



## European Technical Assessment

ETA 20/0459  
of 06/08/2020

<b>Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: Warringtonfire Testing and Certification Limited.</b>	
<b>Trade name of the construction product</b>	<b>Fireguard A565</b>
<b>Product family to which the construction product belongs</b>	EC PAC 35 – Fire Stopping, Fire Sealing & Fire Protective Products. Fire Retardant Products
<b>Manufacturer</b>	<b>Dana Lim A/S</b> Københavnsvej 220 DK 4600 KØge Denmark
<b>Manufacturing plant(s)</b>	E/055
<b>This European Technical Assessment contains</b>	17 pages including 1 Annex which forms an integral part of this assessment.
	Annex A Contains confidential information and is not included in the European Technical Assessment when that assessment is publicly available.
<b>This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of</b>	EAD 350141-00-1106-Linear Joint and Gap Seals: Issue September 2017

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## 1. Technical Description of the Product

- 1) Fireguard A565 is an acrylic based 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) Fireguard A565 has slight intumescent properties that cause it to swell on heating.
- 3) The Fireguard A565 is supplied in liquid form contained within 310 ml & 380ml cartridges, 600ml foils or in 5, 10, 20 or 25 litre tubs. The sealant is gunned or trowelled into the aperture in or between the separating element/elements to a specified depth utilising various backing materials.

## 2. Specification Of The Intended Use In Accordance With The Relevant EAD

The intended use of Fireguard A565 is to reinstate the fire resistance performance of gaps in and joints between rigid and flexible wall constructions, gaps in and joints between rigid floor constructions.

- 1) The specific elements of construction that the Fireguard A565 may be used to provide a gap or joint seal in, are as follows:

Rigid Floors:	The floor 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 walls:	The wall must have a minimum thickness of 100 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m <sup>3</sup> .
Flexible walls	The wall must have a minimum thickness of 120 mm and comprise timber or steel studs lined on both faces with minimum 2 layers of 12.5 mm thick, 'Type F' Gypsum boards according to EN 520. In timber stud walls, no part of the penetration shall be closer than 100 mm to a stud, the cavity must be closed between the penetration seal and the stud and minimum 100 mm of insulation of class A1 or A2 according to EN 13501-1, is provided within the cavity between the penetration seal and the stud.

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

- 2) The Fireguard A565 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 Fireguard A565 is 60 mm.
- 4) The maximum movement capability of Fireguard A565 is  $\leq 25\%$  depending on the application and installation. See Annex A for further details
- 5) The provisions made in this European Technical Assessment are based on an assumed working life of the Fireguard A565 of 25 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.

### 2.1 Use Category

Type Z<sub>1</sub>: Intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below 0°C, without exposure to rain or UV.

### 3. Performance Of The Product And References To The Methods Used For Its Assessment

	Characteristic	Assessment of characteristic
<b>BWR 1 Mechanical resistance and stability</b>		
<b>BWR 2 Safety in case of fire</b>		
	Reaction to fire	See clause 3.1.1
	Resistance to fire	See clause 3.1.2
<b>BWR 3 Hygiene, Health and the Environment</b>		
	Air permeability	See clause 3.2.1
	Release of dangerous substances	See clause 3.2.2
<b>BWR 4 Safety in use</b>		
	Durability and serviceability	See clause 3.3.1
<b>BWR 5 Protection against noise</b>		
	Airborne sound insulation	See clause 3.4.1
<b>BWR 6 Energy, Economy and Heat Retention</b>		
<b>BWR 7 Sustainable use of natural resources</b>		

#### 3.1 Safety in case of fire

##### 3.1.1 Reaction to fire

Fireguard A565 is classified 'F' in accordance with EN 13501-1.

##### 3.1.2 Resistance to fire

Fireguard A565 has been tested in accordance with BS EN 1366-4: 2006 based upon the test results and the field of direct application specified within EN 1366-4: 2006, the Fireguard A565 has been classified in accordance with EN 13501-2, as given in Annex A:

The seals may only be used in the elements of construction described in Annex A and against the substrates described in Annex A.

Provisions shall be taken such that floor joint seals cannot be stepped on e.g. by covering with wire mesh or floor finishes.

