

DIVISION 10

SPECIALTIES

SECTION 10A

CHALKBOARD AND TACKBOARDS

PART I GENERAL

10A1.01 GENERAL REQUIREMENTS

- A. Attention is directed to the printed form of the Contract and Division 1 of these specifications entitled "General Requirements", which are hereby made a part of this Section of the Specifications.
- B. Equality of material, article, assembly or system, other than those named or described in this Section will be determined in accordance with the provisions of the Contract Form.

10A1.02 RELATED DOCUMENTS

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

10A1.03 DESCRIPTION OF WORK:

- A. Extent of chalkboards and tackboards is indicated on the drawings.
- B. Types of chalkboards and tackboards specified in this section include the following:
  - 1. Porcelain enamel chalkboards.
  - 2. Natural cork tackboards.

10A1.04 QUALITY ASSURANCE:

- A. Manufacturer: Furnish all chalkboards and tackboards by a single manufacturer for the entire project.

10A1.05 SUBMITTALS:

- A. Shop Drawings: Submit shop drawings for each type of chalkboard and tackboard. Include sections of typical trim members and dimensioned elevations. Show anchors, grounds, reinforcement, accessories, layout and

installation details.

- B. **Product Data:** Submit manufacturer's technical data and installation instructions for each material and component part, including data substantiating that materials comply with requirements.
- C. **Samples:** Submit full range of color samples for each type of chalkboard, tackboard, trim and accessory required. Provide 12" square samples of sheet materials and 12" lengths of trim members for color verification after selections have been made.

10A1.06 **SPECIAL PRODUCT WARRANTY:**

- A. **Porcelain Enamel Chalkboard Warranty:** Furnish the manufacturer's written warranty, agreeing to replace, for the lifetime of the building, porcelain enamel chalkboards that do not retain their original writing and erasing qualities, become slick and shiny, or exhibit crazing, cracking or flaking, provided manufacturer's instructions with regard to handling, installation, protection and maintenance have been followed. Replacement is limited to material replacement only; labor for removal and reinstallation is not included.

**PART II - PRODUCTS**

10A2.01 **ACCEPTABLE MANUFACTURERS:**

- A. **Available Manufacturers:** Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:

1. **Manufacturers of Porcelain Enamel Chalkboards:**

Carolina Chalkboard Co.  
Claridge Products and Equipment, Inc.  
Greensteel, Inc.  
Nelson-Adams Co.

2. **Manufacturers of Tackboards:**

Carolina Chalkboard Co.  
Claridge Products and Equipment, Inc.  
Greensteel, Inc.  
Nelson-Adams Co.

## 10A2.02 MATERIALS:

- A. **Combined chalkboard tackboard units:** All units supplied shall consist of a central 8'-0" x 4'-0" chalkboard with flanking tackboards measuring 3'-0" x 4'-0", forming a single 14'-0" x 4'-0" unit similar in configuration to Claridge Type C-RC.
- B. **Porcelain Enamel Chalkboards:** Provide balanced, high pressure laminated porcelain enamel chalkboards of 3-ply construction consisting of facing sheet, core material and backing.
- C. **Facing Sheet:** Provide facing sheet of 24-gage enameling grade steel sheet especially processed for temperatures used in coating porcelain on steel. Coat the exposed face with a 3-coat process consisting of primer, ground coat and color cover coat, and the concealed face with a 2-coat process consisting of primer and ground coat. Fuse cover and ground coats to the steel at the manufacturer's standard firing temperatures, but not less than 1,200 deg. F (649 deg. C).
1. **Proprietary Facing Sheet:** At the Contractor's option provide 24-gage, "Vitracite", porcelain enamel clad, type 1 stretcher-leveled aluminized steel facing sheet, as manufactured by Claridge Products and Equipment, Inc. in lieu of the facing sheet construction specified above. Fuse porcelain enamel coating to sheet facing steel at approximately 1,000 deg. F (538 deg. C).
  2. **Cover Coat:** Provide the manufacturer's standard matte finish cover coat, color as selected from the manufacturer's standards.
  3. **Core:** Provide the manufacturer's standard 3/8" thick particleboard core material complying with the requirements of ANSI A208.1, Grade 1-M-1.
  4. **Backing Sheet:** Provide the manufacturer's standard 0.015" thick aluminum sheet backing.
  5. **Laminating Adhesive:** Provide the manufacturer's standard moisture-resistant thermoplastic type adhesive.
- D. **Natural Cork Tackboards:** Provide single layer 1/4" thick seamless, compressed fine grain bulletin board quality natural cork sheet, face sanded for natural finish, complying with MS MIL-C15116, Type II.

