

Part 1 General

1.1 SECTION INCLUDES

- .1 Projection screen.
- .2 Wire shelving.
- .3 Fall Arrest Anchors
- .4 Non-Slip Safety Nosing

1.2 SHOP DRAWINGS

- .1 Section 01 33 00 – Submittal procedures.
- .2 Shop drawings: provide location drawings, dimensions, details, details of floor and wall supports and interface with other products.

1.3 MAINTENANCE DATA

- .1 Prior to substantial performance, provide Contract Administrator with manufacturers instructions covering care and maintenance of equipment to be included in maintenance manual as per General Requirements.

Part 2 Products

2.1 PROJECTION SCREENS

- .1 Projection screen: Da-Lite model C; matte white fibreglass screen surface with optional pull rod; and CSR feature; size 60” x 60”.

2.2 WIRE SHELVING

- .1 Wire shelving: AMCO II challenger wire shelves 12” deep; 19” between pairs of shelves; c/w wall mounting wall brackets and hardware. Located in kitchen 148.
 - .1 36” wide - quantity 2.
 - .2 48” wide - quantity 1.

2.3 FALL ARREST ANCHORS

- .1 Fall arrest anchors: Thaler Model FARA-6; forged eye swivel for bolt mounting around OWSJ.
- .2 Fall arrest anchors: Thaler Model FARA-3; forged eye swivel for bolt mounting around Beam

2.4 NON-SLIP SAFETY NOSING

- .1 Safety nosing: Wooster products safety treads; Type 131; 78 mm wide for steel pan stairs

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that surfaces are ready to receive work.

3.2 PROJECTION SCREEN

- .1 Install projection screen in accordance with manufacturers instructions.

3.3 WIRE SHELVING

- .1 Install wire shelving to locations indicated, ensure fasteners penetrate substrate and into blocking or studs.

3.4 FALL ARREST ANCHORS

- .1 Install fall arrest anchors to locations indicated on drawings to manufacturers instructions.
- .2 Coordinate with structural steel and roofing trades.

3.5 NON-SLIP SAFETY NOSING

- .1 Install safety nosing to concrete filled stair treads and landings. Install one piece full width.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Surfaced metal marker boards.
- .2 Tack boards.
- .3 Trim, Chalk rail, and accessories.
- .4 Stand alone tack rails.

1.2 RELATED SECTIONS

- .1 Section 06 10 00 - Rough Carpentry: Wood blocking and grounds.
- .2 Section 09 21 16 - Gypsum Board Assemblies.

1.3 REFERENCES

- .1 ASTM A424 - Steel, Sheet, for Porcelain Enameling.
- .2 ASTM B209 - Aluminum and Aluminum-Alloy Sheet and Plate.
- .3 ASTM B221 - Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- .4 ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- .5 Porcelain Enamel Institute - Performance Specifications for Porcelain Enamel Chalkboards.

1.4 SUBMITTALS FOR REVIEW

- .1 Product Data: Provide data on marker boards, tack boards, and trim and accessories.
- .2 Shop Drawings: Indicate wall elevations, dimensions, joint locations, special anchor details.
- .3 Samples: Submit two samples 200 x 200 mm in size illustrating materials and finish, colour and texture of marker board, tack board, wall and covering.

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for flame/smoke rating of / for vinyl fabric covered tack boards to ASTM E84.

1.6 DELIVERY, STORAGE, AND PROTECTION

- .1 Protect pre-finished surfaces with wrapping. strippable coating.

1.7 OPERATION AND MAINTENANCE DATA

- .1 Maintenance Data: Include data on regular maintenance cleaning, stain removal, and .

Part 2 Products

2.1 SHOP FABRICATED WHITEBOARD

- .1 Acceptable Manufacturers:
 - .1 Shanahan's Building Specialties: 200 series
 - .2 Panel Products: System 300
 - .3 Claridge
 - .4 Almar distributors
- .2 Whiteboards (WB-1): White porcelain enamel writing surface on 0.4 mm. min. steel on a single ply 9 mm fibreboard core, manufactured to sizes as indicated on drawings without visible joiners. Mitred corners.
- .3 Frame: Natural anodized aluminum frame with chalk rail, map rail with cork insert; concealed mounting. System 300 manufactured by Panel Products; Series 200 by Shanahans. Delete map rail and chalk rail on dressing room schedule white board.
- .4 Accessories:
 - .1 Felt Markers: 1 each of Black, Blue , Red, Green.
 - .2 Easer Brush: 2 eraser brushes per whiteboard.
 - .3 Map Hooks: 2 metal map hooks per 2400 mm of map rail.
 - .4 Whiteboard cleaner.
 - .5 Magnets: 4 magnets per 2400 mm of whiteboard.

2.2 TACK BOARD MATERIAL

- .1 Tackboards: 6 mm Forbo Marmoleum bulletin board laminated to 8 mm Particleboard; colour 2202 Charcoal Grey. Refer to drawings for location and sizes.
- .2 Frame: framing to match white boards without chalk rail.

2.3 TACK RAILS

- .1 Tack Rails: Provide tackable map rails located as noted on drawings attached to 38 x 19 mm clear fir strapping. Map rails to match white board map rails.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify dimensions, tolerances, and method of attachment with other work.

- .2 Verify that internal wall blocking is ready to receive work and positioning dimensions are as indicated on shop drawings.

3.2 INSTALLATION

- .1 Install marker boards, and tack boards to manufacturer's instructions.
- .2 Secure units level and plumb.
- .3 Chalk Boards and Marker Boards:
 - .1 Butt panels tight with concealed spline to hairline joint.
 - .2 Join chalk board panels with batten joint.
 - .3 Set slate chalk board tight in frame, butt joints tight, hairline.

3.3 CLEANING

- .1 Section 01 74 00: Cleaning installed work.
- .2 Remove protective material from surfaces.
- .3 Clean chalk board surfaces in accordance with manufacturer's instructions, then cover chalk board surfaces with protective cover, taped to frame.
- .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 HDPE Solid plastic toilet compartments, floor mounted, Overhead braced.
- .2 Urinal screens; wall mounted with floor mounted pilaster.
- .3 Shower cubicles.

1.2 RELATED SECTIONS

- .1 Section 04 22 00 - Concrete Masonry
- .2 Section 06 10 00-Rough Carpentry: blocking.
- .3 Section 10 28 14 - Washroom Accessories.

1.3 REFERENCES

- .1 ASTM A167 - Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.

1.4 SUBMITTALS

- .1 Section 01 33 00: Submission procedures.
- .2 Shop Drawings: Indicate partition plan, elevation views, dimensions, details of wall, and floor ceiling supports, door swings.
- .3 Product Data: Provide data on panel construction, hardware, and accessories.
- .4 Samples: Submit two samples of partition panels, 150x150 mm in size illustrating panel finish and colour.
- .5 Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.
- .6 Closeout submittals: provide two sets of vandal resistant fastening system tools to building manager, sized to fit each fastener size used.

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for access for the handicapped.

1.6 FIELD MEASUREMENTS

- .1 Verify that field measurements are as indicated .

1.7 COORDINATION

- .1 Coordinate the work with placement of support framing and anchors in wall.

Part 2 Products

2.1 ACCEPTABLE MANUFACTURERS

- .1 Bradley Corporation; Sentinel Floor mounted overhead braces - series 400.

2.2 COMPONENTS

- .1 Doors, panels and pilasters: High Density Polyethylene, 2 colors to be selected by Contract Administrator:
 - .1 Door, panel and pilasters: 25 mm thick with 5 mm radius edges.
 - .2 Doors: 1400 mm high mounted 350 mm above finished floor c/w aluminum heat sink strip at bottom edge of doors and panels.
 - .3 Pilasters: 2080 mm high fastened to floor with 75 m stainless steel shoe with #4 finish.
 - .4 Head rail: aluminum with anti-grip profile clamped over pilasters and fastened to wall with stainless steel brackets.
 - .5 Urinal screens: 1040 mm high mounted 450 above floor with 150 pilaster support for free end.
- .2 Hardware: heavy duty aluminum and stainless steel vandal resistant fasteners.
 - .1 Hinge: integral hinge system stainless steel and nylon.
 - .2 Sliding Latches: extruded aluminum 6463-T3 alloy; with wraparound hinges, with stainless steel fasteners.
 - .3 Strike / keeper: extruded aluminum with wraparound flanges and through bolts.
 - .4 Coat Hooks; Zamic alloy with satin finish.
 - .5 Brackets: Continuous aluminum double edge brackets.
 - .6 All fasteners to be vandal resistant stainless steel torx with centre pin.
 - .7 D pulls: stainless steel D type pull minimum 140 mm long.

2.3 ACCESSORIES

- .1 Provide two extra torx drivers to fit fastening system.
- .2 Turn over to building manager at substantial completion.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify correct spacing of and between plumbing fixtures.
- .2 Verify correct location of built-in framing, anchorage, and bracing.

3.2 INSTALLATION

- .1 Install partitions secure, rigid, plumb, and level in accordance with manufacturer's instructions.
- .2 Maintain 9 to 13 mm space between wall and panels and between wall and end pilasters.
- .3 Attached panel brackets securely to walls using anchor devices.
- .4 Attach panels and pilasters to brackets with tamper proof through bolts and nuts.
- .5 Anchor urinal screen panels to walls with continuous panel brackets and vertical upright consisting of pilaster anchored to floor.
- .6 Provide adjustment for floor variations with screw jack through steel saddles integral with pilaster. Conceal floor fastenings with pilaster shoes.
- .7 Equip each door with two hinges, one door latch, one coat hook and bumper.
- .8 Install door strike and keeper with door bumper on each pilaster in alignment with door latch.
- .9 Replace damaged or scratched materials with new materials.
- .10 Install 'D' pulls on out swinging doors as follows:
 - .1 One pull on each side of door near latch at 900 mm above finished floor.
 - .2 One pull on inside of door 250 mm from hinge side at 900 mm above finished floor mounted horizontally.

3.3 ERECTION TOLERANCES

- .1 Maximum Variation From True Position: 6 mm.
- .2 Maximum Variation From Plumb: 3 mm.

3.4 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.

3.5 SCHEDULES

- .1 Staff Washroom: One toilet stall of ceiling mounted type; single colour as selected.

END OF SECTION

Part 1 GENERAL

1.1 SECTION INCLUDES

- .1 Folding panel acoustic partition.
- .2 Ceiling track, ceiling guards, and operating hardware.
- .3 Manual operation paired panel.

1.2 SECTION INCLUDES

- .1 Folding panel acoustic partition.
- .2 Ceiling track, ceiling guards, and operating hardware.
- .3 Manual operation.

1.3 RELATED SECTIONS

- .1 Section 05 50 00 – Metal Fabrications.

1.4 REFERENCES

- .1 ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
- .2 ASTM E90 - Airborne-Sound Transmission Loss of Building Partitions and Elements.
- .3 ASTM E557 - Standard Guide for the Installation of Operable Partitions.
- .4 ASTM E596 - Method for Laboratory Measurement of Noise Reduction of Sound-Isolating Enclosures.

1.5 PERFORMANCE REQUIREMENTS

- .1 Sound Transmission Coefficient (STC): 50 measured in accordance with ASTM E413.
- .2 Surface Burning of Vinyl Fabric Finish: ASTM E84; flame/smoke rating of 15/45 max.
- .3 Install partition system track capable of supporting imposed loads, with maximum deflection of 1/360 of span.
- .4 Operation: Side opening; individual panels; side stacking.

1.6 SUBMITTALS

- .1 Section 01 33 00: Submission procedures.
- .2 Shop Drawings: Indicate opening sizes, track layout, details of track and required supports, static and dynamic loads, adjacent construction and finish trim, and stacking sizes.

- .3 Product Data: Provide data on partition operation, hardware and accessories, colours and finishes available.
- .4 Samples: Submit two samples of full manufacturer's colour range for selection of colours.
- .5 Samples: Submit two samples of surface finish, 300 x 300 mm size, illustrating quality, colours selected, texture, and weight.

1.7 MAINTENANCE DATA

- .1 Include recommended cleaning methods, cleaning materials, and stain removal methods.
- .2 Describe cleaning materials detrimental to vinyl fabric surfaces and hardware finish.

1.8 QUALIFICATIONS

- .1 Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.
- .2 Installer: Company specializing in performing the work of this section with minimum 3 years documented experience and approved by manufacturer.

1.9 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for combustibility requirements for materials.

