

SOUDAL FIRE RATED

SITE GUIDE.

EXPERTS IN SEALANTS, FOAMS & ADHESIVES



SOUDAL

UP TO IT.

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LINEAR JOINT APPLICATIONS
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WHY USE OUR FIRE RATED RANGE?

Our comprehensive range of fire rated solutions have been extensively tested on their ability to delay combustion, provide protection and allow valuable time to exit premises when fire strikes.

The information in this booklet covers common applications where fire resistance is required. For more specific applications or should you require further technical assistance call us on 0800 TECSPEC.



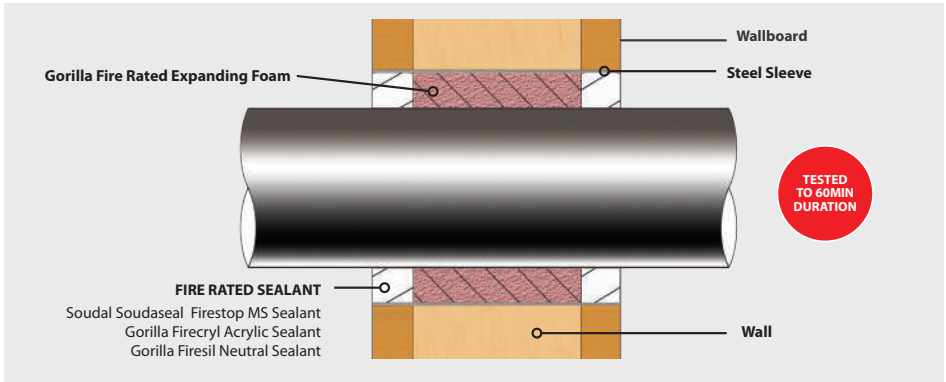
What is a Fire Rated product?

A fire-resistance rating typically means the duration for which a passive fire protection system can withstand a standard fire resistance test. This can be quantified simply as a measure of time, or it may entail a host of other criteria, involving other evidence of functionality or fitness for purpose.



FIRE RATED SOLUTIONS

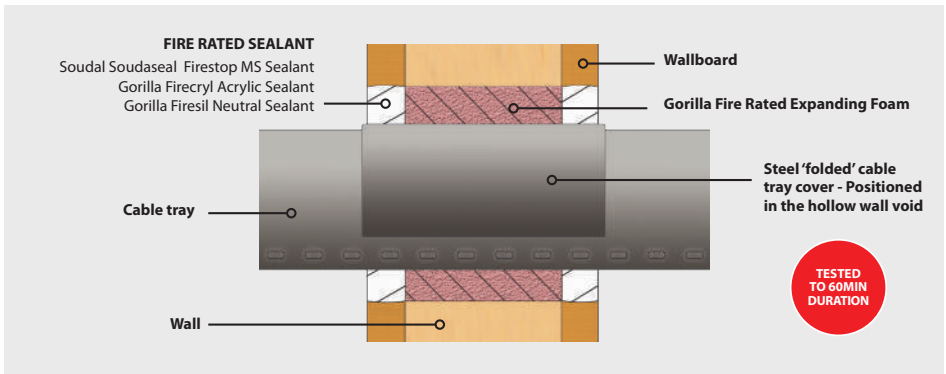
TYPICAL APPLICATIONS



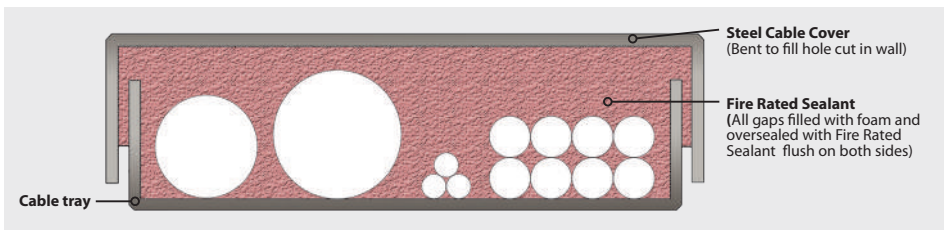
FIRE RATED PIPE PENETRATION

What is a pipe penetration seal? Pipe penetration seals are used to allow tubes or pipes to expand thermally, while they penetrate the shell of a boiler or similar pressure casing without damaging the surrounding shell or pressure casing.

NOTE : Metal penetrations do not require sealant but for aesthetics Firecryl may be required.



