

# **TECHNICAL DATASHEET**

Code	Description	Size	Colour
20250	Gorilla Smart Expanding Foam	600ml	Champagne
20252	Gorilla Smart Expanding Foam	750ml	Champagne

# 1. Description

Gorilla Smart Expanding Foam is a ready to use single component self expanding Polyurethane Foam. Due to the smart gun less applicator system the application of PU Foam becomes very easy and precise. The extrusion straw can be resealed which makes it possible to continue the application from a partially used canister for several weeks. CFC Free Propellants.

### 2. Characteristics

- · Excellent form stability no shrink, no post expansion
- · Excellent filling characteristics
- · Excellent adhesion to all building materials (except PE, PP and PTFE)
- · High insulation values, both thermal and acoustical
- · Excellent installation performance

# 3. Technical Data

Consistency:	Stable foam, thixotropic
Curing System:	Moisture curing
Skin Formation:(20°C/65% R.H.)	Ca. 7 minutes
Cutting Time:	25 minutes
Density:	Ca. 25kg/m³
Sound Insulation:	58 dB
Insulation Factor:	37mW/m.K
Curing Time: (20°C/65% R.H.)	90 minutes for a 30mm bead
Yield:	600ml yields ca. 20l of foam
Shrinkage:	<3%
Post-expansion:	<1%
Cellular Structure:	Fine-celled
Reaction to fire classification:	No fire classification
Compressive Strength:	Ca. 38 kPa
Shear Strength:	Ca. 54 kPa
Water Absorption:	0,27 kg/m²
Temperature Resistance:	-40°C till +90°C (cured) 120°C (max 1 hour)

<sup>\*</sup>This varies according to ambient conditions such as temperature, humidity, substrate etc

# H1 insulation R-Value Calculations based on thickness of Gorilla Expanding Foam Range

Product	mW/m.	/m. Thickness mm									
	K (TDS)	50	60	70	80	90	100	125	140	200	220
Gorilla PRO Expanding Foam Aerosol	29.70	1.68	2.02	2.36	2.69	3.03	3.37	4.21	4.71	6.73	7.41
Gorilla PRO Expanding Foam "CnF"	32.00	1.56	1.88	2.19	2.50	2.81	3.13	3.91	4.38	6.25	6.88
Gorilla FLEXI Expanding Foam	35.00	1.43	1.71	2.00	2.29	2.57	2.86	3.57	4.00	5.71	6.29
Gorilla SMART Expanding Foam	37.00	1.35	1.62	1.89	2.16	2.43	2.70	3.38	3.78	5.41	5.95
Gorilla MS Foam	37.00	1.35	1.62	1.89	2.16	2.43	2.70	3.38	3.78	5.41	5.95
Gorilla FR Expanding Foam	30.20	1.66	1.99	2.32	2.65	2.98	3.31	4.14	4.64	6.62	7.28
Gorilla FR Expanding Foam Aerosol	34.00	1.47	1.76	2.06	2.35	2.65	2.94	3.68	4.12	5.88	6.47
Gorilla One Shot Foam	35.40	1.41	1.69	1.98	2.26	2.54	2.82	3.53	3.95	5.65	6.21

#### 4. Applications

- · Installation of door- and window frames
- · Filling of cavities
- · Sealing and filling of openings and cavities in roof constructions
- · Creation of an acoustic screen
- · Creation of a sound deadening layer
- · Improvement of insulation in cold store facilities
- · All other usual PU Foam applications

# 5. Packaging

Aerosol canister of 600mL (net content)

#### 6. Shelf Life

18 months in unopened packaging in a cool and dry storage place at temperatures between  $+5^{\circ}$ C and  $+25^{\circ}$ . Upright storage is recommended.

#### 7. Building Product Information

Manufactured BySoudal NVDistributed BySoudal Ltd

#### **Relevant Building Code Clauses**

- Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years
- Clause E2 EXTERNAL MOISTURE: Performance E2.3.2.
- Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

#### **Contribution to compliance With NZBC**

Performance B2.3.1 (b): Assessment of durability to meet the NZBC is based on difficulty of access and replacement of the air seal, and the ability to detect failure of the air seal both during normal use and maintenance of the building when used as Air-seals (i.e. in dry, interior environments where the product is inaccessible, and completely sheltered from exposure to sunlight, chemicals, solvents and temperature extremes), they will remain serviceable for at least 15 years.

Performance E2.3.2: Complying with the requirements of NZBC Acceptable Solution E2/AS1 when installed in accordance with the design. Soudal maintains manufacturing and production records within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 1999.

Performance F2.3.1: This product meets this requirement when used and applied in accordance with Soudal's product installation instructions and does not present a health hazard to people occupying or using the building. Refer to the Soudal Technical Data sheet and product Safety Data Sheet, soudal.co.nz for further information if required.

## 8. Application Instructions

Surfaces Type:

Various porous surfaces such as wood, concrete, stone and other materials commonly used in

construction. Not suitable for polyethylene and polypropylene

State: Clean, dry, free of grease and loose particles.

Pre-treatment: Moisture in the air or the substrates will cure the adhesive, which will foam slightly. Slightly moistening the

substrates will speed up the cure and increase the filling properties of the adhesive. Adhesion to metal batons is determined by surface preparation. An initial wipe with Gorilla 696 Surface Activator is required.

#### **Directions for Use**

- · Shake the canister thoroughly for ca 30 seconds. Open the lid on the top and wear the enclosed gloves. Straighten the applicator tube.
- · Apply a fine water spray to the surface which needs to be clean and free of grease and dust.
- $\cdot\,\,$  Turn around the canister and extrude the foam carefully by applying pressure on the trigger.
- · Fill cavities on for 30 to 40 % as the foam will continue to expand during the curing process.
- · Shake canister regularly during the application. If Foam is applied in several layers, moisten between each layer of foam.

Gorilla Smart Expanding Foam

- · At the end of the application, close the applicator tube with the sealing plug and click into the holder. Close the lid. The canister can be reactivated for up to 6 weeks if resealed correctly.
- · Uncured foam can be removed with Foam Cleaner or acetone. Cured foam can only be removed mechanically.

# BEFORE USE DURING USE AFTER USE SHAKE 20 x OPEN THE CAP USE THE GLOVES RELEASE NOZZLE AND PUSH DETACH THE BUNG CLOSE NOZZLE WITH BUNG & CLOSE CAP TURN THE CAN AND PUSH DETACH THE BUNG AFTER USE TURN THE CAN AND PUSH DETACH THE BUNG TO TH

#### Remarks:

- · Always moisten surfaces in order to improve curing and cellular structure
- · Cured Gorilla SMART Expanding Foam must be protected from UV-radiation by painting or applying a top layer of sealants (silicone, MS Polymer, etc)
- · For the filling of large volumes apply product in layers and moisten between each layer
- · Always store canister with the valve pointed upwards

Soudal recommends preliminary compatibility tests on surfaces on which PU Foams have not been applied previously.

#### 9. Health and Safety Recommendation

- · Apply the usual industrial hygiene.
- · Wear gloves and safety goggles.
- · Remove cured foam by mechanical means only, never burn away

#### 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 info@soudal.co.nz.

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Supplier contact details:	Soudal Ltd	Freephone: 0800 70 10 80
	134 Kohia Drive	Phone: (07) 847 5540
	Horotiu	
	Hamilton 3288	Email: info@soudal.co.nz
	New Zealand	Website: www.soudal.co.nz

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