

ARBOSHIELD^{PRO}

B1 FR Foam Hand Held

MULTI-USE FOAM, FIRE RATED, FLEXIBLE & AIRTIGHT

ARBOSHIELD Pro B1 FR Foam Hand Held is a one-component, ready to use polyurethane strawfoam for various building applications, e.g. sealing of joints in fire rated walls, installation of fire rated doors and windows and other filling and sealing works in places which have heightened requirements concerning building materials reaction to fire properties. Adheres well to most construction materials.

Main Applications

ARBOSHIELD Pro B1 FR Foam Hand Held is suitable for sealing of joints in fire rated walls, installation of fire-proof doors and windows, filling and sealing works in places which have heightened requirements concerning building materials reaction to fire properties, regular filling and sealing works in construction sector materials like wood, concrete, stone, plaster, metal, PVC and polystyrene.

Key Performance Attributes

- Fire rated up to 240 minutes
- Fire class B1 (DIN)
- Moderate expansion avoids deformation of building elements
- High mechanical strength
- High thermal and acoustic insulation value

Application Instructions

Application conditions

- Air temperature during use: +5 °C to +30 °C. Make sure the ambient temperature stays within this range until the foam has fully cured.
- Can temperature during application: +10 °C to +25 °C, best results at +20 °C.



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Surface preparation

Remove dust, loose particles and oil stains from the surfaces. Moisten dry substrate to ensure better results. Protect adjacent surfaces with paper, plastic film or other suitable material.

If needed add additional shield outside for weather protection (against rain, wind, etc.).

Application method

- Shake the can vigorously at least 20 times. Remove the cap. Hold the foam can in upright position with valve up. Screw the straw applicator tightly to the foam can valve. Hold the can upside down when extruding the foam. Foam output can be adjusted with the applicator trigger.
- Fill joints up to approx. 50%, as the foam expands. In case of larger joints apply foam in several layers and moisten slightly between each layer to ensure better results.

Cleaning

- Excess foam can be cut after it has fully cured.
- Uncured foam can be removed with acetone. Cured foam can be removed mechanically.

Packaging

750ml can, 12 cans per box

Storage conditions and shelf life

- Shelf life is 12 months from production date if stored in an unopened packaging in a cool and dry place at +5 °C to +30 °C.
- Do not expose to temperature over +50 °C, do not keep near heat sources or in direct sunlight.
- Store and transport in vertical position.
- Secure cans before transport.

Fire resistance tested according to EN 1366-4 and rated according to EN 13501-2:

Fire Resistance Classification	
EI 90-V-X-F-W10	Joint depth 100 mm and over
EI 45-V-X-F-W20	Joint depth 100 mm and over
EI 30-V-X-F-W30	Joint depth 100 mm and over
EI 30-V-X-F-W40	Joint depth 100 mm and over
EI 60-T-X-F-W15	Joint depth 100 mm and over
EI 45-T-X-F-W30	Joint depth 100 mm and over
EI 240-V-X-F-W10	Joint depth 200 mm and over
EI 240-V-X-F-W20	Joint depth 200 mm and over
EI 120-V-X-F-W30	Joint depth 200 mm and over
EI 90-V-X-F-W40	Joint depth 200 mm and over
EI 180-T-X-F-W15	Joint depth 200 mm and over
EI 180-T-X-F-W30	Joint depth 200 mm and over

V - vertical joint

T - horizontal joint

This classification is valid for the following end use applications:

- ARBOSHIELD Pro B1 FR Foam Hand Held shall be used as fire resistant joint seal in joints of concrete, block work and masonry vertical separating elements with density of 450 kg/m³ or greater and thickness of 100 mm and over.
- Linear joints shall have vertical or horizontal orientation and shall be filled throughout. Joint seal shall be fitted flush with the surface of the supporting construction and protected with steel sheet, thickness at least 0,6 mm.
- Movement capability $\pm 7,5\%$ is permitted

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Safety regulations

- Pressurized canister.
- Use only in well-ventilated areas.
- Do not smoke during application!
- Use PPE when necessary.
- See label and safety data sheet (SDS) for more information.

Limitations

- ARBOSHIELD Pro B1 FR Foam Hand Held lacks adhesion to Teflon, polyethylene and silicone surfaces.
- Cured foam is sensitive to UV-light and direct sunlight and therefore must be covered with suitable opaque sealant, filler, paint or other material. Do not cover before foam has fully cured.
- Lighter construction elements must be firmly fixed before application of the foam due to formula's high post expansion.
- Please observe the expiration date!

Technical data

Properties	Value	Unit
Tack free time (EN 17333-3)	6-10	min
Cutting time (30 mm bead, EN 17333-3)	<60	min
Fully cured in joint, 3x5cm (+23 °C)	<16	h
Curing pressure (EN 17333-2, moistened surfaces)	<4	kPa
Post expansion (EN 17333-2)	<150	%
Density in joint, 3x10 cm (WGM106)	23-27	kg/m³
Dimensional stability (EN 17333-2, moistened surfaces)	<1	%
Temperature resistance of cured foam	-50-+90	°C
Fire resistance class (EN 13501-2)	EI30-EI240	
Reaction to fire classification (EN 13501-1)	E	
Fire class of cured foam (DIN 4102-1)	B1	
Tensile strength / elongation (EN 17333-4, moistened surfaces)	>80/10	kPa/%
Compression strength (EN 17333-4, moistened surfaces)	>50	kPa
Shear strength (EN 17333-4, moistened surfaces)	>40	kPa
Thermal conductivity (EN 12667, EN 17333-5)	0.003	W/(m·K)
Sound reduction index R _{st,w} (EN ISO 10140)	62	dB
Water vapour permeability (EN 12086)	<0.04	mg/(m.h.Pa)
Foam yield in joint, 3x5 cm (WGM107), per 750 ml filling rate	10	m

The values specified were obtained at +23 °C and 50% relative humidity, unless otherwise specified. These values may vary depending on environmental factors such as temperature, moisture and type of substrates.

Both the information and the product descriptions contained in this publication have been compiled to the best of our knowledge and belief based on our prior experiences and tests. Claims for compensation may not be derived from the same. We reserve the right to make improvements to our product range, in accordance with our high standards in relation to technical advancement and the progression of quality.

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