Safety Anchor Post 9630 Bruceville Rd #106 Elk Grove Ca 95757 USA 800-377-1632 Email: <u>info@safetyanchorpost.com</u> SAPhandrail@gmail.com



SECTION 05 52 17 ROOFTOP FALL PROTECTION

Copyright 2023 - Safety Anchor Post System. - All rights reserved

1.GENERAL

SECTION INCLUDES

Roof accessories including the following:
Fall Arrest Guardrails
Wood Rail
Wire Rope Rail
Deck Mounted Fall Arrest Anchor Points
Overhead Fall Arrest Anchor Points

RELATED SECTIONS

Section 01 56 00 – Temporary Barriers and Enclosures

Section 03 40 00 – Precast Concrete

Section 03 50 00 – Cast Decks and Underlayment

Section 07 41 13 - Metal Roof Panels.

Section 07 61 00 - Sheet Metal Roofing.

Section 07 70 00 - Roof and Wall Specialties and Accessories

Section 05 50 00 - Metal Fabrications.

REFERENCES

American National Standards Institute (ANSI): ANSI/ASSP Z359.18 - 2017 - Safety Requirements for Anchorage Connectors for Active Fall Protection Systems.

American National Standards Institute (ANSI): ANSI/ASSP Z359.14 - 2021 - SRL Class 2

American Welding Society: AWS D1.1 - Structural Welding Code - Steel.

California Occupational Safety & Health Administration (CAL OSHA): 1620 - Design of Temporary Railing.

California Occupational Safety & Health Administration (CAL OSHA): 1621 - Railings and Toe Boards.

California Occupational Safety & Health Administration (CAL OSHA): 1632 - Floor, Roof and Wall Openings to Be Guarded

California Occupational Safety & Health Administration (CAL OSHA): 3211 - Wall Openings.

California Occupational Safety & Health Administration (CAL OSHA): 3212 - Floor Openings, Floor

Holes and Roofs.

- California Occupational Safety & Health Administration (CAL OSHA): 3213 Service Pits and Yard Surface Openings.
- California Occupational Safety & Health Administration (CAL OSHA): 3214 Stair Rails and Handrails.
- Occupational Safety and Health Administration (OSHA): 29 CFR 1910.28 Duty to Have Fall Protection and Falling Object Protection.
- Occupational Safety and Health Administration (OSHA): 29 CFR 1910.29. Walking-Working Surfaces.
- Occupational Safety and Health Administration (OSHA): 29 CFR 1926.500 Scope, Application, and Definitions Applicable to this Subpart.
- Occupational Safety and Health Administration (OSHA): 29 CFR 1926.501 Duty to Have Fall Protection.
- Occupational Safety and Health Administration (OSHA): 29 CFR 1926.502 Fall Protection Systems Criteria and Practices.
- Occupational Safety and Health Administration (OSHA): 29 CFR 1926.503 Training Requirements.

SUBMITTALS

Submit under provisions of Section 01 30 00 - Administrative Requirements.

Product Data: Manufacturer's data sheets on each product to be used, including:

Preparation instructions and recommendations.

Storage and handling requirements and recommendations.

Installation methods.

Shop Drawings: Drawings showing plans, elevations, sections and details of components. Show member sizes and part identification, fasteners, anchors, fittings and evidence of compliance with structural performance requirements.

Manufacturer's Certificates:

Certify that Railings and Base Castings are made in USA. Provide steel mill and foundry certificates for verification prior to shipment.

Manufacturer must be American Welding Society Welding Certified for Welding Standards AWS D1.1 and AWS D1.3. Third party qualification documentation required prior to shipment.

DELIVERY, STORAGE, AND HANDLING

Deliver materials to the job site in good condition and adequately protected against damage.

Inspect rail sections for damage before signing the receipt from the trucking company. Truck driver must note damaged goods on the bill of lading if damaged product is found.

PROJECT CONDITIONS

Field Measurements: Where handrails and railings are indicated to fit to other construction, check actual dimensions of other construction by accurate field measurements before fabrication.

WARRANTY

Warranty: Provide manufacturer's limited two year warranty.

2.PRODUCTS

MANUFACTURERS

Acceptable Manufacturer: Safety Anchor Posts System, 9630 Bruceville Rd. #160, Elk Grove, CA 95757. Phone: (800) 377-1632, www.safetyanchorpost.com, info@safetyanchorpost.com

Substitutions: Not permitted.

Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

ANACHORED RAILING SYSTEM

Edge Protection: Provide Safety Anchoring Post System pedestrian/Worker egress barrier system on roof, including pipe railings, uprights, bases, accessories and fittings. For cast-in-place anchors

Product: SAP42S Guardrail System.

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1910.29 (b)(1-14).

Structural Load: 200 lb (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

When D-Ring specified system in accordance with OSHA Standards - 29 CFR 1926.501 (b)(1-15).

When D-Ring specified fall arrest Load: 5,000 lbs. (2,268 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502

Product: SAP Handrail System.

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1910.29 (b)(1-14).

Structural Load: 200 lb (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Product: SAP5x8 Panel:

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1926.502 (J) (4-5).

Structural Load: 200 lbs. (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Product: SAP U-Channel and Toe Board

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1926.502 (J)(1-4).

Structural Load: 50 lbs. (22.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Height: (60, 42, 21) inches (1524, 1067, 533 mm), minimum.

Railings: 2x4 top and mid-rail, free of sharp edges and snag points.

Mounting Bases:

SAPS Metal Deck Anchors

SAPS Dualie Anchor

SAPS Spider Anchor

Accessories:

Toe Board Brackets.

Fall Arrest D-Ring

Panel (8'x5' and 9'-6"x5')

Whisker Set Plug

Finish: Steel surfaces.

Hot dip zinc galvanized.

Factory finished powder coat paint.

Hot dip zinc galvanized and factory finished powder coat paint.

Color: None. Color: Safety Yellow.

Color: _____.
Color: Specified by Architect.

Edge Protection: Provide Safety Anchoring Post System pedestrian/Worker egress barrier system on roof, including pipe railings, uprights, bases, accessories and fittings. For cast-in-place anchors

Product: SAP Guardrail SAP60DW with SAPS Kicker Braces- Wire Rope System.

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1910.29 (b)(1-14).

Structural Load: 200 lb (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

When D-Ring is specified system in accordance with OSHA Standards - 29 CFR 1926.501 (b)(1-15).

When D-Ring is specified fall arrest Load: 5,000 lbs. (2,268 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502

Product: SAP Handrail System.

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1910.29 (b)(1-14).

Structural Load: 200 lbs. (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Product: SAP5x8 Panel:

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1926.502 (J) (4-5).

Structural Load: 200 lbs. (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Product: SAP U-Channel and Toe Board

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1926.502 (J)(1-4).

Structural Load: 50 lbs. (22.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Height: (60, 42, 21) inches (1524, 1067, 533 mm), minimum.

Railings: Wire Rope Mounting Bases:

SAPS Metal Deck Anchors

SAPS Dualie Anchor

SAPS Spider Anchor

Accessories:

Toe Board Brackets.

Fall Arrest D-Ring

Panel (8'x5' and 9'-6"x5')

Whisker Set Plug

Horizontal Guard Rail Line

Finish: Steel surfaces.

Hot dip zinc galvanized.

Factory finished powder coat paint.

Hot dip zinc galvanized and factory finished powder coat paint.

Color: None.

Color: Safety Yellow.

Color:

Color: Specified by Architect.

Edge Protection: Provide Safety Anchoring Post System pedestrian/Worker egress barrier system on roof, including pipe railings, uprights, bases, accessories and fittings. For existing structures.

Product: SAP Guardrail SAP60DW with SAPS Kicker Braces—Wire Rope System.

System top and mid rail provided in accordance with OSHA Standards - 29 CFR

1910.29 (b)(1-14).

Structural Load: 200 lb (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

When D-Ring is specified system in accordance with OSHA Standards - 29 CFR 1926.501 (b)(1-15).

When D-Ring is specified fall arrest Load: 5,000 lbs. (2,268 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502

Product: SAP Handrail System.

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1910.29 (b)(1-14).

Structural Load: 200 lbs. (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Product: SAP5x8 Panel:

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1926.502 (J) (4-5).

Structural Load: 200 lbs. (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Product: Built in Toe Board

System top and mid rail provided in accordance with OSHA Standards - 29 CFR 1926.502 (J)(1-4).

Structural Load: 50 lbs. (22.7 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Height: (60, 42, 21) inches (1524, 1067, 533 mm), minimum.

Railings: Wire Rope Mounting Bases:

(4) 3/4"Ø Titan HD Concrete Anchors

Accessories:

Toe Board Brackets. Fall Arrest D-Ring Panel (8'x5' and 9'-6"x5')

Whisker Set Plug

Finish: Steel surfaces.

Hot dip zinc galvanized.

Factory finished powder coat paint.

Hot dip zinc galvanized and factory finished powder coat paint.

Color: None.

Color: Safety Yellow.

Color:

Color: Specified by Architect.

Overhead Fall Protection: Provide Safety Anchoring Post System overhead fall arrest anchoring systems.

Product: SAPS Swivel D-Ring.

System in accordance with OSHA Standards - 29 CFR 1926.501 (b)(1-15).

Fall arrest Load: 5,000 lbs. (2,268 kg), minimum, in any direction to all components in accordance with OSHA Regulation 29 CFR 1926.502.

Accessories:

Whisker Set Plug

Finish: Steel surfaces.

Hot Dip Zinc Galvanized.

Factory finished powder coat paint.

Hot Dip Zinc Galvanized and factory finished powder coat paint.

Color: None.

Color: Safety Yellow.

Color:

Color: Specified by Architect.

EXAMINATION

For cast-in-place anchors ensure location of inserts are correct prior to placing substrate.

Do not begin installation until substrates have been properly prepared.

If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

PREPARATION

Clean surfaces thoroughly prior to installation.

Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

When using post installed anchors on Post Tension slabs deck they should be scanned first to avoid damaging any existing strands.

INSTALLATION

Install in accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction.

When using thin slab anchors TEK screws must be installed per manufactures recommendations.

Tie spider anchors to rebar mat to hold location. Do not wet set anchors.

PROTECTION

Protect installed products until completion of project.

Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION