





## **FIRE RATED**

SITE GUIDE

#### Why use our Gorilla 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 High Temp product?

A high-temperature rating typically means the duration that the product can resist temperatures of up to 1500°C.



#### 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.





#### **Features**

Fire retardant up to 360 minutes^ (refer to test data), efficient seal against smoke and gas, excellent adhesion to many building materials, acoustic rating 57Db, insulation 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.

Code	Description	Size	Colour
20160	Gorilla F.R. Expanding Foam Click&Fix	750ml	Red
20169	Gorilla F.R. Expanding Foam Aerosol	750ml	Red











#### **Features**

Gorilla Firestop MS Sealant is a high quality single component joint sealant with high adhesive strength and excellent elasticity. It is based on MS Polymer 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 is required with good fire retardant.

Code	Description	Size	Colour
56219	Gorilla Firestop MS Sealant	600ml	Grey





#### More than 240min

#### **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  $^{\circ}$ 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 full test results).

Code	Description	Size	Colour	
20060	Gorilla Firecryl Acrylic Sealant		310ml	White
21427	Gorilla Firecryl Acrylic Sealant		600ml	Grey









Up to 240min

#### **Features**

Gorilla Firesil is a high quality, neutral, elastic, one-component sealant based on silicones which conforms to the DIN 4102 B1 Flammability Rating and has a fire retardancy of up to 4 hours in certain joint configurations.

#### **Uses & Substrates**

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

Code	Description	Size	Colour
20165	Gorilla Firesil Neutral Silicone	310ml	Grey







Up to 120min

#### **Features**

Gorilla Fire Cement is a single component ready to use heat resistant sealant which cures to form a hard seal and will resist temperatures of up to 1500° C.

#### **Uses & Substrates**

Suitable for both interior and exterior applications of sealing joints and openings of furnaces, barbecues and pizza ovens. Also can be used as a heat retardant sealant of existing constructions.

Code	Description	Size	Colour
20190	Gorilla Fire Cement Sealant	310ml	Black



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		Gorilla FR Expanding Foam 750ml Aerosol	Gorilla FR Expanding Foam 750ml Click & Fix Code: 20160	Gorilla Firestop MS Sealant 600ml Code: 56219	
door frames, sealing connection joints, fi		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 See	Fire Rating* Up to 360 minutes * † See test results		Up to 360 minutes * †	Up to 240 minutes * †	
<b>Temp. Resistance (cured)</b> -40°C until +90°C		-40°C until +90°C	-40°C until +90°C		
Acoustic Rating Max 75Db*		Max 75Db*	N/A		
	rior/Exterior en painted)	Interior/Exterior *	Interior/Exterior *	Interior/Exterior *	
Pain	table	Paintable	Paintable	Paintable	
UV F	lesistant	N/A	N/A	UV Resistant	
Wate	erproof	Waterproof	Waterproof	Waterproof	
Mov	ement	Low movement	Low movement	+/-25%	
No S	hrink	No shrink	No shrink	No shrink	
Flex	ible/Elongation	N/A	N/A	Flexible	
Curi	ng Rate (*at 20°C)	30mm bead/2hrs	30mm bead/2hrs	2mm bead/24hrs	
	Formation 20°C)	10 minutes	30 minutes	30 minutes	
Tack	Free Time	25 minutes	25 minutes	10-15 minutes	
Tens	ile Strength	>17N/cm² (DIN 53427)	>17N/cm <sup>2</sup> (DIN 53427)	N/A	
Solv	ent Free	Solvent free	Solvent free	Solvent free	
No C	dour	No odour	No odour	No odour	
Stor	age (*from luction date)	12 months *	12 months *	12 months *	
Colo	ur	Red	Red	Grey	
VOC		28% / 189gr/Lt	28% / 189gr/Lt	<2% / 28gr/Lt	
ing	Aerosol 750ml	Aerosol 750ml	N/A	N/A	
Packaging	Click & Fix 750ml	N/A	Click & Fix 750ml	N/A	
Pa	Sausage 600ml	N/A	N/A	Sausage 600ml	
Арр	rovals	'Test Report 9279 - University Ghent to NBN 713.020, En 13664 BS 476; Part 20 - Warrington Fire Research Report 113610. France: CSTB Report D'Essal RS00-067 - France. Italy: CSI Report 125FR. Australia WFRA Report 45717 to AS 1530.4 and AS 4072.  1 Applies to liner joint applications.	Test Report 9279 - University Ghent to NBN 713.020, En 13664 BS 476; Part 20 - Warrington Fire Research Report 113610, Italy: CSI Report 1125RF. Australia WFRA Report 45717 to AS 1530.4 and AS 4072. Various applications with fire doors.  † Applies to liner joint applications.	*CSTB France Report No. RS03-007 ODICE - ISO R834 at least 2 hours Warrington UK: Assessment Report 139271 to BS 476: Part20: 1987 Italy R.E.I. CSI 1125RF. † Applies to liner joint applications.	

