CARLISLE FASTTM ADHESIVE DUAL CARTRIDGE

GENERAL:

Carlisle FAST Adhesive Dual Cartridge is a construction grade, two-component, polyurethane adhesive. The low-rise, expanding characteristics are designed to bond Carlisle's FleeceBACK® membrane and insulations to a variety of substrates. Carlisle FAST Adhesive Dual Cartridge is compatible with: wood fiberboard, polyisocyanurate insulation, EPS, extruded polystyrene, DensDeck® and OSB. Compatible deck types include concrete, cellular lightweight concrete, gypsum, cementitious wood fiber, wood and painted or galvanized steel. Carlisle FAST Adhesive Dual Cartridge is also compatible with the following roofing substrates: smooth BUR (previously exposed), mineral cap sheet, smooth (previously exposed) or granulated SBS Mod-Bit and Carlisle's 725 Vapor Barrier. Carlisle FAST Adhesive Dual Cartridge is applied in beads or ribbons 4", 6" or 12" o.c. depending on the wind zone, building height and code requirements to produce a strong adhesive bond between the FleeceBACK membrane, insulation and the substrate. Factory Mutual approval over a variety of deck types and substrates has been achieved.

TYPICAL PROPERTIES AND CHARACTERISTICS**:

	Part A (1)	Part B (2)
Property	Polymeric Isocyanate	Polyols, Surfactants
		& Catalysts
Viscosity (CPS@25°C)	250 cps	300-500 cps
Avg. Net Weight	10.25 lbs/gal	8.75 lbs/gal
Packaging	0.2 gal (0.75 L) per	0.2 gal (0.75 L) per
	cartridge	cartridge
Mixing Ratio by Volume	1:1 Part A to Part B	
Shelf Life	1 year	

CAUTIONS AND WARNINGS:

- 1. Review the applicable Material Safety Data Sheet for complete safety information prior to use.
- 2. The foam produced is an organic material. It must be considered as combustible and may constitute a fire hazard. The foam adhesive must not be left exposed or unprotected. Shield from heat and sparks.
- 3. Do not smoke during application.
- 4. Use with adequate ventilation. Avoid breathing vapors. Wear a NIOSH or MSHA approved respirator for organic vapors with prefilters and solvent resistant cartridges if concentrations of MDI exceed the TLV or are unknown. Proper safety training is essential for all persons involved in the installation process. If inhaled, remove to fresh air and administer oxygen if breathing is difficult. Consult a physician immediately.
- 5. Avoid contact with eyes. Safety glasses or goggles are required. If splashed in eyes, immediately flush eyes with plenty of clean water for at least 15 minutes. Contact a physician immediately.
- 6. Avoid contact with skin. Wear long sleeves and pants. Wash thoroughly after handling. In case of contact with skin, thoroughly wash affected area with soap and water or corn oil. NOTE: Carlisle's special solvent resistant Hycron® or nitrile gloves are required when handling Part A directly.
- 7. Job site storage temperatures in excess of 90°F (32°C) may affect product shelf life. Should the components be stored at temperatures lower than 55°F (13°C), restore to room temperature prior to use. Do not allow Carlisle FAST Adhesive Dual Cartridge to freeze.
- 8. All air intake vents on roofs must be closed during application of Carlisle FAST Adhesive Dual Cartridge.
- 9. KEEP OUT OF THE REACH OF CHILDREN.

COVERAGE RATE: For standard 12" o.c. bead application (may vary due to job site conditions)

FleeceBACK or insulation attachment to:

Per carton - 4 cartridge sets 400 to 600 sq.ft.

Lightweight concrete, concrete, wood, steel, smooth (previously exposed) BUR, Mod-Bit, mineral cap, or multiple layers of insulation.

APPLICATION:

- 1. The surface to which the adhesive is to be applied shall be smooth, dry, free of fins, sharp edges, loose and foreign materials, oil and grease and standing water. All sharp projections and loose material shall be removed by sweeping, blowing or vacuum cleaning.
- 2. Adhesion tests must be conducted on lightweight concrete, smooth BUR, smooth Mod-Bit and gypsum decks to determine deck integrity prior to using the Carlisle FAST Adhesive Dual Cartridge product for insulation securement.
- 3. Proper adhesion of existing roof coatings to their substrate must be verified prior to bonding to these materials.
- 4. Fibrous cement decks must be investigated for their ability to retain liquid adhesive. (Some types of fibrous cement decks may allow liquid adhesive to flow through the deck).
- 5. Apply Carlisle FAST Adhesive Dual Cartridge when the substrate and ambient temperature is 25° F (-4° C) or above.

Insulation Attachment

1. Apply a ½" to ¾" wide bead of Carlisle FAST Adhesive Dual Cartridge using a portable 1:1 applicator (oversized, dual-cartridge caulking gun)* with beads spaced as outlined on the following chart for 5, 10, or 15 year or 55-mph warranties (20 yr or 72-mph warranties require 6" o.c. in the field):

Building Height	Bead Spacing (Perimeter)	Bead Spacing (Field)
0-25 feet	6 inches o.c 4 feet perimeter	12 inches o.c.
25 - 50 feet	6 inches o.c 8 feet perimeter	12 inches o.c.
50 - 75 feet	6 inches o.c 12 feet perimeter	12 inches o.c.
75 - 100 feet	6 inches o.c 16 feet perimeter	12 inches o.c.
100 feet or greater	Contact Carlisle for bead spacing requirements	

- 2. When following Factory Mutual guidelines, bead spacing in the perimeter and corner areas may differ from the table above.
- 3. Place 4' x 4' maximum insulation boards into Carlisle FAST Adhesive Dual Cartridge after allowing it to rise ½" and develop string/body (approx. 1min. at room temperature) but before the adhesive reaches a "tack-free" state.
- 4. Designate one person to walk and roll boards into place using a 150 lb. weighted roller adding constant weight or slitting boards where necessary until adhesive sets-up.

FleeceBACK Installation

- 1. Unroll FleeceBACK sheet and position. Fold sheets in half width-wise.
- 2. Apply FAST Adhesive Dual Cartridge to the substrate at 4", 6" or 12" on center (depending on building height, wind-speed warranty, warranty length and Factory Mutual guidelines).
- 3. Allow adhesive to rise and develop string/body (approx. 1.5-2 minutes), then roll FleeceBACK membrane into FAST Adhesive. The time it takes for the adhesive to develop string will vary based on environmental conditions (temperature and humidity).
- 4. Take precautions to avoid installing more adhesive than can be covered with FleeceBACK and rolled prior to the adhesive reaching the tack free state.
- 5. Roll membrane with a roller (not to exceed 150 lbs.) to insure fleece embedment. If adhesive contaminates the splice area immediately remove with splice cleaner or splice primer.
- * The portable 1:1 applicator is a hand operated, lightweight, portable unit that consists of an oversized, dual-cartridge caulking gun used to transfer the 2-component Carlisle FAST Adhesive Dual Cartridge from the plastic cartridges to the substrate. From the applicator, the adhesive flows through a disposable static mixing nozzle and onto the substrate. Since the adhesive reaction occurs in the nozzle, clean up and maintenance is fast and easy. Each carton includes 4 cartridge sets and 6 static mixing tubes.
- ** General properties. Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification or specification range for any particular property of this product.

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