.

Ovjereni prijevod s engleskog jezika

Instytut Techniki Budowlanej

Istraživački i razvojni radovi | Akreditirana grupacija laboratorija |
Prijavljeno tijelo br. 1488 | Član EOTA-e | Certificirani sustavi upravljanja ISO 9001, ISO 27001

KLASIFIKACIJA VATROOTPORNOSTI U SKLADU S EN 13501-2:2016

Klijent:	*SELENA FM S.A.* *2-4, Strzegomska St.* *53-611 Wrocław* *Poljska*
Izradio:	Odjel za istraživanje požara Institut za istraživanja u vezi s izgradnjom *(Fire Research Department,* *Building Research Institute)* 1, Filtrowa St. PL 00-611 Varšava
Naziv proizvoda:	*Brtve linearnih spojeva izrađene pomoću PREMIUM B1 STRAW pjene za nanošenje slamčicom ili PREMIUM B1 GUN pjene za nanošenje pištoljem društva Orion PU Sp.z.o.o.*
Klasifikacijsko izvješće br.:	06052/15/R29NP/ENG
Br. izdanja	1 Br. primjerka: 1
Datum izdavanja	13.12.2017.

Ovo izvješće o klasifikaciji sastoji se od 11 stranica i može se koristit ili reproducirati samo u cijelosti.

1. UVOD

Izvješće o klasifikaciji utvrđuje klasifikaciju otpornosti na vatru pripisanu ispitnom elementu – brtve linearnih spojeva u zidu, izrađene pomoću PREMIUM B1 STRAW pjene za nanošenje slamčicom ili PREMIUM B1 GUN pjene za nanošenje pištoljem društva Orion PU Sp. z.o.o., u skladu s postupcima navedenima u normi EN 13501-2:2016.

2 DETALJI O KLASIFICIRANOM PROIZVODU

2.1. Općenito

Element – brtve linearnih spojeva u zidu, izrađene pomoću PREMIUM B1 pjene za nanošenje slamčicom ili PREMIUM B1 pjene za nanošenje pištoljem društva Orion PU Sp. z.o.o.

2.2. Opis

Element - brtve linearnih spojeva u zidu, izrađene pomoću PREMIUM B1 pjene za nanošenje slamčicom ili PREMIUM B1 pjene za nanošenje pištoljem opisane su u nastavku.

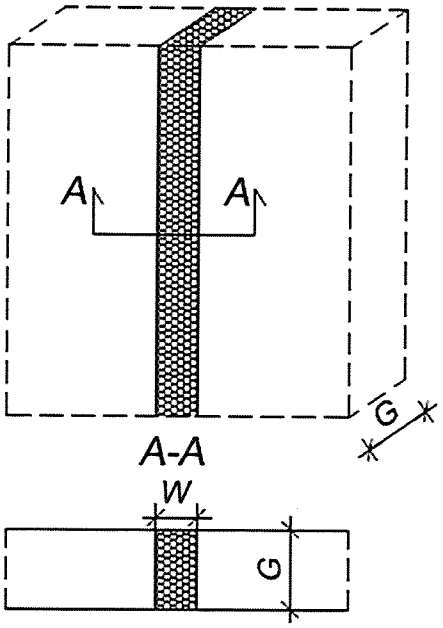
Brtve linearnih spojeva izrađene su pomoću:

a) vatrootporne poliuretanske pjene PREMIUM B1 pjene za nanošenje slamčicom – verzija sa slamčicom – nanošenje poliuretanske pjene elastičnom slamčicom, ili

b) vatrootporne poliuretanske pjene BREMIUM B1 GUN – verzija s pištoljem – primjena poliuretanske pjene pištoljem.

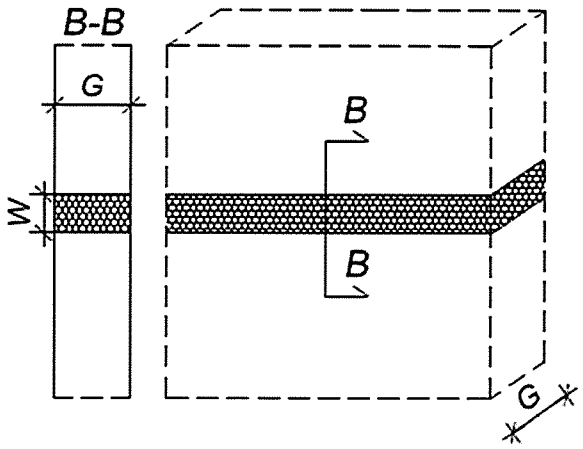
Pregledi i presjeci brtvi linearnih spojeva prikazane su na slici 1. i 2.

