

Installation, Operation + Maintenance Manual

# ROOF BELLOW SYSTEM CANT APPLICATION Model(s): EEJ/EEJw

#### **GENERAL DESCRIPTION**



Nystrom Roof Bellows System is an effective, flexible joint closure for a wide variety of standard and special applications. The EEJ cover is 60-mil thick, reinforced EPDM bellows widely used in roof to roof and roof to wall cant 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 its own analysis to select products suitable for their specific application requirements, ensure they are properly maintained, and limit their use to its intended purpose. Follow proper local, state, and federal regulations for proper installation and operation

#### 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 product warranty.

#### **Transportation + Storage**

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

#### Preparation

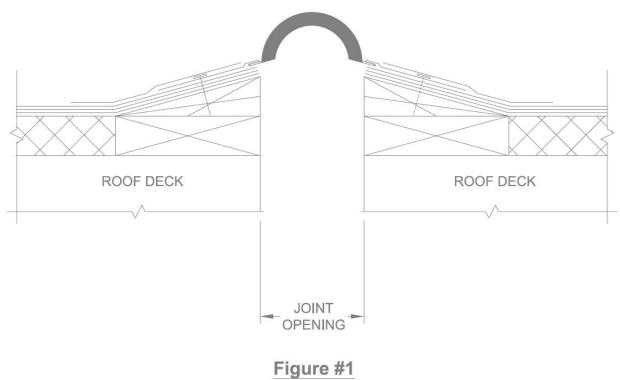
- Locate the packing slip(s) and/or shop drawings.
- Verify that all products listed on the packing slip are included in the package.
- Check the products for damage. If products are damaged, report a freight claim immediately and leave the products in their packaging. If you sign for products without 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**

- Metal cutting snips
- Chalk line
- Tape measure
- Hammer
- Trowel

# **INSTALLATION EJN-EEJ**

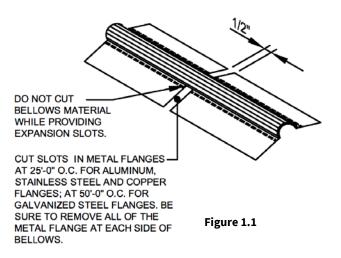
### EJN-EEJ - ROOF TO ROOF



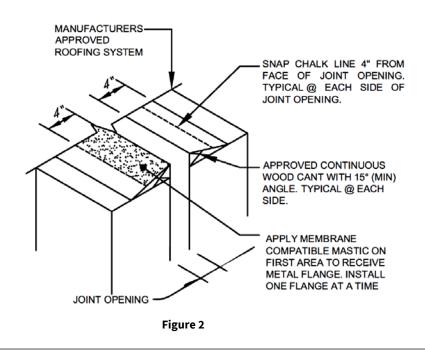
# SEE INSTALLATION ADDENDUM 'A' FOR BELLOWS SIZES 18" AND GREATER

### 1. Note: Step 1 not required for EJN-EEJ material provided in 10' lengths

For rolled expansion joint EEJ products - cut slots in metal flanges to allow expansion. Cut slots at 25'-0" on-center for aluminum, stainless steel, and copper flanges; at 50'-0" on-center for galvanized flanges. Provide full splice at each of these locations as described in splicing installation instructions below. **See Figure 1.1** 

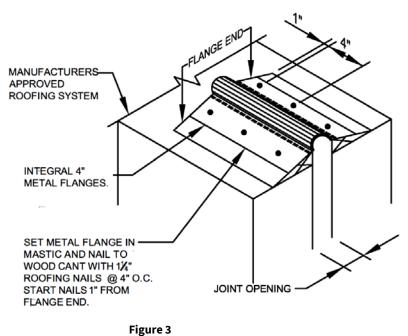


 Snap chalk line 4" from face of joint openings, typical at each side of joint opening. Apply membrane compatible mastic on 4" wide area over wood cant to receive metal flange. Install one flange at a time. See Figure 2

