**SECTION 07 72 60.02 [07 72 33.02]**

**Automatic Roof Hatch Opener**

**PART 1 GENERAL**

* 1. **SECTION INCLUDES**
		1. Automatic Roof Hatch Opener (fall protection) lift system for automatic opening/closing, locking/unlocking of [existing] roof hatches.

# RELATED REQUIREMENTS

* + 1. Section 07 72 00 - Roof Accessories: Roof hatches.
		2. Section 07 72 33 - Roof Hatches.

# REFERENCE STANDARDS

* + 1. California Occupational Safety & Health Administration (CAL OSHA): 3209 - Standard Guardrails.
		2. California Occupational Safety & Health Administration (CAL OSHA): 3212 - Floor Openings, Floor Holes and Roofs.
		3. Occupational Safety & Health Administration (OSHA): 29 CFR 1910.23 - Guarding Floor and Wall Openings and Holes.
		4. Occupational Safety & Health Administration (OSHA): 29 CFR 1910.27 - Fixed Ladders.

# ADMINISTRATIVE REQUIREMENTS

* + 1. Coordination: Coordinate installation of power hatch lift system with installation of new roof hatch [and roof hatch safety rail system]. [Coordinate installation of power hatch lift system with retrofit work on existing roof hatch [and roof hatch safety rail system].]
		2. Sequencing: Ensure that roof hatches and related flashings are complete prior to proceeding with installation of power hatch lift system.

# SUBMITTALS

* + 1. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
		2. Product Data: Provide manufacturer's product data for complete power hatch lift system, including wiring diagrams, controls and finishes.
		3. Certificate: Certify that products of this section meet or exceed specified requirements.
		4. Manufacturer's Instructions: Indicate complete instructions for proper installation of power hatch lift system.
		5. Warranty: Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

# QUALITY ASSURANCE

* + 1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than 2 years of documented experience.
		2. [Installer Qualifications: Manufacturer's certified installer.]

# DELIVERY, STORAGE, AND HANDLING

* + 1. Deliver products to project site in manufacturer's original packaging.
		2. Store products under cover, dry and elevated above grade.

# FIELD CONDITIONS

* + 1. Existing Conditions: Verify that existing roof hatches are suitable to receive proper installation of power hatch lift system. Notify Architect [Owner] of conditions that would prevent proper installation.

# WARRANTY

* + 1. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
		2. Materials shall be free of defects in material and workmanship for a period of one (1) year from the date of purchase. Within this period, manufacturer shall replace defective components at no charge to Owner.

# PART 2 PRODUCTS

* 1. **MANUFACTURER**
		1. SafePro™ Safety Products., 739 Moore Rd Avon Lake OH 44012; Phone: 1-877-723-3570; Website: [www.safeprosafety.com](http://www.safeprosafety.com/)
		2. Substitutions: See Section 01 60 00 - Product Requirements. [Not permitted].

# Automatic Roof Hatch Opener

* + 1. Basis of Design: Automatic Roof Hatch Opener Model No. [AHO16-110V] by SafePro™ Safety Products.
		2. Description: Powered roof hatch lift system providing fall protection and roof top security by remotely unlocking/locking, open/closing, latching and lifting an access hatch lid from the safety of ground level, using a security key pad, or wireless remote control. New or retrofit permanent bolt mounting on hatch curb back wall (hinged side) and hatch cover with turnbuckle connector attached to standard hatch latching mechanism.
			1. Mounting Plates and Brackets: hot rolled steel plates and brackets, minimum 10 gauge.
			2. Lift System Actuator: Manufacturer’s standard 12 volt DC permanent magnet motor with brake, built in limit switches, 5 amp, with high strength plastic housing protecting motor and gears. Black Powder coating on outer tube. Stainless steel inner tube. Standard protection class: IP51.
			3. [110v Lift System Control Power Supply: Manufacturer’s Standard power supply encased in durable hard plastic housing; Input: AC120 Volt/60Hz, Output: 12Volt/5A, Duty cycle: 10%~ 6min. per hour or 2 min. at continuous use at full load. Standard US 2 prong AC plug on 6 ft. length cord].
			4. Controls: Furnish manufacturer’s standard wall mount key pad control and wireless hand held remote control.
1. Key Pad Control: Back light key pad with power indicator lights, stainless face plate, hard wired to Control Box.
2. Hand Held Remote Control: Manufacturer's standard remote control, 3 volt (CR2024) replaceable battery.
	* + 1. Hardware: Manufacturer’s standard bolts, nuts washers and spacers; stainless steel and zinc plated.
			2. Manual Emergency Operations: Quick release actuator head clevis pin, 3/8 inch forged steel and zinc plated, with full length wire grab hold for manual push up operation.
			3. Labels: Furnish with manufacturer's standard labels containing safety warnings, fall dangers and manufacturer identification.
		1. Performance:
			1. Meets and exceeds OSHA Standard CFR 29 1910.23 and CFR 29 1910.27.
			2. Meet and exceeds Cal-OSHA §3212. Floor Openings, Floor Holes and Roofs and §3209.

Standard Guardrails.

* + 1. Finish: Factory finished components.
			1. Steel Finish: Manufacturer's standard powder coating; color: Black.
			2. Aluminum Finish: Clear, natural anodized.
			3. Stainless Steel Finish: No. 4.

# PART 3 EXECUTION

* + - * 1. **EXAMINATION**

Verification of Conditions: Verify that roof hatch is suitable to receive proper installation of Automatic Roof Hatch Opener (fall protection) lift system. Report unsatisfactory conditions to Architect [Owner].

# INSTALLATION

Install roof hatch lift system in accordance with manufacturer's instructions utilizing manufacturer's certified installers.

1. [Install roof hatch lift system in accordance with manufacturer's instructions using fasteners and components furnished by manufacturer].
2. Install roof hatch lift system in a manner to avoid penetration of roof base flashing.

# TESTING AND ADJUSTING

Test roof hatch lift system and controls for proper operation and automatic locking.

Adjust lift system for appropriate travel and smooth operation, free of binding.

# CLOSEOUT ACTIVITIES

Demonstration: Demonstrate proper operation of roof hatch lift system to Owner's personnel.

Use operation and maintenance data as reference during demonstration.

Briefly describe function, operation, use and maintenance of system.

**END OF SECTION**