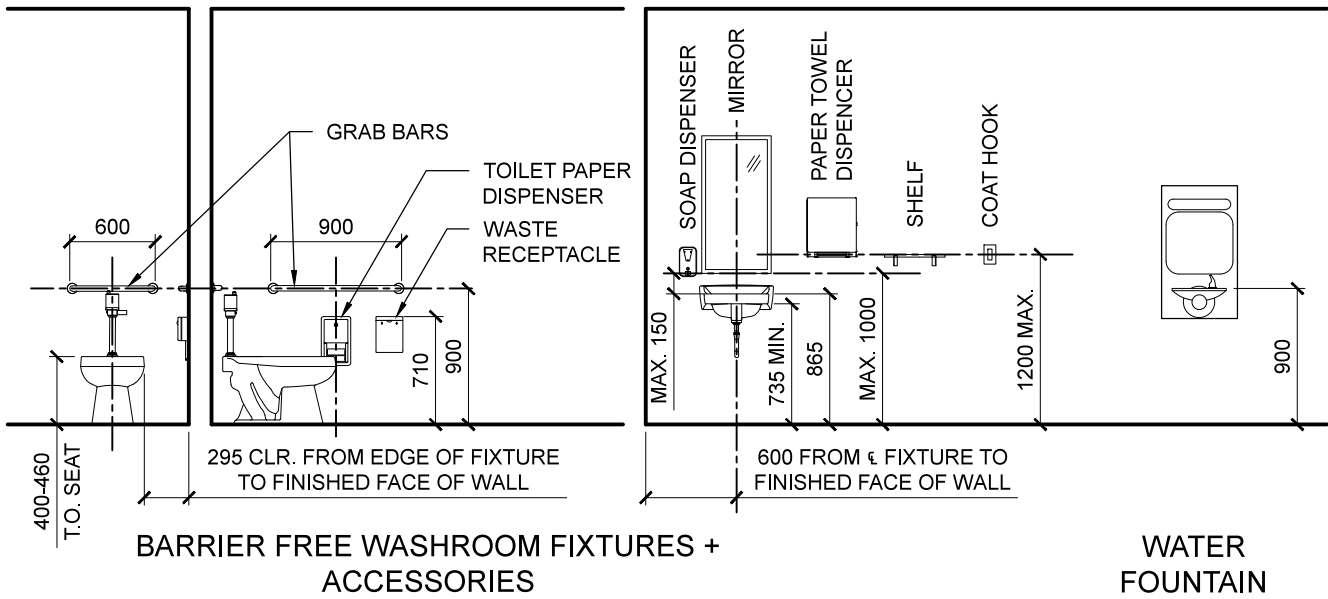
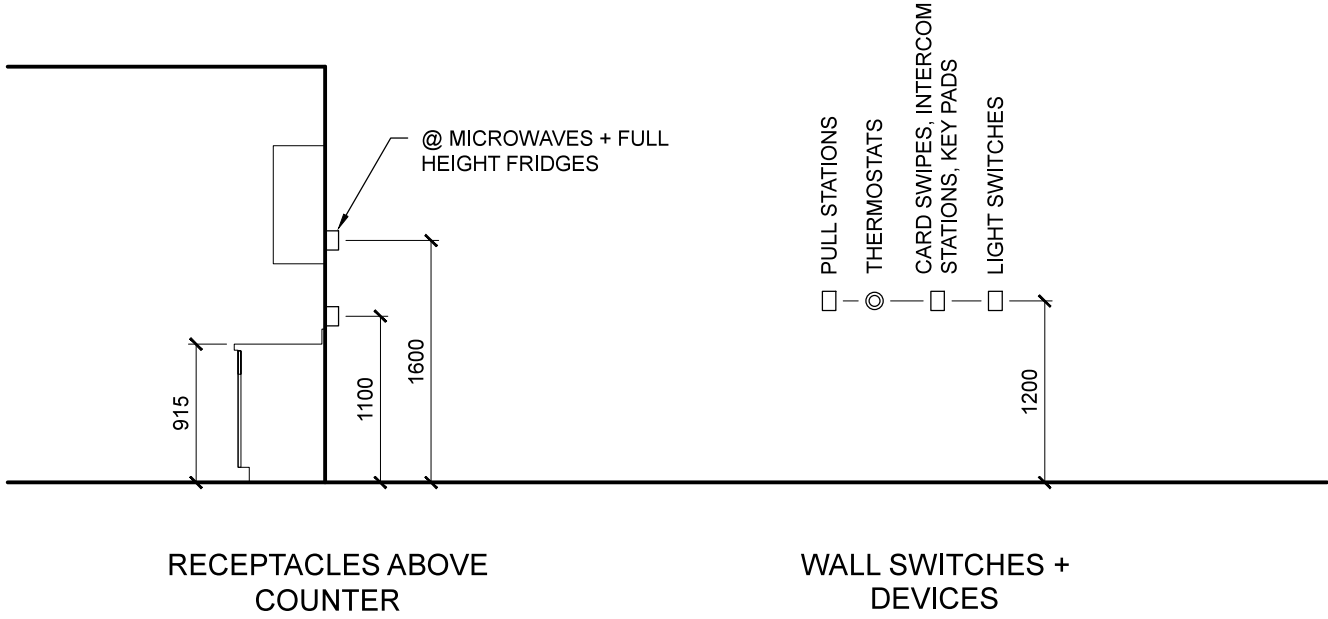
