Soudatherm Roof 250

Technical data

Basis	Polyurethane
Consistency	Stable foam adhesive , thioxotrpic
Curing system	Moisture curing
Skin Formation (EN 17333-3)	8 min
Can be loaded after*	1 hour
Can be walked upon after	About 45 minutes
Curing time*	40 minutes for a bead of 30 mm
Consumption*	80 - 100 g/m² (in the context of the ATG)
Yield	Up to 14 m² of insulation (800 ml) Up to 17 m² of insulation (850 ml)
Fire rating (DIN4102)	B1
Temperature resistance**	-40 °C till +90 °C (cured)

These values may depend on environmental factors such as temperature, humidity, surface, etc.

Product description

Soudatherm Roof 250 is a polyurethane foam adhesive in aerosol for the efficient, clean, economical and durable bonding of roof insulation panels. The characteristics of this foam adhesive make it also suitable for uneven surfaces. The adhesive can be applied efficiently and quickly with an adjustable gun.

Properties

- Easy and fast to apply (saving of up to 30 % in labour time).
- Good adhesion on all surfaces (except PE, PP and PTFE).
- Fast curing
- Very precise to dose.
- Does not age or rot, but should not be exposed to UV radiation.
- Resistant to cold and heat
- Resistant to wind forces
- Freon free (not harmless to ozone layer and greenhouse effect)
- Extremely light
- Water repellent but not waterproof.
- Open time: Max 8 min
- Resistant against wind aspiration
- Solvent free
- Doesn't attack polystyrene.

Applications

Bonding of common insulation materials
- PIR/PUR covered with
  - Mineral-coated glass fibre
  - Bituminous glass fibre (Sand surfaced or chipped, not on burnable PP surfaces)
  - Aluminium
- Expanded polystyrene (EPS)
- Mineral insulation materials (e.g. Perlite, Multipor®, Fermacell®)
- Mineral wool (but on flat surfaces, Soudatherm Roof 170 is a better bonding solution)

On many types of surfaces:
- Insulation on insulation (multi-layer)
- Even and uneven surfaces
- Masonry surfaces (e.g. concrete, fibre cement, cellular concrete)
- Steel roof decks
- Bituminous roofing felts, sand surfaced or chipped
- Wooden boards, hard PVC, plaster,…
- On vapour barriers:
  - Check the technical data sheet of the vapour barrier to make sure it is suitable for insulation bonding
  - To be tested prior to use or used only with approval of the manufacturer of the barrier
  - Bituminous vapour barriers are possible

Remark: This technical data sheet replaces al previous versions. 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. Since the design, the quality of the substrate and processing conditions are beyond our control, no liability under this publication is accepted. In every case it is recommended to carry out preliminary experiments. Soudal reserves the right to modify products without prior notice.

o Aluminium coated vapour barriers: only with the approval of the manufacturer
- Doesn't bond on PP, PE or PTFE (Teflon)
- Always perform a prior adhesion test

Packaging

Colour: orange
Packaging: 800 ml aerosol (net), 850 ml aerosol (net)

Shelf life

24 months unopened and stored in dry and cool conditions (Between 5 and 25 °C), Upright storage is recommended. After application, just lock the gun and it's closed. If the product will not be used within the following week, clean can and gun with Soudal Gun & Foam Cleaner. After cleaning, remove the Soudal Gun & Foam Cleaner and empty the gun completely.

Application method

Gluing

The materials should be clean and free of dust and grease. Loose parts should be removed and the surface should be coated with a primer if necessary.
For renovation and especially ballasted roofs, make sure the bonding surface is firmly attached to the substructure.
Shake at least 20 seconds with the can upside down to ensure proper mixing of the ingredients and maximum yield.
- Thread the can tightly to the Applicator Gun.
- 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.

It is recommended that at least 4 beads / m (30mm diameter) should be applied (80 to 100 g/m²). On the corners and the edges of the roof, at least 8 beads are recommended. The correct number of beads (and thus the usage of adhesive) can be calculated according to EN 1991-1-4. The region, the roof area, the location and structure height and also the location on the roof (middle, corners or edges) are factors that have to be taken into account.
- On uneven surfaces (for example old bituminous roofing felts), more adhesive (thicker beads up to 50mm) needs to be applied in order to make sure that there is at least 40% adhesive transfer between surface and insulation panel.
- Maximum allowed unevenness underneath an insulation board is 1cm.

In the case of steeldeck, the adhesive is applied in beads on the top (upper side) of the steeldeck. In case that a vapor barrier is present on the steeldeck, the adhesive should still be applied on the top (upper side) of the steeldeck in beads and not in e.g. a zigzag pattern between the tops.
After extrusion, the panels need to be pressed down in the adhesive beads within the open time of 8 minutes. Then do not walk on the applied insulation panels for about 1 hour.
- It's recommended to shake the can after each work interruption.

Do not hammer on the boards
- When the boards are pulled back or displaced (and the adhesive layer is broken), it's necessary to apply extra adhesive to get a good bond.

The installer should make sure that the adhesive is fully cured before applying the roofing membrane to the insulation board, minimize walking over the boards during the first hour (especially on uneven surfaces).
Cured adhesive should be removed mechanically.

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Filling

Shake at least 20 seconds with the can upside down to ensure proper mixing of the ingredients and maximum yield.
Thread the can tightly to the Applicator Gun.
It's recommended to shake the can after each work interruption.
When the product is applied in multiple layers, moisten the surface between each layer.
If not yet cured, use Soudal Gun and Foam Cleaner for cleaning. Cured adhesive should be removed mechanically.

Can temperature: +5 °C - 35 °C
Ambient temperature: +5 °C - 30 °C.
Surface temperature: +5 °C - 35 °C

Health- and Safety Recommendations

Take the usual labour hygiene into account. Always wear gloves and goggles. Remove cured foam mechanically. Never burn away. Consult label and material safety data sheet for more information. When vaporizing (for example with a compressor), additional security measures will be required.

Remarks

- Moisten surfaces with a water sprayer prior to application. If you have to work in layers repeat moistening after each layer. For not common surfaces we recommend an adhesion test.

Standards and certificates

Fire Class B1 (DIN 4102-1) - Test Certificate P-SAC 02/III-453 (MFPA Leipzig)
EMICODE EC1 PLUS - Lizenz 6617 (GEV, Düsseldorf)
BDA (Gorinchem) 0050-L-16/1: Utherm Roof PIR-L on Sopravap Stick C-15
BDA (Gorinchem) 0053-L-16/1: Rockwool Rhinoxx on Sopravap Stick C15
BDA (Gorinchem) 0076-L-17/1 - 0077-L-17/1: IDEAL EPS 120 on Bueho ALGV E 40 Plus
BDA (Gorinchem) 0197-L-14/1: Bondrock MV on Hassodritt Vapor
BDA (Gorinchem) 0293-L-13/1: Linitherm PAL (SK) on Mogat Mogaplan
BDA (Gorinchem) 0296-L-20/1: BACHL Styropor EPS 035 DAA dm on Hasse Hassodritt Vapor
BDA (Gorinchem) 0298-L-20/1: Rockwool Bitrock on Hasse Hassodrit Vapor
BDA (Gorinchem) 0362-L-19/1: Firestone Resista AK on Firestone V-Gard
Carlisle Europe 08/08/2013: Kingspan TR27 on PDT ALUTRIX 600/FR
IFI (Aachen) PB 22/09 EPS 40
IFI (Aachen) PB 23/09 Powerdeck F
IFI (Aachen) PB 20/09 MV PUR
WTCB CAR 14180-2: Unilin PIR K on IREX Profil
WTCB CAR 14224-1: Poliuretanos PIR 7C on Firestone V-Force EU
WTCB CAR 14233: IKO Enertherm MG on Seal Eco Alushell 0,6 mm
WTCB CAR 16067-3: IKO Enertherm ALU on MEPS 25
WTCB CAR 16219: ISOMO on MEPS 25
WTCB CAR 19-070-01: Utherm Roof PIR-K on Siplast Irex Profil
WTCB CAR 19-233-01: Utherm Roof PIR-K on Imper Unovel 25

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