SECTION 08 17 00

INTEGRATED HOLLOW METAL DOOR OPENING ASSEMBLIES

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\*\* NOTE TO SPECIFIER \*\* Door Systems; Integrated hollow metal door opening assemblies.  
This section is based on the products of Door Systems, which is located at:1150 S. Las BrisasPlacentia, CA 92870Toll Free Tel: 866-534-3667Tel: 714-258-7100Fax: 714-258-7171Email: [request info (contact@doorsysinc.com)](https://arcat.com/rfi?action=email&company=Door%252BSystems&message=RE%253A%2520Spec%2520Question%2520(08170dsi)%253A%2520&coid=50183&spec=08170dsi&rep=&fax=714-258-7171)  
Web: <https://www.doorsysinc.com>   
 [ [Click Here](https://arcat.com/company/door-systems-50183) ] for additional information.  
  
Door Systems, is dedicated to providing innovative solutions for your smoke and fire containment needs as well as assisting in concept, design and layout of all future projects.  
  
Whether you are an architect seeking consultation on a new construction project or a building owner/engineer looking to bring your existing facility up to code while reducing maintenance cost, the Door Systems, staff is here to assist.  
  
Door Systems products include DSI Fire Protective Smoke Curtains and Syntegra Integrated Fire Door Systems.  
  
The gravity fail-safe DSI Smoke and Fire Protective Curtains have market leading features and the highest technical specifications available, yet offer cost-effective and flexible solutions to fire and smoke control. DSI curtain systems are designed to be discreet, robust and simple to operate and maintain, so a solution can be found for the most challenging architectural demands. Every smoke curtain and fire curtain from Door Systems, is rigorously tested and complies with all relevant UL standards allowing their incorporation into design throughout the United States.  
  
The locally manufactured Syntegra Integrated Door System is created to include all working hardware and the door into a single integrated package. Syntegra completely integrates the steel door, hardware and frame into a single working unit - no bolt-ons or add-ons. Precision-engineered, factory-assembled systems eliminate the need to order, coordinate, and site-assemble individual components. Code compliant, cost effective, unparalleled durability and superior aesthetics make the Syntegra Integrated Door System the product of choice for architects and building owners.  
  
By utilizing Door Systems products for your next new or renovation project, you will be acquiring the best, complete, single source solution for your smoke and fire protection requirements.  
  
I invite you to review the full array of products and services we have to offer and look forward to assisting you with any questions you might have regarding your future needs.  
  
Sincerely,  
Jeff Bonnema, President

1. GENERAL
   1. SECTION INCLUDES
      1. Integrated metal door opening assemblies including doors, metal frame, operating hardware and accessories. (Syntegra)
   2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 05 40 00 - Cold-Formed Metal Framing.
    2. Section 06 10 00 - Rough Carpentry.
    3. Section 08 11 13.16 - Custom Hollow Metal Doors and Frames.
    4. Section 08 71 53 - Security Door Hardware.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ANSI/BHMA A156.3 - American National Standard for Exit Devices.
    2. ANSI/BHMA A156.13 - American National Standard for Mortise Locks and Latches Series 1000.
    3. ANSI A156.26 - American National Standard for Continuous Hinges.
    4. ANSI A156.32 - Integrated Door Opening Assemblies.
    5. ANSI/SDI A250.8 - Specifications for Standard Steel Doors and Frames.
    6. NFPA 101 - Life Safety Code.
    7. NFPA 252 - Standard Methods of Fire Tests of Door Assemblies.
    8. ANSI/UL 10C - Standard for Safety for Positive Pressure Fire Tests of Door Assemblies.
    9. UL 305 - Standard for Panic Hardware.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
     2. Product Data: Manufacturer's catalog cuts on each product to be used.
     3. Shop Drawings: Indicate each door and frame condition; frame type, profile and installation detail; items of finish hardware, finishes and electrical rough-in requirements.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + 1. Verification Samples: For each finish product specified.
       1. If required by the Architect, submit one sample of each type of typical hardware required illustrating style, color, and finish.
       2. Approved samples may be incorporated into Work.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: A manufacturer with a minimum of five years experience manufacturing integrated door assemblies and related products for projects of similar size and complexity to projects of this type.
     2. Supplier Qualifications: Trained and authorized distributor of manufacturer.
     3. Installer Qualifications: Manufacturer trained and authorized, employed by supplier.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Packaging: Polyvinyl wrapped, palette by floor, and clearly marked for each opening.
     2. Delivery: Deliver to site in original unopened containers and pallets bearing system manufacturers name, and brand.
     3. Store: Horizontally on level surface, not less than 2 inches off floor in a clean, dry well-ventilated area protected from sunlight, extreme heat, dryness and moisture.
  3. PROJECT CONDITIONS
     1. 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 recommended limits.
  4. WARRANTY
     1. The complete integrated opening assembly (doors, frames and locking hardware) except as noted below shall be warranted to be free of defect in material or workmanship under normal use for a period of five (5) years from date of first shipment. The manufacturer, at its sole option, will repair or replace the product or parts thereof found to be defective in material or workmanship per the details contained in the warranty certificate. Consult full, written warranty for details.