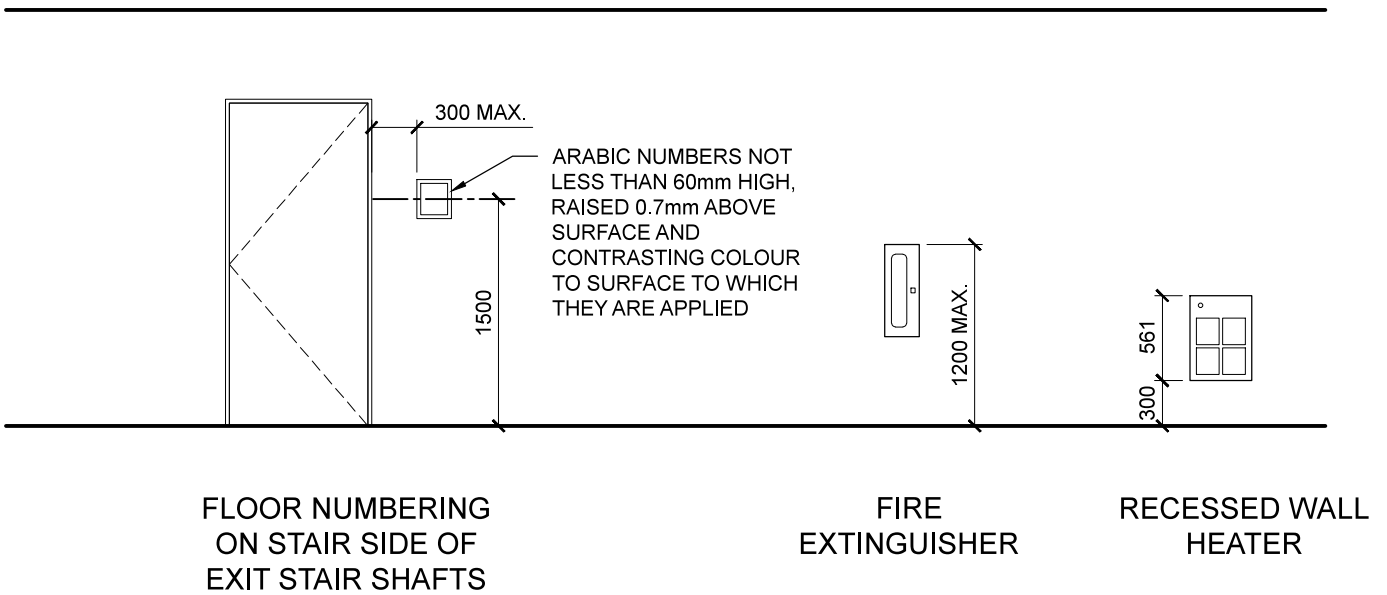
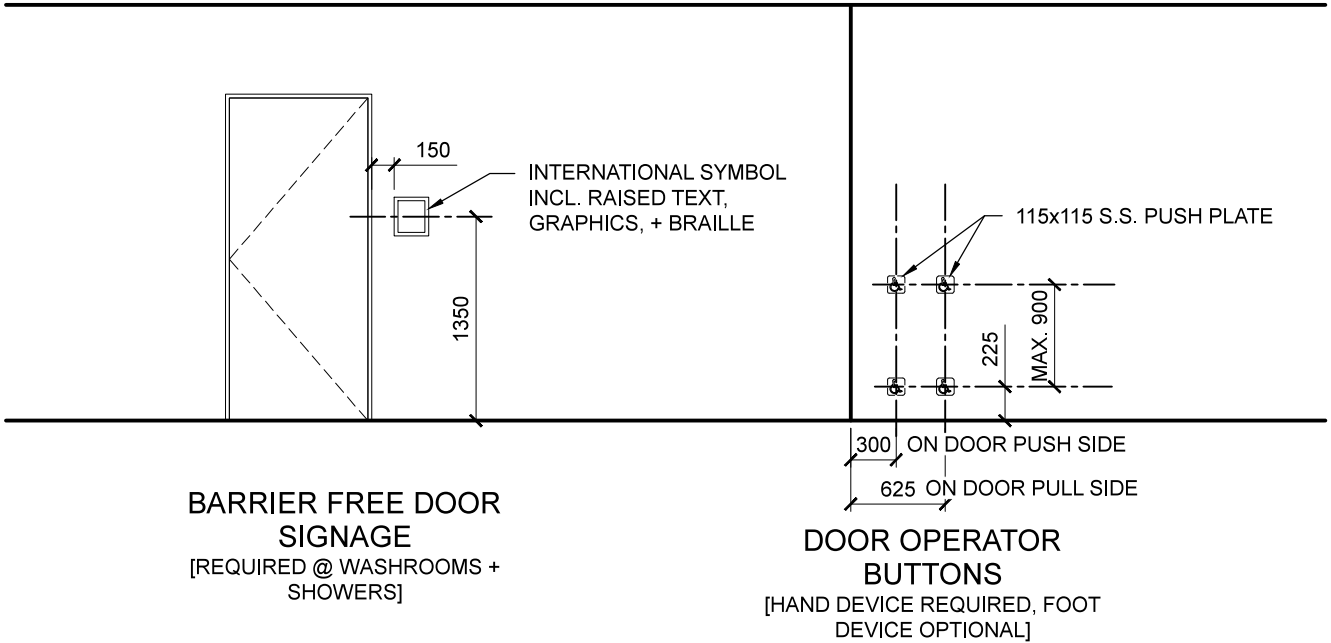


