

Pyrolastic® Silicone

Technical Data Sheet











UAE Certificate of Compliance



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0105

FSi Limited Westminster Industrial Estate Tamworth Road Measham DE12 7DS UK



DEVELOP MANUFACTURE PROTECT

Pyrolastic® Silicone

Technical Data Sheet

FIRE STOPPING & COMPARTMENTATION SYSTEMS

Pyrolastic® Silicone is a fire resistant silicone sealant. It is a one-part, neutral curing silicone for construction joints. Pyrolastic® cures at room temperature under the action of atmospheric moisture to give a permanently flexible silicone rubber.

Pyrolastic[®] Silicone is used to reinstate the fire resistance of wall and floor construction in linear joints and where apertures are penetrated by services. Pyrolastic[®] has been developed allowing it to be tested and certified to internationally recognised standards, including CERTIFIRE, UL-EU and CE marking.

Intended areas of use

- Rigid walls and floors
- Head of wall joints
- Non combustible services
- Internal or external
- Movement joints
- · Sealant for facade elements and glazing

Key product advantages

- Prevention of air leakage
- Maintains acoustic performance
- Assumed working life of 25 years
- Highly flexible
- Cold smoke seal
- Wide range of backing materials
- Linear joints up to 60mm in width







Pyrolastic® Silicone





Product Specification

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Product Description		
Colour	White / Grey / Black (others on request)	
Cure Rate	3mm per day at 50% relative humidity @ 23°C	
Tack Free	30 mins at 23°C, 50% RH	
Slump	≤ 5mm	
Density	1.38 g/cm³ nominal	
Classification	EN 13501-2, EN 13501-1, ISO 11600	
Product Size	310ml / 380ml / 600ml	
Movement	+/- 25%	
Storage Conditions	To be stored in dry conditions between 5°C - 30°C	
Shelf Life	12 months for wet product	
Elastic Recovery	≤ 80%	
Shore A Hardness	25 nominal	
Intended Use	EN 15651-1 F-INT-EXT CC	
Intended Use	EN 15651-2 G-CC	

Test Data

Test Description	Result	Test Standard
Fire Resistance	Up to EI 240	EN 13501-2 (EN 1366-4 & EN1366-3)
Air Permeability	600Pa, 100Pa 2.8/5.6 m³/h/m²	EN 1026
Acoustic	52 (0;-4) dB	EN 10140
VOC	Compliant	BREEAM International GN22
VOC	EC 1 PLUS	EMICODE
Classification	25LM F&G	ISO 11600

FSi has Technical Representatives who provide assistance in the selection and specification of FSi products. For more information, specification and technical advice please call our Head Office on Tel: +44 (0) 1530 515130. Guarantee / Warranty: FSi products are manufactured to rigid standards of quality. No liability can be accepted for the information provided in this document although it is published in good faith and believed to be correct. FSi Limited reserves the right to alter product specifications without prior notice, in line with our Company policy of continuous development and improvement.



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Product Information

Pre-Installation

Ensure that the aperture and services in question are approved for use with Pyrolastic® Silicone, and the site conditions are within the application specification. All services and apertures need to be clean and clear of all dust and loose particles. The aperture temperature needs to be at 5°C or above at time of installation.

Applying the sealant

Once an appropriate seal backing has been install the sealant should be applied taking care to ensure that the joint is completely filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces. Smoothing off should be carried out using a dry spatula before the surface skin is formed. Areas applied with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent. If the sealant is already cured it can be removed by scraping or using a special silicones remover. For more information, please consult FSi technical department.

Limitations

Pyrolastic® Silicone must not be used:

- To produce aquariums.
- To seal swimming pool joints
- In food grade applications
- Particular attention should be paid to application on materials which can give out certain components over time (butyl sealant, EPDM rubbers, polychloroprenes, etc.)

Service support requirements

Services should be rigidly supported via steel angles, hangers or channels, not further than 400mm from the surface of the sealing system on both faces of wall and top face of floor unless specified otherwise in the performance data.

Classification Terminology

There are two performance criteria for the failure of a penetration seal, integrity and insulation.