#### 3.2 Health, Hygiene and the environment

##### 3.2.1 Air permeability

Fireguard A565 has been tested in accordance with BS EN 1314-1 to provide the following results:

Product tested		Acoustic intumescent sealant		
Pressure (Pa)	Results under positive chamber pressure		Results under negative chamber pressure	
	Leakage (m <sup>3</sup> /h)	Leakage (m <sup>3</sup> /m <sup>2</sup> /h)	Leakage (m <sup>3</sup> /h)	Leakage (m <sup>3</sup> /m <sup>2</sup> /h)
50	0.0	0.0	0.0	0.0
100	0.0	0.0	0.0	0.0
150	0.0	0.0	0.1	2.8
200	0.0	0.0	0.1	2.8
250	0.0	0.0	0.1	2.8
300	0.0	0.0	0.0	0.0
450	0.1	2.8	0.1	2.8
600	0.1	2.8	0.1	2.8

### 3.2.2 Release of dangerous substances

Dana Lim A/S has presented a declaration that Fireguard A565 does not contain any substance of high concern with regards to REACH Regulations and are compliant with the requirements reference to <http://ec.europa.eu/enterprise/construction/cpd-ds/index.cfm>

Confirmation has further been declared that all dangerous chemical substances  $\geq 1.0$  % w/w as well as all toxic, carcinogenic, toxic for reproduction and mutagenic chemical substances  $\geq 0.1$  % w/w (Status: 29. adaption – 2004/73/EG – of the EU directive 67/548/EEC - classification, packaging and labelling of dangerous substances) are stated in the Fireguard A565 safety data sheets (according to 91/155/EEC including amendments) and have been considered for the classification of the products according to the directive 1999/45/EG (classification of preparations, including amendments).

All dangerous chemical substances are below the classification limits of 67/548/EEC.

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.

The use category of Fireguard A565 in relation to BWR 3 (Hygiene, health and environment) is IA3, S/W3

## 3.3 Safety and accessibility in use.

### 3.3.1 Durability and serviceability

Fireguard A565 has been tested in accordance with EOTA Technical Report - TR024 – Edition November 2006, for the type Z1 use category specified in EAD 350454-00-1106 Fire Stopping And Fire Sealing Products, and the results of the tests have demonstrated suitability for penetration seals intended for use in internal conditions with humidity equal to or higher than 85% RH excluding temperatures below 0oC, without exposure to rain or UV.

## 3.4 Protection against noise.

### 3.4.1 Airborne sound insulation

The results of the test provided the following single number rating according to BS EN 10142-2:  
Rw (C;Ctr)= 38(-2;-7)

## 4 Assessment and Verification Of Constancy Of Performance (Hereinafter AVCP) System Applied, With References To Its Legal base

According to the decision 1999/454/EC of the European Commission the system of assessment and verification of constancy of performance (see Annex V to the Regulation (EU) No 305/2011) given in the following table apply:

Products	Intended use/s	AVCP System
Fire stopping and fire sealing products	For fire compartmentation and / or fire protection or fire performance	System 1

## 5. Technical Details Necessary For The Implementation Of The AVCP System, As Provided For In The Applicable EAD.

### 5.1 Tasks for the Manufacturer

#### 5.1.1 Factory production control

The manufacturer has a Factory Production Control System (FPC) and exercises permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer are documented in a systematic manner in the form of policies, procedures and work instructions. This FPC system ensures that the product is in conformity with this European Technical Assessment.

The manufacturer shall only use raw materials or components that are supplied with the relevant inspection documents as laid down in the Control Plan. All incoming raw materials shall be subject to inspection, verification, controls and tests (as applicable) by the manufacturer.

The Control Plan, which is part of the technical documentation of this European Technical Assessment includes details of the extent, nature and frequency of testing and controls to be performed within the FPC system and has been agreed between the Assessment holder and Warringtonfire Testing and Certification Limited. Any changes to the FPC; Control Plan or the Product shall only be made following approval by Warringtonfire Testing and Certification Limited.

The results of FPC are recorded and evaluated. These records include but are not limited to:

- Product specification and designation, basic materials and components
- Type(s) of Control testing
- Date of manufacture of the product and date of testing of the product or basic material and components;
- Result of control and testing and, if appropriate, comparison with requirements;
- Signature of the person responsible for FPC

These records shall be presented to Warringtonfire Testing and Certification Limited upon request.