FIRE RATED CABLE TRAY PENETRATION



SECTIONS THROUGH PENETRATIONS

PRODUCTS

Gorilla Fire Rated Expanding Foam

FEATURES

Fire retardant up to 240 minutes (refer to test data), efficient seal against smoke and gas, excellent adhesion to many building materials, acoustic rating 57Db, insulating properties (R value 3.12) high bond strength, very good filling characteristics, excellent stability, no shrink and limited post expansion. Can be painted after full cure.

USES & SUBSTRATES

Fire retardant installation of windows and door frames, fire and smoke retardant sealing of connections between partition walls, ceilings and floors. Filling of cavities, sealing of all openings in roof constructions, sealing of cable and pipe penetrations. Creating of sound proof-screen, bonding of insulation materials, application of sound deadening layers and improving thermal insulation in cold store areas.

Colour	Size	Code
Light Red	Click & Fix 750ml	20160
Light Red	Aerosol 750ml	20169



Up to 240min



Soudal Soudaseal Firestop MS Adhesive Sealant

FEATURES

Soudal Soudaseal Firestop MS Sealant is a high-quality single-component joint sealant with high adhesive strength and excellent elasticity. It is based on MS Polymers and is chemically neutral and fully elastic. It has a very high UV and marine resistance, while being very easy to tool and finish.

USES & SUBSTRATES

For use in high-movement joints in construction, automotive, marine and aerospace areas where a tough flexible rubber with good fire retardant qualities is required.

Colour	Size	Code
Grey	600ml	56219



Up to 240min



PRODUCTS

Gorilla Firecryl Acrylic Sealant

FEATURES

Gorilla Firecryl is a one component acoustically rated, highly qualified, emulsion based sealant for fire retarding constructions. After application the product forms a tough plastic rubber fire rated seal by evaporation of water. Intumescent at temperatures above 250°C.

USES & SUBSTRATES

Ideal for interior joints with low or medium movement, and has excellent adhesion to all porous surfaces, with a fire rating of up to 4 hours (refer to full test results).



More than 240min

Colour	Size	Code
White	<input type="checkbox"/>	310ml 20060
Grey	<input checked="" type="checkbox"/>	600ml 21427



Gorilla Firesil Silicone Sealant

FEATURES

Gorilla Firesil Silicone is a high-quality neutral-cure single-component elastic sealant based on silicones that conforms to the DIN4102 B1 standard for fire retardancy and has a fire rating of up to 4 hours in certain joint configurations (EN 1366 part 4 – NN713.020 – BS 476/20). Ideal for linear building and glazing joints that require a fire rating and for fire rated expansion joints.

USES & SUBSTRATES

Suitable for both interior and exterior applications, with excellent adhesion to a wide range of building and glazing materials.



