

#### TECHNICAL DATASHEET

Code	Description	Size	Colour
20169	Gorilla Fire Rated Expanding Foam Aerosol	750ml	Light Red

# 1. Description

Gorilla Fire Rated Expanding Foam is a one-component, self-expanding, ready to use polyurethane foam. It contains propellants, which are completely harmless to the ozone layer. It has a fire rating of up to 360 minutes on linear joint applications. (Ghent test report 9279).

Gorilla Fire Rated Expanding Foam will not react with electrical cabling. See statement of suitability for more information: <a href="http://www.holdfast.co.nz/resources/pdf/products/20160">http://www.holdfast.co.nz/resources/pdf/products/20160</a> Statement Of Suitability.pdf

# 2. Characteristics

- · Fire retardant up to 360 minutes on linear joint applications
- · Efficient seal against smoke and gas
- · Excellent adhesion on most substrates (exempt Teflon, PE and PP)
- · High thermal and acoustical insulation
- · High bond strength
- · Very good filling characteristics
- · Excellent stability: No shrink or post expansion
- · Can be painted after full cure

### 3. Technical Data

Colour:	Light red	
Base:	Polyurethane	
Consistency:	Stable Foam, Thixotropic	
Curing System:	Moisture-cure	
Skin Formation:	9-10 minutes	
Cutting Time:	90 minutes	
Density:	Ca. 25kg/m³	
Sound Insulation:	62 dB	
Box Yield:	750ml yields ca. 30l of foam	
Joint Yield:	750ml yields ca. 21m of foam	
Shrinkage after Curing:	<6%	
Post – Expansion:	<1%	
Compressive Strength:	Ca. 104 kPa	
Shear Strenggth:	Ca.43 kPa	
Cellular Structure:	Ca. 70% closed cells	
Temperature Resistance:	-40°C till +90°C (cured)	

# 4. Applications

- · Fire retardant installation of window 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

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- · Creating of sound-proof screen
- · Bonding of insulation materials
- · Application of sound deadening layers
- · Improving thermal insulation in cold store areas

#### 5. Packaging

Aerosol can 750ml (net content)

#### 6. Shelf Life

12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°C.

### 7. Application Instructions

Method: Ensure surface is clean, free of dust and grease.

Application temperature +5°C until +30°C

Shake aerosol can well before use (at least 20 seconds). A compatibility test to ensure desired outcome is obtained.

Fit the applicator onto the valve, hold can upside down for extruding.

Moisten surfaces with a water sprayer prior application to achieve the optimal performance with

regards to elasticity, noise reduction and cellular structure.

Extrude foam by pulling the trigger.

Repeat shaking regularly during application. If you have to work in layers repeat moistening after

each layer.

Once extruding has stopped and foam has cured in applicator, can will not extrude further.

Cured foam can only be removed mechanically.

#### Remarks

- · Work in layers and repeat moistening after each layer.
- · Cured PU-foam must be protected from UV-radiation by painting or applying a top layer of sealant (silicone, MS Polymer, acrylic and PU-sealant)
- · As some timber treatments contain wax it is recommended that the surface of these timbers is activated with Gorilla 696 Surface Activator before application of adhesive.

### Cable Penetrations – refer to appropriate test report for the penetration type.

Cable penetrations – fill complete cavity with Gorilla FR Expanding Foam. Once cured rebate back 15mm of cured Gorilla Firestop and overfill with #20060/21427 Gorilla Firecryl intumescent gap filler.

### **Approvals**

- · Test Report 9279 University Ghent to NBN 713.020, En 1366-4
- · Test Report 13492 University of Ghent / Warringtonfire
- UK: BS476:Part20:1987 WFRC N° C113610
- · France: Rapport d'Essai RS00-067
- · Holland: NEN 6069:1997 TNO Rapprt 2000-CVB-R00703
- · Belgium: NBN 713.020 Test Report 9297 University of Ghent
- · Italy: CSI 1125 RF
- $\cdot\,$  BS 476: Part 20-Warrington Fire Research Report 113610
- · France: CSI Report 1125RF
- · Australia WFRA Report 45717 to AS1530.4 and AS 4072.1
- $\cdot\,$  Various applications with fire doors
- · BRANZ TESTED #FAR 2330 Penetrations and closures in fire rated wall systems

#### Test Results: Test Report 9297C - University of Ghent

Wall Thickness	Joint Dimension	Backing Material	Flame Resistance in Minutes
200mm	Width: 11mm	None	229 Minutes
20011111	Depth: 200mm	None	Fire Rating El 180
200mm	Width: 41mm	None	110 Minutes
20011111	Depth: 200 mm	None	Fire Rating El 90
100mm Width: 30mm		None	50 Minutes

