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COOL GUARD® CONDENSER UNIT ENCLOSURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes condenser unit enclosures.

1.2 PERFORMANCE REQUIREMENTS

A. Structural Performance: Provide condenser unit enclosures capable of withstanding 100 lb./sq., ft. or a concentrated load of 300 flb on an area of 4 sq. in., whichever produces the greater stress without exceeding the allowable design working stress of materials involved, including anchors and connections, and without exhibiting permanent deformation in any components making up enclosures.

B. Openings in sides should not allow penetration of a round object of greater than 3/16". The openings in the top should not allow penetration of a round object of greater than 3/8".

C. Top should have a 2 year guarantee against deformation or breaking under normal operating conditions.

1.3 SUBMITTALS

A. Samples for Color Selection: Manufacturer's color charts showing the full range of colors, textures, and patterns available.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Gregory Supply Co. a division of Eastern Sales & Marketing, Inc. (423-479-4408, 800-813-8760, fax 423-479-9006).

2.2 MATERIALS

A. Galvanized Sheet Steel: ASTM A366/A 366M, cold rolled commercial quality, galvanized to comply with the requirements specified in ASTM A653/A, 653M for G90 coating.

1. Form sidewalls and top from perforated sheets. Form perforations by punching, cutting, or drilling to produce openings of approximately 3/16" bye 1" slots for the sides & 3/8" bye 1" for the top. NO WELDS on any parts. Roll or press perforated metal if required to flatten and to remove deformations.

B. Fasteners: Provide concealed fasteners for interconnecting components and for attaching them to other work, unless exposed fasteners are unavoidable or are the standard fastening method. Use fasteners fabricated from Type 304 or Type 316 stainless steel, or Aluminum.

C Expansion Anchors: Provide zinc-plated fasteners with coating complying with ASTM B 633, Class Fe/Zn 5, selected for type, grade, and class required.

2.3 FABRICATION

A. Shop Assembly: Pre-assemble condenser unit enclosures in shop to greatest extent possible to minimize field assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for re-assembly and coordinated installation.

B. Coordinate construction, configuration, and dimensions of enclosures with those of the condenser units. Provide notched openings for refrigerant piping, electrical conduit, and other components.

1. Size units to provide no less than 3 inches of clearance around sides of condensing units and 6 inches on top of unit.

C. Fabricate condenser unit enclosures from galvanized steel sheet metal of thickness indicated below or thicker if required to comply with structural performance requirements. NO WELDS on any parts.

1. Sidewalls: 0.079 inch (14 gauge). 2. Top: 0.108 inch (12 gauge).

D. Provide support framing, mounting and attachment clips, fasteners, and accessories needed to install condenser unit enclosures.

2.4 - FINISH

A. Galvanized Metal - Leave finish as is.

B. Powder Coating Surface Preparation - Clean surfaces with nonpetroleum solvent so surfaces are free of oil and other contaminants. After cleaning, apply a conversion coating suited to the organic coating to be applied over it. Clean connections, and abraded areas, and apply galvanizing or repair paint to comply with ASTM A780-

C. Powder-Coated Finish: Immediately after cleaning and pretreating, apply thermosetting polyester or acrylic urethane powder coating with cured-film thickness not less than 1.5 mils. Prepare, treat, and coat metal to comply with resin manufacturers written instructions.

1. Color and Gloss: As selected by PHA from manufacturer's full range of colors available.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Assemble condenser unit enclosures to comply with manufacturer's written instructions. Form tight joints with exposed connections accurately fined together.

B. Install units level and plumb, firmly anchored to concrete pad; maintain clearances recommended by condenser unit manufacturer.

3.2 CLEANING AND ADJUSTING

A. Clean condenser unit enclosures by washing thoroughly with clean water and soap and rinsing with clean water.

B. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Restore items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit or provide new units.

3.3 PROTECTION

A. Protect finishes of condenser unit enclosures from damage during construction period. Remove temporary protective coverings at time of acceptance.

END OF SECTION