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1. **Backing:** Make panels rigid by factory laminating cork face sheet under pressure to 1/4" thick hardboard backing.
- E. **Metal Trim and Accessories:** Fabricate frames and trim of not less than 0.062" thick aluminum alloy, size and shape as indicated, to suit type of installation. Provide straight, single length units wherever possible; keep joints to a minimum. Miter corners to a neat, hairline closure.
1. Where the size of boards or other conditions exist which require support in addition to the normal trim, provide structural supports or modify the trim as indicated, or as selected by the Architect from the manufacturer's standard structural support accessories to suit the condition indicated.
  2. **Baked Enamel Finish:** Furnish exposed aluminum trim, accessories and fasteners with the manufacturer's standard baked enamel finish in color to be selected by the Architect.
  3. **Chalktray:** Furnish manufacturer's standard continuous box type aluminum chalktray with slanted front and cast aluminum end closures for each chalkboard.

10A2.03 FABRICATION;

- A. **Porcelain enamel Chalkboards:** Laminate facing sheet and backing sheet to core material under pressure with manufacturer's recommended flexible, waterproof adhesive.
- B. **Assembly:** Provide factory assembled chalkboard and tackboard units, except where field assembled units are required.
1. Make joints only where the total length exceeds the maximum manufactured length. Fabricate with the minimum number of joints, balanced around the center of the board, as acceptable to the Architect.
  2. Provide the manufacturer's standard vertical joint system between abutting sections of chalkboard.
  3. Provide the manufacturer's standard mullion trim at joints between chalkboard and tackboard.

PART III - EXECUTION

10A3.01 INSTALLATION:

- A. Deliver factory-built chalkboards and tackboard units completely assembled in one piece without joints, wherever possible. Where dimensions exceed panel size, provide 2 or more pieces of equal length as acceptable to the Architect. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site. Use splines at joints to maintain surface alignment.
- B. Install units in locations and at mounting heights indicated and in accordance with the manufacturer's instructions. Keep perimeter lines straight, plumb and level. Provide all grounds, clips, backing materials, adhesives, brackets, anchors, trim and accessories necessary for a complete installation.
- C. Coordinate job-site assembled units with grounds, trim and accessories. Join all parts with a neat, precision fit.

10A3.02 ADJUST AND CLEAN:

- A. Verify that accessories required for each unit have been properly installed and that operating units function properly.
- B. Clean units in accordance with the manufacturer's instructions. Break-in chalkboards only as recommended by the manufacturer.

END OF SECTION 10A

DIVISION 10

SPECIALTIES

SECTION 10B

TOILET PARTITIONS

PART I GENERAL

10B1.01 GENERAL REQUIREMENTS

- A. Attention is directed to the printed form of the Contract and Division 1 of these specifications entitled "General Requirements", which are hereby made a part of this Section of the Specifications.
- B. Equality of material, article, assembly or system, other than those named or described in this Section will be determined in accordance with the provisions of the Contract Form.

10B1.02 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

10B1.03 DESCRIPTION OF WORK:

- A. Extent of toilet partitions is indicated on drawings.
- B. Types of toilet partitions required include the following:
  - 1. Plastic laminate, floor-supported.
- C. Types of screens required include the following:
  - 1. Plastic laminate, floor-supported.
- D. Toilet accessories are specified elsewhere in Division 10.

10B1.04 QUALITY ASSURANCE:

- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible, to ensure proper fitting of work. However, allow for adjustments within specified tolerances wherever taking of field measurements before fabrication

might delay work.

- B. **Coordination:** Furnish inserts and anchorages which must be built into other work for installation of toilet partitions and related work; coordinate delivery with other work to avoid delay.