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	Depth: 100mm		Fire Rating El 45
100mm	Width: 10mm	None	103 Minutes
10011111	Depth: 100mm	Ttone	Fire Rating El 90

### Test Results: Test Report 13492A – University of Ghent 2008

Wall Thickness	Wall Thickness Joint Dimension		Flame Resistance in Minutes
200mm	Width: 30mm Depth: 200mm	None	158 Minutes
200mm Width: 10mm Depth: 200 mm		None	>240 Minutes

Test Results: University of Ghent

**Fire Doors** 

Type of door	Rf value	Benor/ATG Certificate	Tests
Bruynzeel	30 Minutes	00/2186	2000 Ghent
De Coene	30 Minutes	02/1639	2002 Ghent
General for Fire doors	30 Minutes	01/2287	2001 Ghent
Vernimetal Metal doorframe	30 Minutes	In finalisation	2003 Ghent

Test Results: Test Report 13492A - University of Ghent 2008

**Product Combinations – Vertical Joints** 

Product Tested	Wall Thickness	Joint Dimension	Backing Material	Flame Resistance in Minutes
a.Gorilla Firecryl		a.Width: 25mm Depth:		
(20060, 21427)	200mm	25mm	None	>240 Minutes
b. Gorilla FR Click&Fix	200111111	b.Width:25mm	none	>240 Minutes
(20160, 20169)		Depth: 175mm		
a.Gorilla Firestop MS		a.Width: 40mm		
(56129)		Depth: 20 mm		
b. Gorilla FR Click&Fix	200mm	b.Width: 40mm	None	>240 Minutes
(20160, 20169)		Depth: 150 mm	None	>240 Minutes
c. Gorilla Firecryl		c.Width: 40mm		
(20060, 21427)		Depth: 30 mm		

Test Results: Test Report 13492A - University of Ghent 2008

**Product Combinations – Horizontal Joints** 

Product Tested	Wall Thickness	Joint Dimension	Backing Material	Flame Resistance in Minutes
a. Gorilla Firecryl		a.Width: 15mm Depth:		
(20060, 21427)	200mm	15mm	Nana	>240 Minutes
b. Gorilla FR Click&Fix	20011111	b.Width:25mm	None	>240 Minutes
(20160, 20169)		Depth: 175mm		
a.Gorilla Firestop MS		a.Width: 25mm		
(56129)	200	Depth: 20 mm	Nana	240 Minutes
b. Gorilla FR Click&Fix	200mm	b.Width: 40mm	None	>240 Minutes
(20160, 20169)		Depth: 180 mm		

# Test Results: Fire Test CSTB - 10 May 2000 France

Wall Thickness	Joint Dimension	Backing Material	Flame Resistance in Minutes
200mm	Width: 10mm	None	229 Minutes
20011111	Depth: 200mm	None	229 Minutes
200mm	Width: 20mm	None	229 Minutes
20011111	Depth: 200mm	None	229 Minutes
200mm	Width: 30mm	None	291 Minutes
200mm	Depth: 200mm	None	291 Minutes
200mm	Width: 40mm	Nama	218 Minutes
	Depth: 200mm	None	2 to willutes

# Test Results: CSI 1125 RF 2004 - Italy

Wall Thickness	Joint Dimension	Backing Material	Flame Resistance in Minutes
200mm	Width: 30mm	None	120 Minutes

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	Depth: 200mm		
200mm	Width: 10mm Depth: 200 mm	None	180 Minutes
100mm	Width: 10 mm Depth: 100mm	None	90 Minutes

# 8. Health and Safety Recommendation

- · Apply the usual industrial hygiene
- · Wear gloves and safety goggles
- $\cdot\,$  Remove cured foam by mechanical means only, never burn away
- · Please refer to the SDS for more detailed information

#### Remark

The directives and data contained in this documentation is provided in good faith and accurately reflect Soudal's knowledge when its products are properly stored, handled and applied under normal conditions in accordance with Soudal's recommendations. In practice, the diversity of the materials, substrates, environments, site conditions, product storage, handling and application are such that no warranty can be given in respect to the merchantability or fit for purpose, of any product. All users must determine the product suitability for their purposes through testing. This technical data sheet and product properties may change without notice so users, suppliers and retailers of Soudal products should always check that the data sheets they have are the latest. To the maximum extent permitted by law, Soudal disclaims all warranties in relation to either the manufacture, storage and end use of the product. All orders are accepted subject to our current terms of trade. If any clarification is required, please contact Soudal Technical Services or email sales@soudal.co.nz.

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