

SECTION 08114
STANDARD STEEL DOORS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes non-rated; thermally insulated steel doors.
- B. Related Sections:
 - 1. Section 08115 - Standard Steel Frames.
 - 2. Section 08212 - Flush Wood Doors
 - 3. Section 08710 - Door Hardware.
 - 4. Section 08800 - Glazing: Glass for doors.
 - 5. Section 09900 - Paints and Coatings: Field painting of doors.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.
- B. ASTM International:
 - 1. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM C1363 - Standard Test Method for the Thermal Performance of Building Assemblies by Means of a Hot Box Apparatus.
 - 3. ASTM E413 - Standard Classification for Rating Sound Insulation.
- C. Hollow Metal Manufacturers Association:
 - 1. HMMA 810 - Hollow Metal Doors.
- D. National Fire Protection Association:
 - 1. NFPA 80 - Standard for Fire Doors, Fire Windows.
 - 2. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.
- E. Steel Door Institute:
 - 1. SDI 108 - Recommended Selection and Usage Guide for Standard Steel Doors.
- F. Underwriters Laboratories Inc.:
 - 1. UL 10B - Fire Tests of Door Assemblies.
- G. Uniform Building Code:
 - 1. UBC Standard 7-2 - Fire Tests of Door Assemblies.

1.3 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Requirements for submittals.
- B. Shop Drawings: Indicate door elevations, internal reinforcement, closure method, and cut-outs for glazing and finishes.
- C. Product Data: Submit door configurations, location of cut-outs for hardware reinforcement.
- D. Manufacturer's Installation Instructions: Submit special installation instructions.
- E. Manufacturer's Certificate: Certify Products meet or exceed specified requirements.
- F. Sample: Submit a 12 inch x 12 inch sample with two sides completely sealed with "Bondo" as specified, ground smooth and primed. Sample shall clearly illustrate the layers of edge detail and panel composition.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ANSI A250.8.
- B. Fire Rated Door Construction: Conform to UL 10B.
- C. Installed Door Assembly: Conform to NFPA 80 for fire rated class as scheduled.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.
- B. Installer: Company specializing in performing work of this section with minimum 3 years documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 01600 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Accept doors on site in manufacturer's packaging. Inspect for damage.
- C. Break seal on site to permit ventilation.

1.7 COORDINATION

- A. Section 01300 - Administrative Requirements: Requirements for coordination.

- B. Coordinate Work with door opening construction, door frame, and door hardware installation.
- C. Coordinate installation to accommodate door hardware electric wire connections.

PART 2 PRODUCTS

2.1 STANDARD STEEL DOORS

- A. Manufacturers:
 - 1. Ceco Door Products.
 - 2. Kewanee Corp.
 - 3. Pioneer Industries.
 - 4. Republic Builders Products.
 - 5. Steelcraft.
 - 6. Substitutions: Section 01600 - Product Requirements.
- B. Product Description:
 - 1. Exterior Doors (Insulated): SDI 108, 1-3/4 inch thick.
 - a. Level 3 - Extra heavy Duty, Model 2, seamless design.

2.2 COMPONENTS

- A. Face: Steel sheet in accordance with SDI 108.
- B. End Closure: Channel, 0.04 inches thick, flush. Thermal Insulated Door: Total insulation R-Value of 7, measured in accordance with ASTM C1363.
- C. Top and Bottom Caps: 16 gauge, flush fully sealed with "Bondo" and ground smooth, seamless design.

2.3 ACCESSORIES

- A. Astragals for Double Doors: Steel shaped, specifically for double doors.
- B. Primer: ANSI A250.10 rust inhibitive type.

2.4 FABRICATION

- A. Fabricate doors with hardware reinforcement welded in place.
- B. Attach astragal to one inactive leaf of pairs of doors.
- C. Attach fire rating label to each fire rated door.

2.5 SHOP FINISHING

- A. Steel Sheet: Galvanized to ASTM A653/A653M, A60.

- B. Primer: Baked.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify opening sizes and tolerances are acceptable.

3.2 INSTALLATION

- A. Install doors in accordance with ANSI A250.8.
- B. Install door louvers, plumb and level.
- C. Coordinate installation of glass and glazing specified in Section 08800.
- D. Coordinate installation of doors with installation of frames specified in Section 08115 and hardware specified in Section 08710.
- E. Touch-up damaged shop finishes.

3.3 ERECTION TOLERANCES

- A. Section 01400 - Quality Requirements: Tolerances.
- B. Maximum Diagonal Distortion: 1/16 inch measured with straight edge, corner to corner.

3.4 ADJUSTING

- A. Section 01700 - Execution Requirements: Requirements for adjusting.
- B. Adjust door for smooth and balanced door movement.

3.5 SCHEDULE

- A. Refer to Door and Frame Schedule in the Drawings.

END OF SECTION

SECTION 08115
STANDARD STEEL FRAMES

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes fire rated and non-rated steel frames.
 - 1. Provide frames for exterior glazed lights.
- B. Related Sections:
 - 1. Section 03300 - Cast-In-Place Concrete: Placement of anchors into masonry wall construction.
 - 2. Section 04810 - Unit Masonry Assemblies: Masonry grout fill of metal frames and placement of anchors into masonry wall construction.
 - 3. Section 08114 - Standard Steel Doors.
 - 4. Section 08710 - Door Hardware: Hardware, silencers, and weatherstripping.
 - 5. Section 08800 - Glazing.
 - 6. Section 09900 – Painting.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A250.8 - Recommended Specifications for Standard Steel Doors and Frames.
- B. ASTM International:
 - 1. ASTM A591/A591M - Standard Specification for Steel Sheet, Electrolytic Zinc-Coated, for Light Coating Mass Applications.
 - 2. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- C. National Fire Protection Association:
 - 1. NFPA 80 - Standard for Fire Doors, Fire Windows.
 - 2. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.
- D. Underwriters Laboratories Inc.:
 - 1. UL 10B - Fire Tests of Door Assemblies.
- E. Uniform Building Code:
 - 1. UBC Standard 7-2 - Fire Tests of Door Assemblies.

