



PRODUCT INFORMATION

Freestanding Safety Guardrail System

The Millennium freestanding guardrail system stands out for its great versatility. Custom configuration is possible according to your needs. Our standard dimensions, pre-approved by an engineer, allow for a safe and quick installation.

Recommended Use

- Roof guardrail systems
- Roof hatch guardrails
- Protection for rooftop access ladders
- Skylight guardrails

Advantages

- Fully modular system according to your needs
- 42-inch height adjustable
- Standard railings of 9, 18 and 27 feet pre-approved by engineers
- Durable and robust, requires no maintenance
- White, natural aluminum or painted according to Millennium colour range
- Non-penetrating system
- Easy set up on all types of flat and low-sloped roofs

Standards

- CNBC section 4.1.5.14 and 9.8.8.2 – Loads on Guardrails
- RROHS chapter S-2.1, r.13, section 12 – Guardrail
- CSA S269.2 sections 6.6.1 and 6.6.2



Assembly Parts

Cast aluminium 535 clamp fittings with threaded holes and stainless steel set screws.

- Elbows: 45° or 90° clamp fittings
- Tees: linear, T or Y clamp fittings
- Flanges: wall brackets receiving the crossbar tube

Physical Properties

Propriété	Metric	English
Densité	2.57 g/cc	0.0928 lb/in ³

Component Elements Properties

Element	Metric	English
Aluminum, Al	91.4 - 93.3 %	91.4 - 93.3 %
Copper, Cu	<= 0.10 %	<= 0.10 %
Iron, Fe	<= 0.15 %	<= 0.15 %
Magnesium, Mg	6.6 - 7.5 %	6.6 - 7.5 %
Manganese, Mn	0.10 - 0.25 %	0.10 - 0.25 %
Other, each	<= 0.05 %	<= 0.05 %
Other, total	<= 0.15 %	<= 0.15 %
Silicon, Si	<= 0.20 %	<= 0.20 %
Titanium, Ti	<= 0.25 %	<= 0.25 %

Structural Parts

Posts and railings: Aluminum tube 6061-T6 of 48 mm (1.9 in) diameter with plastic end caps.

Stackable bases: Ballast plates of 18.91 kg (41.7 lb), 305 mm x 406 mm (12 x 16 in), cast iron ASTM A-48 class 30 with protective mat.

Quality and Compliance

Quality Management: Product manufactured in accordance with an ISO 9001 certified quality management system ensuring process control, traceability, and continuous improvement.

Structural Welding: All welding operations are carried out in accordance with the certification requirements of the Canadian Welding Bureau (CWB).

The system includes a one (1) year warranty on paint finish and a ten (10) year warranty on all materials, starting from the date of purchase.

All engineers working for Millennium hold a Professional Engineer (P.Eng.) designation in structural engineering, qualifying them to design safety equipment projects in all Canadian provinces.