10B1.05 **SUBMITTALS:**

- A. **Product Data:** Submit manufacturer's detailed technical data for materials, fabrication, and installation, including catalog cuts of anchors, hardware, fastenings, and accessories.
- B. **Shop Drawings:** Submit shop drawings for fabrication and erection of toilet partition assemblies not fully described by product drawings, templates, and instructions for installation of anchorage devices built into other work.
- C. **Samples:** Submit full range of color samples for each type of unit required. Submit 6" square samples of each color and finish on same substrate to be used in work, for color verification after selections have been made.

PART II - PRODUCTS

10B2.01 **ACCEPTABLE MANUFACTURERS:**

- A. **Available Manufacturers:** Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:
1. Accurate Partitions Div., United States Gypsum Co.
  2. All American Metal Corp.
  3. Ampco Products Inc.
  4. Flush-Metal Partition Corp.
  5. General Partitions Mfg. Corp.
  6. Global Steel Products Corp.
  7. Knickerbocker Partition Corp.
  8. Metpar Steel Products Corp.
  9. Sanymetal Products Co.

10B2.02 **MATERIALS:**

- A. **General:** Provide materials which have been selected for surface flatness and smoothness. Exposed surfaces which exhibit pitting, seam marks, roller marks, stains, discolorations, telegraphing of core material, or other

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imperfections on finished units are not acceptable.

- B. Plastic Laminate: NEMA Std. LD-3, minimum 0.062" thick, color and pattern as selected by Architect.
- C. Core Material for Plastic Laminate: Manufacturer's standard particleboard or plywood, in thickness to provide nominal dimension of 1" minimum for doors, panels, and screens, 1-1/4" for pilasters.
- D. Pilaster Shoes: ASTM A 167, Type 302/304 stainless steel, not less than 3" high and 20 gage, finished to match hardware.
- E. Stirrup Brackets: Manufacturer's standard design for attaching panels to walls and pilasters, chromium-plated non-ferrous cast alloy ("Zamac").
- F. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories of chromium-plated non-ferrous cast alloy ("Zamac").
- G. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel, chromium-plated steel, or brass finished to match hardware, with theft-resistant type heads and nuts. For concealed anchors, use hot-dip galvanized, cadmium-plated, or other rust-resistant protective-coated steel.

10B2.03 FABRICATION:

- A. General: Furnish standard doors, panels, screens, and pilasters fabricated for partition system, unless otherwise indicated. Furnish units with cutouts, drilled holes, and internal reinforcement to receive partition-mounted hardware, accessories, and grab bars, as indicated.
- B. Door Dimensions: Unless otherwise indicated, furnish 24" wide inswinging doors for ordinary toilet stalls and 36" wide (clear opening) inswinging doors at stalls equipped for use by handicapped.
- C. Plastic Laminate Partitions and Screens:  
General: Pressure-laminate one-piece face sheets to core material with no splices or joints, and with edges straight and sealed. Seal exposed core material at cutouts to protect against moisture.
- D. Floor-Supported Partitions: Furnish galvanized steel



anchorage devices, complete with threaded rods, lock washers, and leveling adjustment nuts at pilasters, to permit structural connection at floor. Furnish shoe at each pilaster to conceal anchorage.

E. **Floor-Supported Screens:** Furnish pilasters not less than 1" in thickness, panels and pilasters of same construction and finish as toilet partitions. Furnish galvanized steel anchorage devices, complete with threaded rods, lock washers, and leveling adjustment nuts at pilasters, to permit structural connection to floor. Furnish shoe at each pilaster to conceal anchorage.

F. **Hardware:** Furnish hardware for each compartment in partition system, as follows:

1. **Hinges:** Cutout inset type, adjustable to hold door open at any angle up to 90°. Provide gravity type, spring-action cam type, or concealed torsion rod type, to suit manufacturer's standards.
2. **Latch and Keeper:** Recessed latch unit, designed for emergency access, with combination rubber-faced door strike and keeper.
3. **Coat Hook:** Manufacturer's standard unit, combination hook and rubber-tipped bumper.
4. **Door Pull:** Manufacturer's standard unit.

### PART III - EXECUTION

#### 10B3.01 INSTALLATION:

A. **General:** Comply with manufacturer's recommended procedures and installation sequence. Install partitions rigid, straight, plumb, and level. Provide clearances of not more than 1/2" between pilasters and panels, and not more than 1" between panels and walls. Secure panels to walls with not less than two stirrup brackets attached near top and bottom of panel. Locate wall brackets so that holes for wall anchorages occur in masonry or tile joints. Secure panels to pilasters with not less than two stirrup brackets located to align with stirrup brackets at wall. Secure panels in position with manufacturer's recommended anchoring devices.

B. **Floor-Supported Partitions:** Set pilaster units with anchorages having not less than 2" penetration into

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structural floor, unless otherwise recommended by partition manufacturer. Level, plumb, and tighten installation with devices furnished. Hang doors and adjust so that tops of doors are level with tops of pilasters when doors are in closed position.

- C. Screens: Attach with concealed anchoring devices, as recommended by manufacturer to suit supporting wall structure. Set units to provide support and to resist lateral impact.
- D. Accessories: Mount accessories to partition units in accordance with manufacturer's instructions.

10B3.02 ADJUST AND CLEAN:

- A. Hardware Adjustment: Adjust and lubricate hardware for proper operation. Set hinges on inswinging doors to hold open approximately 30° from closed position when unlatched. Set hinges on outswinging doors (and entrance swing doors) to return to fully closed position.
- B. Clean exposed surfaces of partition systems using materials and methods recommended by manufacturer, and provide protection as necessary to prevent damage during remainder of construction period.

END OF SECTION 10B

DIVISION 10

SPECIALTIES

SECTION 10E

TOILET AND BATH ACCESSORIES

PART I GENERAL

10E1.01 GENERAL REQUIREMENTS

- A. Attention is directed to the printed form of the Contract and Division 1 of these specifications entitled "General Requirements", which are hereby made a part of this Section of the Specifications.
- B. Equality of material, article, assembly or system, other than those named or described in this Section will be determined in accordance with the provisions of the Contract Form.

10E1.02 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

10E1.03 DESCRIPTION OF WORK:

- A. Extent of each type of toilet accessory is indicated on drawings and schedules.
- B. Types of toilet accessories required include the following:
  - 1. Toilet tissue dispenser.
  - 2. Combination towel dispenser/waste receptacle unit.
  - 3. Grab bar.
  - 4. Soap dispenser.
  - 5. Soap dish, recessed.
  - 6. Towel bar.
  - 7. Mop and broom holder.
  - 8. Robe hook.
  - 9. Soap dish, surface mounted.
  - 10. Towel pin.
  - 11. Mirror.

10E1.04 QUALITY ASSURANCE:

- A. Inserts and Anchorages: Furnish inserts and anchoring

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devices which must be set in concrete or built into masonry; coordinate delivery with other work to avoid delay.

- B. **Accessory Locations:** Coordinate accessory locations with other work to avoid interference and to assure proper operation and servicing of accessory units.
- C. **Products:** Provide products of same manufacturer for each type of accessory unit and for units exposed in same areas, unless otherwise acceptable to Architect.

10E1.05 **SUBMITTALS:**

- A. **Product Data:** Submit manufacturer's technical data and installation instructions for each toilet accessory.
- B. **Setting Drawings:** Provide setting drawings, templates, instructions, and directions for installation of anchorage devices and cut-out requirements in other work.

PART II - PRODUCTS:

10E2.01 **ACCEPTABLE MANUFACTURERS:**

- A. **Available Manufacturers:** Subject to compliance with requirements, manufacturers offering toilet accessories which may be incorporated in the work include, but are not limited to, the following:
  - 1. American Specialties, Inc.
  - 2. Bobrick Washroom Equipment, Inc.
  - 3. Bradley Corporation.
  - 4. Ironmonger.

10E2.02 **MATERIALS, GENERAL:**

- A. **Stainless Steel:** AISI Type 302/304, with polished No. 4 finish, 22 gage (.034") minimum, unless otherwise indicated.
- B. **Brass:** Leaded and unleaded, flat products, FS QQ-B-613; Rods, shapes forgings and flat products with finished edges, FS QQ-B-626.
- C. **Sheet Steel:** Cold rolled, commercial quality ASTM A 366, 20-gage (.040") minimum, unless otherwise indicated. Surface preparation and metal pretreatment as required for applied finish.

