

SECTION 102113.16

PLASTIC-LAMINATE-CLAD TOILET COMPARTMENTS

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. Section Includes:
 - 1. Plastic-laminate-clad toilet compartments configured as toilet enclosures and urinal screens.
- B. Related Requirements:
 - 1. Section 061053 "Miscellaneous Rough Carpentry" for blocking.
 - 2. Section 102800 "Toilet, Bath, and Laundry Accessories" for toilet tissue dispensers, grab bars, purse shelves, and similar accessories mounted on toilet compartments.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for toilet compartments.
- B. Sustainable Design Submittals:
 - 1. Product Data: For recycled content, indicating postconsumer and preconsumer recycled content and cost.
 - 2. Product Data: For adhesives, indicating that product contains no urea formaldehyde.
 - 3. Laboratory Test Reports: For adhesives, indicating compliance with requirements for low-emitting materials.
 - 4. Product Data: For composite wood products, indicating that product contains no urea formaldehyde.
 - 5. Laboratory Test Reports: For composite wood products, indicating compliance with requirements for low-emitting materials.
- C. Shop Drawings: For toilet compartments.
 - 1. Include plans, elevations, sections, details, and attachment details.
 - 2. Show locations of cutouts for compartment-mounted toilet accessories.
 - 3. Show locations of centerlines of toilet fixtures.
 - 4. Show locations of floor drains.
- D. Samples for Verification: For the following products, in manufacturer's standard sizes unless otherwise indicated:
 - 1. Each type of material, color, and finish required for toilet compartments, prepared on 6-inch-152-mm- square Samples of same thickness and material indicated for Work.
 - 2. Each type of hardware and accessory.

- E. Product Schedule: For toilet compartments, prepared by or under the supervision of supplier, detailing location and selected colors for toilet compartment material.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For each type of toilet compartment.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For toilet compartments to include in maintenance manuals.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Door Hinges: Five hinge(s) with associated fasteners.
 - 2. Latch and Keeper: Five latch(es) and keeper(s) with associated fasteners.
 - 3. Door Bumper: Five door bumper(s) with associated fasteners.
 - 4. Door Pull: Five door pull(s) with associated fasteners.
 - 5. Fasteners: Twenty fasteners of each size and type.

1.7 PROJECT CONDITIONS

- A. Field Measurements: Verify actual locations of toilet fixtures, walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing 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.
- B. Regulatory Requirements: Comply with applicable provisions in 2010 ADA Standards for Accessible Design and ICC A117.1 for toilet compartments designated as accessible.

2.2 PLASTIC-LAMINATE-CLAD TOILET COMPARTMENTS-~~(TA-25, TA-26)~~ TP-2

- A. Basis-of-Design Product: Subject to compliance with requirements, provide **Plastic Laminate Moisture Guard; ASI Global Partitions**, or comparable product by one of the following:
 - 1. Accurate Partitions Corporation.
 - 2. All American Metal Corp.
 - 3. American Sanitary Partition Corporation.
 - 4. Ampco, Inc.
 - 5. Bradley Corporation; Mills Partitions.
 - 6. Decolam.
 - 7. Flush Metal Partition Corp.
 - 8. General Partitions Mfg. Corp.

9. Knickerbocker Partition Corporation.
 10. Marlite.
 11. Metpar Corp.
 12. Scranton Products.
 13. Tex-Lam Manufacturing, Inc.
 14. Weis-Robart Partitions, Inc.
- B. Toilet-Enclosure Style: Overhead braced.
- C. Urinal-Screen Style: Floor anchored.
- D. Door, Panel, and Pilaster Construction: One-piece, plastic-laminate facing sheets pressure laminated to core material without splices or joints in facings or cores; with laminate applied to edges before faces to seal edges and prevent laminate from being pried loose. Seal exposed core material at cutouts to protect core from moisture.
1. Core Material: Particleboard.
 2. Doors and Panels: Finished to not less than 1 inch (25 mm) thick.
 3. Pilasters: Provide construction to comply with the following:
 - a. Finished to not less than 1 inch (25 mm) thick and with internal, nominal 0.120-inch-(3.04-mm-) thick, steel-sheet reinforcement.
- E. Pilaster Shoes: Formed from stainless-steel sheet, not less than 0.031-inch (0.79-mm) nominal thickness and 3 inches (76 mm) high, finished to match hardware.
- F. Urinal-Screen Post: Manufacturer's standard post design of material matching the thickness and construction of pilasters; with shoe matching that on the pilaster.
- G. Brackets (Fittings):
1. Full-Height (Continuous) Type: Manufacturer's standard design; stainless steel.
- H. Plastic-Laminate Finish: One color and pattern in each room.
1. Color and Pattern: **
 - a. ~~TA-25: As selected by Architect.~~
 - b. ~~TA-26: As selected by Architect.~~
 - c. **TP-2: "Cherry" #9954; ASI Global Partitions**

