Solar Fence Performance Comparison

12.5 gauge High Tensile Fixed Knot vs. 9 gauge Chain-Link

For utility-scale solar perimeter applications, compare the complete fence system—not wire gauge alone. Evaluate tensile properties and mesh geometry alongside post spacing, bracing, and fittings, then assess coating and installation requirements.

PERFORMANCE AREA	12.5 GA HIGH TENSILE FIXED KNOT	9 GA CHAIN-LINK
Wire + mesh	12.5 ga high tensile fixed knot woven wire; rectangular mesh; ASTM A116 basis.	9 ga woven diamond mesh; coating and fabric standard depend on the specified system.
Breaking load	1,500 lb. line-wire breaking load	1,290 lb. line-wire breaking load
Line-post spacing	Typically 15–20 ft on center	Typically 8–10 ft on center
Post installation	Driven line posts where conditions permit; wider spacing means fewer post locations and can reduce excavation and concrete. Engineered foundations are used at terminal and brace conditions as required.	Closer-spaced pipe posts are commonly concrete-set, requiring more post locations and foundation work.
Fabric weight	0.94 lb/ft for 84-inch 1584-6 fixed knot	4.6 lb/ft for 84-inch chain-link
Framework and bracing	Supports multiple framework options: wood posts with H-brace assemblies or pipe posts with HN-brace assemblies. Uses system-compatible staples or post clips and does not require a continuous top rail.	Requires galvanized pipe posts with a continuous top rail, terminal-post bracing, tension bars, bands, tie wires, and related fittings.
Repair approach	Individual damaged wires may be repaired	Damaged fabric may require entire section replacement
Corrosion protection	Bezinal® coating with a 30-year coating guarantee; ASTM A859	Heavy Class 3; coating type, class and warranty depend on the specified chain-link system

THE BOTTOM LINE: A 12.5 ga high tensile fixed knot system can deliver wider spans with fewer framework components. Evaluate that potential through material strength and engineered tension, not diameter alone, and confirm the complete system design for the project.

Request a project-specific fence review. Align fence height, coating, agrivoltaics options, wildlife details, grounding, and security requirements with the site. To take the next step, visit https://fencing.bekaert.com/en/solar-security-fencing.

Comparison is based on the supplied solar-fence specifications and presentation materials. “Typical” chain-link characteristics vary by project. Final design and certified product values must be confirmed for the selected system. A 25+ year design-service-life requirement is not a warranty.