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This MANU-SPEC® utilizes the Construction Specifications Institute (CSI) *Project Resource Manual* (PRM), including *MasterFormat*™, *SectionFormat*™ and *PageFormat*™. A MANU-SPEC is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. Optional text is indicated by brackets []; delete optional text in final copy of specification. Specifier Notes typically precede specification text; delete notes in final copy of specification. Trade/brand names with appropriate symbols typically are used in Specifier Notes; symbols are not used in specification text. Metric conversion, where used, is soft metric conversion.

This MANU-SPEC specifies door trim and auxiliary products. These products are manufactured by Hager Companies. Revise MANU-SPEC section number and title below to suit project requirements, specification practices and section content. Refer to CSI *MasterFormat* for other section numbers and titles.

**SECTION 08 71 00
 DOOR HARDWARE**

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Door Pulls.
 2. Pull Plates.
 3. Flush Cup Pulls.
 4. Push Plates.
 5. Push/Pull Bars.
 6. Cabinet Hardware.
 7. Ball Catches.
 8. Door Edgings.
 9. Corner Guard.
 10. Door Protection Plate.
 11. Wall Stop and Holder.
 12. Closet Hardware.
 13. Residential Trim and Auxiliary Hardware.
 14. Floor Stop and Holder.
 15. Surface Bolts.
 16. Flush Bolts.
 17. Coordinators.
 18. Latches.
 19. Filler Plates.
 20. Latch Protection Plates.

- 21. Miscellaneous.
- 22. Signage.

Specifier Note: Revise paragraph below to suit project requirements. Add section numbers and titles in accordance with CSI *MasterFormat* and specifier's practice.

B. Related Sections:

- 1. Section [01 33 00 - Submittal Procedures] [_____].
- 2. Section [01 45 00 - Quality Control] [_____].
- 3. Section [01 78 00 - Closeout Submittals] [_____].
- 4. Section [08 11 00 - Metal Doors and Frames] [_____].
- 5. Section [08 14 16 - Flush Wood Doors] [_____].

Specifier Note: Article below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain Reference Article when specifying products and installation by an industry reference standard. If retained, list standard(s) referenced in this section. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Conditions of the Contract or Division 01 References Section may establish the edition date of standards. This article does not require compliance with standard, but is merely a listing of references used. Article below should list only those industry standards referenced in this section. Retain only those reference standards to be used within the text of this Section. Add and delete as required for specific project.

1.02 REFERENCES

- A. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):
 - 1. ANSI/BHMA A156.16 Architectural Door Trim.
 - 2. ANSI/BHMA A156.18 Materials & Finishes.
- B. International Code Council/American National Standards Institute (ICC/ANSI):
 - 1. ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities.
- C. Americans with Disabilities Act (ADA).
- D. Underwriters Laboratories, Inc. (UL).

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Conditions of the Contract and Division 01 Submittal Procedures Section.

1.03 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 01 Submittal Procedures.
- B. Product Data: Submit manufacturer's complete product literature for specified hardware items, detailed installation diagrams and instructions, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
 - 4. Manufacturer's SPEC-DATA® product sheet.
- C. Samples:

Specifier Note: Describe specific types and quantities of samples required to determine style, finish or other characteristics.

- 1. Submit samples upon request.
- 2. Identify each sample by label indicating applicable specification paragraph number, brand name and number, finish and hardware package number.
- 3. After approval, samples will be returned for incorporation into work.

- D. Templates: Submit templates detailing installation procedures, including layout, dimensions and placement of hardware.

Specifier Note: Coordinate paragraph below with Part 3 Field Quality Requirements Article. Retain or delete as applicable.

- E. Closeout Submittals: Submit the following:

1. Warranty: Manufacturer's standard warranty document executed by authorized company official.

1.04 QUALITY ASSURANCE

- A. Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

1.05 DELIVERY, STORAGE & HANDLING

- A. General: Comply with 01 61 00 - Common Product Requirements.

- B. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

- C. Delivery, Storage and Protection:

1. Deliver, store and handle materials in accordance with manufacturer's written instructions.
2. Deliver in original packaging with labels and identification intact.
3. Ship items in lots coordinated with openings, as numbered in door schedule.
4. Inspect items upon delivery to ensure that specified products have been received.
5. Store items in secure, dry location and protected from weather until ready for installation.

- D. Waste Management and Disposal:

Specifier Note: Environment: The disposal of packaging waste into landfill site demonstrates an inefficient use of natural resources and consumes valuable landfill space.

1. Separate waste materials for [Reuse] [And] [Recycling] [_____] in accordance with [Section 01 74 19 - Construction Waste Management and Disposal] [_____].
2. Remove from site and dispose of packaging materials at appropriate recycling facilities.
3. Collect and separate for disposal [Paper] [Plastic] [Polystyrene] [Corrugated cardboard] [_____] packaging material [In appropriate onsite bins] [_____] for recycling.

1.06 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

Specifier Note: Coordinate article below with Conditions of the Contract and with Division 01 Closeout Submittals (Warranty).

1.07 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents. Manufacturer's standard warranty: One calendar year from date of delivery to Project.

PART 2 PRODUCTS

Specifier Note: Retain article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as "or equal" or "or approved equal" or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining "or equal" products.

2.01 DOOR TRIM AND AUXILIARY PRODUCTS

- A. Manufacturer: Hager Companies.

1. Contact: 139 Victor St., St. Louis, MO 63104; Telephone: (800) 325-9995, (314) 772-4400; Fax: (800) 782-0149; E-mail: webmaster@hagerco.com; website: www.hagerco.com.

B. Proprietary Products/Systems: Hager Door Trim.

Specifier Note: Repeat the following article when more than one type of door pull is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying door hardware.

1. Door Pulls: [Pull Bar] [Acorn Pull] [C-Shaped Pull] [Security/Institutional Pull] [Push-Pull Combination] [Horn Pull] [90 Degree Pull] [Square Tip Pull] [Steeple Tip Pull] [Vertical Pull] [Curved Pull] [Cast Door Pull] [Sculpted Bronze Pull] [Security Pull] [Modified Half Round Wrought Door Pull] [Round Offset Pull] [Cylinder Pull].
 - a. Projection: [2 inches (51 mm)] [___ inches (___ mm)].
 - b. CTC Length: [8 1/2 inches (216 mm)] [___ inches (___ mm)].
 - c. Weight: [4 lb (1.8 kg)].
 - d. Materials: [Brass] [Bronze] [Stainless steel] [Cast bronze] [Aluminum] [Cast brass] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- e. Finish: [US3] [_____].
- f. Fasteners: [3/8 inch (9.5 mm)] diameter bolts.
- g. Options: [Back-to-Back].
- h. Listing: [ANSI A156.16] [ANSI A156.18] [_____].
- i. [Handicap accessible] [With] [Without] [Latch guard].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- j. Acceptable Materials: Hager Companies Part Number [_____].

Specifier Note: Repeat the following article when more than one type of pull plate is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying door hardware.

2. Pull Plates: [Security/Barrier-Free Push/Pull Set] [Pull Plate].
 - a. Sizes: [Push plate - {4 inches x 16 inches (102 x 406 mm)} {___ inch x ___ inch (___ x ___ mm)}] [Pull plate - {4 inches x 9 1/4 inches (102 x 235 mm)} {___ inch x ___ inch (___ x ___ mm)}] [Lip projection - {2 1/8 inches (54 mm)} {___ inch (___ mm)}] [Gauge - {0.125 inch (3.2 mm)} {___ inch (___ mm)}] [Pull CTC - {8 inches (203 mm)} {___ inch (___ mm)}].
 - b. Materials: [Brass] [Bronze] [Stainless steel] [Cast bronze] [Aluminum] [Cast brass] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- c. Finish: [US3] [_____].
- d. Listing: [ANSI A156.16] [ANSI A156.18] [_____].
- e. Options: [Engraved] [With cylinder cutout].

