

SECTION 10155 - TOILET COMPARTMENTS

PART 1 - GENERAL

1.1. SECTION INCLUDES

- A. Solid plastic toilet compartments.
- B. Urinal screens.

1.2 RELATED SECTIONS

- A. Section 06105 – Miscellaneous Carpentry- Wood Blocking and Curbing.
- B. Section 09300 - Tile.
- C. Section 09511 – Suspended Acoustic Ceilings.
- D. Section 10800 Toilet and Bath Accessories.
- E. Section 16500 – Lighting Fixtures.

1.3 REFERENCES

- A. ASTM A167 Stainless and Heat Resisting Chromium Nickel Steel Plate, Sheet, and Strip.
- B. NEMA LD 3 High Pressure Decorative Laminates.

1.4 SUBMITTALS

- A. Submit under provisions of General Conditions.
- B. Shop Drawings: Indicate partition plan, elevation views, dimensions, details of wall, floor, and ceiling supports, and door swings. Provide handicap clearances and dimensions.
- C. Product Data: Provide data on panel construction, hardware, and accessories.
 - 1. Recycled content: Provide cut sheets or letter from manufacturer(s) stating the percentage by weight of both post-consumer and post-consumer recycling content in material(s) furnished under this section.
 - a. Fill out 'Recycled Content Certification' Form attached as an appendix to Specification Section 01300, 'Submittals' for every material furnished under this section.
 - 2. Manufacturing Location: Provide cut sheets or letter from manufacturer(s) stating the location of material(s) manufacturer as well as the location of material extraction and harvesting or mining of raw material(s) furnished under this section.
 - a. Include statement indicating costs for product(s) or percentages of product(s) extracted, harvested/mined and manufactured within 500 miles of the project site.

3. Material Safety Data Sheets (MSDS) or cut sheets, with complete Volatile Organic Compound (VOC) information on adhesives, sealants, sealant primers, paints and any other coatings associated with materials in this section.
 - D. Samples: Submit two samples of partition panels, illustrating panel finish, color, and sheen.
 - E. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.
- 1.5 REGULATORY REQUIREMENTS
- A. Conform to ANSI A117.1 Guidelines for access for the handicapped.
- 1.6 FIELD MEASUREMENTS
- A. Verify that field measurements are as indicated on shop drawings.
- 1.7 COORDINATION
- A. Coordinate work under provisions of Section 01039.
 - B. Coordinate the work with placement of support framing and anchors in wall and floor.
 - C. Construction waste generated at the project site is subject to the requirements of the Construction Waste Management Plan; refer to Section 01505.
 - D. All work inside the enclosed building is subject to the requirements of the Construction Indoor Air Quality (IAQ) Management Plan; refer to Section 01745.
- 1.8 WARRANTY
- A. Provide Manufacturer's standard 15 year warranty for all materials.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Santana
- B. Capitol Partitions, Inc.
- C. Comtec Industries

2.2 MATERIALS

- A. High density polyethylene (HDPE) floor supported, overhead braced partition system.
- B. LEED Environmental Requirements:

1. Interior Finishes:
 - a. Adhesives, Sealants & Sealant Primers: All must comply with the Volatile Organic Compound (VOC) limits of Rule #1168 in the South Coast Air Quality Management District. Aerosol adhesives shall comply with the requirements of the Green Seal Standard for Commercial Adhesives GS-36.
 - b. Finishes, Coatings, Stains, Sealers & Shellacs: All must comply with the Volatile Organic Compound (VOC) limits of the South Coast Air Quality Management District (SCAQMD), Rule 1113, Architectural Coatings.
 - c. Paints & Primers: All must comply with the Volatile Organic Compound (VOC) limits of the Green Seal Standard GS-11, Paints, First Edition, May 20, 1993.
2. Panel material shall contain a minimum of one hundred percent (100%) recycled content.
3. Product must be extracted, harvested/recovered and manufactured within 500 miles of the project site.

2.3 ACCESSORIES

- A. Pilaster Shoe: ASTM A167 type 304 stainless steel with No. 4 finish, 3 inch high.
- B. Attachments, Screws, and Bolts: Stainless steel; tamper proof type, heavy duty extruded aluminum brackets.
- C. Through Bolts and Nuts: Stainless steel with tamper proof heads.
- D. Hardware:
 1. Integral HDPE Hinge
 2. Thumb turn door latch with exterior emergency access feature.
 3. Door strike and keeper with rubber bumper.
 4. Door pull for outswinging doors.
 5. Provide a stainless steel hook mounted in the middle of the door on the inside for hanging coats, handbags, et cetera.

2.3 FABRICATION

- A. Fabricate partitions out of solid plastic with finished faces and edges. Finish edges convex.
- B. Bevel corners and edges of cut outs.
- C. Doors and Panels:
 1. Thickness: 3/4 inch
 2. Door Width: 24 inch
 3. Door Width for Handicapped Use: 36 inch, out-swinging.
 4. Height: See Bathroom Elevations
- D. Thickness of Pilasters: 3/4 inch.

2.4 FINISHING

- A. Color to be selected by Architect from full range of colors.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify site conditions under provisions of Section 01039.
- B. Verify correct spacing of and between plumbing fixtures.
- C. Verify correct location of built in framing, anchorage, and bracing.

3.2 INSTALLATION

- A. Install partitions secure, rigid, plumb, and level in accordance with manufacturer's instructions.
- B. Maintain 1/4 inch space between wall and panels and between wall and end pilasters.
- C. Attached panel brackets securely to walls using anchor devices.
- D. Attach panels and pilasters to brackets with tamper proof through bolts and nuts. Provide continuous plastic wall bracket to attach to walls.
- E. Anchor urinal screen panels to walls with continuous panel brackets.
- F. Provide adjustment for floor variations with screw jack through steel saddles integral with pilaster. Conceal floor fastenings with pilaster shoes.
- G. Equip each door with continuous hinges, one door latch, outswinging door with pull.
- H. Install door strike and keeper with door bumper on each pilaster in alignment with door latch.
- I. Field touch up of scratches or damaged finish will not be permitted.
- J. Replace damaged or scratched materials with new materials.

3.3 ERECTION TOLERANCES

- A. Maximum Variation From True Position: 1/4 inch.
- B. Maximum Variation From Plumb: 1/8 inch.

3.4 ADJUSTING

- A. Adjust work under provisions of Section 01700.
- B. Adjust and align hardware to uniform clearance at vertical edge of doors, not exceeding 3/16 inch.

- C. Adjust hinges to position doors in full closed position when unlatched.
 - D. Adjust adjacent components for consistency of line or plane.
- 3.5 SCHEDULES
- A. See Bathroom Elevations and Architectural Floor Plans.
- 3.6 CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT
- A. Comply with Construction Indoor Air Quality (IAQ) Management Plan for all work installed in the enclosed building.
- 3.7 WASTE MANAGEMENT
- A. Separate waste materials in accordance with the Construction Waste Management Plan and place in designated areas.

END OF SECTION 10155

SECTION 10200 - LOUVERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. rectangular fixed, extruded-aluminum louvers.
- B. Related Sections include the following:
 - 1. Division 7 Section "Joint Sealants" for sealants installed in perimeter joints between louver frames and adjoining construction.
 - 2. Division 15 "Mechanical" for items to be installed with louvers that are a part of mechanical equipment and insulated blank off panels.

1.3 DEFINITIONS

- A. Louver Terminology: Definitions of terms for metal louvers contained in AMCA 501 apply to this Section unless otherwise defined in this Section or in referenced standards.
- B. Drainable-Blade Louver: Louver with blades having gutters that collect water and drain it to channels in jambs and mullions, which carry it to bottom of unit and away from opening.

