

Section 07 95 13

EXPANSION AND SEISMIC JOINT COVER SPECIFICATIONS

PART 1 — GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions, Supplementary Conditions and Division-1 General Requirements, apply to the work of this section.

1.02 WORK INCLUDED

- A. Furnish and install complete Balco, Inc. Expansion Joint Cover Systems.
 - 1. Interior Floor expansion joint covers.
 - 2. Interior Wall expansion joint covers.
 - 3. Interior Ceiling expansion joint covers.
 - 4. Exterior Floor expansion joint covers.
 - 5. Exterior Wall expansion joint covers.
 - 6. Roof expansion joint covers.
 - 7. Fire Rated Assemblies.

1.03 RELATED WORK

- A. Related work which is specified elsewhere.
 - 1. Cast-In-Place Concrete: Section 03300.
 - 2. Unit Masonry: Section 04200.
 - 3. Structural Steel: Section 05120.
 - 4. Lightgauge Metal Framing: Section 05400.
 - 5. Cement Plaster: Section 09220.
 - 6. Gypsum Wallboard: Section 09250.

1.04 REFERENCES

- A. Publications listed herein are part of this specification to the extent referenced. The criteria established in the specifications shall take precedence over the standards referenced herein. (An example of a reference standard is provided below.)
 - 1. American Society for Testing and Materials (ASTM):
 - a. ASTM B221, Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes and Tubes.

1.05 DEFINITIONS

- A. Define industry and product terms as necessary.

1.06 SYSTEM DESCRIPTION *(Short Specification Section May be used in lieu of the text that follows.)*

- A. Joint covers shall permit unrestrained movement of joint without disengagement of cover.
 - 1. Specify x-axis joint movement. (Specify for each building level: floor, wall, ceiling, roof).
 - 2. Specify y-axis joint movement. (Specify for each building level: floor, wall, ceiling, roof).
 - 3. Specify z-axis joint movement. (Specify for each building level: floor, wall, ceiling, roof).
- B. Allowable load on floor joint cover plate shall be [50] [100] [200] psf uniform load and [300 pounds concentrated load] [2,000 pounds concentrated load for heavy-duty systems] with maximum 12,000 psi stress (6063-T5 aluminum extrusions) or 28,000 psi stress (6061-T651 aluminum plate) or 16,000 psi stress (5052-H32 aluminum sheet) or 36,000psi stress (stainless steel plate) or 14,000 psi stress (bronze) at full open position.
 - 1. Deflection shall be [1/16] [1/8] inch at neutral position.
 - 2. In the absence of load selections the minimum load will apply – 50 psf with 1/8 inch deflection.
- C. Centering Bars shall have [nylon spheres] [pins] which fully engage with the base members' tracks.
- D. Fire rated joint covers shall have been tested by an independent, nationally recognized testing and listing entity in accordance with ANSI/UL No. 263, ASTM E119, UL 2079, or ASTM E1966, including hose stream test, where applicable, at the full rated period. Covers shall be listed with an independent, nationally recognized testing and listing entity. Fire rating shall be [2 hours] [3 hours] [4 hours] [not less than the fire rating of adjacent construction].

1.07 QUALITY ASSURANCE

- A. Manufacturer: Obtain joint cover assemblies through one source from a single manufacturer.
 - 1. Manufacturer shall be ISO 9001 Certified.
 - a. The Manufacturer shall have documented management and control of the processes that influence the quality of its products.
 - b. The Manufacturer shall have documented management and control of the processes that influence the quality of its customer service.
 - 2. Manufacturer shall have a minimum of ten (10) years of experience in the fabrication of expansion joint cover assemblies.
- B. Installer: Firm with not less than three (3) years of successful experience in the installation of systems similar to those required by this project and acceptable to the manufacturer of the system.

1.08 SUBMITTALS

- A. Submission must be made within ten (10) working days of the General Contract award to

avoid project delay. If not adhered to, the Architect will designate the exact product to be used, and the contractor will have no recourse.