2.3 HARDWARE AND ACCESSORIES

- A. Hardware and Accessories: Manufacturer's standard operating hardware and accessories.
1. Material: Stainless steel.
 2. Hinges: Manufacturer's standard continuous, cam type that swings to a closed or partially open position, allowing emergency access by lifting door.
 3. Latch and Keeper: Manufacturer's standard surface-mounted latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible.
 4. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories.
 5. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors.

6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible.
- B. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile and in manufacturer's standard finish.
- C. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless-steel, hot-dip galvanized-steel, or other rust-resistant, protective-coated steel anchors compatible with related materials.

2.4 MATERIALS

- A. Particleboard: ANSI A208.1, Grade M-2.
 1. Particleboard shall be made without urea formaldehyde.
- B. Plastic Laminate: NEMA LD 3, general-purpose HGS grade, 0.048-inch (1.2-mm) nominal thickness.
- C. Adhesives: Do not use adhesives that contain urea formaldehyde.
- D. Stainless-Steel Sheet: ASTM A 666, Type 304, stretcher-leveled standard of flatness.
- E. Stainless-Steel Castings: ASTM A 743/A 743M.

2.5 FABRICATION

- A. Fabrication, General: Fabricate toilet compartment components to sizes indicated. Coordinate requirements and provide cutouts for through-partition toilet accessories where required for attachment of toilet accessories.
- B. 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.
- C. Urinal-Screen Posts: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment nuts at bottoms of posts. Provide shoes at posts to conceal anchorage.
- D. Door Size and Swings: Unless otherwise indicated, provide 24-inch- (610-mm-) wide in-swinging doors for standard toilet compartments and 36-inch- (914-mm-) wide out-swinging doors with a minimum 32-inch- (813-mm-) wide clear opening for compartments designated as accessible.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for fastening, support, alignment, operating clearances, and other conditions affecting performance of the Work.
 1. Confirm location and adequacy of blocking and supports required for installation.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
 - 1. Maximum Clearances:
 - a. Pilasters and Panels: 1/2 inch (13 mm).
 - b. Panels and Walls: 1 inch (25 mm).
 - 2. Full-Height (Continuous) Brackets: Secure panels to walls and to pilasters with full-height brackets.
 - a. Locate bracket fasteners so holes for wall anchors occur in masonry or tile joints.
 - b. Align brackets at pilasters with brackets at walls.
- B. Overhead-Braced Units: Secure pilasters to floor and level, plumb, and tighten. Set pilasters with anchors penetrating not less than 1-3/4 inches (44 mm) into structural floor unless otherwise indicated in manufacturer's written instructions. Secure continuous head rail to each pilaster with no fewer than two fasteners. Hang doors to align tops of doors with tops of panels, and adjust so tops of doors are parallel with overhead brace when doors are in closed position.
- C. Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.

3.3 ADJUSTING

- A. Hardware Adjustment: Adjust and lubricate hardware according to hardware manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

END OF SECTION 102113.16

SECTION 102113

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. Section Includes:
 - 1. Phenolic-core toilet compartments configured as toilet enclosures and urinal screens.
- B. Related Sections include the following:
 - 1. Division 06 Section "Miscellaneous Carpentry" for wood blocking.
 - 2. Division 10 "Toilet, Bath and Laundry Accessories" for toilet tissue dispensers, grab bars, purse shelves, and similar accessories.

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.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
 - 1. Show locations of cutouts for compartment-mounted toilet accessories.
 - 2. Show locations of reinforcements for compartment-mounted grab bars.
- C. Samples for Initial Selection: For each type of unit indicated.
- D. Samples for Verification: Of each type of color and finish required for units, prepared on 6-inch-square Samples of same thickness and material indicated for Work.

1.4 QUALITY ASSURANCE:

- A. Comply with requirements in CID-A-A-60003, "Partitions, Toilets, Complete."

