



Erie Metal Specialties, Inc.  
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## **SPECIFICATION**

### **Section 07 95 13**

#### **Erie Metal Specialties, Interior Architectural Systems**

#### **Model(s) “ELCF”, “ELCFC”, “ELCFS”, “ELCFT”**

#### **Horizontal Expansion Control Systems**

#### **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 extruded elastomeric seals, base members and support plates.
- B. Related Work
  - Cast-in-place concrete
  - Miscellaneous and ornamental metals
  - Flashing and sheet metal
  - Sealants and caulking

##### **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 • [sales@eriemetal.com](mailto:sales@eriemetal.com) • [www.eriemetal.com](http://www.eriemetal.com) .
- 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.



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- 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 a low-profile expansion joint system that has been designed to accommodate new or existing construction. Incorporate a colorable elastomeric seal that demonstrates ability to remain flat during normal movement cycles. Provide a complete system that exhibits a flush transition between opposing slabs and adjacent finish floor surfaces that complies with ADA guidelines.

Furnish EMS Inc., Low Profile-Floor (Model "ELCF"), Plaza (Model "ELCFS") carpet (Model "ELCFC") or tile (Model "ELCFT") Expansion Control System for interior floors as indicated on drawings.

### **2.02 Components and Materials**

- A. Aluminum Extrusions - Design low height profile with cavity to receive locking lug of elastomeric profile. Provide alternate profiles for concrete slabs with and without blockouts. Where surface mounted profiles are utilized, provide non-slip walking surface designed with a tapered edge to meet the finish floor surface. Material to conform to properties of ASTM B221, alloy 6061-T6 or 6063 T-5.
- B. Aluminum Shapes - Material to conform to ASTM B209, alloy 6061-T6 or 5005-H34.
- C. Elastomeric Seals - Material shall be a flexible extruded Santoprene or manufacturer's alternate material exhibiting a shore A hardness of 64 +/- 5 with U.V. stabilizer. Provide multi-cellular profile with internal webs that form a truss-like structure that transfers service loads to adjacent aluminum extrusions without the need for support plates. The profile shall be flexible and exhibit a non-slip exposed surface that remains flat during normal movement cycles.



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- D. Anchorage - Provide 1/4" (#12) diameter x 1 3/4" lg. (min.) threaded concrete anchor. Style of anchor and head configuration will be determined by type of extrusion profile utilized. Spacing shall be 24" c.c. maximum for block out condition and 24" c.c. for surface mounted profiles without block outs.
- E. Accessories - Provide necessary and related parts required for complete installation. Where project requirements dictate watertight performance, utilize manufacturer's standard adhesives and bedding compounds to install the system's components.
- F. Block out Repair (recommended) - Utilize 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

- G. Block out Infill (recommended) - Utilize a non-catalyzed, non-shrink grout containing mineral aggregate meeting the following data requirements.

Compressive strength at plastic consistency, psi

3 days	6,000
7 days	7,000
28 days	8,500

- H. 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 as a component of the expansion joint cover in accordance with ASTM E-119 at full rated period by a nationally recognized testing and inspecting organization. Supply Fire Barrier as governed by joint opening and fire rating.

2.03 Fabrication

- A. Aluminum extrusions to be shipped in standard 10ft. lengths and shall be cut to length on jobsite where required. Extrusions shall be miter cut in the field to conform to directional changes unless otherwise contracted with expansion joint manufacturer.
- B. Anchor holes shall be shop drilled in accordance with manufacturer's drawings.



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- C. Elastomeric seals shall be shipped in the longest practical continuous length in manufacturer's standard shipping carton.
- D. Fire Barriers - Ship manufacturer's standard assembly for the required hourly rating. Assemblies shall be miter cut in the field to accommodate changes in direction.

#### 2.04 Finishes

- A. Aluminum extrusions shall be supplied in standard mill finish.
- B. Elastomeric seal shall be supplied in standard color offering: black, beige or gray. Optional custom colors available. Select from manufacturers standard color offering.
- C. Surfaces of aluminum extrusions that will be in direct contact with concrete where moisture is present shall receive manufacturer's recommended coating.

### **PART 3 - EXECUTION**

#### 3.01 Installation

- A. Protect all expansion joint component parts from damage during installation of flooring materials, work in adjacent areas 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 Protect

- A. Protect system and its components during construction. After work is complete in adjacent areas clean exposed surfaces with a suitable cleaner that will not harm or attack the elastomeric material or metal finishes.