GRXVRLS1

VERTICAL RAIL LIFELINE SYSTEM



OVERVIEW

The Groxx Vertical Rigid Rail Lifeline System is an engineered, permanent climbing protection solution designed for installation on ladders, towers, wind turbines, and industrial structures. Engineered to eliminate the dynamic "whip" and stretch associated with flexible cable systems, this rigid aluminum and stainless steel infrastructure provides continuous, hands-free safety for personnel ascending or descending vertical heights.

KEY FEATURES

- **Continuous Guided Arrest**: The system utilizes a precision-extruded structural rail profile that guides the climber's slider. In a fall event, the slider locks into the rail immediately, capping fall distance to a few centimeters.
- **Substrate Structural Integrity**: Dynamic load-bearing brackets transfer impact forces evenly into the existing ladder or host structure. The top termination features integrated shock absorption to dissipate kinetic energy.
- **Hands-Free Transit**: The climbing shuttle travels smoothly over intermediate brackets without manual manipulation, ensuring 100% continuous tie-off from entry to exit.

TECHNICAL SNAPSHOT

PARAMETER	GRXVRLS1
EN requirement	Static 15 kN (22 kN textile elements); max. arrest force 6 kN; max. arrest distance 1 m

Parameter	Performance Threshold	Standard Reference
Maximum System Loading	12 kN to 15 kN depending on configuration	Structural Track Capacity
Maximum Arrest Force (MAF)	<6 kN transmitted to user	Dynamic Performance Metric
User Capacity	1 User per span (up to 3 users per total system layout)	Multi-User Verification
Max Track Misalignment Angle	≤15∘ at joint interfaces	Geometric Tolerances
System Lifespan / Inspection	10-Year validity; mandatory 12-month inspection	Maintenance Requirements

USE & INSPECTION

Install to the Groxx instructions by trained installers. Inspect before each use and at least every 12 months by a competent person.

STANDARDS

EN 353-1:2014

FULL DATA SHEET ↗

Product page ↗