

GROXX ZINC-COATED HEX SELF-DRILLING ROOFING SCREW

GGRXRFS4875

GROXX

GROXXGEARS.COM

Fasteners

TECHNICAL SPECIFICATION

GROXX ZINC-COATED HEX SELF-DRILLING ROOFING SCREW | GGRXRFS4875

HEAVY-DUTY STRUCTURAL ROOFING & CLADDING FASTENER

The **Groxx Zinc-Coated Hex Self-Drilling Roofing Screw (Model Number: GGRXRFS4875)** is a premium, contractor-grade structural fastener designed for securing metal roofing profiles, siding, and trapezoidal sheets directly to timber or light-gauge steel purlins. Engineered with a self-drilling point and a high-efficiency sealing system, this screw eliminates the need for pre-drilling while guaranteeing long-term watertight performance and robust wind-load resistance.

CORE PERFORMANCE FEATURES

- Advanced Self-Drilling Tip:** Equipped with an engineered drill point (Type #3/DIN 7504-K style) that cleanly pierces metal sheets and purlins in a single, high-speed operation, eliminating separate pilot hole-drilling stages.
- Corrosion-Resistant Zinc Shielding:** Treated with a high-purity electro-galvanized zinc coating. This sacrificial barrier delivers excellent resistance against red rust, moisture tracking, and chemical weathering.
- Watertight EPDM Bonding Washer:** Pre-assembled with an aluminum-backed EPDM (Ethylene Propylene Diene Monomer) rubber washer. The washer compresses evenly upon driving to form an absolute weather-tight seal against heavy rain, atmospheric moisture, and thermal expansion cycles.
- Hex-Washer Drive Stability:** Features an integrated hexagonal washer head to ensure slip-free driving torque and broad load-bearing distribution across the fastened sheet profile.

TECHNICAL SPECIFICATIONS

FEATURE / DIMENSIONAL PARAMETER	ENGINEERING VALUE / STANDARD
Model Number	GGRXRFS4875
Screw Type	Hex Washer Head Self-Drilling Roofing Screw
Nominal Outer Diameter (\$D\$)	4.8 millimeters
Total Length (\$L\$)	75.0 millimeters
Material Base	Hardened Carbon Steel (Grade SAE J403 1022 or equivalent)
Surface Treatment / Coating	Electro-Plated Zinc Coating (Bright Zinc-Plated)
Drive Interface	8.0 mm Hex Head (\$s = 8\text{ mm}\$ Spanner size)
Head Thickness (\$k\$)	Approximately 4.3 mm
Flange Head Diameter (\$dk\$)	Approximately 10.0 mm
Washer Assembly	Pre-fitted EPDM / Aluminum Backed Sealing Washer
Recommended Driving Speed	1,500 RPM to 2,500 RPM

LOAD-BEARING PERFORMANCE LIMITS

Tested under rigid industrial fastener guidelines (simulating vertical shear and axial tensile strain over structural sheet profiles):

- Ultimate Tensile Resistance:** 7.11 kilonewtons (\$7.11\text{ kN}\$ / approx. 725 kg of pull-apart resistance)
- Ultimate Shear Resistance:** 3.56 kilonewtons (\$3.56\text{ kN}\$ / approx. 363 kg of perpendicular force tolerance)

KEY APPLICATION SPHERES

- Metal to Timber / Steel Framing:** Securing corrugated roofing sheets and cladding panels down to timber battens or thin metal purlins up to 2.5 mm thickness.
- Overlapping / Stitching Profiles:** High-strength stitching of overlapping steel sheets along structural roof ridges and side seams.
- Industrial Warehousing:** Erecting rain screens, cold-storage walls, and prefabricated agricultural sheds.

THE GROXX ADVANTAGE



- **Eliminates On-Site Pre-Drilling:** Combining the drilling, thread-tapping, and tightening phases into one fluid step cuts installation times by up to 50% compared to traditional fastener methods.
- **Zero Leakage Sealing Technology:** The premium EPDM composite washer will not dry-rot, crack, or squeeze out of shape under high driving torque, keeping the fastening point completely waterproof for years to come.
- **Flawless Torque Engagement:** The deep, precision-formed 8 mm hexagonal socket head prevents the driving bit from slipping or spinning out, saving your panel finish from scratches and keeping installation fast and safe.