

SECTION 10 23 76

WALKWAY COVERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Extruded aluminum walkway covers including footings, columns, beams, trim, deck, soffit, drainage system and trellis tubes.

B. Related Sections:

1. Division 3 Section "Cast-In-Place Concrete" for quality of concrete for footings.
2. Division 23 Section "Electrical Lighting" for lighting.
3. Division 32 Section "Portland Cement Concrete Paving" for walkway slab.

1.2 SUBMITTALS

A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

C. Samples for Initial Selection: Factory-applied color finish.

D. Delegated-Design Submittal: For compliance with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

E. Warranties: Sample of special warranties.

1.3 QUALITY ASSURANCE

A. Erector: By the manufacturer.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, sheets, panels, and other manufactured items so as not to be damaged or deformed. Package metal panels for protection during transportation and handling.

B. Unload, store, and erect cover in a manner to prevent bending, warping, twisting, and surface damage.

1.5 COORDINATION

- A. Coordinate sizes and locations of concrete footings with walkway slab paving.

1.6 WARRANTY

- A. Special Warranty on Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Finish: Deterioration includes, but is not limited to, the following:
 - a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: 5 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Manufacturer:
 - 1. *AVAddek* walkway cover systems and canopies submitted, 9201 Winkler Drive, Houston, Texas 77017, 713-944-0988.

2.2 MATERIALS

- A. All components shall be 6061-T6 or 6005-T5 Alloy extruded aluminum.
- B. Fasteners shall be concealed and if not concealed, coated to match finish on components.

2.3 WALKWAY COVER PERFORMANCE

- A. Delegated Design: Design system, including comprehensive engineering analysis by a qualified professional engineer, licensed to practice in the State of Louisiana, using performance requirements and design criteria indicated.

- B. Structural Performance: Walkway system shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated.
 - 1. Wind Loads: Determined by ASCE 7-98, based on wind velocity of 130 miles per hour.
 - 2. Deflection Limits: Design walkway system assemblies to withstand design loads with deflections no greater than the following:
 - a. All components shall be designed for maximum deflection of 1/240 of the span.
- C. Thermal Movements: Allow for thermal movements resulting from change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

2.4 FABRICATION

- A. Columns and beams shall be heliarc welded.
- B. The canopy deck is to have welded end closures at the deck terminations.
- C. The canopy shall be fabricated to drain through the columns.

2.5 FINISHES:

- A. All Components:
 - 1. Two-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish 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.
 - 2. Color and Sheen: To be selected by the Architect from manufacturers standards, including metallics.
 - a. Two (2) colors will be used. Beams and columns will be of a different color from other components.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with erector present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

- B. Before erection proceeds, survey elevations and locations of concrete surfaces and locations of anchor rods, bearing plates, and other embedments to receive structural framing, with erector present, for compliance with requirements and metal building system manufacturer's tolerances.
- C. Proceed with erection only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install the canopy in strict accordance with the manufacturer's recommendations. Do not field cut, drill, or alter structural members without written approval from manufacturer's professional engineer.
- B. Erect canopy footing before walkway slab and sufficiently deep to be covered with walkway slab.
- C. Install columns and beams straight and true.
- D. Install raincaps over draining sections of the deck.
- E. Fill downspout columns with grout to the discharge level to prevent standing water. Deflectors should be installed after grouting.

3.3 CLEANING AND PROTECTION

- A. Repair damaged coatings on components as per manufacturers' written instructions.
- B. Remove and replace components damaged during construction period.

END OF SECTION

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TOILET ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
 - 1. Toilet accessories.