2.2.1. Tip 1 –brtve vertikalnih linearnih spojeva u vertikalnoj potpornoj konstrukciji



Slika 1. Pregled i presjek brtve vertikalnih linearnih spojeva u zidu

2.2.2. Tip 2 - brtve horizontalnih linearnih spojeva u vertikalnoj potpornoj konstrukciji



Slika 2.: Pregled i presjek brtve horizontalnih linearnih spojeva u zidu

3. ISPITNA IZVJEŠĆA/PROŠIRENO IZVJEŠĆE O PRIMJENI I REZULTATI ISPITIVANJA NAVEDENA U PRILOG KLASIFIKACIJI

3.1. Ispitno izvješće/proširena izvješća o primjeni

Naziv laboratorija	Naziv klijenta	Izvješće ref.br.	Ispitno izvješće
Odjel za istraživanje požara Institut za istraživanja u vezi s izgradnjom *(Fire Research Department, Building Research Institute)*, 2, Przemysłowa St. 26-670 Pionki	SELENA FM S.A. 2-4, Strzegomska St. 53-611 Wrocław Poljska	LZP01- 00867/17/Z00NZP	PN-EN 1366-4 +A1:2011
Odjel za istraživanje požara Institut za istraživanja u vezi s izgradnjom *(Fire Research Department, Building Research Institute)*, 2, Przemysłowa St. 26-670 Pionki	SELENA FM S.A. 2-4, Strzegomska St. 53-611 Wrocław Poljska	LZP01- 06052/15/R29NP	PN-EN 1366-4 +A1:2011

3.2. Rezultati ispitivanja

Rezultati ispitivanja						
Broj brtve linearnog spoja u skladu s odgovarajućim ispitnim izvješćem	**Tip brtve linearnog spoja u skladu s točkom 2.2 / širina brtve linearnog spoja**	**Orijentacija brtve linearnog spoja u skladu s EN 13501-2**	**E - integritet**			**I – toplinska izolacija**
			Pukotine ili rastvori veći od danih dimenzija	**Zapaljenje blazinice**	**Pukotine ili rastvori veći od danih dimenzija**	**Maksimalno povećanje temperature u bilo kojoj točki, ograničeno na 180 K iznad početne prosječne temperature**
			Kriterij nije postignut u dano vrijeme, [min]			
Ispitno izvješće br. LZP01-06052/15/R29NP						
Brtve linearnih spojeva izrađene pomoću **PREMIUM B1 STRAW pjene, pri debljini zida od 150 mm** izrađenog od blokova porastog betona gustoće 600 kg/m^3						
1	Tip 2 / 30 mm	T	240	39	240	240
2	Tip 2 / 20 mm	T	240	70	240	78
3	Tip 2 / 10 mm	T	240	173	240	183
19	Tip 1 / 30 mm	V	240	71	240	240
20	Tip 1 / 20 mm	V	240	128	240	118
21	Tip 1 / 10 mm	V	240	240	240	223
Brtve linearnih spojeva izrađene pomoću **PREMIUM B1 GUN pjene, pri debljini zida od 150 mm** izrađenog od blokova porastog betona gustoće 600 kg/m^3						
7	Tip 2 / 30 mm	T	240	44	240	51
8	Tip 2 / 20 mm	T	240	94	240	95
9	Tip 2 / 10 mm	T	240	181	240	195
22	Tip 1 / 30 mm	V	240	63	240	61
23	Tip 1 / 20 mm	V	240	103	240	100
24	Tip 1 / 10 mm	V	240	108	240	240

Rezultati ispitivanja

Broj brtve linearnog spoja u skladu s odgovarajućim ispitnim izvješćem	Tip brtve linearnog spoja u skladu s točkom 2.2 / širina brtve linearnog spoja	Orijentacija brtve linearnog spoja u skladu s EN 13501-2	E - integritet			I – toplinska izolacija
			Pukotine ili rastvori veći od danih dimenzija	Zapaljenje blazinice	Pukotine ili rastvori veći od danih dimenzija	Maksimalno povećanje temperature u bilo kojoj točki, ograničeno na 180 K iznad početne prosječne temperature
			Kriterij nije postignut u dano vrijeme, [min]			
Ispitno izvješće br. LZP01-00867/17/Z00NZP						
Brtve linearnih spojeva izrađene pomoću **PREMIUM B1 STRAW pjene, pri debljini zida od 200 mm** izrađenog od blokova porastog betona gustoće 600 kg/m^3						
1	Tip 2 / 30 mm	T	240	77	240	240
3	Tip 2 / 10 mm	T	240	198	240	195
12	Tip 1 / 30 mm	V	240	99	240	220
10	Tip 1 / 20 mm	V	240	163	240	240
19	Tip 1 / 10 mm	V	240	211	240	215
Brtve linearnih spojeva izrađene pomoću **PREMIUM B1 GUN pjene, pri debljini zida od 200 mm** izrađenog od blokova porastog betona gustoće 600 kg/m^3						
2	Tip 2 / 30 mm	T	240	240	87	103
4	Tip 2 / 10 mm	T	240	240	97	94
13	Tip 1 / 30 mm	V	240	240	92	240
9	Tip 1 / 20 mm	V	240	142	240	225
11	Tip 1 / 10 mm	V	240	240	240	240
Brtve linearnih spojeva izrađene pomoću **PREMIUM B1 STRAW pjene, pri debljini zida od 240 mm** izrađenog od blokova porastog betona gustoće 600 kg/m^3						
5	Tip 2 / 30 mm	T	240	103	240	102
7	Tip 2 / 10 mm	T	240	240	240	240
15	Tip 1 / 30 mm	V	240	115	240	240
17	Tip 1 / 20 mm	V	240	240	240	240
20	Tip 1 / 10 mm	V	240	240	240	240
Brtve linearnih spojeva izrađene pomoću **PREMIUM B1 GUN pjene, pri debljini zida od 240 mm** izrađenog od blokova porastog betona od 600 kg/m^3						
6	Tip 2 / 30 mm	T	240	240	126	240
8	Tip 2 / 10 mm	T	240	213	240	240
14	Tip 1 / 30 mm	V	240	112	240	115
18	Tip 1 / 20 mm	V	240	239	240	240
16	Tip 1 / 10 mm	V	240	240	240	240