Specifier Note: Refer to Hager Companies product catalog for description of part number. A 2 1/2 inch (63 mm) clearance for handicap accessibility is available on special orders for pull plates. Add prefix "H" to pull plate number (i.e., HA34G).

- f. Acceptable Materials: Hager Companies Part Number [_____].

Specifier Note: Repeat the following article when more than one type of flush cup pull is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

3. Flush Cup Pulls:
 - a. Sizes: Face: [3 1/2 inches x 5 inches (89 x 127 mm)] [___ inch x ___ inch (___ x ___ mm)] Projection: [1/8 inch (3.2 mm)] [___ inch (___ mm)] Opening: [1 3/4 inches x 3 1/16 inches (44 x 78 mm)] [___ inch x ___ inch (___ x ___ mm)] Cup Depth: [3/4 inch (19.1 mm)] [___ inch (___ mm)] [Plate: {4 inches x 16 inches (102 x 406 mm)} {___ inch x ___ inch (___ x ___ mm)}].

- b. Material: [Brass] [Bronze] [Stainless steel] [Cast bronze] [Aluminum] [Cast brass] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- c. Finish: [US3] [_____].
 d. Listing: [ANSI A156.16] [ANSI A156.18] [ADA] [_____].
 e. Fasteners: [#6 OH tapping screw with washers] [8-32 x 3/4 inch (19.1 mm) FHMS with security Torx head] [_____].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- f. Acceptable Materials: Hager Companies Part Number [_____].

Specifier Note: Repeat the following article when more than one type of push plate is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

4. Push Plates: [Square Corner - Rounded Bevel Top and Bottom] [Half Circle] [Plate with Lip - Not Beveled] [Square Corner - Beveled] [Radius Corner - Not Beveled] [Round Corner - Not Beveled].
 a. Size: Plate [3 inches x 12 inches (76 x 305 mm)] [____inch x ____inch (____ x ____ mm)] Gauge: [0.125 inch (3.2 mm)] [____inch (____ mm)].
 b. Material: [Brass] [Bronze] [Stainless steel] [Cast bronze] [Aluminum] [Cast brass] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- c. Finish: [US3] [_____].
 d. Listing: [ANSI A156.16] [ANSI A156.18] [_____].
 e. Fasteners: [#6 x 5/8 inch (15.9 mm) oval tapping screws with undercut head] [_____].
 f. Options: [Cut for cylinder] [Engraved "push"].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- g. Acceptable Materials: Hager Companies Part Number [_____].

Specifier Note: Repeat the following article when more than one type of push/pull bar is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

5. Push/Pull Bars:
 a. [Bar Size: {3/8 inch x 1 1/4 inches (9.5 x 32 mm)} {____inch x ____inch (____ x ____ mm)}] [Bar diameter: {1 1/4 inches (32 mm)} {____inch (____ mm)}].
 b. Pull CTC: [18 inches (457 mm)] [____inch (____ mm)].
 c. Offset CTC: [3 inches (76 mm)] [____inch (____ mm)].
 d. Projection: [2 1/8 inches (54 mm)] [____inch (____ mm)].
 e. Base Plate: [1 inch x 3 inches (25.4 x 76 mm)] [____inch x ____inch (____ x ____ mm)].
 f. Material: [Brass] [Bronze] [Stainless steel] [Cast bronze] [Aluminum] [Cast brass] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- g. Finish: [US3] [_____].
 h. Listing: [ANSI A156.16] [ANSI A156.18] [_____].

Specifier Note: Refer to Hager Companies product catalog for description of part number. A 2 1/2 inch (63 mm) clearance for handicap accessibility is available on special orders for pull plates. Add prefix "H" to bar number.

