

# Pyrolastic® Silicone

## Technical Data Sheet



UAE Certificate  
of Compliance

APPROVED  
CF511

ETA 17-0723  
CE-2812-CPR-JA5111

01051

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



[www.fsilttd.com](http://www.fsilttd.com)  
Email: [technical@fsilttd.com](mailto:technical@fsilttd.com)  
Tel: +44 (0) 1530 515130  
Fax: +44 (0) 1530 273564

**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



**Product Specification**

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/cm <sup>3</sup> 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 m <sup>3</sup> /h/m <sup>2</sup>	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.

## 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 installed 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  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$

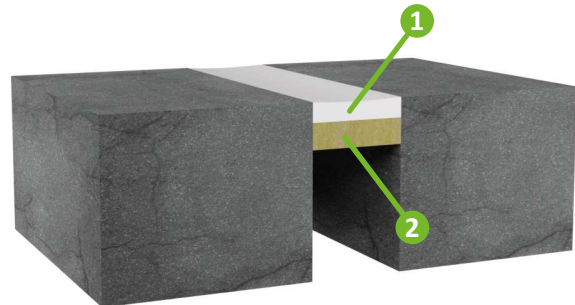
## Supporting Construction

Rigid Floor:  $\geq 150\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN RIGID FLOOR

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$

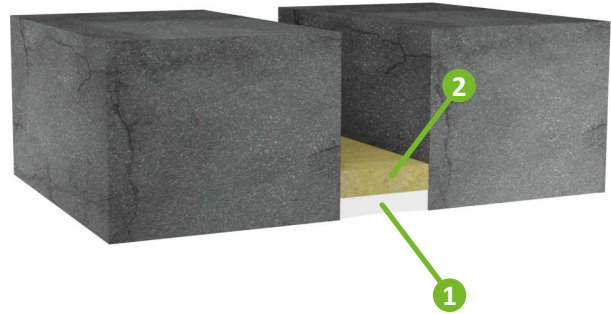
## Supporting Construction

Rigid Floor:  $\geq 150\text{mm}$ , steel faced

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN STEEL FACED RIGID FLOOR

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$
3. Steel

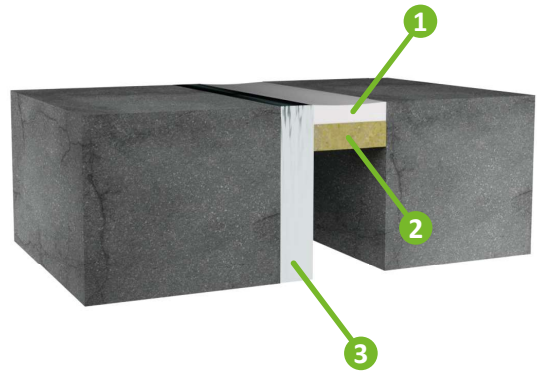
## Supporting Construction

Rigid Floor:  $\geq 150\text{mm}$ , steel faced

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN STEEL FACED RIGID FLOOR

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$
3. Steel

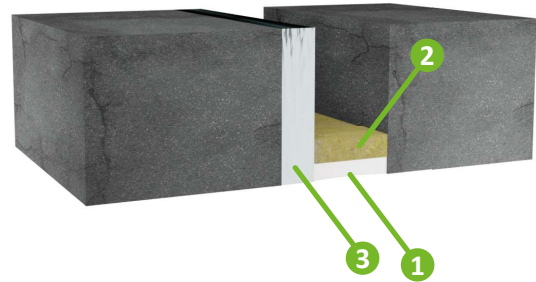
## Supporting Construction

Rigid Floor:  $\geq 150\text{mm}$ , steel faced

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.



# LINEAR JOINTS IN RIGID FLOOR

## Products

1. Pyrolastic® Silicone
2. Backing rod

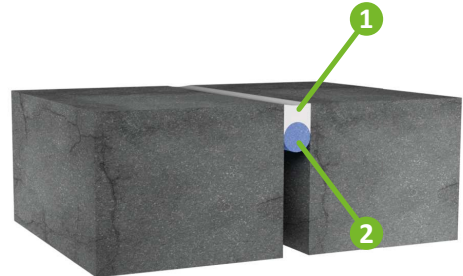
## Supporting Construction

Rigid Floor:  $\geq 150\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS AT HEAD OF WALL

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$

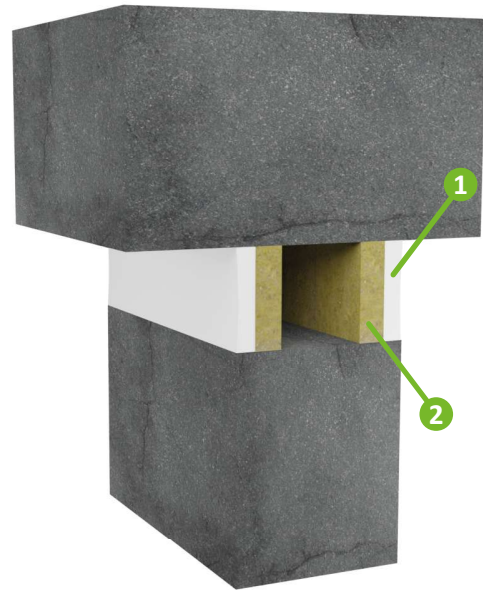
## Supporting Construction

Rigid Wall & Floor:  $\geq 150\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN AT HEAD OF WALL

## Products

1. Pyrolastic® Silicone
2. Backing rod

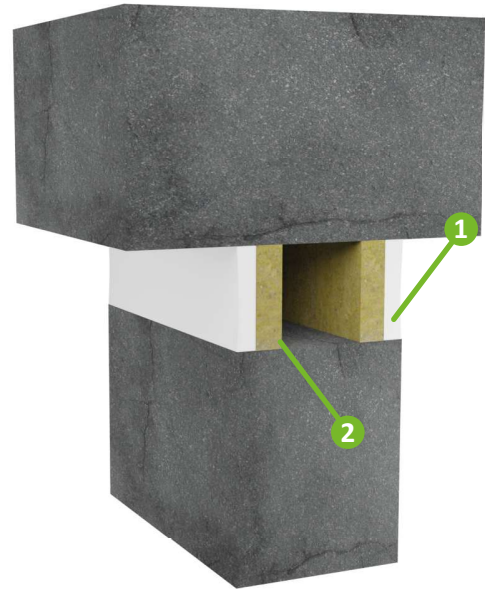
## Supporting Construction

Rigid Wall & Floor:  $\geq 150\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN STEEL FACED HEAD OF WALL

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$
3. Steel

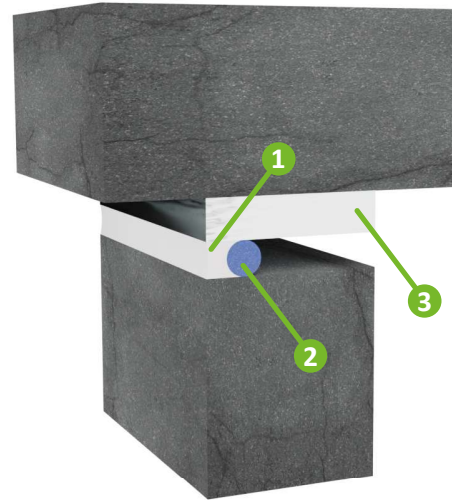
## Supporting Construction

Rigid Wall & Floor:  $\geq 150\text{mm}$ , steel faced

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN RIGID WALLS

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$

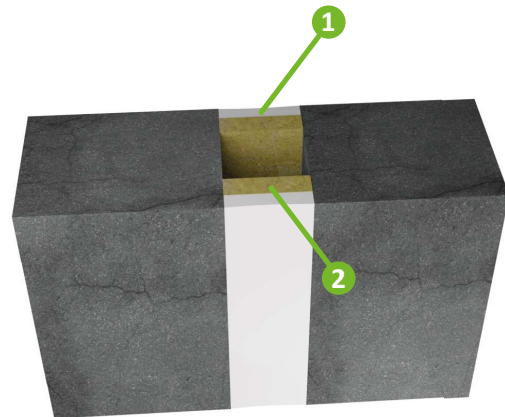
## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN RIGID WALLS

## Products

1. Pyrolastic® Silicone
2. Backing rod

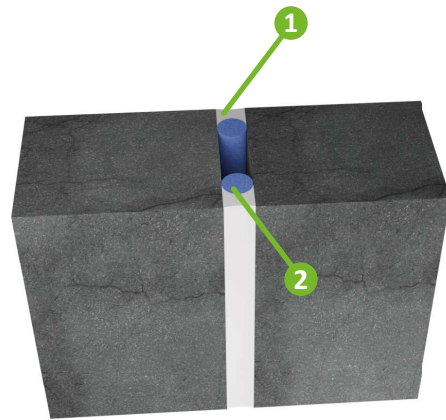
## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN STEEL FACED RIGID WALLS