- D. Galvanized Steel Sheet: ASTM A 527, G60.
- E. Chromium Plating: Nickel and chromium electro-deposited on base metal, ASTM B 456, Type SC 2.
- F. Baked Enamel Finish: Factory-applied, gloss white, baked acrylic enamel coating.
- G. Mirror Glass: FS DD-G-451, Type I, Class 1, Quality q2, 1/4" thick, with silver coating, copper protective coating, and non-metallic paint coating complying with FS DD-M-411.
- H. Galvanized Steel Mounting Devices: ASTM A 153, hot-dip galvanized after fabrication.
- I. Fasteners: Screws, bolts, and other devices of same material as accessory unit or of galvanized steel where concealed.

10E2.03 TOILET TISSUE DISPENSERS:

- A. Roll-In-Reserve Dispenser: Fabricate of stainless steel for mounting indicated below, sized to store and dispense either 4 1/2" diameter or 5" diameter core tissue rolls, with reserve roll placed in service by automatic release or by action of manual release bar. Hinge front of unit with pivot hinge and secure with tumbler lockset.
  - 1. Mounting: Surface-mounted, concealed anchorage.
- B. Single-Roll Dispenser: Size to accommodate core tissue to 5" diameter roll.
  - 1. Fabrication: Molded eccentric-shaped plastic spindle with die-cast, satin-finished aluminum bracket, designed for recessed mounting.

10E2.04 COMBINATION TOWEL DISPENSER/WASTE RECEPTACLE UNIT:

- A. Recessed Unit With Projecting Receptacle: Stainless steel combination unit fabricated for nominal 4" wall depth and with continuous seamless 1" wall flange. Provide towel compartment in upper portion of unit, designed to dispense not less than 400 C-fold or 700 multifold paper towels, double panel door with continuous piano hinge and tumbler lock. Waste receptacle in lower portion of unit provided with reusable heavy-duty vinyl liner, minimum 12 gallon

capacity, secured in place by tumbler lock.

10E2.05 GRAB BARS:

- A. **Stainless Steel Type:** Provide grab bars with wall thickness not less than 18 gage and as follows:
1. **Mounting:** Concealed, manufacturer's standard flanges and anchorages.
  2. **Clearance:** 1-1/2" clearance between wall surface and inside face of bar.
  3. **Gripping Surfaces:** Smooth, satin finish.
  4. **Medium-Duty Size:** Outside diameter of 1-1/4".

10E2.06 SOAP DISPENSERS:

- A. **Liquid Soap Dispenser, Push Up Type:** Fabricate for surface mounting, sized for 16 fl.oz. minimum capacity. Provide stainless steel piston, springs, and internal parts designed to dispense soap in measured quantity by pump action.
1. **Equip unit:** with push type valve for dispensing soap in liquid form.

10E2.07 SHOWER AND BATH ACCESSORIES:

- A. **Recessed Soap Dish:** One piece construction of stainless steel for recess mounting in wall; furnish with mounting clamp or lugs appropriate for wall construction indicated.
- B. **Towel Bar:** 24" long satin-finished Type 304 stainless steel tubular (round) bar and end brackets. Provide galvanized backplates for concealed mounting.

10E2.08 MISCELLANEOUS ACCESSORIES:

- A. **Mop and Broom Holder/Utility Shelf:** Combination unit with 18-gage (.050") Type 304 stainless steel shelf with 1/2" returns, 16-gage (.062") support brackets for wall mounting, provide 16-gage stainless steel hooks for wiping rags on front of shelf, together with spring-loaded rubber cam type mop/broom holders; 1/4" diameter stainless steel drying rod suspended beneath shelf. Provide 36" long unit with 4 mop/broom holders and 3 hooks.

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- B. Soap Dish: Satin-finished stainless steel soap dish with with wall bracket equiped for concealed mounting.
- C. Towel Pin: Satin-finished stainless steel pin projecting from wall surface; with backplate for concealed mounting.

10E2.09 FABRICATION:

- A. **General:** No names or labels are permitted on exposed faces of toilet and bath accessory units. On either interior surface not exposed to view or on back surface, provide identification of each accessory item by either a printed, waterproof label or a stamped nameplate indicating manufacturer's name and product model number.
- B. **Surface-Mounted Toilet Accessories, General:** Except where otherwise indicated, fabricate units with tight seams and joints, exposed edges rolled. Hang doors or access panels with continuous stainless steel piano hinge. Provide concealed anchorage wherever possible.
- C. **Recessed Toilet Accessories, General:** Except where otherwise indicated, fabricate units of all welded construction, without mitered corners. Hang doors or access panels with full-length stainless steel piano hinge. Provide anchorage which is fully concealed when unit is closed.