4. KLASIFIKACIJA I PODRUČJE PRIMJENE

3.1. Referenca klasifikacije

Ova klasifikacija provedena je u sukladnosti s Odredbom 7. norme EN 13501-2:3016.

4.2. Klasifikacija

Brtve linearnih spojeva u zidu klasificirane su u skladu sa sljedećim kombinacijama parametara radnih svojstava i razreda, kako je primjereno:

R	**E**	**I**	**W**		**t**	**t**	**-**	**M**	**S**	**C**	**IncSlow**	**sn**	**ef**	**r**

4.2.1. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 STRAW** pjene za nanošenje slamčicom, pri debljini zida od **min. 150 mm**, u skladu s točkom 2.2.1

Razred vatrootpornosti: EI 180 – V – X – F – W 10 *)

Razred vatrootpornosti: EI 90 – V – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 60 – V – X – F – W 21 do 30 *)

4.2.2. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 STRAW** pjene za nanošenje slamčicom, pri debljini zida od **min. 200 mm**, u skladu s točkom 2.2.1

Razred vatrootpornosti: EI 180 – V – X – F – W 10 *)

Razred vatrootpornosti: EI 120 – V – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 90 – V – X – F – W 21 do 30 *)

4.2.3. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 STRAW** pjene za nanošenje slamčicom, pri debljini zida od **min. 240 mm**, u skladu s točkom 2.2.1

Razred vatrootpornosti: EI 240 – V – X – F – W 10 *)

Razred vatrootpornosti: EI 240 – V – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 90 – V – X – F – W 21 do 30 *)

4.2.4. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 STRAW** pjene za nanošenje slamčicom, pri debljini zida od **min. 150 mm**, u skladu s točkom 2.2.2

Razred vatrootpornosti: EI 180 – T – X – F – W 10 *)

Razred vatrootpornosti: EI 60 – T – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 60 – T – X – F – W 21 do 30 *)

4.2.5. Razred vatrootpornosti brtve linearnog spoja **Tipa 2** izrađene pomoću **PREMIUM B1 STRAW** pjene za nanošenje slamčicom, pri debljini zida od **min. 200 mm**, u skladu s točkom 2.2.2

Razred vatrootpornosti: EI 180 – T – X – F – W 10 *)

Razred vatrootpornosti: EI 60 – T – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 60 – T – X – F – W 21 do 30 *)

4.2.6. Razred vatrootpornosti brtve linearnog spoja **Tipa 2** izrađene pomoću **PREMIUM B1 STRAW** pjene za nanošenje slamčicom, pri debljini zida od **min. 240 mm**, u skladu s točkom 2.2.2.

Razred vatrootpornosti: EI 240 – T – X – F – W 10 *)

Razred vatrootpornosti: EI 90 – T – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 90 – T– X – F – W 21 do 30 *)

4.2.7. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 GUN** pjene za nanošenje pištoljem, pri debljini zida od **min. 150 mm**, u skladu s točkom 2.2.1

Razred vatrootpornosti: EI 90 – V – X – F – W 10 *)

Razred vatrootpornosti: EI 90 – V – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 60 – V – X – F – W 21 do 30 *)

4.2.8. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 GUN** pjene za nanošenje pištoljem, pri debljini zida od **min. 200 mm**, u skladu s točkom 2.2.1

Razred vatrootpornosti: EI 240 – V – X – F – W 10 *)

Razred vatrootpornosti: EI 120 – V – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 90 – V – X – F – W 21 do 30 *)

4.2.9. Razred vatrootpornosti brtve linearnog spoja **Tipa 1** izrađene pomoću **PREMIUM B1 GUN** pjene za nanošenje pištoljem, pri debljini zida od **min. 240 mm**, u skladu s točkom 2.2.1.