1.3 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.

- B. Shop Drawings: Indicate frame elevations, reinforcement, anchor types and spacing, location of cut-outs for hardware, and finish.
- C. Product Data: Submit frame configuration and finishes.

1.4 QUALITY ASSURANCE

- A. Conform to requirements of ANSI A250.8.
- B. Fire Rated Frame Construction: Conform to NFPA 252, UL 10B, and UBC Standard 7-2.
- C. Fabricate fire rated steel frames in accordance with the requirements of Underwriter's Laboratories Inc. (UL) and Factory Mutual (FM). Place UL labels where visible when frames are installed in position. Refer to drawings for class requirements.
- D. Installed Frame Assembly: Conform to NFPA 80 for fire rated class same as fire door.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 01600 - Product Requirements: Product storage and handling requirements.
- B. Accept frames on site in manufacturer's packaging. Inspect for damage.
- C. Break seal on-site to permit ventilation.

1.7 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate Work with frame opening construction, door, and hardware installation.
- C. Sequence installation to accommodate required door hardware electric wire connections.

PART 2 PRODUCTS

2.1 STANDARD STEEL FRAMES

- A. Manufacturers:
 - 1. Ceco Door Products.
 - 2. Kewanee Corp.
 - 3. Republic Builders Products.
 - 4. Steelcraft.
 - 5. Substitutions: Section 01600 - Product Requirements.
- B. Product Description: Standard shop fabricated steel frames, fire rated and non-rated types.
 - 1. Exterior Frames: 16 gage/0.053 inch thick material, base metal thickness.
 - 2. Interior Frames: 16 gage/0.053 inch thick material, base metal thickness.

2.2 ACCESSORIES

- A. Bituminous Coating: Non-asbestos fibered asphalt emulsion.
- B. Primer: ANSI A250.10 rust inhibitive type.
- C. Silencers: Specified in Section 08710.
- D. Weatherstripping: Specified in Section 08710.

2.3 FABRICATION

- A. Fabricate frames as welded unit.
- B. Mullions for Double Doors: Removable type, of same profiles as jambs.
- C. Transom Bars for Glazed Lights: Fixed type, of same profiles as jamb and head.
- D. Fabricate frames with hardware reinforcement plates welded in place. Provide mortar guard boxes.
- E. Reinforce frames wider than 48 inches with roll formed steel channels fitted tightly into frame head, flush with top.
- F. Prepare frames for silencers. Provide three single silencers for single doors and mullions of double doors on strike side. Provide two single silencers on frame head at double doors without mullions.
- G. Attach fire rated label to each fire rated frame.
- H. Fabricate frames to suit masonry wall coursing with 4 inch head member.

2.4 SHOP FINISHING

- A. Steel Sheet: Zinc Coated. ASTM A591 Zinc coated on exterior frames; ASTM A 366 commercial quality on interior frames.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify opening sizes and tolerances are acceptable.

3.2 INSTALLATION

- A. Install frames in accordance with ANSI A250.8.
- B. Coordinate with masonry, gypsum board, and concrete wall construction for anchor placement.
- C. Coordinate installation of glass and glazing specified in Section 08800.
- D. Coordinate installation of frames with installation of hardware specified in Section 08710 and doors in Section 08114.
- E. Install roll formed steel reinforcement channels between two abutting frames. Anchor to structure and floor.

3.3 ERECTION TOLERANCES

- A. Section 01400 - Quality Requirements: Tolerances.
- B. Maximum Diagonal Distortion: 1/16 inch measured with straight edges, crossed corner to corner.

3.4 SCHEDULE

- A. Refer to Door and Frame Schedule in the Drawings.

END OF SECTION

SECTION 08212
FLUSH WOOD DOORS

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes flush wood doors; flush and flush glazed configuration; fire rated and non-rated.
- B. Related Sections:
 - 1. Section 08115 - Standard Steel Frames.
 - 2. Section 08710 - Door Hardware.
 - 3. Section 08800 - Glazing.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI A135.4 - Basic Hardboard.
- B. Architectural Woodwork Institute:
 - 1. AWI - Quality Standards Illustrated.
- C. Hardwood Plywood and Veneer Association:
 - 1. HPVA HP-1 - American National Standard for Hardwood and Decorative Plywood.
- D. National Fire Protection Association:
 - 1. NFPA 80 - Standard for Fire Doors, Fire Windows.
 - 2. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.
- E. Underwriters Laboratories Inc.:
 - 1. UL 10B - Fire Tests of Door Assemblies.
 - 2. UL - Building Materials Directory.
- F. Uniform Building Code:
 - 1. UBC Standard 7-2 - Fire Tests of Door Assemblies.
- G. Intertek Testing Services (Warnock Hersey Listed):
 - 1. WH - Certification Listings.

1.3 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.

- B. Shop Drawings: Illustrate door opening criteria, elevations, sizes, types, swings, undercuts required, special beveling, special blocking for hardware, factory machining criteria, factory finishing criteria, identify cutouts for glazing.
- C. Product Data: Submit information on door core materials and construction, and on veneer species, type and characteristics.
- D. Samples:
 - 1. Submit two samples of door veneer, 12 x 12 inch in size illustrating wood grain, stain color, and sheen.
- E. Manufacturer's Installation Instructions: Submit special installation instructions.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with AWI Quality Standard Section 1300, Premium Grade.
- B. Finish doors in accordance with AWI Quality Standard Section 1500.
- C. Fire Door Construction: Conform to UBC Standard 7-2.
- D. Installed Fire Rated Assembly: Conform to NFPA 80 for fire rated class as scheduled.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Section 01600 - Product Requirements: Product storage and handling requirements.
- B. Package, deliver and store doors in accordance with AWI Section 1300.
- C. Protect doors with resilient packaging sealed with heat shrunk plastic. Do not store in damp or wet areas; or in areas where sunlight might bleach veneer. Seal top and bottom edges with tinted sealer when stored more than one week.
 - 1. Break seal on site to permit ventilation.

1.7 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Coordinate Work with door opening construction, door frame and door hardware installation.

1.8 WARRANTY

- A. Section 01700 - Execution Requirements: Product warranties and product bonds.
- B. Include coverage for delamination of veneer, warping beyond specified installation tolerances, defective materials, and telegraphing core construction.
- C. Furnish manufacturer's "Life of Installation" warranty for interior doors.

PART 2 PRODUCTS

2.1 FLUSH WOOD DOORS

- A. Manufacturers:
 - 1. Algoma Hardwoods Inc.
 - 2. VT Industries.
 - 3. Substitutions: Section 01600 - Product Requirements.
- B. Product Description: Solid core flush wood doors; wood veneer facing material; fire rated and non-rated types; flush glazed design; factory pre-fit; shop finished wood doors.
 - 1. Flush Interior Doors: 1-3/4 inches thick; solid core, seven-ply, fire rated, non-rated, as indicated on Drawings.

2.2 COMPONENTS

- A. Solid Core, Non-Rated: AWI Section 1300, Type SLC- 7, Stave lumber core. AWI Premium quality wood, rotary cut, balanced match, book matched grain, for transparent finish.
 - 1. Wood: Select White Birch.
- B. Solid Core, Fire Rated: AWI Section 1300, Type as required for fire rating. Interior Veneer Facing: AWI Premium quality wood, rotary cut, balanced match, book matched grain, for transparent finish.
 - 1. Wood: Select White Birch.
- C. Facing Adhesive: Type I - waterproof.

2.3 ACCESSORIES

- A. Glazing Stops: Rolled steel channel shape, mitered corners; prepared for countersink style tamper proof screws.

2.4 FABRICATION

- A. Fabricate non-rated doors in accordance with AWI Quality Standards requirements.

- B. Fabricate fire rated doors in accordance with AWI Quality Standards and to UL requirements. Attach fire rating label to door.
- C. Astragals for Fire Rated Double Doors: Reference Section 08710.
- D. Furnish lock blocks at lock edge and top of door for closer for hardware reinforcement.
- E. Factory machine doors for finish hardware in accordance with hardware requirements and dimensions. Do not machine for surface hardware. Furnish solid blocking for through bolted hardware.
- F. Factory fit doors for frame opening dimensions identified on shop drawings.
- G. Cut and configure exterior door edge to receive recessed weather stripping devices.
- H. Provide edge clearances in accordance with AWI 1300.

2.5 SHOP FINISHING

- A. Factory finish doors in accordance with AWI Quality Standard Section 1500 to the following finish designations; color as selected:
 - 1. Transparent Finish TR-6: Catalyzed polyurethane, Premium quality, satin sheen. Seal door top edge with clear sealer to match door facing.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify opening sizes and tolerances are acceptable.
- C. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

3.2 INSTALLATION

- A. Install fire rated and non-rated doors in accordance with AWI Quality Standard, NFPA 80, and to requirements for fire rating label by UL or Intertek Testing Services (Warnock Hersey Listed).
- B. Trim non-rated door width by cutting equally on both jamb edges.
- C. Trim door height by cutting bottom edges to maximum of 3/4 inch.

1. Trim fire door height at bottom edge only, in accordance with fire rating requirements.
- D. Machine cut doors for hardware installation.
 - E. Coordinate installation of doors with installation of frames specified in Section 08115 and hardware specified in Section 08710.
 - F. Coordinate installation of glass and glazing specified in Section 08800.
- 3.3 INSTALLATION TOLERANCES
- A. Section 01400 - Quality Requirements: Tolerances.
 - B. Conform to AWI requirements for fit and clearance tolerances.
 - C. Conform to AWI Section 1300 requirements for maximum diagonal distortion.
 - D. Maximum Width Distortion (Cup): 1/8 inch measured with straight edge or taut string, edge to edge, over imaginary 36 x 84 inches surface area.
- 3.4 ADJUSTING
- A. Section 01700 - Execution Requirements: Testing, adjusting, and balancing.
 - B. Adjust door for smooth and balanced door movement.
 - C. Adjust closer for full closure.
- 3.5 SCHEDULE
- A. Refer to Door and Frame Schedule in the Drawings.

END OF SECTION

SECTION 08710
DOOR HARDWARE

PART 1 GENERAL

1.1 SUMMARY

- A. Work under this section comprises of furnishing and installing hardware specified herein and noted on drawings for a complete and operational system, including any electrified hardware components, systems, controls and hardware for aluminum entrance doors. **Any door shown on the drawing and not specifically referenced in the hardware sets shall be provided with identical hardware as specified on other similar openings and shall be included in the finish hardware suppliers bid.**
- B. Items included but are not limited to the following:
1. Hinges – Pivots
 2. Flush Bolts
 3. Exit Devices
 4. Locksets and Cylinders
 5. Push Plates – Pulls
 6. Coordinators
 7. Closers
 8. Kick, Mop and Protection Plates
 9. Stops, Wall Bumpers, Overhead controls
 10. Electrified Hold Open Devices
 11. Thresholds, Gasketing and Door Bottoms
 12. Silencers
 13. Miscellaneous Trim and Accessories
 14. Electrified Hardware Items, Controls and Power Supplies
 15. Wiring Diagrams
- C. Related Sections:
1. Section 06200 - Finish Carpentry
 2. Section 06410 - Custom Cabinets: Cabinet hardware.
 3. Section 08114 - Standard Steel Doors.
 4. Section 08115 - Standard Steel Frames: Silencers integral with steel frames.
 5. Section 08212 - Flush Wood Doors.
 7. Division 16 - Electrical

1.2 REFERENCES

- A. American National Standards Institute:
1. ANSI A117.1 American National Standards Institute – Accessible and Usable

