

GROXX RAIL LIFELINE

GGHVB062

TECHNICAL SPECIFICATION

GROXX RIGID RAIL LIFELINE SYSTEM

MODEL NO: GGHVB062

The **Groxx GGHVB062** is a comprehensive rigid rail fall protection architecture engineered for horizontal, vertical, and bevel (HVB) applications. Designed for maximum versatility, this system provides a continuous, high-stability load path for personnel engaged in inspection, maintenance, and structural cleaning tasks across industrial and architectural landscapes.



SYSTEM ARCHITECTURE & OPERATIONAL MECHANICS

- Rigid Rail Structure:** Utilizing high-rigidity aluminum alloy profiles, the system provides superior structural stability with minimal sway or deflection compared to traditional cable-based lifelines.
- Non-Disconnection Transit:** The system features precision-engineered shuttle technology that passes seamlessly through intermediate brackets. This ensures 100% tie-off connectivity, eliminating the risk associated with manual detachment or re-hooking during transition points.
- Multi-User Capability:** The GGHVB062 is dynamically tested to support multiple users working simultaneously, provided the system configuration and support spacing adhere to the calculated engineering design.
- Kinetic Interface:** The rail is fully compatible with standard Personal Protective Equipment (PPE), including Self-Retracting Lifelines (SRLs) and safety lanyards, maintaining a constant and reliable safety link.

TECHNICAL SPECIFICATION MATRIX

COMPONENT	TECHNICAL FUNCTION	MATERIAL SPEC
Main Rail	Rigid anchorage line and load-bearing track	Aluminum Alloy
Rail Support	Secures rail to structure; controls span and stiffness	304 SS / Aluminum
Rail Traveler	Mobile anchor point with low-resistance bearings	304 SS / ABS / AL
Rail Bumper	End-of-line elastic energy absorber	304 SS / Silicone
End Terminal	Anti-detachment safety stopper	High-Grade Aluminum

MECHANICAL DATA SUMMARY

- Safe Load Capacity:** 12 kN
- Safety Factor:** 1.5
- Material Integrity:** Constructed from AISI 304/316 Stainless Steel and High-Grade Aluminum (AL) variants for maximum corrosion resistance in aggressive environments.
- Operational Validity:** 10-year lifespan, contingent upon mandatory annual professional recertification and maintenance.

INSTALLATION & SUBSTRATE INTERFACE

- Structural Connection:** The system is secured to primary load-bearing members (beams, purlins, or concrete slabs) via intermediate brackets to form a continuous load path.
- Concrete Application:** For slab mounting, the system utilizes the **GRX851 Chemical Anchor** to create a tension-free molecular bond, maximizing pull-out resistance.
- Alignment Precision:** Tracks must be installed with smooth, burr-free joints. An allowable installation misalignment angle of 15 degrees is strictly enforced to ensure the traveler shuttle operates without jamming.
- Terminal Safety:** All rail ends must be equipped with an anti-detachment end terminal and an elastic rail bumper to protect the shuttle and the user from hard-stop impacts.

COMPLIANCE & STANDARDS

The GGHVB062 system is engineered and tested to meet the most rigorous international safety requirements:

- EN 795:2012 Type D:** Certified for rigid anchor lines (Personal fall protection).
- CEN/TS 16415:2013:** Certified for multi-user safety applications (supporting up to 3 users per span).

THE GROXX ADVANTAGE

By eliminating the dynamic "sag" found in flexible cable systems, the **GGHVB062** significantly reduces the required fall clearance. This makes it the premier solution for facilities with low-headroom or where precise, restricted movement is necessary for worker safety and operational efficiency.