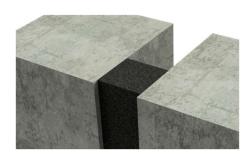


# Installation, Operation + Maintenance Manual

# PRE-COMPRESSED PRIMARY FOAM SYSTEM – VERTICAL APPLICATION

MODEL(S): PBF

# PBF Wall to Wall System - 1/8" Through 4" Sizes



#### **GENERAL DESCRIPTION**

The Nystrom Pre-Compressed Primary Foam System is specifically suited for vertical applications.

This products "breathability" and ability to keep dust and debris out of environments is unmatched. Suitable for both exterior and interior applications.

**GENERAL SAFETY PRECAUTIONS** Improper selection, installation, or use can cause personal injury or property damage. It is solely the responsibility of the user, through their own analysis, to select products suitable to the specific application requirements, ensure proper maintenance and use as intended. Follow local, state, and federal regulations for proper installation and operation requirements.

#### **Introduction + Safety**

Please read the complete instructions carefully before beginning any work. To ensure proper installation and performance of the product, the following actions must be completed by the installing contractor. Failure to do so will affect the product warranty.

# Transportation + Storage

- Inspect all shipments and materials for missing or damaged components and hardware.
- o Material must be stored in a clean, climate-controlled, dry location.

#### **Preparation**

- Locate the packing slip(s) and/or shop drawings.
- Verify that all products listed on the packing slip are included in the package.
- Check the products for damage. If products are damaged, report a freight claim immediately and leave the products in their packaging. If you sign for products without reporting damage, you waive your right to a freight claim and will be responsible for their replacement cost.
- Read the instructions thoroughly before beginning installation.

### **Tool List**

- Tape measure
- Straight edge knives
- Acetone or isopropyl alcohol, lint free rags & a clean paint bucket
- Caulking gun & caulk knives
- Spray bottle filled with water
- Mineral spirits or similar solvent
- Margin trowel

- Broom & dustpan or vacuum
- Level
- Painters tape and/or Duct tape
- 6" caulkers knife
- Ø1-1/2in "jiffy-mixer"
- Spatula to scrape epoxy

# **Environmental Storage Requirements**

- <u>Cold Days:</u> Store materials off the floor in a clean, dry location, inside above 68°F [20 °C] for a minimum of 24 hours prior to installation. Product will recover slower when it's cold and faster when it's warm.
- <u>Very Hot Days</u>: Keep materials in a clean, dry location and out of direct sunlight when the temperature is greater than 60°F [16 °C] until immediately prior to installation of joint. Do not store material in an enclosed container where temperatures exceed 100 °F [38 °C].

#### **Sidewall Adhesive information for Vertical Joints**

For vertical joints 4.00" [102mm] and larger, sidewall adhesives are required as they support the joints performance.

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# **Preinstallation**

- 1. Ensure joint faces area parallel and have sufficient depth to receive the full depth of the EJN-PBF product being installed plus at least 1/4" [6mm] as shown on the shop drawings.
- 2. Repair spalled irregular or unsound joint surfaces using accepted industry practices for repair of the substrates in question. Remove protruding roughness to ensure joint sides are smooth.
- 3. Remove all residues of old sealants. Wire brush or angle grind, if necessary, to clean sides.
- 4. Wipe joint faces with lint-free rags dipped in solvent or other agent suitable for use on the substrates in question to a depth of the seal material plus 1" [25mm] to ensure joint sides are free of dust or cleaning agent prior to installation.
- 5. Ensure joint sides are dry of solvent or cleaning agent PRIOR to installation.
- 6. Tape front 1/2" [13mm] of joint opening (**see Figure A**) both sides, to prohibit epoxy / supplied adhesive accessory from this area (for larger sizes). Failure to stop epoxy from landing in this area will restrict foam seal from optimal movement.

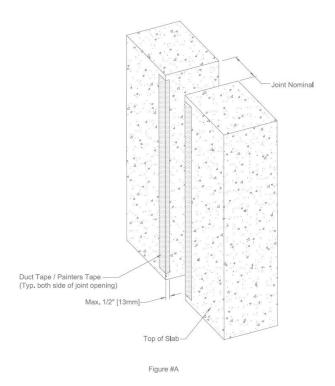


Figure A

# **Foam and Accessory Material Preparation:**

- 1. Store materials per Environmental Storage Requirements shown on page 2.
- 2. Tape the joints ahead of time (will help avoid bad installs).
- 3. Joints must be sized every 5-7 feet [1.5 2.1 meters] to ensure gap opening is uniform and depth is sufficient for the supplied material.

