SECTION 05800 EXPANSION CONTROL

NYSTROM SURFACE MOUNTED FLOOR JOINT COVERS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the contract including General Conditions, Supplementary Conditions and Division 1 specification sections, apply to this section.

1.02 SUMMARY

- A. Section includes: work consisting of furnishing and installing expansion joint cover systems in accordance with the details shown on the plans and the requirements of the specifications.
- B. Related Sections:
 - 1. Division 3 Concrete Section.
 - 2. Division 4 Masonry Section.
 - 3. Division 5 Miscellaneous Metals Section.
 - 4. Division 7 Thermal & Moisture Protection Section.
 - 5. Division 9 Finishes Section.

1.03 REFERENCES

- A. ASTM B209 Standard specification for aluminum and aluminum-alloy sheet and plate.
- B. ASTM B221 Standard specification for aluminum and aluminum-alloy extruded bars, rods, wire, shapes and tubes.

1.04 SUBMITTALS

- A. General: Submit in accordance with Section 01330.
 - 1. Product Data: Submit manufacturer's descriptive literature and product specifications for each product.
 - 2. Shop Drawing: Submit manufacturer's installation instructions and shop drawings with expansion joint cross-section(s) indicating pertinent dimensions, general construction, component connections, and anchorage methods.
 - 3. Substitutions: Any proposed alternate systems must be submitted and receive approval 21 days prior to bid to avoid project delay. All post bid submittals will not be considered. Any manufacturer wishing to submit for prior approval must provide information that describes how system is considered superior to the specified system and include a 6" long sample of each expansion joint assembly for approval.

1.05 QUALITY ASSURANCES

A. Single Source Responsibility: Obtain expansion joint cover assemblies for the project from one source and the same manufacturer.

1.06 DELIVERY, STORAGE & 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.

1.07 WARRANTY

A. Warrant all assemblies sold to be free of defects in material and workmanship for a period of one year from the date of purchase.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURER:

- A. Nystrom Building Products 1701 Madison Street NE Minneapolis, MN 55413 Toll Free Technical Info: 800-781-7850 Toll Free Ordering Info: 800-547-2635 Toll Free Fax: 800-317-8770 Direct Phone: 612-781-7850 Direct Fax: 612-781-1363 E-mail: info@nystrom.com Internet: www.nystrom.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 called for in the base product specification. Any proposed alternate systems must be submitted and receive approval 21 days prior to the bid. All post bid submittals will not be considered.

2.02 GENERAL

A. Provide Nystrom surface mounted expansion joint covers for interior floor joint locations, as manufactured by Nystrom Building Products and as indicated on drawings. Of the following, Select Appropriate Series & Model based on project requirements.

Select surface mounted floor expansion joint cover from the following:

- 1. <u>SA Series</u> single wing cover plate for level floor to floor applications.
- 2. <u>DA Series</u> double wing cover plate for level floor to floor applications.
- 3. <u>FA Series</u> single wing and hinged cover plate for seismic and uneven slab applications.
- 4. <u>FDW Series</u> single wing and hinged cover plate for uneven floor to wall applications.
- 5. <u>RA Series</u> Recessed flush cover plate for wheeled traffic, floor to floor applications.
- 6. <u>DT Series</u> cover plate for unfinished, level floor to floor applications.
- 7. <u>SW Series</u> cover plate for unfinished, level floor to wall applications.
- 8. <u>PD Series</u> Hinged cover plate for pedestrian walkways and parking decks, floor to floor applications.
- 9. <u>PDW Series</u> Hinged cover plate for pedestrian walkways and parking decks, floor to wall applications.

2.03 MATERIALS & COMPONENTS

- A. Aluminum Extrusions Material to conform to properties of ASTM B221; alloy 6005-T5 or 6063-T6.
- B. Moisture Barrier (if required) Shall be a fabric reinforced tear resistant clear vinyl sheet material. Minimum thickness shall be .026".
- C. Anchorage Provide minimum ¼" diameter concrete expansion anchors at maximum 24" o.c. spacing to secure to floor slab.
- D. Accessories
 - Threaded Anchor Assembly: Anchors shall be internally threaded, flanged, drop in anchor. Fasteners shall be flat head cap screw of heat-treated alloy steel ASME/ANSI B18.3. Finish on assembly shall be cadmium plated.

- 2. Epoxy adhesive (if recommended by manufacturer): Epoxy adhesive used to anchor the threaded assembly shall be high strength ceramic filled epoxy polymer equal to "Epcon Ceramic 6" manufactured by ITW Ramset/Red Head or approval equal.
- 3. 2" or 3-1/2" sleeve anchors manufactured by ITW Ramset/Red Head can also be used.
- 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 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 Nystrom Fire Barrier as governed by joint opening and fire rating.

2.04 FABRICATION

- A. Extrusions and generic profiles to be shipped in standard 10 ft. lengths and shall be cut to length on jobsite when required. Profiles shall be miter cut in the field to conform to directional changes unless otherwise contracted with expansion joint manufacturer.
- B. 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.

2.05 FINISHES

A. Aluminum base extrusions shall be supplied in standard mill finish.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify conditions are ideal for suitable installation.

3.02 PREPARATION

A. Advise installers of work relating to expansion joint assembly installation including dimensions, locations of supports and anchoring methods. Coordinate delivery with other work to avoid delay.

3.03 INSTALLATION

- A. Protect all expansion joint component parts from damage during installation, placement of concrete or wall and ceiling 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 or the ambient temperature at the time of installation. This information is indicated in the contract plans.

3.04 CLEAN & 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 material.

END OF SECTION