

SPECIALTIES GENERAL REQUIREMENTS

1. GENERAL

1.1 Summary

- .1 This Section specifies architectural specialty requirements.
- .2 Provide specialty products manufactured for the specific purposes intended and installed in strict accordance with Manufacturer's directions.
- .3 Provide visual display surfaces, marker boards and tack boards as required by Schedule 18 Technical Requirements and the Final Design.

1.2 Standards

- .1 American Society for Testing and Materials (ASTM):
 - .1 ASTM A240 - Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.
 - .2 ASTM A653 - Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - .3 ASTM D4226 - Test Methods for Impact Resistance of Rigid PVC Building Products.
- .2 Canadian Standards Association (CSA):
 - .1 CAN3-0188.1 Particle Cores.
 - .2 CAN3-A172 High Pressure, Paper, Decorative Laminates.
- .3 American National Standards Institute (ANSI):
 - .1 ANSI/NEMA LD3 High-Pressure Decorative Laminates.

1.3 Submittals

- .1 Provide submittals in accordance with Section 01300 and the following:
 - .1 Manufacturer's descriptive literature for materials.
 - .2 Shop Drawings in one (1) complete package indicating dimensions, methods of construction, colours and finishes for all items specified herein.

2. PRODUCTS

2.1 Wall Protection and Corner Guards

- .1 Protect walls and exposed wall corners in public areas, service areas, and other areas as required to prevent collision from traffic and equipment.
- .2 Select materials appropriate to the amount and degree of collision anticipated.

SPECIALTIES GENERAL REQUIREMENTS

- .3 Use stainless steel corner guards.
- .4 Apply panel wall protection to wall areas where the collision damage anticipated is of a larger area of wall than would be protected by bumper guards.
- .5 Provide stainless steel protection for door edges and door frames in service areas including storerooms, shipping and receiving, and appropriate workshops from collision damage caused by the regular movement of materials and equipment.
- .6 Provide stainless steel protection for door edges and door frames in service and workshop areas from collision damage caused by regular and non-regular service vehicles.
- .7 Provide wall splash protection behind and surrounding hand sinks and housekeeping sinks.
- .8 Apply sheet wall protection to faces of doors where collision damage can be expected. Use sheet wall protection that complements the installation of door edge and frame protection.
- .9 Secure wall and corner guards to reinforcing and backing in the walls, such backing sufficient to withstand expected collision loads. Wall protection is to be high impact- and stain-resistant.
- .10 Use wall protection, handrails and corner guard products that are stain resistant to pen marks, paint, and graffiti, and able to withstand commercial cleaners without fading or staining.
- .11 Use bumper guards, crash rails, handrails, and corner guards that are high impact-resistant extrusion conforming to ASTM D4226.

2.2 Metal Lockers

- .1 Provide individual and shared storage facilities as designated by the Schedule 18 Technical Requirements. Such storage facilities shall be metal lockers and metal locker systems of sizes, numbers, and groupings as set out in the Final Design.
- .2 For sheet metal, use galvanized steel conforming to ASTM A653 with ZF001 (A01) zinc coating.
- .3 Finish steel surfaces with polyester baked enamel or powder coating.
- .4 Lockers shall be padlockable.
- .5 Provide one shelf within the lockers.
- .6 Lockers shall have number plates and hanging hooks.
- .7 Provide a continuous bulkhead above the lockers to prevent the storage of excess materials above.

2.3 Storage Shelving Systems

- .1 Provide storage shelving systems where storage shelving is required for the function of the space.

SPECIALTIES GENERAL REQUIREMENTS

- .2 Adjustable shelving systems may be steel-slotted angle industrial shelving for bulk materials and plastic laminate-faced plywood for clean storage.
- .3 Highest shelves shall be 510 mm from ceiling to maintain adequate clearance and functioning of fire sprinklers.

