

# Sika Boom<sup>®</sup>-FR

## One part high yield fire-rated polyurethane foam

Construction

<b>Description</b>	Sika Boom <sup>®</sup> -FR is a one part, high yield, fire rated, polyurethane foam.
<b>Use</b>	Sika Boom-FR can be used for: <ul style="list-style-type: none"><li>■ Filling gaps and voids.</li><li>■ Blocking out dust, noise and draft.</li><li>■ Thermal installation of window and doorframes.</li><li>■ Thermal insulation of pipes.</li><li>■ Joint firerating can only be achieved when designed with respect to the fire report (please see report for various joint orientation)</li></ul>
<b>Advantages</b>	<ul style="list-style-type: none"><li>■ High yield</li><li>■ Easy application</li><li>■ Suitable for application at lower temperatures (+5°C)</li><li>■ Fast curing</li><li>■ Excellent thermal insulation</li><li>■ Age resistant</li><li>■ CFC/HFC free</li><li>■ Resistant to temperatures ranging from -40°C to +100°C</li></ul>
<b>Tests Approvals / Standards</b>	Report on likely performance if tested in accordance with AS1530.4-2005, assessment based on testing to BS476 Part 20: fire rated up to 4 hours fire protection. Warrington fire test reports available on request.
<b>Storage and Shelf Life</b>	12 months from date of production if stored in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures between ±18°C and ±20°C. The aerosol cans must be stored in a vertical position. For optimum yield, opened cans should be used in 4-6 weeks.
<b>Product Data</b>	
<b>Colour</b>	Light red
<b>Packaging</b>	750 ml can (12 cans per box)
<b>Technical Data (Typical)</b>	
<b>Chemical Base:</b>	1 part polyurethane, moisture curing
<b>Density:</b>	0.018 – 0.024 kg/l (=18-24kg/m <sup>3</sup> )
<b>Skinning Time:</b>	8 ± 2 minutes (23°C/50% r.h.)
<b>Curing Rate:</b>	A 20 mm bead of expanding foam can be cut after 15 minutes (23°C / 50% r.h.)
<b>Service Temperature:</b>	Full cure after 12 hours -40°C to +80°C (temporary up to +100°C)
<b>Heat Conductivity:</b>	Approx. 0.04 W/mK



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## Mechanical / Physical Properties

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<b>Compressive Strength</b>	3N/cm <sup>2</sup> at 10% strength (+23°C / 50% r.h.)
<b>Shear Strength</b>	3N/cm <sup>2</sup> (+23°C / 50% r.h.)
<b>Tensile Strength</b>	8N/cm <sup>2</sup> (+23°C / 50% r.h.)
<b>Elongation at Break</b>	18% (+23°C / 50% r.h.)

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## Application Details

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<b>Consumption</b>	Yield 750 ml can up to 55 litres (± 3 litres)
<b>Substrate Quality</b>	Clean, homogenous, free from oils and grease, dust and loose or friable particles.
<b>Substrate Preparation</b>	Pre dampen the substrate with clean water, this ensures that the foam cures optimally and also prevents secondary foam expansion later on.

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## Application Conditions / Limitations

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<b>Substrate temperature</b>	+5°C min. / +30°C max
<b>Ambient temperature</b>	Optimum handling temperature +18°C to +25°C Permissible handling temperature +5°C min / +30°C max.
<b>Relative Air Humidity</b>	Between 30% and 100%

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## Application Instructions

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<b>Application method</b>	<ul style="list-style-type: none"> <li>◆ Shake the can thoroughly before use (~ 20 times)</li> <li>◆ Remove the small black lid from the Sika Boom<sup>®</sup>-FR aerosol can. Screw the Sika Boom<sup>®</sup>-FR nozzle onto the can. Gently press the trigger.</li> <li>◆ Take care to allow each layer to cure sufficiently by spraying water or allowing sufficient waiting time between the layers.</li> <li>◆ Do not fill up hollow sections completely as the foam expands by 1.5 to 2 times its volume during curing.</li> <li>◆ All fixings and components, etc must be temporarily supported until the foam has hardened.</li> </ul>
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<b>Cleaning of Tools</b>	Remove fresh spots of foam immediately using a cleaner such as Sika Boom Cleaner. Cured foam can only be removed mechanically.
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**Notes on Application / Limitations**

- ♦ The aerosol can temperature has to be +5°C min. and +25°C max. For optimum flow and expansion the aerosol can temperature should be +18°C to +25°C.
- ♦ Protect the can from direct sun and temperatures above +50°C (danger of explosion). For the correct curing of the foam sufficient moisture is necessary.
- ♦ Do not use on PE, PP, Teflon, Silicone, Oil, Grease and other separating agents.
- ♦ Foam is not resistant to UV light.
- ♦ Read the safety and technical recommendations printed on the aerosol can.

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**Important Notes**

- To avoid rare allergic reactions, we recommend the use of protective gloves. Change soiled work clothes and wash hands before breaks and after finishing work.
- Local regulations as well as health and safety advice on packaging labels must be observed.
- For further information refer to the Material Safety Data Sheet which is available on request.
- If in doubt always follow the directions given on the pack or label.
- Residues of material must be removed according to local regulations. Fully cured material can be disposed of as household waste under agreement with the responsible local authorities.
- Detailed health and safety information as well as detailed precautionary measures e.g. physical, toxicological and ecological data can be obtained from the Material Safety Data Sheet.

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**Important Notification**

The information, and, in particular, the recommendations relating to the application and end-use of Sika's products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. . In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject of our terms and conditions of sale. Users should always refer to the most recent issue of the Australian version of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.

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