1 ROOM IDENTIFICATION -TYP.





Part 1 General

1.1 SECTION INCLUDES

- .1 Marker boards.
- .2 Unframed tackboards.
- .3 Accessories.

1.2 ADMINISTRATIVE REQUIREMENTS

- .1 Section 01 31 00: Project management and coordination procedures.
- .2 Coordination:
 - .1 Coordinate with other work having a direct bearing on work of this section.
 - .2 Coordinate the Work with installation of wall outlets and switches that are within the wall space for Work of this section.

1.3 SUBMITTALS FOR REVIEW

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide data on marker boards, and tackboards.
- .3 Shop Drawings: Indicate wall elevations, dimensions.
- .4 Samples: Submit two samples 150 by 150 mm in size illustrating materials and finish, colour and texture of marker board, and tackboard.

1.4 CLOSEOUT SUBMITTALS

- .1 Section 01 78 10: Submission procedures.
- .2 Operation and Maintenance Data: Include data on stain removal and regular maintenance cleaning.

1.5 DELIVERY, STORAGE, AND PROTECTION

- .1 Section 01 61 00: Transport, handle, store, and protect products.
- .2 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 Contract Administrator. When overall dimensions require delivery in separate units, prefit components at the factory, disassemble for delivery, and make final joints at the site.
- .3 Protect pre-finished surfaces with wrapping or strippable coating.

1.6 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

1.7 WARRANTY

- .1 Section 01 78 10: Warranties.
- .2 Warranty: Include 10-year coverage of marker board surfaces from discolouration due to cleaning, crazing or cracking, and staining.

Part 2 Products

2.1 UNFRAMED TACKBOARDS

- .1 6 mm thick, chemically resistant, uniform density composition cork with anti-soil, washable surface finish resistant to fading under artificial or natural light. Colour selected by Contractor Administrator.
 - .1 Acceptable Product: Forbo Bulletin Board.
- .2 Mounting Adhesive: As recommended by tackboard manufacturer.

2.2 MARKER BOARD - WHITE BOARD

- .1 Porcelain-Enamel Whiteboards: Low gloss, dry-erase, magnet-compatible board and non-reflective projection surface, monolithic construction, no trim. Dry-erase markers wipe clean with dry cloth or standard eraser.
 - .1 Accessories: Marker tray; 4-marker set of dry-erase markers; erasing cloth. Provide one of each accessory per markerboard. Marker colours: black, red, green and blue.
 - .2 Concealed Cleats: for wall mounting.
 - .3 Cleaning Instructions: Provide written instructions for cleaning.
 - .4 Size: 1829 wide by 1220 mm high.
- .2 Manufacturers/Models:
 - .1 Egan Visual; Dimension Stele.

2.3 FABRICATION

- .1 Visual Display Boards: Factory-assemble marker boards.

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Verify dimensions, tolerances, and method of attachment with other work.
- .3 Verify that internal wall blocking is ready to receive work.
- .4 Verify flat wall surface for frame-less adhesive applied tackboard.

3.2 INSTALLATION

- .1 Install marker boards and tackboards to manufacturer's written instructions.
- .2 Install visual display surfaces in locations and at mounting heights indicated. Keep perimeter lines straight, level, and plumb. Provide grounds, clips, backing materials, adhesives, brackets, anchors, trim, and accessories necessary for complete installation.
- .3 Attach concealed clips, hangers, and grounds to wall surfaces and to marker boards with fasteners at not more than 400 mm o.c. Secure both top and bottom of marker boards to walls.
- .4 Mechanical attachment:
 - .1 To wood or sheet metal use screws. Secure into framing members in stud walls.
- .5 Adhesive attachment: Apply unframed tackboard using spot method with daubs 40 mm diameter by 25 mm high at 200 mm on centre each way to adhere tackboard to wall. Press firmly into adhesive to ensure adhesion.

3.3 CLEANING

- .1 Section 01 74 00: Cleaning installed work.
- .2 Remove protective material from surfaces.
- .3 Clean surfaces in accordance with manufacturer's written instructions, then cover surfaces with protective cover.
- .4 Remove temporary protective cover at date of Substantial Completion.

3.4 PROTECTION OF FINISHED WORK

- .1 Protect finished Work from damage.

END OF SECTION

- Part 1 General**
- 1.1 SECTION INCLUDES**
- .1 Interior signs.
- 1.2 RELATED REQUIREMENTS**
- .1 Section 10 06 10 – Signage Schedule
- 1.3 REFERENCES**
- .1 City of Winnipeg
- .1 2015 City of Winnipeg Accessibility Design Standard, Third Edition
- 1.4 SUBMITTALS FOR REVIEW**
- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide data on signs.
- .3 Shop Drawings:
- .1 Indicate sign styles, lettering font, foreground and background colours, locations, overall dimensions of each sign.
- .2 Submit drawn to scale details indicating word and letter spacing.
- .4 Samples: Submit representative sample of each type of sign, and sign image illustrating type, style, letter font, and colours specified; method of attachment.
- 1.5 DELIVERY, STORAGE, AND PROTECTION**
- .1 Section 01 61 00: Transport, handle, store, and protect products.
- .2 Package signs, labeled in name groups.
- .3 Store adhesive attachment tape at ambient room temperatures.
- 1.6 WASTE MANAGEMENT AND DISPOSAL**
- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.
- Part 2 Products**
- 2.1 REGULATORY REQUIREMENTS**
- .1 Conform to applicable code for requirements for the physically handicapped in accordance with the City of Winnipeg Accessibility Design Standard.
- 2.2 SIGNS**
- .1 Sign Panel: Solid core acrylic, 3 mm thick with non-glare finish. Colour selected by Contract Administrator from manufacturer’s full colour range.

- .2 Lettering and Pictogram: Surface-applied modified acrylic polymer, raised 0.8 mm from background surface. Font: sans serif font selected by Contract Administrator. Colour selected by Contract Administrator from manufacturer's full colour range, contrasting sign panel.
- .3 Braille: Provide Braille information to accompany sign lettering or pictogram using Raster method with 0.8 mm by 1.5 mm dia. high clear domed acrylic Grade 1 uncontracted Braille dots.
- .4 Refer to Section 10 06 10 - Signage Schedule for sign size and layout.
 - .1 Provide Room Identification Signs as follows:
 - .1 Janitor's Room
 - .2 Mechanical / Electrical Room
 - .3 Staff Washroom
 - .4 Staff Room
 - .5 Branch Head Office
 - .2 Provide Self-Check Out signage as indicated on Architectural Drawing 3/A-403.

2.1 ACCESSORIES

- .1 Tape Adhesive: Double-sided tape, permanent adhesive.

2.2 FABRICATION

- .1 Layout sign graphics in accordance with the City of Winnipeg Accessibility Design Standard, with words and letters properly spaced.

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Verify that substrate surfaces are ready to receive work.

3.2 INSTALLATION

- .1 Install signage in accordance with manufacturer instructions.
- .2 Install signs after wall surfaces are finished, in locations as indicated or as directed.
- .3 Wall mount signs level, and at 150 mm from door jamb on strike side of door, with centre line at 1350 mm AFF.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Solid colour phenolic toilet compartments and urinal screens.

1.2 RELATED REQUIREMENTS

- .1 Section 05 50 01 - Metal Fabrications: Placement of concealed supports.
- .2 Section 06 10 53 - Miscellaneous Rough Carpentry: Framing and plates within walls for partition panel support.
- .3 Section 10 28 14 - Toilet and Bath Accessories

1.3 REFERENCES

- .1 ASTM International (ASTM)
 - .1 ASTM A167-99 (2009) - Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
- .2 City of Winnipeg
 - .1 2015 City of Winnipeg Accessibility Design Standard, Third Edition

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Section 01 31 00: Project management and coordination procedures.
- .2 Coordination:
 - .1 Coordinate the work with placement of support framing and anchors in wall.

1.5 SUBMITTALS FOR REVIEW

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- .3 Shop Drawings: Indicate partition plan, elevation views, dimensions, details of wall supports, door swings, locations of reinforcements for compartment-mounted grab bars, and locations of centrelines of toilet fixtures.
- .4 Samples: Submit two samples of partition panels, manufacturer's standard size illustrating panel finish, colour, and sheen.

1.6 CLOSEOUT SUBMITTALS

- .1 Section 01 78 10: Submission procedures.
- .2 Maintenance Data: For toilet compartment partitions to include in maintenance manuals.
- .3 Include precautions for cleaning materials and methods that could be detrimental to finishes and performance.

1.7 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

1.8 PROJECT CONDITIONS

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

Part 2 Products

2.1 REGULATORY REQUIREMENTS

- .1 Conform to City of Winnipeg Accessibility Standards for accessibility requirements for the handicapped, including but not limited to:
 - .1 Accessible stall doors capable of being locked from inside by device operable with one hand without need for fine finger control, tight grasping, pinching or twisting of wrist; emergency operation from outside; complete with gravity hinges, and colour-contrasting D-shape door pulls on both sides of outswing door.

2.2 MANUFACTURERS

- .1 Manufacturers/Models:
 - .1 Bobrick; Product: Sierra 1092, overhead-braced style toilet compartment, 1093 post-to-ceiling screen.
 - .2 Global Partitions; Product: Phenolic Color-Thru Floor Anchored/Overhead Braced.

2.3 MATERIALS

- .1 Solid Phenolic Panel: to NEMA LD3, solid phenolic core with colour-through core.
- .2 Doors: 19 mm thick by nominal 1500 high.
 - .1 Door Width:
 - .1 Accessible Stall: 900 mm clear opening, out-swinging.
 - .2 Elsewhere: 610 mm clear opening.
- .3 Panels: minimum 13 mm thick by nominal 1500 high.
- .4 Pilasters: 19 mm thick by nominal 1800 mm high.
- .5 Urinal Screens: 13 mm thick by nominal 1200 mm high.

2.4 ACCESSORIES

- .1 Pilaster Shoe: Formed ASTM A167, type 304 stainless steel, 75 mm high, with adjustable screw jack.
- .2 Head Rails: Hollow aluminum tube, manufacturer's standard size, with anti-grip edge.
- .3 Attachments, Screws, and Bolts: Stainless steel; tamper proof type heavy duty extruded aluminum brackets.
- .4 Through Bolts and Nuts: Stainless steel with tamper proof heads.

- .5 Hardware: Stainless steel.
 - .1 Pivot hinges, gravity type, adjustable for door close positioning.
 - .2 Nylon bearings.
 - .3 Door latch with exterior emergency access feature.
 - .4 Door strike and keeper with rubber bumper.
 - .5 Coat hook with rubber bumper.
 - .6 Door D-pull for out-swinging doors.
- .6 Urinal Screen Post: minimum 30-mm- square, satin finish stainless steel or aluminum tube with satin finish.
- .7 Brackets: Stirrup Type, ear or U-brackets, stainless steel.

2.5 FABRICATION

- .1 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.
- .2 Urinal-Screen Posts: Provide manufacturer's standard corrosion-resistant anchoring assemblies with leveling adjustment at tops and bottoms of posts. Provide shoes and sleeves (caps) at posts to conceal anchorage.
- .3 Fabricate partitions by forming solid phenolic with surface, edge and core of same colour.
- .4 Bevel corners and edges of cut-outs.

2.6 FINISHES

- .1 Phenolic Panels: Solid-colour through. Allow for two colours selected by Contract Administrator from manufacturer's full colour range.
- .2 Stainless Steel Surfaces: No. 4 finish.
- .3 Aluminum: Clear anodized.

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Verify that field measurements are as indicated on Shop Drawings.
- .3 Verify correct spacing of and between plumbing fixtures.
- .4 Verify correct location of built-in framing, anchorage, and bracing.

3.2 INSTALLATION

- .1 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:
 - .1 Pilasters and Panels: 13 mm.
 - .2 Panels and Walls: 25 mm.

- .2 **Stirrup Brackets:** Secure panels to walls and to pilasters with no fewer than two brackets attached near top and bottom of panel.
 - .1 Locate wall brackets so holes for wall anchors occur in masonry or tile joints.
 - .2 Align brackets at pilasters with brackets at walls.
- .2 **Overhead-Braced Units:** Secure pilasters to floor and level, plumb, and tighten. Set pilasters with anchors penetrating not less than 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 **Urinal Screens:** Attach with anchoring devices to suit supporting structure. Set units level and plumb, rigid, and secured to resist lateral impact.
- .4 Replace damaged or scratched materials with new materials.

3.3 ADJUSTING

- .1 Adjust and align hardware to uniform clearance at vertical edge of doors, not exceeding 5 mm.
- .2 Adjust hinges to position doors in partial opening position when unlatched. Return out swinging doors to closed position.
- .3 Adjust adjacent components for consistency of line or plane.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Corner guards.