The manufacturer shall, on the basis of a contract, involve a body (bodies) which is (are) approved for the tasks referred to in section 5.2 of this ETA. For this purpose, the "Control Plan" referred to in sections 5.1.1 and 5.2 shall be handed over by the manufacturer to the approved body or bodies involved.

### **5.1.2 Other tasks of manufacturer**

#### 5.1.2.1 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 penetration seal is suitable, type and properties of the building elements like minimum thickness, density, and - in case of lightweight constructions – the construction requirements.
- 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 linear joint seal

(b) 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.

### **Tasks of notified body**

#### 5.2.1 Initial Type Testing of the Product

For initial type-testing the results of the tests performed as part of the assessment for the European Technical Assessment shall be used unless there are changes in the production line or plant. In such cases the necessary type testing has to be agreed between Warringtonfire Testing and Certification Limited and the Notified Body.

#### 5.2.2 Initial Inspection of Factory and of Factory Production Control

The Notified Body shall ascertain that, in accordance with the provisions laid down in the Control Plan, Reference 4.10.13, the factory and the factory production control are suitable to ensure continuous and orderly manufacturing of the product according to the specifications mentioned in Section 2, as well as to the Annexes to this European Technical Assessment.

#### 5.2.3 Continuous Surveillance

The Notified Body shall visit the factory twice a year for regular inspection. It shall be verified that the system of factory production control and the specified manufacturing process is maintained in accordance with the provisions of this European Technical Assessment and the Control Plan.

Continuous surveillance and assessment of factory production control shall be performed in accordance with the provisions laid down in the agreed Control Plan.

The results of product certification and continuous surveillance shall be made available on demand by the certification or inspection body or to Warringtonfire Testing and Certification Limited. In cases where the provisions of this European Technical Assessment and the prescribed Control Plan are no longer fulfilled, the conformity certificate shall be withdrawn and the relevant authority/ies shall be informed.

Issued in Warrington, United Kingdom on

06/08/2020

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## Annex A

### Resistance to Fire Classification of Fireguard A565

#### Orientation

The field of application regarding the orientation of the linear joint is given in Table 1.

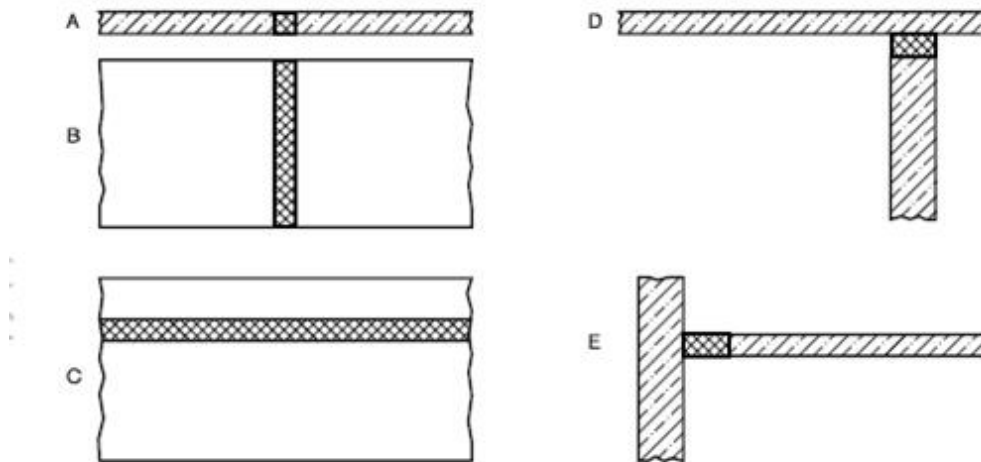
**Table 1**

Tested orientation	Application
A	A, D, E <sup>a</sup>
B	B
C	C, D <sup>b</sup>

<sup>a</sup> Orientation E will only be covered by test orientation A if shear movement was chosen and one face of the joint was fixed and the other was moved.  
<sup>b</sup> Orientation D will only be covered by test orientation C if shear movement was chosen and one face of the joint was fixed and the other face was moved.