1.5 PROJECT CONDITIONS:

- A. Field Measurements: Verify actual locations of walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication and indicate measurements on Shop Drawings.
 - 1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating toilet compartments without field measurements. Coordinate wall, floor, ceilings, and other contiguous construction to ensure that actual dimensions correspond to established dimensions.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS:

- A. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 75 or less.
 - 2. Smoke-Developed Index: 450 or less.
- B. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities and ICC A117.1 for toilet compartments designated as accessible.

2.2 PHENOLIC-CORE UNITS:

- A. Basis-of-Design Product [**TP-1**]: Subject to compliance with requirements, provide “**Solid Phenolic Toilet Enclosures; General Partitions Mfg. Corp.**”, or approved equivalent of one of the following:
 - 1. Global Partitions.
 - 2. Metpar Corp,
 - 3. Accurate Partitions Corp.
- B. Door, Panel and Pilaster Construction: Solid phenolic-core panel material with plastic laminate facing on both sides fused to substrate during panel manufacture, and with eased and polished edges. Provide minimum 3/4-inch- thick doors and pilasters and minimum 1/2-inch- thick panels.
 - 1. Core Color: Black.
 - 2. Facing Sheet Finish:
 - a. As indicated by laminate manufacturer's designations.

FINISH	MANUFACTURER	STYLE/PATTERN	COLOR
PL-1 TP-1	Pionite		Leather L-Finish- Black ST604 Suede – Nubian Brown
PL-2	Pionite		AG021 Suede- Sable **

- C. Heavy-duty “Bank Vault” hinge shall have gravity-acting cams, fabricated from 12 gauge, 304 stainless steel. Hinges are through-bolted onto doors and pilasters using stainless steel tamper resistant through bolts. Hinges are easily adjusted at the job site to a full close or partially open position, as required.
- D. Urinal-Screen Style: Wall hung, flat panel.
 - 1. Continuous heavy duty stainless steel wall brackets are pre-drilled. Wall brackets are mounted with stainless steel, vandal-resistant screws.

- E. Pilaster Shoes and Sleeves (Caps): Stainless steel, ASTM A 666, Type 302 or 304, not less than 0.0312 inch specified thickness and 3 inches high, finished to match hardware.
- F. Brackets (Fittings):
 - 1. Stirrup Type: Ear or U-brackets, stainless steel.

2.3 ACCESSORIES:

- A. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories.
 - 1. Material: Stainless steel.
 - 2. Hinges: Manufacturer's standard paired, self-closing type that can be adjusted to hold doors open at any angle up to 90 degrees.
 - 3. Latch and Keeper: Manufacturer's standard surface-mounted latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with regulatory requirements for accessibility at compartments designated as accessible. Fabricate from 12 gauge 304 stainless steel.
 - 4. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent in-swinging door from hitting compartment-mounted accessories. Fabricate from 304 stainless steel.
 - a. Provide coat hook without bumper on Handicap stalls only.
 - 5. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors. Fabricate from 304 stainless steel.
 - 6. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with regulatory requirements for accessibility. Provide units on both sides of doors at compartments designated as accessible. Fabricate from 304 stainless steel.
 - a. Provide one (1) additional pull handle on the compartment side of the door, mounted 6-inches from the hinge edge and between 26 and 36-inches above the floor. Provide pull with a shape that is easily grasped with one hand and does not require tight, pinching or twisting of the wrist to operate.
- B. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile and in manufacturer's standard finish.
- C. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match the items they are securing, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use stainless steel, hot-dip galvanized steel, or other rust-resistant, protective-coated steel.

2.4 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- (610-mm-) wide, in-swinging doors for standard toilet compartments and 36-inch- (914-mm-) wide, out-swinging doors with a minimum 32-inch- (813-mm-) 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, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.
 - 1. Maximum Clearances:
 - a. Pilasters and Panels: 1/2 inch.
 - b. Panels and Walls: 1 inch.
 - 2. Stirrup Brackets: Secure panels to walls and to pilasters with not less than three brackets attached at midpoint and near top and bottom of panel.
 - a. Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
 - b. Align brackets at pilasters with brackets at walls.
- B. Wall-Hung Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb and to resist lateral impact.
- C. Overhead-Braced Units: Secure pilasters to floor and level, plumb, and tighten. Set pilasters with anchors penetrating not less than 1-3/4 inches (44 mm) into structural floor unless otherwise indicated in manufacturer's written instructions. Secure continuous head rail to each pilaster with no fewer than two fasteners. Hang doors to align tops of doors with tops of panels, and adjust so tops of doors are parallel with overhead brace when doors are in closed position.