## Sizes up to 1.75" [44mm] - shipped in ROLLS

- 1. Do not make any cuts until fully prepared to install material.
- 2. Cut off the first and last 1"-2" [25mm to 51mm] of roll material as this is consumable material (from the packaging process).
- 3. Take note which side has PSA (Pressure Sensitive Adhesive) release liner and insert foam on non-PSA side (to keep the PSA away from the other sidewall which could catch and slow down the installation process).
- 4. Install material from one side of the gap, working towards the opposite side. (Note: drive initial installation termination end with positive pressure), once a proper 0.25" [6mm] recess is achieved, apply PSA-side to sidewall to adhere into place.
- 5. At splices, a 0.125"-0.25" [3mm-6mm] "overlap" is needed as some compressive force is required to keep splice connected.
- 6. Allow 48+ hours for material expansion and equalization.

# Sizes up to 2.00"-3.75" [51mm - 95mm] - shipped in STICKS (6.50ft)

- 1. As PSA is applied to the sticks, no epoxy is required but flexible sealant is provided as a splice adhesive between abutting foam faces.
- 2. All sizes within this range will have PSA as a standard (applied to one side of foam), thus no epoxy is required.

# Sizes up to 3.75"-4.00" [95mm – 102mm] – shipped in STICKS (6.50ft)

3. With these larger sizes, no PSA is applied to the sticks, so epoxy is required for sidewall adhesive on both sides during installation into gap opening and flexible sealant is provided as a splice adhesive between abutting foam faces

# **INSTALLATION (EJN-PBF - ROLLS ONLY)**

#### <u>Cutting Details – Roll Material</u>

- 1. Do not make any cuts until ready to install the material.
- 2. Refer to the section below for further instruction on cutting the roll material.
- 1. When fully prepared to install, remove the outer lining surrounding the joint material.
  - WARNING: Be prepared to install the material immediately once the liner is removed to prevent the material from expanding past the joint width. See **Figure 1**
  - TIP: Material will expand faster when hot and slower when cold. Make sure materials are stored per the Environmental Storage Requirements shown on page 2.



Figure 1

- 2. Cut off the first and last 1"-2" [25mm 51mm] of material using a sharp utility knife. See **Figure 2** 
  - Verify that the material is cut square at both ends for proper seams. (Refer to the SEAMS section (p11) for more details.
  - All pieces must be square to the termination point.
  - TIP: Mineral spirits can be applied to the blade for a smoother cut.



Figure 2

- 3. If the joint runs horizontal, begin installing the material at one side of the joint (either side) and continue to install the material working towards the opposite end. For vertical joints begin installation at the bottom of the joint and work upward. See **Figure 3** 
  - The installed rolls will support the subsequent rolls until the material fully expands
  - Remove the release liner as the material is installed

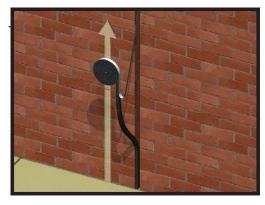


Figure 3

- 4. Place the material into the joint while gently pushing the non-PSA (pressure sensitive adhesive) up against the side of the substrate. Once the material is in place, use a margin trowel to firmly press the adhesive side to the substrate and allow the material to expand to fill the joint. See **Figure 4** 
  - NOTE: If the PSA is hampering installation, apply a small amount of isopropyl alcohol or a mist of water to the adhesive side of the material. This will not impact the final sealing properties.



Figure 4

- NOTE: If the PSA is <u>not</u> sticking to the substrate, use wooden wedges to hold the material in place while the material expands. Once the material has expanded, the wedges can be removed.
- WARNING: Allow 72 hours for full expansion and material equalization. Expansion and equalization rates are affected by temperature. Material will expand faster when hot and slower when cold.

