

# APX Large Single Door Enclosure – NEMA 4X

## Specification Sheet

### I. General

A. The purpose of this specification is to provide details of an enclosure that protects internal equipment from rain, dust, vandalism and other conditions found in an outdoor or otherwise harsh environment.

B. The manufacturer must be able, upon request, to produce part numbers on all components for repair purposes. Certificates of compliance may be requested on each cabinet or on any component or part thereof.

### II. Performance

A. The enclosure(s) will meet or exceed the requirements of a NEMA 4X rating and will be UL Listed.

### III. Cabinet Construction

#### A. General

1. The cabinet and door will be constructed from 5052-H32 sheet aluminum alloy which has a thickness of 0.125". Alternate material is type 304 stainless steel, minimum thickness 14 gauge. Specifier must choose either aluminum or stainless steel construction. External welds will be made by using the Heliarc welding method; whereas, internal welds will be made by the wire welding method. All welds will be neatly formed and free of cracks, blow holes and other irregularities.

2. All inside and outside edges of the cabinet will be free of burrs.

3. The cabinet will be designed with a sloped top to prevent the accumulation of water on its top surface.

4. The door will be double flanged on all four (4) sides. Flanges increase strength around openings and keep dirt and liquids from entering the enclosure when door is open.

5. A door restraint will be provided to prevent door movement in windy conditions.

#### B. Door/Hardware

1. The cabinet door will be a minimum of 80% of the front surface area and will be hinged on the right side when facing the cabinet.

a) The door will be furnished with a gasket that satisfies the physical properties as found in UL 508 and will form a weather-tight seal between the cabinet and door.

2. The hinges will be continuous and bolted to the cabinet and door utilizing ¼-20 stainless steel carriage bolts and nylock nuts.

a) The hinge will be made of 0.075" thick stainless steel and will have 0.250" diameter stainless steel hinge pin.

b) The hinge pin will be capped top and bottom by weld to render it tamperproof.

c) Hinge leaves will not be exposed externally when the door is closed, but hinge knuckles may protrude. All bolt holes will be gasketed.

3. The latching mechanism will be a 3-point draw roller type.

a) Pushrods will be turned edgewise at the outward supports and will be 0.250" by 0.750" aluminum, minimum.

b) Rollers will have a minimum diameter of 0.875" and will be made of nylon. The center catch will be fabricated from 0.187" aluminum, minimum.

4. An operating handle will be furnished.

a) The handle will be stainless steel with a ¾" diameter shank.

b) The latching handle will have a provision for padlocking in the closed position.

c) These are available only with padlocking on the latching handle.

5. A light/alarm switch bracket will be provided.

#### C. Switch Compartment

1. A switch compartment with removable back panel is supplied on the enclosure main door.

2. The switch compartment door opening will be double flanged on all four (4) sides. Flanges increase strength and prevent dirt and liquids from dropping into the compartment when the door is open.

a) The door will be furnished with a gasket that satisfies the physical properties as found in UL 508, and will form a weather-tight seal between the cabinet and door.

3. The specified Corbin Lock is replaced with a weather-tight key lock.

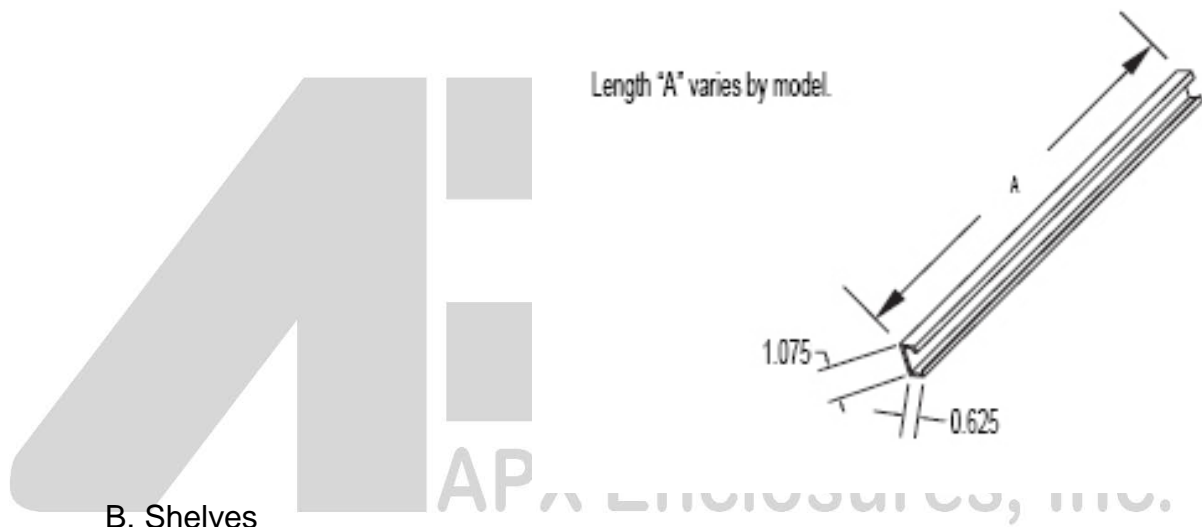
4. The switch compartment door hinge is 0.063" stainless steel with a 0.120" diameter stainless steel hinge pin (hidden hinges).

#### IV. Equipment Mounting (Specified as Required)

##### A. Adjustable Channels

1. The enclosure will be equipped with two (2) adjustable "C" mounting channels on both side walls and back wall of the enclosure, allowing versatile positioning of shelves or panels.
2. The mounting channels will provide infinite vertical and horizontal adjustment and not limit the positioning of shelves or panels. All mounting hardware will be furnished.

Mounting Channel:



##### B. Shelves

1. If equipment is to be shelf mounted, the enclosure will be provided with shelves fabricated from 5052-H32 aluminum having a thickness of 0.125".
2. The shelf depth will be a minimum of 10.50". The enclosure will have provision for positioning shelves or panels to within 4" of the bottom and to within 8" of the top of the enclosure.

##### C. Aluminum Back Panel

1. If the equipment is to be panel mounted, the enclosure will be provided with a 5052-H32 back panel having a thickness of 0.125".

#### V. Cabinet Finish

- A. Unless otherwise specified, the outside of the cabinet will have a smooth, uniform, natural aluminum finish.
- B. If painted, the following steps will be taken as a minimum requirement:

1. The cabinet, doors and any other parts to be painted will be treated with an iron phosphate conversion technique.
2. After phosphatizing, the parts will be baked to eliminate any moisture in seams.
3. The finished coat of a polyester powder will be baked for ten (10) minutes at 400-450° F.
4. The finish will be commercially smooth, substantially free of flow lines, paint washout, streaks, blisters and other defects that would impair serviceability or detract from general appearance.

## VI. Cabinet Mounting (Specify as Required)

### A. Pole or Wall Mounted Enclosure

1. Enclosures intended for pole or wall mounting will be provided with stiffener plates with a thickness of 0.125" aluminum welded to the top and bottom of the rear wall for added strength and rigidity. All mounting holes must be gasketed.

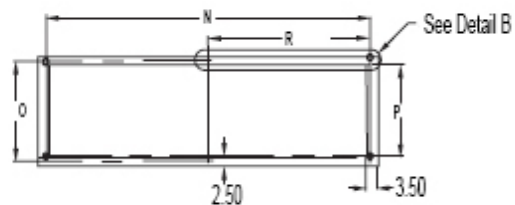
### B. Pedestal Mounted Enclosure

1. Enclosures intended for pedestal mounting shall be provided with a reinforced base plate. If the enclosure is fabricated from 0.125" thick aluminum the base plate will be a thickness of 0.250" aluminum. All mounting holes must be gasketed.

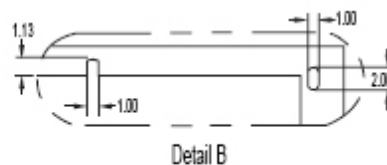
### C. Pad Mounted Enclosure

1. Enclosures intended for pad mounting will be constructed with the following parts: (NOTE: A solid plate will be in place on the bottom of the enclosure to provide a weather-tight seal)

Pad Mounting Pattern:



Pad Mounting Pattern



Detail B

VII. Approved Manufacturer

A. cabinet is to be manufactured by APX Enclosures, Inc. or an approved UL Listed equivalent.

