

APX Specline 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. The thickness of the alloy will be 0.080 for all enclosures less than 36" in height. Alloy with a thickness of 0.125" will be used when the enclosure equals or exceeds 36" in height. Alternate material is type 304 stainless steel, minimum thickness 0.75 (14 gauge). 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. All exterior welds and seams will be continuously welded and ground smooth.

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

B. Door/Hardware

1. The door opening will be a minimum of 80% of the front surface area and will be hinged on the same 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. Hinges on enclosures less than 36" tall will be spot-welded to both the door and cabinet. Hinges on enclosures equal to or greater than 36" will be spot-welded to the cabinet and bolted to the door.

a) Enclosures made from 0.080 aluminum will use hinges made from like material and use 0.187" hinge pins made from stainless steel.

b) Enclosures less than 36" in height and made from 0.075 stainless steel use hinges made from like material and use 0.187" hinge pins made from stainless steel.

c) Stainless steel enclosures equal to or greater than 36" in height use hinges made from 0.075" stainless steel with a 0.250" stainless steel hinge pin.

d) Aluminum enclosures equal to or greater than 36" in height use hinges made from 0.090" thick aluminum with a 0.250" stainless steel hinge pin.

3. Latching will be quarter-turn, screwdriver operated on enclosures smaller than 36" in height. Locking will be by padlock hasp. On enclosures 36" or larger, 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 (3-point latch models only).

a) The handle will be stainless steel with a 3/4" diameter shank.

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

IV. Equipment Mounting

A. Collar studs will be provided on the rear wall for mounting of optional equipment panels.

V. Cabinet Finish

A. Unless otherwise specified, the outside surface 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, 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.

VI. Cabinet Mounting

A. Wall Mounted Enclosure

1. Enclosures will have mounting feet welded to the top and bottom of the rear wall (exterior).

VII. Approved Manufacturer

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