- i. Acceptable Materials: Hager Companies Part Number [_____].

Specifier Note: Repeat the following article when more than one type of cabinet hardware is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

6. Cabinet Hardware: [Light Weight Magnetic Catch with Tan Plastic Case, Double Sided Magnet, Self-Aligning, 6 lb Pull] [Roller Latch].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- a. Acceptable Materials: Hager Companies Part Number [BL6439] [1439] [1445].

Specifier Note: Repeat the following article when more than one type of door edging is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

7. Door Edging:

Specifier Note: Standard lengths are available from 36 inches - 42 inches (914 - 1067 mm).

- a. Length: [36 inches (914 mm)] [___ inch (___ mm)].
- b. Leg on Door Edge: [1 3/4 inches minus 1/32 inch (45 mm minus 0.8 mm)].
- c. Gauge: [0.045 inches (1.1 mm) thick] [___ inch (___ mm)].
- d. Material: [Stainless steel] [Aluminum] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- e. Finish: [US28] [_____].
- f. Fasteners: #6 x 3/4 inch (19.1 mm) FH tapping screws.

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- g. Acceptable Materials: Hager Companies Part Number [1446] [1447] [1448].

Specifier Note: Repeat the following article when more than one type of corner guard is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

8. Corner Guard:

- a. Size: [3 inches x 3 inches x 40 inches (76 x 76 x 1016 mm)] [___ inch x ___ inch x ___ inch (___ x ___ x ___ mm)].
- b. Gauge: [0.050 inch (1.3 mm) thick] [___ inch (___ mm)].
- c. Material: [Stainless steel] [Aluminum] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- d. Finish: [US28] [_____].
- e. Fasteners: [#6 x 5/8 inch (15.9 mm) truss head screws] [Double face tape].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- f. Acceptable Materials: Hager Companies Part Number [1446] [1447] [1448].

Specifier Note: Repeat the following article when more than one type of door protection plate is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

9. Door Protection Plate:

Specifier Note: Mop plates are 4 inches (102 mm) or 6 inches (152 mm) high, 1 inch (25.4 mm) less than door width. Kick plates are 8 inches (203 mm), 10 inches (254 mm) or 12 inches (305 mm) high, 2 inches (51 mm) less than door width. Armor plates are

14 inches - 48 inches (356 - 1219 mm) high.

- a. Size: [6 inches x 30 inches (152 x 762 mm)] [___inch x ___inch (___ x ___ mm)].
- b. Gauge: [0.050 inch (1.3 mm) thick] [___ inch (___ mm)].
- c. Material: [301 grade stainless steel] [Aluminum] [Brass] [Bronze] [Stainless steel] [Clear plastic].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- d. Finish: [US28] [___].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- e. Acceptable Materials: Hager Companies Part Number [204S] [___].

Specifier Note: Repeat the following article when more than one type of wall stop and/or holder is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 10. Wall Stops and Holders: [Convex Wall Stop with Concealed Mounting] [Concave Wall Stop with Concealed Mounting] [Wall Stop and Holder] [Wall Stop] [Angled Wall Stop] [Roller Bumper] [Curved Roller Bumper] [Light Duty Wall Bumper].
 - a. Material: [Brass] [Bronze] [Stainless steel] [Cast bronze] [Aluminum] [Cast brass] [Adhesive backed rubber bumper] [___].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US23] [___].
- c. Projection: [1 3/16 inches (30 mm)] [___ inch (___ mm)].
- d. Fasteners: [#10 x 1 1/4 inches (32 mm) with shield and toggle bolt] [___].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- e. Acceptable Materials: Hager Companies Part Number [251W] [___].

Specifier Note: Repeat the following article when more than one type of closet hardware is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 11. Closet Hardware: [Center Support] [Closet Rod] [Coat and Hat Hook] [Flush Pulls] [Non-Mortise Hinge] [Pole Sockets] [Shelf Bracket] [Shelf Bracket - Adjustable] [Shelf Support] [Shelf Support - Adjustable].
 - a. Material: [Solid brass] [Heavy gauge steel] [___].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [BY] [___].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- c. Acceptable Materials: Hager Companies Part Number [2620] [___].

Specifier Note: Repeat the following article when more than one type of trim or auxiliary hardware is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 12. Residential Trim and Auxiliary Hardware: [Handrail Bracket] [Rigid Door Stop] [Flexible Door Stop] [Floor Door Stop] [Door Bumper] [Kick Down Door Stop] [Door Guard] [Door Viewer].
 - a. Material: [Zinc diecast alloy] [___].

Specifier Note: Refer to Hager Companies product catalog for description and part number.

- b. Description: [_____].
- c. Acceptable Materials: Hager Companies Part Number [1412] [_____].

Specifier Note: Repeat the following article when more than one type of floor stop is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

13. Floor Stops:

Specifier Note: Select or delete following attributes to suit selected hardware.

- a. Material: [Cast brass] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US3] [_____].
- c. Holder Base: [3 inches x 3 7/16 inches (76 x 87 mm)] [___ inch x ___ inch (___ x ___ mm)].
- d. Holder Projection: [1 15/16 inches (49 mm)] [___ inch (___ mm)].
- e. Floor Strike: [2 3/16 inches x 4 1/8 inches (56 x 105 mm)] [___ inch x ___ inch (___ x ___ mm)].
- f. Strike Height: [1 1/4 inches (32 mm)] [___ inch (___ mm)].
- g. Diameter: [1 3/4 inches (44 mm)] [___ inch (___ mm)].
- h. Base Thickness: [1/8 inch (3.2 mm)] [___ inch (___ mm)].
- i. Overall Height: [1 inch (25.4 mm)] [___ inch (___ mm)].
- j. Fasteners: [4 #12 x 1 1/4 inches (32 mm) truss head screws] [And] [3 #14 x 1 1/2 inches (38 mm) FHMS and anchors] [_____].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- k. Acceptable Materials: Hager Companies Part Number [BL241F] [_____].

Specifier Note: Repeat the following article when more than one type of surface bolt is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

14. Surface Bolts:

- a. Material: [Steel] [_____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US26D] [_____].
- c. Length: [8 inches (203 mm)] [___ inch (___ mm)].
- d. Bolt Size: [1/4 inch x 3/4 inch (6.4 x 19.1 mm)] [___ inch x ___ inch (___ x ___ mm)].
- e. Throw: [1 inch (25.4 mm)] [___ inch (___ mm)].
- f. Fasteners: [FHWS] [And] [FHMS].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- g. Acceptable Materials: Hager Companies Part Number [275D] [_____].

Specifier Note: Repeat the following article when more than one type of flush bolt is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 15. Flush Bolts: [Dust Proof Strike] [Flush Bolt] [Single Route Flush Bolt] [Slide Flush Bolt] [Lever Extension Flush Bolt] [Automatic Flush Bolt Set for Wood Covered Composite Doors] [Automatic Flush Bolt Set for Metal Doors] [Constant Latching Bolt Set for Inactive Metal Doors] [Constant Latching Bolt Set for Inactive Wood Covered Composite Doors].

- a. Material: [Brass] [____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US26D] [____].

Specifier Note: Select or delete following attributes to suit selected hardware.

- c. Face Plate: [1 3/8 inches x 2 7/8 inches (35 x 73 mm)] [____inch x ____inch (____ x ____ mm)].
- d. Barrel Diameter: [1 inch (25.4 mm)] [____ inch (____ mm)].
- e. Bolt Diameter: [1/2 inch (12.7 mm)] [____ inch (____ mm)].
- f. Bolt Throw: [3/4 inch (19.1 mm)] [____ inch (____ mm)].
- g. Bolt Head: [1/2 inch (12.7 mm)] [____ inch (____ mm)].
- h. Strike: [7/8 inch x 1 3/4 inches (22.2 x 45 mm)] [____inch x ____inch (____ x ____ mm)].
- i. Depth: [2 3/16 inches (56 mm)] [____ inch (____ mm)].
- j. Fasteners: [#8 x 1 inch (25.4 mm) flat head wood screws] [____].

