

## Section 11

### Roof Anchor Post Fall Protection Safety Systems

#### Part 1: GENERAL

##### 1.01 Summary

###### A. Section Includes:

1. Fall protection systems and related appurtenances to protect the workers walking on the rooftop.
2. Furnish and install support posts, attachment brackets and user equipment as required to provide a complete fall protection system that provides coverage for the rooftop as shown on the plans.
3. Prepare training program in the use, care and maintenance of Fixed Point Anchor Roof Anchor Post fall protection system.

###### B. Related Sections:

1. General Conditions, Supplementary Conditions and Division 1 Sections apply to work of this Section.
2. Section \_\_\_\_\_ Miscellaneous Metal.

##### 1.02 References

###### A. Occupational Safety and Health Administration (OSHA).

1. Part 1910 Occupational Safety and Health Standards.
2. Part 1926 Safety and Health Regulations for Construction.

###### B. American Society for Testing and Materials (ASTM).

###### C. American National Standards Institute, Inc. (ANSI).

1. A 10.32 Fall Protection Systems – American National Standard for Construction and Demolition Operations.
2. Z 359 Fall Protection Code – American National Standard for General Industry

### 1.03 System Description / Requirements

- A. Design a fall protection system to allow safe work on the rooftop as per Occupational Health and Safety regulations. The fall protection system shall allow the user to maintain 100% connectivity per OSHA by permitting the connection to one Fixed Point Anchor Roof Anchor Post prior to disconnecting from the previous Fixed Point Anchor Roof Anchor Post. The fall protection system must provide secure anchorage to arrest a fall by the user. All essential components shall be included as part of the above referenced system, though not specifically stated in the following Specifications, so as to provide a complete and fully operational system.
- B. System components to meet the requirements of this specifications section 2.0.
- C. Each Fixed Point Roof Anchor Post is to accommodate one (1) user at one time (maximum permissible – 1 worker).
- D. All components of the Fixed Point Anchor Post system shall be designed to maintain a factor of safety of at least 2, relative to the dynamic forces generated by the falling workers.

### 1.04 Submittals

- A. Submit the following in accordance with Section \_\_\_\_\_
  - 1. Product Data: Manufacturers' data and product information for manufactured materials and products.
  - 2. Shop Drawings: For fabrication and erection. Include plans, member profiles, sizes, elevations and details for anchorages and connections. Show complete layout of the system in plan and elevation. Show clearance over catwalks and platforms.
  - 3. Operations and Maintenance Manual: Include \_\_\_\_\_ copies of Operations and Maintenance manuals, indicating parts list and maintenance requirements for all equipment, indicating proper procedures and equipment for safe operations of the system.
  - 4. Experience Information: Including type of fall protection system, location and date of installation and Owner's name and address.
  - 5. Installation Certificate: Indicating completion and certification of the installed system.

### 1.05 Quality Assurance

- A. In order to assure uniform quality, ease of maintenance and minimal parts storage, it is the intent of these Specifications that all equipment called for under this Section shall be supplied by a single source. The equipment supplier shall, in addition to the installer, assume the responsibility for proper and complete installation.

- B. Design of the horizontal lifeline system shall be performed by an Engineer with experience in designing not less than 5 installations of similar size and scope. Engineer shall maintain an Errors and Omissions insurance policy with limits of not less than \$1 million per occurrence, \$2 million aggregate.
- C. Manufacturer and installer shall have specific liability insurance (products and completed operations) in an amount of not less than \$9,000,000.
- D. Manufacturer and Installer Qualifications: Firm specializing in design and fabrication and installation of fall protection systems for structures with minimum 15 years' experience.
- B. No equipment shall be supplied by any manufacturer not regularly engaged in the manufacturing and production of fall protection systems. The manufacturer must have installed and had in satisfactory use for a period of not less than two (2) years a minimum of ten (10) installations of the size and type comparable to the unit specified. Bids from manufacturers lacking the experience requirements of the specification, can be considered if the manufacturer provides a satisfactory two (2) year maintenance bond in lieu of evidence of experience and operation. The experience information of maintenance bond shall be submitted in accordance with Section \_\_\_\_\_. Manufacturer shall maintain and Commercial General and Excess Liability insurance policy for Products and Completed Operations with limits of not less than \$2 million per occurrence, \$10 million aggregate.

E.

#### 1.06 Delivery, Storage and Handling

- A. Deliver materials in manufacturer's original, unopened protective packaging.
- B. Store materials in original protective packaging. Prevent soiling, physical damage or wetting.

#### 1.07 Project Conditions

- A. Field Measurements: Perform prior to preparation of Shop Drawings and fabrication drawings to ensure required fit and dimensions.

## **Part 2: PRODUCTS**

### 2.01 Manufacturers

- A. Fall Protection System: **Fusion Roof Anchor Post** as manufactured by **Honeywell Safety Products USA, Inc.**, 1345 15<sup>th</sup> Street, Franklin, PA 16323, telephone 1-800-873-

5242, fax 814-432-2415 and engineered and installed by Fall Protection Associates, Inc Dba Hy-Safe Technology.

- B. Substitutions: Fall Protection Associates, Inc. Dba Hy-Safe Technogy, 960 Commerce Drive, Union Grove, WI 53182

## 2.02 Materials

- A. All materials shall be new, and the complete fall protection system, except for accessory equipment, All materials shall be new, and the complete fall protection system, except for accessory equipment, shall be essentially the product of one manufacturer regularly engaged in the production of such equipment.
- B.
- C. Fasteners
  - 1. The Fixed Point Anchor Roof Anchor Post shall be attached to the supporting structure with appropriate fasteners according to the manufacturer's instructions.

## 2.03 Fall Arrest System Components

- A. System to consist of:
  - 1. The Fixed Point Anchor Roof Anchor Post shall activate at a force of 1000 lbs and shall incorporate a 360 degree protection that, in the event of a fall, orients in the direction of the force, activates the built-in energy-absorbing component, and ensures the base remains securely attached to the roof surface.
  - 2. The Fixed Point Anchor Roof Anchor Posts shall be spaced at intervals to allow users to maintain 100% connectivity per OSHA by permitting the connection to one Fixed Point Anchor Roof Anchor Post prior to disconnecting from the previous Fixed Point Anchor Roof Anchor Post (not to exceed 6' to 8' foot maximum intervals).
- B. Lanyards: Provide one (1) tear out shock absorbing lanyard(s) or self-retracting lanyard(s), per worker, having a maximum arresting force of 1800 lbs., with double locking snap assemblies at each end meeting OSHA regulations and ANSI A10.32 and/or ANSI Z359.1 and as recommended by the fall protection system supplier.
- C. Support Harness(es): Provide one (1) nylon or polyester full body harness, per worker, with back "D" ring meeting OSHA regulations and ANSI A10.32 and/or ANSI Z359.1 and as recommended by the fall protection system supplier.

## **Part 3: EXECUTION**

### 3.01 Installation

- A. Install in accordance with approved shop drawings and manufacturer's instructions.

- B. Examine the existing support structure and the existing conditions under which work is to be installed. Proceed with installation only after any unsatisfactory conditions have been corrected.
- C. Install anchorages and fasteners in accordance with manufacturer's recommendations and instructions to obtain the allowable working loads published in the product literature and instructions and in accordance with this specification. Do not load or stress fall protection system until all materials and fasteners are properly installed and ready for service.

### 3.02 Training

- A. Train owner's designated rigging employees in the proper use of the fall protection system.
- B. Train owner's designated rigging employees in the proper techniques of rescue and retrieval of fallen personnel.

### 3.03 Cleaning

- A. Remove all loose materials, crating and packing material from premises.

END OF SECTION