

Erie Metal Specialties, Inc. 13311 Main Road Akron, NY 14001 Phone: 716-542-3991 Fax: 716-542-3996 E-mail: <u>sales@eriemetal.com</u> Website: www.eriemetal.com

# SPECIFICATION

Section 07 95 13

## Erie Metal Specialties, Interior Architectural Systems

Model(s) "ENBF", "ENBF-W"

# **Expansion Control System**

### PART 1 - GENERAL

- 1.01 Work Included
  - A. The work shall consist of furnishing and installing expansion joints in accordance with the details shown on the plans and the requirements of the specifications. The joints are proprietary designs utilizing preengineered extruded metal components.
  - B. Related Work
    - Miscellaneous and ornamental metals
    - Flashing and sheet metal
    - Concrete
    - Interior Finishes

#### 1.02 Submittals

- A. Template Drawings Submit typical expansion joint cross-section(s) indicating pertinent dimensioning, general construction, component connections, and anchorage methods.
- 1.03 Product Delivery, Storage and Handling
  - A. Deliver products in each 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 supplied by; Erie Metal Specialties, Inc. 13311 Main Road Akron New York 14001 Phone (716) 542-3991 Fax (716) 542-3996 <u>sales@eriemetal.com</u> <u>www.eriemetal.com</u> .
  - 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 specified.



Erie Metal Specialties, Inc. 13311 Main Road Akron, NY 14001 Phone: 716-542-3991 Fax: 716-542-3996 E-mail: <u>sales@eriemetal.com</u> Website: <u>www.eriemetal.com</u>

- 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:

A working 6" sample of the proposed system with a letter describing how system is considered superior to the specified system.

A project proposal drawing that illustrates the recommended alternate system installed in the floor construction that is specific to the project. Typical catalog cut sections will not be considered.

A Verifiable list of prior installations showing prior and successful experience with the proposed Systems.

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

### PART 2 - PRODUCT

- 2.01 General
- A. Provide horizontal expansion control system for floor application that accommodates verifiable movement equal to plus or minus 50 percent (min) of the nominal opening. All system components shall be extruded profiles utilizing snap fit design features and threaded hardware for proper assembly of permanent connections between upper and lower edge profiles. Systems not employing threaded hardware for assembly of edge components will not be permitted. Provide traffic bearing center slide plate exhibiting a curved design engineered to promote vertical displacement and rotational movement. Systems utilizing a flat center slide plate will not be permitted. Provide system capable of following horizontal changes in direction in high visible areas.

For horizontal floor locations furnish EMS Model "ENBF" as indicated on drawings.

Minimum Performance Criteria:

Provide installed system meeting the following verifiable performance criteria:

- 1. Horizontal Movement: Plus or minus 50 percent of nominal opening.
- 2. Rotational Movement \_\_\_\_\_degree rotation of edge member.
- 3. Vertical Displacement \_\_\_\_\_ inches (between opposing edge frames)
- 4. Min. uniform distributed live load: \_\_\_\_\_ PSF



Erie Metal Specialties, Inc. 13311 Main Road Akron, NY 14001 Phone: 716-542-3991 Fax: 716-542-3996 E-mail: <u>sales@eriemetal.com</u> Website: www.eriemetal.com

- Min. concentrated point load: \_\_\_\_\_ lbs (Note: Applied point load shall not cause center slide plate to deflect greater than 1/16 inch at its midpoint.)
- 2.02 Components and Materials
  - A. Metal Components All components shall be extruded aluminum confirming to the properties of ASTM B221, alloy 6063-T6.
  - B. Anchors Provide 1/4" dia. x 1 <sup>3</sup>/<sub>4</sub>" lg. (min.) concrete threaded anchor with hex head. Maximum spacing shall be 24" o.c.
  - C. Accessories Provide necessary and related parts including assembly hardware for complete installation.
  - D. Block out Repair (recommended) Utilize manufacturer's single component rapid strength repair mortar meeting the following data requirements.

Compressive strength, psi (ASTM C 109)	
2 hours	1,500
24 hours	4,500
7 days	8,000
28 days	9,000

- E. Fire Barrier Assembly Designed for indicated or required dynamic structural movement without material degradation or fatigue. Tested in maximum joint width conditions with a field splice in accordance with ASTM E-119 at a full rated period by a nationally recognized testing and inspecting organization. Supply appropriate Fire Barrier as governed by joint opening, fire rating and required test criteria.
- 2.03 Fabrication
  - A. Metal components shall be shipped in 10 ft. lengths and shall be cut to length on jobsite where required. Components shall be miter cut in the field to conform to directional changes unless otherwise contracted with expansion joint manufacturer.
  - B. Anchor slots at edge profile shall be shop punched in accordance with manufacturer's drawings.
  - C. Fire Barriers Ship manufacturer's standard assembly including fire caulks, sealants and anchoring hardware (if applicable) for the required hourly rating. Assemblies shall be miter cut in the field to accommodate changes in direction.



Erie Metal Specialties, Inc. 13311 Main Road Akron, NY 14001 Phone: 716-542-3991 Fax: 716-542-3996 E-mail: <u>sales@eriemetal.com</u> Website: www.eriemetal.com

#### 2.04 Finishes

A. Exposed aluminum components Standard - Mill finish

#### **PART 3 - EXECUTION**

- 3.01 Installation
  - A. Protect all expansion joint component parts from damage during installation and placement of floor materials and thereafter until completion of structure.
  - B. Expansion joint systems shall be installed in strict accordance with the manufacturer's typical details and instructions along with the advice of their qualified representative.
  - C. Expansion joint systems shall be set to the proper width for the ambient temperature at the time of installation. This information is indicated in the contract plans.
- 3.02 Clean and Inspect
  - A. Upon completing installation, the contractor shall clean all exposed metal surfaces with a suitable cleaner that will not harm or attack the finish. Contact manufacturer should questions arise regarding suitability of any cleaner type prior to its use.