2. ANSI A156.1 - Butts and Hinges.
 3. ANSI A156.2 - Bored and Preassembled Locks and Latches.
 4. ANSI A156.3 - Exit Devices.
 5. ANSI A156.4 - Door Controls - Closures.
 6. ANSI A156.5 - Auxiliary Locks and Associated Products.
 7. ANSI A156.6 - Architectural Door Trim.
 8. ANSI A156.7 - Template Hinge Dimensions.
 9. ANSI A156.12 - Interconnected Locks and Latches.
 10. ANSI A156.13 - Mortise Locks and Latches.
 11. ANSI A156.15 - Closer Holder Release Devices.
 12. ANSI A156.16 - Auxiliary Hardware.
 13. ANSI A156.18 - Materials and Finishes
 14. ANSI A156.23 - Electromagnetic Locks.
 15. ANSI A156 - Complete Set of 24 BHMA Standards (A156 Series) with Binder.
- B. Builders Hardware Manufacturers Association:
1. BHMA Directory of Certified Products.
- C. National Fire Protection Association:
1. NFPA 80 - Standard for Fire Doors, Fire Windows.
 2. NFPA 101 – Life Safety Code
 3. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.
- D. ADA – American with Disabilities Act – Title III – Public Accommodations
- E. U.B.C.7-2-97 and UL 10C
- F. State and Local Codes including Authority Having Jurisdiction
- G. Underwriters Laboratories Inc.:
1. UL 10B - Fire Tests of Door Assemblies.
 2. UL 305 - Panic Hardware.
 3. UL - Building Materials Directory.
- H. Intertek Testing Services (Warnock Hersey Listed):
1. WH - Certification Listings.

1.3 PERFORMANCE REQUIREMENTS

- A. Fire Rated Openings: Provide door hardware listed by UL or Intertek Testing Services (Warnock Hersey Listed), or other testing laboratory approved by applicable authorities.
1. Hardware: Tested in accordance with NFPA 252.

1.4 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.

- B. Schedule to be in vertical format, listing each door opening, including: handing of opening, all hardware scheduled for opening or otherwise required to allow for proper function of door opening as intended, and finish of hardware. At doors with door closers or door controls include degree of door opening.
- C. Shop Drawings:
 - 1. Indicate locations and mounting heights of each type of hardware, schedules, catalog cuts, electrical characteristics and connection requirements.
 - 2. Submit manufacturer's parts lists, and templates.
- D. Samples:
 - 1. Submit one sample of typical hinge, latchset, lockset, and closer, illustrating style, color, and finish.
 - 2. Approved samples may be incorporated into Work. Samples will be returned to supplier.
- E. Electronic Security Hardware: Coordinate installation of the electronic security with the Architect and provide installation and technical data to the Architect and other related sub-contractor(s). Upon completion of the electronic security hardware installation, verify that all components are working properly and state in the required guarantee that this inspection has been preformed.
- F. Wiring Diagrams: Provide complete wiring diagrams for each opening requiring electrified hardware, except openings where only magnetic hold-opens are specified. Provide a copy with each hardware schedule submitted after approval. Supply a copy with delivery of hardware to job site and another copy to owner at time of job completion.
- G. Doors and Frames used in positive pressure opening assemblies shall meet U.B.C. 7-2-97 and UL10C in areas where this specification includes Gasketing for smoke door.
- H. Manufacturer's Installation Instructions: Submit special procedures, and perimeter conditions requiring special attention.

1.5 CLOSEOUT SUBMITTALS

- A. Section 01700 - Execution Requirements: Closeout procedures.
- B. Project Record Documents: Record actual locations of installed cylinders and their master key code.
- C. Operation and Maintenance Data: Submit data on operating hardware, lubrication requirements, and inspection procedures related to preventative maintenance.

- D. Keys: Deliver with identifying tags to Owner by security shipment direct from hardware supplier.

1.6 QUALITY ASSURANCE

- A. Perform Work in accordance with the following requirements:
 - 1. ANSI A156 series.
 - 2. NFPA 80.
 - 3. UL 305.
- B. Products Requiring Electrical Connection: Listed and classified by Underwriters' Laboratories, Inc., as suitable for purpose specified and indicated.
- C. All hardware used in labeled fire or smoke rated openings to be listed for those types of openings and bear the identifying label or mark indicating UL. (Underwriter's Laboratories) approved for fire. Exit devices in non-labeled openings to be listed for panic.

1.7 QUALIFICATIONS

- A. Hardware supplier to be a qualified, Factory Authorized, direct distributor of the products to be furnished. In addition, the supplier to have in their regular employment an A.H.C. or person of equivalent experience who will be made available at reasonable times to consult with the Architect/Contractor and/or Owner regarding any matters affecting the finish hardware on this project.

1.8 PRE-INSTALLATION MEETINGS

- A. Section 01300 - Administrative Requirements: Pre-installation meeting.
- B. Convene minimum two weeks prior to commencing work of this section.
- C. Include persons involved with installation of doors, frames, and hardware.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Section 01600 - Product Requirements: Product storage and handling requirements.
- B. Package hardware items individually with necessary fasteners, instructions, and installation templates, when necessary; label and identify each package with door opening code to match hardware schedule.

1.10 COORDINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.

- B. Coordinate Work with other directly affected sections involving manufacture or fabrication of internal reinforcement for door hardware and recessed items.
 - 1. Provide templates or actual hardware as required to ensure proper preparation of doors and frames.
- C. Sequence installation to accommodate required utility connections.
- D. Coordinate Owner's keying requirements during course of Work.