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + - 1. Doors finished in Surfacequest Architectural Fusions: Three years from date of first shipment.
      2. Continuous Hinges: Ten years from date of first shipment.
      3. Door closers: Ten years from date of first shipment.
      4. All electrical functions: Three years from date of first shipment.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: Door Systems, which is located at: 1150 S. Las Brisas; Placentia, CA 92870; ASD Toll Free Tel: 866-534-3667; Tel: 714-258-7100; Fax: 714-258-7171; Email: [contact@doorsysinc.com](mailto:contact@doorsysinc.com); Web: <https://www.doorsysinc.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.
  1. INTEGRATED HOLLOW METAL DOOR OPENING ASSEMBLIES
     1. Product: Syntegra Door Systems.
     2. Frames:
        1. In accordance with ANSI/SDI A250. Fire labeled doors shall comply with NFPA 80.
        2. Construction: All welded type.
        3. Material: Steel, cold rolled, ASTM A1008, 16 gauge.
        4. Fire Resistance Rating: Where indicated in Contract Documents for doors.
        5. Spreader Bar: Removable, at sill.
     3. Frame Anchorage Devices:
        1. To securely fasten to wall construction without distortion or stress.
        2. In accordance with fire resistance rating indicated in Contract Documents.
     4. Door Systems:
        1. Integrated Door Assemblies shall meet or exceed ANSI/BHMA A156.32 Standard for Integrated Opening Assemblies.
        2. Doors shall conform to ANSI/SDI A250.8, Grade 1 for Steel Doors.
        3. Door assemblies shall include door body with factory installed latching/locking devices and will include:
           1. An integrated continuous hinge with hidden fasteners on the door edge.
           2. An adjustable leading edge with hidden lock mounting fasteners and integral, recessed smoke seal.
           3. Doors shall be constructed with a U-shaped, 16 gauge reinforcement channel top and bottom and will include metal internal reinforcements for closers and magnetic holder/releases.
           4. Door assemblies shall be tested and listed for use without the need for overlapping astragals.
        4. Thickness: 1-3/4 inches.
        5. Faces: 18 gauge cold rolled steel, with no seams or spot welds.

\*\* NOTE TO SPECIFIER \*\* Core construction should be determined by application, building codes, and fire label requirements. Delete cores not required.

* + - 1. Core: Honeycomb.
      2. Core: Steel stiffened.
      3. Core: Polystyrene.
      4. Core: Lead lined.
      5. Configurations:

\*\* NOTE TO SPECIFIER \*\* Select one or more of the configurations below. Delete configurations not required.

* + - * 1. Elevator smoke assembly, single.
        2. Elevator smoke assembly, pair.
        3. Elevator lobby assembly, single.
        4. Elevator lobby assembly, pair.
        5. Cross corridor fire doors, single.
        6. Cross corridor fire doors, pair.
        7. Stairwell doors, single.
        8. Stairwell doors, pair.
        9. Areas of assembly, single.
        10. Areas of assembly, pair.
        11. Surgical suites, single.
        12. Surgical suites, pair.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + - 1. Electric Doors: Remotely controlled.

\*\* NOTE TO SPECIFIER \*\* Select one or more of the operation modes below. Delete operation modes not required.

* + - * 1. Operation: Fail safe.
        2. Operation: Fail secure.
        3. Operation: Electric unlatching in conjunction with motor operator by others.
  1. FINISHES
     1. The designations used in schedules and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 or traditional U.S. finishes shown by certain manufacturers for their products.
     2. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
     3. Frames: Factory prime painted for field-applied finish.
     4. Door Faces:

\*\* NOTE TO SPECIFIER \*\* Select one of the finish options below. Delete finishes not required.

