Perimeter Seal/Parapet Repair Using FROTH-PAK™ 200 Foam Sealant

FROTH-PAK™ 200 Foam Sealant is a portable, two-component, spray polyurethane foam dispensing system for air sealing, insulation and moisture management around the building envelope. Reducing air leakage is critical for enhancing building envelope performance. Depending on the construction details, often a source of air leakage is around the perimeter of the building between the roof deck and parapet. Sealing this area during construction can potentially reduce costly repairs later, as well as improve building performance.

GETTING READY
MATERIALS AND EQUIPMENT
• FROTH-PAK™ 200 Foam Sealant Kit complete with gun/hose assembly, dispensing nozzles, petroleum jelly packet and operating instructions
• Protective wear, including goggles or safety glasses, and protective clothing, and respiratory protection
• Roofing knife or handsaw
• 10-12 mil polyethylene
• Paintbrush or roller
• 5/8” to 3/4” plywood if repairing (larger than area to be repaired)
• Protective roof coating (similar or compatible to originally applied coating)

SAFETY AND CONDITIONS OF USE
• Read the instructions and Material Safety Data Sheets carefully before use.
• FROTH-PAK™ Polyurethane Spray Foam contains isocyanate, hydrofluorocarbon blowing agent and polyol. Do not breathe vapor or mist. Use only in well-ventilated areas or with proper respiratory protection. Supplied air or an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter may be required to maintain exposure levels below ACGIH, OSHA, WEEL or other applicable limits. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure, air-supplying respirator (air line or self-contained breathing apparatus).

• Isocyanate is irritating to the eyes, skin and respiratory system, and may cause sensitization by inhalation or skin contact.
• FROTH-PAK™ Foam will adhere to most surfaces and skin. Do not get foam on skin. Wear gloves, goggles or safety glasses, and protective clothing. Cured foam must be mechanically removed or allowed to wear off in time.
• The contents are under pressure.
• Store FROTH-PAK™ 200 Foam Sealant at 75°F. Do not store at temperatures above 120°F.
• Application temperature: 60°F - 90°F.
• Avoid prolonged storage in direct sunlight or near heat sources.

PREPARE WORK AREA
1. Remove all contaminants (water, oil, dust, dirt, debris, old sealants, etc.) that could affect the adhesion between the roof deck, parapet and foam. If in doubt, conduct an adhesion test, waiting at least 1 hour to assess the bond.
2. Check material compatibility. FROTH-PAK™ Foam Sealant is not compatible with silicone coatings. Remove any silicone coating at least 6” from the area to be sprayed.

APPLICATION: SEAL PERIMETER
(DURING CONSTRUCTION)
FROTH-PAK™ Foam Sealant can be easily installed around the perimeter on the exterior side of the roofing assembly. Install the foam prior to insulating the membrane or insulation. FROTH-PAK™ Foam Sealant meets the requirements for use on the exterior of a commercial roof per Section 2603 of the International Building Code. The code requires that foam plastic insulations have surface burning characteristics of ≤75 flame spread index and ≤450 smoke developed index. The application of the product is limited to an area of 8” wide x 2” thick.

APPLICATION: REPAIR PARAPET
1. If the area to be repaired has been previously painted, scrape away all loose or poorly adhered paint. Conduct an adhesion test if any previously painted surfaces are involved in the repair.
2. If the area is wet, let the surface dry completely. Any additional moisture may cause premature curing and limit work time of the FROTH-PAK™ Foam Sealant.
3. Check the underlying substrate for soundness and repair, if applicable.

Note: Always check with local building officials and codes for additional requirements prior to using FROTH-PAK™ Foam Sealant.

APPLICATION: SEAL PERIMETER
1. Apply foam 2” thick or less between the roof deck and parapet (Figure 1).
2. Once the foam has cured (approximately 5 minutes), remove any overspray with a roofing knife. If additional shaping is required, cut the cured foam with a handsaw.

APPLICATION: REPAIR PARAPET
1. If the area to be repaired has been previously painted, scrape away all loose or poorly adhered paint. Conduct an adhesion test if any previously painted surfaces are involved in the repair.
2. If the area is wet, let the surface dry completely. Any additional moisture may cause premature curing and limit work time of the FROTH-PAK™ Foam Sealant.
3. Check the underlying substrate for soundness and repair, if applicable.

Note: For gaps less than 1/2", use GREAT STUFF PRO™ Gaps & Cracks Insulating Foam Sealant or equivalent.

Note: During application, the foam exerts force as it expands. Monitor the amount of foam installed to avoid overfilling restricted spaces.

Note: For gaps less than 1/2", use GREAT STUFF PRO™ Gaps & Cracks Insulating Foam Sealant or equivalent.

Note: For gaps less than 1/2", use GREAT STUFF PRO™ Gaps & Cracks Insulating Foam Sealant or equivalent.
4. Cut the damaged or blistered area at an inward, tapered, 45° angle (Figure 2). Cut back any defective and moist foam until solid, dry foam is exposed. Where possible, remove at least 6” beyond the area to be repaired.

5. Place a piece of plywood wrapped in polyethylene next to the area to be filled.

6. Depending on the depth of the repair area, use two or more coats/passes of FROTH-PAK™ 200 Foam Sealant to obtain a thickness that is approximately 2" from the top of the area. Apply the foam in layers of 2" or less in any single pass (Figure 3).

7. To “form” the final pass, place the plywood wrapped in polyethylene over the area to be filled. Carefully spray the foam under the plywood, holding the plywood down (Figure 4). Wait about a minute for the foam to rise to the underside of the plywood and begin curing. After removing the plywood, check that the foam is equal to the height of the surrounding parapet.

8. Once the foam has cured (approximately 5 minutes), remove any overspray with a roofing knife (Figure 5). If additional shaping is required, cut the cured foam with a handsaw.

APPLY FINISH COATING (IF REQUIRED)

Note: Always protect FROTH-PAK™ Foam Sealant within 3 hours after application with a protective coating.

Brush or roll a 30-40 mil quality protective coating (similar to the originally applied coating).

DISPOSAL

1. Dispose of any foam waste and empty FROTH-PAK™ Foam Sealant cylinders as a non-hazardous waste (outlined in the operating instructions) and in accordance with local and state regulations.

2. Depressurize cylinders prior to disposal.

www.dowbuildingsolutions.com