3.2 ADJUSTING:

- A. Hardware Adjustment: Adjust and lubricate hardware according to manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

END OF SECTION 10155

-SECTION 102800

TOILET, BATH AND LAUNDRY ACCESSORIES

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. Toilet and bath accessories.
- B. Related Sections include the following:
 - 1. Section 102113 "Toilet Compartments" for compartments and screens.

1.3 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. Setting Drawings: For cutouts required in other work; include templates, substrate preparation instructions, and directions for preparing cutouts and installing anchoring devices.
- C. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required. Use designations indicated in the Toilet and Bath Accessory Schedule and room designations indicated on Drawings in product schedule.
- D. Maintenance Data: For accessories to include in maintenance manuals specified in Division 01. Provide lists of replacement parts and service recommendations.

1.4 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 and Bath Accessory Schedule.
 - 1. Products of other manufacturers listed in Part 2 with equal characteristics, as judged solely by Architect, may be provided.

2. 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.

1.5 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.

1.6 WARRANTY:

- A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Manufacturer's Mirror Warranty: Written warranty, executed by mirror manufacturer agreeing to replace mirrors that develop visible silver spoilage defects within minimum warranty period indicated.
 1. Minimum Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. Manufacturers: Subject to compliance with requirements, provide toilet accessories by one of the following:
 1. American Specialties, Inc.
 2. Bobrick Washroom Equipment, Inc.
 3. Bradley Corporation.
 4. Georgia-Pacific.
- B. Products manufactured by Bobrick Washroom Equipment, Inc., and Georgia-Pacific are specified. Items designated establish minimum requirements for design and performance of equipment required by this Section.

2.2 MATERIALS:

- A. Stainless Steel: ASTM A 666, Type 304, with No. 4 finish (satin), in 0.0312-inch minimum nominal thickness, unless otherwise indicated.
- B. Galvanized Steel Sheet: ASTM A 653/A 653M, G60.

- C. Chromium Plating: ASTM B 456, Service Condition Number SC 2 (moderate service), nickel plus chromium electrodeposited on base metal.
- D. Mirror Glass: ASTM C 1036, Type I, Class 1, Quality q2, nominal 6.0 mm thick, with silvering, electroplated copper coating, and protective organic coating complying with FS DD-M-411.
- 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, tamper and theft resistant when exposed, and of galvanized steel when concealed.

2.3 FABRICATION:

- A. General: One, maximum 1-1/2-inch-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. 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.
- C. Framed Glass-Mirror Units: Fabricate frames for glass-mirror units to accommodate glass edge protection material. Provide mirror backing and support system that permits rigid, tamper-resistant glass installation and prevents moisture accumulation.
 - 1. Provide galvanized steel backing sheet, not less than 0.034 inch and full mirror size, with nonabsorptive filler material. Corrugated cardboard is not an acceptable filler material.
- D. Mirror-Unit Hangers: Provide mirror-unit mounting system that permits rigid, tamper- and theft-resistant installation, as follows:
 - 1. One-piece, galvanized steel, wall-hanger device with spring-action locking mechanism to hold mirror unit in position with no exposed screws or bolts.
- E. 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. Secure mirrors to walls in concealed, tamper-resistant manner with special hangers, toggle bolts, or screws. Set units level, plumb, and square at locations indicated, according to manufacturer's written instructions for substrate indicated.
- C. Install grab bars to withstand a downward load of at least 250 lbf, when tested according to method in ASTM F 446.

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 AND BATH ACCESSORY SCHEDULE:

- A. Grab Bars - Stainless Steel Type [TA-1#]: Provide grab bars with wall thickness not less than 0.05 inch (18 gage) and as follows:
 - 1. Mounting: Concealed, manufacturer's standard flanges and anchorage with four set-screws.
 - 2. Clearance: 1-1/2-inch clearance between wall surface and inside face of bar.
 - 3. Gripping Surfaces: Manufacturer's standard nonslip texture.
 - 4. Heavy-Duty Size: Outside diameter of 1-1/2 inches.
 - 5. [TA-1A] Product: Bradley Corp. Model **812 x 18"**.
 - 6. [TA-1D] Product: Bradley Corp. Model **812 x 42"**.
- B. Toilet Tissue Dispenser "TA-2D": Where this designation is indicated, provide toilet tissue dispenser complying with the following:
 - 1. Jumbo-roll toilet tissue dispenser door and cabinet shall be type-304 stainless steel with satin-finish: door shall be 18 gauge (1.2mm); cabinet shall be 20 gauge (1.0mm). Cabinet shall be equipped with a tumbler lock keyed like other Bobrick washroom accessories. Door shall have a wide viewing slot to reveal toilet tissue supply inside cabinet. Dispensing mechanism shall be constructed of high-impact ABS shall accommodate two toilet tissue rolls up to 10" (255mm) diameter with 3" (75mm) diameter core; and be equipped with a sliding access panel that exposes one roll at a time. Spindles shall be convertible in the field to dispense 2-1/4" (55mm) diameter core rolls by removing outer spindles furnished in-place.
 - 2. Product: Model No. **B-2892**, surface mounted.

- C. Recessed Sanitary Napkin/Tampon Vendor Unit [**TA-5B**]: Where this designation is indicated, provide stainless-steel sanitary napkin vendor complying with the following:
1. General: Fabricate cabinet of all-welded construction. Provide seamless door with returned edges and secured by tumbler lockset. Provide identification reading "Napkins" and "Tampons"; brand-name advertising is not allowed. Capacity not less than 31 napkins and 22 tampons.
 2. Operation: Coordinate price with Owner.
 3. Product: Bobrick Model **B-37063C Trimline Series**.
- ~~** D. Semi-Recessed Waste Receptacle [**TA-6B**]: Where this designation is indicated, provide semi-recessed paper towel dispenser complying with the following:~~
- ~~1. Recessed waste receptacle shall be type-304 stainless steel with all-welded construction; exposed surfaces shall have satin finish. Flange shall be drawn and beveled, one-piece, seamless construction. Removable waste receptacle shall be secured to cabinet with a tumbler lock keyed like other Bobrick washroom accessories, have front and side edges of bottom and all top edges hemmed for safe handling, and shall have a minimum capacity of 12-gal. (45.4-L).~~
- ~~2. Product: Bobrick Model **B-3644**.~~
- ** E. [**TA-7A**] Surface Mounted Paper Towel Dispenser: Where this designation is indicated, provide stainless-steel paper towel dispenser unit complying with the following:
1. Surface Mounted Automated Towel Dispenser, hands-free, electronic towel dispenser, engineered to be surface mounted to the wall.
 2. Battery operated.
 3. Product: Wausau Paper Wall Mount Automated Touchless Towel Dispenser, Model **Wave'n Dry**.
- F. Surface Mounted Sanitary Napkin Disposal [**TA-8A**]: Where this designation is indicated, provide stainless-steel combination unit complying with the following:
1. Surface-mounted sanitary napkin disposal shall be type-304 stainless steel with all-welded construction; exposed surfaces shall have satin finish. Door shall be secured to cabinet with a full-length stainless steel piano-hinge and equipped with a tumbler lock keyed like other washroom accessories. Unit shall have a self-closing panel covering disposal opening. Panel shall have bottom edge hemmed for safety, be secured to door with a spring-loaded, full-length stainless steel piano-hinge, and equipped with an international graphic symbol identifying sanitary napkin disposal. Unit shall be furnished with a removable, leak-proof, rigid molded polyethylene receptacle. Receptacle shall have a capacity of 1.5-gal. (6.6-L).
- a. Bradley Model No. **4722-15**

- G. Soap Dispenser [TA-10]: Where this designation is indicated, provide soap dispenser complying with the following:
1. Surface-mounted foam soap dispenser, battery operated.
 - a. Dimensions: 10" Height x 6" Width x 4" Depth.
 2. Product: GOJO USA Model No. **H-1585 Touch Free Dispenser - Dove Gray**.
- ** H. Surface Mounted Electric Backlit Mirror [TA-11G]: Where this designation is indicated, provide surface mounted electric backlit mirror complying with the following:
1. The Fusion™ Lighted Mirror by Electric Mirror has two bands of vertical frosted light on the left and right sides of the backlit mirror and comes in six standard sizes. Fusion features long lasting lamps, natural light temperature, anti-corrosion mirror treatment, energy efficiency, and is proudly designed and manufactured in the USA.
 2. Size: Custom size, 18"W x 36" H.
 3. Product: Electric Mirror, LLC, Model **Fusion Lighted Mirror**.
- I. Mirror Units [TA-11A]: Where this designation is indicated, provide mirror unit complying with the following:
1. **Stainless Steel Framed Mirror Units: Fabricate frame with angle shapes not less than 0.05 inch (18 gage), with square corners mitered, welded, and ground smooth. Provide in No. 4 satin polished finish.**
 - a. **Product : Bobrick Model No. B-165 - 16 (wide) x 36 (high).**
- J. Clothes Hook [TA-13]: Where this designation is indicated, provide clothes hook complying with the following:
1. Clothes Hook: Clothes hook shall be type-304, 11-gauge stainless steel with satin finish and all-welded construction. Surface mounted with stainless steel fasteners.
 2. Product: Bobrick Model No. **B-233**.
- K. Mop and Broom Holder [TA-14]: Where this designation is indicated, provide mop and broom holder with rag hooks complying with the following:
1. Mop and Broom Holder/Utility Shelf: Combination unit with 0.05-inch (18-gage), Type 304, stainless steel shelf with 1/2-inch returns, 0.062-inch (16-gage) support brackets for wall mounting. Provide 0.062-inch (16-gage) stainless steel hooks for wiping rags on front of shelf, together with spring-loaded, rubber hat, cam-type mop/broom holders; 1/4-inch-diameter stainless steel drying rod suspended beneath shelf. Provide unit 36 inches long and complete with four mop/broom holders and rag rod.
 2. Product: Bradley Corp., **9954-36**.

- L. Pipe Insulation [**TA-23**]: Provide pipe insulation and fittings on hot and cold supplies and P-trap and waste below sinks on ADA accessible units utilizing one of the following:
 - a. Lav Guard 2 EZ; TRUEBRO, IPS Corporation.
 - b. Pro Wrap; McGuire Manufacturing Co., Inc.

- M. Toilet Accessory [**TA-25**]: Toilet partitions. Refer to Specification Section 102113 - Toilet Compartments.

- N. Toilet Accessory [**TA-26**]: Urinal Screens. Refer to Specification Section 102113 - Toilet Compartments.

- O. Surface Mounted Toilet Seat Cover Dispenser [**TA-35**]: Where this designation is indicated, provide surface mounted toilet seat cover dispenser complying with the following:
 - 1. Surface-mounted seat cover dispenser, with face formed with contemporary contours, radii, and finish matching related accessories in manufacturer's designer series. Capacity 250 standard single-fold or half-fold toilet seat covers. Equipped with spring clip dispensing mechanism and bottom-hinged service door with keyed tumbler lock. Universal keying. Formed from stainless steel sheet with satin finish on exposed surfaces, fully welded, with seamless corners and burr-free edges: cabinet and door 0.036- inch / 20-ga. thick.
 - 2. Product: Bradley Model **5A40**.

- P. Sharps Receptacle and Mail System [**TA-37**]: One Quart Disposal by Mail System. Approximately 50-70 lcc syringe capacity. Sharps Container Cabinet, lockable metal container.
 - 1. Sharps Item: **#10101-012**.
 - 2. Sharps Item: **#50020-004**.
 - 3. Provide one cabinet and container in each toilet room.
 - 4. http://www.allsafetyproducts.com/documents/catalogs/Catalog_Page_285.pdf or as approved by the Architect.

END OF SECTION 102800

SECTION 104413

FIRE PROTECTION CABINETS

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. Section Includes:
 - 1. Fire-protection cabinets for the following:
 - a. Portable fire extinguishers.
- B. Related Requirements:
 - 1. Section 104416 "Fire Extinguishers."

1.3 PREINSTALLATION CONFERENCE

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to fire-protection cabinets including, but not limited to, the following:
 - a. Schedules and coordination requirements.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product. Show door hardware, cabinet type, trim style, and panel style. Include roughing-in dimensions and details showing recessed-, semirecessed-, or surface-mounting method and relationships of box and trim to surrounding construction.
- B. Shop Drawings: For fire-protection cabinets. Include plans, elevations, sections, details, and attachments to other work.
- C. Samples for Verification: For each type of exposed finish required, prepared on Samples 6 by 6 inches (150 by 150 mm) square.
- D. Product Schedule: For fire-protection cabinets. Indicate whether recessed, semirecessed, or surface mounted. Coordinate final fire-protection cabinet schedule with fire-extinguisher schedule to ensure proper fit and function. Use same designations indicated on Drawings.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For fire-protection cabinets to include in maintenance manuals.

1.6 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.