1.2 SUBMITTALS FOR REVIEW

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Indicate physical dimensions, features, and anchorage details.
- .3 Shop Drawings: Indicate heights, location of wall protection on floor plan at 1:100 scale.
- .4 Samples: Submit two sections of corner guard, 300 mm long, illustrating component design, configuration, colour and finish.

1.3 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

Part 2 Products

2.1 COMPONENTS

- .1 Corner Guard - Surface Mounted: 90 degree corners with 38 mm wings.
 - .1 Material: High impact vinyl, 2 mm thick, scratch- and stain-resistant, full depth integral colour, matte pebble grain textured surface.
 - .2 Mounting: surface with factory-applied double-sided tape.
 - .3 Length: One piece, 1220 mm high.
 - .4 Colour: selected by Contract Administrator from manufacturer's full range of colours to match adjacent wall finish.
- .2 Manufacturer/Model:
 - .1 Acrovyn; VA-200N.
 - .2 IPC InPro; Tape-on Corner Guard.
 - .3 Pawling; CGT-12.
- .3 Mounting Hardware: Double-sided foam tape.

2.2 FABRICATION

- .1 Fabricate components with tight corners.

Part 3 Execution

3.1 INSTALLATION

- .1 Install components to manufacturer's written instructions.
- .2 Install components level and plumb, secured rigidly in position

- .3 Position bottom of corner guard at top of wall base.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Toilet, shower, washroom and custodial accessories.

1.2 RELATED REQUIREMENTS

- .1 Section 01 10 00 - Summary of Work.
- .2 Section 06 10 00 - Rough Carpentry: plywood backing, and support
- .3 Section 08 80 50 - Glass and Glazing: unframed mirrors
- .4 Section 09 21 16 - Gypsum Board Assemblies
- .5 Division 26 - Electrical, hand dryer

1.3 REFERENCES

- .1 ASTM International (ASTM)
 - .1 ASTM A123/A123M-15 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
 - .2 ASTM A167-99(2009) - Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
 - .3 ASTM A269/A269M-15 - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service
 - .4 ASTM F2285-04(2010) - Standard Consumer Safety Performance Specification for Diaper Changing Tables for Commercial Use

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Section 01 31 00: Project management and coordination procedures.
- .2 Coordination:
 - .1 Coordinate with other work having a direct bearing on work of this section.
 - .2 Coordinate the work with the placement of internal wall reinforcement to receive anchor attachments.
 - .3 Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.

1.5 SUBMITTALS FOR REVIEW

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide data on accessories describing size, finish, details of function, attachment methods.
- .3 Shop Drawings: Indicate size and description of components, base material, surface finish inside and out, hardware and locks, attachment devices, description of rough-in-frame, building-in details of anchors for grab bars, wiring diagrams for hand dryers.
- .4 Samples: Submit two samples of each component, illustrating colour and finish. Samples will be returned for incorporation into the Work.

1.6 CLOSEOUT SUBMITTALS

- .1 Section 01 78 10: Submission procedures.
- .2 Provide maintenance data for toilet and bath accessories.

1.7 EXTRA MATERIALS

- .1 Provide special tools and keys required for accessing, assembly/disassembly or removal for toilet and bath accessories in accordance with requirements specified in Section 01 78 10.
- .2 Deliver special tools to Contract Administrator.
- .3 Provide minimum of six keys to Contract Administrator.

1.8 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

1.9 WARRANTY

- .1 Mirror Warranty: Manufacturer's standard form in which manufacturer agrees to replace mirrors that develop visible silver spoilage defects and that fail in materials or workmanship within specified warranty period.
 - .1 Warranty Period: 10 years from date of Substantial Performance of the Work.

Part 2 Products

2.1 CITY-SUPPLIED PRODUCTS

- .1 Paper towel dispensers.

2.2 REGULATORY REQUIREMENTS

- .1 Conform to City of Winnipeg Accessibility Design Standards for accessibility requirements for the handicapped.

2.3 PERFORMANCE REQUIREMENTS

- .1 Fastener and Mounting Requirements: Install grab bars to withstand a minimum 1.3 kN downward shear force when tested in accordance with ASTM F446; provide fasteners and mountings of types suitable for substrates, and as required for permanent and durable installation.

2.4 MATERIALS

- .1 Stainless Steel Sheet: ASTM A167, Type 304.
- .2 Tubing: ASTM A269, stainless steel.
- .3 Fasteners: Manufacturer's standard for installation; through bolts for mounting to toilet partitions; expansion anchors of type designed to accept anticipated loads and as follows:
 - .1 Galvanized Steel Mounting Devices: In accordance with ASTM A153/A153M, hot dip galvanized after fabrication.

- .2 Screws, Bolts, and other Devices: Same material as accessory unit, tamper and theft resistant when exposed, and galvanized steel when concealed.
- .4 Expansion Shields: Fibre, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.5 FABRICATION

- .1 General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.
- .2 Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Master key accessories.

2.6 FINISHES

- .1 Galvanizing: Hot-dip galvanized to ASTM A123/A123M, appropriate grade for type and size of steel material indicated. Galvanize ferrous metal and fastening devices.
- .2 Stainless Steel: No. 4 Satin finish.
- .3 Back paint components where contact is made with building finishes to prevent electrolysis.

Part 3 Execution

3.1 EXAMINATION

- .1 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.
- .2 Grab Bars: Install to withstand a downward load of at least 1112 N, when tested according to ASTM F 446.

3.2 INSTALLATION

- .1 Install toilet accessory units level, plumb, and firmly anchored in locations and at heights indicated or as directed.
- .2 Install and secure accessories rigidly in place as follows:
 - .1 Stud walls: install steel back-plate to stud prior to gypsum board finish. Provide plate with threaded studs or plugs.
 - .2 Stud walls: For low weight devices (less than 2.5 kg) mounted on gypsum board, such as soap dispensers use suitably sized self-drilling anchor.
 - .3 For installation on surfaces with plywood backing: wood screw of length such that 2/3 of screw is in plywood, and remaining length passes through non-anchor surface.
- .3 Install grab bars on built-in anchors provided by bar manufacturer.
- .4 Use tamper proof screws/bolts for fasteners.
- .5 Fill units with necessary supplies shortly before final acceptance of building.

- .6 Location and Quantity:
 - .1 Locate accessories where indicated, or scheduled. Exact locations determined by Contract Administrator.
 - .2 Refer to Drawings for location, types, and quantities.

3.3 ADJUSTING AND CLEANING

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

3.4 SCHEDULE

- .1 Dispenser - Paper Towel (DPT): City-supplied; Contractor-installed.
- .2 Baby Change Station (BCC): to ASTM F2285, surface mounted wall unit, horizontal orientation, injection-moulded polypropylene cabinet with antimicrobial additive in bed surface. Type 304 brushed stainless steel veneer finish. Steel hinge assembly, integral support mechanism, and pneumatic cylinder for controlled opening and closing. Complete with liner dispenser, safety instructions in both official languages or graphic illustration, labeled with universally accepted symbol. Contoured change area complete with safety strap and bag hooks.
 - .1 Manufacturer/Model:
 - .1 Koala Kare Products KB 200-SS
 - .2 ASI 9018-9.
- .3 Coat Hook (CH1): Stainless steel, satin finish, surface-mounted, 19 mm dia. post with 6 mm diameter hook pin, 100 mm wide double hook, approximately 33 mm projection, mounting bracket with concealed wall plate.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-542.
- .4 Coat Hook (CH2): Heavy-duty, one-piece brass casting, satin chrome- or nickel-plated finish, approximately 85 mm projection, mounting bracket with concealed wall plate.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-2116.
 - .2 ASI 0751.
- .5 Dispenser – Liquid Soap (DLS): Surface mounted, stainless steel construction, satin finish. Hinged lid for top filling. Capacity: 1.2 L.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-4112.
 - .2 ASI 9343.
- .6 Framed Mirror (M1):
 - .1 Mirror Glass: Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.
 - .2 Backing: full-size, shock-absorbing, water-resistant padding primary backing, and galvanized steel secondary backing.

-
- .3 Frame: Stainless-steel channel with mitred and mechanically interlocked corners.
 - .4 Hangers: Produce rigid, tamper- and theft-resistant installation, to hold mirror unit in position with no exposed screws or bolts.
 - .5 Size: 610 by 915 mm.
 - .6 Manufacturer/Model:
 - .1 Bobrick B-165.
 - .2 ASI Group 0620.
 - .7 Grab Bar (GB#): Stainless steel, 32 mm OD, 1.21 mm wall thickness with peened finish, positive gripping surface and complete with standard mounting plates, flanges and accessories.
 - .1 Length:
 - .1 GB-1: 533 mm long.
 - .2 GB-2: 610 mm long.
 - .3 GB-3: 762 mm long.
 - .4 GB-4: 915 mm long.
 - .2 Manufacturer/Model:
 - .1 Bobrick B-5806.99 series.
 - .2 ASI W-3701-P Series.
 - .8 Folding Shower Seat (SHS): Fold-up type, stainless steel frame and mounting brackets; one-piece seat fabricated from water-resistant solid phenolic material with drain slots. Seat size approximately 455 mm wide by 365 deep, 140 mm projection in folded position.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-5191.
 - .2 ASI 8203.
 - .9 Mop and Broom Holder (MH): Type 304 stainless steel utility shelf, with four hooks, and three spring-loaded mop/broom holders. Shelf depth: 200 mm. Length: 865 mm.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-239.
 - .2 ASI 1308.
 - .10 Shelf (SH-#): Type 304 stainless steel, satin finish, 125 mm deep by 400 mm long with returned edges, complete with welded mounting brackets.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-295.
 - .2 ASI 0692.
 - .11 Shower Curtain (SC): Opaque, matte white vinyl, 0.2 mm thick, with antibacterial and flame-retardant, complete with grommets along top at 150 mm o.c., and hemmed sides and bottom. Size: 1780 wide by 1830 mm high. Provide stainless steel shower hooks.
 - .1 Manufacturer/Model:
 - .1 Bobrick 204-3
 - .2 ASI 1200-V.

- .12 Shower Curtain Rod: Type 304 stainless steel tube, 32 mm diameter, extra heavy duty, minimum 1.2 mm wall thickness, complete with flanges and concealed mounting brackets.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-6047.
 - .2 ASI 1204.
- .13 Sanitary Waste Receptacle (WR): Surface mounted, stainless steel, satin finish, curved front. Hinged lid.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-270.
 - .2 ASI 20852.
- .14 Toilet Paper Dispenser (TP): Double roll type, surface mounted, cast aluminum, satin finish. Capacity: two standard-core toilet tissue rolls up to 152 mm diameter on theft-resistant high-impact ABS spindles.
 - .1 Manufacturer/Model:
 - .1 Bobrick B-2740.
 - .2 ASI 0264-1.
- .15 Waste Receptacles: (WR): Square polyethylene receptacle with rolled rim and reinforced base, approximately 420 by 420 by 685 mm high, 95 litre capacity. Provide complete with swing lid. Colour: Grey.
 - .1 Manufacturer/Model: Continental 25GY Swingline Square Receptacle and Continental 1600 Swing Top.

