## ADDENDUM

ADDENDUM NO: 2

**BID PACKAGE NO: All** 

PROJECT: BCSC Johnson Early Education Center Renovations Phase 2

PROJECT NO: 2024004 .1

DATE: 12/11/2024

This Addendum is issued in accordance with the provisions of "The General Conditions of the Contract for Construction," Article 1, "Contract Documents" and becomes a part of the Contract Documents as provided therein. This Addendum includes:

Addendum Pages: ADD 1 – ADD 4 Attachments: 01 11 00 – Visual Display Units, 08 71 00 – Door Hardware, 10 21 23 – Cubicle Curtains and Track, A201, A210, A301, A401, A501, A502, A600, A601, A602, MD-201, M201, ED-201, E-231, E-501

## **PART 1 - BIDDING AND CONTRACT REQUIREMENTS**

1.01 NOT USED

## **PART 2 - SPECIFICATIONS**

- 2.01 10 11 00 - Visual Display Units
  - Α. Under item 2.03 revise 3, as follows:

3. Frame: Custom framed, 2" inch thick clear anodized aluminum, custom powder coat colors as indicated on drawings.

#### 1. Frame: Custom framed, 2" inch thick clear anodized aluminum, custom powder coat colors as indicated on drawings.

- 2.02 <u>08 71 00 – Door Hardware</u>
  - Α. Reissue in its entirety.
- 2.03 10 21 23 - Cubicle Curtains and Track
  - Α. Under item 2.03 Curtains add c. as follows:
    - c. Carnegie Fabrics
- 2.04

## **PART 3 - DRAWINGS**

ADD 1 of 1



BY: Jennie Gaw



## ARCHITECTURAL

#### 3.01 <u>A201 – FIRST FLOOR PLAN</u>

- A. Trash receptacle, soap dispenser, and paper towel dispenser added to infants' rooms
- B. Windows tagged in the staff room and director's office.
- C. Wall dividing staff room & director's office wall changed to W8.

#### 3.02 A210 – FIRST FLOOR REFLECTED CEILING PLAN

A. Wall dividing staff room & director's office wall changed to **W8.** 

### 3.03 A301 – EXTERIOR ELEVATIONS & BUILDING SECTIONS

A. Structural grids removed from elevations.

#### 3.04 A401 – WALL SECTIONS & PLAN DETAILS

A. Additional keynotes added to plan detail and wall thickness increased to **6**" **metal stud** to accommodate electrical box.

#### 3.05 A501 – DOOR & WINDOW SCHEDULE

- A. 34A & 34B on Door and Frame Schedule change head detail to H6.
- B. **30, 31, & 39** added to window schedule.
- C. Dimensions for W2 adjusted.

#### 3.06 A502 – HEAD, JAMB, & SILL DETAILS

A. H6 Adjusted to be more accurate .

#### 3.07 <u>A600 – CASEWORKSCHEDULE</u>

Casework Schedule Updated.

#### 3.08 A601 – INTERIOR ELEVATIONS

A. Added tags and casework.

## 3.09 A602 – INTERIOR ELEVATIONS

- A. Added views of casework.
- B. Added views of corridors.
- C. Added view of cafeteria window.

### 3.010 A800 - FINISH LEGEND, DETAILS, & ELEVATIONS



- A. Window stools removed from existing infants.
- B. A. Revised General Finish Note **O**.

#### 3.011 3.03 A801 FIRST FLOOR FINISH PLAN

A. Remove Finish Plan Note **F9** from Infants 1.

#### 3.012 3.04 A802 ENLARGED FINISH PLANS

A. Add Finish Plan Note **F7** to rooms Classrooms 16, 17, 20, 23.

#### 3.013 A900 – EQUIPEMENT SCHEDULE & FIRST FLOOR EQUIPMENT PLAN

- A. Added casework elevations.
- B. Specialty equipment Schedule Updated.

### **MECHANICAL**

- 3.014 MD-201 FIRST FLOOR DEMOLITION PLAN MECHANICAL
  - A. REISSUE THIS DRAWING IN ITS ENTIRETY.
- 3.015 M201 FIRST FLOOR PLAN MECHANICAL
  - A. REISSUE THIS DRAWING IN ITS ENTIRETY.

## ELECTRICAL

- 3.016 ED-201 FIRST FLOOR DEMOLITION PLAN ELECTRICAL
  - A. REISSUE THIS DRAWING IN ITS ENTIRETY.
- 3.017 E-231 FIRST FLOOR PLAN FIRE ALARM
  - A. REISSUE THIS DRAWING IN ITS ENTIRETY.
- 3.018 E-501 RISER DIAGRAM AND SCHEDULES ELECTRICAL
  - A. REISSUE THIS DRAWING IN ITS ENTIRETY.

## PART 4 - OTHER ITEMS

4.01 <u>NOT USED</u>

## PART 5 - QUESTION AND ANSWER

1. I had a question concerning the Richard L. Johnson EEC. I am needing clarification on the steel beam lintels. Drawing S201 detail 2 shows masonry to remain above steel



beam, but drawing A401 detail 2 shows the joist bearing directly on the beam. Are the beams going all the way to the joists, or is there masonry to remain above, and would all opening with beam lintels be the same?

- 1. The structural detail you are referring not is for new door openings in masonry. The section is not the same condition and in a different area.
- 2. RCP A210 shows seven (7)new "clouds", and elevations only show three (3) false tree's. Are we to provide a false tree at each "cloud".
  - 1. No, false trees to only be installed in three (3) rooms.
- 3. There is a metal lath & plaster ceiling above the lay in acoustical ceiling. Is this ceiling assembly to be demo'd complete?
  - 1. Answer: Correct.
- 4. To demo the plaster & metal lathe ceiling, the flex & hard ductwork will most likely be damaged. Are we to remove the flex & hard duct as needed to demo, and reinstall?
  - 1. Answer: Plaster & metal lathe ceiling to be removed per needs of Mechanical units.
- 5. Note three (3) on sheet E211 indicates a WALL JUNCTION BOX for a removed electrical panel. Please advise if this note should be revised to follow the verbiage of note #8 which communicates that there is to be NO wall junction box, and it is all in the crawl space OR above ceiling.
  - 1. Note 3 is to splice in a junction box for temporary use for phase 2 and note 8 is to remove junction box we used temporarily in phase 1. We have no more use for junction box used in phase 1.
- 6. Demolition note 22 says to remove all ceiling to expose structure. I noticed that the 12"x12" tile ceiling was not removed in phase 1. I want to confirm that the 12"x12" tile ceiling is to be removed in phase 2.
  - 1. Answer: Correct. 12"x12"tile to be removed from classroom in phase 2.
- 7. Clarify temporary partition in hallway. What is it to be made of.
  - 1. Answer: The means and methods are up to them. They just need to make sure it meets the requirements in section 3.04 of spec 015000.

END OF ADDENDUM

#### SECTION 10 11 00 - VISUAL DISPLAY UNITS

- PART 1 GENERAL
- 1.01 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

- A. Section Includes:
  - 1. Markerboards.
  - 2. Tackboards.

#### 1.03 DEFINITIONS

- A. Tackboard: Framed, tackable, visual display board assembly.
- B. Visual Display Board Assembly: Visual display surface that is factory fabricated into composite panel form, with a perimeter frame; includes chalkboards, markerboards, and tackboards.
- C. Visual Display Surface: Surfaces that are used to convey information visually, including surfaces of markerboards, tackboards, and surfacing materials that are not fabricated into composite panel form but are applied directly to walls.

#### 1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for visual display surfaces.
- B. Shop Drawings: For visual display surfaces. Include plans, elevations, sections, details, and attachments to other work.
  - 1. Show locations of panel joints.
  - 2. Show locations of special-purpose graphics for visual display surfaces.
  - 3. Include sections of typical trim members.
- C. Samples for Initial Selection: For each type of visual display surface indicated, for units with factory-applied color finishes, and as follows:
  - 1. Actual sections of porcelain-enamel face sheet and tackboard assembly.
  - 2. Include accessory Samples to verify color selected.
- D. Samples for Verification: For each type of visual display surface indicated.
  - 1. Visual Display Surface: Not less than 8-1/2 by 11 inches, mounted on substrate indicated for final Work. Include one panel for each type, color, and texture required.

- 2. Trim: 6-inch- long sections of each trim profile.
- E. Product Schedule: For visual display surfaces. Use same designations indicated on Drawings.

#### 1.05 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.
- B. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for surface-burning characteristics of fabrics.
- C. Warranties: Sample of special warranties.

### 1.06 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For visual display surfaces to include in maintenance manuals.

#### 1.07 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of motor-operated, sliding visual display units required for this Project.
- B. Source Limitations: Obtain visual display surfaces from single source from single manufacturer.
- C. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
  - 1. Flame-Spread Index: 25 or less.
  - 2. Smoke-Developed Index: 450 or less.

#### 1.08 DELIVERY, STORAGE, AND HANDLING

- A. Deliver factory-built visual display surfaces, including factory-applied trim where indicated, completely assembled in one piece without joints, where possible. If dimensions exceed maximum manufactured panel size, provide two or more pieces of equal length as acceptable to Architect. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site.
- B. Store visual display surfaces vertically with packing materials between each unit.

#### 1.09 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install visual display surfaces until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above ceilings is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

- B. Field Measurements: Verify actual dimensions of construction contiguous with visual display surfaces by field measurements before fabrication.
  - 1. Allow for trimming and fitting where taking field measurements before fabrication might delay the Work.

#### 1.10 WARRANTY

- A. Special Warranty for Porcelain-Enamel Face Sheets: Manufacturer's standard form in which manufacturer agrees to repair or replace porcelain-enamel face sheets that fail in materials or workmanship within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Surfaces lose original writing and erasing qualities.
    - b. Surfaces exhibit crazing, cracking, or flaking.
  - 2. Warranty Period: 50 years from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. AARCO Products, Inc.
  - b. ADP Lemco, Inc.
  - c. Claridge Products and Equipment, Inc.
  - d. Marsh Industries, Inc.; Visual Products Group.
  - e. PolyVision Corporation; a Steelcase company.
  - f. Forbo

#### 2.02 MATERIALS, GENERAL

- A. Porcelain-Enamel Face Sheet: Porcelain-enamel-clad, ASTM A 463/A 463M, Type 1, stretcher-leveled aluminized steel, with 0.024-inch uncoated thickness; with porcelain-enamel coating fused to steel at approximately 1000 deg F.
  - 1. Gloss Finish: Low gloss; dry-erase markers wipe clean with dry cloth or standard eraser. Suitable for use as projection screen.
    - a. Products: Subject to compliance with requirements, provide one of the following:
      - 1) Claridge Products and Equipment, Inc.; LCS Markerboard
      - 2) Approved equivalent.
- B. Porcelain-Enamel Face Sheet: ASTM A 424, enameling-grade steel, uncoated thickness indicated; with exposed face and edges coated with primer, 1.7-to-2.5-mil- (0.043-to-0.064-mm-) thick ground coat, and color cover coat; and with concealed face coated with primer and 1.7-to-2.5-mil- (0.043-to-0.064-mm-) thick ground coat.