† Applies to liner joint applications.



# FIRE RATED SITE GUIDE

Application Areas   Interior fire proofing applications; filling of cracks in concrete and plaster work, sealing of connection joints. All building and glazing joints which require a fire inconcrete and plaster work, sealing of connection joints. All building and glazing joints which require a fire inconcrete and plaster work, sealing of connection joints. All building and glazing joints which require a fire inconcrete and plaster work, sealing of connection joints. All building and glazing joints which require a fire inconcrete and plaster work. Sealing of connection joints. All building and glazing joints which require a fire inconcrete and plaster work. Sealing of connection joints and plaster work. Sealing of joints and posters.  Fire Rating* See test results  Temp. Resistance (cured)  -20°C until +90°C  -40°C until +140°C  Up to 1500°C  Acoustic Rating  STC 60  N/A  Interior/Exterior  I	/		Firecryl Acrylic Sealant 310ml/600ml Code: 20060/21427	FIRESIL Firesil Neutral Sealant 310ml	Gorilla Fire Cement Sealant 310ml	
Temp. Resistance (cured)	Application Areas Interior fire proofing applications; filling of cracks in concrete and plaster work, sealing of connection		All building and glazing joints which require a fire	of joints and openings at furnaces, heating systems,		
Acoustic Rating STC 60 N/A N/A Interior/Exterior			Up to 240 minutes * †	+120 minutes *		
Interior/Exterior (*when painted)  Paintable Paintable N/A Paintable  UV Resistant UV Resistant UV Resistant Waterproof N/A  Waterproof Weather resistant (after cure)  Movement +/-10% V+-25% Low movement  No Shrink 10% No shrink N/A  Flexible/Elongation Flexible Flexible Flexible/900% N/A  Curing Rate (*at 20°C) N/A 1mm bead/24 hours N/A  Skin Formation (*at 20°C) 20 minutes 25 minutes N/A  Skin Formation VA 25 minutes N/A  Tack Free Time 20 minutes Ca 20 minutes N/A  Tensile Strength N/A 0.8N/mm² N/A  Solvent Free Solvent free Solvent free Solvent free Solvent free No Odour No odour No odour No odour No odour Storage (*from production date)  Colour White (310ml), Grey (600ml) Grey Black  VOC <1% / <15gr/Lt N/A  Applrovals **Test Report 2829 - University Ghent to N/A  Applrovals **Test Report 2829 - University Ghent to N/A N/A  Applies to liner joint applications. **Test liner j	Temp	. Resistance (cured)	-20°C until +90°C	-40°C until +140°C	Up to 1500°C	
Paintable	Acou	stic Rating	STC 60	N/A	N/A	
UV Resistant UV Resistant UV Resistant UV Resistant UV Resistant UV Resistant Waterproof Weather resistant (after cure) Waterproof N/A Movement +/-10% +/-25% Low movement No Shrink 10% No shrink N/A N/A Flexible/Elongation Flexible Flexible/900% N/A Imm bead/24 hours N/A Skin Formation (*at 20°C) V/A Skin Formation (*at 20°C)  Tack Free Time 20 minutes Ca 20 minutes N/A  Tensile Strength N/A Solvent Free Solvent free Solvent free Solvent free Solvent free No Odour No odour No odour No odour No odour Storage (*from production date)  Colour White (310ml), Grey (600ml) Sausage 600ml Sausage 600ml Sausage 600ml Approvals  Test Report 9279 - University Chent to Test applications. Applies to liner joint applications.  Test Report 9279 - University Chent to Test applications. Applies to liner joint applications.  