PART 1 - GENERAL

1.1 SUMMARY

A. Includes But Not Limited To:
   1. Furnish and install sealants for calking doorframes as described in Contract Documents.
   2. Furnish and install insulation in doorframes as described in Contract Documents.

B. Products Installed But Not Supplied Under This Section:
   1. Flush wood doors.
   2. Hollow metal doors.
   3. Hollow metal doorframes.
   4. Finish hardware.

C. Related Sections:
   1. Sections under 04 2000 heading: Grouting of frames installed in masonry walls.
   3. Section 07 2116: Quality of fiberglass insulation.
   4. Section 07 9213: Quality of sealants.
   5. Sections under 08 1000 heading: Furnishing of doors and metal frames.
   6. Sections under 08 7000 heading: Furnishing of finish hardware.

1.2 SUBMITTALS

A. Quality Assurance / Control:
   1. Inspection report verifying correct operation and adjustment of installed hardware.
   2. Copy of ‘Installation Guide for Doors & Hardware’ by Door & Hardware Institute. Guide may be obtained from Door and Hardware Institute (DHI).

1.3 QUALITY ASSURANCE

A. Regulatory Requirements: Fire door installations shall meet code requirements.

B. Pre-Installation Conference:
   1. Schedule conference after hardware has been delivered to site and organized into hardware groups by door, but prior to installation of hardware.
   2. Check for appropriate blocking and for correct hardware models and fasteners for substrates.
   3. Review set of Manufacturer's installation, adjustment, and maintenance instructions submitted under Section 08 7101.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Wood Doors:
   1. Do not have doors delivered to building site until after plaster, cement, and taping compound are dry. If doors are to be stored at job-site for more than one week, seal top and bottom edges if not factory sealed.
   2. Store flat on a level surface in a dry, well ventilated building. Cover to keep clean but allow air circulation.
   3. Handle with clean gloves and do not drag doors across one another or across other surfaces.
4. Do not subject doors to abnormal heat, dryness, or humidity or sudden changes therein. Condition doors to average prevailing humidity of locality before hanging.

B. Keys: Immediately before Final Acceptance Meeting, turn change keys over to Owner properly organized, tagged, and placed in new key cabinet.

### 1.5 OWNER'S INSTRUCTIONS

A. Using Owner's Operations And Maintenance Manual, explain keying systems at same time keys and locking mechanisms are tested.

### PART 2 - PRODUCTS: Not Used

### PART 3 - EXECUTION

#### 3.1 INSTALLATION

A. Hollow Metal Frames:
   1. Site Tolerances:
      a. Squareness: 1/16 inch 1.6 mm from top edge to opposite top edge.
      b. Plumbness: 1/16 inch 1.6 mm from top of jamb to bottom of jamb.
      c. Alignment: 1/16 inch 1.6 mm from plane of left side face of jamb to right side face of jamb.
      d. Twist: 1/16 inch 1.6 mm across throat of jamb plane measured across each face to plane of opposite jamb throat.
      e. Finished Clearance Between Door And Frame:
         1) 1/16 inch 1.6 mm at head and hinge jamb plus 1/16 inch 1.6 mm maximum
         2) 1/8 inch 3 mm at strike jamb plus or minus 1/16 inch 1.6 mm maximum.
         3) 1/2 inch 12 mm to top of finished floor surface or 1/4 inch 6 mm to top of threshold, plus or minus 1/16 inch 1.6 mm maximum.
   2. Set frame in location and level head.
   3. Equalize with adjustable floor anchor.
   4. Set spreaders and fasten jambs to floor and wall.
      a. Wood spreaders shall be square, fabricated from lumber one inch minimum thick, be same length as door opening at header, and same depth as frame.
      b. Cut notches for frame stops.
      c. Do not remove spreaders until frames are permanently anchored in wall.
      d. Use one spreader at base of frame and another at strike level.
      e. Do not use temporary spreaders welded to base of jambs during installation of frame.
   5. Fill gap between frame and framing with urethane foam or tightly-packed fiberglass insulation. If urethane foam is used, coat interior of frames with foam before installing frame. Trim excess before installation of frame.
   6. Calking: Calk around both sides of frames of doors receiving acoustical seals with specified sealant.

B. Doors:
   1. When Project is completed, doors shall not bind, stick, or be mounted so as to cause future hardware difficulties.
   2. Do not impair utility or structural strength of door in fitting of door, applying hardware, or cutting and altering panels or other special details.

C. Hardware:
   1. General:
      a. Install using set of Manufacturer's installation, adjustment, and maintenance instructions submitted with hardware under Section 08 7101. Follow as closely as possible.
2. Hardware for Wood Doors:
   a. If doors are not factory-machined, use hardware templates furnished by Hardware Manufacturer when mounting hardware.
   b. Set hinges flush with edge surface. Be sure that hinges are set in a straight line to prevent distortion.
   c. Mount door latches high in strike plate opening so when door later settles, latch will not bind.

3.2 FIELD QUALITY CONTROL

   A. Tests: Arrange to have keys brought to Project site and, in meeting attended by local representatives and Architect, test every new key and locking mechanism.

END OF SECTION