



SOLIDGUARD®
ENGINEERED WOOD PRODUCTS

LP® SolidGuard® LSL

Extra Protection, Through and Through

LP SolidGuard LSL is a zinc borate treated product that protects against termites and fungal decay.

The manufacturing process for LP SolidGuard LSL blends zinc borate throughout the product, eliminating the need for field treatment.

LP SolidGuard LSL is manufactured to be straight, more uniform in strength, stiffness, and size than traditional lumber. Long lengths make it easy for continuous framing along long walls.



Warranty

- 25-Year Limited Warranty against fungal decay and termites. See warranty for full terms and conditions, available at lpcorp.com

Responsible, Sustainable

- LP uses forest management and procurement systems certified to the SFI Standard, which helps ensure wood comes from well managed forests.

Advantages of LP SolidGuard LSL

- Treated throughout—no need to field treat after cutting or drilling
- Manufactured straight and stays straight
- Fast installation and minimal waste
- Helps reduce labor and material costs, as well as the risk of callbacks
- Available in long lengths
- Available in common traditional lumber sizes
- Free of knots and other naturally occurring defects
- Edges and ends are sealed for additional moisture protection
- LSL helps mitigate shrinkage in multiple story buildings



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PLATE BEARING STRESS

Plate Material	Bearing Stress, $F_c \perp$ (psi)
LP® SolidStart® LSL	625 ^{1,2,3}
Douglas fir-Larch	625
So. Pine (No. 2 & No. 3 and Stud)	565
Spruce-Pine-Fir	425
Hem-Fir	405

Notes:

1. 625 psi is the proportional limit value adjusted to 0.04" deformation on a 1-1/2" thick wall plate.
2. No adjustment allowed for the bearing area factor, C_b ($C_b = 1.00$).
3. See technote "Flat Compression Perpendicular-to-Grain for LP SolidStart LSL" for additional information.

FASTENER DESIGN

Equivalent Specific Gravity					
Nails and Wood Screws			Bolts and Lag Screws		
Withdrawal		Dowel Bearing		Dowel Bearing (into the face only)	
Edge	Face	Edge	Face	Load Applied Parallel to Grain	Load Applied Perpendicular to Grain
0.46	0.50	0.50	0.55	0.50	0.58

Notes:

1. The equivalent specific gravity for each connection type listed above is for standard load duration and shall be adjusted according to code.
2. Fastener spacing, end and edge distance shall be as specified by code except for nail spacing as specified below.
3. Shear wall design shall be based on the specific gravity of the wall studs, not to exceed 0.50.

SPACING REQUIREMENTS (1-1/2" LSL AND THICKER)

Fastener Orientation	Nail Size (common or box)	Minimum End Distance	Minimum Nail Spacing	
			Single Row	Multiple Row
Edge ⁵	8d & smaller	2"	3"	3"
	10d & 12d	2"	3"	4"
	16d ⁶	2-1/2"	4" ⁴	6"
Face	8d & smaller	7/8"	1"	
	10d & 12d	7/8"	1"	
	16d ⁶	7/8"	1-1/2"	

Notes:

1. Edge distance shall be such that does not cause splitting.
2. Multiple rows of nails shall be offset at least 1/2" and staggered.
3. Edge orientation refers to nails driven into the narrow edge of the LSL, parallel to the face of the strands. Face orientation refers to nails driven into the wide face of the LSL, perpendicular to the face of the strands.
4. Single row spacing for 16d nails into the edge can be reduced to 3" for 1-3/4" or thicker LSL.
5. 16d sinkers (3-1/4" x 0.148"Ø) can be spaced the same as the 10d & 12d nails.
6. Shear wall boundary nailing into the edge of the sill plate shall not be less than 3" oc.