* + - 1. Prime painted to receive field applied finish.
      2. Factory applied polyurethane or powder coat paint, color as selected by Architect.
      3. Surfacequest Architectural Fusions, pattern as selected by Architect
    1. Lite Kits:

\*\* NOTE TO SPECIFIER \*\* Select one of the finish options below. Delete finishes not required.

* + - 1. Prime painted to receive field applied finish.
      2. Factory painted, bronze color.
      3. Factory painted, black color.
      4. Factory painted, white color.
    1. Hardware: As indicated in Hardware Schedule.
  1. HARDWARE

\*\* NOTE TO SPECIFIER \*\* Select required hardware. Delete hardware not required.

* + 1. Continuous Hinges:
       1. Continuous hinges shall meet ANSI/BHMA A156.26 requirements.
       2. Type: Pin and barrel construction.
       3. Integrated into door edge with hidden fasteners on door.
    2. Integrated Locking/Latching Hardware:
       1. General:
          1. Provide a complete integrated door opening assembly including the installation and adjustment of the latching mechanism within the door construction.
          2. Latching to be accomplished by single or optional multi-point mechanism. Top latching shall be accomplished by friction reducing latch bolt with 7/8 inch throw.
       2. Integrated Exit Devices (XT).
          1. Shall meet ANSI/BHMA A156.3, Grade 1 requirements.
          2. Panic Exit Devices: Listed and labeled by a Nationally Recognized Independent Testing Laboratory for panic protection to UL 305.
          3. Fire Exit Devices: Listed and labeled by a Nationally Recognized Independent Testing Laboratory for panic and fire protection to UL 10C and UL 305.
          4. Exit devices shall be clean and unobtrusive in design with a minimal bar height of 4 inches. The push bar of exit devices shall not exceed a projection of 1/8 inch when in the held open position and 1-1/8 inches when closed and shall be made of heavy duty aluminum extrusion, available in anodized and true architectural finishes using a metal cladding; end caps shall be metal with concealed fasteners.
          5. Exit devices shall have CleanVue hygienic release feature allowing for full access to the recessed pushbar for cleaning without disassembly.
          6. Outside lever trim, when required, shall be clean and unobtrusive in design with a maximum projection of 3-1/2 inches and shall match design of other hardware furnished on project unless otherwise specified. No escutcheons shall be required. Lever mechanism must be protected by integral clutch assembly. Lever can be locked by cylinder as required.

\*\* NOTE TO SPECIFIER \*\* Electric operation is optional. Delete if not required.

* + - * 1. Electric operation of exit device shall be accomplished with the use of a motor that retracts bar to a 1/8 inch projection.
      1. Single Lever or Lever X Lever Latch (LX).
         1. Levers shall be clean and unobtrusive in design with a maximum projection of 3-1/2 inches and shall match design of other hardware furnished on project unless otherwise specified. No escutcheons shall be required. Lever mechanism must be protected by integral clutch assembly. Lever can be locked or unlocked by cylinder as required.
         2. Lever operation can be accomplished on one or both sides of the door.
         3. Levers shall operate and secure each leaf of a pair of doors independently without the need for coordinators, astragals, and automatic flushbolts.
         4. Door systems are listed for fire protection per UL10C.
      2. Push Pad (PX).
         1. Push Pad shall be clean and unobtrusive in design with a minimal bar height of 4 inches and a length of 8 inches. The push pad shall not exceed a projection of 1/8 inch when in the held open position and 1-1/8 inch when closed and shall be made of heavy duty aluminum extrusion, available in anodized and true architectural finishes using a metal cladding; end caps shall be metal with concealed fasteners.
         2. Outside lever trim, when required, shall be clean and unobtrusive in design with a maximum projection of 3-1/2 inches and shall match design of other hardware furnished on project unless otherwise specified. No escutcheons shall be required. Lever mechanism must be protected by integral clutch assembly. Lever can be locked by cylinder as required.

\*\* NOTE TO SPECIFIER \*\* Electric operation is optional. Delete if not required.

* + - * 1. Electric operation of push pad shall be accomplished with the use of a motor that retracts push pad to a 1/8 inch projection.
        2. Push pad and latching mechanism are listed for fire protection per UL10C.
    1. Gasketing:
       1. Shall be a compression type product for use with steel doors and labeled for use on fire-rated doors.
       2. Lead edge gasket hall be recessed into and integral with adjustable edge of door.

