

ARCHITECTURE

SECTION 05811

ARCHITECTURAL JOINT SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes exterior and interior joint systems for the following applications:
 - 1. Walls.
 - 2. Ceilings.
 - 3. Roofs – metal flanged, bellows type & EPDM Elastomeric membrane roofing under section 07530.

1.2 SUBMITTALS

- A. Product Data: For each joint system indicated.
- B. Shop Drawings: Include Placement Drawings showing entire length of each joint system and details.

1.3 PERFORMANCE REQUIREMENTS

- A. General: Provide roof expansion joint assemblies that, when installed, remain watertight within movement limitations specified by manufacturer.

PART 2 - PRODUCTS

2.1 PRODUCTS AND MANUFACTURERS

- A. Basis-of-Design Product: The design for each architectural joint system is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by another manufacturer approved by the Architect.
- B. The following are approved manufacturers:
 - 1. Balco Inc.
 - 2. MM Systems Corporation
- C. Product Data: Include manufacturer's product specifications, construction details, material and finish descriptions, installation instructions, and dimensions of individual components.
- D. Research/Evaluation Reports: Evidence of roof expansion joint assemblies' compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.

2.2 MATERIALS

- A. Aluminum: ASTM B 221, alloy 6063-T5 for extrusions; ASTM B 209, alloy 6061-T6 for sheet and plate.
 - 1. Apply manufacturer's standard protective coating on aluminum surfaces to be placed in contact with cementitious materials.
- B. Stainless Steel: ASTM A 666, Type 304 with No. 2B finish, unless otherwise indicated, for plates, sheet, and strips.
- C. Preformed Seals: Single or multicellular extruded elastomeric seals designed with or without continuous, longitudinal, internal baffles. Formed to be installed in frames or with anchored flanges, in color indicated or, if not indicated, as selected from manufacturer's standard colors.

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- D. Preformed Cellular Foams: Extruded neoprene or polyurethane, compressible foam.
- E. Accessories: Manufacturer's standard anchors, clips, fasteners, set screws, spacers, flexible moisture barrier and filler materials, drain tubes, lubricants, adhesives, and other accessories compatible with material in contact, as indicated or required for complete installations.

2.3 ARCHITECTURAL JOINT SYSTEMS

- A. General: Of design, basic profile, materials, and operation indicated and with the capability to accommodate joint widths indicated and variations in adjacent surfaces.
 - 1. Furnish units in longest practicable lengths to minimize number of end joints.
 - 2. Include closure materials and transition pieces, tee-joints, corners, curbs, cross-connections, and other accessories as required for continuous joint systems.
 - 3. Frames for Strip Seals: Designed with semiclosed cavity that provides a mechanical lock for seals of type indicated.
 - 4. Public Arena Seals: Non-slip seals designed for installation on treads and risers and to lie flat with adjacent surfaces, and complying with ADA guidelines for public areas.
- B. Products by "Balco Inc" are noted on the drawings.
 - 1. Exterior Wall Joint – 9W2 & 9WC2.
 - 2. Interior Wall Joint – BCFS series.
 - 3. Ceiling Joint – BCSW series.
 - 4. Interior Floor Joint – BCSW series.
 - 5. Roof Joints – BRBG-2SE.
- C. Metal-Flanged, Bellows-Type Roof Expansion Assemblies: Provide assemblies consisting of exposed polymeric sheet over foam bellows, securely anchored at both edges to 3- to 4-inch-wide sheet metal nailing flanges, either flat or angle formed to fit cant or curbs as required. Insulate bellows with closed-cell, flexible rubber or plastic foam not less than 5/16 inch thick; adhere bellows to underside of polymeric sheet.
 - 1. Polymeric Sheet: EPDM, 60 mils thick.
 - 2. Metal Flanges: Zinc-coated (galvanized) steel, minimum 0.019 inch thick.

2.4 FINISHES

- A. General: Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
 - 1. Applying a strippable, temporary protective covering on exposed surfaces to protect mechanical finishes from damage before and during shipping.
- B. Aluminum:
 - 1. Painted Organic Coating: AAMA 2603 except with a minimum dry film thickness of 1.5 mils, medium gloss.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Cut, drill, and fit architectural joint systems as required for complete installation. Install with hairline mitered corners where units change directions and hairline joints where unit lengths abut or units abut other materials. Secure to in-place construction.

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- B. Comply with manufacturer's written instructions for handling and installing roof expansion assemblies and materials, unless more stringent requirements are indicated.
- C. On single-ply roofing, install roof expansion joint assemblies in the manner indicated, complying with manufacturer's instructions. Anchor to cants or curbs and seal to membrane with sealant compatible with roofing membrane and expansion joint assembly. Cover flanges with stripping or flashing and install according to requirements in Division 7 Section "07531."

3.2 PROTECTION

- A. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer that ensures roof expansion joint assemblies are without damage or deterioration at time of Substantial Completion.

END OF SECTION 05811