1.11 WARRANTY

- A. Section 01700 - Execution Requirements: Product warranties and product bonds.
- B. Furnish two five year manufacturer warranty for locksets and door closers. All finish hardware shall be supplied with a Two- (2) year warranty against defects in materials and workmanship, commencing with substantial completion of the project except as follows:
 - 1. All Closers to have a ten (10) year warranty
 - 2. All Exit Devices to have a five (5) year warranty
 - 3. All Locksets to have a five (3) year warranty
 - 4. All Continuous Hinges to have a ten (10) year warranty

1.12 MAINTENANCE MATERIALS

- A. Section 01700 - Execution Requirements: Maintenance materials.
- B. Furnish special wrenches and tools applicable for each different and for each special hardware component.

1.13 EXTRA MATERIALS

- A. Section 01700 - Execution Requirements: Spare parts and maintenance products.
- B. Furnish ten extra key lock cylinders for each master keyed group.

PART 2 PRODUCTS

2.1 HINGES

- A. All hinges to be of one manufacturer as hereafter listed for continuity and consideration of warranty. Provide one of the following manufacturers Ives, Bommer or Stanley.
- B. Unless otherwise specified provide five-knuckle, heavy-duty, button tip, full mortise template type hinges with non-rising loose pins. Provide non-

removable pins for out swinging doors at secured areas or as called for in this specification.

- C. Exterior Door Hinges: Provide out-swinging door hinges of solid bronze or stainless steel with non-removable pins or security studs as called for in this specification.
- D. Interior Door Hinges: Wrought steel, polished and plated to match specified finish. Furnish three (3) hinges up to 90 inches high and one (1) additional hinge for every 30 inches or fraction thereof.
- E. Provide size 4½ inch x 4½ inch for all 1¾ inch thick doors up to and including 36 inches wide. Doors over 1¾ inch through 2¼ inch thick, use 5 inch x 5-inch hinges. Doors over 36 inches use 5 inch x 4½ inch.
- F. Were required to clear the trim and/or to permit the doors to swing 180 degrees furnish hinges of sufficient throw.
- G. Provide heavy weight hinges on all doors over 36 inches in width.
- H. At labeled door's steel or stainless steel, bearing-type hinges shall be provided. For all doors equipped with closers provide bearing-type hinges.
- I. Finishes: At wood doors, hinges are to be plated to match adjacent hardware or as called for in Hardware Sets. At hollow metal doors, hinges are to be USP or stainless steel at exterior out-swinging doors, unless otherwise specified in Hardware Sets.
- J. Continuous hinges shall be Ives as specified or equal products manufactured by Select or Markar.

2.2 LOCKS AND LOCK TRIM

- A. All of the lock sets, latch sets, and trim to be of one manufacturer as hereafter listed for continuity of design and consideration of warranty. Locksets shall be provided as specified and are Falcon "M" series with the Dane lever. Equal products manufactured by Arrow or Schlage shall be acceptable.
- B. Provide metal wrought box strike boxes and curved lip strikes with proper lip length to protect trim of the frame, but not to project more than 1/8 inch beyond frame trim or the inactive leaf of a pair of doors.
- C. Mechanical Locks shall meet ANSI Operational Grade 1, Series 4000 as specified.

1. Hand of lock is to be easily field reversible or non-handed.

2. All lever trim is to be through-bolted through the door.

2.3 CYLINDERS AND KEYING

- A. Provide locks and Exit devices requiring cylinders with Arrow cylinders to match the existing key system and comply with performance requirements of ANSI A156.5. All keys to be of nickel silver only. All locks are to be factory keyed to the existing master key system as directed by Laughlin Air Force Base and the Architect. The hardware supplier shall meet with the General Contractor, the Architect, a Representative the Lock manufacturer and a Representative of Laughlin Air Force Base at the project site to determine all permanent keying requirements.
- B. Furnish all exterior locks and cylinders with temporary keyed construction cylinders for the duration of construction. Provide ten (10) construction keys total.
- C. Cylinders shall be factory keyed and factory maintained as directed by Laughlin Air Force Base. Provide four- (4) keys per cylinder and six- (6) master keys per master used.
- D. Stamp all keys "Do not duplicate" and with key symbol as directed by Laughlin Air Force Base.

2.4 EXIT DEVICES

- A. All exit devices and trim, including electrified items, to be of one manufacturer as hereafter listed and in the hardware sets for continuity of design and consideration of warranty; electrified devices and trim to be the same series and design as mechanical devices and trim.
- B. Exit Devices to be "UL" listed for life safety. All exit devices for labeled doors shall have "UL" label for "Fire Exit Hardware". All devices mounted on labeled wood doors are to be through-bolted or per the manufacturer's listing requirements. All devices shall conform to NFPA 80 and NFPA 101 requirements.
- C. All exit devices to be of a heavy duty, chassis mounted design, with one piece removable covers, eliminating necessity of removing the device from the door for standard maintenance and keying requirements.
- D. All trims to be through-bolted to the lock stile case. Lever design to be the same as specified with the lock sets ("Quantum" design). Provide Vandal Resistant Trim as specified in hardware sets.

- E. Exit Devices to be the modern push rail design.
- F. All devices shall carry a five- (5) year warranty against manufacturing defects and workmanship.
- G. Exit Devices shall be Monarch 18 series or equal products manufactured by Arrow, Von Duprin or Sargent.

2.5 SURFACE MOUNTED DOOR CLOSERS

- A. All closers for this project shall be the products of a single manufacturer for continuity of design and consideration of warranty. All door closers shall be mounted as to achieve the maximum degree of opening (trim permitting).
- B. All closers to be heavy duty, surface mounted, fully hydraulic, rack and pinion action with high strength iron or aluminum cylinder to provide control throughout the entire door opening cycle.
- C. Size all closers in accordance with the manufacturer's recommendations at the factory.
- D. All closers to have adjustable spring power sizes 1 or 2 through 4 or 6 and separate tamper resistant, brass, non-critical regulating screw valves for closing speed, latching speed and back-check control as a standard feature.
- E. All closer covers to be rectangular, full cover type of non-ferrous, non-corrosive material painted to match closer. Provide closer covers only if provided as a standard part of the door closer package.
- F. Closers shall have heavy-duty arms. All closer arms shall be of sufficient length to accommodate the reveal depth and to insure proper installation. The hardware supplier shall provide any and all required brackets, spacers or filler plates as required by the manufacture for a proper and functional installation as part of their base bid.
- G. Supply appropriate arm assembly for each closer so that closer body and arm are mounted on non-public side of door opening and on the interior side of exterior openings, except where required otherwise in the hardware sets.
 - 1. All parallel arm mounted closers to be factory indexed to insure proper installation.
 - 2. Furnish heavy-duty cold forged parallel arms for all parallel arm mounted closers.
- H. Provide closers with special application and heavy-duty arms as specified in the hardware sets or as otherwise called for to insure a proper operating, long

lasting opening. Drop plates and any additional brackets required for the proper installation of the door closer shall be included in the hardware supplier's base bid.

- I. Finish: Sprayed enamel finish to match other hardware.
- J. Closers shall be Dor-O-Matic SC81 series or equal products manufactured by LCN or Sargent.

2.6 DOOR STOPS AND HOLDERS

- A. Door stops are to be furnished for every door leaf. Every door is to have a floor, wall, or an overhead stop.
- B. Place door stops in such a position that they permit maximum door swing, but do not present a hazard of obstruction. Furnish floor strikes for floor holders of proper height to engage holders of doors.
- C. Where overhead stops and holders are specified, or otherwise required for proper door operation, they are to be heavy duty and of extruded brass, bronze or stainless steel with no plastic parts as specified. The General Contractor shall provide wood blocking in all stud walls specified and scheduled to receive wall stops.
- D. Finish: Same as other hardware where available.
- E. Acceptable Products
 - 1. Floor and wall stops as listed in hardware sets. Equivalent products as manufactured by Ives, Rockwood, Glynn Johnson and Trimco are acceptable.

2.7 PUSH PLATES, DOOR PULLS, AND KICKPLATES

- A. All push plates, door pull's, kick plates and other miscellaneous hardware as listed in hardware sets. Equivalent products as manufactured by Ives, Rockwood, Glynn Johnson and Trimco are acceptable.
- B. Kick plates to be 10 inches high and Mop plates to be 6 inches high, both by 2 inches or 1 inch less than door width (LDW) as specified. They are to be of 16 gauge (.050 inches) thick stainless steel. For door with louvers or narrow bottom rails, kick plate height to be 1 inch less dimension shown from the bottom of the door to the bottom of the louver or glass.

- C. Where required armor plates, edge guards and other protective hardware shall be supplied in sizes as scheduled in the hardware sets.
- D. Finish: Same as other hardware.

2.8 FLUSH BOLTS AND COORDINATORS

- A. Provide Flush bolts with Dust Proof Strikes as indicated in the individual hardware sets by Ives, Rockwood, Glynn Johnson and Trimco are acceptable. Finish to match adjacent hardware.

2.9 THRESHOLDS AND GASKETING

- A. Provide materials and finishes as listed in hardware sets. Equivalent product by National Guard Products, Zero, and Reese are acceptable. All thresholds must be in accordance with the requirements of the ADA and ANSI A117.1.
- B. Provide thresholds with wood screws and plastic anchors. Supply all necessary anchoring devices for weather strip and sound seal.
- C. Gasketing shall comply with requirements of U.B.C. 7-2-97 and UL10C.
- D. Gasketing shall comply with the requirements of the Wood Door Manufacturer's certification requirements.

2.10 FINISHES

- A. Finishes for all hardware are as required in this specification and the hardware sets.
- B. Special care is to be taken to make uniform the finish of all various manufactured items.

2.11 DOOR SILENCERS

- A. Furnish door silencers at all openings without gasket. Provide two- (2) each at each pair of doors and three - (3) each for each single door.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify doors and frames are ready to receive door hardware and dimensions are as indicated on shop drawings. instructed by manufacturer.
- C. Verify electric power is available to power operated devices and is of correct characteristics.

3.2 INSTALLATION

- A. Coordinate mounting heights with door and frame manufacturers. Use templates provided by hardware item manufacturer. Hardware is to be installed by experienced finish hardware installers after a pre-installation and pre-wiring meeting between the hardware supplier, hardware manufacturer's representative, electrical contractor, security contractor, hollow metal supplier, wood door supplier and installer.
- B. Check hardware against the reviewed hardware schedule upon delivery. Store the hardware in a dry, secure location to protect against loss and damage.
- C. Install finish hardware in accordance with approved hardware schedule and manufacturers' printed instructions. Pre-fit hardware before finish is applied to door; remove and reinstall after finish is complete and dry. Install and adjust hardware so that parts operate smoothly, close tightly, and do not rattle.
- D. Mortise and cutting to be done neatly, and evidence of cutting to be concealed in the finished work. Protect all Finish hardware from scratching or other damage.

3.3 FIELD QUALITY CONTROL

- A. Architectural Hardware Consultant inspect installation and certify hardware and installation has been furnished and installed in accordance with manufacturer's instructions and as specified.

3.4 ADJUSTING

- A. Section 01700 - Execution Requirements: Testing, adjusting, and balancing.
- B. Adjust hardware for smooth operation.

3.5 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 01700 - Execution Requirements: Protecting installed construction.
- B. Do not permit adjacent work to damage hardware or hardware finish.

3.6 SCHEDULES

- A. The following hardware sets are intended to establish type and standard of quality when used together with this section requirements. Examine Drawings and Specifications and furnish proper hardware for door openings.

HW SET: 01
DOOR NUMBER:
102

EACH TO HAVE:

2	EA	CONTINUOUS HINGE	700 83"	630	IVE
1	EA	PANIC DEVICE	18-V-L-DANE-LBR	630	MON
1	EA	PANIC DEVICE	18-V-L-DT-DANE-LBR	630	MON
1	EA	CYLINDER	MC61 X RC62 AS REQUIRED	626	ARR
1	SET	ASTRAGAL	189MA 84"	AL	NGP
2	EA	SURFACE CLOSER	SC81 DS	689	DOR
2	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	SET	JAMBS WEATHER STRIP	162S 2/84"	AL	NGP
1	SET	HEAD WEATHER STRIP	700SA 1/96"	AL	NGP
1	SET	DRIP CAP	16A 100"	AL	NGP
2	EA	DOOR SWEEP	200SA 48"	AL	NGP
1	EA	THRESHOLD	896V 96"	AL	NGP

HW SET: 02
DOOR NUMBER:
101

EACH TO HAVE:

1	EA	CONTINUOUS HINGE	700 83"	630	IVE
1	EA	PANIC DEVICE	18-R-P-APOLLO	630	MON
1	EA	CYLINDER	MC61 X RC62 AS REQUIRED	626	ARR
1	EA	SURFACE CLOSER	SC81 DS	689	DOR

1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	SET JAMBS WEATHER STRIP	162S 2/84"	AL	NGP
1	EA	SET HEAD WEATHER STRIP	700SA 1/36"	AL	NGP
1	EA	DRIP CAP	16A 40"	AL	NGP
1	EA	DOOR SWEEP	200SA 36"	AL	NGP
1	EA	THRESHOLD	896V 36"	AL	NGP

HW SET: 03
DOOR NUMBER:
100

EACH TO HAVE:

4	EA	HINGES	5BB1 4.5 X 4.5	630	IVE
1	EA	DUTCH DOOR BOLT	054	626	IVE
1	EA	CLASSROOM LOCK	M561L DN	626	FAL
1	EA	DEADLOCK	D61	626	ARR
1	EA	MORTISE CYLINDER	MC61 X COLLAR	626	ARR
1	EA	SURFACE CLOSER	SC81 HW/RA	689	DOR
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	FLOOR STOP	FS441	626	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
4	EA	SILENCER	SR64	GRY	IVE

END OF SECTION

SECTION 08800

GLAZING

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes glass glazing for metal frames and doors.
- B. Related Sections:
 - 1. Section 07900 - Joint Sealers: Sealant and back-up material other than glazing sealants.
 - 2. Section 08114 - Standard Steel Doors: Glazed doors.
 - 3. Section 08212 - Flush Wood Doors: Glazed doors.
 - 4. Section 10800 - Toilet, Bath, and Laundry Accessories: Metal framed mirrors.

1.2 REFERENCES

- A. American National Standards Institute:
 - 1. ANSI Z97.1 - Safety Glazing Materials Used in Buildings Safety.
- B. American Society of Civil Engineers:
 - 1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
- C. ASTM International:
 - 1. ASTM C864 - Standard Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers.
 - 2. ASTM C920 - Standard Specification for Elastomeric Joint Sealants.
 - 3. ASTM C1036 - Standard Specification for Flat Glass.
 - 4. ASTM C1048 - Standard Specification for Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass.
 - 5. ASTM C1193 - Standard Guide for Use of Joint Sealants.
 - 6. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
 - 7. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors By Uniform Static Air Pressure Difference.
 - 8. ASTM E546 - Standard Test Method for Frost Point of Sealed Insulating Glass Units.
 - 9. ASTM E576 - Standard Test Method for Frost Point of Sealed Insulating Glass Units in the Vertical Position.
 - 10. ASTM E773 - Standard Test Methods for Seal Durability of Sealed Insulating Glass Units.
 - 11. ASTM E774 - Standard Specification for Sealed Insulating Glass Units.
- D. Glass Association of North America:

1. GANA - FGMA Sealant Manual.
 2. GANA - Glazing Manual.
 3. GANA - Laminated Glass Design Guide.
- E. National Fire Protection Association:
1. NFPA 80 - Standard for Fire Doors, Fire Windows.
- F. Underwriters Laboratories Inc.:
1. UL - Building Materials Directory.

1.3 PERFORMANCE REQUIREMENTS

- A. Provide glass and glazing materials for continuity of building enclosure vapor retarder and air barrier:
1. In conjunction with materials described in Section 04820 (Membrane flashing).
 2. To utilize inner pane of multiple pane sealed units for continuity of air barrier and vapor retarder seal.
 3. To maintain continuous air barrier and vapor retarder throughout glazed assembly from glass pane to heel bead of glazing sealant.

1.4 SUBMITTALS

- A. Section 01330 - Submittal Procedures: Submittal procedures.
- B. Product Data:
1. Glass: Provide structural, physical and environmental characteristics, size limitations, special handling or installation requirements.
 2. Glazing Sealants, Compounds and Accessories: Provide chemical, functional, and environmental characteristics, limitations, special application requirements. Identify available colors where exposed.
- C. Samples:
1. Glass: Submit two samples 12 x 12 inch in size, illustrating each glass unit, coloration and design.
 2. Glazing Materials: Submit 6 inch long bead of glazing sealant and gaskets, color as selected by Architect.
- D. Certificates: Certify products meet or exceed specified requirements.
- E. Manufacturer's Certificate: Certify sealed insulated glass, meets or exceeds specified requirements.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with GANA Glazing Manual, GANA Sealant Manual, GANA Laminated Glass Design Guide for glazing installation methods.

1.6 QUALIFICATIONS

- A. Installer: Company specializing in performing Work of this section with minimum three years documented experience.

1.7 MOCKUP

- A. Section 01400 - Quality Requirements: Requirements for mock-up.
- B. Construct mockup 2 x 2 feet including glass.
- C. Locate where directed by Architect.

1.8 PRE-INSTALLATION MEETING

- A. Section 01300 - Administrative Requirements: Pre-installation meeting.
- B. Convene minimum one week before starting Work of this section.

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Section 01600 - Product Requirements.
- B. Do not install glazing when ambient temperature is less than 50 degrees F.
- C. Maintain minimum ambient temperature before, during and 24 hours after installation of glazing compounds.