Test Report 9279 - University Chent to Test applications. Applies to liner joint applications.  Test Report 9279 - University Chent to Test applications. Applies to liner joint applications.  Test Report 9279 - University Chent to Test applications. Applies to liner joint applications.  Test Report 9279 - University of Chent to Test applications. Applies to liner joint applications.  Test Report 9279 - University of Chent to Test applications. Applies to liner joint applications. Applies to liner joint applications.  Test Report 9279 - University of Chent to Test applications. Applies to liner joint applications. Applies to liner joint applications.			Interior/Exterior	Interior/Exterior	Interior/Exterior	
Waterproof         Weather resistant (after cure)         Waterproof         N/A           Movement         +/-10%         +/-25%         Low movement           No Shrink         10%         No shrink         N/A           Flexible/Elongation         Flexible         Flexible/900%         N/A           Curing Rate (*at 20°C)         N/A         1mm bead/24 hours         N/A           Skin Formation (*at 20°C)         20 minutes         25 minutes         N/A           Tack Free Time         20 minutes         Ca 20 minutes         N/A           Tensile Strength         N/A         0.8N/mm²         N/A           Solvent Free         Solvent free         Solvent free         Solvent free           No odour         No odour         No odour         No odour           Storage (*from production date)         12 months *         9 months *         12 months *           Colour         White (310ml), Grey (600ml)         Grey         Black           VOC         <1% / <15 gr/Lt         N/A         N/A           Approvals         Vinited Kingdom: Bs476: part 20: 1987 France: CSIB no: 93 35164 EC: IMD Fire Test Procedure Code, Annex 1, Part 5 and Part 2. Ec: No. MED 0050288 (96)88 EC (MED), Inferentials: Is of 10m102-00: VS4 Pro2070-00 CV5 Pro2070-00 CV5 Pro2070-00 code, Pro2070-00 code, Pro2070-00 code, Pro2070-00	Paint	able	Paintable	N/A	Paintable	
Movement   Horizola   Horizola   Movement   Horizola	UV Resistant UV Resistant		UV Resistant	UV Resistant	N/A	
No Shrink  10%  No shrink  Flexible/Elongation  Flexible  Flexible/900%  N/A  1mm bead/24 hours  N/A  Skin Formation (*at 20°C)  N/A  20 minutes  25 minutes  N/A  NA  Tack Free Time  20 minutes  Ca 20 minutes  N/A  N/A  Tensile Strength  N/A  Solvent Free  Solvent free  Solvent free  Solvent free  Solvent free  No Odour  No odour  No odour  No odour  No odour  Storage (*from production date)  Colour  White (310ml), Grey (600ml)  Grey  Black  VOC	Waterproof Weath		Weather resistant (after cure)	Waterproof	N/A	
Flexible/Elongation  Flexible  Flexible/900%  N/A  Imm bead/24 hours  N/A  Skin Formation (*at 20°C)  Tack Free Time  20 minutes  Ca 20 minutes  N/A  N/A  Tensile Strength  N/A  Solvent Free  Solvent free  Solvent free  Solvent free  No Odour  No odour  No odour  No odour  No odour  Storage (*from production date)  Colour  White (310ml), Grey (600ml)  Grey  Black  VOC  <1% / <15gr/Lt  N/A  N/A  Approvals  **United Kingdom: Bs476: part 20: 1987 France: CSIB no: 93.36194 EC: IMD Free Test Procedure Cock, Annex 1, Part 3 and 20.  **Warmigton Fire Research Report Bills on www.holdfast.co.nz. Gorilla Fire Cement can be reheated each lime you use your piczo who and then the fire Cement can be reheated each lime you use your piczo who and then the fire Cement can be reheated each lime you use your piczo won and then then the piczo who well site with the site with the piczo who conduction applications.  **Applies to liner joint applications.**  N/A  N/A  N/A  **Cement can be reheated each liner you use your piczo won and then then you use your piczo won and then the your use your piczo won and then the your use	Move	ement	+/-10%	+/-25%	Low movement	
Curing Rate (*at 20°C)  N/A  1mm bead/24 hours  N/A  N/A  Skin Formation (*at 20°C)  Tack Free Time  20 minutes  Ca 20 minutes  N/A  N/A  N/A  Solvent Free  Solvent free  Solvent free  Solvent free  Solvent free  Solvent free  No Odour  No odour  No odour  No odour  No odour  No odour  Storage (*from production date)  Colour  White (310ml), Grey (600ml)  Grey  Black  VOC  <196 / <15gr/Lt  N/A  N/A  N/A  Approvals  Vinited Kingdom: Bs476: part 20: 1987 France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington France: CSTB no: 93.35164 EC; IMO Fire NBM 713.020 En 13664-BS 476: Part 20: Warrington Fire Research Report CB1770. Refer to Dilvid 10: D	No SI	hrink	10%	No shrink	N/A	
Skin Formation (*at 20°C)   20 minutes   25 minutes   N/A	Flexi	ble/Elongation	Flexible	Flexible/900%	N/A	
Tack Free Time  20 minutes  Ca 20 minutes  N/A  D.8N/mm²  N/A  Solvent Free  Solvent free  Solvent free  Solvent free  Solvent free  No Odour  No odour  No odour  No odour  No odour  Storage (*from production date)  Colour  White (310ml), Grey (600ml)  Grey  Black  VOC  41% / <15gr/Lt  N/A  Cartridge 310ml  Cartridge 310ml  Cartridge 310ml  Sausage 600ml  Sausage 600ml  Sausage 600ml  Approvals  **United Kingdom: BS476: part 20: 1987 France: CSIB no: 93.36194 EC: IMD Fire Test Procedure Code, Annex 1, Part 20: 1987 France: CSIB no: 93.36194 EC: IMD Fire Test Procedure Code, Annex 1, Part 30: 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report BMN 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire	Curin	ig Rate (*at 20°C)	N/A	1mm bead/24 hours	N/A	
Tensile Strength  N/A  Solvent Free  Solvent free  Solvent free  Solvent free  Solvent free  Solvent free  No Odour  No odour  No odour  No odour  No odour  Storage (*from production date)  12 months *  9 months *  12 months *  12 months *  12 months *  12 months *  VOC  Colour  White (310ml), Grey (600ml)  Grey  Black  N/A  N/A  VOC  <1% / <15gr/Lt  N/A  Cartridge 310ml  Cartridge 310ml  Cartridge 310ml  Sausage 600ml  Sausage 600ml  Sausage 600ml  Approvals  **United Kingdom: BS476: part 20: 1987 France: CSTB no: 93.35164 EC: IMD Fire Test Procedure Code, Annex 1, Part 3.00.  Employed Annex 1, Part 3.00.  Bin 713.020. En 1366-4 BS 476: Part 20: Warmsglon Fire Reach Report Bridge 310ml Annex 1, Part 3.00.  NEM 713.020 En 1366-4 BS 476: Part 3.00.  NEM 713.020 En 1366-4 BS 47			20 minutes	25 minutes	N/A	
Solvent Free  No odour  No odour  No odour  Storage (*from production date)  12 months *  9 months *  12 months *  12 months *  12 months *  Solvent free  No odour  White (310ml), Grey (600ml)  Grey  Black  VOC  <1% / <15gr/Lt  N/A  N/A  Cartridge 310ml  Cartridge 310ml  Cartridge 310ml  Sausage 600ml  Sausage 600ml  Sausage 600ml  N/A  Approvals  **United Kingdom: BS476: part 20: 1987 France: CSIB no: 93.36148 EC: IMD Free Test Procedure Cocks Annex 1, Part 320: BRN 713.020. En 1366-4 BS 476: Part 20: Warnington File Reach Report Repo	Tack	Free Time	20 minutes	Ca 20 minutes	N/A	
