

SECTION 07227 - FALL PROTECTION DEVICES

PART 1 – GENERAL

1.01 SUMMARY

- A. Section Includes: Roof tie-down system of fall restraint and fall arrest for worker safety.
- B. Related Sections:
 - a. Section 07510 – Built-Up Roofing
 - b. Section 07700 – Roof Specialties and Accessories

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
- B. American National Standard Institute (ANSI)
 - a. ANSI Z359.1-2007 – Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
 - b. ANSI Z359.6-2009 – Specifications and Design Requirements for Active Fall Protection Systems
- C. Occupational Health And Safety Administration (OSHA)
 - a. OSHA 1926.502 – Fall Prevention Systems Criteria and Practices

1.03 SYSTEM DESCRIPTION

- A. General: Provide fall restraint and fall arrest system capable of withstanding loads and stresses within limits and under conditions specified in OSHA and other applicable safety codes. Provide free-standing fall protection anchors that do not penetrate the roof substrate.
- B. Design Requirements: Anchors and accessories comprising system of following types:
 - a. Guardian Angel Anchor System, spaced as indicated by manufacturer, for safety snap connection by individual workers capable of withstanding a 5,000 pound load or safety factor of 2 meeting the requirements of OSHA 1926.502(d)(8).
- C. Performance Requirements: System and components tested for the resistance of the following loads:
 - a. Fall Arrest: 1 User
 - b. Fall Restraint: 1 User

1.04 SUBMITTALS

- A. Product Data: For each type of device specified, including manufacturer's standard fabrication details and installation instructions.
- B. Maintenance Data: Written instructions for maintenance of fall prevention safety devices to be included in the operation and maintenance manual.
- C. In-house Test Reports: Indicate anchor fabrication compliance with performance requirements.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firm having at least 10 years continuous experience in manufacturing fall safety equipment similar to systems specified and exhibiting records of successful in-service acceptability and performance. Firm must employ personnel dedicated to provide regularly scheduled Authorized and Competent Person Training courses as mandated by OSHA 1926 and 1910 for owner's authorized safety personnel.

- B. OSHA Standards: Comply with Occupational Safety and Health Administration Standards for the Construction Industry 29 CFR § 1926.500 Subpart M (Fall Protection), and with applicable State Administrative Code safety standards for Fall Restraint and Fall Arrest.
- C. Source Limitations: Obtain all roof anchors through one source from a single manufacturer.

1.06 COORDINATION

- A. Contractor to coordinate installation of structural deck and roof substrate to meet requirements of roof anchor manufacturer.
- B. Contractor to coordinate installation of structural deck reinforcements and anchorages to support the load exerted by the fall protection anchors.

1.07 WARRANTY

- A. Provide manufacturer's standard warranty to guarantee products will be free from defects for a period of 12 months. Warranty period shall become effective on date of substantial completion.

PART 2 – PRODUCTS

2.01 MANUFACTURER

- A. Provide fall protection system manufactured by Guardian Fall Protection Inc., 6305 South 231st Street Kent, WA, phone 800-466-6385, fax 800-670-7892, or equal.

2.02 MATERIALS

- A. Plated steel components:
 - a. Central Frame
 - b. Frame Member (6 each)
 - c. Weighted Pad (12 each)
 - d. Connection point

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Examine framing and substrate and verify conditions comply with structural requirements for proper system performance.
- B. Proceed with installation of roof anchors only after verifying conditions are satisfactory.

3.02 INSTALLATION

- A. General: Installation to be performed by contractor according to manufacturer's instructions and recommendations.