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$
3. Steel

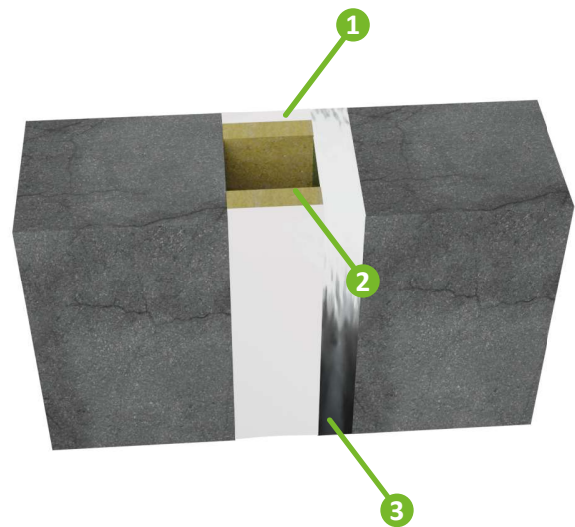
## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$ , steel

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# LINEAR JOINTS IN TIMBER FACED RIGID WALLS

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 50\text{mm}$  &  $\geq 45\text{kg/m}^3$
3. Timber

## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$ , timber

Depth (mm)	Substrate	Max Width (mm)
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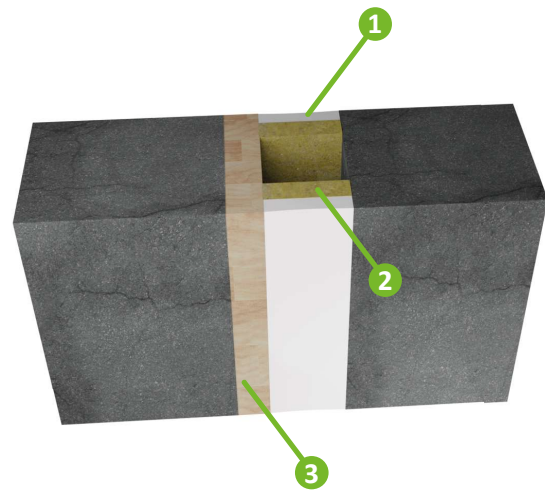
5

Concrete

60

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.



# LINEAR JOINTS IN FLEXIBLE & RIGID WALLS

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 30\text{mm}$  &  $\geq 45\text{kg/m}^3$

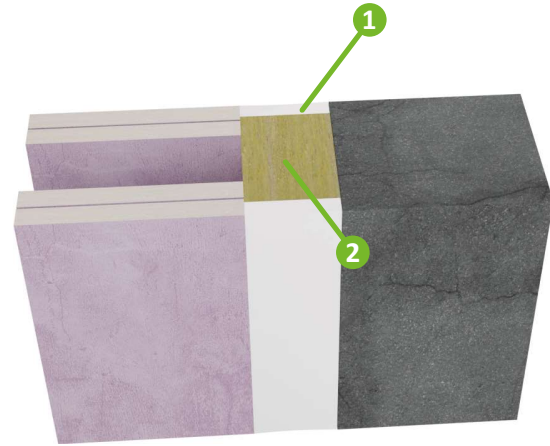
## Supporting Construction

Rigid & Flexible Wall:  $\geq 100\text{mm}$

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

## Classification

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



## Installation

Ensure all substrates are free from dust and debris including primers. Also ensure that substrate is fully cured. Place backing material into joint at the correct depth then gun silicone into joint ensuring that the correct depth is achieved.

