# SECTION 07 72 00 SAFETY RAILINGS FOR ROOF HATCHES Construction Specification

## PART 1 GENERAL

## 1.1 SUMMARY

- A. Section includes:
  - 1. Safety railings for roof hatches installed to counterflashing. Included related hardware.
- B. Related Sections:
  - Division 07 Roof Hatches.

## 1.2 REFERENCE STANDARDS

- A. ASTM B209 Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate
- B. ASTM B221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- C. ASTM B221M Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes
- D. AAMA 611 Voluntary Specification for Anodized Architectural Aluminum; American Architectural Manufacturers Association
- E. AAMA 2603 Voluntary Specification, Performance Requirements and Test Procedures for Pigmented Organic Coatings on Aluminum Extrusions and Panels
- F. AAMA 2604 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels
- G. AAMA 2605 Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels
- H. ASTM D4586/D4586M Standard Specification for Asphalt Roof Cement, Asbestos-Free
- I. FM P7825 Approval Guide; Factory Mutual Research Corporation; current edition.
- J. NRCA ML104 The NRCA Roofing and Waterproofing Manual; National Roofing Contractors Association; Fifth Edition, with interim updates.
- K. SMACNA (ASMM) Architectural Sheet Metal Manual; Sheet Metal and Air Conditioning Contractors' National Association
- L. SPRI ES-1 Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems; Single Ply Roofing Industry (ANSI/SPRI/FM 4435/ES-1)

## 1.3 QUALITY ASSURANCE

- A. Qualifications:
  - Manufacturer/Installer: Company specializing in manufacturing and installation of components specified in this Section with minimum of 5 years documented experience.

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## B. Regulatory Requirements:

1. Cal-OSHA Compliance: Provide hatch safety railing system as required by Cal-OSHA Standard 1910.23 and 1910.27 and as specified in Section.

## C. Sustainability Requirements:

San Mateo County Community College District is strongly committed to promoting sustainability throughout their campus projects. Section 01 81 13 Sustainability of the Design Standard provides guidelines and recommendations for implementing sustainability strategies. Where relevant, specific sustainability criteria is noted in this section; however, each project team should review and cross reference that front section while developing the specific project and its documentation. Each discipline shall confirm that specific performance and manufacturer information provided in the specification section is in alignment with code requirements, LEED criteria, and any other goals for sustainability.

#### 1.4 WARRANTY

A. Provide manufacturer's written 25-year warranty for materials and workmanship against defects.

### PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Bilco Company (The).
  - 2. JL Industries Inc.; a division of the Activar Construction Products Group.
  - 3. Nystrom Inc.

### 2.2 SAFETY RAILINGS

- A. Provide Roof Hatch Curb mounted type to avoid roof penetrations.
- B. Top rail, Mid rail and upright posts: Stainless Pipe, 1-1/4 inch ID, A53 Grade B pipe.
- C. Exit: Self Closing Gate: Stainless, 1-1/4 inch ID A53 Grade B pipe, U bolt with hinge attachment and Stainless mounting bolts and nut hardware.
- D. Fittings: Manufacturer's Stainless, cast with set screw pipe mount.
- E. Counterflash Mount: Stainless mounting bracket with backer plate, hemmed nut for easy installation.
- F. Cal-OSHA Compliance: Provide hatch safety railing system as required by Cal-OSHA Standard 1910.23 and 1910.27 and as specified.
  - 1. Top Rail Height: 42-45 inches above finished roof deck.
  - 2. Top-Mid Rail Spacing: 21 inches maximum.
  - 3. Meets 200lb deflection load when mounted to roof hatch counterflashing.

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- 4. Upright post maximum spacing of 8 feet.
- G. Basis of Design: Nystrom Inc.; Model Number SRCG.

# 2.3 SAFETY RAILING FOR SHIPS LADDER AND SERVICE STAIR APPLICATION

- A. Curb mounted fall protection railing as described in this section.
- B. Provide rail extensions integral to safety railing to serve exiting from and entering through roof hatch.
- C. Project design team shall provide coordinated drawings showing curb mounted railing per 07 72 00 with roof hatch application.

**END OF SECTION** 

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