

SECTION 07 95 60

ROOF EXPANSION CONTROL SYSTEMS

PART 1 - GENERAL

1.01 Work Included

- A. This work shall consist of furnishing and installing flexible roof bellows in exterior applications at locations shown on plans and in accordance with the following specification. The system shall accommodate the design movement and prevent the passage of water through the expansion joint opening.
- B. Related Work
  - Roofing
  - Flashing and sheet metal
  - Sealants and caulking

1.02 Submittals

- A. Template Drawings - Submit typical expansion joint cross-section(s) indicating pertinent dimensioning and relationship to adjacent construction.

1.03 Product Delivery, Storage and Handling

- A. Deliver products in manufacturer's original, intact, labeled containers and store under cover in a dry location until installed. Store off the ground, protect from weather and construction activities.

1.04 Acceptable Manufacturer

- A. All joints shall be as designed and supplied by Watson Bowman Acme, 95 Pineview Drive, Amherst, New York 14228.
- B. Alternate manufacturers and their products will be considered, provided they meet the design concept and are produced of materials that are equal to or superior to those called for in the base product specification.
- C. Any proposed alternate systems must be submitted and receive approval 21 days prior to the bid. All post bid submittals will not be considered. This submission shall be in accordance with MATERIALS AND SUBSTITUTIONS.

- Any manufacturer wishing to submit for prior approval must provide the following:

1. A working 6" sample of the proposed system with a letter describing how system is considered superior to the specified system.
2. A project proposal drawing that illustrates the recommended alternate system installed in the horizontal or vertical application that is specific to the project. Typical catalog cut sections will not be considered.
3. Verifiable list of installations showing prior and successful experience with the proposed systems.

4. Any substitution products not adhering to all specification requirements within, will not be considered.

## PART 2 - PRODUCT

### 2.01 General

- A. Provide expansion joint cover that is flexible, weatherproof and suitable for exterior application. System shall incorporate a flexible rubber membrane supported by a closed cell foam (horizontal applications) to form a flexible bellows profile incorporating two metal flanges, adhesively and mechanically attached to the bellows by bifurcation process. System's minimum transverse movement capability shall accommodate +/-50 percent of the nominal design opening. Provide factory fabricated transitions designed for maximum flexibility incorporating necessary fabrication techniques to ensure watertightness and clean seam lines.

For horizontal and vertical expansion joints furnish Wabo®Flash as designed and supplied by Watson Bowman Acme and as indicated on drawings. Select appropriate size of profile and flange configuration based on project requirements.

- Model "EEJ" - Flat 4" galvanized flange for cants.
- Model "SVS" - Flat 4" stainless steel flange for walls.
- Model "ECF" - Formed 2"x2" galvanized flange for curbs.

### 2.02 Materials

- A. Bellow Profile - The profile shall meet the requirements of the properties listed below unless specified otherwise.
  - Flexible Membrane Cover  
60 mil (1.5 mm) EPDM sheet - black
  - Support Foam  
Closed cell foam, k factor  
0.25 BTU · in/(hr·ft<sup>2</sup>·°F) at ambient  
(0.036 W/m ·°C)  
Thickness varies from 3/8" to 3/4" (10 mm to 19 mm) depending on bellows width . Foam not applicable on Models "EVS" and "SVS".
- B. Flange Metal
  - Standard - Galvanized Steel - 26 ga. (0.56 mm)
  - Optional - Stainless Steel - .018" (0.46 mm)
  - Aluminum - .032" (0.81 mm)
  - Copper - 16 oz. (454 g)
- C. Termination Bar (model "EWC") - Pre-punched aluminum.
- D. Accessories - Provide necessary and related splice kits required for complete installation.

### 2.03 Fabrication

- A. Bellow profiles and shipped lengths are governed by metal flange configuration. All profiles shipped in manufacturer's standard carton. Cut bellows to length on jobsite where required.
- B. Factory fabricate and ship all directional changes (transitions) or system terminations and ship in manufacturer's standard carton.

2.04 Finishes

- A. Seal profile - Supply in color: Black.

PART 3 - EXECUTION

3.01 Installation

A. Construction Requirements

1. General

- a. Installation must be performed in gap openings with sound construction.
- b. Gap openings must have parallel dimensionally consistent side walls.
- c. Bellows joint systems shall be installed in strict accordance with the manufacturer's typical details and instructions along with the advice of their qualified representative.

3.02 Clean and Inspect

- A. Protect installed systems and transitions from damage during construction.

...END OF SECTION 07 95 60