1. Submit manufacturer's specifications and technical data, including Material Safety Data Sheets, installation instructions, and, as required, catalog cuts and templates to explain construction and to provide for incorporation of the product into the project.
2. Submit certificates, copies of independent test reports, or research reports showing compliance with fire resistance rating and other specified performance requirements.
3. Submit shop drawings showing complete fabrication details for all joint covers, including required anchorage to surrounding construction, recesses, blocking, backing and connections between similar and dissimilar joint cover assemblies.
4. Submit three (3) 6" samples of the specified system.

1.09 DELIVERY, STORAGE AND HANDLING

- A. Provide temporary protective cover on [anodized aluminum] [stainless steel] [bronze] finished surfaces.
- B. Deliver joint covers to jobsite in new, clean, unopened crates of sufficient size and strength to protect materials during transit.
- C. Store components in original containers in a clean, dry location.

1.10 SEQUENCING

- A. Submittals shall be completed and approved prior to award of subcontract for system components.
- B. Subcontract for the work of this section shall be planned to allow sufficient time for manufacturer's production and delivery scheduling.

1.11 WARRANTY

- A. Submit manufacturer's warranty that materials furnished will perform as specified for a period of not less than one (1) year when installed in accordance with manufacturer's recommendations.

PART 2 — PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Furnish and install as noted in specifications and as indicated on drawings, [Expansion Joint Cover Type(s) (type number(s))] [Seismic Joint Cover Type(s) (type number(s))] as manufactured by: Balco, Inc., PO Box 17249, 2626 S. Sheridan, Wichita, KS 67217; phone: 800-767-0082 or (316) 945-9328; fax: (316) 945-0789.
- B. Substitutions: Submit proposed substitutions in writing to Architect no less than 10 days before bids are due. Submit samples and product data to demonstrate acceptability of

proposed substitute. Acceptance will be by Addendum.

2.02 MATERIALS *(Short Specification Section May be used in lieu of the text that follows.)*

- A. [Expansion] [Seismic] joint cover systems: [Manufacturer's type number(s)] [proprietary product name].
1. Aluminum:
 - a. ASTM B221, alloy 6063-T5 for extrusions.
 - b. ASTM B209, alloy 6061-T6 for plate.
 - c. ASTM B209, alloy 5052-H32 for sheet.
 2. Steel: ASTM A36 Plate
 3. Stainless Steel: ASTM A666, type 304.
 4. Bronze:
 - a. ASTM B455, alloy 385 for extrusions.
 - b. ASTM B36, alloy 280 for sheet and plate.
 5. PVC Vinyl: Extruded flexible wall and ceiling joint cover.
 6. Silicone:
 - a. ASTM D 2000, extruded elastomeric flat seal.
 - b. ASTM D 2000, 4GE, 709, M, extruded elastomeric seals
 - 1). Face Seals
 - 2). Roof Bellow Seals
 - 3). UV stabilized
 - 4). Does not propagate flame
 7. Santoprene:
 - a. Face Seals to be installed in exterior conditions shall be UV resistant.
 - b. [Black] [Colorable] extruded wall and ceiling joint cover system face seals.
 - c. Neutral extruded wall and ceiling joint cover system back seals.
 - d. Extruded back seals, ASTM C 864 modified Grade 221-73
 - 1). UV stabilized
 - 2). Black
 8. Abrasive: Two (2) part Epoxy combined with aluminum oxide grit.
- B. Water Barrier: Flexible EPDM, Class I, ASTM D4637, 45 mils thick (minimum).
- C. Fire Barrier: [Metaflex™; patented [single] [double] package membrane type fire barrier] Metaflex 2000; membrane type fire barrier] [Metaflex™ 5000 MetaMat™] [Metaflex™ 5000 MetaBlock™] required for indicated fire resistance. Asbestos is not acceptable.
- D. [Flame Sealant: Metacaulk™ 990; sealant shall permit joint movement and shall, upon exposure to heat, increase in volume to resist penetration of fire through voids in construction.]