- 1. Gloss-Finish Cover Coat: Low gloss; dry-erase markers wipe clean with dry cloth or standard eraser. Minimum 3.0-to-4.0-mil- (0.076-to-0.102-mm-) thick cover coat. Cover and ground coats shall be fused to steel at manufacturer's standard firing temperatures but not less than 1475 deg F (802 deg C).
  - a. Products: Subject to compliance with requirements, provide one of the following:
    - PolyVision Corporation, a Steelcase company; P<sup>3</sup> ceramicsteel Markerboard.
    - 2) Approved equivalent.
- C. Plastic-Impregnated-Cork Sheet: Seamless, homogeneous, self-sealing sheet consisting of granulated cork, linseed oil, resin binders, and dry pigments that are mixed and calendared onto fabric backing; with washable vinyl finish and integral color throughout with surface-burning characteristics indicated.
- D. Hardboard: ANSI A135.4, tempered.
- E. Fiberboard: ASTM C 208.
- F. Extruded Aluminum: ASTM B 221, Alloy 6063.

#### 2.03 MARKERBOARD ASSEMBLIES

- A. Porcelain-Enamel Markerboards: Balanced, high-pressure, factory-laminated markerboard, porcelain-enamel face sheet, finish suitable for projection.
  - 1. Basis of Design: Claridge, Series 1.
  - 2. Face Sheet: porcelain enamel steel markerboard.
  - 3. Frame: Custom framed, 2" inch thick clear anodized aluminum, custom powder coat colors as indicated on drawings.
  - 4. Color: White, suitable for a projection surface.

## 2.04 TACKBOARD ASSEMBLIES

- A. Cork Tackboard: 1/4-inch- thick, natural, jute-backed, cork sheet
  - 1. Color to be selected from manufacturer's standards.
  - 2. Basis of Design: Forbo Bulletin Board
  - 3. Core: <sup>1</sup>/<sub>4</sub> inch gauge, jute backing
  - 4. Frame: Factory framed, 2" inch thick powder coated.

#### 2.05 MARKERBOARD AND TACKBOARD ACCESSORIES

- A. Aluminum Frames and Trim: Fabricated from not less than 0.062-inch- thick, extruded aluminum; of size and shape standard for indicated basis of design product 6063 alloy grade aluminum with T5 tempering in accordance with ASTM B221 in clear anodized finish.
- B. Magnetic Eraser: One per markerboard assembly.
- C. Marker Caddy: One per markerboard assembly.

D. Magnetic Tray: Anodized aluminum with strong magnets to hold tray in place.

E. Hanging Devices: Concealed z-clip hangers at top, dual-lock washer and tab at bottom.

#### 2.06 FABRICATION

- A. Porcelain-Enamel Visual Display Assemblies: Laminate porcelain-enamel face sheet and backing sheet to core material under heat and pressure with manufacturer's standard flexible, waterproof adhesive.
- B. Visual Display Boards: Factory assemble visual display boards unless otherwise indicated.
  - 1. Where factory-applied trim is indicated, trim shall be assembled and attached to visual display boards at manufacturer's factory before shipment.
- C. Factory-Assembled Visual Display Units: Coordinate factory-assembled units with trim and accessories indicated. Join parts with a neat, precision fit.
  - 1. Make joints only where total length exceeds maximum manufactured length. Fabricate with minimum number of joints, as indicated on approved Shop Drawings.
  - 2. Provide manufacturer's standard vertical-joint spline system between abutting sections of markerboards.
  - 3. Where size of visual display boards or other conditions require support in addition to normal trim, provide structural supports or modify trim as indicated or as selected by Architect from manufacturer's standard structural support accessories to suit conditions indicated.
- D. Aluminum Frames and Trim: Fabricate units straight and of single lengths, keeping joints to a minimum. Miter corners to a neat, hairline closure.
  - 1. Where factory-applied trim is indicated, trim shall be assembled and attached to visual display units at manufacturer's factory before shipment.

#### 2.07 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

#### 2.08 ALUMINUM FINISHES

A. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

#### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances, surface conditions of wall, and other conditions affecting performance of the Work.
- B. Examine walls and partitions for proper preparation and backing for visual display surfaces.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 PREPARATION

- A. Comply with manufacturer's written instructions for surface preparation.
- B. Clean substrates of substances that could impair the performance of and affect the smooth, finished surfaces of visual display boards, including dirt, mold, and mildew.
- C. Prepare surfaces to achieve a smooth, dry, clean surface free of flaking, unsound coatings, cracks, defects, projections, depressions, and substances that will impair bond between visual display surfaces and wall surfaces.
  - 1. Prime wall surfaces indicated to receive direct-applied, visual display wall panels and as recommended in writing by primer/sealer manufacturer and wall covering manufacturer.

#### 3.03 INSTALLATION, GENERAL

- A. General: Install visual display surfaces in locations and at mounting heights indicated on Drawings. Keep perimeter lines straight, level, and plumb. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for complete installation.
- 3.04 INSTALLATION OF FACTORY-FABRICATED VISUAL DISPLAY BOARDS AND ASSEMBLIES
  - A. Visual Display Boards: Attach concealed clips, hangers, and grounds to wall surfaces and to visual display boards with fasteners at not more than 16 inches o.c. Secure both top and bottom of boards to walls.

#### 3.05 CLEANING AND PROTECTION

- A. Clean visual display surfaces according to manufacturer's written instructions. Attach one cleaning label to visual display surface in each room.
- B. Touch up factory-applied finishes to restore damaged or soiled areas.
- C. Cover and protect visual display surfaces after installation and cleaning.

#### END OF SECTION

### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Section includes:
  - 1. Mechanical and electrified door hardware
  - 2. Electronic access control system components
- B. Section excludes:
  - 1. Windows
  - 2. Cabinets (casework), including locks in cabinets

  - Signage
    Toilet accessories
  - 5. Overhead doors
- C. Related Sections:
  - 1. Division 01 Section "Alternates" for alternates affecting this section.
  - 2. Division 06 Section "Rough Carpentry"
  - 3. Division 06 Section "Finish Carpentry"
  - 4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
  - 5. Division 08 Sections:
    - a. "Metal Doors and Frames"
    - b. "Flush Wood Doors"
    - c. "Aluminum-Framed Entrances and Storefronts"
  - 6. Division 26 "Electrical" sections for connections to electrical power system and for lowvoltage wiring.
  - 7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

#### REFERENCES 1.02

- A. UL LLC
  - 1. UL 10B Fire Test of Door Assemblies
  - 2. UL 10C Positive Pressure Test of Fire Door Assemblies
  - 3. UL 1784 Air Leakage Tests of Door Assemblies
  - 4. UL 305 Panic Hardware
- B. DHI Door and Hardware Institute
  - 1. Sequence and Format for the Hardware Schedule
  - 2. Recommended Locations for Builders Hardware
  - 3. Keying Systems and Nomenclature
  - 4. Installation Guide for Doors and Hardware

- C. NFPA National Fire Protection Association
  - 1. NFPA 70 National Electric Code
  - 2. NFPA 80 2016 Edition Standard for Fire Doors and Other Opening Protectives
  - 3. NFPA 101 Life Safety Code
  - 4. NFPA 105 Smoke and Draft Control Door Assemblies
  - 5. NFPA 252 Fire Tests of Door Assemblies
- D. ANSI American National Standards Institute
  - 1. ANSI A117.1 2017 Edition Accessible and Usable Buildings and Facilities
  - 2. ANSI/BHMA A156.1 A156.29, and ANSI/BHMA A156.31 Standards for Hardware and Specialties
  - 3. ANSI/BHMA A156.28 Recommended Practices for Keying Systems
  - 4. ANSI/WDMA I.S. 1A Interior Architectural Wood Flush Doors
  - 5. ANSI/SDI A250.8 Standard Steel Doors and Frames

#### 1.03 SUBMITTALS

- A. General:
  - 1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
  - 2. Prior to forwarding submittal:
    - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
    - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.
- B. Action Submittals:
  - 1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
  - 2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
    - a. Wiring Diagrams: For power, signal, and control wiring and including:
      - 1) Details of interface of electrified door hardware and building safety and security systems.
      - 2) Schematic diagram of systems that interface with electrified door hardware.
      - 3) Point-to-point wiring.
      - 4) Risers.
  - 3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
    - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
  - 4. Door Hardware Schedule:

- a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
- b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
- c. Indicate complete designations of each item required for each opening, include:
  - 1) Door Index: door number, heading number, and Architect's hardware set number.
  - 2) Quantity, type, style, function, size, and finish of each hardware item.
  - 3) Name and manufacturer of each item.
  - 4) Fastenings and other pertinent information.
  - 5) Location of each hardware set cross-referenced to indications on Drawings.
  - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
  - 7) Mounting locations for hardware.
  - 8) Door and frame sizes and materials.
  - 9) Degree of door swing and handing.
  - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
- 5. Key Schedule:
  - a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
  - Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
  - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
  - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
  - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
  - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- C. Informational Submittals:
  - 1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
  - 2. Provide Product Data:
    - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
    - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
  - 1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
    - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
    - b. Catalog pages for each product.
    - c. Final approved hardware schedule edited to reflect conditions as installed.

d. Final keying schedule

- e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
- f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.
- E. Inspection and Testing:
  - 1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
    - a. Fire door assemblies, in compliance with NFPA 80.
    - b. Required egress door assemblies, in compliance with NFPA 101.

### 1.04 QUALITY ASSURANCE

- A. Qualifications and Responsibilities:
  - Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
  - 2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
  - 3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
    - a. For door hardware: DHI certified AHC or DHC.
    - b. Can provide installation and technical data to Architect and other related subcontractors.
    - c. Can inspect and verify components are in working order upon completion of installation.
    - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
  - 4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.
- B. Certifications:
  - 1. Fire-Rated Door Openings:
    - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
    - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
  - 2. Smoke and Draft Control Door Assemblies:

- a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
- b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
- 3. Electrified Door Hardware
  - a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
- 4. Accessibility Requirements:
  - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings
  - 1. Keying Conference
    - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
      - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
      - 2) Preliminary key system schematic diagram.
      - 3) Requirements for key control system.
      - 4) Requirements for access control.
      - 5) Address for delivery of keys.
  - 2. Pre-installation Conference
    - Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
    - b. Inspect and discuss preparatory work performed by other trades.
    - c. Inspect and discuss electrical roughing-in for electrified door hardware.
    - d. Review sequence of operation for each type of electrified door hardware.
    - e. Review required testing, inspecting, and certifying procedures.
    - f. Review questions or concerns related to proper installation and adjustment of door hardware.
  - 3. Electrified Hardware Coordination Conference:
    - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.

- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

### 1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

#### 1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
  - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
  - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
    - a. Mechanical Warranty
      - 1) Locks: 10 Years
      - 2) Exit Devices: 10 Years
      - 3) Closers: 30 Years
    - b. Electrical Warranty
      - 1) Locks: 3 Year
      - 2) Exit Devices: 3 Year
      - 3) Automatic Operators: 2 Years

#### 1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
  - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

#### 2.02 MATERIALS

- A. Fabrication
  - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
  - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
  - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
  - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
  - 2. For closers and panic devices: Verify with Architect and/or Owner if thru-bolts are required at specific door materials.

#### 2.03 HINGES

A. Manufacturers and Products:

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- Scheduled Manufacturer and Product: a. Ives 5BB series
- 2. Acceptable Manufacturers and Products:
  - a. Hager BB series
  - b. McKinney TB series
  - c. Stanley (Best/Dormakaba) FBB series
- B. Requirements:
  - 1. Provide hinges conforming to ANSI/BHMA A156.1.
  - 2. Provide five knuckle, ball bearing hinges.
  - 3. Hinge Height:
    - a. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide: 4-1/2 inches (114 mm) high
    - b. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide: 5 inches (127 mm) high
    - c. 2 inches or thicker doors: 5 inches (127 mm) high, regardless of door width
  - 4. Hinge Width: 4-1/2 inches (114 mm) wide typical. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
  - 5. Hinge quantity: Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
  - 6. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
    - a. Steel Hinges: Steel pins
    - b. Non-Ferrous Hinges: Stainless steel pins
    - c. Out-Swinging Exterior Doors: Non-removable pins
    - d. Out-Swinging Interior Lockable Doors: Non-removable pins
    - e. Interior Non-lockable Doors: Non-rising pins
  - 7. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.
  - 8. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.

## 2.04 CONTINUOUS HINGES

- A. Manufacturers:
  - 1. Scheduled Manufacturer: a. lves
  - 2. Acceptable Manufacturers: a. Select
    - b. Pemko
- B. Requirements:
  - 1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
  - 2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.

- 3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
- 4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
- 5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
- 6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
- 7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.
- 8. Adjust hinge model/width as required for door thickness or construction.

### 2.05 ELECTRIC POWER TRANSFER

- A. Manufacturers:
  - Scheduled Manufacturer and Product: a. Von Duprin EPT-10
  - Acceptable Manufacturers and Products:
    a. No Substitute
- B. Requirements:
  - 1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
  - 2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

#### 2.06 SURFACE BOLTS

- A. Manufacturers:
  - 1. Scheduled Manufacturer: a. lves
  - 2. Acceptable Manufacturers:
    - a. Rockwood
    - b. Trimco
- B. Requirements:
  - Surface bolt s to have 1" throw for maximum security with concealed mounting that prevents vandalism. Units to be constructed of heavy-duty steel and UL listed up to three (3) hours when used on the inactive door of a pair up to 8' in height.

## 2.07 MORTISE LOCKS AND DEADBOLTS

A. Manufacturers and Products:

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- Scheduled Manufacturer and Product: a. Schlage L9000 series
- Acceptable Manufacturers and Products:
  a. No Substitute
- B. Requirements:
  - 1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
  - 2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
  - 3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
  - 4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
  - 5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
  - 6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches.
  - 7. Provide motor based electrified locksets that comply with the following requirements:
    - a. Universal input voltage single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
    - b. Fail Safe/Fail Secure changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case.
    - c. Low maximum current draw maximum 0.4 amps to allow for multiple locks on a single power supply.
    - d. Low holding current maximum 0.01 amps to produce minimal heat, eliminate "hot levers" in electrically locked applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
    - e. Connections provide quick-connect Molex system standard.
  - 8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
    - a. Lever Design: Schlage 06B. (VERIFY/MATCH EXISTING)

## 2.08 EXIT DEVICES

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product: a. Von Duprin 99/33A series
  - 2. Acceptable Manufacturers and Products: a. No Substitute
- B. Requirements:

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- 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
- 2. Cylinders: Refer to "KEYING" article, herein.
- 3. Provide grooved touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
- 4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
- 5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
- 6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
- 7. Provide flush end caps for exit devices.
- 8. Provide exit devices with manufacturer's approved strikes.
- 9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
- 10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
- 11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
- 12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
- 13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
- 14. Provide electrified options as scheduled.
- 15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
- 16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

#### 2.09 POWER SUPPLIES

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. Schlage/Von Duprin PS900 Series
  - Acceptable Manufacturers and Products:
    a. No Substitute
- B. Requirements:
  - 1. Provide power supplies approved by manufacturer of supplied electrified hardware.
  - Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
  - 3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
  - 4. Provide power supplies with the following features:
    - a. 12/24 VDC Output, field selectable.
    - b. Class 2 Rated power limited output.
    - c. Universal 120-240 VAC input.

- d. Low voltage DC, regulated and filtered.
- e. Polarized connector for distribution boards.
- f. Fused primary input.
- g. AC input and DC output monitoring circuit w/LED indicators.
- h. Cover mounted AC Input indication.
- i. Tested and certified to meet UL294.
- j. NEMA 1 enclosure.
- k. Hinged cover w/lock down screws.
- I. High voltage protective cover.

#### 2.10 CYLINDER HOUSINGS

- A. Manufacturers:
  - Scheduled Manufacturer and Product: a. Schlage
  - Acceptable Manufacturers and Products:
    a. No Substitute
- B. Requirements:
  - 1. Provide cylinder housings from same manufacturer of locksets, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.
  - 2. Provide cylinder housings in the below-listed configuration(s), distributed throughout the Project as indicated.
    - a. Cylinder/Core Type: Small Format Interchangeable Core (SFIC)
  - 3. Replaceable Construction Cores.
    - a. Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
      - 1) 3 construction control keys
      - 2) 12 construction change (day) keys.
  - 4. Verify with Owner where permanent cores are to be shipped to.

#### 2.11 PERMANENT CORES, KEYING, KEYS

- A. Supplied by Owner
- B. Installed By Contractor

### 2.12 KEY CONTROL SYSTEM

- A. Manufacturers:
  - 1. Scheduled Manufacturer: a. Telkee
  - 2. Acceptable Manufacturers:

- a. HPC
- b. Lund
- B. Requirements:
  - 1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
    - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
    - b. Provide hinged-panel type cabinet for wall mounting.

### 2.13 DOOR CLOSERS

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product: a. LCN 4040XP series
  - Acceptable Manufacturers and Products:
    a. No Substitute
- B. Requirements:
  - 1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
  - 2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
  - 3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
  - 4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
  - 5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
  - 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
  - 7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
  - 8. Pressure Relief Valve (PRV) Technology: Not permitted.
  - 9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
  - 10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

## 2.14 PROTECTION PLATES

A. Manufacturers:

- 1. Scheduled Manufacturer:
  - a. Ives
- 2. Acceptable Manufacturers:
  - a. Trimco
  - b. Rockwood
  - c. Hager
- B. Requirements:
  - 1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
  - 2. Sizes kick and armor plates 1 1/2 inches (51 mm) less width of door on single doors, and 1 inch (25 mm) less width of door on pairs. Adjust width at doors with mullions, edge guards, gasketing or other conflicting hardware.
  - 3. Size mop plates 1" less width of door. Adjust width as needed for edge guards or other conflicting hardware.
  - 4. At fire rated doors, provide protection plates over 16 inches high with UL label.

### 2.15 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

- A. Manufacturers:
  - 1. Scheduled Manufacturers: a. Glynn-Johnson
  - Acceptable Manufacturers:
    a. No Substitute
- B. Requirements:
  - 1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.
  - 2. Provide friction type at doors without closer and positive type at doors with closer.

## 2.16 DOOR STOPS AND HOLDERS

- A. Manufacturers:
  - 1. Scheduled Manufacturer: a. lves
  - 2. Acceptable Manufacturers:
    - a. Trimco
    - b. Rockwood
- B. Provide door stops at each door leaf:
  - 1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
  - 2. Where a wall stop cannot be used, provide universal floor stops.

- 3. Where wall or floor stop cannot be used, provide overhead stop.
- 4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

## 2.17 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

- A. Manufacturers:
  - Scheduled Manufacturer: a. Zero International
  - 2. Acceptable Manufacturers:
    - a. National Guard
    - b. Reese
    - c. Pemko
- B. Requirements:
  - 1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
  - 2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
  - 3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
  - 4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

#### 2.18 SILENCERS

- A. Manufacturers:
  - 1. Scheduled Manufacturer: a. lves
  - 2. Acceptable Manufacturers:
    - a. Rockwood
    - b. Trimco
- B. Requirements:
  - 1. Provide "push-in" type silencers for hollow metal or wood frames.
  - 2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
  - 3. Omit where gasketing is specified.
- 2.19 FINISHES
  - A. Provide finish for each item as indicated in the sets.

#### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
  - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
  - 2. Custom Steel Doors and Frames: HMMA 831.
  - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
  - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
  - 1. Install construction cores to secure building and areas during construction period.
  - 2. Replace construction cores with permanent cores as indicated in keying section.

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- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
  - 1. Conduit, junction boxes and wire pulls.
  - 2. Connections to and from power supplies to electrified hardware.
  - 3. Connections to fire/smoke alarm system and smoke evacuation system.
  - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
  - 5. Connections to panel interface modules, controllers, and gateways.
  - 6. Testing and labeling wires with Architect's opening number.
- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.
- L. Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- M. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- N. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- O. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- P. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- Q. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
- R. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- S. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

#### 3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
  - 1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

#### 3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

124648 OPT0401213 Version 1

Legend:

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✓ Electrified Opening

#### HARDWARE GROUP NO. 01

For use	e on Doo	or #(s):					
2A		19A	19B	24	25	28A	
28B							
Provide	e each S	GL door(s) with the f	ollowing:				
QTY		DESCRIPTION		CATALOG NUMBER		FINISH	MFR
3	EA	HINGE		5BB1 SIZE, QTY, NRF (SEE SPECS)	AS REQ'D	652	IVE
1	EA	CLASSROOM LOC	K	L9070BDC 06B		626	SCH
1		PERMANENT COR	E	BY OWNER		626	
1	EA	OH STOP		450S		652	GLY
3	EA	SILENCER		SR64		GRY	IVE

HARDWARE GROUP NO. 02

For use	e on Doo	or #(s) <sup>.</sup>					
16A		17A	20A	23	26A	29A	
Provide	e each S	GL door(s) with the f	ollowing:				
QTY		DESCRIPTION	-	CATALOG NUMBER	R	FINISH	MFR
3	EA	HINGE		5BB1 SIZE, QTY, NF (SEE SPECS)	RP AS REQ'D	652	IVE
1	EA	CLASSROOM SEC W/ INSIDE INDICAT	URITY FOR	L9071BDC 06B IS-L	00	626	SCH
2		PERMANENT COR	E	BY OWNER		626	
1	EA	WALL STOP		WS406/407CVX		630	IVE
3	EA	SILENCER		SR64		GRY	IVE