PART III - EXECUTION

10E3.01 INSTALLATION:

- A. Install toilet accessory units in accordance with manufacturers' instructions, using fasteners which are appropriate to substrate and recommended by manufacturer of unit. Install units plumb and level, firmly anchored in locations and at heights indicated.

10E3.02 ADJUSTING AND CLEANING:

- A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.
- B. Clean and polish all exposed surfaces after removing protective coatings.

10E3.03 SCHEDULE OF TOILET AND BATH ACCESSORIES

- A. **Manufacturer:** Model numbers of toilet accessories

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listed below are those of Bobrick Washroom Equipment, Inc., unless otherwise indicated.

B. Kid Toilet, Room No. 101.			
1	Paper Towel Dispenser and Disposal	Bobrick	B-3944
1	Mirror, 24" x 36"	Bobrick	B-290
1	Soap Dispenser	ASI	0371
1	Toilet Paper Holder	Bobrick	B-6677
C. Janitor's Closet, Room No. 202.			
1.	Mop and Broom Holder	Bobrick	B-239
D. Faculty Toilet, Room No. 203.			
1	Paper Towel Dispenser and Disposal	Bobrick	B-3944
1	Mirror, 24" x 36"	Bobrick	B-290
1	Soap Dispenser	ASI	0371
1	Toilet Paper Holder	Bobrick	B-6677
E. Boy's Toilet, Room No. 206.			
1	Paper Towel Dispenser and Disposal	Bobrick	B-3944
2	24" x 36" Mirror	Bobrick	B-290
2	Soap Dispenser	ASI	0371
2	Toilet Tissue Dispenser	Bobrick	B-288
2	42" Grab Bar	Bobrick	B-5507
F. Girl's Toilet, Room No. 207.			
1	Paper Towel Dispenser and Disposal	Bobrick	B-3944
2	24" x 36" Mirror	Bobrick	B-290
2	Soap Dispenser	ASI	0371
4	Toilet Tissue Dispenser	Bobrick	B-288
2	42" Grab Bar	Bobrick	B-5507
G. Bath, Room No. 214 & 215			
2	Soap Dish/Tumbler Holder	Ironmonger	
1	24" x 36" Mirror	Bobrick	B-290
3	Towel Bar	Ironmonger	
3	Robe Hook	Ironmonger	310/28
1	Toilet Paper Holder	Ironmonger	
1	Soap Dish with Bar	Ironmonger	

END OF SECTION 10E



DIVISION 10

SPECIALTIES

SECTION 10L

LOUVERS AND VENTS

PART I GENERAL

10L1.01 GENERAL REQUIREMENTS

- A. Attention is directed to the printed form of the Contract and Division 1 of these specifications entitled "General Requirements", which are hereby made a part of this Section of the Specifications.
- B. Equality of material, article, assembly or system, other than those named or described in this Section will be determined in accordance with the provisions of the Contract Form.

10L1.02 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

10L1.03 DESCRIPTION OF WORK:

- A. Extent of louvers and vents is indicated on drawings, including indications of sizes and locations.
- B. Types of louvers and vents include the following:
  - 1. Extruded aluminum louvers
- C. Sealants including installation are specified in Division 7.
- D. Blank-off plates for air-handling louvers are specified in Division 15.

10L1.04 QUALITY ASSURANCE:

- A. Performance Requirements: Where louvers are indicated to comply with specific performance requirements, provide units whose performance ratings have been determined in compliance with Air Movement and Control Associates (AMCA) Standard 500.

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- B. Comply with SMACNA "Architectural Sheet Metal Manual" recommendations for fabrication, construction details and installation procedures, except as otherwise indicated.
- C. **Field Measurements:** Verify size, location and placement of louver units prior to fabrication, wherever possible.
- D. **Shop Assembly:** Coordinate field measurements and shop drawings with fabrication and shop assembly to minimize field adjustments, splicing, mechanical joints and field assembly of units. Preassemble units in shop to greatest extent possible and disassemble as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.