1.4 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Provide louvers capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated without permanent deformation of louver components, noise or metal fatigue caused by louver blade rattle or flutter, or permanent damage to fasteners and anchors. Wind pressures shall be considered to act on vertical projection of louvers.
 - 1. Wind Loads: Determine loads based on pressures as indicated on Drawings.
 - 2. Wind Loads: Determine loads based on a uniform pressure of 30 lbf/sq. ft. (1436 Pa), acting inward or outward.
- B. Thermal Movements: Provide louvers that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to

both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.
- C. Air-Performance, Water-Penetration, Air-Leakage, and Wind-Driven Rain Ratings: Provide louvers complying with performance requirements indicated, as demonstrated by testing manufacturer's stock units identical to those provided, except for length and width according to AMCA 500-L.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For louvers and accessories. Include plans, elevations, sections, details, and attachments to other Work. Show blade profiles, insulated blank-off panel locations, angles, and spacing.
 1. For installed louvers and vents indicated to comply with design loads, include structural analysis data.
- C. Samples for Verification: For each type of metal finish required.
- D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency or by manufacturer and witnessed by a qualified testing agency, for each type of louver.

1.6 QUALITY ASSURANCE

- A. Source Limitations: Obtain louvers and vents through one source from a single manufacturer where indicated to be of same type, design, or factory-applied color finish.
- B. Welding: Qualify procedures and personnel according to the following:
 1. AWS D1.2, "Structural Welding Code--Aluminum."
- C. SMACNA Standard: Comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" for fabrication, construction details, and installation procedures.

1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify louver openings by field measurements before fabrication and indicate measurements on Shop Drawings.

1.8 WARRANTY

- A. Special Assembly Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of louvers that do not comply with requirements or that deteriorate

as defined in this Section within specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Structural failures including, but not limited to, excessive deflection.
 - b. Noise or vibration caused by thermal movements.
 - c. Adhesive or cohesive sealant failures.
 - d. Deterioration of metals and other materials beyond normal weathering.
 - e. Water leakage beyond specified limits.

2. Warranty Period: Five years from date of Substantial Completion.

B. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components on which finishes fail within specified warranty period. Warranty does not include normal weathering.

1. Warranty Period: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Storm Resistant Louvers:
 - a. Construction Specialties, Inc.
 - b. Greenheck.
 - c. Ruskin Company; Tomkins PLC.

B. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the products specified.
2. Products: Subject to compliance with requirements, provide one of the products specified.
3. Basis-of-Design Product: The design for each louver is based on the product named. Subject to compliance with requirements, provide either the named product or a comparable product by one of the other manufacturers specified.

2.2 MATERIALS

A. Aluminum Extrusions: ASTM B 221 (ASTM B 221M), alloy 6063-T5 or T-52.

B. Aluminum Sheet: ASTM B 209 (ASTM B 209M), alloy 3003 or 5005 with temper as required for forming, or as otherwise recommended by metal producer for required finish.

- C. Aluminum Castings: ASTM B 26/B 26M, alloy 319.
- D. Galvanized Steel Sheet: ASTM A 653/A 653M, G90 (Z275) zinc coating, mill phosphatized.
- E. Fasteners: Of same basic metal and alloy as fastened metal or 300 Series stainless steel, unless otherwise indicated. Do not use metals that are incompatible with joined materials.
 - 1. Use types and sizes to suit unit installation conditions.
 - 2. Use Phillips flat-head screws for exposed fasteners, unless otherwise indicated.
- F. Postinstalled Fasteners for Concrete and Masonry: Torque-controlled expansion anchors, made from stainless-steel components, with capability to sustain, without failure, a load equal to 4 times the loads imposed, for concrete, or 6 times the load imposed, for masonry, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency.
- G. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

2.3 FABRICATION, GENERAL

- A. Assemble louvers in factory to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- B. Maintain equal louver blade spacing, including separation between blades and frames at head and sill, to produce uniform appearance.
- C. Fabricate frames, including integral sills, to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints.
 - 1. Frame Type: Channel, unless otherwise indicated.
- D. Include supports, anchorages, and accessories required for complete assembly.
- E. Provide vertical mullions of type and at spacings indicated, but not more than recommended by manufacturer.
 - 1. Fully Recessed Mullions: Provide mullions fully recessed behind louver blades. Where length of louver exceeds fabrication and handling limitations, fabricate with close-fitting blade splices designed to permit expansion and contraction.
- F. Where indicated, provide subsills made of same material as louvers or extended sills for recessed louvers in masonry walls.
- G. Join frame members to each other and to fixed louver blades with fillet welds concealed from view, unless otherwise indicated or size of louver assembly makes bolted connections between frame members necessary.

