



TRUS JOIST® TREATED SILL PLATES, COLUMNS, AND STUDS

For Residential Applications 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 Use Category 2
- No special handling or disposal required
- 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



#TJ-8100 TECHNICAL BRIEF

iLevel® 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	$= 1.3 \times 10^6$ psi	1.3×10^6 psi	1.5×10^6 psi	1.5×10^6 psi
Adjusted modulus of elasticity ⁽¹⁾	E_{min}	$= 660,750$ psi	$660,750$ psi	$762,400$ psi	$762,400$ psi
Flexural stress	F_b	$= 1,700$ psi ⁽²⁾	$1,900$ psi ⁽³⁾	$2,250$ psi ⁽²⁾	$2,525$ psi ⁽³⁾
Compression perpendicular to grain ⁽⁴⁾	$F_{c\perp}$	$= 680$ psi	625 psi ⁽⁵⁾	775 psi	625 psi ⁽⁵⁾
Compression parallel to grain	$F_{c\parallel}$	$= 1,400$ psi	$1,400$ psi	$1,950$ psi	$1,950$ psi
Horizontal shear parallel to grain	F_v	$= 400$ psi	150 psi	400 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) $F_{c\perp}$ shall not be increased for duration of load.

(5) For sill plate applications only.

General Notes

- Zinc borate is an EPA-registered biocide.
- Accelerated testing (AWPA E12-94) indicates that adding zinc borate does not increase corrosivity. StrandGuard® treatment is less corrosive to fasteners and connectors than CCA or other copper-based alternatives.
- The StrandGuard® treatment process does not reduce design stresses for TimberStrand® LSL.
- For complete design and installation information regarding **wall framing** with TimberStrand® LSL, refer to the *iLevel Residential Wall Guide* for your region (Reorder #TJ-9003 or #TJ-9004).
- For complete design and installation information regarding TimberStrand® LSL **columns**, refer to the *iLevel Beam, Header, and Column Specifier's Guide* (Reorder #TJ-9000).

Connector Notes

Bolted Connections

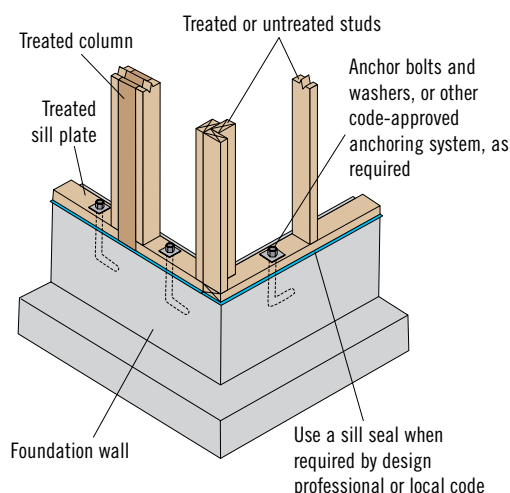
- For bolts installed perpendicular to face and loaded parallel to grain, use a specific gravity of 0.50.
- For bolts installed perpendicular to face and loaded perpendicular to grain, use a specific gravity of 0.58.

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.

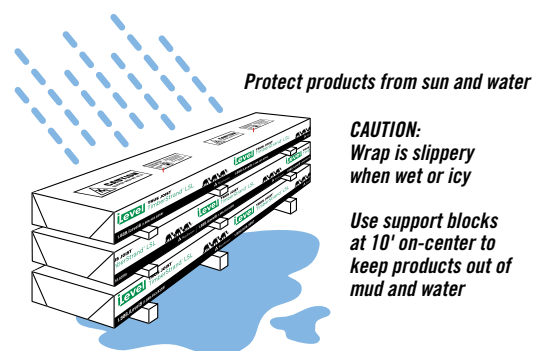


StrandGuard® TimberStrand® LSL framing materials are intended for use in aboveground, protected applications such as sill plates, columns, and studs. The American Wood Protection Association (AWPA) standards classify such applications as Use Category 2.

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 Warranty for StrandGuard® TimberStrand® LSL (Reorder #TJ-1005).

Product Storage



Code Evaluations: See HUD MR 1265d, ICC ES ESR-1387

Call your iLevel representative today to order StrandGuard® TimberStrand® LSL. 1.888.453.8358

August 2008
Reorder TJ-8100

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

Weyerhaeuser, iLevel®, StrandGuard®, TimberStrand®, and Trus Joist® are registered trademarks of Weyerhaeuser. © 2008 Weyerhaeuser Company. All rights reserved. Printed in the USA.