- E. Smoke Barrier: Material tested in accordance with and in compliance with the requirements of the air leakage test option of UL 2079.
- F. Fasteners, accessories and other materials required for complete installation in accordance with the manufacturer's installation instructions.

2.03 FABRICATION

- A. Fabricate [expansion] [seismic] joint cover assemblies as detailed. Provide centering bars, sealing washers, gaskets, splice covers, and closures as necessary for complete installation.
 - 1. Fabricate special transitions and corner fittings as required.
 - 2. Fabricate fire barrier and provide fire-resistant sealant as required for fire-resistant installations.
 - 3. Miter and weld joint systems as applicable.
 - 4. Provide necessary and related parts, devices, water barrier (if specified), anchors, form clips and other items required for water-resistant and fire-resistant installation.
 - 5. Provide corners, tees, transitions, curb risers, etc. assembled with connection [mitered] [interlocking] and secured to ensure proper fit and alignment as applicable.
 - 6. Special conditions shall be [shop] [field] fabricated.
 - 7. Cover plates shall have a [smooth] [serrated] [v-grooved] [abrasive] [1/8 inch recessed] exposed surface.
- B. Shop assemble components and package with anchors and fittings. Provide components in single lengths where possible; minimize site splicing.

2.04 FINISHES *(Select all applicable items in this section)*

- A. Aluminum:
 - 1. Floors, Roofs, and Exterior Walls – Mill finish.
 - 2. Interior Walls and Ceilings – [Clear anodized, Class II, AA-M12 C22 A31; 204-R1] [Color anodized to match] [Other (specify)] [Prime painted].
 - 3. In contact with concrete – Prime painted.
- B. Steel shall be galvanized in accordance with ASTM A123.
- C. Bronze: Satin finish. [Provide lacquer coating for wall and ceiling joint covers.]
- D. Stainless Steel: [Matte finish, sanded] [Other (specify)].
- E. Vinyl: Gray (standard). Optional white or black is available for some products.
- F. Santoprene: [Black] [White] [Gray] [Tan] [Select Color].
- G. Silicone: [[Natural Stone] [Grey] [Bronze] [Black] [Select Color]
- G. Abrasive: [Black (standard)] [Select color (Optional colors available)].
- H. Filler Strips: Gray (standard).

PART 3 — EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements [and blockout dimensions] are as shown on shop drawings prior to releasing materials for fabrication by the manufacturer.
- B. Installer shall examine conditions under which work is to be performed and shall notify the contractor in writing of unsatisfactory conditions. Installer shall not proceed until unsatisfactory conditions have been corrected in a manner acceptable to the installer.

3.02 INSTALLATION

- A. Install [expansion] [seismic] joint covers in accordance with the manufacturer's instructions. Align work plumb, level, and flush with adjacent surfaces. Rigidly anchor to substrate. Make allowances for change in joint size due to difference between installation and building operating temperatures.
- B. Set centering bars diagonally at 20 inches on center maximum (or 10 inches on center for heavy-duty models). Centering bars shall be fully engaged with the base members.
- C. Fire Rated Joint Covers: Install fire rated covers to requirements of applicable fire rated design. Install fire barriers and flame sealant as required.
- D. Water Barrier: Provide water barriers at exterior joints and where called for on Drawings. Provide drainage fittings where called for on Drawings.

3.03 ADJUSTING AND PROTECTION

- A. Adjust joint cover to freely accommodate joint movement.
- B. Protect the installation from damage by work of other Sections. Where required, remove and store cover plates and install temporary protection over joints. Re-install cover plates prior to Substantial Completion of work.

3.04 SCHEDULE

- A. Indicate Balco, Inc. product number on Drawings or Schedule.
 - 1. Interior Floor Joints: _____
 - 2. Interior Wall Joints: _____
 - 3. Ceiling Joints: _____
 - 4. Fire Rated Joints: _____
 - 5. Exterior Floor Joints: _____
 - 6. Exterior Wall Joints: _____
 - 7. Roof Joints: _____

Document Control No. BGS07 95 13
10/14/14

End of Section