#### Key

- A** linear joint in a horizontal test construction
- B** vertical linear joint in a vertical test construction
- C** horizontal linear joint in a vertical test construction
- D** horizontal wall joint abutting a floor, ceiling or roof
- E** horizontal floor joint abutting a wall

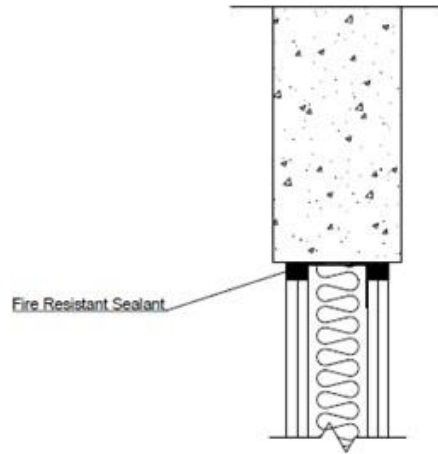


#### Key

- joint seal
- wall – front view
- wall or floor – section

- A** linear joint in a horizontal test construction
- B** vertical linear joint in a vertical test construction
- C** horizontal linear joint in a vertical test construction
- D** horizontal wall joint abutting a floor, ceiling or roof
- E** horizontal floor joint abutting a wall

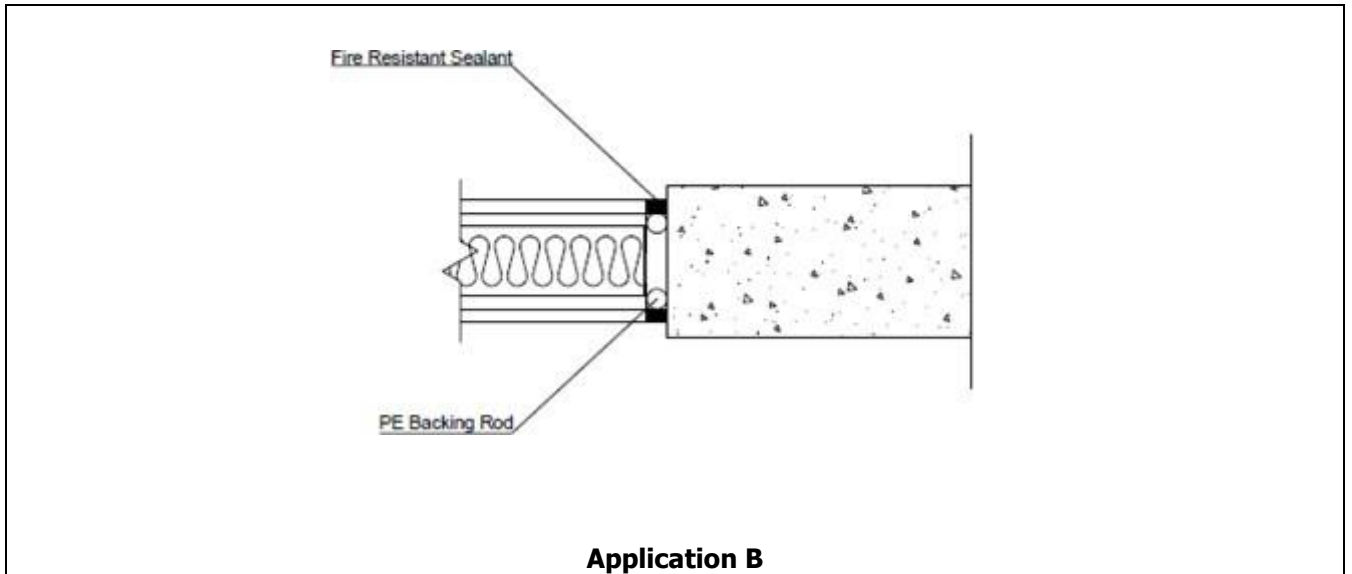
**A1.1 Fireguard A565 Linear Joint Seals. Min 120 mm Thick – Sealing of Drywall Head Track-Sealant Flush To Both Faces Of The Wall**



**Application D**

Substrate	Depth (mm)	Classification
Gypsum board/Steel head track	25mm. (Both Sides)	<b>EI120-T – X – F – W 00 to 20</b>
		<b>EI120-V – X – F – W 00 to 20</b>

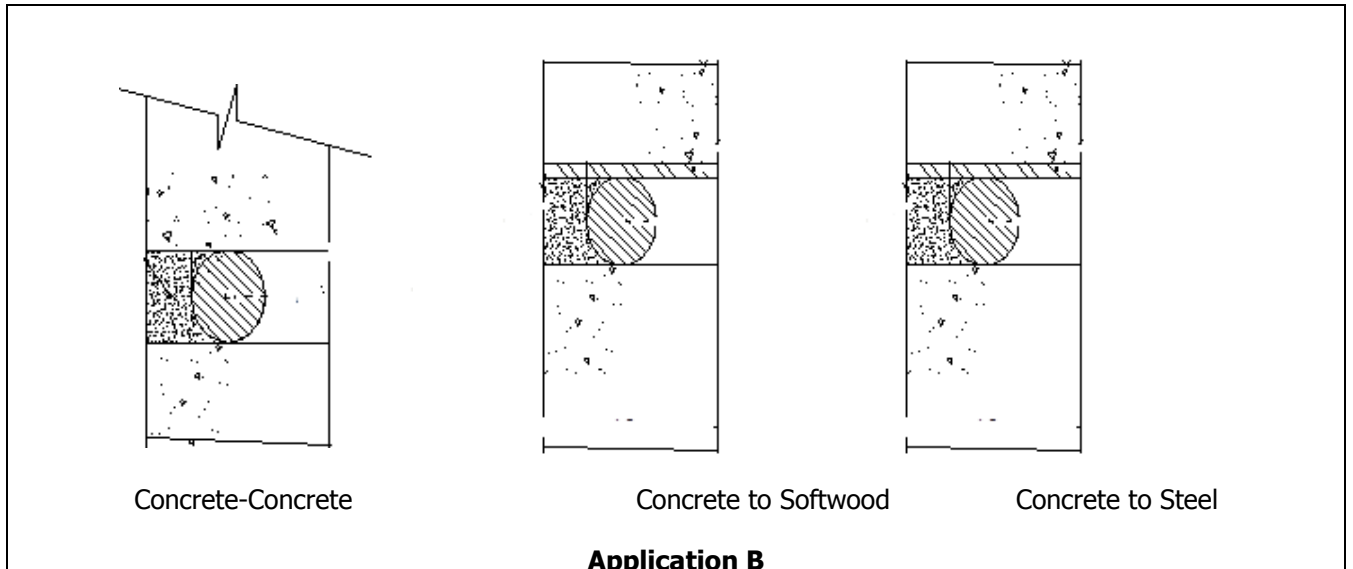
**A1.2 Fireguard A565 Linear Joint Seals. Min 120 mm Thick Flexible or Rigid Wall.**



**Application B**

Substrate	Depth (mm)	Backing Material	Classification
Flexible Wall to Rigid Wall	12.5mm. (Both Sides)	PE backing Rod	<b>EI120-V - X - F - W 00 to 20</b>

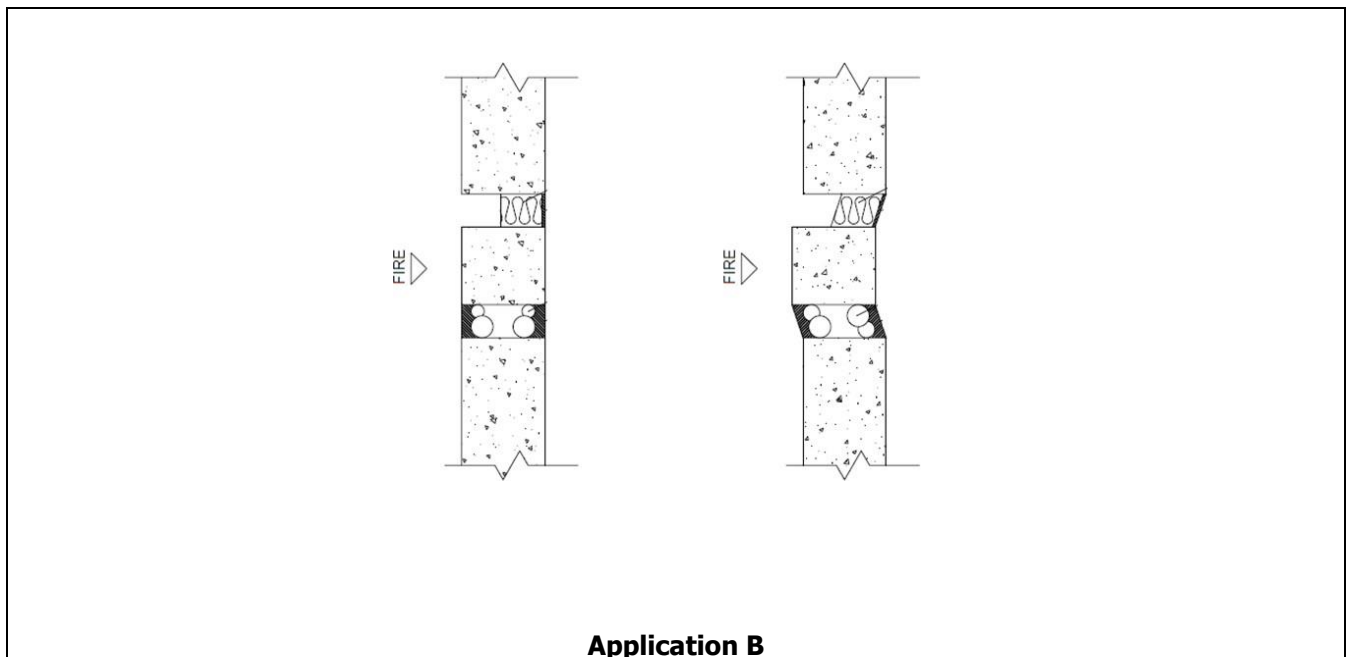
### A1.3 Fireguard A565 Linear Joint Seals. Min 100 mm Thick Rigid Wall.



**Application B**

Substrate	Depth (mm)	Backing Material	Classification
Concrete-Concrete	10 (Single Side)	PE backing Rod	<b>E120 EI45-V – X – F – W 00 to 20</b>
Concrete-Concrete	25 (Single Side)		<b>E120 EI60-V – X – F – W 00 to 50</b>
Concrete-Steel	10 (Single Side)		<b>E120 EI20-V – X – F – W 00 to 20</b>
Concrete-Steel	50 (Single Side)		<b>E45 EI30-V – X – F – W 00 to 50</b>
Concrete-Softwood	10 (Single Side)		<b>E30 EI20-V – X – F – W 00 to 20</b>
Concrete-Softwood	50 (Single Side)		<b>EI45-V – X – F – W 00 to 50</b>

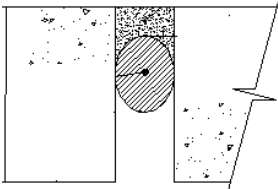
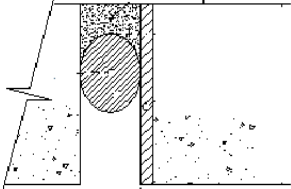
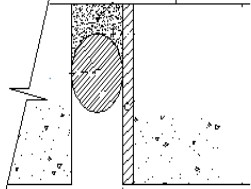
## A1.4 Fireguard A565 Linear Joint Seals. Min 150 mm Thick Rigid Wall.