No odour  12 months *  9 months *  12 months *  13 months *  14 months *  15 months *  16 months *  17 months *  18 months *  18 months *  19 months *  10 months *  11 months *  12 months *  13 months *  14 months *  14 months *  15 months *  16 months *  16 months *  17 months *  18 months *  1	Tensi	le Strength	N/A	0.8N/mm <sup>2</sup>	N/A	
Storage (*from production date)  Colour  White (310ml), Grey (600ml)  Grey  Black  VOC  <1% / <15gr/Lt  N/A  N/A  Cartridge 310ml  N/A  N/A  Approvals  **United Kingdom: B5476: part 20: 1987* France: CSTB no: 93.35164 EC: IMO Fire Test Procedure Code, Annex 1. Part 5 and Part 2: EC: No. MED 0500288 (1998) eS CD INMIA1028 1: Insitted For Bautechnik, Common resolution A633 (16).  1 Applies to liner joint applications.  **Applies to liner joint applications.**  12 months **  12 months *  12 months **  13 mortinged 310ml  N/A  N/A  N/A  **  **  **  **  **  **  **  **  **	Solve	ent Free	Solvent free	Solvent free	Solvent free	
Colour White (310ml), Grey (600ml) Grey Black  VOC < 196 / <15gr/Lt N/A N/A  Cartridge 310ml Cartridge 310ml Cartridge 310ml Cartridge 310ml Cartridge 310ml  Sausage 600ml Sausage 600ml N/A  Approvals   Test Report 9279 - University Ghent to Test Procedure Code, Annex 1, Part 5 and Part 2. Ec. No. Med. Dos0228 (8)698 ED DINIVIO-2281 - Institute for Bautechnik, Committee Com	No O	dour	No odour	No odour	No odour	
VOC  Cartridge 310ml N/A N/A N/A Approvals Approvals France: CSTB no: 93.35f64 EC: IMO Fire 7 in 13664 BS 476: Part 20: 1987 France: CSTB no: 93.35f64 EC: IMO Fire 7 in 13664 BS 476: Part 20: NBN 713.020, En 13664 BS 476: Part 20: NBN 713.020 BS 476:			12 months *	9 months *	12 months *	
Cartridge 310ml Cartridge 310ml Cartridge 310ml Cartridge 310ml Cartridge 310ml N/A N/A  Approvals  *United Kingdom: BS476: part 20: 1987 France: CSTB no: 93.36194 EC: IMD Fire Test Procedure Cock Annex 1, Part 2  BM 713.020, En 1366-4 BS 476: Part 3  BM 713.0	Colo	ur	White (310ml), Grey (600ml)	Grey	Black	
*United Kingdom: BS476: part 20: 1987 France: CSTB nc 93.35194 EC: IMD Fire BN 713.020, En 1366-4 BS 476: Part 20: Amranglo nc BN 713.020, En 1366-4 BS 476: Part 21: Amranglo nc BN 713.020, En 1366-4 BS 476: Pa	voc		<1% / <15gr/Lt	N/A	N/A	
*United Kingdom: BS476: part 20: 1987 France: CSTB nc 93.35194 EC: IMD Fire BN 713.020, En 1366-4 BS 476: Part 20: Amranglo nc BN 713.020, En 1366-4 BS 476: Part 21: Amranglo nc BN 713.020, En 1366-4 BS 476: Pa	caging	Cartridge 310ml	-	-	-	
T Applies to liner joint applications.  (usually around 50-10hic(9), this is why  Gorilla Fire Cement can be reheated each  time you use your pizza oven and then  cooled without Isosin the prometries of the	Pack	Sausage 600ml				
	_		Test Procedure Code, Annex 1, Part 5 and Part 2. EC: No: MED 0050288 (96/98 EC (MED) International: ISO 1716/1973 EC: Imo resolution A653 (16).	20 - Warrington Fire Research Report DIN4102-B1 - Institute for Bautechnik, Berlin TNO-rapport 2000-CVB-R00700703.	(usually around 90-100dCel), this is why Gorilla Fire Cement can be reheated each time you use your pizza oven and then cooled without losing the properties of the	