2.4 FIXED, EXTRUDED-ALUMINUM LOUVERS

- A. Horizontal Storm-Resistant Louver: For installation at all locations where louvers are indicated.

1. Provide one of the following:
 - a. Louver Model 7315 by Construction Specialties, Inc.
 - b. Louver Model EME745 by Ruskin Company; Tomkins PLC
 - c. Louver Model EHH-701 by Greenheck.
2. Louver Depth: 7 inches (177 mm).
3. Frame and Blade Nominal Thickness: As required to comply with structural performance requirements, but not less than 0.060 inch (1.5 mm) for blades and 0.080 inch (2.0 mm) for frames.
4. Shape and Size: As indicated on drawings.
5. Performance Requirements:
 - a. Free Area: Not less than 7.5 sq. ft. (0.65 sq. m) for 48-inch- (1.2-m-) wide by 48-inch- (1.2-m-) high louver.
 - b. Wind-Driven Rain Performance: Not less than 99 percent effectiveness when subjected to a rain fall rate of 3 inches (75 mm) per hour and a wind speed of 29 mph (13 m/s) at a core area intake velocity of 500 fpm (2.5 m/s).

2.5 LOUVER SCREENS

- A. General: Provide screen at each exterior louver.
 1. Screen Location for Fixed Louvers: Interior face.
 2. Screening Type: Provide all active louvers with insect screening.
 - a. Where louvers are directly in front of mechanical ducts provide bird screen in lieu of insect screening.
- B. Secure screens to louver frames with stainless-steel machine screws, spaced a maximum of 6 inches (150 mm) from each corner and at 12 inches (300 mm) o.c.
- C. Louver Screen Frames: Fabricate with mitered corners to louver sizes indicated.
 1. Metal: Same kind and form of metal as indicated for louver to which screens are attached. Reinforce extruded-aluminum screen frames at corners with clips.
 2. Finish: Same finish as louver frames to which louver screens are attached.
 3. Type: Rewirable frames with a driven spline or insert for securing screen mesh.
- D. Louver Screening for Aluminum Louvers:
 1. Bird Screening: Aluminum, 1/2-inch- (12.7-mm-) square mesh, 0.063-inch (1.6-mm) wire.
 2. Insect Screening: Aluminum, 18-by-16 (1.4-by-1.6-mm) mesh, 0.012-inch (0.30-mm) wire.
- E. BLANK-OFF PANELS
 1. Insulated, Blank-Off Panels: Provided under Division 15.

2.7 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish louvers after assembly.

2.8 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with system established by the Aluminum Association for designating aluminum finishes.
- B. High-Performance Organic Finish: 2-coat fluoropolymer finish complying with AAMA 2605 and containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
 - 1. Color and Gloss: Match Architect's sample.

PART 3 - EXECUTION

3.1 EXAMINATION

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

3.2 PREPARATION

- A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

3.3 INSTALLATION

- A. Locate and place louvers and vents level, plumb, and at indicated alignment with adjacent work.
- B. Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.
- C. Form closely fitted joints with exposed connections accurately located and secured.
- D. Provide perimeter reveals and openings of uniform width for sealants and joint fillers, as indicated.
- E. Repair finishes damaged by cutting, welding, soldering, and grinding. Restore finishes so no evidence remains of corrective work. Return items that cannot be refinished in the field to the factory, make required alterations, and refinish entire unit or provide new units.

- F. Protect galvanized and nonferrous-metal surfaces from corrosion or galvanic action by applying a heavy coating of bituminous paint on surfaces that will be in contact with concrete, masonry, or dissimilar metals.
- G. Install concealed gaskets, flashings, joint fillers, and insulation as louver installation progresses, where weathertight louver joints are required. Comply with Division 7 Section "Joint Sealants" for sealants applied during louver installation.

3.4 ADJUSTING AND CLEANING

- A. Clean exposed surfaces of louvers and vents that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate until final cleaning.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.
- C. Restore louvers and vents damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.
 - 1. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with, factory-applied finish coating.

END OF SECTION 10200

SECTION 10280 - TOILET, BATH, AND ACCESSORIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Public-use washroom accessories.
 - 2. Custodial accessories.
- B. Related Sections include the following:
 - 1. Division 08 Section "Mirrors" for frameless mirrors.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include the following:
 - 1. Construction details and dimensions.
 - 2. Anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
 - 3. Material and finish descriptions.
 - 4. Features that will be included for Project.
 - 5. Manufacturer's warranty.
 - 6. Recycled Content: Provide cut sheets or letter from manufacturer(s) stating the percentage of both post- industrial and post-consumer recycled content in material(s) furnished under this section.
 - a. Fill out 'Recycled Content Certification' form attached as an appendix to Specification Section 01300, 'Submittals' for every material furnished under this section.
 - 7. Manufacturing Location: Provide cut sheets or letter from manufacturer(s) stating the location of material(s) manufacturer, and/or the location of the mining or harvest of raw material(s) furnished under this section.
 - a. Include statement indicating costs for product(s) or percentages of product(s) extracted, harvested/mined and manufactured within 500 miles of project site.

8. Material Safety Data Sheets (MSDS) or cut sheets for adhesives, sealants, sealant primers, paints or any other coatings with complete Volatile Organic Compound (VOC) information.
 - B. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.
 1. Identify locations using room designations indicated on Drawings.
 2. Identify products using designations indicated on Drawings.
 - C. Maintenance Data: For toilet and bath accessories to include in maintenance manuals.
- 1.4 QUALITY ASSURANCE
- A. Source Limitations: For products listed together in the same articles in Part 2, provide products of same manufacturer unless otherwise approved by Architect.
- 1.5 COORDINATION
- A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.
 - B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.
- 1.6 WARRANTY
- A. Special Mirror Warranty: Manufacturer's standard form in which manufacturer agrees to replace mirrors that develop visible silver spoilage defects and that fail in materials or workmanship within specified warranty period.
 1. Warranty Period: 15 years from date of Substantial Completion.
- 1.7 PROJECT CONDITIONS
- A. Construction waste generated at the project site is subject to the requirements of the Construction Waste Management Plan; refer to Section 01505.
 - B. Work included in this section and inside the enclosed building is subject to the requirements of the Construction Indoor Air Quality (IAQ) Management Plan; refer to Section 01745.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Stainless Steel: ASTM A 666, Type 304, 0.0312-inch (0.8-mm) minimum nominal thickness, unless otherwise indicated.

- B. Brass: ASTM B 19 flat products; ASTM B 16 (ASTM B 16M), rods, shapes, forgings, and flat products with finished edges; or ASTM B 30, castings.
- C. Steel Sheet: ASTM A 1008/A 1008M, Designation CS (cold rolled, commercial steel), 0.0359-inch (0.9-mm) minimum nominal thickness.
- D. Galvanized Steel Sheet: ASTM A 653/A 653M, with G60 (Z180) hot-dip zinc coating.
- E. Galvanized Steel Mounting Devices: ASTM A 153/A 153M, hot-dip galvanized after fabrication.
- F. Fasteners: Screws, bolts, and other devices of same material as accessory unit and tamper-and-theft resistant where exposed, and of galvanized steel where concealed.
- G. Chrome Plating: ASTM B 456, Service Condition Number SC 2 (moderate service).
- H. Mirrors: ASTM C 1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.
- I. ABS Plastic: Acrylonitrile-butadiene-styrene resin formulation.