1.2 SUBMITTALS

- A. Product Data: Include construction details, material descriptions and thicknesses, dimensions, profiles, fastening and mounting methods, specified options, and finishes for each type of accessory specified.
- B. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required. Use reference designations indicated on the Drawings which relate to accessories listed in the "Toilet Accessory Schedule" also appearing on the Drawings.
- C. Maintenance Data: For accessories to include in maintenance manuals specified in Division 1. Provide lists of replacement parts and service recommendations.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Provide products of same manufacturer for each type of accessory unit and for units exposed to view in same areas, unless otherwise approved by Architect.
- B. Product Options: Accessory requirements, including those for materials, finishes, dimensions, capacities, and performance, are established by specific products indicated in the "Toilet Accessory Schedule".
 - 1. Products of other manufacturers with equal characteristics, as judged solely by Architect, may be provided.
 - 2. Other manufacturers' products with equal characteristics may be considered. See Division 1 Section "Product Requirements".
 - 3. Do not modify aesthetic effects, as judged solely by Architect, except with Architect's approval. Where modifications are proposed, submit comprehensive explanatory data to Architect for review.

1.4 COORDINATION

- A. Coordinate accessory locations with other work to prevent interference with clearances required for access by disabled persons, 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.
- C. Verify the installation of 16 gage sheet metal backer-plates, additional studs or other devices at stud partition construction to secure accessories.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering accessories that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Toilet and Bath Accessories:
 - a. A & J Washroom Accessories, Inc.
 - b. American Specialties, Inc.
 - c. Bobrick Washroom Equipment, Inc. as the basis of design.
 - d. Bradley Corporation.
 - e. General Accessory Manufacturing Co. (GAMCO).
 - f. McKinney/Parker Washroom Accessories Corp.
 - B. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, those indicated in the "Toilet Accessory Schedule" appearing on the Drawings.

2.2 MATERIALS

- A. Stainless Steel: ASTM A 666, Type 304, with No. 4 finish (satin), in 0.0312-inch (0.8-mm) minimum nominal thickness, unless otherwise indicated.
- B. Brass: ASTM B 19, leaded and unleaded flat products; ASTM B 16 (ASTM B 16M), rods, shapes, forgings, and flat products with finished edges; ASTM B 30, castings.
- C. Sheet Steel: ASTM A 366/A 366M, cold rolled, commercial quality, 0.0359-inch (0.9-mm) minimum nominal thickness; surface preparation and metal pretreatment as required for applied finish.
- D. Galvanized Steel Sheet: ASTM A 653/A 653M, G60 (Z180).
- E. Chromium Plating: ASTM B 456, Service Condition Number SC 2 (moderate service), nickel plus chromium electrodeposited on base metal.
- F. Baked-Enamel Finish: Factory-applied, gloss-white, baked-acrylic-enamel coating.
- G. Galvanized Steel Mounting Devices: ASTM A 153/A 153M, hot-dip galvanized after fabrication.
- H. Fasteners: Screws, bolts, and other devices of same material as accessory unit, tamper and theft resistant when exposed, and of galvanized steel when concealed.

2.3 FABRICATION

- A. General: One, maximum 1-1/2-inch- (38-mm-) diameter, unobtrusive stamped manufacturer logo, as approved by Architect, is permitted on exposed face of accessories. On interior surface not exposed to view or back surface of each accessory, provide printed, waterproof label or stamped nameplate indicating manufacturer's name and product model number.
- B. General: Names or labels are not permitted on exposed faces of accessories. On interior surface not exposed to view or on back surface of each accessory, provide printed, waterproof label or stamped nameplate indicating manufacturer's name and product model number.
- C. Surface-Mounted Toilet Accessories: Unless otherwise indicated, fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with continuous stainless-steel hinge. Provide concealed anchorage where possible.

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. Accessories Installed for Use by Disabled Persons: Install accessories as per ADA (Americans with Disabilities Act) and ANSI A117.1-1992 regulations and guidelines.

3.2 ADJUSTING AND CLEANING

- A. Adjust accessories for unencumbered, smooth operation and verify that mechanisms function properly. 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 TOILET ACCESSORY SCHEDULE

- A. Refer to "Toilet Room Accessory Schedule" appearing on the Drawings for "Bobrick" model numbers and mounting heights.

END OF SECTION

SECTION 10 44 13

FIRE EXTINGUISHER CABINETS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fire protection cabinets for the following:
 - a. Portable fire extinguishers.
- B. Related Sections:
 - 1. Division 10 Section "Fire Extinguishers."