#### **TEST RESULTS - LINEAR JOINT APPLICATIONS**

Product Tested	Wall/Width x Depth	Backing Material	Integrity	Heat Insulation	Completion Date
	200mm x11mm CC filled throughout	None	229 min	229 min	1999 Ghent
	200mm x41mm CC filled throughout	None	110 min	110 min	1999 Ghent
	100mm x30mm CC filled throughout	None	50 min	50 min	1999 Ghent
	100mm x11mm CC filled throughout	None	104 min	103 min	1999 Ghent
	200mm x40mm PC filled throughout	None	232 min	218 min	2000 CSTB France
	200mm x30mm PC filled throughout	None	291 min	291 min	2000 CSTB France
4	200mm x20mm PC filled throughout	None	360 min	360 min	2000 CSTB France
FIRE RATED	200mm x10mm PC filled throughout	None	360 min	360 min	2000 CSTB France
	200mm x30mm CC filled throughout	None	120 min	120 min	2004 CSI 1125 RF Italy
	200mm x10mm CC filled throughout	None	180 min	180 min	2004 CSI 1125 RF Italy
Gorilla F.R. Expanding Foam	100mm x10mm CC filled throughout	None	90 min	90 min	2004 CSI 1125 RF Italy

#### FIRE DOORS - LINEAR JOINT APPLICATIONS

Product Tested	Type of fire door	Rf value in min	Benor/ATG Certificate	Completion Date
	Bimex	None	98/2229	1998 Ghent
4	Bruyzeel	None	00/2186	2000 Ghent
FIRE	De Coene	None	02/1639	2002 Ghent
KAIEU COMMON TAM	Theuma	None	98/2274	1998 Ghent
	General for fire doors	None	01/2887	2001 Ghent
Gorilla F.R. Expanding Foam	Vimimetal metal doorframe	None		2003 Ghent





#### **EXTERNAL ONLY - LINEAR JOINT APPLICATIONS**

	Wall/Width x Depth	Backing Material	Integrity	Heat Insulation	Completion Date
	150mm/30mm x 20mm PC	PU	332 min	270 min 30 sec	2003 CSTB France
	150mm/10mm x 10mm PC	PU	>360 min	240 min (thermocouple failure)	2003 CSTB France
	200mm/10mm x 10mm PC	PU	>360 min	>360 min	2003 CSTB France
	100mm/10mm x 10mm CC	PE	>180 min	>180 min	2004 CSI Italy
	200mm/15mm x 15mm CC	PE	>240 min	>240 min	2008 Ghent Joint C
Gorilla Firestop MS Sealant	200mm/30mm x 20mm CC	PE	>240 min	>240 min	2008 Ghent Joint H
Product Tested	Wall/Width x	Backing	Intergrity	Heat	Completion
	Depth	Material		Insulation	Date
Gorilla Fire Cement	200mm/10mm x 45mm	PE	120 min	120 min	1995 Ghent
Product Tested	Wall/Width x Depth	Backing Material	Integrity	Heat Insulation	Completion Date
	200mm/11mm x 10mm CC	PE	>240 min	>210 min	1999 Ghent
	x 10mm CC				
	200mm/30mm x 20mm CC	PE	225 min	225 min	1999 Ghent
	200mm/30mm	PE PE	225 min 187 min	225 min 116 min	1999 Ghent 1999 Ghent
	200mm/30mm x 20mm CC 100mm/33mm				
	200mm/30mm x 20mm CC 100mm/33mm x 20mm CC	PE	187 min	116 min	1999 Ghent
	200mm/30mm x 20mm CC 100mm/33mm x 20mm CC 100mm/11mm x 10mm CC	PE PE	187 min 202 min	116 min 146 min	1999 Ghent 1999 Ghent 2003 CSTB
FRESIL	200mm/30mm x 20mm CC 100mm/33mm x 20mm CC 100mm/11mm x 10mm CC 150mm/30mm x 20mm PC	PE PE PU	187 min 202 min >360 min	116 min 146 min 180 min (thermocouple failure)	1999 Ghent 1999 Ghent 2003 CSTB France 2003 CSTB
FIRESIL	200mm/30mm x 20mm CC 100mm/33mm x 20mm CC 100mm/11mm x 10mm CC 150mm/30mm x 20mm PC 150mm/10mm x 10mm PC 2000mm/30mm	PE PE PU PU	187 min 202 min >360 min	116 min 146 min 180 min (thermocouple failure) 251 min 30 sec	1999 Ghent 1999 Ghent 2003 CSTB France 2003 CSTB France 2003 CSTB
FIRESIL	200mm/30mm x 20mm CC 100mm/33mm x 20mm CC 100mm/11mm x 10mm CC 150mm/30mm x 20mm PC 150mm/10mm x 10mm PC 2000mm/30mm x 20mm PC	PE PE PU PU PU	187 min 202 min >360 min >360 min	116 min 146 min 180 min (thermocouple failure) 251 min 30 sec 180 min (thermocouple failure)	1999 Ghent 1999 Ghent 2003 CSTB France 2003 CSTB France 2003 CSTB France 2003 CSTB