HARDWARE GROUP NO. 03

For use	on Doo	or #(s):	)B	200				
TOD		170 20	Ы	290				
Provide	e each S	GL door(s) with the follo	wing:					
QTY		DESCRIPTION		CATALOG NUMBER	_		FINISH	MFR
1	EA	CONT. HINGE		112XY EPT			628	IVE
1	EA	POWER TRANSFER		EPT10		N	689	VON
1	EA	ELEC PANIC HARDWA	ARE	LX-RX-QEL-33A-NL-OP-388 24 VDC		×	626	VON
1	EA	RIM CYL HOUSING (S	FIC)	80-159 (W/ KEYED CONST CORE)			626	SCH
1		PERMANENT CORE		BYOWNER			626	
1	EA	90 DEG OFFSET PULI	_	8190EZHD 8" STD			630- 316	IVE
1	EA	SURFACE CLOSER (V SPRING STOP)	V/	4040XP SCUSH TBWMS			689	LCN
1	EA	PA MOUNTING PLATE AS REQUIRED	-	4040XP-18PA SRT			689	LCN
1	EA	CUSH SHOE SUPPOR AS REQ'D	RT -	4040XP-30 SRT			689	LCN
1	EA	BLADE STOP SPACEF AS REQ'D	२ -	4040XP-61 SRT			689	LCN
1	EA	DOOR SWEEP, BRUS	HW/	8198AA			AA	ZER
1	EA	THRESHOLD, 1/2"		655A			А	ZER
1	EA	DOOR CONTACT		BY DIV 28				B/O
1	EA	CREDENTIAL READE	R	BY ACCESS CONTROL INTEGRATOR		×		B/O
1	EA	POWER SUPPLY		PS902 900-2RS 120/240 VAC		×	LGR	SCE
1		NOTE		WEATHERSTRIP BY DOOR/FRAME MANUFACTURER				

OPERATION: DOOR NORMALLY CLOSED AND LOCKED. PRESENTING A VALID CREDENTIAL TO THE READER WILL MOMENTARILY RETRACT THE PANIC DEVICE LATCH ALLOWING ACCESS. DOOR TO LOCK UPON LOSS OF POWER. THE REQUEST (RX)TO EXIT FEATURE OF THE LOCK TO SHUNT THE ALARM OUTPUT OF THE DOOR CONTACT DURING VALID EGRESS. DOOR CONTACT MONITORS THE POSITION OF THE DOOR. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 04 For use on Door #(s): 22 18 21 Provide each DD door(s) with the following: DESCRIPTION QTY CATALOG NUMBER FINISH MFR 4 EΑ HINGE 5BB1 SIZE, QTY, NRP AS REQ'D 652 IVE (SEE SPECS) E 1 ΕA DUTCH DOOR BOLT 054 626 IVE 1 EA PASSAGE SET L9010 06A 626 SCH 2 ΕA WALL STOP WS406/407CVX 630 IVE 4 EA SILENCER **SR64** GRY IVE NOTE: DUTCH DOOR HARDWARE GROUP NO. 05 For use on Door #(s): 26B 29B Provide each SGL door(s) with the following: QTY DESCRIPTION CATALOG NUMBER FINISH MFR 2 ΕA HINGE 5BB1 SIZE, QTY, NRP AS REQ'D 652 IVE (SEE SPECS) Ē 1 EΑ PASSAGE SET L9010 06A 626 SCH 1 EA WALL STOP WS406/407CVX 630 IVE 2 ΕA SILENCER **SR64** GRY IVE NOTE: HALF HEIGHT DOOR HARDWARE GROUP NO. 06 For use on Door #(s): 30 Provide each SGL door(s) with the following: QTY DESCRIPTION CATALOG NUMBER FINISH MFR 3 ΕA 5BB1 SIZE, QTY, NRP AS REQ'D HINGE 652 IVE (SEE SPECS) L9050BDC 06B L583-363 1 EA OFFICE/ENTRY LOCK 626 SCH 1 PERMANENT CORE **BY OWNER** 626 450S 1 EΑ OH STOP 652 GLY

**SR64** 

3

ΕA

SILENCER

IVE

GRY

HARDWARE GROUP NO. 07

For use on Door #(s):

31

Provide each SGL door(s) with the following:

FINISH	MFR
652	IVE
626	SCH
626	
689	LCN
630	IVE
GRY	IVE
	FINISH 652 626 626 689 630 GRY

#### HARDWARE GROUP NO. 08

For use on Door #(s):

32

### Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	STOREROOM LOCK	L9080BDC 06B	626	SCH
1		PERMANENT CORE	BYOWNER	626	
1	EA	SURFACE CLOSER	4040XP CUSH TBWMS 1 3/4"	689	LCN
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

#### HARDWARE GROUP NO. 09

For use on Door #(s):

34A

## Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T (AS REQ'D)	630	IVE
1	EA	CYL X TURN DEAD LOCK	L460BDC 09-544 L283-722	626	SCH
1		PERMANENT CORE	BYOWNER	626	
1	EA	PULL PLATE	1874	630	DON
2	EA	OH STOP	450S	652	GLY
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 10

For use on Door #(s):

34B

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
2	EA	PANIC HARDWARE	9927-L-LBR-06	626	VON
2	EA	SFIC RIM CYLINDER	80-116	626	SCH
2		PERMANENT CORE	BYOWNER	626	
2	EA	SURFACE CLOSER (W/ SPRING STOP & HO)	4040XP SHCUSH TBWMS	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

DOOR#	HWSET#
2A	01
16A	02
16B 💉	03
17A	02
17B 💉	03
18	04
19A	01
19B	01
20A	02
20B 🗡	03
21	04
22	04
23	02
24	01
25	01
26A	02
26B	05
28A	01
28B	01
29A	02
29B	05
29C 🗡	03
30	06
31	07
32	08
34A	09
34B	10

END OF SECTION

#### SECTION 10 21 23 - CUBICLE CURTAINS AND TRACK

- PART 1 GENERAL
- 1.01 RELATED DOCUMENTS
  - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

- A. Section Includes:
  - 1. Curtain tracks and carriers.
  - 2. Cubicle curtains.

#### 1.03 ACTION SUBMITTALS

- A. Product Data: For each type of product.
  - 1. Include durability, laundry temperature limits, fade resistance, applied curtain treatment, and fire-test-response characteristics for each type of curtain fabric indicated.
  - 2. Include data for each type of track.
- B. Shop Drawings:
  - 1. Show layout and types of cubicles, sizes of curtains, number of carriers, anchorage details, and conditions requiring accessories. Indicate dimensions taken from field measurements.
  - 2. Include details on blocking above ceiling and in walls.
- C. Samples for Initial Selection: For each type of curtain material indicated.
- D. Samples for Verification: For each type of product required, prepared on Samples of size indicated below:
  - 1. Curtain Fabric: 10-inch- (254-mm-) square swatch or larger as required to show complete pattern repeat, from dye lot used for the Work, with specified treatments applied. Mark top and face of material.
  - 2. Mesh Top: Not less than 10 inches (254 mm) square.
  - 3. Curtain Carrier: Full-size unit.

#### 1.04 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For curtains, track, and hardware to include in operation and maintenance manuals.

#### 1.05 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Curtain Carriers and Track End Caps: Full-size units equal to 3 percent of amount installed for each size indicated, but no fewer than 10 units.
  - 2. Curtains: Full-size units equal to 10 percent of amount installed for each size indicated, but no fewer than two units.

#### PART 2 - PRODUCTS

- 2.01 PERFORMANCE REQUIREMENTS
  - A. Curtains: Provide curtain fabrics with the following characteristics:
    - 1. Launderable to a temperature of not less than 160 deg F (71 deg C).
    - 2. Flame resistant and identical to those that have passed NFPA 701 when tested by a testing and inspecting agency acceptable to authorities having jurisdiction.
      - a. Identify fabrics with appropriate markings of a qualified testing agency.

#### 2.02 CURTAIN SUPPORT SYSTEMS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. COVOC Corporation.
  - 2. Construction Speacialties.
  - 3. Imperial Fastener & Industrial Supply Company.
  - 4. InPro Corporation.
  - 5. A. R. Nelson Co.
  - 6. Pryor Products.
  - 7. Salsbury Industries.
- B. Extruded-Aluminum Curtain Track: Not less than 1-1/4 inches wide by 3/4-inch-high (32 mm wide by 19 mm high); with manufacturer's standard wall thickness.
  - 1. Curved Track: Factory-fabricated, 12-inch- (305-mm-) radius bends.
  - 2. Finish: Baked enamel, acrylic, or epoxy.
- C. Curtain Track Accessories: Fabricate splices, end caps, connectors, end stops, coupling and joining sleeves, wall flanges, brackets, ceiling clips, and other accessories from same material and with same finish as track.
  - 1. Suspended-Track Support: Not less than 7/8-inch- (22.2-mm-) OD tube.
  - 2. End Stop: Removable with carrier hook.
  - 3. Switch Unit: Shuttle and coupling device for rerouting and securing cubicle curtain, with pull chain for switching track.
- D. Curtain Carriers: Two nylon rollers and nylon axle with aluminum hook.

- E. Breakaway Curtain Carriers: One-piece nylon breakaway curtain carriers designed to allow curtains to detach from tracks with a pulling force of no more than 5 lbf (22.2 N).
- F. Exposed Fasteners: Stainless steel.
- G. Concealed Fasteners: Stainless steel.

#### 2.03 CURTAINS

- A. Cubicle Curtain Fabric: Curtain manufacturer's standard, 100 percent polyester; inherently and permanently flame resistant, stain resistant, and antimicrobial.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Avora FR.
    - b. Trevira CS.
    - c. Carnegie Fabrics.
  - 2. Color: As indicated on drawings.
  - 3. Provide mold resistant for curtain at shower area.
- B. Curtain Grommets: Two-piece, rolled-edge, rustproof, nickel-plated brass; spaced not more than 6 inches (152 mm) o.c.; machined into top hem.
- C. Mesh Top: Not less than 20-inch- (508-mm-) high mesh top of No. 50 nylon mesh.
- D. Curtain Tieback: Nickel-plated brass chain; one at each curtain termination.

