

# **TECHNICAL BULLETIN**

October 2022 (Expires 10/2024)

## StrandGuard® TimberStrand® LSL Sill Plates with Hanging TJI® Joists

## **ALLOWABLE DESIGN STRESSES - PLANK ORIENTATION**

E Modulus of Elasticity [psi]	F <sub>b</sub> Flexural Stress [psi]	F <sub>c⊥</sub> Compression Perpendicular to Grain [psi]	F <sub>v</sub> Horizontal Shear Parallel to Grain [psi]
1.3 x 10 <sup>6</sup>	1900[1]	670[2]	150

[1] Value shown is for thickness up to 3½".

[2] Must not be increased for duration of load.

#### **General Notes**

**TB-715** 

- StrandGuard® TimberStrand® LSL is treated during manufacture 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 Wall Specifier's Guide for your region (TJ-9003 or TJ-9004).
- StrandGuard® TimberStrand® LSL is non-corrosive to hangers.
- For 1½" x 6¼" and 1½" x 8¼" sizes only.

## **Connector Notes**

#### **Bolted Connections**

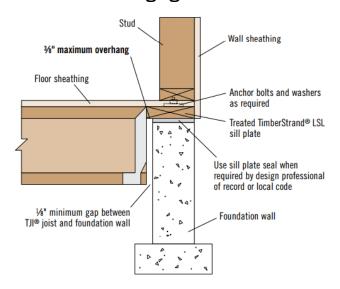
- For bolts installed perpendicular to face and loaded **parallel** to grain, use a specific gravity of 0.50.
- For bolts installed perpendicular to face and loaded perpendicular to grain, use a specific gravity of 0.58.

#### **Nailed Connection**

- For lateral nail capacity, use specific gravity of 0.50.
- For withdrawal nail capacity, use 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 allowable shear.
- Minimum edge nail spacing for 2x sill plate: one row at 4" on-center.



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 Trus Joist® StrandGuard® TimberStrand® LSL (TJ-1005).



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 <a href="https://www.p65warnings.ca.gov/andhttps://www.p65warnings.ca.gov/products/wood-dust">https://www.p65warnings.ca.gov/products/wood-dust</a>

For information on re-sawing of StrandGuard® TimberStrand® LSL see *Re-Sawing Microllam® LVL, Parallam® PSL, and TimberStrand® LSL* (<u>TB-305</u>). For code report information, see ICC-ES <u>ESR-1387</u>.

If you have any questions, please contact your Weyerhaeuser representative.

A, Weyerhaeuser, Javelin, Microllam, Parallam, TimberStrand, TJ, TJI, and Trus Joist are registered trademarks and ForteWEB, Edge, Edge Gold, and TJ-Pro are trademarks of Weyerhaeuser NR. © 2022 Weyerhaeuser NR Company. All rights reserved.