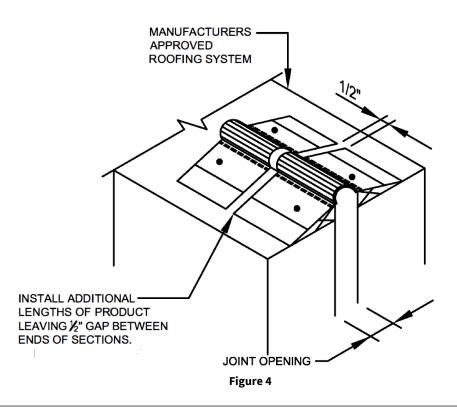


#### **Direct Service Done Right**

3. Set flange in membrane compatible mastic and nail to wood cant w/ (1) 1<sup>3</sup>/<sub>4</sub>" roof nail@ 4" o.c. start nails 1" from flange end. \*Repeat steps 1 - 3 for opposite flange, being careful to align second flange with chalk line to allow proper bellows shape. See Figure 3



Repeat steps 1 - 3 for remaining sections of EEJ being sure to provide <sup>1</sup>/<sub>2</sub>" gap between ends of sections. Provide full splice at each of these locations as described in the splicing installation instructions below. See Figure 4



Since 1948, Nystrom has been the go-to manufacturer of specialty building products providing a wide range of floor, roof, wall, ceiling and stair access products that create safer, more accessible buildings. We offer hassle-free services including access to technical experts, REVIT tools for BIM, HPDs for LEED v4, 3-part specifications and AIA-accredited continuing education courses.

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#### **INSTALLATION EJN-EEJw**



Nystrom Roof Bellows System (EEJw) is designed to match the EJN-EEJ system in corner applications.

EJN-EEJW - ROOF TO WALL

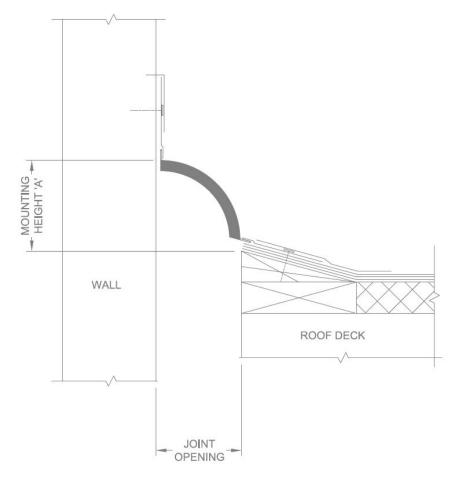


Figure #5

### SEE INSTALLATION ADDENDUM 'A' FOR BELLOWS SIZES 18" AND GREATER

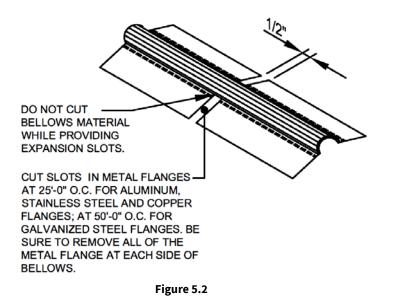
The mounting height provided is applicable for any condition in which the product is being mounted in a curb to wall condition. **See Figure 5.1** 

BELLOWS WIDTH	MOUNTING HEIGHT 'A'
4"	2 1/2"
6"	3 3/4"
8"	5 1/8"
10"	6 3/8"
12"	7 1/2"
14"	8 3/4"
16"	10 1/4"
18"	11 1/2"
20"	12 3/4"
22"	14"
24"	15 1/4"
Figure 5.1	

#### BELLOWS MOUNTING HEIGHT 'A' FOR ROOF TO WALL ATTACHMENT

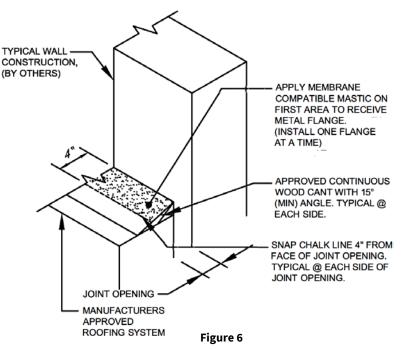
#### 5. Note: Step 5 not required for EEJ material provided in 10' lengths

For rolled EEJ products; cut slots in metal flanges to allow expansion. Cut slots at 25'-0" on-center for aluminum, stainless steel, and copper flanges; at 50'-0" on-center for galvanized flanges. Provide full splice at each of these locations as described in splicing installation instructions below. **See Figure 5.2** 

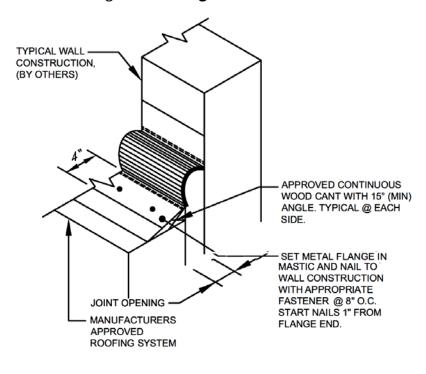


#### **Direct Service Done Right**

**6.** On the roof side, snap a chalk line 4" from face of joint openings. Apply membrane compatible mastic on 4" wide area over wood cant to receive metal flange. **See Figure 6** 

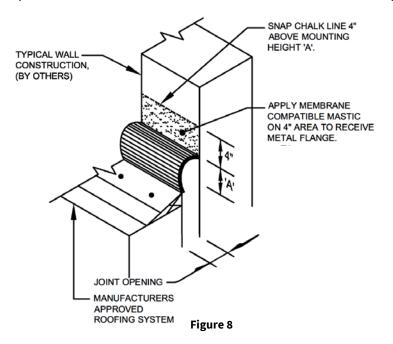


**7.** Set flange in membrane compatible mastic and nail to wood cant w/ (1) 1<sup>3</sup>/<sub>4</sub>" roof nail at 4" o.c. start nails 1" from flange end. **See Figure 7** 

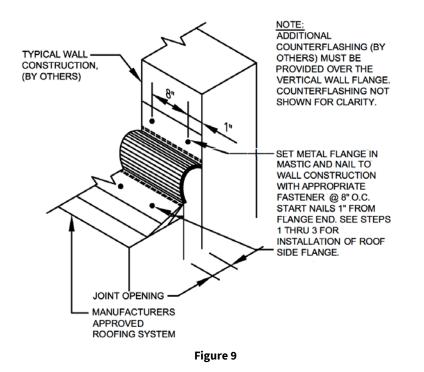




 Fold over wall flange to gain access to attachment location. Snap chalk line 4" above mounting height 'a'. See mounting height 'a' chart for correct dimension. Apply membrane compatible mastic on 4" wide area to receive metal wall flange. See Figure 8

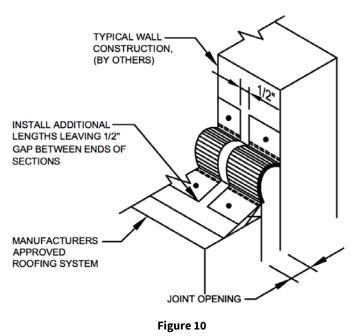


**9.** Set wall flange in membrane compatible mastic and nail to wall construction w/ (1) appropriate fastener at 8" o.c. start fasteners 1" from flange end. **See Figure 9** 



#### **Direct Service Done Right**

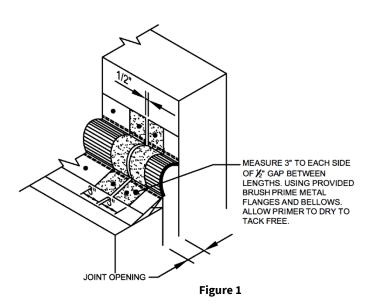
10. Repeat steps 1 - 5 for remaining sections, being sure to provide ½" gap between ends of sections. Provide full splice at each of these locations as described in the splicing installation instructions. See Figure 10



### **SPLICING INSTRUCTIONS**

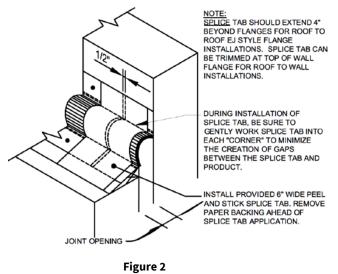
General notes: these installation instructions represent the correct installation procedure for a 6" wide splice tab which is included for bellows sizes 4" - 12". The dimensions indicated in these instructions must be adjusted accordingly for bellows sizes larger than 12" which will include a 9" wide splice tab.

 Measure 3" to each side of ½" gap between lengths. Using provided brush, prime metal flanges and bellows. Allow primer to dry to tack free. Typical at each splice location. See Figure 1



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Install provided 6" wide peel and stick splice tab. Remove paper backing ahead of splice tab application being sure not to stretch the splice tab and working it into each crevice. Splice tab must extend an additional 4" (minimum) beyond flange on roof side. See Figure 2



**3.** Apply ¼" x 1" long bead of caulking beginning at the edge of the splice tab and working out. Using the provided wooden depressor, gently drag the caulking toward center of the splice tab to ensure any gaps are filled. Typical @ at four location per splice tab and typical at each spliced location. **See Figure 3** 

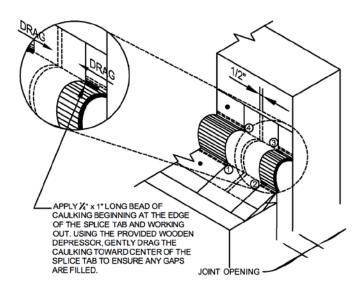


Figure 3

#### **Direct Service Done Right**

 On flat flange installations, strip in metal flange with membrane compatible flashing. For roof to wall installations provide continuous counterflashing (by others) over wall flange.
See Figure 4

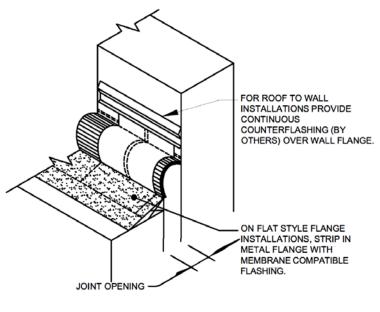
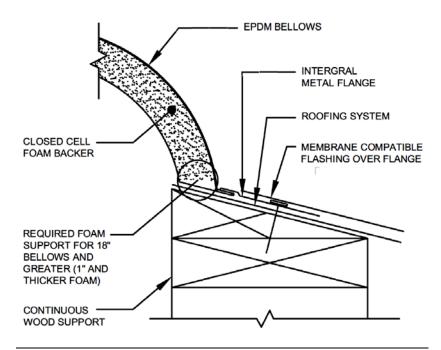


Figure 4

#### **ADDENDUM 'A'**

#### **INSTALLATION ADDENDUM FOR BELLOWS SIZES 18" AND GREATER**



#### **Direct Service Done Right**

#### **INSTALLATION NOTES:**

Install all factory fabricated intersections and transitions first. Follow the appropriate steps included in the installation instructions for these items.

Leave ½" gap between the start of straight sections and all intersections and transitions. For products provided in 50'-0" or 100'-0" rolls; cut slots in metal flanges to allow for thermal appropriate expansion. Cut slots at 25'-0" on-center for aluminum, stainless steel, and copper flanges; at 50'-0" on-center for galvanized flanges. Provide full splice at these locations as described in these installation instructions. Do not cut bellows material while providing expansion slots.

The building/roof surfaces to which the product is to be installed should be smooth, clean, and free of any dirt and debris.

Install with the foam backer facing the inside of building. Do not expose foam to weather.

## **OPERATION**

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

### MAINTENANCE

Annual inspections should be performed to make sure the system is still in position. Repair and/or replace as needed.

# **QUESTIONS?**

For more information on installation, repair, or replacement, please visit nystrom.com