#### 2.04 CURTAIN FABRICATION

- A. Fabricate curtains as follows:
  - 1. Width: Equal to track length from which curtain is hung plus 10 percent added fullness, but not less than 12 inches (305 mm) added fullness.
  - 2. Length: Equal to floor-to-ceiling height, minus depth of track and carrier at top, and minus clearance above the finished floor as follows:
    - a. Cubicle Curtains: 6 inches (381 mm).
  - 3. Top Hem: Not less than 1 inch (25.4 mm) and not more than 1-1/2 inches (38 mm) wide, triple thickness, reinforced with integral web, and double lockstitched.
  - 4. Mesh Top: Top hem of mesh not less than 1 inch (25.4 mm) and not more than 1-1/2 inches (38 mm) wide, triple thickness, reinforced with integral web, and double lockstitched. Double lockstitch bottom of mesh directly to 1/2-inch (13-mm) triple thickness, top hem of curtain fabric.
  - 5. Bottom Hem: Not less than 1 inch (25.4 mm) and not more than 1-1/2 inches (38 mm) wide, double thickness and double lockstitched.
  - 6. Side Hems: Not less than 1/2 inch (13 mm) and not more than 1-1/4 inches (32 mm) wide, with double turned edges, and single lockstitched.
- B. Vertical Seams: Not less than 1/2 inch (13 mm) wide, double turned and double stitched.

#### PART 3 - EXECUTION

#### 3.01 EXAMINATION

- A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.02 INSTALLATION

- A. General: Install tracks level and plumb, according to manufacturer's written instructions.
- B. Up to 20 feet (6.0 m) in length, provide track fabricated from single, continuous length.
  - 1. Curtain Track Mounting: Surface.
- C. Surface-Track Mounting: Fasten tracks to ceilings at intervals recommended by manufacturer. Fasten tracks to structure at each splice and tangent point of each corner. Center fasteners in track to ensure unencumbered carrier operation. Attach track to ceiling as follows:
  - 1. Mechanically fasten directly to bottom of concrete deck with post-installed anchors.
  - 2. Mechanically fasten directly to finished ceiling with toggle bolts.
  - 3. Mechanically fasten to furring through suspended ceiling with screw and tube spacer.
  - 4. Mechanically fasten to suspended ceiling grid with screws.
  - 5. Attach track to suspended ceiling grid with manufacturer's proprietary clip.
- D. Track Accessories: Install splices, end caps, connectors, end stops, coupling and joining sleeves, and other accessories as required for a secure and operational installation.
  - 1. Provide one locking switch unit for each pair of beds.
  - 2. Provide one hinged loading unit for each bed.
- E. Curtain Carriers: Provide curtain carriers adequate for 6-inch (152-mm) spacing along full length of curtain plus an additional carrier.
- F. Curtains: Hang curtains on each curtain track. Secure with curtain tieback.

END OF SECTION



	OTHER TRADES.
В.	ALL WORK IS TO BE COMPLETED IN STRICT ACCORDANCE
	APPLICABLE CODES, ORDINANCES, RULES, REGULATIONS
	STANDARDS INCLUDING, BUT NOT LIMITED TO THOSE LIST
C	FIELD VERIEV EXISTING CONDITIONS AND DIMENSIONS PR
0.	COMMENCEMENT OF WORK, DISCREPANCIES BETWEEN T
	DOCUMENTS AND THE ACTUAL CONDITIONS SHALL BE BRO
	THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMM
	OF WORK.
D.	ALL DIMENSIONS ARE FROM CENTERLINE OF STRUCTURE
-	FACE OF WALL, FACE OF MASONRY, OR FACE OF EXISTING
E.	ANY DIMENSIONS NOT SHOWN OR DEEMED QUESTIONABL
F	BEFER TO WALL TYPE SCHEDULE SHEET A200 TO DETER
••	WHICH WALLS EXTEND TO DECK. SEE STRUCTURAL FOR T
	SUPPORT DETAIL. WHERE METAL STUDS EXTEND TO DECI
	SLIP CONNECTIONS FOR ROOF/ FLOOR DEFLECTION.
G.	ALL STEEL STUDS ARE TO BE BRACED ACCORDING TO
	MANUFACTURER LIMIT HEIGHT (L/240).
н.	WHERE INSULATED OR SOUND WALLS EXTEND TO DECK, I
1	REFER TO PLUMBING PLANS FOR LOCATION OF FLOOR DE
 J.	WHERE ACCESS PANELS ARE SHOWN IN TOILET ROOM CH
	FINAL LOCATION SHALL BE COORDINATED WITH OTHER TR
	PRIOR TO INSTALLATION.
K.	ALL CONCRETE MASONRY UNITS (CMU) SHALL BE LAID RU
	BOND U.N.O. CMU WALLS THAT DO NOT LAY OUT IN FULL O
	LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE AN
L.	ALL INTERIOR MASONRY WALLS THAT RUN TO UNDERSIDE
	ABOVE SHALL HAVE A 2" JOINT (U.N.O.) AT THE DECK TO B
	WITH FIRE STOPPING AT RATED WALLS PER PROJECT MAI
	MINERAL WOOL AT THE NON-RATED WALLS TO ALLOW FO
М	THERE SHALL BE PERIMETER INSULATION CONTINUOUS A
IVI.	THE ENTIRE PERIMETER OF THE BUILDING EXTENDING 2'-C
	(R-15 MIN.) HORIZONTAL.
N.	PROVIDE MISCELLANEOUS SUPPORT FOR ALL CEILING SU
~	
0.	WHERE MORE THAN ONE DOOR OCCURS IN A BOOM A SI
	BEEN ADDED (E.G. A100-1), SEE A500 SERIES DRAWINGS F
	SCHEDULE AND DETAILS.
Ρ.	ALL DOOR FRAMES SHALL BE LOCATED 4" OFF FINISH WAL
~	OFF MASONRY WALLS UNLESS NOTED OTHERWISE.
Q.	ALL GLASS AT INTERIOR DOOR FRAMES, DOOR LITES AND
	OTHERWISE
R.	AT BUILDING EXPANSION JOINTS, ALL PARTITIONS, CEILING
	AND ALL WALL, FLOOR OR CEILNG MOUNTED ITEMS SHALI
	ANCHORED TO THE BUILDING STRUCTURE ON ONLY ONE
	THE EXPANSIONS JOINTS. CONTRACTOR SHALL COORDIN.
	THAT NO SHOLITEMS BRIDGE ACCROSS THE EXPANSION
S	ALL SLAB-ON-GRADE CONTROL JOINTS TO BE CLEANED A
•	CAULKED PRIOR TO PLACEMENT OF FLOOR FINISH.
Τ.	SEE REFLECTED CEILING PLANS FOR BULKHEAD LOCATIO
	DETAILS.
U.	REFER TO MECHANICAL DRAWINGS FOR WALL LOUVER LC
V	SEE AND GOANTITIES.
W.	SEE A900 SERIES DRAWINGS FOR EQUIPMENT SCHEDULE
	PLANS. PROVIDE BLOCKING IN STUD WALLS AND/OR GROU
	MASONRY CORES AS REQUIRED TO SUPPORT EQUIPMENT
Х.	PROVIDE FIRE RESISTANT TREATED WOOD BLOCKING SU
v	WHERE DISIMILAR FLOOR MATERIALS MEET THEY SHALL
	UNDER THE CENTERLINE OF THE DOOR UNLESS NOTED O
Z.	APPLY SEALANT AT ALL JUNCTURES BETWEEN DIFFERENT
	MATERIALS (E.G. MASONRY TO GYPSUM WALL BOARD) UT
	APPROPRIATE TYPE PER SPECIFICATIONS. COLOR TO BE
ΔΔ	APPLY SEALANT AT ALL COLINTERTOPS AND BLACKED AS
, v٦.	JUNCTURE WITH WALL.
BB.	ALL DOORS MUST BE INSTALLED WITH AT LEAST THE MINI
	MANEUVERING CLEARANCE AT THE DOOR APPROACH PER









## EXTERIOR MATERIAL LEGEND

KEYNOTE	MATERIAL	MFCTR	COLOR	NOTES
08 41 13-A	ALUMINUM STOREFRONT		CLEAR ANNODIZED	

# <sup>3</sup> PARTIAL EXTERIOR ELEVATION - SOUTH

- PATCH REMOVED LOUVER WITH SALVAGED BRICK.

08 41 13-A —

— PATCH REMOVED LOUVER WITH SALVAGED BRICK.

- PAINT ALL COPING TO MATCH EXISTING. SEE SPEC.





#### KEYNOTE LEGEND 02 00 00-A EXISTING TO REMAIN 04 20 00-A GROUT CORE SOLID 04 20 00-AA BOND BEAM MASONRY LINTEL BRICK TYPE 1 04 20 00-L 04 20 00-P 6" CONCRETE MASONRY UNIT 8" CONCRETE MASONRY UNIT 04 20 00-Q BOND BEAM MASONRY UNIT 04 20 00-V 06 10 53-B 1X WOOD BLOCKING 06 10 53-C 2X WOOD BLOCKING 06 40 00-Z SOLID PLASTIC SURFACE - 1/2" WINDOW STOOL 07 92 00-B SEALANT EACH SIDE, TYPICAL HOLLOW METAL DOOR/BORROWED LIGHT FRAME 08 11 13-A 08 11 13-B HOLLOW METAL DOOR 08 41 00 6" ALUMINUM-FRAMED STOREFRONT 08 41 13-A 4 1/2" ALUMINUM-FRAMED STOREFRONT ALUMINUM ENTRANCE DOOR 08 41 13-C 08 80 00-A GLAZING - SEE SCHEDULE/ELEVATIONS 7/8" FURRING CHANNEL 09 22 16-D

2 1/2" STEEL STUD 3 5/8" STEEL STUD

6" STEEL STUD 5/8" GYPSUM WALL BOARD (SEE SPECS FOR TYPE) SOUND ATTENUATION INSULATION ACOUSTICAL CEILING SUSPENSION ASSEMBLY DECORATIVE ACOUSTICAL CEILING EDGE TRIM ROLLER WINDOW SHADES- SEE EQUIPMENT SCHEDULE

![](_page_41_Picture_4.jpeg)

![](_page_42_Figure_0.jpeg)

	DNIT	ATING	SK SK
	UL RA	STCR	REMA
1	-	-	3
2	-	-	3
1	-	-	-
2	-	-	3
1	-	-	-
1	-	-	1,3
1	-	-	3
1	-	-	3
2	-	-	3
1	-	-	-
1	-	-	1,3
1	-	-	1,3
2	-	-	3
1	-	-	3
1	-	-	3
2	-	-	3
1	-	-	3
1	-	-	3
1	-	-	3
2	-	-	3
1	-	-	3
1	-	-	-
1	-	-	3
1	-	-	3
1	-	-	3
2	-	-	3
1	-	-	3

								2"	V.I.F. V.I.F.
12' - 8" 10"   6' - 1"	//	//	//	//	//	//	//	//	
	///	//	///	//	//	//	//	//	
	//	///	//	///	///	//	//		
	//	//	//	//	//	//	//	//	