1. EXECUTION
   1. EXAMINATION
      1. Field Conditions:
         1. Prior to commencing installation, examine parts of building structure, which are to receive door systems and component parts.
         2. Report, in writing, conditions which would prevent proper execution or endanger permanency of the work to the Architect.
      2. Field Dimensions:
         1. Where possible, verify frame tolerances before fabrication of door systems.
         2. Notify Architect of variances with reviewed shop drawings.
      3. Coordinate door opening assembly details with adjacent work to assure proper attachments, clean junctions, etc.
   2. INSTALLATION
      1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
      2. Frames:
         1. Set plumb and square in accordance with DHI standards.
         2. Tolerances:
            1. Squareness of frame head: 1/16 inch.
            2. Plumb for each frame jamb: 1/16 inch.
            3. Alignment for each side in plan: 1/16 inch.
            4. Twist: 1/16 inch.
         3. Brace until adjacent wall is constructed.
         4. Securely anchor to adjacent wall.
         5. Furnish and install clips, fastenings, and anchorages and conceal unless otherwise noted.
      3. Door Systems:
         1. Hang to maintain manufacturer's installation tolerances.
         2. Adjust to freely swing without binding, sticking, or sagging, and to eliminate excessive clearances.
      4. Adjust hardware for smooth operation and proper function.

\*\* NOTE TO SPECIFIER \*\* Consult an Architectural Hardware Consultant (AHC) or other qualified person for recommended schedule format. Coordinate hardware sets with door and frame schedule. Refer to NAAMM Standard HMMA 810, for an example door and frame schedule. If applicable, identify electrical characteristics for each hardware item. Consider the following sample when developing Project schedule.

* 1. DOOR HARDWARE SCHEDULE

\*\* NOTE TO SPECIFIER \*\* Select one or more of the hardware sets below. Modify hardware sets as required to suit actual project requirements. Delete hardware sets not required.

* + 1. HW 01 Elevator Cab, Single, held open:

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 ea. | Full Mortise Cont. hinge, concealed | EMC | 628 | SYN |
| 1 ea | Flush Push Pad Operator | PX | 630 | SYN |
| 1 ea | Lever Latch | LX-F01 | 630 | SYN |
| 1 ea | Pocket Closer | DSI -5051 | 689 | SYN |
| 1 ea. | Wall Magnet | DSI -200 | 628 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 02 Elevator Cab, Pair, held open:

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount concealed | EMC | 628 | SYN |
| 2 ea | Flush Push Pad Operator | PX | 630 | SYN |
| 2 ea | Lever Latch | LX-F01 | 630 | SYN |
| 2 ea | Pocket Closer | DSI -5051 | 689 | SYN |
| 2 ea. | Wall Magnet | DSI -200 | 628 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 03 Elevator lobby, pair of doors, same swing, pocketed, held open (under 50 person occupancy):

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount concealed | EMC | 628 | SYN |
| 2 ea | Flush Push Pad Operator | PX | 630 | SYN |
| 2 ea | Lever Latch | LX-F01 | 630 | SYN |
| 2 ea | Pocket Closer | DSI -5051 | 689 | SYN |
| 2 ea. | Wall Magnet | DSI -200 | 628 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 04 Elevator lobby, pair of doors, same swing, pocketed, held open (over 50 person occupancy):

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount concealed | EMC | 628 | SYN |
| 2 ea | Flush Panic Exit Device | XT | 630 | SYN |
| 2 ea | Lever Latch | LX-F01 | 630 | SYN |
| 2 ea | Pocket Closer | DSI -5051 | 689 | SYN |
| 2 ea. | Wall Magnet | DSI -200 | 628 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 05 Cross Corridor, pairs of doors, double egress, pocketed, held open, (under 50 person occupancy):

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, concealed | EMC | 628 | SYN |
| 2 ea | Flush Push Pad Operator | PX | 630 | SYN |
| 2 ea | Pocket Closer | DSI -5051 | 689 | SYN |
| 2 ea. | Wall Magnet | DSI -200 | 628 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 06 Cross Corridor, pairs of doors, double egress, pocketed, held open, (over 50 person occupancy):

