



# DAKOTA SAFETY

Safety Product Specialists

DakotaSafety.com  
866-503-7245

## SafetyRail 2000 GUARDRAIL SYSTEM

### Description

The SafetyRail 2000 is a non-penetrating, passive fall protection system for workplace safety that can be used from rooftop to ground level applications. It can be used as a portable or permanent system.

Rail sections are constructed of 1-5/8" inch steel tubing. The rails secure to 108 pound cast iron bases that have four ports, allowing the rails to be placed in infinite positions. When the bases are installed in a run with a 90° return on each end, the combined mass and the geometry of installation creates an OSHA compliant barrier for roof edge protection.

### Basic Use

The SafetyRail 2000 System creates a compliant barrier for roof edge protection. It's unique design eliminates the cost and danger of potential trip hazards created by intermediate counterweights used in other guardrail systems. It provides the economies of a fully portable system for commercial, industrial and worksite applications including rail car platforms, manhole barricade, ramps, construction sites, dig sites, mezzanines, assembly and break areas, crowd control, hoist areas and more.

### OSHA Compliance

Compliant with regulations for guardrails:

- 29 CFR 1910.23
- 29 CFR 1926.502

### Features

- Can be used as a portable or permanent guardrail
- Quick installation
- No drilling needed
- Deemed OSHA compliant by an independent accredited engineering firm
- Powder Coat and Galvanized finishes available
- Optional EPDM rubber pads and BUR pads available for added roof surface protection

### Minimum Requirements

In order to meet OSHA regulations for fall protection, outriggers must be utilized (returns/counter weights). Whether the Danger Side Run is 5' or 1000' in length, you must have these in place at the beginning and at the end of the run. Outriggers are standard rail kits that are connected at approximately 90° to the Danger Side Run of each end rail section.



SafetyRail 2000 is an OSHA compliant guardrail system for commercial, industrial and worksite applications.

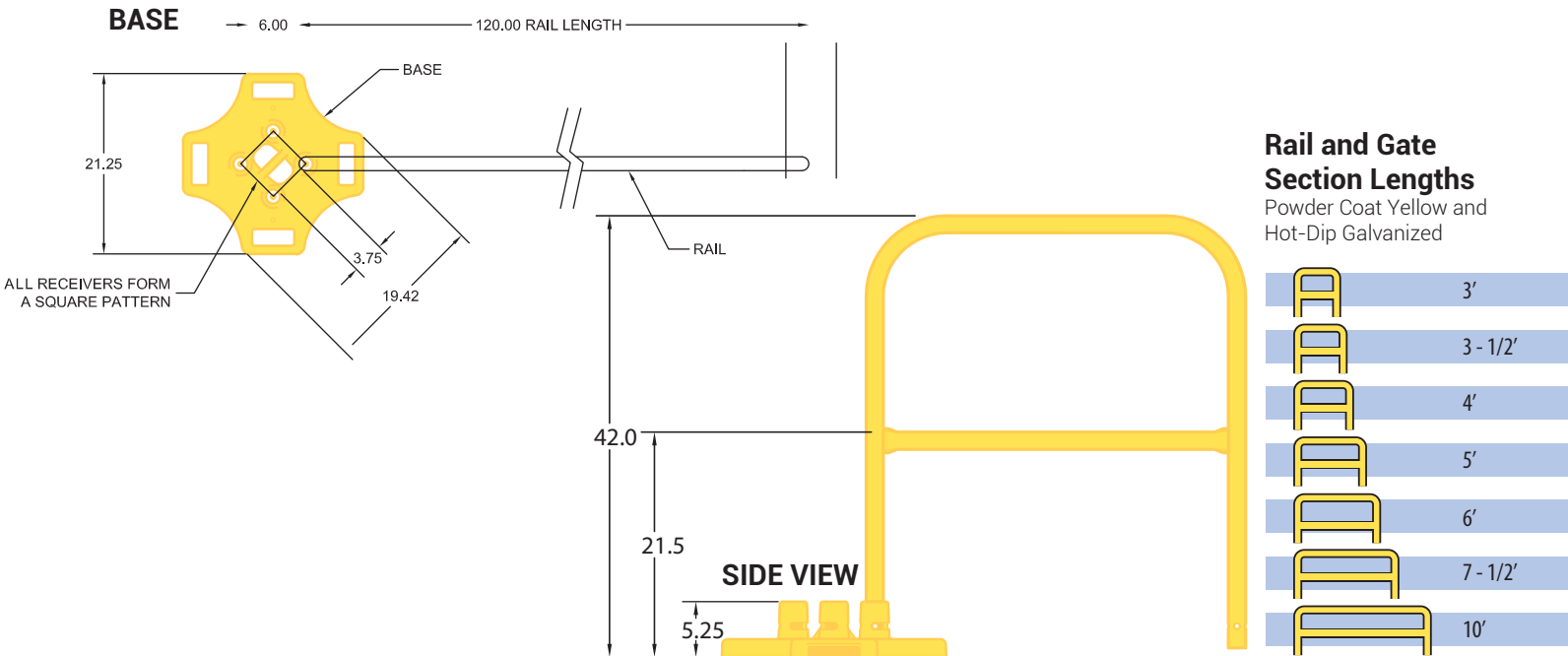
**See reverse side for additional specifications and test results**



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## Roof Edge Protection:

Provide freestanding fall protection system on roof

**Approved Product:** SafetyRail 2000 Guardrail System

**Standards:** System shall have top and mid rail in accordance with OSHA Standards – 29 CFR 1910.23 and 29 CFR 1926.502

**Structural Load:** 200 lb (90.7 kg), minimum, in any direction to all components in accordance with OSHA Regulations 29 CFR 1910.23 and 29 CFR 1926.502

**Height:** 42 inches (1067 mm)

**Railings:** 1- 5/8 inch (41 mm) O.D. hot rolled pickled electric weld tubing, free of sharp edges and snag points

**Mounting Bases:** Class 30 gray iron material cast with four receiver posts. Base weight 96 lbs and 43 lbs per square foot. Provide rubber pads on bottom bases

**Receiver Posts:** Shall have a positive locking system into slots that allow rails to be mounted in any direction. Friction locking systems are not allowed. Receiver posts shall have drain hole

**Hardware:** Securing pins shall be 1010 carbon steel, zinc plated and yellow chromate dipped. Pins shall consist of collared pin and lanyard that connects to lynch pin

**Finishes:** Available in standard Powder Coat Yellow and Hot-Dip Galvanized. Custom colors available

## Options

**Step-Rail:** Variable height railing enables a continuous run of the SafetyRail when the roof steps up or down. Raised Mid-Rail: Railing to fit over duct work for continuous run of SafetyRail

**LP Outrigger:** Supports placed under ducting or conduit to continue run of SafetyRail Guardrail System when rail section cannot be used  
SG200: Sliding (cantilever) gate

**Finishing Rail:** D-shaped railing extension for ladder landings, length or rail section and D-loop as indicated on the drawings

**Surface Protection Pads:** EDPM Rubber Pads and Bur Pads are available

## Independent Test Results

### Test Conclusions:

- The portable guardrail system was found to comply with OSHA regulation 1926.502 for Fall Protection.
- The top rail was capable of withstanding a 200 pound horizontal and vertical load.
- The midpoint of the top rail deflected to 40.75 inches above the floor level when subjected to a 200 pound vertical load.
- The mid rail was capable of withstanding, without failure, a force of 150 pounds, applied in the vertical and horizontal directions.

*Tests were conducted by GME Consultants, Consulting Engineers, Minneapolis, MN 55447. Complete Report available Upon Request.*

### Wind Load Calculations

Available on request.