## GENERAL DOOR NOTES

- A. THESE GENERAL NOTES APPLY TO THE DOOR SCHEDULE. B. DOOR AND FRAME NUMBERS CORRESPOND TO RESPECTIVE ROOM NUMBER. IN ROOMS WITH MULTIPLE OPENINGS, A NUMERICAL SUFFIX HAS BEEN ADDED TO DOOR NUMBERS.
- C. VERTICAL FRAMING MEMBERS AT ALL DOOR FRAMES SHALL EXTEND TO STRUCTURE ABOVE. D. UNDERCUT ALL DOORS AS REQUIRED BY FINAL FINISH.
- E. PROVIDE CONTINUOUS SEALANT BETWEEN HOLLOW METAL FRAME PERIMETERS AND SURROUNDING WALL CONSTRUCTION. F. PROVIDE CONTINUOUS SEALANT BETWEEN INTERIOR AND EXTERIOR
- WINDOW, CURTAINWALL AND STOREFRONT FRAME PERIMETERS AND SURROUNDING CONSTRUCTION UNLESS NOTED OTHERWISE. G. GROUT FULL HOLLOW METAL FRAMES IN MASONRY CONSTRUCTION. H. SPOT GROUT HOLLOW METAL FRAMES IN GYPSUM WALLS. I. WHERE A FIRE RATING IS INDICATED ON THE DOOR SCHEDULE, HARDWARE
- AND DOOR ASSEMBLY COMPONENTS SHALL MEET THE REQUIREMENTS OF THAT LABEL. J. WHERE AN STC RATING IS INDICATED ON THE DOOR SCHEDULE, HARDWARE AND DOOR ASSEMBLY COMPONENTS SHALL MEET THE REQUIREMENTS OF
- THAT LABEL. K. INSTALL DOOR GLASS USING WET GLAZING METHOD. L. ALL LINTELS ABOVE EXTERIOR OPENINGS SHALL BE GALVANIZED. M. REFER TO SHEETS AXXX & AXXX FOR ADDITIONAL DOOR, FRAME AND
- BORROWED LITE ELEVATIONS. N. COORDINATE THROAT OPENINGS WITH WALL WIDTH FOR ALL WRAP AROUND FRAMES. O. SCHEDULED HARDWARE FOR ALUMINUM DOORS SHALL BE PROVIDED BY
- HARDWARE SUPPLIER AND INSTALLED BY ALUMINUM SUPPLIER. ALUMINUM DOORS TO BE PREPARED BY ALUMINUM DOOR SUPPLIER IN ACCORDANCE WITH THE SCHEDULED HARDWARE. P. ALL NEW HOLLOW METAL DOORS, FRAMES AND BORROWED LITE FRAMES
- TO BE PAINTED AS INDICATED ON THE A800 SERIES FINISH PLANS. SEE FINISH PLANS FOR WOOD DOOR FINISHES. Q. PROVIDE SILENCERS ON ALL DOOR FRAMES. R. SEE STRUCTURAL DRAWINGS FOR REQUIREMENTS FOR MASONRY AND STEEL LINTELS. PROVIDE STRUCTURAL STEEL LINTELS AT OPENINGS
- OPENINGS WHERE INDICATED ON THE STRUCTURAL STEEL DRAWINGS IN LIEU OF MASONRY LINTEL AS SHOWN IN THESE DETAILS. S. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO FABRICATION OF DOORS AND FRAMES. BRING DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT.

## **REMARKS**

- 1. DUTCH DOOR.
- 2. SALVAGED DOOR. 3. SEE A800 SERIES FINISH PLANS FOR PAINT TYPE. HALF DOOR
- 5. EXTERIOR GATE. THIS EXTERIOR GATE TO HAVE EMERGENCY EGRESS HARWARE & SCREEN INSTALLED BY THE GATE MANUFACTURER. COORDINATE WITH DOOR HARDWARE SPECIFICATION.

## **GLASS SCHEDULE**

6. MOUNT ROLLER SHADE TO EXERIOR DOOR.

G1 - 1" THICK TEMPERED, LOW E, INSULATING GLAZING WITH 2 PANES 1/4" GLASS AND 1/2" AIRSPACE. G2 - 1/4" CLEAR LAMINATED GLASS. G3 - 1/4" CLEAR TEMPERED GLASS.

## ABBREVIATIONS LEGEND

![](_page_42_Picture_24.jpeg)

- GHM = GALVANNEALED HOLLOW METAL GL = GLASS
- HM = HOLLOW METAL PT = PAINT. SEE A800. ST = STAIN
- SS = STAINLESS STEEL
- STL = STEEL WD = WOOD
- 90M = 90 MINUTE ASSEMBLY RATING \* = SEE REMARKS COLUMN FOR NOTES

![](_page_42_Figure_30.jpeg)

F6

![](_page_42_Picture_32.jpeg)

![](_page_43_Figure_0.jpeg)

![](_page_43_Figure_1.jpeg)

EXISTING TO REMAIN-

— 09 29 00-B — 06 10 53-C

// 09 29 00-В

DOOR PER

/ 09 22 16-D

/— 09 29 00-В

— 09 29 00-В

- DOOR PER SCHEDULE

EXISTING TO REMAIN-

![](_page_43_Figure_2.jpeg)

JAMB DETAIL - J3

![](_page_43_Figure_3.jpeg)

с 08 80 00-A

09 29 00-B —/ (2 LAYERS)

SCALE: 1 1/2" = 1'-0"

![](_page_43_Figure_4.jpeg)

![](_page_43_Figure_5.jpeg)

HEAD DETAIL - H2 SCALE: 1 1/2" = 1'-0"

JAMB DETAIL - J2 SCALE: 1 1/2" = 1'-0"

![](_page_43_Figure_6.jpeg)

![](_page_43_Figure_7.jpeg)

![](_page_43_Figure_8.jpeg)

![](_page_43_Picture_9.jpeg)

SCALE: 1 1/2" = 1'-0"

JAMB DETAIL - J1

5 7/8"

09 29 00-D ·

09 29 00-B —

4 7/8" 1/1

![](_page_43_Figure_10.jpeg)

![](_page_43_Figure_11.jpeg)

SILL DETAIL - S2 SCALE: 1 1/2" = 1'-0"

![](_page_43_Picture_12.jpeg)

![](_page_43_Figure_13.jpeg)

![](_page_43_Figure_14.jpeg)

## FINISH TRANSITION STRIP.

DOOR PER
 SCHEDULE

🗩 09 22 16-Н

— 09 29 00-B

– 07 92 00-B

- 08 11 13-A

HEAD DETAIL - H1 SCALE: 1 1/2" = 1'-0"

![](_page_44_Picture_0.jpeg)

			CASEWOR	K SCHEL	JULE	
TYPE MARK	DESCRIPTION	SPEC. SECTION	MANUFACTURER	MODEL	SIZE	TYPE COMMENTS
R1	BASE CASEWORK - 1 DOOR 1 DRAWER	12 32 16		10/21	18"W/ × 32 1/2"H × 20"D	
B2		12 32 10		10576	22"W x 22 1/2"H x 24"D	
B3		12 32 10		64032	24"W × 49"H × 25"D	
B4	BASE CASEWORK - OPEN EBONT	12 32 10		10080	24 W X 49 H X 23 D	CUSTOM
B7	BASE CASEWORK - FULL DOOR TRASH STORAGE	12 32 10		10700	21"W x 32 1/2"H x 24"D	
B8	BASE CASEWORK - FULL DOOR TRASH STORAGE	12 32 10		10700	21 W X 32 1/2 11 X 24 D	
BQ	BASE CASEWORK - ADA SINK BASE	12 32 10		10576	30"W x 32 1/2"H x 24"D	
B11	BASE CASEWORK	12 32 10		10441	36"W x 32 1/2"H x 24"D	
B13	BASE CASEWORK	12 32 10		10421	18"W x 32 1/2"H x 24"D	
B1/	BASE CASEWORK	12 32 10		104/1	30"W x 32 1/2"H x 24"D	
B15		12 32 16		62034	30"W x 32 1/2"H x 24"D	CUSTOM
B17	BASE CASEWORK	12 32 10		10/21	18"W x 32 1/2"H x 24"D	003101
B18	BASE CASEWORK	12 32 10		10101	24"W x 32 1/2"H x 24"D	
B21	BASE CASEWORK - OPEN DOOR TRASH STORAGE	12 32 10		10116	24 W X 32 1/2 11 X 24 D	
B23	BASE CASEWORK	12 32 10		10//1	36"W x 32 1/2"H x 29"D	
023 CT1	SOLID SUBFACE COUNTER TOP W/ 6"H SPI ASH	12 32 10		10441	34"H x 31"D	
CT2	SOLID SUBFACE COUNTER TOP W/ 6"H SPLASH	12 32 10			34"H × 25"D	
CT3	SOLID SUBFACE COUNTER TOP W/ 6"H SPLASH MOUNT ON BAKKS COUNTER	12 32 10			36"H × 25"D	
013	BRACKETS.	12 32 10			30 11 X 23 D	
CT4	SOLID SURFACE COUNTER TOP W/ NO SPLASH	12 32 16			17 1/2"H x 32"D	
CT5	SOLID SURFACE COUNTER TOP W/ 6"H SPLASH	12 32 16			34"H x 25"D	
CT6	SOLID SURFACE COUNTER TOP W/ 6"H SPLASH	12 32 16			34"H x 26"D	
CT8	SOLID SURFACE CAP	12 32 16			40"H x 24"D	
CT9	COUNTER TOP SUPPORT BRACKET	12 32 16	Rangine Corp Rakks	EH-1818		
CT10	SOLID SURFACE BABY CHANGING TABLE	12 32 16			48"W x 36"H x 24"D	
FP	FILLER PANEL	12 32 16	STEVENS INDUSTRIES	10803	<varies>W x <varies>H x 24"D</varies></varies>	
FP	FILLER PANEL	12 32 16	STEVENS INDUSTRIES	10805	<varies>W x <varies>H x <varies>D</varies></varies></varies>	
FP	FILLER PANEL	12 32 16	STEVENS INDUSTRIES		<varies>W x <varies>H x <varies>D</varies></varies></varies>	
TS1	TALL CASEWORK - OPEN FRONT 1 SHELF	12 32 16	STEVENS INDUSTRIES	22500	24"W x 60"H x 24"D	
W1	WALL CASEWORK - 6 OPEN CUBBIES	12 32 16	STEVENS INDUSTRIES	15226	30"W x 25"H x 10"D	
W2	WALL CASEWORK - 2 DOOR	12 32 16	STEVENS INDUSTRIES	15129	24"W x 36"H x 24"D	CUSTOM
W4	WALL CASEWORK - 2 DOOR	12 32 16	STEVENS INDUSTRIES	15129	33"W x 18"H x 14"D	
W5	WALL CASEWORK - 1 DOOR	12 32 16	STEVENS INDUSTRIES	15121	24"W x 30"H x 14"D	
W6	WALL CASEWORK - 2 DOOR	12 32 16	STEVENS INDUSTRIES	15129	36"W x 30"H x 14"D	
W7	WALL CABINET - 2 DOOR	12 32 16	STEVENS INDUSTRIES	15129	33"W x 30"H x 14"D	
W8	WALL CASEWORK	12 32 16	STEVENS INDUSTRIES	15120	21"W x 30"H x 14"D	
W9	WALL CASEWORK - 2 DOOR	12 32 16	STEVENS INDUSTRIES	15129	30"W x 18"H x 18"D	
W10	WALL CASEWORK	12 32 16	STEVENS INDUSTRIES	15226	30"W x 25"H x 18"D	CUSTOM
W12	WALL CASEWORK	12 32 16	STEVENS INDUSTRIES	15121	18"W x 30"H x 14"D	
W13	WALL CABINET - 2 DOOR	12 32 16	STEVENS INDUSTRIES	15129	24"W x 18"H x 14"D	
W14	WALL CASEWORK	12 32 16	STEVENS INDUSTRIES	15101	30"W x 30"H x 14"D	
WS2	SOLID SURFACE WINDOW STOOL	12 32 16			24"H x 8"D	