Integrity failure shall be made on the basis of the following:

- Cracks or openings
- Ignition of a cotton pad
- Sustained flaming
- *specific criteria of failure given in test standard
- **Insulation failure** is the performance level of the thermal insulation criterion. This shall be the maximum temperature rise at any point, limited to 180°C above the initial mean temperature.
- *specific criteria of failure given in test standard

Integrity will be referred to as E. Insulation will be referred to as I.

LINEAR JOINTS IN RIGID FLOOR

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³

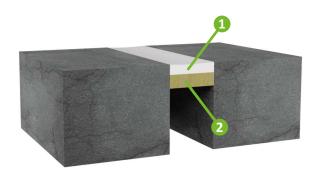
Supporting Construction

Rigid Floor: ≥ 150mm

Depth (mm)	Substrate	Max Width (mm)
5	Concrete	60

Classification

E 240 EI 60 - H - X - F - W 00-60



Installation

LINEAR JOINTS IN RIGID FLOOR

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³

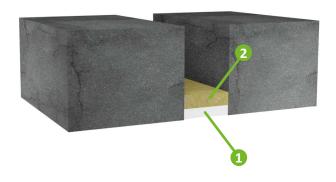
Supporting Construction

Rigid Floor: ≥ 150mm, steel faced

Depth (mm)	Substrate	Max Width (mm)
5	Concrete	60

Classification

E 120 EI 60 - H - X - F - W 00-60



Installation

LINEAR JOINTS IN STEEL FACED RIGID FLOOR

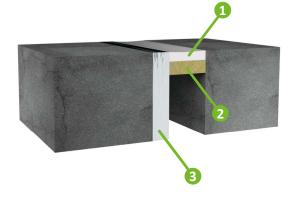
Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³
- 3. Steel

Supporting Construction

Rigid Floor: ≥ 150mm, steel faced

Depth (mm)	Substrate	Max Width (mm)
5	Concrete - Steel	60



Classification

E 240 EI 30 - H X - F - W 00-60

Installation

LINEAR JOINTS IN STEEL FACED RIGID FLOOR

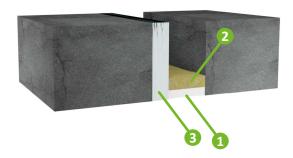
Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³
- 3. Steel

Supporting Construction

Rigid Floor: ≥ 150mm, steel faced

Depth (mm)	Substrate	Max Width (mm)
5	Concrete - Steel	60



Classification

E 240 EI 30 - H - X - F - W 00-60

Installation

LINEAR JOINTS IN RIGID FLOOR

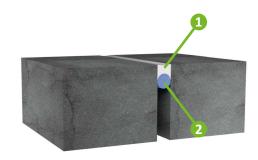
Products

- 1. Pyrolastic® Silicone
- 2. Backing rod

Supporting Construction

Rigid Floor: ≥ 150mm

Depth (mm)	Substrate	Max Width (mm)
2:1	Concrete	60



Classification

E 240 EI 90 - H - X - F - W 00-60

Installation

LINEAR JOINTS AT HEAD OF WALL

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³

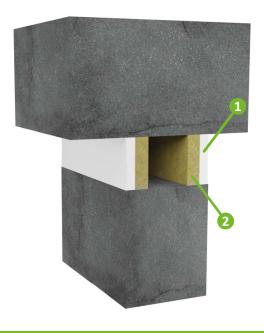
Supporting Construction

Rigid Wall & Floor: ≥ 150mm

Depth (mm)	Substrate	Max Width (mm)
5	Concrete	60

Classification

E 120 EI 60 - H - X - F - W 00-60



Installation

LINEAR JOINTS IN AT HEAD OF WALL

Products

- 1. Pyrolastic® Silicone
- 2. Backing rod

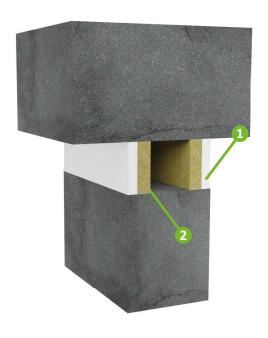
Supporting Construction

Rigid Wall & Floor: ≥ 150mm

Depth (mm)	Substrate	Max Width (mm)
2:1	Concrete	60

Classification

E 240 EI 90 - H - X - F - W 00-60



Installation

LINEAR JOINTS IN STEEL FACED HEAD OF WALL

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³
- 3. Steel

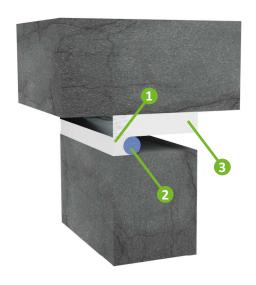
Supporting Construction

Rigid Wall & Floor: ≥ 150mm, steel faced

Depth (mm)	Substrate	Max Width (mm)
5	Concrete - Steel	60

Classification

E 240 EI 30 - H - X - F - W 00-60



Installation

LINEAR JOINTS IN RIGID WALLS

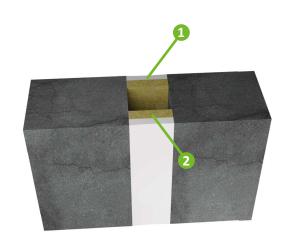
Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³

Supporting Construction

Rigid Wall: ≥ 150mm

Depth (mm)	Substrate	Max Width (mm)
5	Concrete	60



Classification

EI 240 - V - X - F - W 00-60

Installation

LINEAR JOINTS IN RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Backing rod

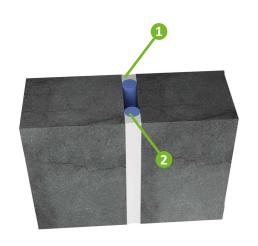
Supporting Construction

Rigid Wall: ≥ 150mm

Depth (mm)	Substrate	Max Width (mm)
2:1	Concrete	50



EI 240 - V - X - F - W 00-60



Installation

LINEAR JOINTS IN STEEL FACED RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³
- 3. Steel

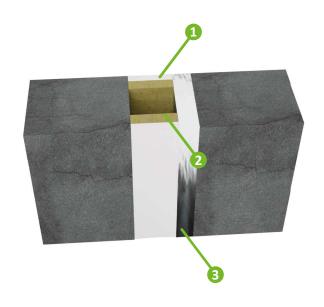
Supporting Construction

Rigid Wall: ≥ 150mm, steel

Depth (mm)	Substrate	Max Width (mm)
5	Concrete	60

Classification

E 240 EI 60 - V - X - F - W 00-60



Installation

LINEAR JOINTS IN TIMBER FACED RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 50mm & \geq 45kg/m³
- 3. Timber

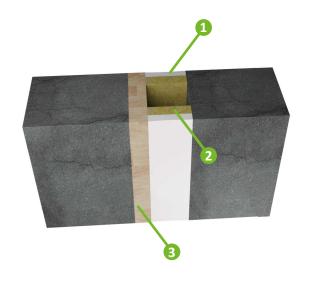
Supporting Construction

Rigid Wall: ≥ 150mm, timber

Depth (mm)	Substrate	Max Width (mm)
5	Concrete	60

Classification

EI 180 - V - X - F - W 00-60



Installation

LINEAR JOINTS IN FLEXIBLE & RIGID WALLS

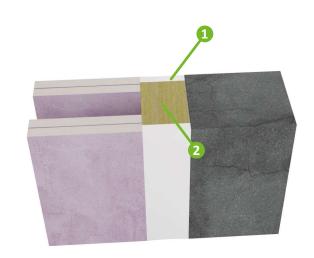
Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 30mm & \geq 45kg/m³

Supporting Construction

Rigid & Flexible Wall: ≥ 100mm

Depth (mm)	Substrate	Max Width (mm)
20	Concrete - Plasterboard	25



Classification

EI 120 - V - X - F - W 00-25

Installation

METALLIC PIPES RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 20mm & \geq 45kg/m³

Classification

E180 EI 20 C/U, C/C

Supporting Construction

Rigid Wall: ≥150mm

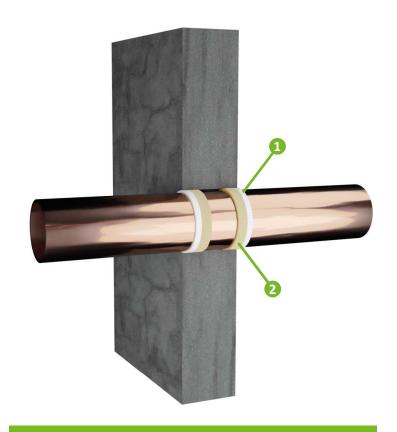
Penetration Service Type	Pipe Diameters (mm)
Steel (3.3 -	
14.2mm wall	<u><</u> 114
thickness)	

Maximum Opening Size

≤ 160mm x 160mm

Separation Distance To Edge of Seal

≥ 20mm



- Ensure that substrate is clean and free from dust or any other material such as primers
- Install the backing material to the required depth around the service
- Gun silicone into joint ensuring that the correct depth is achieved both sides of the wall at a 20mm depth

METALLIC PIPES RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 20mm & \geq 45kg/m³

Classification

E180 EI 90 C/U, C/C

Supporting Construction

Rigid Wall: ≥150mm

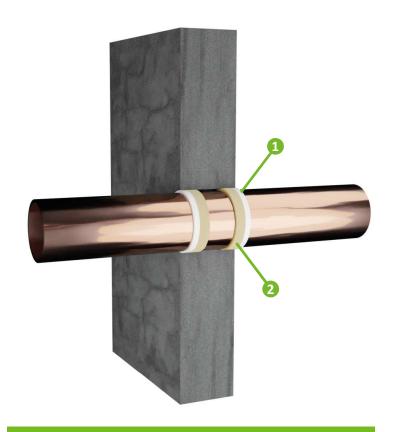
Penetration Service Type	Pipe Diameters (mm)
Copper or Steel (2.8 - 14.2mm	≤ 42
wall thickness)	_

Maximum Opening Size

≤ 80mm x 80mm

Separation Distance To Edge of Seal

≥ 20mm



- Ensure that substrate is clean and free from dust or any other material such as primers
- Install the backing material to the required depth around the service
- Gun silicone into joint ensuring that the correct depth is achieved both sides of the wall at a 20mm depth

METALLIC PIPES RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 25mm & \geq 45kg/m³

Classification

E120 EI 20 C/U, C/C

Supporting Construction

Rigid Wall: ≥150mm

Penetration Service Type	Pipe Diameters (mm)
Copper or Steel	
(1.2 - 14.2mm	<u><</u> 42
wall thickness)	

Maximum Opening Size

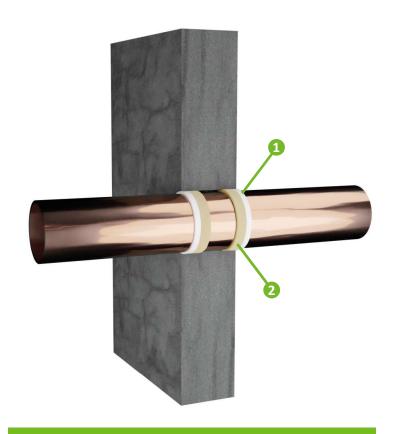
≤ 200mm x 200mm

Separation Distance To Edge of Seal

≥ 20mm

Separation Distance Between Services

≥ 20mm



- Ensure that substrate is clean and free from dust or any other material such as primers
- Install the backing material to the required depth around the service
- Gun silicone into joint ensuring that the correct depth is achieved both sides of the wall at a 25mm depth

CABLES PIPES RIGID WALLS

Products

- 1. Pyrolastic® Silicone
- 2. Stone wool \geq 25mm & \geq 45kg/m³

Classification

E120 EI 30 C/U, C/C

Supporting Construction

Rigid Wall: ≥150mm

Penetration Service Type	Cable Diameters (mm)
Cables	≤ 21

Maximum Opening Size

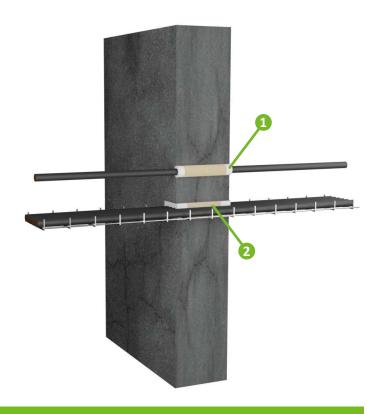
≤ 200mm x 200mm

Separation Distance To Edge of Seal

≥ 20mm

Separation Distance Between Services

≥ 20mm



- Ensure that substrate is clean and free from dust or any other material such as primers
- Install the backing material to the required depth around the service
- Gun silicone into joint ensuring that the correct depth is achieved both sides of the wall at a 25mm depth