END OF SECTION

- Part 1 General**
- 1.1 SECTION INCLUDES**
- .1 Portable fire extinguishers.
 - .2 Fire extinguisher cabinets.
- 1.2 RELATED REQUIREMENTS**
- .1 Section 09 22 16 - Non-structural Metal Stud Framing: Roughed-in wall openings.
- 1.3 REFERENCES**
- .1 National Fire Protection Association (NFPA)
 - .1 NFPA 10-2013, Portable Fire Extinguishers
 - .2 Underwriters Laboratories of Canada (ULC)
 - .1 CAN/ULC-S504-12, Standard for Dry Chemical Fire Extinguishers
 - .2 CAN/ULC-S508-02, Standard for Rating and Fire Testing of Fire Extinguishers
- 1.4 ADMINISTRATIVE REQUIREMENTS**
- .1 Coordinate type and capacity of fire extinguishers with fire protection cabinets to ensure fit and function.
 - .2 Coordinate sizes and locations of fire extinguisher cabinets with wall depths.
- 1.5 SUBMITTALS FOR REVIEW**
- .1 Section 01 33 00: Submission procedures.
 - .2 Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components, and finishes for fire extinguisher cabinets.
 - .1 Extinguishers: Include rating and classification, material descriptions, dimensions of individual components and profiles, and finishes for fire extinguisher.
 - .2 Fire Extinguisher 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.
 - .3 Shop Drawings: For fire extinguisher cabinets. Include plans, elevations, sections, details, and attachments to other work. Coordinate fire extinguisher cabinets with fire extinguishers to ensure proper fit and function.
- 1.6 CLOSEOUT SUBMITTALS**
- .1 Section 01 78 10: Submission procedures.
 - .2 Operation and Maintenance Data: Include test, refill or recharge schedules and re-certification requirements.

1.7 QUALITY ASSURANCE

- .1 Fire Extinguishers:
 - .1 Listed and labeled for type, rating, and classification by an independent testing agency acceptable to authorities having jurisdiction.
 - .2 NFPA Compliance: Fabricate and label fire extinguishers to comply with NFPA 10.
- .2 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.

1.8 DELIVERY, STORAGE AND HANDLING

- .1 Deliver products in original wrappings or containers with manufacturers' labels intact.
- .2 Do not deliver fire extinguishers to site until spaces to receive them are clean, dry, and ready for installation.

1.9 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

1.10 AMBIENT CONDITIONS

- .1 Do not install extinguishers when ambient temperature may cause freezing of extinguisher ingredients.

Part 2 Products

2.1 PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS

- .1 General:
 - .1 Instruction Labels: Include pictorial marking system complying with NFPA 10, Annex B.
- .2 Pressurized Dry Chemical:
 - .1 Description: Multi-purpose monoammonium phosphate, powder type, heavy duty steel cylinder, baked enamel finish, squeeze grip handle with positive on/off valve, hose and nozzle, ULC labelled.
 - .2 Capacity and Rating: 4-A:60-B:C, 4.5-kg.
 - .3 Classification: A, B and C fires.

2.2 FIRE EXTINGUISHER CABINETS - FER

- .1 Cabinet Type: Suitable for fire extinguisher.
- .2 Cabinet Construction: to maintain fire resistive rating of construction in which they occur.
- .3 Cabinet Material: Steel sheet.

- .4 Recessed Cabinet: Cabinet box recessed in walls of sufficient depth to suit style of trim indicated.
 - .1 Exposed Flat Trim: One-piece combination trim and perimeter door frame overlapping surrounding wall surface with exposed trim face and wall return at outer edge (backbend).
- .5 Cabinet Trim Material: Stainless steel sheet.
- .6 Door Material: Stainless steel sheet.
- .7 Door Style: Fully glazed panel with frame.
- .8 Door Glazing: Tempered float glass (clear).
- .9 Door Hardware: Manufacturer's standard door-operating hardware of proper type for cabinet type, trim style, and door material and style indicated.
 - .1 Provide recessed door pull and friction latch.
 - .2 Provide continuous hinge, of same material and finish as trim, permitting door to open 180 degrees.
- .10 Accessories:
 - .1 Identification: Lettering complying with authorities having jurisdiction for letter style, size, spacing, and location.
 - .1 Identify fire extinguisher in fire protection cabinet with the words "FIRE EXTINGUISHER" applied to cabinet door. Letter colour: Red.
- .11 Finishes:
 - .1 Manufacturer's standard baked-enamel paint for the interior of cabinet.
 - .2 Stainless steel, No. 4.

2.3 EXTINGUISHER MOUNTING BRACKETS

- .1 Manufacturer's standard steel, designed to secure fire extinguisher to fire protection cabinet or wall, of sizes required for types and capacities of fire extinguishers indicated, with plated or baked-enamel finish

2.4 FABRICATION

- .1 Fire Extinguisher 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.
- .2 Cabinet Doors: Fabricate doors according to manufacturer's standards, from materials indicated and coordinated with cabinet types and trim styles selected.
- .3 Cabinet Trim: Fabricate cabinet trim in one piece with corners mitered, welded, and ground smooth.

2.5 GENERAL FINISH REQUIREMENTS

- .1 Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- .2 Protect mechanical finishes on exposed surfaces of fire protection cabinets from damage by applying a strippable, temporary protective covering before shipping.

- .3 Finish fire protection cabinets after assembly.

2.6 STEEL FINISHES

- .1 Surface Preparation: Remove mill scale and rust, if present, from uncoated steel.
- .2 Baked-Enamel or Powder-Coat Finish: manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat; minimum dry film thickness of 0.05 mm.

2.7 STAINLESS STEEL FINISHES

- .1 Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
- .2 Polished Finishes: Grind and polish surfaces to produce uniform finish, free of cross scratches.
 - .1 Run grain of directional finishes with long dimension of each piece.
 - .2 When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
 - .3 Directional Satin Finish: No. 4.

Part 3 Execution

3.1 EXAMINATION

- .1 Section 01 70 00: Verify existing conditions before starting work.
- .2 Examine walls and partitions for suitable framing depth and blocking where recessed cabinets will be installed.
- .3 Verify rough openings for cabinet are correctly sized and located.