2.4 Compartments and Cubicles

- .1 Provide compartments and cubicles including toilet partitions, change cubicles, shower partitions, and other areas requiring privacy and security.
- .2 Individual showers and change areas shall have privacy door.
- .3 Galvannealed sheet metal compartments and cubicles shall conform to ASTM A653 with minimum ZF001 (A01) zinc coating. Finish in polyester, baked enamel or powder coating.
- .4 Stainless steel compartments and cubicles shall be type 304 conforming to ASTM A240 with No. 4 finish.
- .5 Plastic laminate compartments and cubicles shall be grade 10/HGS GP50 scuff-resistant, high-pressure laminate, conforming to NEMA LD3.
- .6 Particleboard core partitions shall conform to CAN3-0188.1 industrial grade "R".
- .7 FRP compartments and cubicles shall be a moisture-resistant grade.
- .8 Exposed surfaces shall be permanent, water-resistant, corrosion- proof, and readily cleaned and maintained.
- .9 Secure partitions and standards to the floor or ceiling structure to resist lateral loading and impact.
- .10 For compartment and cubicle doors, use material matching the partitions and include permanent, purpose-made hardware.
- .11 Provide a mirror in all change compartments.
- .12 Provide graffiti-resistant coating in areas accessible to the public and all unsecured locations.

2.5 Change Cubicle Partitions

- .1 Change cubicle partitions shall comply with the above requirements for toilet partitions, or to shower partitions when adjacent showers.

2.6 Shower Partitions

- .1 Use solid phenolic laminated thick stock, factory-laminated with decorative finish both faces of core and conforming to CAN3-A172 or NEMA LD3.

2.7 Tackboards and Whiteboards

- .1 Provide and install in specified rooms and areas:

SPECIALTIES GENERAL REQUIREMENTS

- .1 Tack board surfaces that allow pin penetration of the surface materials and have reasonable resistance to deterioration.
- .2 Whiteboard surfaces that allow use of felt-type marker pens and allow erasing and cleaning with minimal effort. Use porcelain ceramic on steel surface, magnetic, scratch and abrasion-resistant and have maximum contrast, glare control, and reflectivity.
- .2 Provide tackboards and whiteboards with extruded aluminum frames, accessory trays, map rails and map hooks.
- .3 Use non-toxic, water-based lamination adhesive for tackboards and whiteboards.

2.8 Window Coverings

- .1 Blinds shall be tempered aluminum alloy slats uniformly spaced and 100 percent interlaced between cross-ladders on at least one tape. Use tapes with no special end rails required to attach the suspension members from the window opening to the blind.
- .2 Provide motorized blinds where window blind controls are difficult to reach or where the base of the window is 5 ft above the floor.

3. EXECUTION

3.1 General

- .1 Install in accordance with Manufacturer's recommendations and as required by the Final Design.
- .2 Undertake commissioning phases as specified in the Schedule 18 Technical Requirements.

END OF SECTION

SIGNAGE

1. GENERAL

1.1 Summary

- .1 This Section specifies signs.

1.2 Standards

- .1 American Society for Testing and Materials (ASTM):
 - .1 ASTM B209 - Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - .2 ASTM B210M - Aluminum and Aluminum-Alloy Drawn Seamless Tubes (Metric).
 - .3 ASTM A276 - Stainless Steel Bars and Shapes.
 - .4 ASTM D4956 - Standard Specification for Retro-reflective Sheeting for Traffic Control.
- .2 American National Standards Institute (ANSI):
 - .1 ANSI/ICC A117.1-2009 - Standard for Accessible and Usable Buildings and Facilities.
- .3 American Association of State Highway and Transportation Officials (AASHTO), Specifications for the Design and Construction of Structural Supports for Highway Signs.

1.3 Submittals

- .1 Provide submittals in accordance with Section 01300 and the following:
 - .1 Manufacturer's descriptive literature for materials.
 - .2 Construction details, material descriptions, dimensions of individual component and profiles, and finishes for each sign type.
 - .3 Shop Drawings indicating fabrication and installation details for signs and the following:
 - .1 Completed Sign Schedule, to be reviewed by Engineer.
 - .2 Show sign mounting heights, locations of supplementary supports provided by other Sections, and accessories.
 - .3 Provide message list, typestyles, graphic elements and layout for each sign.

2. PRODUCTS

2.1 Performance Criteria

- .1 Sign supports shall be capable of withstanding the following loads (cumulative):
 - .1 Wind load in any direction of 1.28 kPa on signboards.

SIGNAGE

- .2 Dead load of signboards, sign supports and appurtenances.
- .2 Structural deflections and vibration in accordance with the Schedule 18 Technical Requirements.
- .3 Design and provide all way-finding signs large enough to be read for the intended function or purpose to include:
 - .1 Braille markings.
 - .2 Glow in the dark coating.
 - .3 Number for all doors to be logically sequenced.
 - .4 Room names and numbers.
 - .5 Recessed colour contrasting lettering on inorganic material.
- .4 Sign Types: Sign types shall include but not limited to the following:

Type	Message
I	CAUTION - automatic equipment may start at any time
II	High Voltage
III	Corrosive Chemicals
IV	No Smoking
V	Emergency Eyewash and Safety Shower
VI	Keep Out
VII	Non-Potable Water (DO NOT DRINK)
VIII	High Temperature
IX	Restricted Area - Authorized Personnel Only
X	Keep Door Closed
XI	Caution - Vertical Drop
XII	Not used
XIII	Stair

2.2 Metal Signs

- .1 Flexible post:
 - .1 Minimum flexible 57 mm diameter tubular, durable, non-colouring thermoplastic with 38 mm diameter reinforcement tube located and secured in the lower portion of the post. Determine and design size to resist wind loading and support weight of sign.
 - .2 Hardware: integral with locking mechanisms.
 - .3 Confirm colour prior to ordering.
 - .4 Acceptable Manufacturers:
 - .1 Safe-Hit, Safe-Hit Corporation.

SIGNAGE

.2 Or approved equivalent.

.2 Metal sign posts:

.1 Steel Supports for Signs: In accordance with ASTM B210M; tubular supports. Determine size of support to resist wind loading and support weight of the sign.

.1 Base Plates: Ground mounted signage base plates in accordance with ASTM B209M.

.2 Anchor and Connecting Bolts: 'U' clamps and miscellaneous hardware for overhead sign installations fabricated from Type 316 stainless steel in accordance with ASTM A276.

.3 Fasteners: Stainless steel 316 bolts, nuts, washers and other hardware for signs.

2.3 Signboards

.1 Aluminum sheet: In accordance with ASTM B209M, pre-cut to required dimensions; 1.6 mm nominal thickness for signboards up to 750 mm wide; 2.1 mm nominal thickness for signboards 750 to 1200 mm wide.

.2 Connecting straps and brackets: In accordance with ASTM B209M.

.3 Silk screen ink: Transparent or opaque colours in accordance with standard traffic sign requirements of Government Authorities; script content to meet traffic sign regulations of the Government Authority.

.4 Reflective sheeting and tape: In accordance with CGSB 62-GP-11M; adhesive, class of reflectivity and colour to meet traffic sign regulations of the Government Authority.

2.4 Plastic Signs

.1 Plastic panel signs: provide injection molded panel signs in colour, designs, shapes and sizes as required.

.1 Produce smooth, panel sign and sign frame surfaces constructed to remain flat under installed conditions and within tolerance of plus or minus 0.3 mm when measured diagonally.

.2 Injection-molded panel signs: Manufacturer's standard and as follows:

.1 Sign panel material composed of 3 mm injection molded, high-impact, polystyrene plastic, UV-resistant and surface textured with an eggshell matte finish.

.2 Background colours: Manufacturer's standard dark blue background.

.3 Dimensions: overall dimensions as set out in the Final Design.

.4 All corners shall be 16 mm radius.

SIGNAGE

- .5 Sign shall comply with Government Authority accessibility design guidelines and ANSI/ICC A117.1 and include 8 mm raised tactile graphics and Grade II Braille.
- .6 Centre graphics, text and braille on sign material. Graphics to be separated from text and braille with visible graphic line.
- .7 Raised graphics, graphics line and text to be standard white.

2.5 Fabrication

- .1 Supports:
 - .1 Weld aluminium support members in accordance with CSA W47.2. With welds shall be same strength as adjacent member or casting.
 - .2 Remove sharp edges and burrs.
- .2 Signboards:
 - .1 Cut and shape signboard blanks to required shapes and dimensions.
 - .2 Spray signboard back and edges with prime coat and two (2) finish coats in the same colour as the sign face.
 - .3 Spray face with prime coat and two finish coats of required colour for non-reflective signboard faces.
 - .4 Cut and apply reflective background sheeting and lettering in accordance with manufacturer's instructions to match site sign requirements.

3. EXECUTION

3.1 General

- .1 Install in accordance with Manufacturer's recommendations and as required by the Final Design.
- .2 Undertake commissioning phases as specified in the Schedule 18 Technical Requirements.
- .3 Examine wall surfaces, substrate areas and conditions with the Installer present, for compliance with the requirements for installation guidelines, tolerances and other conditions affecting the performance of work.
- .4 Examine supporting members to verify surfaces are free from dirt and other deleterious matter, at elevations required, and comply with the authorities having jurisdiction.

END OF SECTION

TOILET, BATH AND LAUNDRY ACCESSORIES

1. GENERAL

1.1 Summary

- .1 This Section specifies toilet, bath, and laundry accessories.

1.2 Submittals

- .1 Provide submittals in accordance with Section 01300 and the following:
 - .1 Manufacturer's descriptive literature for materials.
 - .2 Shop Drawings in one (1) complete package indicating dimensions, methods of construction, colours and finishes for all items specified herein.

2. PRODUCTS

2.1 Washroom Accessories

- .1 Provide washroom accessories in all public and staff washrooms. Determine the type, size and number of accessories with regard to the numbers and categories of users. Accessories are to meet all needs of facility function and use for both public and users according to function of space.
- .2 Shower rooms shall be in a separate area within the main washroom.
- .3 Shower rooms shall include but are not limited to the following accessories:
 - .1 Shower curtain and track or rod.
 - .2 Barrier-free grab bars.
- .4 Hand-wash sink accessories are to include but are not limited to the following accessories:
 - .1 Automatic soap dispensers.
 - .2 Foot-activated hand washer.
 - .3 Hands-free dryers.
 - .4 Automatic paper towel dispensers.
 - .5 Trash receptacles.
 - .6 Mirrors.
 - .7 Barrier-free grab bars with integral tactile grip finish.
 - .8 Sanitary napkin dispensers in female public washrooms.

TOILET, BATH AND LAUNDRY ACCESSORIES

- .5 Install all washroom accessories in all public and staff washrooms.
- .6 Use commercial-grade accessories free from imperfections in manufacturing.
- .7 Install washroom accessories to allow cleaning and maintenance of the accessory and surrounding wall area.
- .8 Use fittings with concealed fasteners for security and to discourage tampering.

2.2 Laundry Accessories

- .1 Provide hand-wash sink accessories, including but are not limited to, the following:
 - .1 Automatic soap dispenser.
 - .2 Hands-free dryer.
 - .3 Paper towel dispenser.
 - .4 Trash receptacle.
- .2 Use commercial-grade accessories free from imperfections in manufacturing.
- .3 Install laundry accessories to allow cleaning and maintenance of the accessory and surrounding wall area.
- .4 Use fittings with concealed fasteners for security and to discourage tampering.

2.3 Janitor Room Accessories

- .1 Provide suitable quantities of janitors' sinks, hose bibbs and eye wash stations to provide sufficient service.
- .2 Provide mop and broom brackets with a minimum capacity of 5 mop holders in each housekeeping room.
- .3 Provide floor-mop sink in each housekeeping room of an adequate size, depth and access to support the floor burnishers and other required housekeeping equipment.
- .4 Provide hand-wash sink accessories, including but not limited to, the following:
 - .1 Automatic soap dispenser.
 - .2 Hands-free dryer.
 - .3 Paper towel dispenser.
 - .4 Trash receptacle.
- .5 Use commercial-grade accessories free from imperfections in manufacturing.

TOILET, BATH AND LAUNDRY ACCESSORIES

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3.1 General

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- .2 Undertake commissioning phases as specified in the Schedule 18 Technical Requirements.

END OF SECTION