

APX Front and Rear Door Enclosure – NEMA 3R

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 3R rating and will be UL Listed.

III. Cabinet Construction

A. General

1. The cabinet and doors 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 crowned top to prevent the accumulation of water on its top surface.

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

5. Door restraints will be provided to prevent door movement in windy conditions.

B. Door/Hardware

1. The cabinet doors 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 doors 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.

- b) The closed doors will be flush with the sides of the enclosure.
- 2. The hinges will be continuous and bolted to the cabinet and door(s) utilizing ¼-20 stainless steel carriage bolts and nylock nuts.
 - a) The hinges will be made of 0.075" thick stainless steel with a 0.25" 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 doors are closed, but hinge knuckles may protrude.
- 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) The lock will be keyed dead bolt #200725 or equivalent. Two (2) keys will be furnished with each lock.
- 5. A light/alarm switch bracket will be provided.

IV. Cabinet Ventilation

- A. A cabinet requiring ventilation will be provided with louvered vents in the front door with a removable air filter.
 - 1. Louvers will satisfy the NEMA rod entry test for 3R ventilated enclosures.
 - 2. The filter will cover the vents and will be held firmly in place with bottom and top brackets, as well as a spring-loaded upper clamp.
 - 3. Exhaust air will be vented out between the top and of the cabinet and door.
 - a) The exhaust area will be screened with a material having a maximum hole diameter of 0.125".

4. The ventilation plenum area will be equipped with a removable plate with provisions for mounting an optional fan assembly.

B. The ventilation system will be designed to handle a minimum of 100 cubic feet of air per minute.

V. Equipment Mounting (Specify as Required)

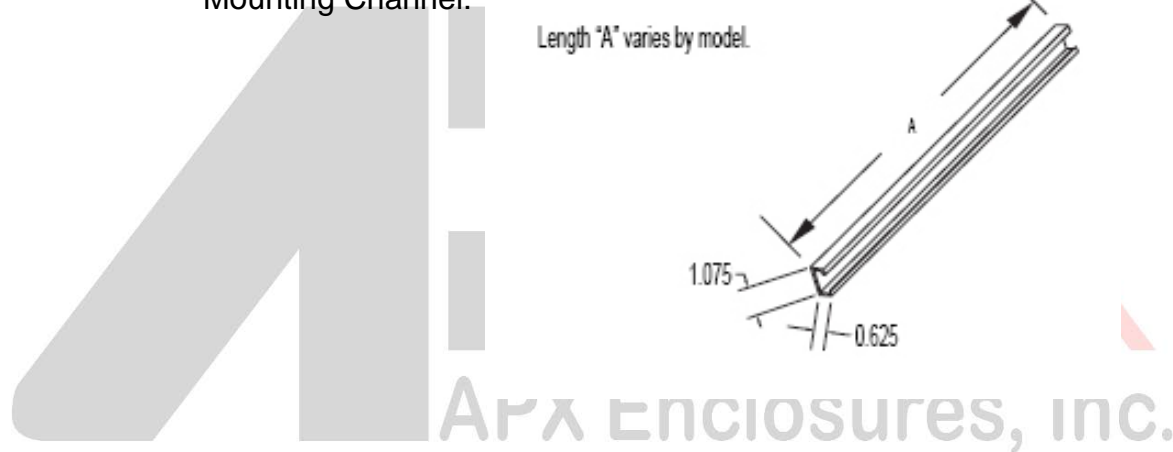
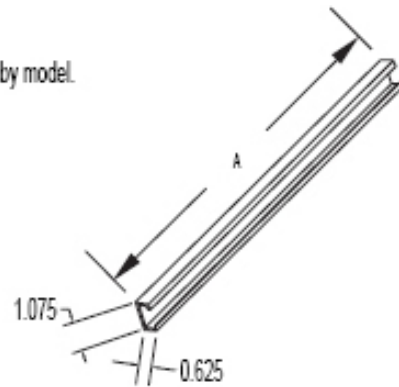
A. Adjustable Channels

1. The enclosure will be equipped with two (2) adjustable “C” mounting channels on both side walls of the enclosure, allowing versatile positioning of shelves or panels.

2. The channel assembly will provide infinite vertical and horizontal adjustment and not limit the positioning of shelves or panels. All mounting hardware will be furnished.

Mounting Channel:

Length “A” varies by model.



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.

3. Shelf mounting flanges will be a minimum of 1.50”.

4. The front shelf edge will be 1.375” to increase available shelf space and will be double flanged to increase shelf strength.

VI. Cabinet Finish

A. Unless otherwise specified, the outside surface area of the cabinet will have a smooth, uniform natural aluminum finish.

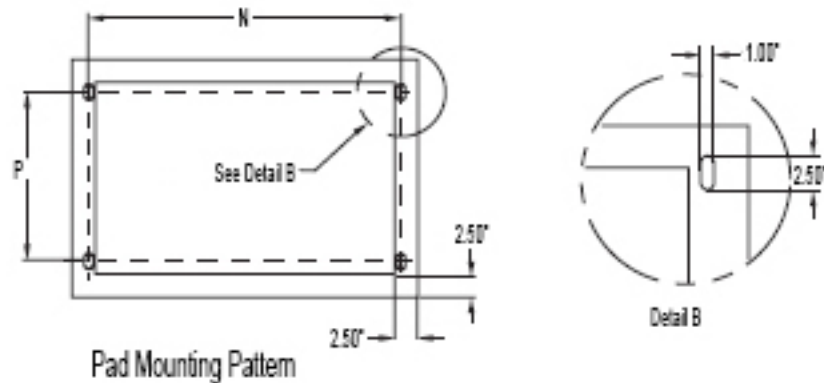
B. If painted, the following steps will be taken as minimum requirement:

1. The cabinet, door and any other parts to be painted will be treated with an iron phosphate coating 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.

VII. Cabinet Mounting

A. Pad Mounted Enclosure

1. Enclosures intended for pad mounting will be constructed with the following pattern:



VIII. Approved Manufacturer

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