3.2 INSTALLATION

- .1 General: Install fire protection cabinets in locations and at mounting heights indicated or, if not indicated, at heights indicated below:
 - .1 Fire Protection Cabinets: 1372 mm above finished floor to top of cabinet.
 - .2 Extinguisher on Wall Bracket: Maximum 1500 mm AFF to handle.
- .2 Fire Protection Cabinets: Fasten cabinets to structure, square and plumb.
 - .1 Unless otherwise indicated, provide recessed fire protection cabinets. If wall thickness is not adequate for recessed cabinets, provide semi-recessed fire protection cabinets.
 - .2 Fasten mounting brackets to inside surface of fire protection cabinets, square and plumb.
- .3 Identification: Apply decals at locations indicated or as directed.
- .4 Place extinguishers on wall brackets in mechanical room and crawlspace.

3.3 ADJUSTING AND CLEANING

- .1 Remove temporary protective coverings and strippable films, if any, as fire protection cabinets are installed unless otherwise indicated in manufacturer's written installation instructions.
- .2 Adjust fire protection cabinet doors to operate easily without binding.
- .3 On completion of fire extinguisher cabinet installation, clean interior and exterior surfaces as recommended by manufacturer.
- .4 Touch up marred finishes, or replace fire extinguisher cabinets that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by fire extinguisher cabinet and mounting bracket manufacturers.
- .5 Replace fire extinguisher cabinets that have been damaged or have deteriorated beyond successful repair by finish touch-up or similar minor repair procedures.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Locker units with hinged doors.
- .2 Metal bases, and filler panels.

1.2 RELATED REQUIREMENTS

- .1 Section 09 22 16 - Non-structural Metal Stud Framing: framing for recessed lockers

1.3 SUBMITTALS FOR REVIEW

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide data on locker types, sizes and accessories.
- .3 Shop Drawings: Indicate locker plan layout, numbering plan.

1.4 DELIVERY, STORAGE, AND PROTECTION

- .1 Section 01 61 00: Transport, handle, store, and protect products.
- .2 Protect locker finish and adjacent surfaces from damage.

1.5 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate waste materials for recycling in accordance with Section 01 74 20 – Waste Management and Disposal.

Part 2 Products

2.1 MANUFACTURERS

- .1 Manufacturers/Models:
 - .1 General Storage Systems; Product: Décor Tri-Lok Corona.
 - .2 Hadrian; Product: Emperor.
 - .3 Shanahan's; Product: SML Deluxe.

2.2 MATERIALS

- .1 Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B, suitable for exposed applications.
- .2 Fasteners: Zinc- or nickel-plated steel, slotless-type, exposed bolt heads; with self-locking nuts or lock washers for nuts on moving parts.
- .3 Anchors: Material, type, and size required for secure anchorage to each substrate.
 - .1 Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls for corrosion resistance.
 - .2 Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

2.3 FABRICATION

- .1 Standard metal lockers, constructed of cold-rolled steel sheet.
- .2 Configuration: double-tier, recessed installation.
- .3 Size: 305 wide by 450 deep by 1830 mm high.
- .4 Body: Assembled by riveting or bolting body components together. Fabricate from unperforated steel sheet as follows:
 - .1 Tops, Bottoms, and Intermediate Dividers: minimum 0.61-mm nominal thickness, with single bend at sides.
 - .2 Backs and Sides: minimum 0.61-mm nominal thickness, with full-height, double-flanged connections.
- .5 Frames: Channel formed; fabricated from minimum 1.52-mm nominal-thickness steel sheet; lapped and factory welded at corners; with top and bottom main frames factory welded into vertical main frames. Form continuous, integral door strike full height on vertical main frames.
- .6 Doors: Double pan construction, 0.91 mm thick outer panel, 0.61 mm inner panel with structural sound deadening honeycomb core bonded to inner surfaces.
- .7 Hinges: Welded to door and attached to door frame with no fewer than two factory-installed rivets per hinge that are completely concealed and tamper resistant when door is closed; fabricated to swing 180 degrees.
- .8 Recessed Door Handle and Latch: Stainless-steel or aluminum cup with integral door pull, recessed so locking device does not protrude beyond face of door; pry and vandal resistant.
 - .1 Single-point latching: Non-moving latch hook with steel padlock loop that projects through recessed cup and is finished to match metal locker body.
- .9 Equipment: Equip each metal locker with identification number plate, ventilation in either door or frame, and three ball-pointed single-prong aluminum or zinc-plated steel wall hooks.
- .10 Accessories:
 - .1 Identification Plates: Manufacturer's standard, etched, embossed, or stamped plates.
 - .2 Continuous Metal Base: Fabricated from manufacturer's standard thickness, but not less than 0.91-mm nominal-thickness steel sheet. Formed into channel or Z-profile for stiffness, and fabricated in lengths as long as practical to enclose base and base ends of metal lockers; finished to match lockers. Height: 100 mm.
 - .3 Recess Trim: Fabricated from manufacturer's standard thickness, but not less than 0.91-mm nominal-thickness steel sheet. Fabricate with minimum 64-mm face width and in lengths as long as practical; finished to match lockers.
- .11 Finish: manufacturer's standard powder coat. Allow for two colours, with door one colour and frame and body another colour; as selected by Contract Administrator from manufacturer's full range.

Part 3 Execution

3.1 INSTALLATION

- .1 General: Install level, plumb, and true; shim as required, using concealed shims.
 - .1 Anchor locker runs at ends and at intervals recommended by manufacturer, but not more than 900mm o.c. Using concealed fasteners, install anchors through backup reinforcing plates, channels, or blocking as required to prevent metal distortion.
 - .2 Anchor rows of metal lockers to walls near top of lockers and to floor.
- .2 Equipment and Accessories: Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
 - .1 Attach hooks with at least two fasteners.
 - .2 Attach number plates to each locker, with minimum two rivet fasteners.
 - .3 Attach recess trim to recessed metal lockers with concealed clips.

3.2 CLEANING

- .1 Section 01 74 00: Cleaning installed work.
- .2 Clean locker interiors and exterior surfaces.

3.3 ADJUSTING, CLEANING, AND PROTECTION

- .1 Clean, lubricate, and adjust hardware. Adjust doors and latches to operate easily without binding.
- .2 Protect metal lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit use during construction.
- .3 Touch up marred finishes, or replace metal lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION