



SECTION Cal / OSHA 1620, 3209

**Accu-Fit Cal 3209**

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PART 1 GENERAL

1.1 SECTION INCLUDES

- A. California Code of Regulations, Title 8, 1620
- B. California Code of Regulations, Title 8, 3209

1.2 REFERENCES

- A. California Occupational Safety & Health Administration (CAL OSHA):
  - 1. 1620 - Design of Temporary Railing.
  - 2. 3209 - Standard Guardrails, California Code of Regulations, Title 8.
  - 3. 3210 - Guardrails at Elevated Locations.
  - 4. 3212 - Floor Openings, Floor Holes and Roofs.
  - 5. 3214 - Stair Rails and Handrails.
- B. Occupational Safety and Health Administration (OSHA):
  - 1. 29 CFR 1910.28(b) – Duty to Have Fall Protection and Falling Object Protection
  - 2. 29 CFR 1910.29(b) – Fall Protection Systems and Falling Object Protection-criteria and practices.
  - 3. 29 CFR 1910.23 – Walking-Working Surfaces - Fixed Ladders.
  - 4. 29 CFR 1926.500 - Scope, Application, Definitions Applicable to this Subpart.
  - 5. 29 CFR 1926.501 - Duty to Have Fall Protection.
  - 6. 29 CFR 1926.502 - Fall Protection Systems Criteria and Practices.
  - 7. 29 CFR 1926.503 - Training Requirements.

### 1.3 SUBMITTALS

- A. Submit under provisions of Section California Code of Regulations, Title 8, 1620
- B. Product Data:
  - 1. Manufacturer's data sheets on each product to be used.
  - 2. Preparation instructions and recommendations.
  - 3. Storage and handling requirements and recommendations.
  - 4. Typical installation methods.
- C. Shop Drawings: Drawings showing plans, elevations, sections and details of components.

1.4

### 1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
- B. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
- C. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.
- D. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
  - 1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
  - 2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
  - 3. Retain mock-up during construction as a standard for comparison with completed work.
  - 4. Do not alter or remove mock-up until work is completed or removal is authorized.

### 1.6 PRE-INSTALLATION CONFERENCE

- A. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.

### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials to the job site in good condition and protected against damage as handrails are a finished product.
- B. 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.
- C. Store products in manufacturer's unopened packaging until ready for installation.
- D. Products to be palletized and labeled by roof level or designated drop zone.

## 1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
- B. Field Measurements: Where stairs and platforms fit over other construction, check actual dimensions of other construction by accurate field measurements before fabrication.

## 1.9 WARRANTY

- A. Manufacturer's standard limited warranty unless indicated otherwise.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Safety Rail Company, which is located at: 4244 Shoreline Dr.; Spring Park, MN 55384; Tel: 888-434-2720; Email: sales@safetyrailcompany.com; Web: <http://www.safetyrailcompany.com>
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section California Code of Regulations, Title 8, 1620 & 3209.

### 2.2 SYSTEMS

- D. Roof Edge Protection: Provide freestanding pedestrian egress barrier system on roof, including railings, bases, and hardware for flat roofs with 1:12 pitch.
  - 1. Approved Product: **Accu-Fit Cal 3209**
- E. Standards: System shall have top and mid rail in accordance with Cal / OSHA California Code of Regulations, Title 8, 1620 & 3209.
  - 1. Structural Load: 200 lb. concentrated load; 20 pound per linear foot minimum applied either horizontally or vertically downward at the top rail in accordance with Cal / OSHA Regulation Title 8.
  - 2. Height: 42 inches (1067 mm), nominal.
  - 3. Mid-rail shall be halfway between the top rail and the floor, platform, runway or ramp when there is no wall or parapet wall at least 21 inches (53cm) high.
  - 4. Pipe Railings: 1-1/4 inch I.D. schedule 40 pipe x 21' length, to be assembled free of sharp edges and snag points. Field trim pipes to fit application on corners or terminations.
  - 5. Pipe Railing Connections; Join pipe lengths together with approved splice fittings. Tighten all set screw connections to 29 ft. lbs. Modular Pipe Fitting to be cast iron fittings manufactured to the requirements of ASTM A47-77-32510
  - 6. Stanchions: Straight or Curved profile, constructed of 1-1/4 inch I.D. schedule 40 pipe x 42" tall in base.
  - 7. Stanchion spacing must be installed at 8'-0" increments or less.
  - 8. Mounting Bases: 3/8" thick, 190 lb. discreet, flat, low profile design safeguards from trip hazards. Includes one welded receiver post and roof edge upright toe design. Two base parts mechanically fastened with cut-in carrying handle and galvanized finish. Rubber trim pads are provided on edge of metal bases to prevent snag points.
  - 9. Receiver Posts: Stanchion shall be pinned into base plate with set screw tighten connections to 42 ft. lbs or

Hardware: Securing pins shall be 1010 carbon steel, zinc plated and yellow chromate dipped. Pins shall consist of collared pin and latch.

10. Accessories:
  - a. Ladder Spanner Brackets: Provide brackets at ladder transition points as required  
Hardware: Socket-head cap screws 3/8 inch (9.5mm) – 16 x .5 inch (12.7mm) to be provided by manufacturer.
11. Product origin: Railings and Base are specified as 100% made in USA. Manufacturer must provide steel mill certificates for verification prior to shipment.
12. Quality/Standards Certifications: Manufacturer must be American Welding Society welding qualified for Welding Standards AWS D1.1 & AWS D1.3 Third party qualification documentation required prior to shipment.

### 2.3 FINISHES

- A. Finish: Hot Dip Zinc Galvanized or custom color rails only

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. All site plans from manufacturer must be stamped with California Professional Engineer Stamp of approval prior to installation.
- B. Do not begin installation until substrates have been properly constructed and prepared.
- C. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.

### 3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

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

### 3.4 CLEANING AND PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION