1. GENERAL

1.1 Quality Assurance

- .1 Source Limitations: Provide like products of same manufacturer unless otherwise approved by Contractor Administrator.
- .2 Electrical Components, Devices, and Accessories: Listed and labelled by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

1.2 Submittals

- .1 Shop Drawings: Indicate materials, products and finishes and showing in large scale detail the construction, reinforcing, anchorage and, where permitted, the location of exposed fastenings.
- .2 Maintenance data: Three copies of a list of the accessories requiring supplies together with names and addresses of local distributors of the supplies.

1.3 Delivery, Storage and Handling

- .1 Carefully wrap accessories ensuring protection during shipping and storage.
- .2 Store accessories inside the building in the location directed, and so that their identification is readily visible, and in the general order in which they will be required for installation.

1.4 Coordination

- .1 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.
- .2 Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

1.5 Electrical Coordination

- .1 Electrical Requirements: Coordinate wiring requirements and power characteristics of work with building electrical system. Do wiring in strict conformity with requirements of the Electrical Code and Electrical Sections.
 - .1 Work by Electrical Sections: Supply and installation of disconnect switch/junction box and power to the disconnect switch/junction box.
 - .2 Work by This Section: Wiring and connection at and from disconnect switch/junction box to motors, starters, switches, controls, safety devices and other items requiring power.

- .2 Employ licensed electrician to wire and interconnect all operational and safety components for the Work. Terminate wiring required for connection to control circuitry and power at NEMA enclosures. Ground all control wiring.
- .3 Electrical Components, Devices, and Accessories: CSA Listed and labelled.

2. **PRODUCTS**

2.1 Materials

- .1 Sheet Steel: Commercial quality to ASTM A653, galvanized.
- .2 Stainless Steel: ASTM A167, Type 304.
- .3 Fasteners: Vandal resistant, concealed screws and bolts hot dip galvanized, exposed fasteners to match face of unit. Expansion shields fibre, lead or rubber as recommended by accessory manufacturer for component and its intended use.
- .4 Supply for installation under other Sections, mounting devices and reinforcement required to be built-in for support of grab bars and imposed loads. Be responsible for giving proper notice to other Sections and supplying such reinforcement when required by other Sections for building in.

2.2 Fabrication

- .1 Fabricate accessories true, square, rigid, free from distortion and from defects detrimental to appearance and performance.
- .2 Butt visible joints straight and accurate. Mitre corner joints.
- .3 Except as otherwise specified, fabricate accessories for concealed mounting by noncorrosive metal, expansion type, toggle type or other approved type of positive, mechanical anchors to suit the construction to which the accessory is to be mounted.
- .4 Exposed fasteners, where permitted, shall be finished to match the adjacent accessory surface, and shall be countersunk. Where accessories are to be mounted to sheet metal, provide a 3 mm (1/8") thick minimum full-size metal back-up plate drilled and tapped to receive machine screws and finished to match the adjacent sheet metal surface.
- .5 Where specified as frameless, provide accessories in one piece fronts with 90 degree formed returns at their edges and openings. Continuously weld returns and ground smooth at the corners.
- .6 Where accessory fronts are framed, frame edges, both inside and outside, shall have 90 degree formed returns continuously welded and ground smooth at the corners. Doors shall also have 90 degree formed returns as specified.

- .7 Provide full length concealed stainless steel piano hinges. Hinged elements shall have concealed, mechanically-retained, rubber bumpers for silent closing, and shall close flush with faces of fronts or frames.
- .8 Unless otherwise specified, portions of sheet metal accessory interiors which are visible in the completed work shall be stainless steel. Form or continuously welded and ground smooth changes in plane.
- .9 Hot dip galvanize sheet metal accessory parts concealed in the finished installation.
- .10 Hem edges of sheet metal accessible by users or maintenance personnel.
- .11 Accessories for flange-type mounting shall have forged brass, full flanges drilled and countersunk for three mounting fasteners. Fix flanges to tubes using solid silver soldering.
- .12 Back paint components where contact is made with building finishes to prevent electrolysis.
- .13 Shop assemble components and package complete with anchors and fittings.
- .14 Deliver inserts and rough-in frames to job site at appropriate time for building-in. Provide templates, details and instructions for building in anchors and inserts.
- .15 Provide steel anchor plates and components for installation on studding and building framing.
- .16 Engrave lettering on accessories to a depth of minimum 0.254 mm (0.010"). Size, location and type face of lettering to selection by Contractor Administrator. Maintain engraving edges straight and sharp.

2.3 Finishes

- .1 Where steel is specified as having a chrome plated finish, pretreat including mechanical removal of imperfections and buffing, degreasing, removal of degreaser, electrolytic cleaning, intermediate treatments of acid washes and cold water rinses in preparation for and to suit plating, nickel plating pretreatment, nickel plating, hard chromium plating with a final hot water rinse.
- .2 Finish stainless steel to a standard No. 4 mechanical finish. Where possible, arrange sheet stainless steel so that the grain of the finish runs vertically in the finished installation.
- .3 Manufacturer's or brand names on face of units not acceptable.

2.4 Accessories

.1 WA-01: Surface mounted combination paper towel dispenser and waste receptacle, stainless steel welded construction, full length lockable door, removable leak-proof, rigid ,oulded plastic waste container, B-380349 by Bobrick.

- .2 WA-02: Surface mounted hand dryers, vandal resistant, chrome plated steel construction, B-748 by Bobrick.
- .3 WA-03: Recessed multi-roll toilet paper dispenser, welded stainless steel construction, lockable cover, moulded plastic control delivery spindle, B-4388 by Bobrick.
- .4 WA-04: Surface mounted refillable soap dispenser, stainless steel, in one piece drawn seamless construction, lockable lid, B-4112 by Bobrick.
- .5 WA-05: Surface mounted mirrors, stainless steel channel frame, mitered corners, 6.mm (1/4") thick float glass mirror, silver coated and hermetically sealed with a uniform copper plating and warranted for 15 years against silver spoilage. Protect edges of mirror by friction and chafe absorbing fillers. Protect back of mirror full size shock-absorbing water-resistant filler and full size one piece 20 gauge corrosion protected steel. Spot weld top and bottom wall mounting brackets shall be spot welded into "H" hanger. Secure mirror to lower bracket with a locking screw. B-165 by Bobrick, 610 mm wide x 914 mm high.

3. EXECUTION

3.1 Installation

- .1 Install and secure accessories rigidly in place.
- .2 Hollow masonry units: Use toggle bolts drilled into cell/wall cavity.
- .3 Solid masonry or concrete: Use bolt with lead expansion sleeve set into drilled hole.
- .4 Fill units full with necessary supplies shortly before Substant