1.10 FIELD MEASUREMENTS

- .1 Verify that field measurements are as indicated on shop drawings.

1.11 Coordination

- .1 Coordinate the work with other sections providing panel finish materials to this section.
- .2 Coordinate installation of electric service.

Part 2 Products

2.1 MANUFACTURERS

- .1 Modernfold Model Acousti-Seal 932.
- .2 Moderco Signature 8800

2.2 COMPONENTS

- .1 Panel Construction:
 - .1 Panel Substrate Facing: Steel sheet, 0.76 mm thick.
 - .2 Core: 1.5 mm thick formed sheet steel frame top, bottom, jambs, and intermediates; welded construction; internally reinforced at suspension points , with acoustical fill.
 - .3 Thickness: 75 mm.

- .4 Trim: Trimless.
- .5 Panel to Panel Seals: Vinyl clad roll formed steel.
- .6 Closure panel: expandable closure with removable handle.
- .2 Track: Extruded aluminum; thickness and profile designed to support loads; steel sub-channel and track connectors,.
- .3 Carriers: 2 sets Nylon Ball bearing, wheels on trolley carrier at top of every second panel, sized to carry imposed loads, with threaded pendant bolt for vertical adjustment.
- .4 Acoustic Seals: Flexible acoustic seals at jambs, meeting mullions, ceilings, retractable floor and ceiling seals, with removable handle.
- .5 Accessories: White enameled ceiling closure jamb moulding, fittings and attachments.
- .6 Acoustic Sealant: Manufacturer's standard.

2.3 PANEL FINISHES

- .1 Vinyl Coated Fabric Finish: Mildew resistant, polyvinyl fluoride finish for washability and improved flame retardance; colour as selected from manufacturer's standard range.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify track supports are laterally braced and will permit track to be level within 6 mm of required position and parallel to the floor surface.
- .2 Verify floor flatness of 3 mm / 3 m, non-cumulative.
- .3 Verify wall plumbness of 3 mm / 3 m, non-cumulative.

3.2 INSTALLATION

- .1 Install partition in accordance with manufacturer's instructions.
- .2 Fit and align partition assembly and pocket doors level and plumb.
- .3 Lubricate moving components.
- .4 Apply acoustic sealant to achieve required acoustic performance.

3.3 ADJUSTING

- .1 Adjust partition assembly to provide smooth operation from stacked to full open position. Do not over-compress acoustic seals.
- .2 Visually inspect partition in full extended position for light leaks to identify a potential acoustical leak.
- .3 Adjust to achieve light tight seal.

3.4 CLEANING

- .1 Clean finish surfaces and partition accessories.

3.5 DEMONSTRATION

- .1 Demonstrate operation of partition, identify potential operational problems.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Toilet, shower, and washroom accessories.
- .2 Grab bars.
- .3 Attachment hardware.

1.2 RELATED SECTIONS

- .1 Section 09 31 00 - Thin Set Tiling.
- .2 Section 10 21 12 - HDPE Plastic Toilet Compartments.

1.3 REFERENCES

- .1 ASTM A123/A123M - Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- .2 ASTM A167 - Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip.
- .3 ASTM A269 - Seamless and Welded Austenitic Stainless Steel Tubing for General Service.
- .4 ASTM A1008/A1008M - Steel, Sheet, Cold-Rolled Carbon, Structural, High-Strength Low Alloy and High Strength Low Alloy with Improved Formability.
- .5 ASTM B456 - Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium.

1.4 SUBMITTALS

- .1 Section 01 33 00: Submission procedures.
- .2 Product Data: Provide data on accessories describing size, finish, details of function, attachment methods.
- .3 Samples: Submit two samples of each component, illustrating colour and finish when requested by Contract Administrator.

1.5 REGULATORY REQUIREMENTS

- .1 Conform to applicable code for access for the handicapped.

1.6 FIELD MEASUREMENTS

- .1 Verify that field measurements are as indicated on product data. instructed by the manufacturer.

1.7 COORDINATION

- .1 Coordinate the work with the placement of internal wall reinforcement and reinforcement of toilet partitions to receive anchor attachments.

Part 2 Products

2.1 MATERIALS

- .1 Sheet Steel: ASTM A366.
- .2 Stainless Steel Sheet: ASTM A167, Type 304.
- .3 Tubing: ASTM A269, stainless steel. .
- .4 Adhesive: Two component epoxy type Contact type, waterproof.
- .5 Fasteners, Screws, and Bolts: Hot dip galvanized, tamper-proof, and security type.
- .6 Expansion Shields: Fibre, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.2 FABRICATION

- .1 Weld and grind joints of fabricated components, smooth.
- .2 Form exposed surfaces from single sheet of stock, free of joints. Form surfaces flat without distortion. Maintain surfaces without scratches or dents.
- .3 Fabricate grab bars of tubing, free of visible joints, return to wall with concealed end attachment flanges. Knurl grip surfaces.
- .4 Shop assemble components and package complete with anchors and fittings.
- .5 Provide steel anchor plates, adapters, and anchor components for installation.

2.3 KEYING

- .1 Supply four keys for each accessory to City.
- .2 Master key all accessories.

2.4 FINISHES

- .1 Galvanizing: ASTM A123 to 380 g/sq m. Galvanize ferrous metal and fastening devices.
- .2 Shop Primed Ferrous Metals: Pre-treat and clean, spray apply one coat primer and bake.
- .3 Enamel: Pre-treat to clean condition, apply one coat primer and minimum two coats electrostatic baked enamel.
- .4 Chrome/Nickel Plating: ASTM B456, Type SC 2 satin finish.

- .5 Stainless Steel: No. 4 satin lustre
- .6 Back paint components where contact is made with building finishes to prevent electrolysis.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that site conditions are ready to receive work and dimensions are as indicated on shop drawings.
- .2 Verify exact location of accessories for installation.

3.2 PREPARATION

- .1 Deliver inserts and rough-in frames to site for timely installation.
- .2 Provide templates and rough-in measurements as required.

3.3 INSTALLATION

- .1 Install accessories in accordance with manufacturers' instructions and ANSI A117.1.
- .2 Install plumb and level, securely and rigidly anchored to substrate.

3.4 SCHEDULE

- .1 Refer to drawing A7.1 for accessory schedule.

END OF SECTION

PART 1 GENERAL

1.1 RELATED SECTIONS

- .1 Section 013300 - Submittal Procedures.
- .2 Section 017810 - Closeout Submittals.

1.2 REFERENCES

- .1 American National Standards Institute (ANSI)
 - .1 ANSI/NFPA 10, Portable Fire Extinguishers.
- .2 Underwriters' Laboratories of Canada (ULC)
 - .1 CAN/ULC-S508, Rating and Fire Testing of Fire Extinguishers and Class "D" Extinguishing Media.

1.3 SHOP DRAWINGS AND PRODUCT DATA

- .1 Submit shop drawings and product data in accordance with Section 013300 - Submittal Procedures.

1.4 CLOSEOUT SUBMITTALS

- .1 Provide maintenance data for incorporation into manual specified in Section 017810 - Closeout Submittals.

PART 2 PRODUCTS

2.1 MULTI-PURPOSE DRY CHEMICAL EXTINGUISHERS

- .1 Stored pressure rechargeable type with hose and shut-off nozzle, ULC labelled for A, B and C class protection. Sizes as indicated.

2.2 EXTINGUISHER BRACKETS

- .1 Type recommended by extinguisher manufacturer.

2.3 CABINETS

- .1 Flush type as indicated, constructed of 1.6 mm thick steel, 180° opening door of 2.5 mm thick steel with latching device.
- .2 Cabinet to maintain fire resistive rating of construction in which they occur.
- .3 Cabinet door: with 5 mm full glass panel.

- .4 Finish:
 - .1 Tub: prime coated.
 - .2 Door and frame: No.4 satin finish stainless steel.

2.4 IDENTIFICATION

- .1 Identify extinguishers in accordance with recommendations of ANSI/NFPA 10.
- .2 Attach tag or label to extinguishers, indicating month and year of installation. Provide space for service dates.

2.5 FIRE SAFETY BLANKETS

- .1 1800 x 1800 mm of silicone coated fibre glass in metal container.

PART 3 EXECUTION

3.1 INSTALLATION

- .1 Install or mount extinguishers in cabinets or on brackets as indicated.
- .2 Install fire safety blankets as indicated.

END OF SECTION 104420