# METALLIC PIPES RIGID WALLS

## Products

1. Pyrolastic® Silicone
2. Stone wool  $\geq 20\text{mm}$  &  $\geq 45\text{kg/m}^3$

## Classification

E180 EI 20 C/U, C/C

## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$

## Penetration Service Type

### Pipe Diameters (mm)

Steel (3.3 - 14.2mm wall thickness)

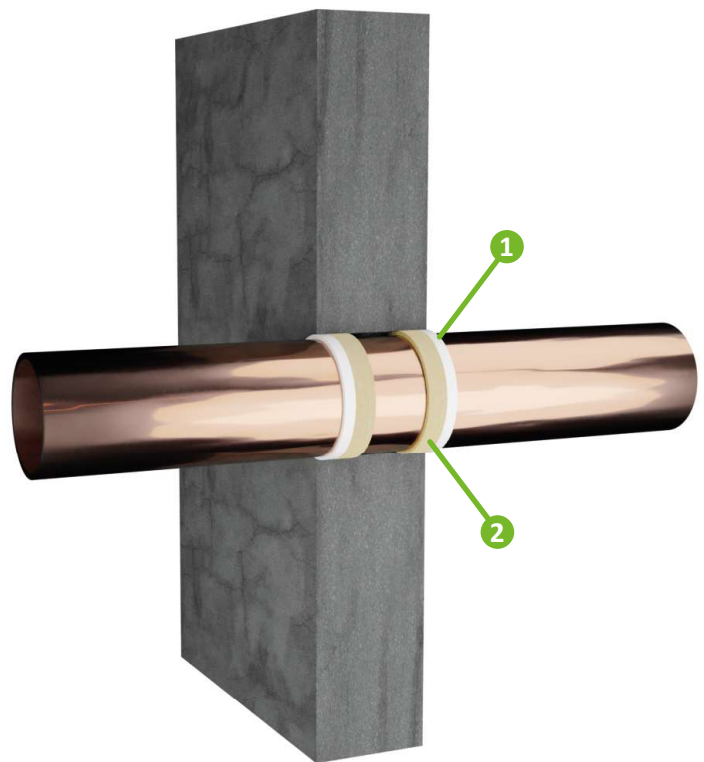
$\leq 114$

## Maximum Opening Size

$\leq 160\text{mm} \times 160\text{mm}$

## Separation Distance To Edge of Seal

$\geq 20\text{mm}$



## Installation

- 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  $\geq 20\text{mm}$  &  $\geq 45\text{kg/m}^3$

## Classification

E180 EI 90 C/U, C/C

## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$

## Penetration Service Type

### Pipe Diameters (mm)

Copper or Steel  
(2.8 - 14.2mm  
wall thickness)

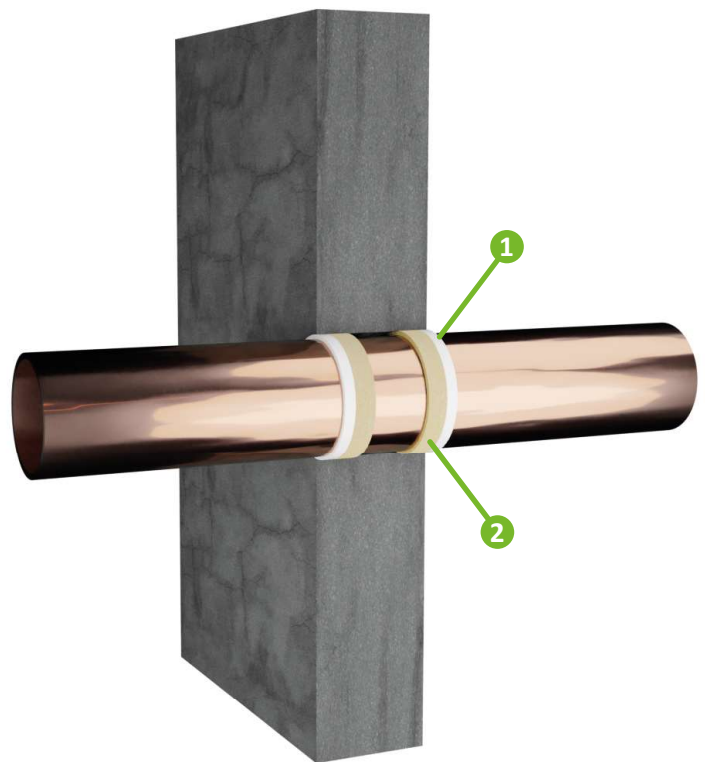
$\leq 42$

## Maximum Opening Size

$\leq 80\text{mm} \times 80\text{mm}$

## Separation Distance To Edge of Seal

$\geq 20\text{mm}$



## Installation

- 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  $\geq 25\text{mm}$  &  $\geq 45\text{kg/m}^3$

## Classification

E120 EI 20 C/U, C/C

## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$

## Penetration Service Type

### Pipe Diameters (mm)

Copper or Steel  
(1.2 - 14.2mm  
wall thickness)

