

SECTION 05 72 00

ROOF EDGE GUARDRAIL SYSTEM

PART 1 - GENERAL

- 1.01 SUMMARY: Provide and install freestanding Roof Edge Fall Protection System, including pipe railings, uprights, bases, counterweights, fittings and delivery to site.
- 1.02 REFERENCE: OSHA: 29 CFR 1910.23 (e) (1) - (e) (3) (iv); 29 CFR 1926.502 (b) (1) - (b) (14), all applicable state, local and regional codes.
- 1.03 FINISH:
- A. Pipe for handrails, mid-rails, uprights and counterweight connection is to be galvanized mill finish to the requirements of ASTM A53.
  - B. Fittings shall be galvanized to meet ASTM A153.
- 1.04 DESIGN REQUIREMENTS:
- A. Railing shall consist of top rails, mid rails, uprights, counterweights and connections.
  - B. All pipe connections to be structural pipe fittings manufactured to the requirements of ASTM A47-77-32510.
  - C. Railing assembly shall be capable of withstanding a load of at least 200 pounds applied in any direction at any point on the top rail. Test in accordance with OSHA Regulation 29 CFR 1910.23 (e) (1) ; (e) (3) (iv).
- 1.05 SUBMITTALS:
- A. Shop drawing: Indicate profiles, sizes, connections, size and type of fasteners and accessories.
- 1.06 FIELD MEASUREMENTS:
- A. Verify field measurements prior to assembly and/or ordering.

PART 2 - PRODUCTS

- 2.01 MANUFACTURER:
- A. Kee Industrial Products, Inc., Model: KeeGuard Roof Edge Fall Protection System.  
Phone: (800) 851-5181  
Fax: (716) 896-5696
  - B. Substitutions: Permitted, subject to compliance with requirements as judged solely by Architect.

2.02 COMPONENTS:

- A. Pipe: ASTM A53 1-1/2 inch schedule 40, galvanized.
- B. Rails and Posts: 1-1/2 inch diameter steel pipe, galvanized.
- C. Pipe fittings: Elbows, Crossovers, Wall flanges, Tees, Couplings, galvanized.
- D. Mounting Bases: Steel bases are galvanized and are supplied with a rubber pad on underside of the component.
- E. Counterweights: Steel Counterweights are supplied with a rubber pad on the underside of the component.
- F. Fasteners: All Fasteners shall be 304 or 305 stainless steel.

2.03 ASSEMBLY:

- A. Fit and shop-assembled components in largest practical sizes for delivery to site.
- B. Upright tops shall be plugged with weather and light resistant material.
- C. Assemble components with joints tightly fitted and secured with set screws tightened to 29 foot pounds of torque.
- D. Accurately form components to suit installation.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Install guardrail system in strict accordance with manufacturer's instructions.
- B. For all connections with pipe fittings, each set screw is to be tightened to 29 foot pounds of torque.
- C. Placement of uprights and counterweights to meet manufacturer specifications as stated in the manufacturer's installation instructions.
- D. Terminate the run as stated in the manufacturer's installation instructions.

3.02 SCHEDULES:

- A. Freestanding counterweighted guardrail system with 42" nominal height to provide a pedestrian egress barrier on the roof which withstands a minimum load of 200 lbs. in any direction applied to the top rail per OSHA Regulation 29 CFR 1910.23 (e) (1) ; (e) (3) (iv)); 29 CFR 1910.502 (b) (1) - (b) (14).

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