2.2 WASHROOM ACCESSORIES

- A. Basis-of-Design Product: The design for accessories is based on products indicated. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
 - 1. A & J Washroom Accessories, Inc.
 - 2. American Specialties, Inc.
 - 3. Bobrick Washroom Equipment, Inc
 - 4. Bradley Corporation.
- B. HC Toilet Stall Grab Bar
 - 1. Basis-of-Design Product: Bobrick B-5837
- C. Vertical Toilet Stall Grab Bar
 - 1. Basis-of-Design Product: Bobrick B-5806 x 18
- D. Mirror Unit
 - 1. Basis-of-Design Product: Bobrick B-165 2436 Stainless steel frame
- E. Hand dryer
 - 1. Basis-of-Design Product: Excel Dryer/ Xlerator XL-W
- F. Toilet Tissue (Roll) Dispenser
 - 1. Basis-of-Design Product: Vista 9" Jumbo Bath Tissue Dispenser
- G. Sanitary-Napkin Disposal Unit

1. Basis-of-Design Product: Gamco ND-1W

- H. Liquid-Soap Dispenser , Wall-mounted Plastic
1. Basis-of-Design Product: Bobrick B-5050

2.3 CUSTODIAL ACCESSORIES

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
- C. Basis-of-Design Product: The design for accessories is based on products indicated. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:
1. A & J Washroom Accessories, Inc.
 2. American Specialties, Inc.
 3. Bobrick Washroom Equipment, Inc.
 4. Bradley Corporation.
 5. General Accessory Manufacturing Co. (GAMCO).
- D. Utility Shelf with Mop/Broom Holders and Hooks:
1. Basis-of-Design Product: Bobrick B239
 2. Mounting: Surface mounted
 3. Material and Finish: Stainless steel, No. 4 finish (satin)
- E. Utility Shelf
1. Basis-of-Design Product: Bobrick B295x24
 2. Mounting: Surface mounted
 3. Material and Finish: Stainless steel, No. 4 finish (satin)
- F. Paper Towel (Folded) Dispenser (Owner furnished, contractor installed)
1. Basis-of-Design Product:
 2. Mounting: Surface mounted
 3. Minimum Capacity: 400 C-fold or 525 multifold towels
 4. Material and Finish: Stainless steel, No. 4 finish (satin)
 5. Lockset: Tumbler type.
 6. Refill Indicators: Pierced slots at sides or front.

2.4 FABRICATION

- A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.
- B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.
- B. Grab Bars: Install to withstand a downward load of at least 250 lbf (1112 N), when tested according to method in ASTM F 446.

3.2 ADJUSTING AND CLEANING

- A. Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.
- B. Remove temporary labels and protective coatings.
- C. Clean and polish exposed surfaces according to manufacturer's written recommendations.

3.3 CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT

- A. Comply with Construction Indoor Air Quality (IAQ) Management Plan for all work included in this section and installed in the enclosed building.

3.6 WASTE MANAGEMENT

- A. Plan and coordinate the work included in this section to minimize the generation of offcuts and waste. Reuse scraps to the maximum extent feasible.
- B. Separate and recycle waste materials in accordance with the Construction Waste Management Plan and place in designated areas.

END OF SECTION 10280

SECTION 10426- SIGNAGE AND GRAPHICS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Engraved plastic signs

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Shop Drawings: Indicate sign styles, lettering font, foreground and background colors, locations, overall dimensions of each sign.
- C. Samples: Submit two sample signs, full size, illustrating type, style, letter font, and colors specified; method of attachment.
- D. Manufacturer's Installation Instructions: Include installation template and attachment devices.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five years experience.

1.5 REGULATORY REQUIREMENTS

- A. Conform to applicable codes, ANSI A117.1, IBC 2003.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site under provisions of Section 01600.
- B. Package signs, labeled in name groups.
- C. Store adhesive attachment tape at ambient room temperatures.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Do not install signs when ambient temperature is lower than recommended by manufacturer.
- B. Maintain this minimum temperature during and after installation of signs.