SOLIDGUARD®

1.35E LSL
Mill 1092

APA EWS

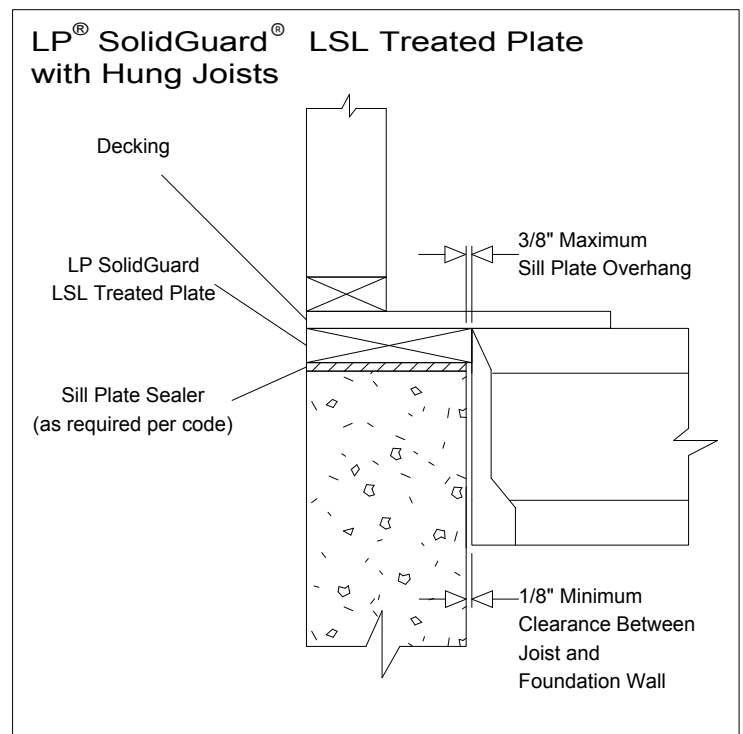
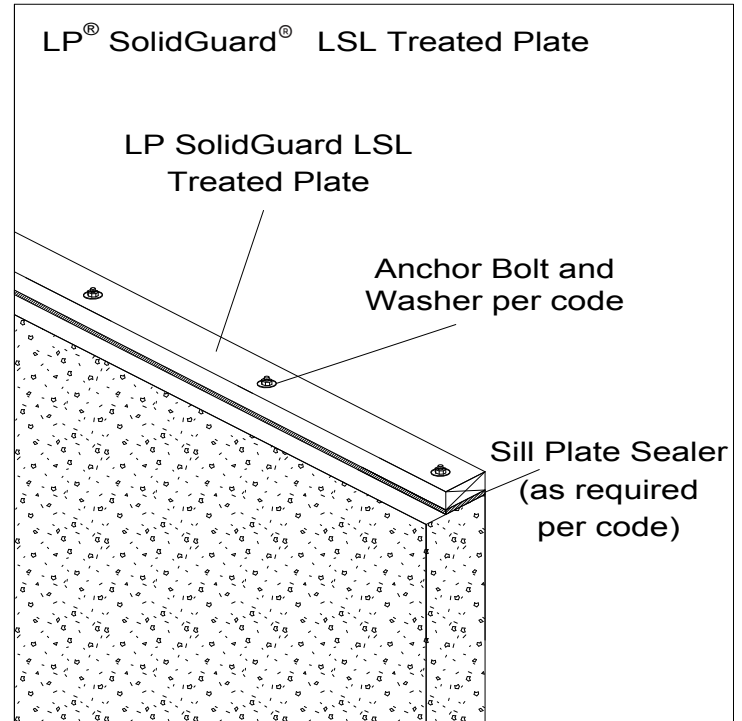
APA PR-L280
ZB Treated

MM DD YY

Actual LP SolidGuard LSL stamp represented. Look for the stamp and gray end and edge seal on your product.

