

SolarMount™

Lag Bolts Specifications

Because lag bolt requirements vary with design wind load and the lumber used for the roof trusses, lag bolts are no longer provided with SolarMount rail sets.

The table below (reproduced from UniRac's Technical Bulletin 103: *Code Compliant SolarMount Installation*) lists pull-out values for various roof truss lumber and the lag screws. To

ensure code compliance, the lag pull-out value must exceed the installation's design live load per footing multiplied by an appropriate safety factor.

For more information on design live loads, download Technical Bulletin 103 at www.unirac.com.

Lag Pull-Out Values (lbs) in Typical Roof Truss Lumber

	Specific Gravity	Lag Screw Specifications		
		5/16" Shaft, 2-1/2" Thread Depth	5/16" Shaft, per 1" Thread Depth	3/8" Shaft, per 1" Thread Depth
Douglas Fir — Larch	0.50	665	266	304
Douglas Fir — South	0.46	588	235	269
Engelmann Spruce, Lodgepole Pine (MSR 1650 f & higher)	0.46	588	235	269
Hem — Fir	0.43	530	212	243
Hem — Fir (North)	0.46	588	235	269
Southern Pine	0.55	768	307	352
Spruce, Pine, Fir	0.42	513	205	235
Spruce, Pine, Fir (E of 2 million psi and higher grades of MSR and MEL)	0.50	665	266	304

Sources: *Uniform Building Code; American Wood Council.*

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