# Product Data Sheet

## GenFlex One Step Insulation Adhesive

| Item Description | Item Number |
|---|---|
| Insulation Adhesion Kit<br>▪ 4 each of 750 mL Part A and 750 mL Part B<br>▪ 4 each Static Mixers | W590010132 |

## Description

One Step Insulation Adhesive is a two-component low-rise polyurethane adhesive designed for anchoring acceptable roof insulation and cover boards to acceptable substrates, as well as for adhering multiple layers of insulation. One Step Insulation Adhesive is a solvent free and VOC free insulation adhesive that contains no harmful HCFC or CFCs.

One Step Insulation Adhesive is suitable for cold weather applications when stored properly. One Step Insulation Adhesive is dispensed using a battery-powered or pneumatic applicator. The dispensers extrude One Step Insulation Adhesive Parts A and B simultaneously to the static mixer, which results in a mixed adhesive in bead form.

## Method of Application

1. One Step Insulation Adhesive can be installed at temperatures as low as 20 °F (-7 °C) and rising when the material is stored between 60 °F (16 °C) and 80 °F (27 °C).
2. For the best results, use power actuated dispensers (battery; pneumatic) to dispense One Step Insulation Adhesive. Hand powered dispensers may not offer the continuous force necessary to insure uniform mixing of large quantities.
3. The substrate must be clean, smooth, dry, and free of sharp edges, loose and foreign materials, oil, grease, and other contaminants.
4. To mix and dispense One Step Insulation Adhesive from kits, remove plugs and apply the static mixer over plug end of kit by hand tightening static mixer to kit with plug end facing up. Keep plug end facing up until you are ready to dispense One Step Insulation Adhesive to the deck substrate.
5. Properly mixed One Step Insulation Adhesive will be amber, with no marbling. Part A and B will be extruded simultaneously through dispensing equipment.
6. To stop dispensing One Step Insulation Adhesive, stop the dispenser plunger from advancing and point the mixing end up to stop Part A and Part B from entering static mixer. This stopped position of the kit can only be maintained for several minutes, as Part A and Part B already in the static mixer will continue to react, set up, and block the static mixer. If the static mixer becomes blocked during the stopped period, replace static mixer in order to mix and dispense the remaining Part A and Part B in kit.
7. Apply One Step Insulation Adhesive in a bead ½" (13 mm) wide to deck substrate in spacing as specified for the project and immediately set the insulation or cover boards, 4' x 4' (1.2 m x 1.2 m) maximum, in fresh One Step Insulation Adhesive before a skim coat develops. The adhesive will rise to a bead of ¾" – 1" (19 mm – 25 mm) within minutes after placement.

## Installation (cont'd)

8. Rise time will depend on the ambient conditions: warmer = faster; cooler = slower. Typical Set-up times:
   - At 60 – 90 °F (16 C – 32 °C): 5 – 8 minutes
   - At 20 – 60 °F (-7 °C – 16 °C): 8 – 15 minutes
9. To ensure that the insulation makes continuous contact with the adhesive during the critical set-up period, immediately weigh each board after setting in place, using full pails of bonding adhesive or other available source of weight that will not damage the roof insulation.

## Coverage

| Bead Spacing | Coverage per Carton |
|---|---|
| 4" o.c. (102 mm) | 200 ft² (27.9 m²) |
| 6" o.c. (152 mm) | 300 ft² (18.6 m²) |
| 12" o.c. (305 mm) | 600 ft² (55.7 m²) |
| *Each One Step Insulation Adhesive kit, when properly mixed, dispenses 150' (45.7 m) of mixed adhesive in a bead ½" (13 mm) wide. Coverage rate may be reduced due to irregularities in substrates. | |

## Storage

- Store in original containers at temperatures between 60 °F (16 °C) and 80 °F (27 °C). Do not allow One Step Insulation Adhesive to freeze.
- Store cartons with kits on their side.
- DO NOT store kits with plunger or plugged end down to avoid the possibility of leakage.
- Keep plugs on kits tightly closed during storage. DO NOT expose to moisture.

## Shelf Life

- Shelf life of eighteen (18) months can be expected when stored in original, unopened containers at temperatures
- between 60 °F and 80 °F (16 °C and 27 °C) and kept out of sunlight and protected from rain and moisture.
- For optimum results, rotate your stock to ensure stored material has not exceeded the shelf life of one year.

## Precautions

- Review applicable Safety Data Sheets (SDS) prior to use.
- Store in original containers at temperatures between 60 °F (16 °C) and 80 °F (27 °C). Do not allow One Step Insulation Adhesive to freeze.
- Personnel who are sensitive/allergic to isocyanate or polyurethane should not work with One Step Insulation Adhesive.
- At the start of each workday, and prior to beginning work, perform a trial application using One Step Insulation Adhesive and a sample piece of insulation or cover board to verify the product's suitability for use that day. Verify that proper mixing, set-up and overall adhesion of insulation to substrate is being achieved before proceeding. Use only when conditions allow, and daily trials indicate successful adhesion.
- Install only as much roof insulation with One Step Insulation Adhesive as can be covered and made watertight during that working day. The performance of One Step Insulation Adhesive should be periodically monitored during the workday to verify that sufficient rise, adhesion, and mating of the insulation using One Step Insulation Adhesive is occurring.
- Review dispensing equipment instructions prior to use. Ensure dispensing equipment is in good working order.
- It is the responsibility of the roofing contractor to maintain dispensing equipment in good working order to deliver and thoroughly mix, meter, and dispense this adhesive in a 1:1 (Part A:Part B) ratio.
- Avoid contact with eyes. Wear safety glasses with side shields.
- Avoid breathing vapors. A self-contained breathing apparatus (SCBA) or respirator should be used in areas of limited ventilation.
- Avoid contact with skin. Wear gloves when dispensing. Wash hands thoroughly after handling.
- Immediately set into wet One Step Insulation Adhesive. Insulation boards shall not exceed 4' x 4' (1.2 m x 1.2 m).
- It is imperative that freshly installed insulation is continuously weighted until One Step Insulation Adhesive sets up and the board is held in place by the adhesive.
- Use caution when removing plugs from kits.
- Do not burn empty kit containers. Dispose in accordance with local, federal, and state regulations.

## LEED® Information

Post-Consumer Recycled Content: 0%
Post Industrial Recycled Content: 0%
Manufacturing Location: Chargrin Falls, OH
NOTE: LEED® is a registered trademark of the U.S. Green Building Council

## Acceptable Substrates

| Substrate | NOTE |
|---|---|
| Structural Concrete (New) | Minimum 28-day cure time |
| Structural Concrete (Existing) | Positive adhesion test required |
| Steel | New steel decks may require cleaning to remove processing oils |
| Gypsum Decks | Positive adhesion test required |
| Cementitious Woodfiber | |
| Modified Bitumen (smooth) | Existing substrates containing residual asphalt must be cleaned and scraped as smooth as possible. |
| Plywood and OSB | |
| Vapor Shield Membrane | |
| Lightweight Concrete | Cellular or air-entrained only |
| Coal Tar Pitch | Positive adhesion test required |
| GenFlex Polyiso Insulation / GenFlex GL ISO, GenFlex Coated Glass Facer Polyiso / GenFlex CG ISO, GenFlex ½" HD ISO / GenFlex HD ISO, GenFlex HD Composite, Nailbase Composite Board / GenFlex NB ISO, DensDeck®, Securock®, Structodek™ HD | |
| Not acceptable | Single-ply membrane, fiberglass insulation, perlite insulation |

Please contact Amrize Technical Services at 800-428-4511 for further information.

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