

SPECIFIER'S GUIDE

# TREATED SILL PLATES AND STUDS

Featuring StrandGuard® TimberStrand® LSL

 Treated with zinc borate, using a proprietary process, for protection against termites and fungal decay

Trus Jois

- Accepted by ICC-ES and meets AWPA treating standards for dry interior applications (Use Category 2)
- Treated throughout—no need to field treat after cutting or drilling
- Eliminates the need for corrosion-resistant fasteners
- Every piece is manufactured to be straight and true for fast installation and minimal waste
- Available in the following sizes:
  1.3E: 1½" x 3½", 1½" x 5½"
  1.5E: 1½" x 7¼"
- Limited 25-year 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	Е	=	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(1)	Emin	=	660,750 psi	660,750 psi	762,400 psi	762,400 psi
Flexural stress	Fb	=	1,700 psi <sup>(2)</sup>	1,900 psi	2,250 psi <sup>(2)</sup>	2,525 psi
Compression perpendicular to grain <sup>(3)</sup>	$F_{c\perp}$	=	710 psi	670 psi	860 psi	750 psi
Compression parallel to grain	F <sub>cll</sub>	=	1,835 psi	1,835 psi	2,105 psi	2,105 psi
Horizontal shear parallel to grain	Fν	=	425 psi	150 psi	505 psi	150 psi

- (1) Reference modulus of elasticity for beam stability and column stability calculations, per NDS®.
- (2) For 12" depth. For other depths, multiply by  $\left\lceil \frac{12}{d} \right\rceil^{0.092}$
- (3) F<sub>c1</sub> must not be increased for duration of load.

### **General Notes**

- StrandGuard® TimberStrand® LSL is treated with zinc borate, an EPA-registered biocide, using a proprietary process for protection against termites and fungal 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 for your region, TJ-9000 or TJ-9020.

## **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.

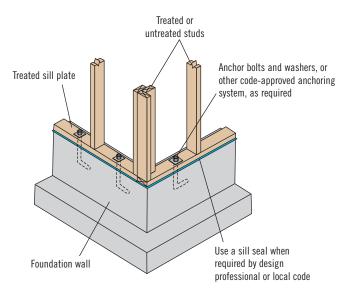
### Code Evaluation: See ICC-ES ESR-1387



WARNING: This product can expose you to chemicals including wood dust which are known to the State of California to cause cancer, and methanol, which are known to the State of California to cause birth defects or other reproductive harm. Drilling, sawing, sanding or machining wood products can expose you to wood dust. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

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This document supersedes all previous versions. If this is more than one year old, contact your dealer or Weyerhaeuser rep.



StrandGuard® TimberStrand® LSL framing materials are intended for use in aboveground, protected applications such as sill plates 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 product from sun and water

CAUTION: Wrap is slippery when wet or icy

Align stickers (2x3 or larger) directly over support blocks

Use support blocks (6x6 or larger) at 10' on-center to keep bundles out of mud and water

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