1.7 SEQUENCING

- A. Apply vinyl lettering on field-painted fire-protection cabinets after painting is complete.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

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

2.2 FIRE-PROTECTION CABINET (FEC-1)

- A. Cabinet Type: Suitable for fire extinguisher.
 - 1. Basis-of-Design Product: Subject to compliance with requirements, provide Model Alpine; Nystrom, Inc., or comparable product by one of the following:
 - a. Fire-End & Croker Corporation.
 - b. GMR International Equipment Corporation.
 - c. Guardian Fire Equipment, Inc.
 - d. JL Industries, Inc.; a division of the Activar Construction Products Group.
 - e. Modern Metal Products, Division of Technico Inc.
 - f. Larsens Manufacturing Company
 - g. Potter Roemer LLC.
 - h. Strike First Corporation of America.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide **#FC-7057; Nystrom; Alpine™ Fire Extinguisher Cabinet.**
 - 1. Description: Steel unit construction, continuous piano hinge with 180 degree opening. Weld joints and grind smooth.
 - 2. Cabinet Mounting: Recessed, 1/2 inch (12.7 mm)
 - 3. Components:
 - a. Door and Frame:
 - 1) 0.0652 inch (1.66mm) stainless steel.
 - 2) Color and Finish: Type 304 Stainless Steel with #4 finish.
 - b. Tub: 0.036 inch (0.9mm) cold rolled steel
 - 1) Color Finish: White factory applied powder coat paint finish.
 - c. Door Type: Full glass with tempered safety glass.
 - 4. Options:
 - a. Lettering: Vertical decal, red, 2-inch high lettering.
 - b. Latching: Pull handle roller catch.

5. Cabinet Dimensions: Size to match extinguisher type.
6. Fire Rating: Non-fire rated.

2.3 FIRE-PROTECTION CABINET (FEC-2)

A. Cabinet Type: Suitable for fire extinguisher.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Model Alpine; Nystrom, Inc., or comparable product by one of the following:
 - a. Fire-End & Croker Corporation.
 - b. GMR International Equipment Corporation.
 - c. Guardian Fire Equipment, Inc.
 - d. JL Industries, Inc.; a division of the Activar Construction Products Group.
 - e. Modern Metal Products, Division of Technico Inc.
 - f. Larsens Manufacturing Company
 - g. Potter Roemer LLC.
 - h. Strike First Corporation of America.

B. Basis-of-Design Product: Subject to compliance with requirements, provide **#FRC-7057; Nystrom; Alpine™ Fire Extinguisher Cabinet.**

1. Description: Steel unit construction, continuous piano hinge with 180 degree opening. Weld joints and grind smooth.
2. Cabinet Mounting: Recessed, 1/2 inch (12.7 mm)
3. Components:
 - a. Door and Frame:
 - 1) 0.0652 inch (1.66mm) stainless steel.
 - 2) Color and Finish: Type 304 Stainless Steel with #4 finish.
 - b. Tub: 0.036 inch (0.9mm) cold rolled steel
 - 1) Color Finish: White factory applied powder coat paint finish.
 - c. Door Type: Full glass with tempered safety glass.
4. Options:
 - a. Lettering: Vertical decal, red, 2-inch high lettering
 - b. Latching: Pull handle roller catch.
5. Cabinet Dimensions: Size to match extinguisher type.
6. Fire Rating: Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems.

2.4 FIRE-PROTECTION CABINET (FEC-3)

A. Cabinet Type: Suitable for fire extinguisher.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Model Ridge; Nystrom, Inc., or comparable product by one of the following:
 - a. Fire-End & Croker Corporation.
 - b. GMR International Equipment Corporation.
 - c. Guardian Fire Equipment, Inc.
 - d. JL Industries, Inc.; a division of the Activar Construction Products Group.

- e. Modern Metal Products, Division of Technico Inc.
 - f. Larsens Manufacturing Company
 - g. Potter Roemer LLC.
 - h. Strike First Corporation of America.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide #FC-7337; Nystrom; Ridge™ Fire Extinguisher Cabinet.
- 1. Description: Steel unit construction, continuous piano hinge with 180 degree opening, architectural convex, clear “bubble” window.
 - 2. Cabinet Mounting: Recessed, 1/2 inch (12.7 mm)
 - 3. Components:
 - a. Door and Frame:
 - 1) 6063-T5 anodized aluminum.
 - 2) Color and Finish: Satin finish, clear polyester coating.
 - b. Tub: 0.036 inch (0.9mm) cold rolled steel
 - 1) Color Finish: White factory applied powder coat paint finish.
 - c. Door Type: Convex Clear Full Bubble.
 - 4. Options:
 - a. Lettering: Vertical decal, red, 2-inch high lettering.
 - b. Latching: Pull handle roller catch.
 - 5. Cabinet Dimensions: Size to match extinguisher type.
 - 6. Fire Rating: [Non-fire rated][Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems]