10L1.05 SUBMITTALS:

- A. **Product Data:** Submit manufacturer's specifications; certified test data, where applicable; and installation instructions for required products, including finishes.
- B. **Shop Drawings:** Submit shop drawings for fabrication and erection of louver units and accessories. Include plans, elevations and details of sections and connections to adjoining work. Indicate materials, finishes, fasteners, joinery and other information to determine compliance with specified requirements.
- C. **Samples:** Submit 6" square, of each required finish. Prepare samples on metal of the same gage and alloy to be used in work. Where normal color and texture variations are to be expected, include 2 or more units in each sample showing limits of such variations.

PART II - PRODUCTS

10L2.01 ACCEPTABLE MANUFACTURERS:

- A. **Available Manufacturers:** Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:
  - 1. Airline Products Co.
  - 2. American Warming and Ventilating Co.
  - 3. Construction Specialties, Inc.: Model 4423
  - 4. Industrial Louvers, Inc.

10L2.02 MATERIALS:

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- A. Aluminum Sheet: ASTM B 209, Alloy 3003 or 5005 with temper as required for forming, or as otherwise recommended by metal producer to provide required finish.
- B. Aluminum Extrusions: ASTM B 221, Alloy 6063-T52.
- C. Fastenings: Use same material as items fastened, unless otherwise indicated. Fasteners for exterior applications may be hot-dip galvanized, stainless steel or aluminum. Provide types, gages and lengths to suit unit installation conditions. Use Phillips flat-head machine screws for exposed fasteners, unless otherwise indicated.
- D. Anchors and Inserts: Use non-ferrous metal or hot-dip galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use steel or lead expansion bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.
- E. Bituminous Paint: SSPC-Paint 12 (cold-applied asphalt mastic).

10L2.03 FABRICATION, GENERAL:

- A. Provide louvers and accessories of design, materials, sizes, depth, arrangement, and metal thicknesses indicated, or if not indicated, as required for optimum performance with respect to airflow; water penetration; air leakage, where applicable (for adjustable units, if any); strength; durability; and uniform appearance.
- B. Fabricate frames including integral sills to suit adjacent construction with tolerances for installation, including application of sealants in joints between louvers and adjoining work.
- C. Include supports, anchorages, and accessories required for complete assembly.
- D. Provide sill extensions and loose sills made of same material as louvers, where indicated, or required for drainage to exterior and to prevent water penetrating to interior.

10L2.04 STATIONARY FORMED ALUMINUM WALL LOUVERS:

- A. Horizontal Blade Louvers: Blades and trim to be formed from .040" (1.02mm) thick 3004-H14 smooth aluminum, in

the sizes indicated, complying with the following performance requirements.

1. Free Area: Not less than 4.81 sq. ft. for a 48" x 48" size.
2. Static Pressure Loss: Not more than 0.15" of water gage at an airflow of 1050 fpm free area velocity in intake direction.
3. Water Penetration: Not more than 0.052 oz. per sq. ft. of free area at an airflow of 1000 fpm free area velocity.
4. AMCA Certification: Furnish units bearing AMCA Certified Ratings Seal.

10L2.04 LOUVER SCREENS:

- A. Provide removable screens for exterior louvers where indicated.
- B. Fabricate screen frames of same metal and finish as louver units to which secured, unless otherwise indicated.
  1. Provide rewireable frames consisting of formed or extruded metal with a driven spline or insert for securing screen mesh.
- C. Use insect screens where indicated, of the following:
  1. 18" x 16" mesh, 0.011" aluminum wire.
- D. Locate screens on inside face of louvers, unless otherwise indicated. Secure screens to louver frames with machine screws, spaced at each corner and at 12" o. c. between.

10L2.05 METAL FINISHES:

- A. General: Comply with NAAMM "Metal Finishes Manual" for finish designations and application recommendations, except as otherwise indicated. Apply finishes in factory after products are assembled. Protect finishes on exposed surfaces with protective covering, prior to shipment. Remove scratches and blemishes from exposed surfaces which will be visible after completing finishing process.
- B. Aluminum Finishes: All aluminum products; windows,

storefronts and louvers, shall receive the same baked enamel finish in colors to be selected by the architect.

- C. **Baked Enamel Finish:** AA-C12C42R1x (cleaned with inhibited chemicals, conversion coated with an acid-chromate-fluoride-phosphate treatment, and painted with organic coating specified below). Apply where factory painted finish is indicated, in strict compliance with paint manufacturer's specifications.

### PART III - EXECUTION

#### 10L3.01 PREPARATION:

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

#### 10L3.02 INSTALLATION:

- A. Locate and place louver units plumb, level and in proper alignment with adjacent work.
- B. Use concealed anchorages wherever possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.
- C. Form tight joints with exposed connections accurately fitted together. Provide reveals and openings for sealants and joints fillers, as indicated.
- D. Repair finishes damaged by cutting, welding, soldering and grinding operations required for fitting and jointing. Restore finishes so there is no evidence of corrective work. Return items which cannot be refinished in the field to shop, make required alterations, and refinish entire unit, or provide new units, at Contractor's option.
- E. Provide concealed gaskets, flashings, joint fillers, and insulations, and install as work progresses to make installations weathertight.
- F. Refer to Division-7 sections for sealants in connection with installation of louvers.

END OF SECTION 10L

DIVISION 10

SPECIALTIES

SECTION 10P

FIRE EXTINGUISHERS, CABINETS AND ACCESSORIES

PART I GENERAL

10P1.01 GENERAL REQUIREMENTS

- A. Attention is directed to the printed form of the Contract and Division 1 of these specifications entitled "General Requirements", which are hereby made a part of this Section of the Specifications.
- B. Equality of material, article, assembly or system, other than those named or described in this Section will be determined in accordance with the provisions of the Contract Form.

10P1.02 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this section.

10P1.03 DESCRIPTION OF WORK:

- A. Extent of fire extinguishers, cabinets and accessories is indicated on drawings.
- B. Definition: "Fire extinguishers" as used in this section refers to units which can be hand-carried as opposed to those which are equipped with wheels or to fixed fire extinguishing systems.
- C. Types of products required include:
  - 1. Fire extinguishers.
  - 2. Mounting brackets
- D. Fire hose cabinets and valve cabinets are specified in Division 15.
- E. Fixed fire protection systems are specified in Division-15 sections.

10P1.04 QUALITY ASSURANCE:

- A. Single Source Responsibility: Obtain products in this section from one manufacturer.
- B. UL-Listed Products: Provide new portable fire extinguishers which are UL-listed and bear UL "Listing Mark" for type, rating, and classification of extinguisher indicated.

10P1.05 SUBMITTALS:

- A. Product Data: Submit product data for each type of product included in this section.

PART II - PRODUCTS

10P2.01 ACCEPTABLE MANUFACTURERS:

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:
  1. Larsen's Mfg. Co.
  2. Johnson-Lee, Division of W.F. Lee Corp.
  3. Muckle Manufacturing, Division of Technico, Inc.

10P2.02 FIRE EXTINGUISHERS:

- A. General: Provide eight (8) fire extinguishers and brackets, to be located in the field.

extinguisher cabinet and other locations indicated, in colors and finishes selected by Architect from manufacturer's standard which comply with requirements of governing authorities.

1. Fill and service extinguishers to comply with requirements of governing authorities and manufacturer's requirement.

2. Abbreviations indicated below to identify extinguisher types relate to UL classification and rating system and not, necessarily, to type and amount of extinguishing material contained in extinguisher.

- B. Multi-Purpose Dry Chemical Type: UL-rated 4-A:60-B: C 10 lb. nominal capacity, in enameled steel container,

for Class A, Class B and Class C fires.

10P2.03 MOUNTING BRACKETS:

- A. Provide manufacturer's standard brackets designed to prevent accidental dislodgement of extinguisher, of proper size for type and capacity of extinguisher indicated, in manufacturer's standard plated finish.

PART III - EXECUTION

10P3.01 INSTALLATION:

- A. Install items included in this section in locations and at mounting heights indicated, or if not indicated, at heights to comply with applicable regulations of governing authorities.
1. Securely fasten mounting brackets and fire extinguisher cabinets to structure, square and plumb, to comply with manufacturer's instructions.
  2. Where exact location of surface-mounted cabinets and bracket-mounted fire extinguishers is not indicated, locate as directed by Architect.

10P3.02 IDENTIFICATION:

- A. Identify bracket-mounted extinguishers with red letter decals spelling "FIRE EXTINGUISHER" applied to wall surface. Letter size, style and location as selected by Architect.

END OF SECTION 10P