

Viking Flexible FAST™ Adhesive

Viking Roofspec Supplier Code: STP900b
Version 1.0

Introduction.

This Data Sheet is to serve as a reference guide for Viking Roofspec Licensed Installers who are already familiar with Viking Roofspec's systems and are responsible for Viking roof-system installations.

The following guide contains precautions, best uses and application procedures for the correct installation of Viking Flexible FAST™ Adhesive. FAST Adhesive for use with Fleeceback membrane systems (F.B.S) and to secure P.I.R insulation boards to the supporting substrate, provides a non-penetrating system application such as WarmSpan1. This industry-leading breakthrough in urethane adhesive technology offers built-in elongation, energy-absorbing and enhances puncture and impact resistance properties when used conjunction with the Fleeceback membrane System.

Flexible FAST Adhesive Parts A & B are mixed in the cartridge nozzle and applied to the roof substrate as an extruded wet bead of approx. 15mm. A catalytic reaction takes place, causing the Flexible FAST Adhesive to expand to a light-blue coloured foam. Fleeceback membrane or insulation boards are then laid into the foamed adhesive after developing "string/body" and rolled with a 70-kg roller. This will ensure either, the fibres of the fleece are embedded into the fleece, or the insulation panels have full contact with the adhesive. Within 30 minutes Flexible FAST Adhesive cures to form a tenacious bond between the substrate and the Fleeceback membrane or insulation boards.

Properties

Coverage	7 - 10m ² (1 set per 3 Sheets of Polyiso)
Application Temp	15°C or above
String Time / Tack off time	1 ^{1/2} - 3 min String time will vary based on environmental conditions like temperature and humidity
Full cure	
Packaging Part A / Part B	750ml (Part A) & 750ml (Part B) plastic cartridge
Mixing ratio	Mix A and B 1 to 1 - equal parts by volume
Substrates	Concrete, Plywood
For use under Waterproofing membranes	Enviroclad FBS / Epiclad FBS
Storage	2°C - 30°C max
Shelf life	12 months (unopened container)
Colour	Mixed Blue
VOC Content	0 g/l

Installation

1. The surface to which adhesive is to be applied must be dry and free of protrusions, sharp edges, loose and foreign materials, oil, and grease. Depressions greater than 6 mm shall be filled with Flexible FAST Adhesive or other approved patching material. All sharp projections shall be removed. Previously unexposed asphalt must be primed with CAV-GRIP III.
2. Where Vapour barrier is required seal gaps between the substrate and penetration with Viking Vapour Barrier VWR725, or other suitable material, to avoid condensation issues and positive pressure from air infiltration.
3. Apply Flexible FAST Adhesive when the substrate and ambient temperatures are -4°C or above. Keep Cartridges stored for use between 20°C – 30°C. Keep Cartridges out of direct sunlight as adhesive may expand within the cartridge due to overheating.
4. Apply FAST Adhesive in ribbons at 150mm – 300mm on centre.
5. Use 150mm centres within 1.2m - 5.4m from all roof perimeters such as roof edges, gutters, parapets, pop-ups, skylights, and large penetrations. **Refer Ribbon centres: Extruded Wet Bead of 15mm*

FleeceBACK Attachment Slide-in Method:

1. Unroll FleeceBACK sheet and position. Fold the sheet back in half lengthwise (end-to-end).
2. Apply FAST Adhesive to the substrate in ribbons at 150 – 300mm on centre with a minimum 15mm wet bead achieving a light-blue coloured foam. *Refer Ribbon centres: Extruded Wet Bead of 15mm.
3. Once “string time” occurs, gradually feed FleeceBACK sheet into Flexible FAST Adhesive, checking for “string/body” every few meters. Stop feeding FleeceBACK sheet into adhesive when applicator reaches adhesive that has NOT developed “string/body”. Immediately begin to roll membrane width-wise with a heavy segmented weighted roller. Repeat process until FleeceBACK sheet is fully installed.

Roll-in (Mod Bit) Method:

1. Ensure the bitumen has been cleaned and is dry
2. Keeping the FleeceBACK sheet on the core, position roll of FleeceBACK membrane at the designated starting point.
3. Extrude Flexible FAST Adhesive to the substrate. - Apply at 4", 6", or 12" on center with a min. ½" wet bead. Ensure end laps are protected from adhesive.
4. Once “string time” occurs, gradually roll FleeceBACK membrane into Flexible FAST Adhesive, checking for “string/body” every few feet. Stop rolling FleeceBACK into adhesive when applicator reaches adhesive that has NOT developed “string/body”. Immediately begin to roll membrane width-wise with a 150-lb. segmented weighted roller. Repeat process until FleeceBACK sheet is fully installed.

Insulation Attachment

1. Apply Flexible FAST Adhesive to the substrate achieving a light-blue coloured foam.
 - Refer Ribbon centres: Extruded Wet Bead of 15mm.
 - For metal-decks extrusion of FAST must run parallel with and be on top of all metal-deck ribs / flutes.
2. Place insulation boards into Flexible FAST Adhesive after adhesive rises and develops “string/body” (approx. 1 – 2 min.). String time will vary based on environmental conditions like temperature and humidity. Do not allow the adhesive to over-cure prior to setting insulation boards.
3. Designate one person to walk the insulation boards into place and then roll (with a 70 kg weighted roller) the boards between 5 – 7 minutes from the initial adhesive application. Boards may be relief-cut where necessary and must be temporarily weighted to keep the boards in constant contact with the adhesive until the adhesive cures. 30 – 40mins.
4. At the beginning of the insulation attachment process and periodically throughout the day, check the adhesion of boards to ensure a tight bond is created and maximum contact is achieved. Wait a minimum of 20 minutes after board is installed before checking adhesive.

*Ribbon centres: Extruded Wet Bead of 15mm		
Building Height Mt	Bead Spacing (Perimeter)	Bead Spacing (Field)
0m – 7.5m	150mm o.c. (1.2mt perimeter)	300mm o.c.
8 m– 15m	150mm o.c. (2.4mt perimeter)	300mm o.c.
16m – 22m	150mm o.c. (3.6mt perimeter)	300mm o.c.
23m +	150mm o.c. (5.4mt perimeter)	300mm o.c.
Coverage (estimate)	7m ² per Set	10m ² per Set

Precautions

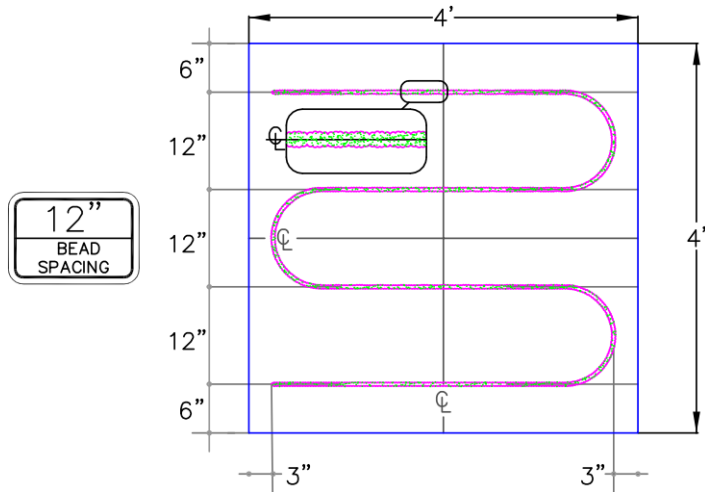
- Review the Material Safety Data Sheet for complete safety information prior to use.
- The foam produced is an organic material. It must be considered as combustible and may constitute a fire hazard. The foam adhesive must not be left exposed or unprotected. Shield from heat and sparks. Do not smoke during application.
- Use with adequate ventilation. Avoid breathing vapours. Wear an approved respirator for organic vapours with prefilters and solvent resistant cartridges. If vapour inhaled, remove to fresh air, and administer oxygen if breathing is difficult. Consult a physician immediately.
- Avoid contact with eyes. Safety glasses or goggles are required.
- If Flexible FAST adhesive is splashed in eyes, immediately flush eyes with plenty of clean water for at least 15 minutes. Contact a physician immediately.
- Avoid contact with skin. Wear long-sleeved shirts and long pants. Wash hands thoroughly after handling. In case of contact with skin, thoroughly wash affected area with soap and water.
- Permeation-resistant gloves are required when handling the material or during application.
- KEEP OUT OF THE REACH OF CHILDREN.

NOTE:

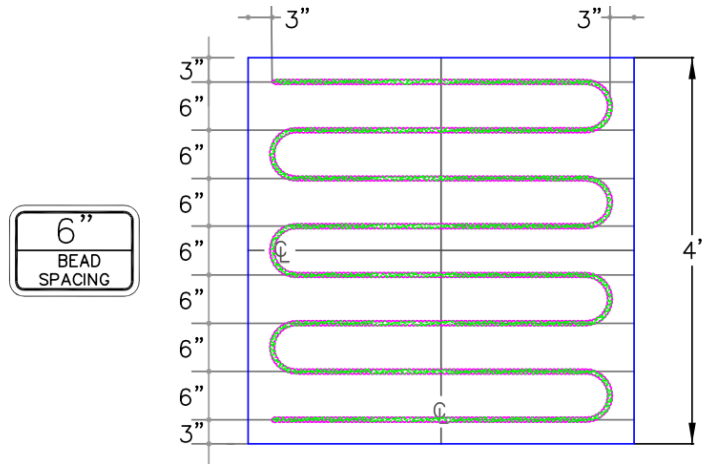
- Jobsite storage temperatures more than 32°C may affect product shelf life. Should the components be stored at temperatures lower than 15°C, restore to room temperature prior to use. Do not allow Flexible FAST Adhesive to freeze (storage below -18°C for at least 3 days).