**Application B**

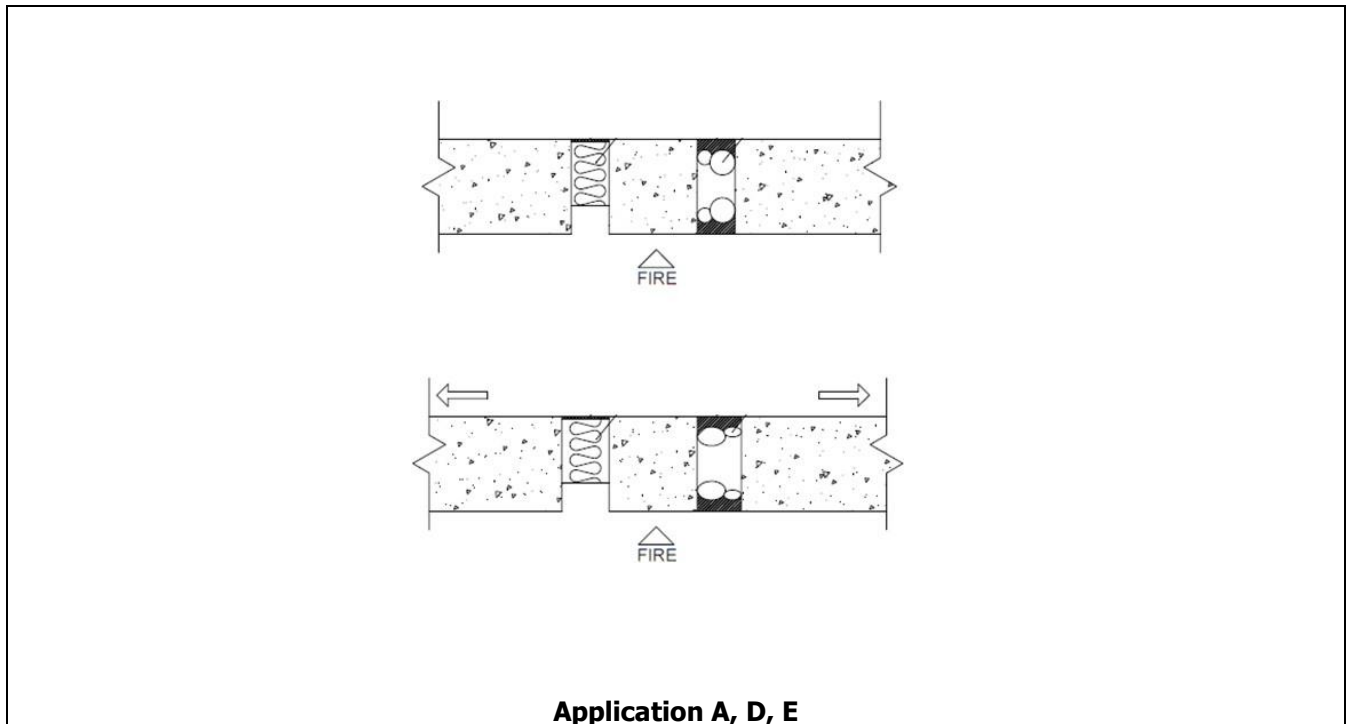
Substrate	Depth (mm)	Backing Material	Classification
Concrete-Concrete	20 (Double Side)	PE backing rod	<b>E240 EI120-V – 25 – F – W 00 to 60</b>
Concrete-Concrete	5 (Non fireside Side)	Stonewool 75mm deep, 60kg/m <sup>3</sup>	<b>E240 EI120-V – 25 – F – W 00 to 60</b>

## A1.5 Fireguard A565 Linear Joint Seals. Min 150 mm Thick Rigid Floor.

					
Concrete-Concrete		Concrete to Steel <b>Application A, D, E</b>		Concrete to Softwood	
Substrate	Depth (mm)	Backing Material	Classification		
Concrete-Concrete	10 (Single Side)	PE backing Rod	<b>E240 EI45-H – X – F – W 00 to 20</b>		
Concrete-Concrete	25 (Single Side)		<b>E240 EI90-H – X – F – W 00 to 50</b>		
Concrete-Steel	10 (Single Side)		<b>E120 EI20-H – X – F – W 00 to 20</b>		
Concrete-Steel	50 (Single Side)		<b>E240 EI90-H – X – F – W 00 to 50</b>		
Concrete-Softwood	10 (Single Side)		<b>EI30-H – X – F – W 00 to 20</b>		
Concrete-Softwood	50 (Single Side)		<b>EI45-H – X – F – W 00 to 50</b>		



## A1.6 Fireguard A565 Linear Joint Seals. Min 150 mm Thick Rigid Floor



**Application A, D, E**

Substrate	Depth (mm)	Backing Material	Classification
Concrete- Concrete	20 (Double Side)	Stonewool 75mm deep, 60kg/m <sup>3</sup>	<b>E240 EI120-V - 25 - F - W 00 to 60</b>
Concrete- Concrete	5 (Non fireside Side)	PE Backing rod	<b>E240 EI120-V - 25 - F - W 00 to 60</b>