

## **SECTION 07 72 60.01 [07 72 33.01]**

### **ROOF HATCH SAFETY RAIL SYSTEM and LADDER EXTENSION**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Factory fabricated roof hatch fall protection safety rail and ladder extension system installed on [existing] roof hatches.

##### **1.02 RELATED REQUIREMENTS**

- A. Section 07 72 00 - Roof Accessories: Roof hatches.
- B. Section 07 72 33 - Roof Hatches.
- C. Section 07 72 33.01 [07 72 60.01] - Roof Hatch Safety Rail System: Fall protection safety rail system on roof hatches.

##### **1.03 REFERENCE STANDARDS**

- A. ASTM A 500/A 500M - Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2007.
- B. California Occupational Safety & Health Administration (CAL OSHA): 3209 - Standard Guardrails.
- C. California Occupational Safety & Health Administration (CAL OSHA): 3212 - Floor Openings, Floor Holes and Roofs.
- D. Occupational Safety & Health Administration (OSHA): 29 CFR 1910.29 - Guarding Floor and Wall Openings and Holes.
- E. Occupational Safety & Health Administration (OSHA): 29 CFR 1910.23 - Fixed Ladders.

##### **1.04 ADMINISTRATIVE REQUIREMENTS**

- A. Coordination: Coordinate installation of roof hatch safety rail and ladder extension system with installation of new roof hatch and roof flashing. [Coordinate installation of roof hatch safety rail and ladder extension system with retrofit work on existing roof hatch].
- B. Sequencing: Ensure that roof hatches and related flashings are complete prior to proceeding with installation of safety rail and ladder extension system.

##### **1.05 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide manufacturer's product data for complete safety rail system, including finishes.
- C. Shop Drawings: Indicate profiles, accessories, location, quantities and dimensions.
- D. Certificate: Certify that products of this section meet or exceed specified requirements.
- E. Manufacturer's Instructions: Indicate complete instructions for proper installation of safety rail system.
- F. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

##### **1.06 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than 2 years of documented experience.
- B. [Installer Qualifications: Manufacturer's certified installer.]

### **1.07 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver products to project site in manufacturer's original packaging.
- B. Store products under cover, dry and elevated above grade.

### **1.08 FIELD CONDITIONS**

- A. Existing Conditions: Verify that existing roof hatches are suitable to receive proper installation of safety rail and ladder extension system. Notify Architect [Owner] of conditions that would prevent proper installation.

### **1.09 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
- B. Materials shall be free of defects in material and workmanship for a period of eight (8) years from the date of purchase. Powder coat finish has 3 year limited warranty. Within this period, manufacturer shall replace defective components at no charge to Owner.

## **PART 2 PRODUCTS**

### **2.01 MANUFACTURER**

- A. SafePro L.P., 1355 N. Walton Walker, Dallas, TX 75211; Phone: 1-877-723-3570; Fax: 214-330-5435; Website: [www.safeprosafety.com](http://www.safeprosafety.com)
- B. Substitutions: See Section 01 60 00 - Product Requirements. [Not permitted].

### **2.02 ROOF HATCH FALL PROTECTION SAFETY RAIL AND LADDER EXTENSION SYSTEM**

- A. Basis of Design: Roof Hatch Fall Protection Safety Rail Model No. [SP-3036] [SP-3636] [SP-XXXX] by SafePro L.P.
- B. Description: Steel tube railing system mounted on roof hatch providing an ergonomically correct power grip in a safe upright egress and ingress through roof hatches in addition to protection from accidental falls through roof opening while roof hatch is open. Includes top and mid-rail and wrap around self-closing gravity gate mounted with heavy duty hinges acting as a ladder extension.
  1. Steel Tubing: 1-1/2 inch hot rolled electric welded steel tubing, ASTM A500, Grade B, hot formed.
  2. Size: Formed to fit roof hatch size of 30 x 36 [36 x 36] [XX x XX] inches.
  3. Height: 42 inch above roof surface when mounted on standard roof hatch cap flashing.
  4. Mounting System: Integrated stanchions of rail system through bolted to extended cap flashing of roof hatch using 3/8 inch bolts.
  5. Gate System: Gravity self-closing, non-collapsible full wrap around steel tubing grab hold, welded construction. Heavy duty hinges with 5/8 inch hinge pin with built in pinch-less gate stop and pull up full open positioning.
  6. Fasteners: Stainless steel 316 Grade Hex head bolts, 3/8 inch x 2 inch, Nylon locking Hex nut and flat washers.
  7. Labels: Furnish with manufacturer's standard labels containing SafePro Patent Number, and SafePro Logo.
- C. Performance:
  1. Meets and exceeds OSHA Standard CFR 29 1910.23 and CFR 29 1910.29.

2. Meet and exceeds Cal-OSHA §3212. Floor Openings, Floor Holes and Roofs and §3209. Standard Guardrails.
- D. Fabrication: Factory formed and fully welded construction, free of sharp edges and snag points.
  - E. Finish: Factory finished with powder coating.
    1. Powder Coat Finish: Manufacturer's standard super durable powder coating; color: Safety Yellow.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verification of Conditions: Verify that roof hatch is suitable to receive proper installation of safety rail and ladder extension system. Report unsatisfactory conditions to Architect [Owner].

### **3.02 INSTALLATION**

- A. Install safety rail and ladder extension system in accordance with manufacturer's instructions using bolts furnished by railing manufacturer.
- B. [Install safety rail and ladder extension system in accordance with manufacturer's instructions utilizing manufacturer's Certified Installers.]
- C. Install safety rail and ladder extension system by through-bolting to integral curb flashing of roof hatch, avoiding penetration of roof base flashing.

### **3.03 ADJUSTING**

- A. Adjust gate for smooth operation, free of binding.

**END OF SECTION**