

# 400 Series

## Suggested Specifications

### PART 1 - GENERAL

#### 1.01 SUMMARY

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

#### 1.02 WORK INCLUDED

- A. Furnish complete JointMaster/InPro Corporation Expansion Joint Systems.
1. Interior floor expansion joint systems.
  2. Interior wall expansion joint systems.
  3. Interior ceiling expansion joint systems.
  4. Exterior wall expansion joint systems.
  5. Exterior floor expansion joint systems.
  6. Parking deck expansion joint systems.
  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 04810.
  3. Structural Steel: Section 05120.
  4. Light Gage Metal Framing: Section 05400.
  5. Roof Expansion Assemblies - 07716
  6. Sheet Metal Flashing and Trim: Section 7620.
  7. Cement Plaster: Section 09210.
  8. Gypsum Wallboard: Section 09260.

#### 1.04 REFERENCES

- A. Publications listed herein are part of this specification. See below for standards where applicable to the product listed:
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.
    - b. ASTM B 209 "Standard Specifications for Aluminum and Aluminum Alloy Sheet and Plate."
  - c. ASTM E1399 "Cyclic Movement and Measuring of Minimum/Maximum Joint Widths of Architectural Joint Systems."

#### 1.05 DEFINITIONS

- A. Define industry and product terms as necessary.
1. Bevel: Leading edge treatment.
  2. Taper: Gradual sloped profile less than that of a bevel.

#### 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 500 lbs. for standard loads, 1000 lbs. for moderate loads, and 2000 lbs. for heavy duty loads.
- C. Fire Rated Assemblies shall meet requirements of Underwriters Laboratories, in accordance with [ANSI/U.L. No. 263 and ASTM E 119/E 814] [UL 2079] [including hose stream test at full rated period].
- Underwriter's Laboratories shall classify assemblies. Fire rating shall be not less than the fire rating of adjacent construction.

#### 1.07 QUALITY ASSURANCE

- A. Manufacturer: Furnish assemblies from one (1) manufacturer with a minimum of five (5) years of experience in the design, engineering and fabrication of expansion joint systems.
- 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. Inspect materials upon arrival, monitor for adverse environmental impacts.

#### 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 JointMaster/InPro Corporation limited warranty against material and manufacturing defects for a period of not less than five (5) years when installed in accordance with manufacturer's recommendations.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURER

- A. InPro Corporation  
580 W18766 Apollo Drive  
Muskego, WI 53150 USA  
Phone: (800) 222-5556  
Fax: (888) 715-8407  
Email: service@inprocorp.com
- B. Substitutions: Not permitted.

#### 2.02 MATERIALS

- A. Aluminum: ASTM B 221, alloy 6061-T6, alloy 6063-T6, alloy 5052-H32.
- B. Stainless Steel Plates (optional): SS304
- C. Vapor Barrier (optional): 45 mils thick fabric reinforced EPDM.
- D. Insulated Vapor Barrier (optional): Owens Corning EcoTouch Batt insulation sandwiched by an adhered and pinned 45 mil fabric reinforced EPDM.
- E. Fire Barrier (optional): [925 Mineral Wool and Sealant System to UL2079] [935 Textiled Wool and Silicone Sealant System to UL2079] [950 Blanket System to UL2079 with hose stream test to walls] [F520 Blanket System to UL2079 with hose stream test to walls] or [990/995 Foam System to UL2079 with hose stream test to walls] required for indicated fire resistance rating.
- F. Fasteners, accessories and other materials required for complete installation in accordance with the manufacturer's instructions.
- G. Centering Bars (where required) shall be fabricated from zinc coated steel.