1.10 WARRANTY

- A. Section 01700 - Execution Requirements: Product warranties and product bonds.
- B. Furnish ten year warranty to include coverage for sealed glass units from seal failure, interpane dusting or misting, and replacement of same.

1.11 GLAZING

- A. Manufacturers:
 - 1. Libbey-Owens-Ford, Inc.
 - 2. Viracon.
 - 3. Guardian.
 - 4. PPG Industries, Inc.
 - 5. Substitutions: Section 01600 - Product Requirements.
- B. Wired Glass Manufacturers:
 - 1. Guardian Industries, Inc.
 - 2. Hordis Brothers, Inc.
 - 3. Substitutions: Section 01600 - Product Requirements.

1.12 COMPONENTS

- A. Flat Glass (Type FG): Minimum 1/4 inch unless otherwise indicated.
 - 1. Clear Float Glass (Type FG-CF): ASTM C1036, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select.
 - 2. Clear Heat Strengthened Glass (Type FG-CH): ASTM C1048, Kind HS, heat strengthened, Condition A uncoated, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select.
 - 3. One-Way Reflective Mirror Glass (Type FG-OM): ASTM C1036, Type 1 transparent flat, Class 1 clear, Quality q2 mirror; size noted on Drawings.
- B. Safety Glass (Type SG): Conform to ANSI Z97.1, minimum thickness 1/4 inch unless otherwise indicated.
 - 1. Clear Tempered Glass (Type SG-CT): ASTM C1048, Kind FT Fully tempered, Condition A, uncoated, Type 1 transparent flat, Class 1 clear, Quality q3 glazing select.

1.13 ACCESSORIES

- A. Elastomeric Glazing Sealants: Materials compatible with adjacent materials including glass, laminated glass core, insulating glass seals, and glazing channels.
 - 1. Silicone Glazing Sealant: ASTM C920, Type S, Grade NS, Class and Use suitable for glazing application indicated; single component; chemical curing; capable of water immersion without loss of properties; non-bleeding, non-staining, cured Shore A hardness of 15 to 25.
 - 2. Polysulfide Glazing Sealant: ASTM C920, Type M, Grade NS, Class and Use suitable for glazing application indicated; two component; chemical curing, non-sagging type; cured Shore A hardness of 15 to 25.
 - 3. Polyurethane Glazing Sealant: ASTM C920, Type S, Grade NS, Class and Use suitable for glazing application indicated; single component, chemical curing, non-staining, non-bleeding, Shore A Hardness Range 20 to 35.
 - 4. Acrylic Sealant: ASTM C920, Type S, Grade NS, Class and Use suitable for glazing application indicated; single component, solvent curing, non-bleeding; cured Shore A hardness of 15 to 25.
- B. Glazing Gaskets: ASTM C864 Option II, resilient neoprene extruded shape to suit glazing channel retaining slot.
- C. Pre-Formed Glazing Tape: Size to suit application.
 - 1. Preformed butyl compound with integral resilient tube spacing device; 10 to 15 Shore A durometer hardness; coiled on release paper; black color.
 - a. Butyl Corner Sealant: ASTM C920 single component non-skinning butyl compatible with glazing tape; color to match tape.
- D. Setting Blocks: ASTM C864 Option I, Neoprene, 80 to 90 Shore A durometer hardness, length of 0.1 inch for each square foot of glazing or minimum 4 inch x

width of glazing rabbet space minus 1/16 inch x height to suit glazing method and pane weight and area.

- E. Spacer Shims: ASTM C864 Option I, Neoprene, 50 to 60 Shore A durometer hardness, minimum 3 inch long x one half the height of glazing stop x thickness to suit application.
- F. Glazing Clips: Manufacturer's standard type.
- G. Smoke Removal Unit Targets: Adhesive targets affixed to glass to identify glass units destined for removal for smoke control.

PART 2 EXECUTION

2.1 EXAMINATION

- A. Section 01300 - Administrative Requirements: Coordination and project conditions.
- B. Verify openings for glazing are correctly sized and within acceptable tolerance.
- C. Verify surfaces of glazing channels or recesses are clean, free of obstructions impeding moisture movement, weeps are clear, and ready to receive glazing.

2.2 PREPARATION

- A. Clean contact surfaces with solvent and wipe dry.
- B. Seal porous glazing channels or recesses with substrate compatible primer or sealer.
- C. Prime surfaces scheduled to receive sealant.

2.3 INSTALLATION

- A. Perform installation in accordance with GANA Glazing Manual.
 - 1. Glazing Sealants: Comply with ASTM C1193.
- B. Exterior Wet/Dry Method (Preformed Tape and Sealant) Installation:
 - 1. Cut glazing tape to length and set against permanent stops, 3/16 inch below sight line. Seal corners by butting tape and dabbing with compatible butyl sealant.
 - 2. Apply heel bead of butyl sealant along intersection of permanent stop with frame ensuring full perimeter seal between glass and frame to complete continuity of air and vapor seal.
 - 3. Place setting blocks at 1/4 points with edge block no more than 6 inches from corners.

4. Rest glazing on setting blocks and push against tape and heel bead of sealant with sufficient pressure to attain full contact at perimeter of pane or glass unit.
5. Fill gap between glazing and stop with elastomeric glazing sealant to depth equal to bite of frame on glazing, but not more than 3/8 inch below sight line.
6. Apply cap bead of elastomeric glazing sealant along void between stop and glazing, to uniform line, flush with sight line. Tool or wipe sealant surface smooth.

2.4 FIELD QUALITY CONTROL

- A. Section 01700 - Execution Requirements: Testing, adjusting, and balancing.
- B. Monitor quality of glazing.

2.5 CLEANING

- A. Section 01700 - Execution Requirements: Final cleaning.
- B. Remove glazing materials from finish surfaces.
- C. Remove labels after Work is complete.
- D. Clean glass and adjacent surfaces.

2.6 PROTECTION OF INSTALLED CONSTRUCTION

- A. Section 01700 - Execution Requirements: Protecting installed construction.

END OF SECTION