Razred vatrootpornosti: EI 240 – V – X – F – W 10 *)

Razred vatrootpornosti: EI 180 – V – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 90 – V– X – F – W 21 do 30 *)

4.2.10. Razred vatrootpornosti brtve linearnog spoja **Tipa 2** izrađene pomoću **PREMIUM B1 GUN** pjene za nanošenje pištoljem, pri debljini zida od **min. 150 mm**, u skladu s točkom 2.2.2

Razred vatrootpornosti: EI 180 – T – X – F – W 10 *)

Razred vatrootpornosti: EI 90 – T – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 30 – T – X – F – W 21 do 30 *)

4.2.11. Razred vatrootpornosti brtve linearnog spoja **Tipa 2** izrađene pomoću **PREMIUM B1 GUN** pjene za nanošenje pištoljem, pri debljini zida od **min. 200 mm**, u skladu s točkom 2.2.2

Razred vatrootpornosti: EI 180 – T – X – F – W 10 *)

Razred vatrootpornosti: EI 90 – T – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 60 – T – X – F – W 21 do 30 *)

4.2.12. Razred vatrootpornosti brtve linearnog spoja **Tipa 2** izrađene pomoću **PREMIUM B1 GUN** pjene za nanošenje pištoljem, pri debljini zida od **min. 240 mm**, u skladu s točkom 2.2.2

Razred vatrootpornosti: EI 180 – T – X – F – W 10 *)

Razred vatrootpornosti: EI 120 – T – X – F – W 11 do 20 *)

Razred vatrootpornosti: EI 120 – T – X – F – W 21 do 30 *)

***) Ključ**

E – integritet;

I – toplinska izolacija;

V – orijentacija: vertikalna potporna konstrukcija – vertikalni spoj

T – orijentacija: vertikalna potporna konstrukcija – horizontalni spoj;

X – bez pomaka;

F – brtva učinjena na gradilištu;

W – raspon širine spoja (u mm).

4.3. Područje primjene

Ova klasifikacija vrijedi za sljedeće krajnje primjene u skladu s normom EN 1366-4:2006+A1:2010:

4.3.1. Moguća orijentacija brtvi linearnih spojeva u skladu s PN-EN 1366-4+A1:2011:

- B – vertikalni linearni spoj u vertikalnoj potpornoj konstrukciji – linearni spojevi klasificirani u točki 4.2.1. – 4.2.3. i 4.2.7. – 4.2.9.;

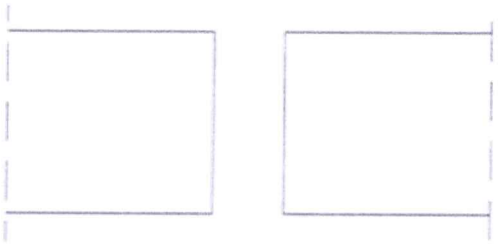
- C – horizontalni linearni spoj u vertikalnoj potpornoj konstrukciji – linearni spojevi klasificirani u točki 4.2.4. – 4.2.6. i 4.2.10. – 4.2.12.;

4.3.2. Klasifikacija navedena u točkama 4.2.1., 4.2.4., 4.2.7. i 4.2.10. vrijedi za brtve linearnih spojeva u elementima za odvajanje od porastog betona, betona, betonskih blokova ili zidanih zidova debljine 150 mm i gustoće min 600 kg/m^3.

4.3.3. Klasifikacija navedena u točkama 4.2.2., 4.2.5., 4.2.8. i 4.2.11. vrijedi za brtve linearnih spojeva u elementima za odvajanje od porastog betona, betona, betonskih blokova ili zidanih zidova debljine 200 mm i gustoće min 600 kg/m^3.

4.3.4. Klasifikacija navedena u točkama 4.2.3., 4.2.6., 4.2.9. i 4.2.12. vrijedi za brtve linearnih spojeva u elementima za odvajanje od porastog betona, betona, betonskih blokova ili zidanih zidova debljine 240 mm i gustoće min 600 kg/m^3.

4.3.5. Moguća pozicija brtvi linearnih spojeva u potpornoj konstrukciji naznačena je na slici 1. i 2. Klasifikacija navedena u točki 4.2. primjenjiva je samo na površine elemenata za brtvljene s ravnim paralelnim rubom, u skladu sa slikom 3.



Slika 3.: Rubovi elemenata za brtvljenje

5 OGRANIČENJA

Ova klasifikacija ostaje valjana sve dok:

- se ne mijenjaju ispitne metode,

- se ne mijenja proizvodni standard ili tehničko odobrenje,

- izmjene u konstrukciji ili materijalima ne premašuju granice područja primjene navedene u 4.3.

Ovo izvješće o klasifikaciji izdano je u 3 primjerka. Dodatne potpisane kopije može izdati Odjel za istraživanje požara (*Fire Research Department)* ITB-a samo na zahtjev vlasnika izvješća.

Ovaj dokument o klasifikaciji ne predstavlja odobrenje tipa ili certifikaciju proizvoda.

U slučaju nejasnoća, osnova za tumačenje ovog izvješća je poljska jezična verzija.

POTPISANO

/potpis nečitak/
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magistar inženjer građevinarstva

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ODOBRENO

/potpis nečitak/
Marek Łukomski,
magistar inženjer građevinarstva

Ja, WIDIAN ZEITOUN, stalni sudski tumač za engleski, francuski i češki jezik, imenovana rješenjem predsjednika Županijskog suda u Zagrebu broj 4 Su-1371/18 od 15.4.2019. potvrđujem da gornji prijevod potpuno odgovara izvorniku sastavljenom na engleskom jeziku.
Zagreb, 18. ožujka 2020.
Br. 167/2020

Widian Zeitoun

Instytut Techniki Budowlanej
Research and development works | Accredited Group of Laboratories |
Notified Body N° 1488 | EOTA member | Certified management systems ISO 9001, ISO 27001

CLASSIFICATION OF FIRE RESISTANCE

IN ACCORDANCE WITH EN 13501-2:2016

Sponsor:	*SELENA FM S.A.* *2-4, Strzegomska St.* *53-611 Wrocław* *Poland*
Prepared by:	**Fire Research Department** **Building Research Institute** **1, Filtrowa St.** **PL 00-611 Warsaw**
Product name:	***Linear joint seals made using PREMIUM B1 STRAW foam or PREMIUM B1 GUN foam of Orion PU Sp. z o.o. company***
Classification report No.:	**06052/15/R29NP/ENG**
Issue number:	**1** **Copy No. 1**
Date of issue:	**2017.12.13**

This classification report consists of 11 pages and only to be used or reproduced in its entirety.

1 INTRODUCTION

The classification report defines the resistance to fire classification assigned to the element – linear joint seals in wall, made using PREMIUM B1 STRAW foam or PREMIUM B1 GUN foam of Orion PU Sp. z o.o. company, in accordance with the procedures given in EN 13501-2:2016.

2 DETAILS OF CLASSIFIED PRODUCT

2.1 General

Element – linear joint seals in wall, made using PREMIUM B1 STRAW foam or PREMIUM B1 GUN foam of Orion PU Sp. z o.o. company.

2.2 Description

Element – linear joint seals made using PREMIUM B1 STRAW foam or PREMIUM B1 GUN foam are described below.

Linear joint seals are made using:

a) fireproof polyurethane foam PREMIUM B1 STRAW – straw version – application of the polyurethane foam by elastic straw, or
b) fireproof polyurethane foam PREMIUM B1 GUN – gun version – application of the polyurethane foam by gun.

Views and cross-sections of the linear joint seals are presented in fig. 1 and 2.