$\leq 42$

## Maximum Opening Size

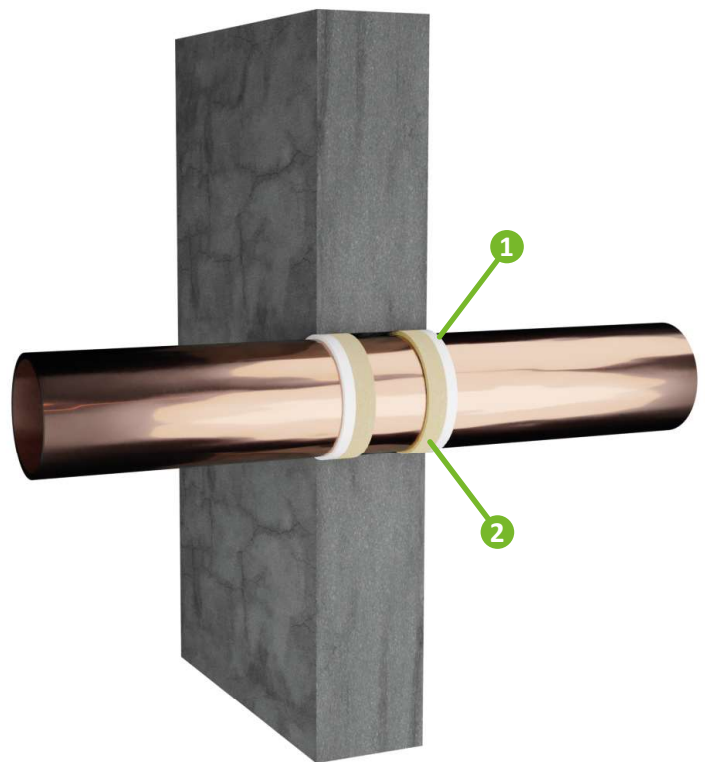
$\leq 200\text{mm} \times 200\text{mm}$

## Separation Distance To Edge of Seal

$\geq 20\text{mm}$

## Separation Distance Between Services

$\geq 20\text{mm}$



## Installation

- 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  $\geq 25\text{mm}$  &  $\geq 45\text{kg/m}^3$

## Classification

E120 EI 30 C/U, C/C

## Supporting Construction

Rigid Wall:  $\geq 150\text{mm}$

## Penetration Service Type

### Cable Diameters (mm)

Cables

$\leq 21$

## Maximum Opening Size

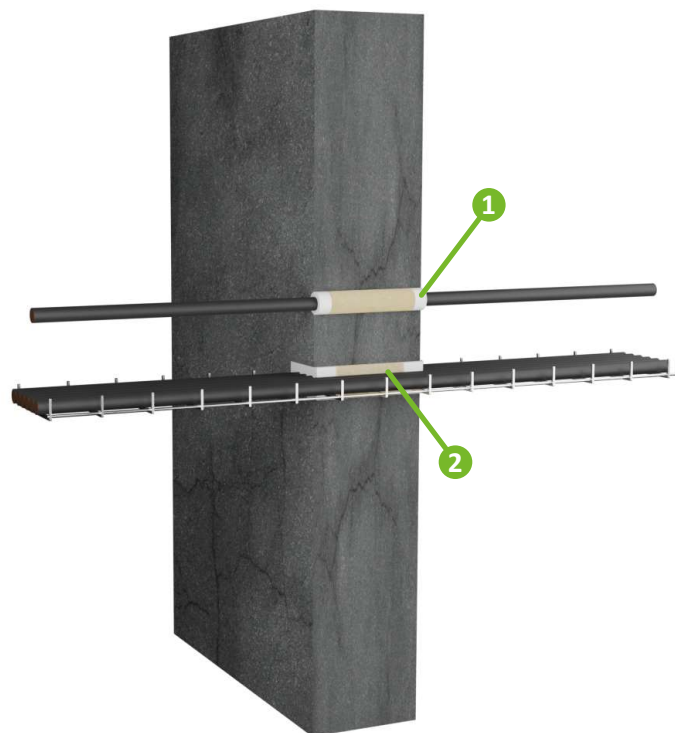
$\leq 200\text{mm} \times 200\text{mm}$

## Separation Distance To Edge of Seal

$\geq 20\text{mm}$

## Separation Distance Between Services

$\geq 20\text{mm}$



## Installation

- 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