Substrate Compatibility						
Insulation/Underlayments			Roof Decks		Existing Roofing Materials	
Polyiso PIR		YES	Concrete	YES	Mineral Cap Sheet	YES
Expanded Polystyrene (EPS)		Yes1	Plywood	YES	Granular Modified-Bitumen	YES
Extruded Polystyrene (XPS)		Yes1	Wood	YES	Smooth Modified-Bitumen	YES
Coverboards Gypsum Fibre		YES	Fibrous Cement	YES	Smooth BUR	Yes3
DensDeck coverboard		YES	Painted Steel	YES	Gravel BUR	Yes4
OSB		YES	Aluminium	YES	Aluminium-Coated BUR	Yes5
			Galvanised Steel	Yes2	Unexposed Asphalt	Yes6
					Aged Rubber, TPO	Yes7
					Coal Tar Pitch	Yes8

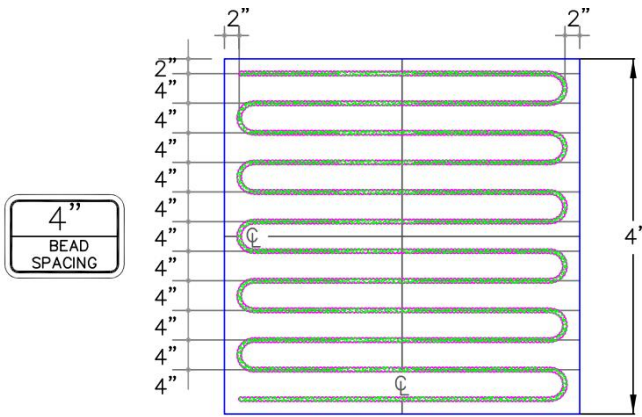
1. For insulation attachment only.
2. For new galvanized steel decks, power-washing may be necessary to remove finishing oil residue if present.
3. Existing Smooth BUR must be Type III or IV asphalt if Epiclad FBS (Black) membrane is to be installed directly without insulation.
4. A minimum 10mm Coverboard or 25mm insulation is required over properly prepared gravel BUR. Fleeceback membrane cannot be installed directly over a gravel surface.
5. Any loose coatings must be removed by power-washing or by physical abrasion prior to the application of Flexible FAST Adhesive.
6. A test installation over the aluminium-coated smooth BUR is recommended to ensure the aluminium coating is fully adhered.
7. Consider using a mechanical fixing method for fixing into the substrate.
8. Requires primer coat of CAV-GRIP III for application.
9. Power-washing aged EPDM, Butyl, or TPO membrane is required prior to the application of Flexible FAST Adhesive. Contact Viking for specific requirements on TPO recover.
10. An insulation providing the necessary R-value must be specified to prevent the coal tar pitch from softening. Fleeceback membranes cannot be installed directly to coal tar pitch.



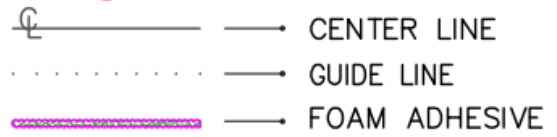
12"
 BEAD
 SPACING



6"
 BEAD
 SPACING



4"
 BEAD
 SPACING



FEET TO CENTIMETERS		INCHES TO CENTIMETERS																				
4'	8'	inch	1/8"	1/4"	15/32"	1/2"	5/8"	3/4"	1"	1.5"	2"	2.5"	3"	4"	6"	8"	9"	11"	12"	18"	24"	36"
120	250	cm	0.5	1	1.2	1.5	1.6	2	2.5	4	5	6.5	7.5	10	15	20	23	28	30	46	61	91

Auckland office

80 Alexander Crescent,
 Otara PO Box 14-541,
 Panmure, Auckland
 1741, New Zealand

Christchurch office

2 Nazareth Avenue,
 Middleton, PO Box
 9117, Tower Junction
 Christchurch 8149,
 New Zealand

Wellington office

19 Pretoria St,
 Lower Hutt 5010,
 New Zealand

T: 0800 729 799
 F: 0800 729 788

info@vikingroofspec.co.nz
 www.vikingroofspec.co.nz

A division of Viking Group Limited