Up to 240min

Colour	Size	Code
Grey	<input checked="" type="checkbox"/>	310ml 20165



PRODUCT CHARACTERISTICS



Gorilla Fire Rated Expanding Foam 750ml Aerosol

Code: 20169



Gorilla Fire Rated Expanding Foam 750ml Click & Fix

Code: 20160



Soudal Soudaseal Firestop MS Sealant 600ml

Code: 56219

Application Areas	Insulation of window and door frames, sealing of connection joints, filling of cavities, cable and pipe penetrations, etc.	Insulation of window and door frames, sealing of connection joints, filling of cavities, cable and pipe penetrations, etc.	Ideal for expansion joints and connection joints in prefabricated, high rise and all usual construction applications.
Fire Rating* See test results	Up to 240 minutes * †	Up to 240 minutes * †	Up to 240 minutes * †
Temp. Resistance (cured)	-40°C to +90°C	-40°C to +90°C	-40°C to +90°C
Acoustic Rating	Max 75Db*	Max 75Db*	N/A
Interior/Exterior (*when painted)	Interior/Exterior *	Interior/Exterior *	Interior/Exterior *
Paintable	Paintable	Paintable	Paintable
UV Resistant	N/A	N/A	UV Resistant
Waterproof	Waterproof	Waterproof	Waterproof
Movement	Low movement	Low movement	+/-25%
No Shrink	No shrink	No shrink	No shrink
Flexible/Elongation	N/A	N/A	Flexible
Curing Rate (*at 20°C)	30mm bead/2hrs	30mm bead/2hrs	2mm bead/24hrs
Skin Formation (*at 20°C)	10 minutes	10 minutes	30 minutes
Tack Free Time	25 minutes	25 minutes	10-15 minutes
Tensile Strength	>17N/cm ² (DIN 53427)	>17N/cm ² (DIN 53427)	N/A
Solvent Free	Solvent free	Solvent free	Solvent free
No Odour	No odour	No odour	No odour
Storage (*from production date)	12 months *	12 months *	12 months *
Colour	Red	Red	Grey
VOC	28% / 189gr/Lt	28% / 189gr/Lt	<2% / 28gr/Lt
Packaging	Aerosol 750ml	Aerosol 750ml	N/A
	Click & Fix 750ml	N/A	N/A
	Sausage 600ml	N/A	Sausage 600ml
Approvals	<ul style="list-style-type: none"> * Approvals – Linear Joints, Meets AS1530.4-2014, AS4072.1-2005 EWFA Report No. 23751-02 EWFA Report No. 45717-02 † Applies to linear joint applications. 	<ul style="list-style-type: none"> * Approvals – Linear Joints, Meets AS1530.4-2014, AS4072.1-2005 EWFA Report No. 23751-02 EWFA Report No. 45717-02 * Approvals – Penetrations, Meets AS1530.4-1997, AS4072.1-1992 BRANZ FP3271 † Applies to linear joint applications. 	<ul style="list-style-type: none"> * Approvals – Linear Joints, Meets AS1530.4-2014, AS4072.1-2005 EWFA Report No. 23751-02 EWFA Report No. 45717-02 * Approvals – Penetrations, Meets AS1530.4-1997, AS4072.1-1992 BRANZ FP3271 † Applies to linear joint applications.

PRODUCT CHARACTERISTICS



Gorilla Firecryl
Acrylic Sealant
310ml/600ml

Code:
20060/21427



Gorilla Firesil
Neutral Silicone
310ml

Code: 20165

Application Areas

Interior fire proofing applications; filling of cracks in concrete and plaster work, sealing of connection joints.

Fire rated expansion joints. All building and glazing joints that require a fire rating.

Fire Rating* (See test results)

More than 240 minutes * †

Up to 240 minutes * †

Temp. Resistance (cured)

-20°C to +90°C

-40°C to +140°C

Acoustic Rating

STC 60

N/A

Interior/Exterior (*when painted)

Interior/Exterior

Interior/Exterior

Paintable

Paintable

Not paintable

UV Resistant

UV Resistant

UV Resistant

Waterproof

Weather resistant
(after cure)

Waterproof

Movement

+/-10%

+/-25%

No Shrink

10%

No shrink

Flexible/Elongation

Flexible

Flexible/900%

Curing Rate (*at 20°C)

N/A

1mm bead/24 hours

Skin Formation (*at 20°C)

20 minutes

25 minutes

Tack Free Time

20 minutes

Ca 20 minutes

Tensile Strength

N/A

0.8N/mm²

Solvent Free

Solvent free

Solvent free

No Odour

No odour

No odour

Storage (*from production date)

12 months *

9 months *

Colour

White (310ml), Grey (600ml)

Grey

VOC

<1% / <15gr/Lt

N/A

Packaging

Cartridge 310ml

Cartridge 310ml

Cartridge 310ml

Sausage 600ml

Sausage 600ml

N/A

Approvals

- Approvals – Linear Joints, Meets AS1530.4-2014, AS4072.1-2005 EWFA Report No. 23751-02 EWFA Report No. 45717-02 EWFA Report No. 55712700.1 BRANZ FAR 2005, Meets AS1530.4-1997, AS4072.1-1992
- Approvals – Penetrations, Meets AS1530.4-1997, AS4072.1-1992 BRANZ FP3271


- Approvals – Linear Joints, Meets AS1530.4-2014, AS4072.1-2005 EWFA Report No. 23751-02 EWFA Report No. 45717-02

† Applies to linear joint applications.

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LINEAR JOINT APPLICATIONS

AERATED CONCRETE

Product Tested	Wall Thickness (mm)	Gap Width (mm)	Seal Depth (mm)	Backing Material	Seal Required	FRL
Gorilla Fire Rated Expanding Foam 	200	41	200	None	Both faces	90/90
	200	10	200	None	Both faces	240/240
	200	30	200	None	Both faces	120/120
	100	11	100	None	Both faces	90/90

TEST RESULTS

FIRE DOORS

Product Tested	Type of fire door	Benor/ATG Certificate	Completion Date & Location
Gorilla Fire Rated Expanding Foam 	Blimex	98/2229	1998 Ghent
	Bruyzeel	00/2186	2000 Ghent
	De Coene	02/1639	2002 Ghent
	Theuma	98/2274	1998 Ghent
	General for fire doors	01/2887	2001 Ghent
	Vimimetal metal doorframe	N/A	2003 Ghent

- Testing was carried out within the testing parameters for fire rated doors at that time.

LINEAR JOINT APPLICATIONS

Product Tested	Wall Thickness (mm)	Gap Width (mm)	Seal Depth (mm)	Backing Material	Seal Required	FRL
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Soudal Soudaseal Firestop MS Sealant



Aerated Concrete

200	15	15	20mm PEF	Exposed	240/240
200	40	20	Gorilla Fire Rated Foam	Exposed	240/240
200	30	20	Gorilla Fire Rated Foam	Exposed	240/240
200	30	20	25mm PEF	Exposed	240/240
200	25	20	Gorilla Fire Rated Foam	Exposed	240/240

Gypsum Wall (13mm Fire Rated Gypsum - Both sides)

90	20	13	None	Exposed	60/60
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Gypsum Wall (26mm Fire Rated Gypsum - Both sides)

120	20	26	None	Exposed	120/120
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Masonry, Blockwork, AAC walls 75mm<

75	20	13	None	Exposed	60/60
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Masonry, Blockwork, AAC walls 100mm<

100	20	26	None	Exposed	120/120
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Product Tested	Wall Thickness (mm)	Gap Width (mm)	Seal Depth (mm)	Backing Material	Seal Required	FRL
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Gorilla Firesil Neutral Sealant




Aerated Concrete

200	11	10	15mm PEF	Both faces	240/240
200	31	20	40mm PEF	Both faces	240/180
100	33	20	40mm PEF	Both faces	180/90
100	11	10	15mm PEF	Both faces	180/120
200	10	10	15mm PEF	Both faces	240/240

LINEAR JOINT APPLICATIONS

Product Tested	Wall Thickness (mm)	Gap Width (mm)	Seal Depth (mm)	Backing Material	Seal Required	FRL
Gorilla Firecryl Acrylic Sealant 	Aerated Concrete					
	200	20	20	25mm PEF	Both faces	240/240
	200	25	25	Gorilla Fire Rated Foam	Exposed	240/240
	200	15	15	20mm PEF	Exposed	240/240
	100	21	20	25mm PEF	Both faces	240/180
	100	11	10	15mm PEF	Both faces	240/180
	Gypsum Wall (13mm Fire Rated Gypsum - Both sides)					
	90	20	13	None	Exposed	60/60
	Gypsum Wall (26mm Fire Rated Gypsum - Both sides)					
	120	20	26	None	Exposed	120/120
	Masonry, Blockwork, AAC walls 75mm<					
	75	20	13	None	Exposed	60/60
	Masonry, Blockwork, AAC walls 100mm<					
	100	20	26	None	Exposed	120/120

TEST RESULTS WALL PENETRATION

Product Tested	Type of Penetration	Wall Thickness (mm)	Integrity	Heat Insulation	Completion Date & Location
Gorilla Firecryl Acrylic Sealant 	160mm steel tube	200	>180 min	>180 min	2004 CSI Italy
	20mm steel pipe	200	>180 min	>180 min	2004 CSI Italy
	20mm steel pipe	100	>180 min	>180 min	2004 CSI Italy
	20mm steel pipe	100	>180 min	>180 min	2004 CSI Italy

APPROVALS

General: EN 1366-4 - Test Report 9297, University of Ghent

UK: BS476: Part20: 1987 - WFRC N° C113610

UK: BS476: Part20: 1987 - WFRC N° 139271 (sealants)

France: Rapport d'Essai RS00-067 (only Firestop 1)

France: Rapport d'Essai RS03-007 (sealants)

Holland: NEN 6069: 1997 - TNO Rapport 2000-CVB-R00703

Belgium: NBN 713.020 - Test Report 9297 - University of Ghent

Australia: WRFA 45716 & 45717 to AS1530.4 and AS4072.1

Italy: CSI 1125 RF

All sealants were tested double-sided. Refer to the technical data and full test results on www.soudal.co.nz.

EXPERTS IN SEALANTS, FOAMS & ADHESIVES



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