#### 2.03 INTERIOR JOINT SYSTEMS FOR FLOORS, WALLS AND CEILINGS

- A. JointMaster 400 Series - Standard System Profiles: Aluminum (Stainless Steel where listed) cover plate with hidden or exposed fasteners as required.
1. Floor Systems - Recessed/Flush Mount, Floor/Floor or Floor/Wall
    - a. 430-A01 or A02, dual tapered plate and sloped frame (height 1 1/2" [38mm]) vertical change-in-plane not to exceed 3/16" [4.76 mm] (or 10% slope) at any point, suitable for all finishes, hidden fastener.
    - b. 432-A01 or A02, dual tapered plate and sloped frame (height 1 1/2" [38mm]) vertical change-in-plane not to exceed 3/16" [4.76 mm] (or 10% slope), suitable for all finishes, exposed fastener.
    - c. 441-A01 or A02, frame height 1" [25mm], beveled plate suitable for all finishes, exposed fastener.
    - d. 421-A01 or A02, aluminum frame and wing height 1 5/8" [41.3mm] or 1 7/8" [47.6mm], beveled aluminum plate suitable for all floor finishes, exposed fastener.
    - e. 423-A01 or A02, aluminum frame and wing height 1 5/8" [41.3mm] or 1 7/8" [47.6mm], stainless steel beveled plate suitable for all floor finishes, exposed fastener.

- f. 425-A01 or A02, aluminum frame and stainless steel wing height 1 5/8" [41.3mm] or 1 7/8" [47.6mm], stainless steel beveled plate suitable for all floor finishes, exposed fastener.
  - g. 426-A01 or A02, frame and wing height 1 5/8" [41.3mm] or 1 7/8" [47.6mm], beveled plate (stainless steel optional) suitable for all floor finishes, exposed fastener.
  - h. 427-A01 or A02, frame and wing height 1 5/8" [41.3mm] or 1 7/8" [47.6mm], beveled plate accepts 1/8" floor finishes, fastener hidden under floor finish.
  - i. 428-A01 or A02, frame and wing height 1 5/8" [41.3mm] or 1 7/8" [47.6mm], beveled plate accepts 3/8" floor finishes, fastener hidden under floor finish.
2. Floor Systems - Surface Mount, Floor/Floor or Floor/Wall
    - a. 471-A01 or A02, tapered frame accepts 1/8" floor finish but suitable for any floor finish, double tapered plate with hidden fastener.
    - b. 472-A01 or A02, tapered frame accepts 1/8" floor finish but suitable for any floor finish, double tapered plate with exposed fastener.
    - c. 401-A01 or A02, frame suitable for all finishes, beveled plate (stainless steel optional), exposed fastener.
  3. Floor Systems - New to Existing (Renovation), Floor/Floor
    - a. 461-A01, surface mounted tapered frame accepts 1/8" floor finish and recessed frame (height 1 1/2" [38mm]) with double tapered plate, hidden fastener.
  4. Wall/Ceiling Systems - Surface Mount, Wall/Wall (and Ceiling/Ceiling) or Wall/Corner (and Ceiling to Wall)
    - a. 491-A07 or A09 - suitable for all wall finishes, exposed fastener.
  5. Wall/Ceiling System - Recessed Mount, Wall/Wall (and Ceiling/Ceiling) or Wall/Corner (and Ceiling to Wall)
    - a. 481-A07 or A09 - frame depth 1 1/4" to accept drywall finish, exposed fastener.
- B. JointMaster 400 Series - System Accessories:
- a. Fabric Reinforced Vapor Barrier for horizontal and vertical applications (as required).
  - b. Insulated Vapor Barrier for horizontal and vertical applications (as required).
  - c. Drainage Fittings for horizontal and vertical applications (as required).

#### 2.04 FABRICATION

- A. Field assemble components provided in standard lengths with pre-packaged fasteners and accessories.
- B. Fabricate special transitions and corner fittings as required.

#### 2.05 FINISHES

- A. Aluminum:
  1. Floors: Mill finish.
  2. Walls and Ceilings: Standard Class II Clear Anodized [Color Anodized] [Mill] [Kynar Painted] [Custom Color Painted] optional
- B. Stainless Steel: 2B

### PART 3 - EXECUTION

#### 3.01

- A. Verify that structural gap and blockout dimensions are in conformance with manufacturer's submittal data. See manufacturer for recommended tolerances.

#### 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. No shimming allowed.
- B. Set spring clips or centering bars @ 18 inches on center. Spring clips or centering bars shall engage in the frame.
- C. Fire Rated Assemblies: Where required, install to manufacturer's instructions.
- D. Vapor Barrier: Where required, install to manufacturer's instructions. Provide drainage fittings where required.

#### 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

IPC.841/REV.9