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, concealed | EMC | 628 | SYN |
| 2 ea | Flush Panic Exit Device | XT | 630 | SYN |
| 2 ea | Pocket Closer | DSI -5051 | 689 | SYN |
| 2 ea. | Wall Magnet | DSI -200 | 628 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 07 Pairs of doors, same swing, cross corridor, electrified exit device, automatic operator:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount | EM | 630 | SYN |
| 2 ea | Electrified Exit Device X Lever (lever always locked) | XT-LC-ML | 630 | SYN |
| 2 ea. | Mortise Cylinder |  |  | By Others |
| 1 ea. | Automatic operator |  |  | By Others |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 2 ea. | Kickplate | KP | 630 | SYN |
| 1 ea. | Wire Transfer | EPT-EM-105 |  | SYN |
| 1 ea. | Power Supply | PS-1 |  | SYN |

* + 1. HW 08 Pairs of doors, double egress, cross corridor, electrified exit device, automatic operator:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount | EM | 630 | SYN |
| 2 ea | Electrified Flush Panic Exit Device | XT-ML | 630 | SYN |
| 2 ea. | Mortise Cylinder |  |  | By Others |
| 1 ea. | Automatic operator |  |  | By Others |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 2 ea. | Kickplate | KP | 630 | SYN |
| 1 ea. | Wire Transfer | EPT-EM-105 |  | SYN |
| 1 ea. | Power Supply | PS-1 |  | SYN |

* + 1. HW 09 Pair of doors, same swing, lever x lever:

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, concealed | EMC | 628 | SYN |
| 2 ea | Lever x Lever Latch | LX-F05 | 630 | SYN |
| 1 ea. | Mortise Cylinder |  | 630 | By Others |
| 2 ea | Surface Closer | DSI -5051 | 689 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 10 Pairs of doors, cross corridor, double egress non-pocketed, active:

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount | EM | 630 | SYN |
| 2 ea | Exit Device | XT | 630 | SYN |
| 2 ea | Surface Closer | DSI -5051 | 689 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 2 ea. | Armor Plate | AP | 630 | SYN |

* + 1. HW 11 Unequal pair, one leaf active with exit device x lever trim:

\*\* NOTE TO SPECIFIER \*\* Hinges are also available prime painted or with stainless steel finish. For swing clear specify model SC or SCC.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, edge mount | EM | Prime | SYN |
| 1 ea | Flush Panic Exit Device x Lever Trim | XT-L | 630 | SYN |
| 1 Set | Automatic Flush Bolts | AFB | 630 | SYN |
| 2 ea | Surface Closer | DSI -5051 | 689 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 2 ea. | Kickplate | KP | 630 | SYN |

* + 1. HW 12 Areas of Assembly, independent latching pairs:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge | FM | Prime | SYN |
| 2 ea | Lever x Lever Latch | LX-F04 | 630 | SYN |
| 1 ea. | Mortise Cylinder |  |  | By Others |
| 1 ea. | Mortise Thumbturn |  | 630 | By Others |
| 2 ea | Surface Closer | DSI -5051 | 689 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |

* + 1. HW 13 Single door, stairwell, access to occupied floors:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 ea. | Full Mortise Cont. hinge, edge mount | EM | Prime | SYN |
| 1 ea | Exit Device x Lever Trim | XT-L | 630 | SYN |
| 1 ea | Surface Closer | DSI -5051 | 689 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 1 ea. | Kickplate | KP | 630 | SYN |

* + 1. HW 14 Single door, stairwell, last exit out of building in means of egress:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 ea. | Full Mortise Cont. hinge, edge mount | EM | Prime | SYN |
| 1 ea | Flush Panic Exit Device, EO | XT | 630 | SYN |
| 1 ea | Surface Closer | DSI -5051 | 689 | SYN |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 1 ea. | Kickplate | KP | 630 | SYN |

* + 1. HW 15 Surgical suite:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 2 ea. | Full Mortise Cont. hinge, swing clear | SC | 630 | SYN |
| 2 ea | Lever x Lever Latch w/ Electrified Latch Retraction | LX-F01-ML | 630 | SYN |
| 1 ea. | Automatic Door Operator |  |  | By Others |
| 1 Set | Smoke Seal | SS | DBZ | SYN |
| 2 ea. | Armor Plate | AP | 630 | SYN |
| 1 ea. | Wire Transfer | EPT-EM-105 |  | SYN |
| 1 ea. | Power Supply | PS-1 |  | SYN |

END OF SECTION