

Firestone Building Products

JET BOND ADHESIVE APPLICATION GUIDE

December 2019

TABLE OF CONTENTS

1.01	PRODUCT DESCRIPTION	3
1.02	PREPARATION	3
1.03	METHOD OF APPLICATION	3
1.04	CLEANING APPLICATOR	4
1.05	CANISTER STORAGE	4

1.01 PRODUCT DESCRIPTION

Jet Bond Spray Adhesive is an LVOC bonding adhesive packaged in portable, pressurized canisters and formulated for two-sided spray application directly from the canister. Jet Bond provides excellent adhesion of Firestone RubberGard™ EPDM, EcoWhite™ EPDM, UltraPly™ TPO and TPO XR roofing membranes and flashings to approved substrates in both horizontal and vertical applications.

1.02 PREPARATION

- A. General Application Information
 - 1. Dispense Firestone Jet Bond Spray Adhesive in a well-ventilated area using appropriate personal protective equipment (PPE).
 - 2. Substrates to receive Jet Bond Adhesive must be clean, smooth, dry, free of sharp edges, loose and foreign materials, oil, grease, and other contaminants. Avoid contact with asphalt surfaces.
 - The Jet Bond canister must be at least 70 °F (21 °C) at the time of application. Adhesive may be applied at ambient temperatures as low as 25 °F (-4 °C) and rising, but canister temperature must be a minimum of 70 °F (21 °C).
 - 4. During colder weather, signs that the canister temperature is too low may include increased adhesive viscosity, clogging spray tip, inconsistent fan spray pattern or decreased coverage rate. It may be necessary to use an industrial heating blanket or rotate stock to a hot box or warm storage area to maintain production. Keep the applicator tip clean and shake canister more frequently to maintain adequate applicator pressure.
 - 5. Do not apply Jet Bond in windy conditions exceeding 15 mph (or when flag is standing straight out.). A wind break may be necessary to maintain fan spray pattern in winds less than 15 mph.
 - 6. Make sure the trigger lock on adhesive spray gun (if equipped) is engaged when not in use to prevent accidental discharge.
 - 7. Refer to the product Technical Information Sheet (TIS) for additional information.

1.03 METHOD OF APPLICATION

- A. Assembling Jet Bond Spray Applicator:
 - 1. Connect the hose to the gun and tighten fitting securely with wrench. Connect the other end of the hose to the cylinder outlet and tighten fitting securely with wrench. Use caution not to cross-thread the connections.
 - 2. Open the cylinder valve fully, checking all connections for leaks. Tighten if necessary.
 - 3. Once the valve has been opened, do not close the valve until the cylinder is completely empty or hose and spray gun are to be removed and proper cleaning is performed.
 - 4. The spray tip may require periodic cleaning.
 - 5. Agitate Jet Bond canister for 30 seconds prior to use. Periodically shake the canister during application to maintain canister pressure and produce optimal fan spray pattern.

B. Dispensing Notes:

- 1. Maintain the trigger fully open while applying adhesive. Do not spray in short bursts.
- 2. Keeping the spray nozzle perpendicular to the substrate, picture-frame the spray area with adhesive and then go back and forth with an approximate 50% overlap to fill in the area.
- 3. For all smooth and fleece backed membranes a two-sided application of Jet Bond is required. Reference the "Good" spray pattern below:



1.03 METHOD OF APPLICATION (continued)

- 4. For smooth EPDM/TPO membranes and for all substrates: spray with the trigger fully open, at a distance of 12" 18" (305 mm 457 mm) from the substrate, at a rate of approximately 1 ft/sec (~0.305 m/sec) to obtain the "Good" spray pattern. Apply Jet Bond Adhesive to the membrane and substrate at about the same time to allow approximately the same flash-off time.
- For TPO XR Fleece back membrane: spray with the trigger fully open, at a distance of 12" 18" (305 mm 457 mm), and at a rate of ~0.5 0.75 ft/sec (~0.152 0.228 m/sec) to obtain the "Good" spray pattern. Apply Jet Bond Adhesive to the TPO XR membrane first to allow sufficient flash-off time.
- Coverage rate is approximately 800 ft² 1000 ft² (74 m²– 93 m²) per canister for smooth membranes, and approximately 650 – 750 ft² (60.4 – 69.7 m²) per canister for TPO XR fleece backed membrane.
- 7. Keep membrane lap areas clean and free of Jet Bond Adhesive overspray and remove any adhesive from the seam area with Firestone Splice Wash or Firestone LVOC Adhesive Flush Solution before mating the seam.
- 8. Allow solvent to flash-off from Jet Bond Adhesive prior to mating the two surfaces. Perform "touch-push test" in areas of heavier application to verify the adhesive is tacky but does not transfer to finger.
 - Flash-off time is typically 6 8 minutes with a working time maximum of 30 minutes. These times will vary depending on ambient conditions.
- 9. Carefully mate the membrane to the substrate. Broom the membrane, then roll the membrane thoroughly using a 75 lb (34 kg) to 150 lb (68 kg) roller for horizontal surfaces and a silicone hand roller for vertical surfaces.

1.04 CLEANING JET BOND SPRAY APPLICATOR

- A. Preparation
 - 1. Make sure to clean gun/hose assembly in a well-ventilated area using the appropriate PPE.
 - 2. Close the valve on the adhesive canister and engage the trigger to relieve pressure on the gun/hose assembly into an appropriate collection container.
 - 3. Disconnect the hose from the adhesive canister outlet.
 - 4. Connect the hose to the outlet of the Firestone LVOC Canister Flush Solution and tighten with a wrench. Use caution not to cross-thread the connection.
- B. Flushing the Applicator
 - 1. Fully open the cylinder valve on the flush solution canister, direct the fan spray into an appropriate collection container and squeeze the handle of the spray gun to allow flow of LVOC Canister Flush Solution through the device.
 - 2. Allow an adequate amount of solution through the hose into an appropriate collection container. If necessary, small parts such as the nozzle, gun tip, and threads can be soaked in LVOC Canister Flush solution, or wiped with a rag that has been saturated with solution.
 - 3. Once flushed, close the LVOC Canister Flush Solution valve, and the engage trigger to relieve pressure on the gun/hose assembly.
 - 4. Disconnect the hose from the flush solution canister outlet and drain any residual solution into an appropriate collection container.
 - 5. Dispose of used LVOC Canister Flush Solution in accordance with local, state and federal regulations.

1.05 CANISTER STORAGE

- A. Store adhesive and flush solution canisters tightly closed in a cool, dry, well-ventilated area, between 60 °F and 80 °F (16 °C 47 °C). Bring cannister to 70 °F (21 °C) before application. Do not allow adhesive cannister temperature to exceed 110 °F (43 °C).
- B. Store canister without gun/hose assembly attached.