2.5 FIRE-PROTECTION CABINET (FEC-4)

- A. Cabinet Type: Suitable for fire extinguisher.
- 1. Basis-of-Design Product: Subject to compliance with requirements, provide Model Ridge; Nystrom, Inc., or comparable product by one of the following:
 - a. Fire-End & Croker Corporation.
 - b. GMR International Equipment Corporation.
 - c. Guardian Fire Equipment, Inc.
 - d. JL Industries, Inc.; a division of the Activar Construction Products Group.
 - e. Modern Metal Products, Division of Technico Inc.
 - f. Larsens Manufacturing Company
 - g. Potter Roemer LLC.
 - h. Strike First Corporation of America.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide #FC-FRC-7338; Nystrom; Ridge™ Fire Extinguisher Cabinet.
- 1. Description: Steel unit construction, continuous piano hinge with 180 degree opening, architectural convex, clear “bubble” window.
 - 2. Cabinet Mounting: Semi-Recessed-2inch (50.8 mm)
 - 3. Components:
 - a. Door and Frame:
 - 1) 6063-T5 anodized aluminum.

- 2) Color and Finish: Satin finish, clear polyester coating.
- b. Tub: 0.036 inch (0.9mm) cold rolled steel
 - 1) Color Finish: White factory applied powder coat paint finish.
- c. Door Type: Convex Clear Full Bubble.
4. Options:
 - a. Lettering: Vertical decal, red, 2-inch high lettering.
 - b. Latching: Pull handle roller catch.
5. Cabinet Dimensions: Size to match extinguisher type.
6. Fire Rating: Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems.

2.6 FIRE-PROTECTION CABINET (FEC-5)**

- A. Cabinet Type: Suitable for fire extinguisher.
 1. Basis-of-Design Product: Subject to compliance with requirements, provide Model Ridge; Nystrom, Inc., or comparable product by one of the following:
 - a. Fire-End & Croker Corporation.
 - b. GMR International Equipment Corporation.
 - c. Guardian Fire Equipment, Inc.
 - d. JL Industries, Inc.; a division of the Activar Construction Products Group.
 - e. Modern Metal Products, Division of Technico Inc.
 - f. Larsens Manufacturing Company
 - g. Potter Roemer LLC.
 - h. Strike First Corporation of America.
- B. Basis-of-Design Product: Subject to compliance with requirements, provide #FC-FRC-7339; Nystrom; Ridge™ Fire Extinguisher Cabinet.
 1. Description: Steel unit construction, continuous piano hinge with 180 degree opening, architectural convex, clear “bubble” window.
 2. Cabinet Mounting: Surface mounted.
 3. Components:
 - a. Door and Frame:
 - 1) 6063-T5 anodized aluminum.
 - 2) Color and Finish: Satin finish, clear polyester coating.
 - b. Tub: 0.036 inch (0.9mm) cold rolled steel
 - 1) Color Finish: White factory applied powder coat paint finish.
 - c. Door Type: Convex Clear Full Bubble.
 4. Options:
 - a. Lettering: Vertical decal, red, 2-inch high lettering.
 - b. Latching: Pull handle roller catch.
 5. Cabinet Dimensions: Size to match extinguisher type.
 6. Fire Rating: Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems.

2.7 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.
 - 3. Prepare doors and frames to receive locks.
 - 4. Install door locks at factory.

- B. Cabinet Doors: Fabricate doors according to manufacturer's standards, from materials indicated and coordinated with cabinet types and trim styles.
 - 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.

2.8 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's AMP 500, "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 walls and partitions for suitable framing depth and blocking where semirecessed cabinets will be installed.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare recesses for recessed 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 or, if not indicated, at heights indicated below:
 - 1. Fire-Protection Cabinets: 54 inches (1372 mm) above finished floor to top of cabinet.
- B. Fire-Protection Cabinets: Fasten cabinets to structure, square and plumb.
 - 1. Fasten mounting brackets to inside surface of fire-protection cabinets, square and plumb.
- C. Identification: Apply vinyl lettering 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 104413