

**FIX ALL® FILLS & BONDS GUN****Date:15/06/11****Page 1 of 3****Technical Data:**

Base	Single component Polyurethane
Consistency	Stable Adhesive Foam – does not sag
Curing System	Moisture Cure at room temperature
Skin Formation	+/- 8 minutes (20°C/65% R.H.)
Drying time	Dust free after ca 9 min. – 30mm adhesive bead
Can be trimmed	+/- 40 minutes – 30mm adhesive bead
Full strength	+/- 12 hours – 30mm adhesive bead
Post expansion	Minimal
Heat Transmission (DIN 52612)	About 0,036 W/(m·K)
Tear Strength (DIN EN 1607)	0,18 N/mm ²
Shear Strength (DIN 53427)	0,12 N/mm ²
Resistance to bending (DIN5342)	0,6 N/mm ²
Resistance to pressure (ISO844)	0,3 N/mm ²
Elongation at break	About 25%
Water absorption (DIN53428)	< 1%
Shrink	< 3%
Temperature Resistance	-40°C until +90°C when cured +120°C (until maximum 1 hour)
Fire Rating	B2 (normal flammability)
Yield	+/- 12m ² per can of 750ml – 30mm adhesive bead

(*) measured at 20°C, 65% r.H.. These values can vary as a result of factors in the environment such as temperature, moisture, type of surface, etc.

Product Description:

Fix All Fills & Bonds Gun is a gun applied ready to use single component self expanding polyurethane adhesive. The product has been developed for clean, efficient, economic and permanent bonding of insulation panels and lightweight decorative elements in wall and roof areas.

Characteristics:

- Saving of up to 30% in working time.
- Very good initial bond, even at low temperatures.
- Economic in use due to precise application – sufficient for 12m² of roof insulation panels (3 beads per m²).
- Suitable for vertical and horizontal applications.
- Can be applied at temperatures as low as -5°C (temperature of aerosol can needs to be at least +5°C).
- Excellent insulation characteristics, enhances performance of insulation panels when filling gaps (ca 0,036 W/(m·K)).

- Remains flexible, does not become brittle.
- Suitable for uneven surfaces as it fills cavities.
- Limited post expansion, resulting in fast and precise installation of insulation panels.
- Very wide adhesion spectrum: various types of boards such as plasterboard and dry lining, roofing, concrete, stone, brick, timber, various insulation panels and decorative elements based on PU, Polystyrene, Phenol resin foam, etc.
- Compared to usual types of PU Roof adhesives and Dry lining or plasterboard adhesives, huge savings in space and weight.
- Fast curing; 1 hour after application work can continue on flat roofs or boards can be plastered
- Free of solvents.
- Compatible with most types of paints, many solvents and chemical substrates.
- Does not age or rot, but should not be exposed to UV radiation (cover with paint or plaster if necessary).

Remark: The directives contained in this documentation are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments.



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Applications:

- Bonding of various types of insulation panels onto roofs, walls and façades.
- Bonding of decorative elements in façade applications.
- Filling of cavities between insulation panels.

Packaging:

Colour: light orange

Packaging: gun applied aerosol can, 750mL content.

Shelflife and Storage :

- 12 months in unopened packaging in a cool and dry storage place at temperatures between +5°C and +25°.
- Always store aerosol can with the valve pointed upwards.
- Partially used aerosol cans must be sealed well, valves cleaned and used within a short time.

Surfaces:

Type: all types of panels, boards, dry lining, roofing, timber, concrete, metals, fiber cement, etc

State of Surface: clean, free of dust and grease.

We recommend a compatibility test to ensure optimal performance.

Application Method – Roof elements

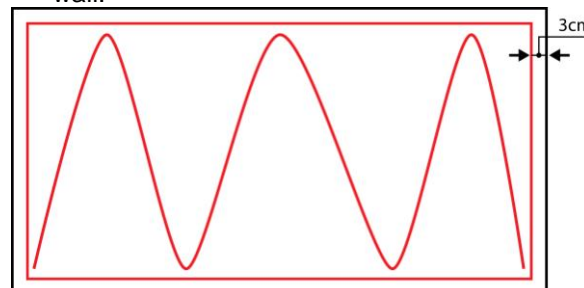
- Prior to application, protect and cover adjacent surfaces.
- During strong winds, ensure that no adjacent areas are exposed.
- Thread the can tightly to the Applicator Gun.
- Shake at least 30 times with the can upside down to ensure proper mixing of the ingredients and maximum yield.
- Repeat shaking after work intervals.
- Adjust extrusion rate to allow for 30mm beads using the setting screw at the end of the applicator gun.
- Apply directly onto the surface, holding the gun at an angle of about 90° to the surface and ensure a distance of about 1 to 2 cm between nozzle and surface. The nozzle should not be in direct contact with the surface.
- Apply at least 3 beads per m². At the edges of the insulation panels, at corners and where there is increased wind exposure, the quantity

of adhesive should be increased (see DIN 1055, part 4).

- Wait for 4-5 of minutes and then press insulation panels into the adhesive and hold in place for approx 1min. (within 8 minutes from extrusion, 20°C, 65% r.h.). At higher temperatures/humidity, the open time will be reduced; at lower temperatures/humidity, the open time will be longer.
- Fill all open joints with Fix All Fills & Bonds.
- Leave to cure for at least 2 hours before submitting the bond to pressure (walking, etc.)
- Remove surplus adhesive with a cutter knife after full cure.
- **Ready to plaster after 1 hour.**

Application Method – Lightweight Dry Lining / Boards

- Prior to application, protect and cover adjacent surfaces.
- Screw the can tightly to the applicator thread of the applicator gun.
- Shake at least 30 times with the can upside down to ensure proper mixing of the ingredients and maximum yield.
- Repeat shaking after work intervals.
- Adjust extrusion rate to allow for 30mm beads using the setting screw at the end of the applicator gun. Apply directly onto the surface, holding the gun at an angle of about 90° to the surface and ensure a distance of about 1 to 2 cm between nozzle and surface. The nozzle should not be in direct contact with the surface.
- Apply adhesive onto boards in a continuous bead around the perimeter at about 3 cm distance from the edge.
- Inside this bead apply adhesive in a zigzag bead, ensuring that at least 1/3 of the surface is covered when panel is pressed against the wall.



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- Wait for a couple of minutes and then press boards strongly onto substrate (within 8 minutes from extrusion, 20°C, 65% r.h.). At higher temperatures/humidity, the open time will be reduced; at lower temperatures/humidity, the open time will be longer.
- To improve spreading of the adhesive and obtain a more uniform, flatter distribution across the panel, the board can be removed and left for about 30 seconds before being pressed strongly back against the surface.
- Spraying the adhesive surface with a fine spray of water will improve the curing rate of the adhesive.
- Remove surplus adhesive with a cutter knife after full cure.

Application Temperature:

Surfaces: from -5°C to +35°C

Aerosol can: from +5°C to +25°C (ideally between +15°C and +25°C)

If required, acclimatise aerosol can slowly in cool or lukewarm water.

Clean with:

If not yet cured, use PU Foam Cleaner.
Once cured, use PU Remover or remove mechanically

Repair with:

Fix All Fills & Bonds Gun

Health- and Safety Recommendation:

- Apply the usual industrial hygiene.
- Wear gloves and safety goggles.
- Remove cured adhesive mechanically only or with PU Remover, never burn off.

Remarks:

- Always store can with the valve pointed upwards

Norms and Approvals:

- Building Class B1 (DIN 4102-1); Test Report P-SAC 02/III-276 (MFPA, Leipzig)
- Adhesion Report Nr. 07-143, IFBT Leipzig

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