PART 2 PRODUCTS

2.1 ENGRAVED SIGNS

- A. Signs: Provide signs for all rooms required by building code, including but not limited to the following rooms: Bathrooms, closets, stairwells, storage rooms, mechanical/ electrical/ elevator equipment rooms, and outside elevator, directional signs, offices etc. Copy to be provided by Architect.
- B. Material: Acrylic. Photopolymer applique, raised lettering and braille.
 - 1. Face Color: Light (color to be selected).
 - 2. Copy Color: Dark (color to be selected).
 - 3. Total Thickness: 1/8 inch.
 - 4. Size: 8-1/2" x 7-1/4" inches.
 - 5. Edges: Square, slightly eased, left side radius is 5".
 - 6. Character Font: To be determined.
 - 7. Braille: 1/32 inch raised height.
 - 8. Mounting Height: 5'-0" to centerline of sign.
 - 9. Plastic Insert: Removable name tag slot w/ vinyl lettering

2.2 ACCESSORIES

- A. Tape Adhesive: Double sided tape.
- B. Adhesive: GE silicone. Clear.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that substrate surfaces are ready to receive work.

3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install signs after doors and wall surfaces are finished, and adjoining surface are complete.
- C. Review location of all signs with Architect.

END OF SECTION

SECTION 10520 - FIRE-PROTECTION SPECIALTIES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Portable fire extinguishers.
 - 2. Fire-protection cabinets for the following:
 - a. Portable fire extinguishers.

1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for fire-protection specialties.
 - 1. Fire Extinguishers: Include rating and classification.
 - 2. Cabinets: Include roughing-in dimensions, details showing mounting methods, relationships of box and trim to surrounding construction, door hardware, cabinet type, trim style, and panel style.
- B. Samples for Verification: For each type of exposed cabinet finish required, prepared on Samples of size indicated below and of same thickness and material indicated for the Work. If finishes involve normal color and texture variations, include sample sets showing the full range of variations expected.
 - 1. Size: 6-by-6-inch- (150-by-150-mm-) square Samples.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain fire extinguishers and cabinets through one source from a single manufacturer.
- B. NFPA Compliance: Fabricate and label fire extinguishers to comply with NFPA 10, "Standard for Portable Fire Extinguishers."

C. Fire Extinguishers: Listed and labeled for type, rating, and classification by an independent testing agency acceptable to authorities having jurisdiction.

1. Provide extinguishers listed and labeled by FM.

D. Regulatory Requirements:

1. Conform to U.L. requirements North Carolina 2009 Building Code.

1.5 COORDINATION

A. Coordinate size of cabinets to ensure that type and capacity of fire extinguishers indicated are accommodated.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Portable Fire Extinguishers:

- a. J.L. Industries, Inc.
- b. Larsen's Manufacturing Company.
- c. Potter-Roemer; Div. of Smith Industries, Inc.

2. Fire-Protection Cabinets:

- a. J.L. Industries, Inc.
- b. Larsen's Manufacturing Company.
- c. Potter-Roemer; Div. of Smith Industries, Inc.

2.2 MATERIALS

A. Cold-Rolled Steel Sheet: Carbon steel, complying with ASTM A 366/A 366M, commercial quality, stretcher leveled, temper rolled.

B. Aluminum: Alloy and temper recommended by aluminum producer and manufacturer for type of use and finish indicated, and as follows:

1. Sheet: ASTM B 209 (ASTM B 209M).
2. Extruded Shapes: ASTM B 221 (ASTM B 221M).

C. Stainless-Steel Sheet: ASTM A 666/A 666M, Type 302 or Type 304 alloy.

2.3 PORTABLE FIRE EXTINGUISHERS

- A. General: Provide fire extinguishers of type, size, and capacity for each cabinet and other locations indicated.
- B. Multipurpose Dry-Chemical Type: UL-rated 4-A:60-B:C, 10-lb (4.5-kg) nominal capacity, in enameled-steel container.
- C. Purple-K Dry-Chemical Type in Brass Container: UL-rated 120-B:C, 20-lb (9.1-kg) nominal capacity, with potassium bicarbonate-based dry chemical in chrome-plated brass container. Provide at food service equipment where indicated on drawings.

2.4 FIRE-PROTECTION CABINETS

- A. Cabinet Construction: Provide manufacturer's standard box (tub), with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated. Weld joints and grind smooth. Miter and weld perimeter door frames.
 - 1. Fire-Rated Cabinets: Listed and labeled to meet requirements of ASTM E 814 for fire-resistance rating of wall where it is installed.
 - a. Construct fire-rated cabinets with double walls fabricated from 0.0478-inch- (1.2-mm-) thick, cold-rolled steel sheet lined with minimum 5/8-inch- (16-mm-) thick, fire-barrier material.
 - b. Provide factory-drilled mounting holes.
 - 2. Cabinet Metal: Enameled-steel sheet.
- B. Cabinet Type: Suitable for the following:
 - 1. Fire extinguisher.
- C. Cabinet Mounting: Suitable for the following mounting conditions:
 - 1. Recessed: Cabinet box recessed in walls of sufficient depth to suit style of trim indicated.
- D. Cabinet Trim Style: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.
 - 1. Trimless with hidden flange of same metal and finish as box that overlaps surrounding wall finish and that is concealed from view by an overlapping door.
- E. Cabinet Trim Material: Manufacturer's standard, as follows:
 - 1. Stainless-steel sheet.
- F. Door Material: Manufacturer's standard, as follows:
 - 1. Stainless-steel sheet.
- G. Door Glazing: Manufacturer's standard, as follows:

1. Tempered Float Glass: ASTM C 1048, Kind FT, Condition A, Type I, Quality q3, as follows:

a. Class 1 (clear).

H. Door Style: Manufacturer's standard design, as follows:

1. Vertical duo panel with frame.

I. Door Construction: Fabricate doors according to manufacturer's standards, of materials indicated, and coordinated with cabinet types and trim styles selected.

1. Provide minimum 1/2-inch- (13-mm-) thick door frames, fabricated with tubular stiles and rails, and hollow-metal design.

J. Door Hardware: Provide manufacturer's standard door-operating hardware of proper type for cabinet type, trim style, and door material and style indicated. Provide either lever handle with cam-action latch, or exposed or concealed door pull and friction latch. Provide concealed or continuous-type hinge permitting door to open 180 degrees.

2.5 ACCESSORIES

A. Mounting Brackets: Manufacturer's standard steel, designed to secure extinguisher, of sizes required for types and capacities of extinguishers indicated, with plated or baked-enamel finish.

1. Provide brackets for extinguishers not located in cabinets.

2. Provide brackets for extinguishers located in cabinets.

B. Lettered Door Handle: Provide one-piece, cast-iron door handle with the word "FIRE" embossed into face.

C. Identification: Provide lettering to comply with authorities having jurisdiction for letter style, color, size, spacing, and location. Locate as indicated by Architect.

1. Identify fire extinguisher in cabinet with the words "FIRE EXTINGUISHER" applied to door.

a. Application Process: Silk-screened or.

b. Application Process: Vinyl letters.

c. Lettering Color: Red.

d. Orientation: Vertical.

2.6 COLORS AND TEXTURES

A. Colors and Textures: As selected by Architect from manufacturer's full range for these characteristics.

2.7 FINISHES, GENERAL

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: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.8 STAINLESS-STEEL FINISHES

- A. General: Remove or blend tool and die marks and stretch lines into finish. Grind and polish surfaces to produce uniform, directionally textured polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.
- B. Satin, Directional Polish: No. 6 finish.
- C. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in for cabinets to verify actual locations of piping connections before cabinet installation.
- B. Examine walls and partitions for suitable framing depth and blocking where recessed and semi recessed cabinets are to be installed.
- C. Examine fire extinguishers for proper charging and tagging.
 - 1. Remove and replace damaged, defective, or undercharged units.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing fire-protection specialties.
- B. Install in locations and at mounting heights indicated or, if not indicated, at heights acceptable to authorities having jurisdiction.
 - 1. Prepare recesses for cabinets as required by type and size of cabinet and trim style.
 - 2. Fasten mounting brackets to structure and cabinets, square and plumb.
 - 3. Fasten cabinets to structure, square and plumb.

3.3 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust cabinet doors that do not swing or operate freely.
- B. Refinish or replace cabinets and doors damaged during installation.
- C. Provide final protection and maintain conditions that ensure that cabinets and doors are without damage or deterioration at the time of Substantial Completion.

END OF SECTION 10520