#### WALL SECTIONS & INTERNAL APPLICATIONS - LINEAR JOINT APPLICATIONS

Product Tested	Wall/Width x Depth	Backing Material	Integrity	Heat Insulation	Completion Date
	100mm/20mm x 20mm CC	PE	>240 min	210 min	1999 Ghent
RECRY	100mm/11mm x 10mm CC	PE	>240 min	187 min	1999 Ghent
	150mm/20mm x 20mm PC	PU	298 min	180 min (thermocouple failure)	2003 CSTB France
	150mm/10mm x 10mm PC	PU	>360 min	240 min (thermocouple failure)	2003 CSTB France
	200mm/20mm x 20mm PC	PU	>360 min	>360 min	2003 CSTB France
	100mm/10mm x 10mm PC	PU	>360 min	>360 min	2003 CSTB France
	200mm/20mm x 20mm CC	PE	>180 min	>180 min	2004 CSI Italy
	200mm/10mm x 10mm CC	PE	>180 min	>180 min	2004 CSI Italy
Gorilla Firecryl Acrylic Sealant	100mm/10mm x 10mm CC	PE	120 min	120 min	2004 CSI Italy

#### **WALL PENETRATION TESTS**

Product Tested	Type of penetration	Wall thickness	Integrity	Heat Insulation	Completion Date
RECRI	160mm steel tube	200mm	>180 min	>180 min	2004 CSI Italy
	20mm steel pipe	200mm	>180 min	>180 min	2004 CSI Italy
	20mm steel pipe	100mm	>180 min	>180 min	2004 CSI Italy
Gorilla Firecryl Acrylic Sealant	20mm steel pipe	100mm	>180 min	>180 min	2004 CSI Italy

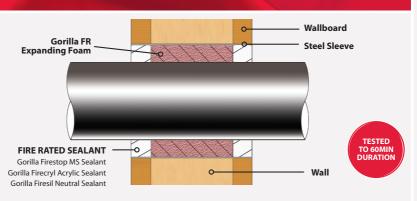
All sealants were tested double sided. Refer to the technical data and full test results on www.holdfast.co.nz.



#### **APPROVALS**

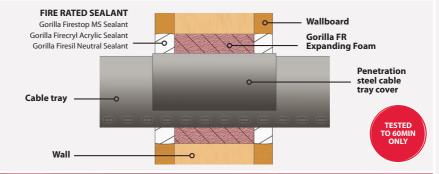
General: UK: UK: France: France: Holland: Belgium: Australia: Italy: EN 1366-4 - Test Report 9297, University of Ghent BS476: Part20: 1987 - WFRC № C113610 BS476: Part20: 1987 - WFRC № C139271 (sealants) Rapport d'Essai RS00-067 (only Firestop 1) Rapport d'Essai RS03-007 (sealants) NEN 6069: 1997 - TNO Rapport 2000-CVB-R00703 NBN 713.020 - Test Report 9297 - University of Ghent WRFA 45716 & 45717 to AS1530.4 and AS4072.1 CSI 1125 RF

#### FIGURE 1: FIRE RATED PIPE PENETRATION



What is pipe penetration? Pipe penetration seals are used to allow tubes or pipes to expand thermally, 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.

#### FIGURE 2: FIRE RATED CABLE TRAY PENETRATION



#### FIGURE 2B: SECTIONS THROUGH PENETRATIONS