2.2.1. Type 1 – vertical linear joint seals in vertical supporting construction

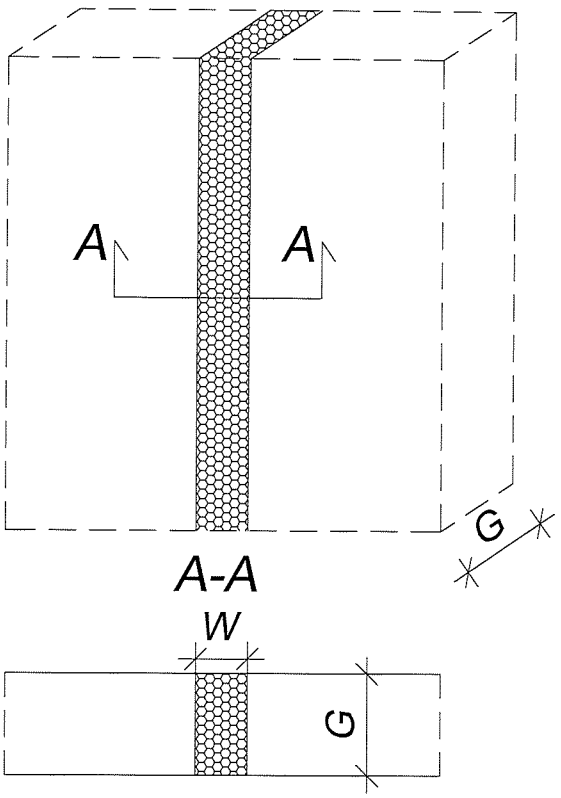

Fig. 1 View and cross-section of the vertical linear joint seal in wall

2.2.2. Type 2 – horizontal linear joint seals in vertical supporting construction

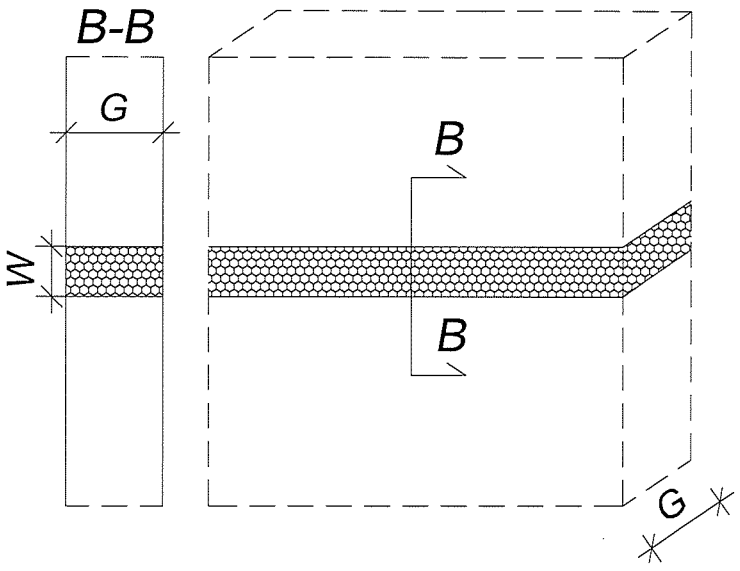

Fig. 2 View and cross-section of the horizontal linear joint seal in wall

3 TEST REPORTS/EXTENDED APPLICATION REPORTS AND TEST RESULTS IN SUPPORT OF THE CLASSIFICATION

3.1 Test report/extended application reports

Name of laboratory	Name of sponsor	Report ref. No	Test standard
Fire Testing Laboratory Building Research Institute 2, Przemysłowa St. 26-670 Pionki	SELENA FM S.A. 2-4, Strzegomska St. 53-611 Wrocław Poland	LZP01- 00867/17/Z00NZP	PN-EN 1366-4 +A1:2011
Fire Testing Laboratory Building Research Institute 2, Przemysłowa St. 26-670 Pionki	SELENA FM S.A. 2-4, Strzegomska St. 53-611 Wrocław Poland	LZP01- 06052/15/R29NP	PN-EN 1366-4 +A1:2011

3.2 Test results

Test results						
Linear joint seal numbering in accordance with the appropriate test report	**Linear joint seal type in accordance with p. 2.2 / width of the linear joint seal**	**Linear joint seal orientation in accordance with EN 13501-2**	**E - integrity**			**I – thermal insulation**
			Cracks or openings in excess of given dimensions	**Ignition of a cotton pad**	**Cracks or openings in excess of given dimensions**	**Maximum temperature rise at any point, limited to 180 K above the initial mean temperature**
			Criterion not achieved to the time, [min]			
Test Report No. LZP01-06052/15/R29NP						
Linear joint seals made using **PREMIUM B1 STRAW foam, in wall thickness of 150 mm** made of aerated concrete blocks density of 600 kg/m^3						
1	Type 2 / 30 mm	T	240	39	240	240
2	Type 2 / 20 mm	T	240	70	240	78
3	Type 2 / 10 mm	T	240	173	240	183
19	Type 1 / 30 mm	V	240	71	240	240
20	Type 1 / 20 mm	V	240	128	240	118
21	Type 1 / 10 mm	V	240	240	240	223
Linear joint seals made using **PREMIUM B1 GUN foam, in wall thickness of 150 mm** made of aerated concrete blocks density of 600 kg/m^3						
7	Type 2 / 30 mm	T	240	44	240	51
8	Type 2 / 20 mm	T	240	94	240	95
9	Type 2 / 10 mm	T	240	181	240	195
22	Type 1 / 30 mm	V	240	63	240	61
23	Type 1 / 20 mm	V	240	103	240	100
24	Type 1 / 10 mm	V	240	108	240	240

