

# TREATED SILL PLATES, COLUMNS, AND STUDS

## Featuring StrandGuard® TimberStrand® LSL

- Treated with zinc borate, using a proprietary process, for protection against insects and decay
- ICC ES accepted and meets AWPA treating standards for dry interior applications (Use Category 2)
- Treated throughout—no need to field treat after cutting or drilling
- Every piece is manufactured to be straight and true for fast installation and minimal waste
- Limited product warranty



# TRUS JOIST® STRANDGUARD® TIMBERSTRAND® LSL

## Allowable Design Stresses (100% Load Duration)

		1.3E		1.5E	
		Beam Orientation	Plank Orientation	Beam Orientation	Plank Orientation
Modulus of elasticity	E =	1.3 x 10 <sup>6</sup> psi	1.3 x 10 <sup>6</sup> psi	1.5 x 10 <sup>6</sup> psi	1.5 x 10 <sup>6</sup> psi
Adjusted modulus of elasticity <sup>(1)</sup>	E <sub>min</sub> =	660,750 psi	660,750 psi	762,400 psi	762,400 psi
Flexural stress	F <sub>b</sub> =	1,700 psi <sup>(2)</sup>	1,900 psi <sup>(3)</sup>	2,250 psi <sup>(2)</sup>	2,525 psi <sup>(3)</sup>
Compression perpendicular to grain <sup>(4)</sup>	F <sub>c⊥</sub> =	710 psi	625 psi <sup>(5)</sup>	860 psi	625 psi <sup>(5)</sup>
Compression parallel to grain	F <sub>c  </sub> =	1,835 psi	1,835 psi	2,105 psi	2,105 psi
Horizontal shear parallel to grain	F <sub>v</sub> =	425 psi	150 psi	505 psi	150 psi

(1) Reference modulus of elasticity for beam stability and column stability calculations, per NDS® 2005.

(2) For 12" depth. For other depths, multiply by  $[\frac{12}{d}]^{0.092}$

(3) Value shown is for thickness up to 3½".

(4) F<sub>c⊥</sub> must not be increased for duration of load.

(5) For plate applications only.

## General Notes

- StrandGuard® TimberStrand® LSL is treated with zinc borate, an EPA-registered biocide, using a proprietary process for protection against insects and decay.
- The StrandGuard® treatment process does not reduce the allowable design stresses for TimberStrand® LSL.
- For complete design and installation information regarding **wall framing** with TimberStrand® LSL, refer to the *Trus Joist® Wall Guide* for your region, TJ-9003 or TJ-9004.
- For complete design and installation information regarding TimberStrand® LSL **columns**, refer to the *Trus Joist® Beam, Header, and Column Specifier's Guide*, TJ-9000.

## Connector Notes

### Bolted Connections

- For bolts installed perpendicular to face and loaded **parallel** to grain, use a specific gravity of 0.50.
- For bolts installed perpendicular to face and loaded **perpendicular** to grain, use a specific gravity of 0.58.

### Nailed Connections

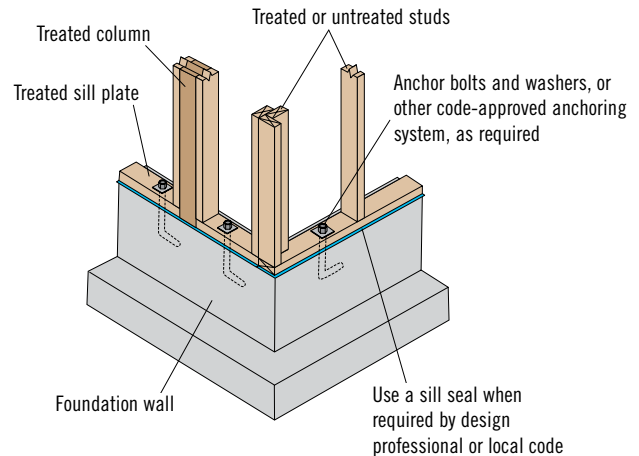
- For lateral nail capacity, use a specific gravity of 0.50.
- For withdrawal nail capacity, use a specific gravity of 0.42 in the edge and 0.50 in the face.

### Shear Walls

- When StrandGuard® TimberStrand® LSL sill plates are used in shear-wall construction, use the specific gravity of the studs when determining the allowable shear.
- Minimum edge nail spacing for 2x sill plate: one row at 4" on-center.
- Minimum edge nail spacing for 3x sill plate: two rows at 4" on-center, staggered.

Code Evaluation: See ICC ES ESR-1387

**WARNING:** Drilling, sawing, sanding or machining wood products generates wood dust. The paint and/or coatings on this product may contain titanium dioxide. Wood dust and titanium dioxide are substances known to the State of California to cause cancer.



*StrandGuard® TimberStrand® LSL framing materials are intended for use in aboveground, protected applications such as sill plates, columns, and studs. The American Wood Protection Association (AWPA) standards classify such applications as Use Category 2.*

*StrandGuard® TimberStrand® LSL may be supported by masonry or concrete foundations, but must not come into contact with the ground, nor can it be substituted for studs in a treated-wood foundation.*

*For complete warranty information, see the limited warranty for StrandGuard® TimberStrand® LSL, TJ-1005.*

## PRODUCT STORAGE

Protect products from sun and water



**CAUTION:** Wrap is slippery when wet or icy

Use support blocks at 10' on-center to keep products out of mud and water

Align stickers directly over support blocks