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for fire protection cabinets.
 - 1. Fire Protection 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. Shop Drawings: For fire protection cabinets. Include plans, elevations, sections, details, and attachments to other work.
- C. Product Schedule: For fire protection cabinets. Coordinate final fire protection cabinet schedule with fire extinguisher schedule to ensure proper fit and function.
- D. Maintenance Data: For fire protection cabinets to include in maintenance manuals.

1.3 QUALITY ASSURANCE

- A. Fire-Rated, Fire Protection Cabinets, if shown in rated walls or partitions: Listed and labeled to comply with requirements in ASTM E 814 for fire-resistance rating of walls where they are installed.

1.4 COORDINATION

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

- B. Coordinate sizes and locations of fire protection cabinets with wall depths.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B.

2.2 FIRE-PROTECTION CABINETS

- A. Cabinet Construction: Provide manufacturer's standard box (tub), fully recessed, 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. No 2409-R1 by Larsen as the basis of design.

1. Cabinet Metal: Steel sheet.
2. Fire-Rated Cabinets, if shown in rated walls or partitions: Construct fire-rated cabinets with double walls fabricated from 0.0428-inch- (1.1-mm-) thick, cold-rolled steel sheet lined with minimum 5/8-inch- (16-mm-) thick, fire-barrier material. Provide factory-drilled mounting holes. Fire stopping at penetrations.

- B. Cabinet Type: Suitable for the following:

1. Fire extinguisher.

- C. Available Manufacturers:

1. J. L. Industries, Inc., a division of Activar Construction Products Group, as the basis of design.
2. Kidde Residential and Commercial Division, Subsidiary of Kidde plc.
3. Larsen's Manufacturing Company.
4. Modern Metal Products, Division of Technico Inc.
5. Moon-American.
6. Potter Roemer LLC.
7. Watrous Division, American Specialties, Inc.

- D. Cabinet Mounting: Suitable for the following mounting conditions:

1. Recessed: Cabinet box recessed in walls of sufficient depth to suit style of trim indicated.

- E. Cabinet Trim Style: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.

1. Exposed Trim: One-piece combination trim and perimeter door frame overlapping surrounding wall surface with exposed trim face and wall return at outer edge (backbend).
 - a. Flat Trim: 1/4- to 5/16-inch (6- to 8-mm) backbend depth.

- F. Cabinet Trim Material: Manufacturer's standard, as follows:

1. Steel sheet.
- G. Door Material: Manufacturer's standard, as follows:
1. Steel sheet with white baked acrylic enamel used as prime coat for finish painting under Division 9 Section "Interior Painting".
- H. Door Style: Manufacturer's standard design, as follows:
1. Solid.
- I. Accessories:
1. Mounting Bracket: Manufacturer's standard steel, designed to secure fire extinguisher to fire protection cabinet, of sizes required for types and capacities of fire extinguishers indicated, with plated or baked-enamel finish.
 2. Identification: Lettering complying with authorities having jurisdiction for letter style, size, spacing, and location.
 - a. Identify fire extinguisher in fire protection cabinet with the words "FIRE EXTINGUISHER."
 - 1) Location: Applied to cabinet door.
 - 2) Application Process: Decal – 2 inch by 19 inch - #DCVBF, J. L. Industries, Inc., as the basis of design.
 - 3) Lettering Color: Black.
 - 4) Orientation: Vertical.
- J. Finishes:
1. Manufacturer's standard white powder-coat finish for the following:
 - a. Exterior of cabinet trim except for those surfaces indicated to receive another finish.
 - b. Interior of cabinet.

2.3 FABRICATION

- A. Fire Protection Cabinets: Provide manufacturer's standard box (tub) with trim, frame, door, and hardware to suit cabinet type, trim style, and door style indicated.
1. Weld joints and grind smooth.
 2. Provide factory-drilled mounting holes.
- B. Cabinet Doors: Fabricate doors according to manufacturer's standards, from materials indicated and coordinated with cabinet types and trim styles selected.
1. Fabricate door frames with tubular stiles and rails and hollow-metal design, minimum 1/2 inch (13 mm) thick.
 2. Fabricate door frames of one-piece construction with edges flanged.
 3. Miter and weld perimeter door frames.