# **INSTALLATION (EJN-PBF - STICKS ONLY)**

#### <u>Cutting Details – Stick Material</u>

- 1. Use a miter saw to make any cuts to the material before removing the clear shrink wrap packaging. All starting and ending pieces must be square to the termination point.
- 2. Use a sharp knife to make any cuts after the clear shrink wrap packaging has been removed.
  - a. Apply mineral spirits to the knife for a smoother cut. A miter box can be used.
  - b. WARNING: Install the material directly after removing the packaging to ensure the material does not expand past the joint width.
  - c. NOTE: Refer to the SEAMS section (p11) for further instruction on preparing the material.
- 1. When fully prepared to install, cut the shrink packaging along the edge of the Masonite strapping.
  - WARNING: Be prepared to install the material immediately once the packaging is removed to prevent the material from expanding past the joint width. See Figure 5
  - TIP: Material will expand faster when hot and slower when cold. In cold temperatures, store the material in a heated area 24 hours prior to installation. In hot temperatures, store the material out of direct sunlight and not in an enclosed storage container where temperatures may exceed 100 ° F (38° C).

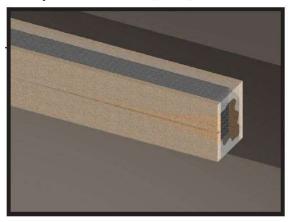


Figure 5

- 2. Verify the material is cut square at both ends for proper seams. All pieces must be square to the termination point.
- 3. Remove the release liner on both sides of the EJN-PBF. See Figure 6
  - NOTE: Refer to the FOAM & ACCESSORY MATERIAL PREPERATION (p4) and SEAMS section (p11) for further instruction.

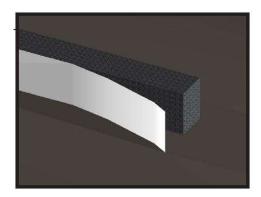


Figure 6

- 4. For joints that run horizontal, begin installing the material at one side of the joint (either side) and continue to install the material working towards the opposite end. For vertical joints, begin the installation at the bottom of the joint and work upward. See **Figure 7** 
  - The installed stick will support the subsequent sticks until the material fully expands.

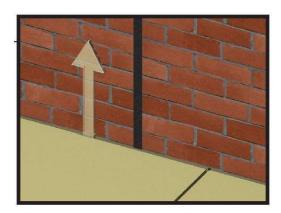


Figure 7

- 5. Use a putty knife to press the material against the joint wall. This will activate the pressure sensitive adhesive (PSA) and further help to support the material during expansion. See **Figure 8** 
  - NOTE: If the PSA is hampering installation, apply a small amount of isopropyl alcohol or a mist of water to the adhesive side of the material. This will not impact the final sealing properties.
  - NOTE: If the PSA is not sticking to the substrate, use wooden wedges to hold the material in place while the material expands. Once the material has expanded, the wedges can be removed.
  - WARNING: Allow 72 hours for full expansion and material equalization. Expansion and equalization rates are affected by temperature. Material will expand faster when hot and slower when cold.



Figure 8

# **INSTALLATION (EJN-PBF - SEAMS)**

#### **Butt Seams**

- 6. Verify that the new piece of material is cut square and not at an angle to the previous material installed.
- 7. Overlap extra material (approximately 1/8" 1/4" [3mm 6mm]. at seams and splices to ensure that the seam is in compression after installation. See **Figure 9**



Figure 9

- 8. "T" & "Cross" Intersections
  - Install horizontal material first.
  - Butt the vertical material up to the horizontal material following Steps #6 & 7. See
     Figure 10

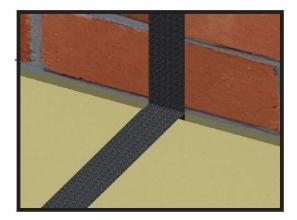


Figure 10

#### **Butt Seams**

9. For joint corners, seam the material using a 45° angle cut (Refer to the FOAM & ACCESSORY MATERIAL PREPERATION [p4] section for further information).

# **Finish**

10. Allow for 72 hours for full expansion and material equalization.

#### **OPERATION**

Expansion Joints are designed and built for years of dependable service.

#### **MAINTENANCE**

Perform annual inspections to make sure the system is in position; all components are tight and in place and there is no impedance of joint movement. Repair and/or replace as needed.

# **QUESTIONS?**

For more information on installation, repair, or replacement, please contact Customer & Sales Support at 800-547-2635 or visit <a href="mailto:nystrom.com">nystrom.com</a>