Specifier Note: Refer to Hager Companies product catalog for description and part number.

- k. Description: [_____].
- l. Acceptable Materials: Hager Companies Part Number [280X] [____].

Specifier Note: Repeat the following article when more than one type of coordinating device is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 16. Coordinating Devices: [Carry Bar] [Coordinator with Filler Bar] [Filler Plate] [Mounting Bracket] [Coordinator].
 - a. Material: [Steel] [____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US2] [____].

Specifier Note: Select or delete following attributes to suit selected hardware.

- c. Plate Size: [1 3/4 inches x 2 1/4 inches (45 x 57 mm)] [____inch x ____inch (____ x ____ mm)].
- d. Fasteners: [1/4 inch (6.4 mm) sex bolts] [____].
- e. Jamb Depth: [4 1/4 inches (108 mm)] [____ inch (____ mm)].
- f. Stop Height: [5/8 inch (15.9 mm)] [____ inch (____ mm)].
- g. Stop Width: [Over 2 1/4 inches (57 mm)] [____ inch (____ mm)].

Specifier Note: Refer to Hager Companies product catalog for description and part number.

- h. Description: [_____].
- i. Acceptable Materials: Hager Companies Part Number [298D] [____].

Specifier Note: Repeat the following article when more than one type of latch is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

Specifier Note: Repeat the following article when more than one type of ball catch is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 17. Ball Catches: [2 1/4 inches x 1 inch x 1 1/8 inches (57 x 25.4 x 29 mm)] [____ inch x ____ inch x ____ inch (____ x ____ x ____ mm)] faceplate with [{#6 x 3/4 inch (19.1 mm)} {____ inch (____ mm)} FPHW wood screw] [Steel screw] fasteners.

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- a. Finish: [US3] [____].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- b. Acceptable Materials: Hager Companies Part Number [1446] [1447] [1448].
- 18. Latches: [Roller Latch with Full Lip Strike] [Roller Latch with ASA Strike] [Conversion Kit] [Push/Pull Latch] [Roller Latch with Tee Strike] [Roller Latch With Stop] [Roller Catch with Strike] [Adjustable Ball Catch with Strike] [Lightweight Ball Catch] [Pocket Door Latch] [ASA Strike Plate].
 - a. Material: [Brass] [____].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US3] [____].

Specifier Note: Select or delete following attributes to suit selected hardware.

- c. Size: [1 3/4 inches x 2 1/4 inches (45 x 57 mm)] [____inch x ____inch (____ x ____ mm)].
- d. Thickness: [0.080 inch (2 mm)] [____ inch (____ mm)].
- e. Fasteners: [#8 - 1 inch (25.4 mm) FH wood screw] [____].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- f. Acceptable Materials: Hager Companies Part Number [298D] [____].
- g. Description: [_____].

Specifier Note: Repeat the following article when more than one type of filler plate is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 19. Filler Plates: [Door hinge reinforcement plate] [Edge filler plate] [Face filler plate] [Dead lock face plate] [Flush bolt strike filler plate] [Hinge filler plate] [Latch adapter filler plate] [Strike filler plate] [Template hinge shim].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- a. Finish: [Primed steel] [____].
- b. Size: [1 1/8 inches x 2 1/4 inches (29 x 57 mm)] [____inch x ____inch (____ x ____ mm)].
- c. Diameter: [1 3/4 inches (45 mm)] [____ inch (____ mm)].
- d. Gauge: [0.125 inch (3.2 mm)] [____ inch (____ mm)].

Specifier Note: Refer to Hager Companies product catalog for description and part number.

- e. Description: [____].
- f. Acceptable Materials: Hager Companies Part Number [298D] [____].

Specifier Note: Latch protection plates are for use with both cylindrical and mortise lock sets on hollow metal or wood doors. Repeat the following article when more than one type of latch protection plate is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying hardware.

- 20. Latch Protection Plates:
 - a. Material: [Steel] [Stainless steel].

Specifier Note: Refer to Hager Companies product catalog for product finish designations.

- b. Finish: [US2C] [US32D].

- c. Size: [3 inches x 11 inches (76 x 279 mm)] [1 5/8 inches x 10 inches (41 x 254 mm)].

Specifier Note: Refer to Hager Companies product catalog for description of part number.

- d. Acceptable Materials: Hager Companies Part Number [298D] [_____].

Specifier Note: Repeat the following article when more than one of the following accessories is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying items.

- 21. Miscellaneous: [160° Door Viewer] [200° Door Viewer] [Shim for Door Guard] [Door Guard Protective Plate] [Door Guard] [Edge Pull for Sliding Doors] [Chain Door Check] [Handrail Bracket] [Drawer Pull] [Door Silencer] [Wrought Door Knocker] [Coat Hooks].

Specifier Note: Refer to Hager Companies product catalog for description and part number.

- a. Description: [_____].
- b. Acceptable Materials: Hager Companies Part Number [1755] [_____].

Specifier Note: Repeat the following article when more than one of signage is required for project. Refer to Hager Companies door hardware catalog when selecting and specifying items.

- 22. Signage: [Engraved plastic] [Engraved metal] [ADA tactile].
 - a. Material: [0.125 inch (3 mm) plastic] [_____].
 - b. Size: [2 1/2 inches x 5 inches (63 x 127 mm)] [____inch x ____inch (____ x ____ mm)].
 - c. Color: [Brown (W1) with raised white lettering] [_____].
 - d. Lettering: [3/4 (19.1 mm) Helvetica] [_____].
 - e. Fasteners: [Double-sided pressure sensitive tape] [_____].

Specifier Note: Refer to Hager Companies product catalog for description and part number.

- f. Description: [_____].
- g. Acceptable Materials: Hager Companies Part Number [298D] [_____].

Specifier Note: Edit Paragraph below to suit project requirements. If substitutions are permitted, edit text below. Add text to refer to Division 01 Project Requirements (Product Substitutions Procedures) Section.

2.02 PRODUCT SUBSTITUTIONS

- A. Substitutions: No substitutions permitted.

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

Specifier Note: Article below is an addition to the CSI *SectionFormat* and a supplement to MANU-SPEC. Revise article below to suit project requirements and specifier's practice.

- A. Compliance: Comply with manufacturer's written data, including product technical bulletins, product catalog installation instructions, product carton installation instructions and Hager SPEC-DATA sheets.

3.02 EXAMINATION

- A. Site Verification of Conditions:
 1. Verify that substrate conditions are acceptable for product installation in accordance with manufacturer's instructions.
 2. Clean surfaces thoroughly prior to installation.
 3. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under project conditions.

3.03 INSTALLATION

-
- A. Assembly: Install in accordance with manufacturer's instructions.

3.04 ADJUSTING

- A. Adjust installed items for proper function.

3.05 PROTECTION

- A. Protect installed products until completion of project.
B. Touch up, repair or replace damaged products before Substantial Completion.

3.06 FIELD QUALITY CONTROL

- A. Site Tests, Inspection: Inspect completed assembly for proper level and alignment, after installation and prior to final acceptance. Report component damage to [Supplier] [_____].

3.07 COMPLETION & CLEANUP

- A. Proceed in accordance with Section [01 74 00 - Cleaning and Waste Management] [_____].
B. Upon completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION