

SECTION 10101 - VISUAL DISPLAY SURFACES

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. Section Includes:
 - 1. Marker Board Assemblies.
 - 2. Tack Assemblies Boards.

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for visual display surfaces.
- B. Shop Drawings: For visual display surfaces. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Show locations of panel joints.
 - 2. Show locations of special-purpose graphics for visual display surfaces.
 - 3. Include sections of typical trim members.
- C. Samples for Initial Selection: For each type of visual display surface indicated, for units with factory-applied color finishes, and as follows:
 - 1. Actual sections of tackboard assembly and visual display wall panel.
 - 2. Fabric swatches of polyester-fabric-faced tack assemblies.
 - 3. Include accessory Samples to verify color selected.
- D. Samples for Verification: For each type of visual display surface indicated.
 - 1. Visual Display Surface: Not less than 8-1/2 by 11 inches, mounted on substrate indicated for final Work. Include one panel for each type, color, and texture required.
 - 2. Trim: 6-inch- long sections of each trim profile.
 - 3. Display Rail: 6-inch- long sections.
 - 4. Rail Support System: 6-inch- long sections.
 - 5. Accessories: Full-size Sample of each type of accessory.
- E. Product Schedule: For visual display surfaces. Use same designations indicated on Drawings.
- F. Maintenance Data: For visual display surfaces to include in maintenance manuals.

- G. Warranties: Sample of special warranties.

1.4 QUALITY ASSURANCE

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

1.5 DELIVERY, STORAGE, AND HANDLING

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

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install visual display surfaces until spaces are enclosed and weathertight, wet work in spaces is complete and dry, work above ceilings is complete, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Verify actual dimensions of construction contiguous with visual display surfaces by field measurements before fabrication.
 - 1. Allow for trimming and fitting where taking field measurements before fabrication might delay the Work.
- C. Verify mounting heights with Owner prior to installation of blocking.

PART 2 - PRODUCTS

2.1 MARKERBOARD ASSEMBLIES

- A. Porcelain-Enamel Markerboards: Balanced, high-pressure, factory-laminated markerboard assembly of three-ply construction consisting of backing sheet, core material, and 0.021-inch-thick, porcelain-enamel face sheet with low-gloss finish.
1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Claridge Products and Equipment, Inc.
 - b. PolyVision Corporation; a Steelcase company.
 2. Manufacturer's Standard Core: Minimum 1/4 inch thick, with manufacturer's standard moisture-barrier backing.
 3. Laminating Adhesive: Manufacturer's standard, moisture-resistant thermoplastic type.

2.2 TACKBOARD ASSEMBLIES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. Claridge Products and Equipment, Inc. (Basis of design)
 2. PolyVision Corporation; a Steelcase company.
 3. Tri-Best Visual Display Products.
- B. Natural-Cork Tackboard: 1/16-inch-thick, natural cork sheet factory laminated to 7/16-inch-thick fiberboard backing.
- C. Polyester-Fabric-Faced Tackboard: Polyester fabric factory laminated to 3/8-inch-thick fiberboard backing.

2.3 MARKERBOARD AND TACKBOARD ACCESSORIES

- A. Aluminum Frames and Trim: Fabricated from not less than 0.062-inch-thick, extruded aluminum; standard size and shape.
1. Factory-Applied Trim: Manufacturer's standard.
- B. Tray: Manufacturer's standard, continuous.
1. Solid Type: Extruded aluminum with ribbed section and smoothly curved exposed ends at markerboards only.
- C. Map Rail: Manufacturer's standard, continuous.
1. Continuous at markerboards only.

2.4 FABRICATION

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

2.5 GENERAL FINISH REQUIREMENTS

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

2.6 ALUMINUM FINISHES

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

PART 3 – EXECUTION (NOT USED)

END OF SECTION 10101

END OF SECTION 10101



SECTION 10155 - TOILET COMPARTMENTS

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 toilet compartments and screens as follows:
 - 1. Type: Solid plastic.
 - 2. Compartment Style: Overhead braced and floor anchored.

1.3 SUBMITTALS

- A. Product Data: For each type and style of toilet compartment and screen specified. Include details of construction relative to materials, fabrication, and installation. Include details of anchors, hardware, and fastenings.
- B. Shop Drawings: For fabrication and installation of toilet compartment and screen assemblies. Include plans, elevations, sections, details, and attachments to other work.
 - 1. Show locations of reinforcement and cutouts for compartment-mounted toilet accessories.
- C. Samples for Verification: Of each compartment or screen color and finish required, prepared on 6-inch- (150-mm-) square Samples of same thickness and material indicated for Work.

1.4 PROJECT CONDITIONS

- A. Field Measurements: Verify dimensions in areas of installation by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

1. 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:
 - a. Comtec.
 - b. Santana Products, Inc.
 - c. Bobrick.

2.2 MATERIALS

1. General: Provide materials that have been selected for surface flatness and smoothness. Exposed surfaces that exhibit pitting, seam marks, roller marks, stains, discolorations, or other imperfections on finished units are unacceptable.
2. Material for Solid-Polymer Units: Fabricate from polymer resins under high pressure forming a single component section which is water proof, non absorbent and has a self lubricating surface that resists marking from pens, pencils and other writing instruments.
3. Toilet Partitions:
 - a. Doors, Panels, and Screens: 1 inch thick(25 mm), 55" high at 14" above finish floor.
 - b. Pilasters: 82" high and fastened to 3" high, plastic pilaster steel shoes with theft proof cadmium plated sex bolts.
 - c. Finish for doors, panels and pilasters shall be similar and equal to Santana Products Co. Inc. "Poly-mar HD" Colors to be selected from manufacturer's standard.
4. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories of the following material:
5. Hinges: Fabricated from heavy aluminum extrusion (6463-T5 alloy) with clear anodized finish with wrap around flanges surfaced mounted and thru-bolted to doors and pilasters with one way sex bolts. Hinges shall be factory set to stand open to the degree required. Supply and install three hinges per door. 8" heavy duty hinges shall be used throughout.
6. Each door shall be furnished with one coat hook /bumper of heavy chrome plated Zamak with rubber bumper. (Handicapped doors to also include: one door pull

and one wall stop.)

7. Door strike and Keeper: Fabricate from heavy duty aluminum (6463-T alloy) with clear anodized finish with wrap around flange surface, mounted and thru-bolted to pilaster with one-way sex bolts. Strike shall be heavy duty 6" strike plate.
8. Door latch housing: Fabricate from heavy duty aluminum (6463-T alloy) with clear anodized finish, surface mounted and thru-bolted to door with one way sex bolts. Slide bolt and button shall be heavy aluminum with" tough-coat black "finish.
9. Plastic pilaster shoes : Anchored to finish floor with No. 5 plastic anchors and No. 14 stainless steel Phillips head screws and shall be made of polymer resin formed under high pressure and be made of single construction with color throughout. Equal to Santana's Poly-Mar solid plastic.
10. Full length continuous wall brackets (6063-T6 alloy) with bright dip finish, weighting not less than 1.685 lbs per linear foot, similar or equal to Santana Products shall be used for all panel to pilaster , pilaster to wall, and panel to wall conections. Wall brackets shall be pre drilled by manufacturer with holes spaced every 6" along full length of bracket. Wall brackets shall be thru-bolted to panels and pilasters with one way sex bolts. Attachment of brackets to adjacent wall construction shall be accomplished by one theft proof Zamak mushroom nail in head anchor directly behind the vertical edge of panels and pilasters at every 12" along the full length of the bracket and two No. 5 plastic anchors and No. 14 X 1 ¼ " stainless steel phillips head screws at every 12" interval alternately spaced between anchor connections.

2.3 FABRICATION

- A. Overhead-Braced units: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, and anchors at pilasters to suit floor conditions. Provide shoes at pilasters to conceal supports and leveling mechanism.
- B. Door Size and Swings: Unless otherwise indicated, provide 24-inch wide, inswinging doors for standard toilet compartments and 36-inch wide, outswinging doors with a minimum 32-inch wide, clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install

units rigid, straight, plumb, and level. Provide clearances of not more than 1/2 inch (13 mm) between pilasters and panels and not more than 1/2 inch (25 mm) between panels and walls. Secure units in position with manufacturer's recommended anchoring devices.

- B. Level, plumb and tighten installation with leveling device. Secure pilaster shoes in position. Secure overhead brace to pilaster face with not less than two fasteners per face and to wall with stirrup brackets.
- C. No evidence of drilling, cutting or patching shall be visible in the finished work.

3.2 ADJUSTING AND CLEANING

- A. Hardware Adjustment: Adjust and lubricate hardware according to manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors and swing doors in entrance screens to return to fully closed position.
- B. Provide final protection and maintain conditions that ensure toilet compartments and screens are without damage or deterioration at the time of Substantial Completion.

END OF SECTION 10155

SECTION 10265 - IMPACT-RESISTANT WALL PROTECTION

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. Corner guards.

1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, impact strength, fire-test-response characteristics, dimensions of individual components and profiles, and finishes for each impact-resistant wall-protection unit.
- B. Shop Drawings: For each impact-resistant wall-protection unit showing locations and extent. Include sections, details, and attachments to other work.
 - 1. For installed products indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- C. Samples for Initial Selection: For each type of impact-resistant wall-protection unit indicated.
 - 1. Include similar Samples of accent strips and accessories involving color selection.
- D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.
 - 1. Corner Guards: 12 inches long. Include examples of joinery, corners, top caps, and field splices.
- E. Qualification Data: For Installer.
- F. Material Test Reports: For each impact-resistant plastic material.
- G. Material Certificates: For each impact-resistant plastic material, signed by manufacturer.
- H. Maintenance Data: For each impact-resistant wall-protection unit to include in maintenance manuals.

1. Include recommended methods and frequency of maintenance for maintaining optimum condition of plastic covers under anticipated traffic and use conditions. Include precautions against using cleaning materials and methods that may be detrimental to plastic finishes and performance.

1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain impact-resistant wall-protection units through one source from a single manufacturer.
- B. Fire-Test-Response Characteristics: Provide impact-resistant, plastic wall-protection units with surface-burning characteristics as determined by testing identical products per ASTM E 84, NFPA 255, or UL 723 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction.
- C. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store impact-resistant wall-protection units in original undamaged packages and containers inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.
 1. Maintain room temperature within storage area at not less than 70 deg F during the period plastic materials are stored.
 2. Keep plastic sheet material out of direct sunlight.
 3. Store plastic wall-protection components for a minimum of 72 hours, or until plastic material attains a minimum room temperature of 70 deg F.
 - a. Store corner-guard covers in a vertical position.

1.6 PROJECT CONDITIONS

- A. Environmental Limitations: Do not deliver or install impact-resistant wall-protection units until building is enclosed and weatherproof, wet work is complete and dry, and HVAC system is operating and maintaining temperature at 70 deg F for not less than 72 hours before beginning installation and for the remainder of the construction period.
- B. Field Measurements: Verify actual locations of walls, columns, and other construction contiguous with impact-resistant wall-protection units by field measurements before fabrication and indicate measurements on Shop Drawings.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of impact-resistant wall-protection units that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Structural failures.
 - b. Deterioration of plastic and other materials beyond normal use.
2. Warranty Period: Five years from date of Substantial Completion.

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Corner-Guard Covers: Full-size plastic covers of maximum length equal to 2 percent of each type, color, and texture of units installed, but no fewer than two, 4-foot-long units.
- B. Include mounting and accessory components. Replacement materials shall be from same production run as installed units.

PART 2 - PRODUCTS

2.1 CORNER GUARDS

- A. Surface-Mounted, Resilient, Plastic Corner Guards: Assembly consisting of snap-on plastic cover installed over continuous retainer; including mounting hardware; fabricated with 90- or 135-degree turn to match wall condition.
 1. Manufacturers:
 - a. American Floor Products Co., Inc.
 - b. Balco, Inc.
 - c. IPC Door and Wall Protection Systems; Division of InPro Corporation.
 - d. Korogard Wall Protection Systems; Division of RJF International Corporation.
 - e. Pawling Corporation.
 2. Cover: Extruded rigid plastic, minimum 0.100-inch wall thickness; as follows:
 - a. Profile: Nominal 3-inch-long leg and 1/4-inch corner radius.
 - b. Height: 4 feet.
 - c. Color and Texture: Clear.
 3. Retainer: Minimum 0.060-inch-thick, 1-piece, extruded aluminum.
 4. Top and Bottom Caps: Prefabricated, injection-molded plastic; color matching cover; field adjustable for close alignment with snap-on cover.

2.2 FABRICATION

- A. Fabricate impact-resistant wall-protection units to comply with requirements indicated for design, dimensions, and member sizes, including thicknesses of components.

- B. Assemble components in factory to greatest extent possible to minimize field assembly. Disassemble only as necessary for shipping and handling.
- C. Fabricate components with tight seams and joints with exposed edges rolled. Provide surfaces free of wrinkles, chips, dents, uneven coloration, and other imperfections. Fabricate members and fittings to produce flush, smooth, and rigid hairline joints.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and wall areas, with Installer present, for compliance with requirements for installation tolerances, fire rating, and other conditions affecting performance of work.
 - 1. Examine walls to which impact-resistant wall protection will be attached for blocking, grounds, and other solid backing that have been installed in the locations required for secure attachment of support fasteners.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Complete finishing operations, including painting, before installing impact-resistant wall-protection system components.
- B. Before installation, clean substrate to remove dust, debris, and loose particles.

3.3 INSTALLATION

- A. General: Install impact-resistant wall-protection units level, plumb, and true to line without distortions. Do not use materials with chips, cracks, voids, stains, or other defects that might be visible in the finished Work.

3.4 CLEANING

- A. Immediately after completion of installation, clean plastic covers and accessories using a standard, ammonia-based, household cleaning agent.
- B. Remove excess adhesive using methods and materials recommended in writing by manufacturer.

END OF SECTION 10265

SECTION 10400 - SIGNS

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 types of signs:

- 1. 7" X 7" Panel signs (Interior)

1.3 SUBMITTALS

- A. General: Submit the following according to the Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each type of sign specified, including details of construction relative to materials, dimensions of individual components, profiles, and finishes.
- C. Shop drawings showing fabrication and erection of signs. Include plans, elevations, and large-scale sections of typical members and other components. Show anchors, grounds, layout, reinforcement, accessories, and installation details.
- D. Provide message list for each sign required, including large-scale details of wording and lettering layout.
- E. For signs supported by or anchored to permanent construction, provide setting drawings, templates, and directions for installation of anchor bolts and other anchors to be installed as a unit of Work in other Sections.
- F. Samples: Provide the following samples of each sign component for initial selection of color, pattern and surface texture as required and for verification of compliance with requirements indicated.
 - 1. Samples for initial selection of color, pattern, and texture:
 - a. Cast Acrylic Sheet and Base Sheet: Manufacturer's color charts

consisting of actual sections of material including the full range of colors available for each material required.

1.4 QUALITY ASSURANCE

- A. Sign Fabricator Qualifications: Firm experienced in producing signs similar to those indicated for this Project, with a record of successful in-service performance, and sufficient production capacity to produce sign units required without causing delay in the Work.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated in the Work include, but are not limited to, the following:
1. Manufacturers of Panel Signs:
 - a. Andco Industries Corp.
 - b. ASI Modulex.
 - c. Mohawk Sign Systems
 - d. Inland Pacific

2.2 MATERIALS

- A. Cast Acrylic Base Sheet: Provide cast methyl methacrylate monomer plastic sheet, 7" X 7" X 1/4" base thickness, with a minimum flexural strength of 16,000 psi when tested according to ASTM D 790, with a minimum allowable continuous service temperature of 176 deg F (80 deg C), and of the following general types:
1. Transparent Sheet: Where sheet material is indicated as "clear," provide colorless sheet in matte finish, with light transmittance of 92 percent, when tested according to the requirements of ASTM D 1003. 1/16" Thickness.
 2. Base Sheet: Where sheet material is indicated as "opaque," provide colored opaque acrylic sheet in colors and finishes as selected from the manufacturer's standards.
- B. Fasteners: Use metal screw fasteners fabricated from metals that are not corrosive to the sign material and mounting surface.

2.3 PANEL SIGNS

- A. Double Panel (Window) Sign with changeable insert: Comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.
 - 1. Produce smooth, even, level sign panel surfaces, constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch measured diagonally.
- B. Unframed Panel Signs: Fabricate signs with edges mechanically and smoothly finished to conform with the following requirements:
 - 1. Edge Condition: Bull nose.
 - 2. Corner Condition: Corners rounded to 1/4" radius indicated.
- C. Graphic Content and Style: Provide sign copy that complies with the requirements indicated for size, style, spacing, content, position, material, finishes, and colors of letters, numbers, and other graphic devices.
- D. ADA Standards: Provide braille tags and complete design to meet the standards of the Americans with Disabilities Act.
- E. Subsurface Copy: Apply copy to the back face of clear acrylic sheet forming the panel face by process indicated to produce precisely formed opaque images free from rough edges.

2.4 FINISHES

- A. Colors and Surface Textures: For exposed sign material that requires selection of materials with integral or applied colors, surface textures or other characteristics related to appearance, provide color matches indicated, or if not indicated, as selected by the Architect from the manufacturer's standards.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Locate sign units and accessories at all interior doors, using mounting methods of the type described and in compliance with the manufacturer's instructions.
 - 1. Install signs level, plumb, and at the height indicated, with sign surfaces free

from distortion or other defects in appearance.

B. Wall-Mounted Panel Signs: Attach panel signs to wall surfaces using the methods indicated below:

1. Screw mounting

3.2 CLEANING AND PROTECTION

A. After installation, clean soiled sign surfaces according to the manufacturer's instructions. Protect units from damage until acceptance by the Owner.

END OF SECTION 10425

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. Brackets.
 - 2. Portable fire extinguishers.
 - 3. 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.

1.4 COORDINATION

- A. Coordinate size of cabinets to ensure that type and capacity of fire extinguishers indicated and provided by Owner under separate Contract 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. J.L. Industries, Inc.
 - 2. Larsen's Manufacturing Company.
 - 3. Modern Metal Products; Div. of Technico.

B. Fire-Protection Cabinets:

1. J.L. Industries, Inc.
2. Larsen's Manufacturing Company.
3. Modern Metal Products; Div. of Technico.

2.2 MATERIALS

A. 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).

2.3 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 nominal capacity, in enameled-steel container.

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: Aluminum sheet.

B. Cabinet Type: Suitable for the following:

1. Fire extinguisher.

C. Cabinet Mounting: Suitable for the following mounting conditions:

1. Semi-Recessed: Cabinet box partially recessed in walls of shallow depth to suit style of trim indicated.