## GENERAL CASEWORK NOTES

- A. PROVIDE FILLER PANELS AT ALL LOCATIONS WHERE CASEWORK IS FLANKED BY WALLS AS REQUIRED TO CLOSE OFF SPACE AND PROVIDE A NEAT, FINISHED INSTALLATION. PROVIDE EQUAL FILLER PANELS AT EITHER SIDE OF CASEWORK TO BALANCE APPEARANCE.
- B. PROVDIE FINISHED ENDS AT ALL CABINET SIDES PARTIALLY OR FULLY EXPOSED TO VIEW.
- C. SEE INTERIOR CASEWORK ELEVATIONS FOR DOOR SWING.
- D. PROVIDE COUNTER GROMMETS FOR ALL OPEN KNEE-SPACE COUNTERTOP INSTALLATIONS.
- E. REFER TO A800 SERIES DRAWINGS FOR FINISHES NOT NOTED ON EQUIPMENT PLANS AND CASEWORK ELEVATIONS.
- F. PROVIDE LOCKS AT ALL TEACHER CABINETS AND AS NOTED ON THE CASEWORK ELEVATIONS.

![](_page_44_Picture_15.jpeg)

![](_page_45_Figure_0.jpeg)

![](_page_46_Figure_0.jpeg)

![](_page_46_Figure_1.jpeg)

![](_page_47_Figure_0.jpeg)

![](_page_47_Figure_8.jpeg)

	В			P	ANE	ELBOA	RD SCH	IEDULI	E				
LOCAT	TION : STAFF ROOM 31	SCCR (AMPS RI	MS SYN	<b>/M):</b> 2	2,000	SERVIC	<b>Ε:</b> 208Y/120V 3Φ 4	1-Wire+Ground	AMP :	100 A	м	AIN : MLO NEMA: Type 1 MOUNTING : Rec	essed
		, , , , , , , , , , , , , , , , , , ,		,									
СКТ	DESCRIPTION		NOTE	AMP	POLE	А	В	С	POLE	AMP	NOTE	DESCRIPTION	СКТ
1	LIGHTING ROOM 31, 3	3, 32		20 A	1	437 / 550			1	20 A		EXHAUST FAN EF-7	2
3	LIGHTS - NURSE'S OFI	FICE	E	20 A	1		0 / 900		1	20 A		RECEPT STAFF ROOM 31	4
5	UNKNOWN		E	20 A	1			0 / 900	1	20 A		RECEPT DIRECTOR'S OFFICE 30	6
7	LIGHTS - FOYER, HA	<b>LL</b>	E	20 A	1	0 / 180			1	20 A		RECEPT ROOF	8
9	LIGHTS - MAIN OFFI	CE	Е	20 A	1		0 / 0		1	20 A	E	RECEPTACLES - HALL & OFFICE	10
11	LIGHTS - PRINCIPAL OFFICI	E, IDF RM.	E	20 A	1			0 / 0	1	20 A	E	RECEPTACLES - PRE-K DIR. 102	12
13	RECEPTACLE PRINT	ER	E	20 A	1	0 / 0			1	20 A	E	RECEPTACLES - RECEPTION AREA	14
15	UNKNOWN		E	20 A	1		0 / 0		1	20 A	E	CLINIC - EXHAUST FAN	16
17	SPARE		E	20 A	1			0 / 0	1	20 A	E	CUSTODIAN OFFICE 109	18
19	SPARE		E	20 A	1	0 / 1491			2	20 1			20
21	SPARE		E	20 A	1		0 / 1491		2	20 A		SPEIT UNIT DS-AT, DS-AZ AND TIF-T ROOM 50-5	22
23	UNKNOWN		Е	20 A	1		_	0 / 0	1	20 A	Е	SPARE	24
25	RECEPTACLE IN RECEPTION	ON AREA	E	20 A	1	0 / 0			1	20 A	E	UNKNOWN	26
27	SPARE		E	20 A	1		0 / 0		1	20 A	E	UNKNOWN	28
29	SPARE		E	20 A	1			0 / 0	1	20 A	E	UNKNOWN	30
31	UNKNOWN		E	20 A	1	0 / 0			1	20 A	E	UNKNOWN	32
33	UNKNOWN		E	20 A	1		0 / 0		1	20 A	E	UNKNOWN	34
35	UNKNOWN		E	20 A	1		_	0 / 0	1	20 A	E	UNKNOWN	36
37	LAMINATAR		E	20 A	1	0 / 0			1	20 A	E	UNKNOWN	38
39	MICROWAVE - EAST W	VALL	E	20 A	1		0 / 0		1	20 A	E	UNKNOWN	40
41	UNKNOWN		E	20 A	1			0 / 0	1	20 A	E	UNKNOWN	42
							<u> </u>		1				
					E	2658 VA	2391 VA	900 VA					
	TOTAL CON	NNECTED LOAD (	(VA) : {	5950 VA	4		TOTAL	CONNECTED	load		): 17 A		
- NEW - CIRCU PANEL	KKS: PANELBOARD TO REPLACE EXIS JIT NUMBERS TO REMAIN SAME BOARD 'B'	STING PANELBOA FOR EXISTING L	ARD 'B'. .OADS I	INTEG MOVED	GRAL SF D FROM	PD. I EXISTING	NOTES: E - LOAD MOVED TYPE IN FIELD. T	) FROM EXISTII RACK CIRCUIT	NG PAN S MAR	IELBO/ KED 'U	ARD 'B'. NKNOV	. PROVIDE AND VERIFY CIRCUIT BREAKER SIZES VN' AND UPDATE DIRECTORY.	AND

![](_page_48_Picture_1.jpeg)

![](_page_48_Picture_2.jpeg)

	A2		P	ANI	ELBOA	RD SCH	IEDUL	Ε				
	TION : MOTHERS' ROOM 34 SCCR (AMPS)	RMS SYN	/M): 2	22,000	SERVICE	: 208Y/120V 3Φ	4-Wire+Ground	AMP :	100 A	MA	AIN : MLO NEMA: Type 1 MOUNTING : Rece	essed
			ì	i i				â	1			
скт	DESCRIPTION	NOTE	AMP	POLE	Α	В	С	POLE	AMP	NOTE	DESCRIPTION	СКТ
1	RECEPTS INFANTS 1	E	20 A	1	1080 / 1440			1	20 A	Е	RECEPTS CLASSROOM 2s 8	2
3	RECEPTS INFANTS 1	E	20 A	1		720 / 720		1	20 A	E	PROJ. & TEACHER RECEPT CLASSROOM 2s 8	4
5	PROJ. & TEACHER RECEPT INFANTS 1	E	20 A	1			360 / 600	1	20 A	E	REFRIG. CLASSROOM 2s 8	6
7	REFRIG. INFANTS 1	E	20 A	1	600 / 1260		_	1	20 A	Е	RECEPTS CLASSROOM 3s 10	8
9	RECEPT ROOM A, AA, 3	E	20 A	1		720 / 720		1	20 A	Е	PROJ. & TEACHER RECEPT CLASSROOM 3s 10	10
11	RECEPTS ROOM 4. VEST. C	E	20 A	1			1260 / 600	1	20 A	Е	REFRIG. CLASSROOM 3s 10	12
13	PROJ. & TEACHER RECEPT CLASSROOM 1s 4	E	20 A	1	720 / 1080			1	20 A	Е	RECEPT CHECK-IN 12	14
15	REFRIG. CLASSROOM 1s 4	E	20 A	1		600 / 900		1	20 A	Е	RECEPT VEST B, STOR. 13	16
17	RECEPT FLEX OFFICE 5	E	20 A	1			540 / 1620	1	20 A	EB	RECEPT INFANTS 16	18
19	SPARE	EB	20 A	1	0 / 360			1	20 A	EB	TEACHER RECEPT INFANTS 16	20
21	SPARE	EB	20 A	1		0 / 600		1	20 A	EB	RECEPT INFANTS 16	22
23	SPARE	EB	20 A	1			0 / 1000	1	20 A	EB	WASHER STORAGE 2	24
25	SPARE	EB	20 A	1	0 / 2500					-		26
27	SPARE	EB	20 A	1		0 / 2500		2	30 A	G	DRYER STORAGE 2	28
29	LIGHTING S WALL EXTERIOR	E	20 A	1			160 / 557	1	20 A	EB	LIGHTING ROOM 2, 16	30
31	LIGHTING ROOM 1, 3-6, VEST. C	E	20 A	1	1060 / 1158			1	20 A	Е	LIGHTING ROOM 8, 10-13	32
33	EF-4 & LGTN ROOM 7, 14	E	20 A	1		608 / 608		1	20 A	Е	EF-3 & LGTN ROOM 9,15	34
35							1500 / 1500					36
37	ECUH-A2 VESTIBULE A	E	20 A	2	1500 / 1500			2	20 A	E	ECUH-A1 RECEPT VESTIBULE B	38
39	ECUH-B EXTERIOR					750 / 0						40
41	TOILET / 1s TOILET 14	E	20 A	2			750 / 0	2	20 A	EB	SPARE	42
							1					
			TO	TALS :	14258 VA	9446 VA	10447 VA					
	TOTAL CONNECTED LOAD	<b>) (VA) :</b> 3	34151	VA		ΤΟΤΑ	L CONNECTED	LOAD	(AMPS)	: 95 A		
r <b>ema</b> Exis	<b>RKS:</b> TING PANELBOARD			NOTES: E - EXISTING LOAD TO REMAIN. LEAVE AS SPARE IF NO LOAD CONNECTED. EB - EXISTING CIRCUIT BREAKER. G - PROVIDE GFCI CIRCUIT BREAKER.								

	LIGHT FIX1	<b>FURE S</b>	CHEE	DUL	.E			
MARK	DESCRIPTION	MOUNTING	WATTS	CRI	COLOR	LUMENS	VOLTS	MANUFACTURER(S)
		· · · ·						
F30	OPEN DOWNLIGHT, 2-INCH DIAMETER APERTURE, CLEAR SEMI-SPECULAR REFLECTOR, FLANGELESS TRIM, 0-10V DIMMING TO 10-PERCENT, NON-IC RATED.	RECESSED	13W	80	3500K	1000	120-277V	GOTHAM EVO2 SERIES PORTFOLIO LD2B SERIES PRESCOLITE LFR-4RD SERIES WILLIAMS 2DR SERIES
F30B	SAME AS TYPE 'F30' EXCEPT DIFFERENT LUMEN OUTPUT.	RECESSED	6.3W	80	3500K	500	120-277V	
F31	OPEN DOWNLIGHT, 4-INCH DIAMETER APERTURE, CLEAR SEMI-SPECULAR REFLECTOR, SELF FLANGED, 0-10V DIMMING TO 10-PERCENT, NON-IC RATED.	RECESSED	21W	80	3500K	2000	120-277V	HALO COMMERCIAL HC4 SERIES WILLIAMS 4DR SERIES LITHONIA LDN4 SERIES PRESCOLITE LC4 SERIES
F70	2-FOOT NOMINAL UNDER-CABINET LIGHT, 1 INCH WIDE NOMINAL, FROSTED LENS, 120 DEGREE SPREAD, ALUMINUM BODY, 0-10V DIMMING, ARCHITECT TO SELECT FINISH.	SURFACE	3W/FT	80	3500K	381/FT	120-277V	ALUZ ZUCO A1 SERIES LUMINII BOSCA SERIES QTL ESSENSTIAL WIDE-FLAT SCOUT LIGHTING SLIM SERIES
F72	LED STRIP/RIBBON WITH SELF-ADHESIVE, FIELD CUTTABLE,CORNER-BENDING, 0-10V DIMMING, 120 DEGREE SPREAD. PROVIDE REMOTE LED POWER SUPPLIES AND CONNECTORS AS REQUIRED. ORDER TO NECESSARY LENGTH.	SURFACE	2W/FT	80	3500K	163/FT	120-277V	KELVIX JAGGER SERIES OMNI LIGHT ARC SERIES LUMINII LINELED FLEX 18 SERIES BEAMEVER AERO TAPE S
F91	2 BY 2-FOOT FLAT PANEL, ACRYLIC LENS, EDGE-LIT, 0-10V DIMMING TO 10-PERCENT, SWITCHABLE LUMEN OUTPUT AND COLOR TEMPERATURE.	RECESSED	32W	80	3500K	3200	120-277V	COLUMBIA SRP22 SERIES JADEMAR LIGHTING JFP-CPS SERIES LITHONIA CPANL22 SERIES METALUX 22FP SERIES
F91F	SAME AS TYPE 'F91' EXCEPT PROVIDE DRYWALL FLANGE.	RECESSED	32W	80	3500K	3200	120-277V	
F91S	SAME AS TYPE 'F91' EXCEPT SURFACE MOUNTED.	RECESSED	32W	80	3500K	3200	120-277V	
F92	2 BY 4-FOOT FLAT PANEL, ACRYLIC LENS, EDGE-LIT, 0-10V DIMMING TO 10-PERCENT, SWITCHABLE LUMEN OUTPUT AND COLOR TEMPERATURE.	SURFACE	40W	80	3500K	5000	120-277V	COLUMBIA SRP24 SERIES JADEMAR LIGHTING JFP-CPS SERIES LITHONIA CPANL24 SERIES METALUX 24FP SERIES
FN	ARCHITECTURAL WALL PACK, WET LOCATION LISTED, FINISH TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S CATALOG OF STANDARD COLORS.	SURFACE WALL	10W	70	3000K	1300	120-277V	HUBBELL SG SERIES LITHONIA WPX SERIES LUMARK XTOR SERIES LUMENCON LWS-MFC SERIES
FN2	SAME AS TYPE 'FN' EXCEPT BATTERY BACKUP (COLD RATED), 90 MINUTE EMERGENCY CAPACITY.	SURFACE WALL	10W	70	3000K	1300	120-277V	
X1C	THERMOPLASTIC EXIT SIGN, WHITE HOUSING, SELF POWERED, SELF DIAGNOSTIC.	SURFACE CEILING	5W	80		N/A	1 <mark>20-277V</mark>	DUAL-LITE SE SERIES SURE-LITES CX SERIES LITHONIA LE SERIES LIFE SAFETY LIGHTING LSXS SERIES
ХЗС	THERMOPLASTIC EXIT SIGN, WHITE HOUSING, SELF POWERED, SELF DIAGNOSTIC.	SURFACE CEILING	5W	80	GREEN	N/A	120-277V	DUAL-LITE EVC SERIES SURE-LITES APC SERIES LITHONIA LQHM SERIES LIFE SAFETY LIGHTING LSCEU SERIES
X4	EMERGENCY LIGHTING UNIT, 90-MINUTE EMERGENCY CAPACITY, DAMP LOCATION LISTED, SELF DIAGNOSTIC.	SURFACE WALL	5W	80	WHITE	N/A	120-277V	DUAL-LITE EV SERIES SURE-LITES SEL25 SERIES LITHONIA ELM2 SERIES LIFE SAFETY LIGHTING LSLEDR1 SERIES

## **GENERAL NOTES:**

1. SEE E-001 FOR GENERAL NOTES.

- **# PLAN NOTES:**
- USE EXISTING CIRCUIT BREAKER FOR REMOVED PANELBOARD 'B' TO FEED NEW PANELBOARD 'B'. 4#3/0, 8#4 GND, 1 1/4" C.

	Δ			P/				IFDUI	F						
	TION : MOTHERS' ROOM 34 S(	CCR (AMPS RMS	SYM	IM): 2	2,000	SERVICI	E: 208Υ/120V 3Φ 4	4-Wire+Ground	AMP :	100 A	MA	IN: MLO	NEMA: Type	MOUNTING : R	ecessed
		,		Ó											
СКТ	DESCRIPTION	NC	OTE	AMP	POLE	Α	В	С	POLE	AMP	NOTE		DESCR	IPTION	СКТ
1	RECEPT EARLY CHILDHOOF	D 29 E	ΞВ	20 A	1	900 / 720			1	20 A	EB	PROJ	. AND TEACHE	R RECEPT ROOM 20	2
3	RECEPT EARLY CHILDHOOF	D 29 E	ΞB	20 A	1		600 / 1440		1	20 A	EB		RECEPT CLAS	SROOM 3s 20	4
5	RECEPT EARLY CHILDHOOI	D 29 E	ΞВ	20 A	1			720 / 600	1	20 A	EB		REFR. CLASS	ROOM 3s 20	6
7	PROJ. AND TEACHER RECEPT F	ROOM 26 E	ΞB	20 A	1	720 / 720			1	20 A	EB	PROJ	. AND TEACHE	R RECEPT ROOM 17	8
9	RECEPT EARLY CHILDHOOF	D 26 E	ΞB	20 A	1		720 / 1260		1	20 A	EB		RECEPT CLAS	SROOM 2s 17	10
11	REFR. EARLY CHILDHOOD	) 26 E	ΞВ	20 A	1			600 / 600	1	20 A	EB		REFR. CLASS	ROOM 2s 17	12
13	WASHER LAUNDRY 25	E	ΞB	20 A	1	1000 / 720			1	20 A	EB		RECEPT CC	RRIDOR 34	14
15	PROJ. AND TEACHER RECEPT F	ROOM 23 E	ΞВ	20 A	1		720 / 540		1	20 A	EB		EWC COR	RIDOR 34	16
17	RECEPT CLASSROOMS 3s	3 23 E	ΞB	20 A	1			1440 / 260	1	20 A	EB	L	IGHTING AND	EF-1 TOILET 18	18
19	REFR. CLASSROOMS 3s 2	23 E	ΞВ	20 A	1	600 / 0			1	20 A	E		EXISTIN	G LOAD	20
21	LIGHTING AND EF-9 TOILET 2	21, 22 E	ΞВ	20 A	1		410 / 0		1	20 A	E		EXISTIN	G LOAD	22
23	LIGHTING AND EF-8 TOILET	Т 27 Е	ΞВ	20 A	1			410 / 855	1	20 A	EB		LIGHTING CO	DRRIDOR 21	24
25				20.4	2	1500 / 200			1	20 A	EB	LIGHTI	NG NORTH EX	FERIOR WALL PACKS	26
27	ECUH-AZ CUKKIDUK 34	•	Р	20 A	2		1500 / 1164		1	20 A	EB		LIGHTING ROC	M 19-20, 23-25	28
29	SPARE	E	ΞB	20 A	1			0 / 530	1	20 A	EB		LIGHTING CL	ASSROOM 17	30
31	EXISTING LOAD		E	20 A	1	0 / 1116			1	20 A	EB		LIGHTING RO	OM 26, 28 ,27	32
33	EXISTING LOAD		E	20 A	1		0 / 0		1	20 A	E		EXISTIN	G LOAD	34
35	EXISTING LOAD		E	20 A	1			0 / 0	1	20 A	E		EXISTIN	G LOAD	36
37	EXISTING LOAD		E	20 A	1	0 / 0			1	20 A	E		EXISTIN	G LOAD	38
39	EXISTING LOAD		E	20 A	1		0 / 0		0				0.0.0		40
41	EXISTING LOAD		E	20 A	1			0 / 0		30 A	EB		SPA	RE	42
											· ·				
				тот	TALS :	8196 VA	8354 VA	6015 VA							
	TOTAL CONNE	ECTED LOAD (VA	<b>()</b> : 22	2565 V	/A		TOTAL		LOAD	(AMPS)	): 63 A				
REMA • EXIS	RKS: TING PANEL BOARD.		<b>NOTES:</b> E - EXISTING LOAD TO REMAIN. LEAVE AS SPARE IF NO LOAD CONNE EB - EXISTING CIRCUIT BREAKER. P - PROVIDE NEW CIRCUIT BREAKER.					CONNECTED.							

	MARK
	E30
	F30
	ESUB
	F31
	F70
	F72
	F91
5	
	F91F
	F91S
5	F92
	ENI
	<b>FIN</b>
	FN2
	1 1 1 2
	X1C
3	
	X3C
ES	
	X4
RIES	

![](_page_48_Figure_13.jpeg)

![](_page_49_Figure_0.jpeg)

![](_page_49_Figure_8.jpeg)

![](_page_50_Figure_0.jpeg)

![](_page_51_Figure_0.jpeg)

1. SEE SHEET MD-200 FOR ADDITIONAL GENERAL NOTES.

- REMOVE SUPPLY REGISTER AND PATCH OPENING. MATCH ADJACENT

16 24

![](_page_51_Figure_12.jpeg)