

Part 1 – GENERAL

1.01 SUMMARY

- A. Furnish Expansion Joint System in accordance with the drawings and general provisions of the Contract.

1.02 WORK INCLUDED

- A. Furnish complete Prospec Specialties Expansion Joint Systems.
 - 1. Interior floor expansion joint systems.
 - 2. Exterior floor expansion joint systems.
 - 3. Parking deck expansion joint systems.

1.03 RELATED WORK

- A. Related work which is specified elsewhere.
 - 1. Cast-in-Place Concrete: Section 03300.
 - 2. Unit Masonry: Section 04810.
 - 3. Structural Steel: Section 05120.

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 given below.)
 - 1. American Society for Testing and Materials (ASTM):
 - a. ASTM B 221, Standard Specifications 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

- A. Joint systems shall permit limited movement of joint without disengagement.
 - 1. Specify x-axis joint movement (horizontal).
 - 2. Specify y-axis joint movement (vertical).
 - 3. Specify z-axis joint movement (lateral).
- 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-T6 aluminum plate) or 16,000 psi stress (5052-H32 aluminum sheet) or 36,000 psi stress (stainless steel plate) 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. Fire Rated Assemblies shall have been tested by Underwriter's Laboratories, in accordance with UL 2079 including hose stream test at full rated period. Underwriter's Laboratories shall classify assemblies. Fire rating shall be 2 hours or not less than the fire rating of adjacent construction.

1.07 QUALITY ASSURANCE

- A. Manufacturer: Furnish Expansion Joint Covers from one single manufacturer.
- 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. Manufacturer's specifications, technical data, installation instructions, and detail drawings for each system.
- B. Certificates or other documentation confirming UL approved compliance with fire resistance rating of fire barrier assemblies.
- C. Sample of specified systems where required.

1.09 DELIVERY AND STORAGE

- A. Provide temporary protective covers on [anodized aluminum] [stainless steel] finished surfaces.
- B. Deliver joint systems to jobsite in new, clean, unopened cartons or 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 submitted within a reasonable amount of time after award of subcontract.
- 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. Standard Prospec Specialist Inc. limited warranty against material and manufacturing defects for a period of not less than three (3) years when installed in accordance with manufacturer's recommendations.

PART 2 – PRODUCTS

2.01 MANUFACTURER

- A. Prospec Specialties Inc.
3601 Highway 7, Suite 400,
Markham ON L3R 0M3
Canada
- B. Substitutions: Not permitted.
- C. Request for substitutions will be considered in accordance with provisions of section 01600.

2.02 MATERIALS

- A. Aluminum: ASTM B 221, alloy 6063-T6, 6061-T6, 5052-H32.
- B. Stainless Steel Plates (optional): SS304.
- C. Brass Plates (optional): Alloy 385, CZ121, 280 Muntz, 464 Naval or CZ108.
- D. Compression Seal: Preformed, low-density, closed-cell, cross-linked, polyethylene with EVA for added memory and consistency during expansion and compression.
- E. Silicone sealant
- F. Fire Barrier (optional): Fire Blanket System to UL2079 with hose stream test or Mineral Wool and Silicone Sealant Fire Barrier System to UL2079 required for indicated fire resistance rating.
- G. Fasteners, accessories and other materials required for complete installation in accordance with the manufacturer's instructions.

2.03 INT./EXT. JOINT SYSTEMS FOR FLOORS

- A. Standard cover plate systems: Prospec Specialties Inc. 'HI' Series – Continuous cover plate with compression seal

1. Floor Systems
 - a. Surface mounted center cover plate with compression seal (floor/floor) - HIS
 - b. Surface mounted corner cover plate with compression seal (floor/Wall) - HIC

2.04 FABRICATION

- A. Field assembled components provided in standard lengths with pre-packed accessories.
- B. Fabricated special transitions and corner fittings as required.

2.05 FINISHES

- A. Aluminum:
 1. Floor: Mill Finish/Silver Anodized.

PART 3 – EXECUTION

3.01

- A. Verify that structural gap is in conformance with manufacturer's submittal data.

3.02 INSTALLATION

- A. Joint Systems: Install in accordance with manufacturer's instructions. Align work plumb, level and flush with adjacent surfaces. Rigidly anchor to substrate. Allowances should be made where actual structural gap at time of installation varies from nominal design gap.
- B. Fire Rated Assemblies: Where required, install as per manufacturer's instructions.

3.03 PROTECTION AND CLEANING

- A. Protect installation from damage by work of others.
- B. At completion of the installation, clean exposed surfaces with non-solvent cleaner.

END OF SECTION