Test results

Linear joint seal numbering in accordance with the appropriate test report	Linear joint seal type in accordance with p. 2.2 / width of the linear joint seal	Linear joint seal orientation in accordance with EN 13501-2	E - integrity			I – thermal insulation
			Cracks or openings in excess of given dimensions	Ignition of a cotton pad	Cracks or openings in excess of given dimensions	Maximum temperature rise at any point, limited to 180 K above the initial mean temperature
			Criterion not achieved to the time, [min]			
Test Report No. LZP01-00867/17/Z00NZP						
Linear joint seals made using **PREMIUM B1 STRAW foam, in wall thickness of 200 mm** made of aerated concrete blocks density of 600 kg/m^3						
1	Type 2 / 30 mm	T	240	77	240	240
3	Type 2 / 10 mm	T	240	198	240	195
12	Type 1 / 30 mm	V	240	99	240	220
10	Type 1 / 20 mm	V	240	163	240	240
19	Type 1 / 10 mm	V	240	211	240	215
Linear joint seals made using **PREMIUM B1 GUN foam, in wall thickness of 200 mm** made of aerated concrete blocks density of 600 kg/m^3						
2	Type 2 / 30 mm	T	240	240	87	103
4	Type 2 / 10 mm	T	240	240	97	94
13	Type 1 / 30 mm	V	240	240	92	240
9	Type 1 / 20 mm	V	240	142	240	225
11	Type 1 / 10 mm	V	240	240	240	240
Linear joint seals made using **PREMIUM B1 STRAW foam, in wall thickness of 240 mm** made of aerated concrete blocks density of 600 kg/m^3						
5	Type 2 / 30 mm	T	240	103	240	102
7	Type 2 / 10 mm	T	240	240	240	240
15	Type 1 / 30 mm	V	240	115	240	240
17	Type 1 / 20 mm	V	240	240	240	240
20	Type 1 / 10 mm	V	240	240	240	240
Linear joint seals made using **PREMIUM B1 GUN foam, in wall thickness of 240 mm** made of aerated concrete blocks density of 600 kg/m^3						
6	Type 2 / 30 mm	T	240	240	126	240
8	Type 2 / 10 mm	T	240	213	240	240
14	Type 1 / 30 mm	V	240	112	240	115
18	Type 1 / 20 mm	V	240	239	240	240
16	Type 1 / 10 mm	V	240	240	240	240

4 CLASSIFICATION AND FIELD OF APPLICATION

4.1 Reference of classification

This classification has been carried out in accordance with Clause 7 of EN 13501-2:2016.

4.2 Classification

The linear joint seals in wall are classified according to the following combinations of performance parameters and classes as appropriate:

R	E	I	W		t	t	-	M	S	C	IncSlow	sn	ef	r

4.2.1 Fire resistance class of linear joint seal **Type 1** made using **PREMIUM B1 STRAW** foam, in wall thickness of **min. 150 mm**, in accordance with p. 2.2.1

Fire resistance class: EI 180 – V – X – F – W 10 *)

Fire resistance class: EI 90 – V – X – F – W 11 to 20 *)

Fire resistance class: EI 60 – V – X – F – W 21 to 30 *)

4.2.2 Fire resistance class of linear joint seal **Type 1** made using **PREMIUM B1 STRAW** foam, in wall thickness of **min. 200 mm**, in accordance with p. 2.2.1

Fire resistance class: EI 180 – V – X – F – W 10 *)

Fire resistance class: EI 120 – V – X – F – W 11 to 20 *)

Fire resistance class: EI 90 – V – X – F – W 21 to 30 *)

4.2.3 Fire resistance class of linear joint seal **Type 1** made using **PREMIUM B1 STRAW** foam, in wall thickness of **min. 240 mm**, in accordance with p. 2.2.1

Fire resistance class: EI 240 – V – X – F – W 10 *)
Fire resistance class: EI 240 – V – X – F – W 11 to 20 *)
Fire resistance class: EI 90 – V – X – F – W 21 to 30 *)

4.2.4 Fire resistance class of linear joint seal **Type 2** made using **PREMIUM B1 STRAW** foam, in wall thickness of **min. 150 mm**, in accordance with p. 2.2.2

Fire resistance class: EI 120 – T – X – F – W 10 *)
Fire resistance class: EI 60 – T – X – F – W 11 to 20 *)
Fire resistance class: EI 30 – T – X – F – W 21 to 30 *)

4.2.5 Fire resistance class of linear joint seal **Type 2** made using **PREMIUM B1 STRAW** foam, in wall thickness of **min. 200 mm**, in accordance with p. 2.2.2

Fire resistance class: EI 180 – T – X – F – W 10 *)
Fire resistance class: EI 60 – T – X – F – W 11 to 20 *)
Fire resistance class: EI 60 – T – X – F – W 21 to 30 *)

4.2.6 Fire resistance class of linear joint seal **Type 2** made using **PREMIUM B1 STRAW** foam, in wall thickness of **min. 240 mm**, in accordance with p. 2.2.2

Fire resistance class: EI 240 – T – X – F – W 10 *)
Fire resistance class: EI 90 – T – X – F – W 11 to 20 *)
Fire resistance class: EI 90 – T – X – F – W 21 to 30 *)

4.2.7 Fire resistance class of linear joint seal **Type 1** made using **PREMIUM B1 GUN** foam, in wall thickness of **min. 150 mm**, in accordance with p. 2.2.1

Fire resistance class: EI 90 – V – X – F – W 10 *)
Fire resistance class: EI 90 – V – X – F – W 11 to 20 *)
Fire resistance class: EI 60 – V – X – F – W 21 to 30 *)

4.2.8 Fire resistance class of linear joint seal **Type 1** made using **PREMIUM B1 GUN** foam, in wall thickness of **min. 200 mm**, in accordance with p. 2.2.1

Fire resistance class: EI 240 – V – X – F – W 10 *)
Fire resistance class: EI 120 – V – X – F – W 11 to 20 *)
Fire resistance class: EI 90 – V – X – F – W 21 to 30 *)

4.2.9 Fire resistance class of linear joint seal **Type 1** made using **PREMIUM B1 GUN** foam, in wall thickness of **min. 240 mm**, in accordance with p. 2.2.1

Fire resistance class: EI 240 – V – X – F – W 10 *)
Fire resistance class: EI 180 – V – X – F – W 11 to 20 *)
Fire resistance class: EI 90 – V – X – F – W 21 to 30 *)

4.2.10 Fire resistance class of linear joint seal **Type 2** made using **PREMIUM B1 GUN** foam, in wall thickness of **min. 150 mm**, in accordance with p. 2.2.2

Fire resistance class: EI 180 – T – X – F – W 10 *)
Fire resistance class: EI 90 – T – X – F – W 11 to 20 *)
Fire resistance class: EI 30 – T – X – F – W 21 to 30 *)

4.2.11 Fire resistance class of linear joint seal **Type 2** made using **PREMIUM B1 GUN** foam, in wall thickness of **min. 200 mm**, in accordance with p. 2.2.2

Fire resistance class: EI 180 – T – X – F – W 10 *)
Fire resistance class: EI 90 – T – X – F – W 11 to 20 *)
Fire resistance class: EI 60 – T – X – F – W 21 to 30 *)

4.2.12 Fire resistance class of linear joint seal **Type 2** made using **PREMIUM B1 GUN** foam, in wall thickness of **min. 240 mm**, in accordance with p. 2.2.2

Fire resistance class: EI 180 – T – X – F – W 10 *)
Fire resistance class: EI 120 – T – X – F – W 11 to 20 *)
Fire resistance class: EI 120 – T – X – F – W 21 to 30 *)

***) Key**

E – integrity;
I – thermal insulation;
V – orientation: vertical supporting construction – vertical joint;
T – orientation: vertical supporting construction – horizontal joint;
X – without movement;
F – sealing made on construction site;
W – joint widths range (in mm).

4.3 Field of application

This classification is valid for the following end use applications in accordance with EN 1366-4:2006 +A1:2010:

4.3.1 The possible orientation of the linear joint seals in accordance with PN-EN 1366-4+A1:2011:
– B – vertical linear joint in vertical supporting construction – linear joints classified in p. 4.2.1 – 4.2.3 and 4.2.7 – 4.2.9;
– C – horizontal linear joint in vertical supporting construction – linear joints classified in p. 4.2.4 – 4.2.6 and 4.2.10 – 4.2.12.

4.3.2 Classification given in p. 4.2.1, 4.2.4, 4.2.7 i 4.2.10 is valid for linear joint seals in aerated concrete, concrete, block work and masonry wall separating elements thickness of min. 150 mm and density of min. 600 kg/m^3.

4.3.3 Classification given in p. 4.2.2, 4.2.5, 4.2.8 i 4.2.11 is valid for linear joint seals in aerated concrete, concrete, block work and masonry wall separating elements thickness of min. 200 mm and density of min. 600 kg/m^3.

4.3.4 Classification given in p. 4.2.3, 4.2.6, 4.2.9 i 4.2.12 is valid for linear joint seals in aerated concrete, concrete, block work and masonry wall separating elements thickness of min. 240 mm and density of min. 600 kg/m^3.

4.3.5 The possible position of linear joint seals in supporting construction is presented in fig. 1 and 2. Classification given in p. 4.2 is applicable only to straight parallel edge surfaces of sealing elements, in accordance with fig. 3.

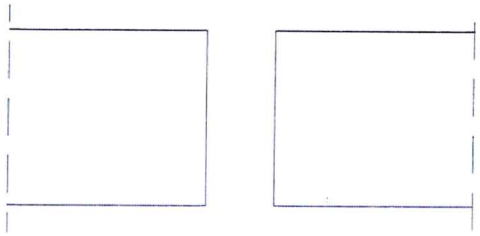

Fig. 3 Edge surfaces of sealing elements

5 LIMITATIONS

This classification given remains valid as long as:

- test method remains unchanged,
- product standard or technical approval remains unchanged,
- constructional or material modifications do not exceed limits of the field of application defined in 4.3.

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This classification document does not represent type approval or certification of the product.

In the case of ambiguity, the base of interpretation of this report is its version in Polish.

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