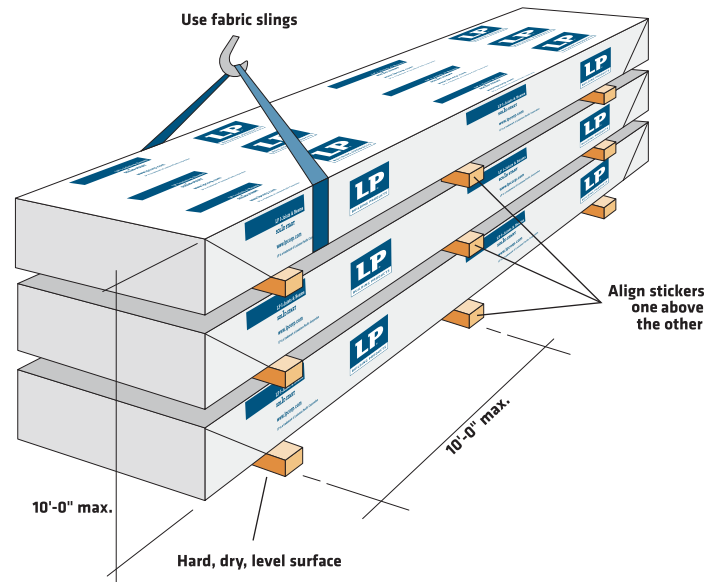
General Conditions:

- LP SolidGuard LSL is treated with zinc borate for fungal decay and termite resistance to a retention level equivalent to that specified in American Wood Protection Association (AWPA) Standard T1-13 for Use Category 2.
- LP SolidGuard LSL framing materials are intended for use in aboveground, protected applications such as sill plates, columns, rim board and studs. The American Wood Protection Association (AWPA) standards classify such applications as Use Category 2.
- LP SolidGuard LSL is not intended for ground contact, nor can it be substituted for treated studs in a permanent wood foundation.
- Zinc borate is an EPA-registered biocide. Borate is a naturally occurring mineral that is odorless and colorless in wood. LP SolidGuard LSL require no special handling or disposal.
- Zinc borate does not increase corrosion of nails, screws, bolts or other fasteners.
- The treatment process does not reduce design stresses for LP SolidGuard LSL. For complete design and installation details refer to the LP SolidStart LSL Wall Framing Technical Guide.



Handling & Storage Guidelines

- WARNING: FAILURE TO FOLLOW PROPER PROCEDURES FOR HANDLING, STORAGE AND INSTALLATION COULD RESULT IN UNSATISFACTORY PERFORMANCE, UNSAFE STRUCTURES AND POSSIBLE COLLAPSE.
- Keep LP® SolidGuard® LSL dry. These products are intended to resist the effects of moisture on structural performance from normal construction delays but are not intended for permanent exposure to the weather.
- Unload products carefully, by lifting. Support the bundles to reduce excessive bowing. Individual products should be handled in a manner which prevents physical damage during measuring, cutting, erection, etc.
- Keep products stored in wrapped and strapped bundles, stacked no more than 10' high. Support and separate bundles with 2 x 4 (or larger) stickers spaced no more than 10' apart. Keep stickers in line vertically.
- Product must not be stored in contact with the ground, or have prolonged exposure to the weather.
- Use forklifts and cranes carefully to avoid damaging product.
- Do not use a visually damaged product. Call your local LP SolidGuard LSL distributor for assistance when damaged products are encountered.
- LP SolidGuard LSL is limited to interior locations, continuously protected from the weather and not in contact with the ground, but may be subject to dampness (such as sill plates over concrete footings and slabs) as defined by the American Wood Protection Association (AWPA) Use Category UC2 as defined in AWP A U1.
- For built-up members, LP SolidGuard LSL shall be dry before nailing or bolting to avoid trapping moisture.
- LP SolidGuard LSL shall not be used for unintended purposes such as ramps and planks.



LP SolidGuard LSL 1730Fb-1.35E

Contact your local distributor for availability.

Cal. Prop 65 Warning: Use of this product may result in exposure to wood dust, known to the State of California to cause cancer.



For more information on LP SolidGuard LSL or the nearest distributor, please contact **1.888.820.0325** or e-mail **customer.support@lpcorp.com**. Visit our web site at **LPCorp.com**