- C. Cabinet Trim: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.

2.4 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 of fire protection cabinets from damage by applying a strippable, temporary protective covering before shipping.
- C. Finish fire protection cabinets after assembly.
- D. 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.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in for cabinets to verify actual locations before cabinet installation.
- B. Examine walls and partitions for suitable framing depth and blocking where cabinets will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare recesses for fire protection cabinets as required by type and size of cabinet and trim style.

3.3 INSTALLATION

- A. General: Install fire protection cabinets in locations and at mounting heights indicated
 - 1. Fire Protection Cabinets: Maximum 54 inches (1372 mm) above finished floor to top of cabinet. Verify exact location with Architect.
- B. Identification: Apply decals at locations indicated.

3.4 ADJUSTING AND CLEANING

- A. Remove temporary protective coverings and strippable films, if any, as fire protection cabinets are installed unless otherwise indicated in manufacturer's written installation instructions.

- B. Adjust fire protection cabinet doors to operate easily without binding. Verify that integral locking devices operate properly.
- C. On completion of fire protection cabinet installation, clean interior and exterior surfaces as recommended by manufacturer.
- D. Touch up marred finishes, or replace fire protection cabinets that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by fire protection cabinet and mounting bracket manufacturers.
- E. Replace fire protection cabinets that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION

SECTION 10 44 16

FIRE EXTINGUISHERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Portable, hand-carried fire extinguishers for installation in cabinets and mounting on walls.

B. Related Sections:

1. Division 10 Section "Fire Extinguisher Cabinets."

1.2 SUBMITTALS

- A. Product Data: For each type of product indicated. Include rating and classification, material descriptions, dimensions of individual components and profiles, and finishes for fire extinguisher.

- B. Product Schedule: Coordinate final fire extinguisher schedule with fire protection cabinet schedule to ensure proper fit and function.

- C. Operation and Maintenance Data: For fire extinguishers to include in maintenance manuals.

- D. Warranty: Sample of special warranty.

1.3 QUALITY ASSURANCE

- A. NFPA Compliance: Fabricate and label fire extinguishers to comply with NFPA 10, "Portable Fire Extinguishers."

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

1. Provide fire extinguishers approved, listed, and labeled by FMG.

1.4 COORDINATION

- A. Coordinate type and capacity of fire extinguishers with fire protection cabinets to ensure fit and function.

1.5 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace fire extinguishers that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Failure of hydrostatic test according to NFPA 10.
 - b. Faulty operation of valves or release levers.
 - 2. Warranty Period: Six years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS

- A. Fire Extinguishers: Type, size, and capacity for each fire protection cabinet.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. J. L. Industries, Inc.
 - b. Larsen's Manufacturing Company.
 - c. Potter Roemer LLC.
 - 2. Valves: Manufacturer's standard.
 - 3. Handles and Levers: Manufacturer's standard.
 - 4. Instruction Labels: Include pictorial marking system complying with NFPA 10, Appendix B.
- B. Multipurpose Dry-Chemical Type in Steel Container: UL-rated 2-A:10-B:C, 5-lb (2.3-kg) nominal capacity, with monoammonium phosphate-based dry chemical in enameled-steel container.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide one of the following products or comparable products by another manufacturer.
 - a. "Cosmic 5E", J. L. Industries, Inc.
 - b. "MP5-A"; Larsen's Manufacturing Company.
 - c. "3005", Potter Roemer LLC.

2.2 MOUNTING BRACKETS FOR WALL HUNG

- A. Identification: Lettering complying with authorities having jurisdiction for letter style, size, spacing, and location. Locate as indicated by Architect.
 - 1. Identify bracket-mounted fire extinguishers with the words "FIRE EXTINGUISHER" in red letter decals applied to mounting surface.
 - a. Orientation: Vertical.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine fire extinguishers for proper charging and tagging.
 - 1. Remove and replace damaged, defective, or undercharged fire extinguishers.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install fire extinguishers in cabinets and on walls in locations indicated on the Drawings.

END OF SECTION

