



#TJ-7102

SPECIFIER'S GUIDE

# PARALLAM® PLUS PSL BEAMS, HEADERS AND COLUMNS



Featuring Trus Joist® Parallam® PSL with Preservative Protection

- Columns and posts are ideal for ground and fresh water contact and saltwater splash applications
- Beams and headers are ideal for exterior, above ground use
- Protects against termites and decay-causing fungi
- Treated throughout the cross section
- Kiln dried after treatment
- 30-year limited warranties





The products in this guide are readily available through our nationwide network of distributors and dealers. For more information on other applications or other Trus Joist® products, contact your Weyerhaeuser representative.

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#### Why Choose Parallam® Plus PSL?

Wood is naturally susceptible to attack by wood-destroying fungi and termites, so any wood product used in wet-service conditions or exposed exterior applications requires preservative treatment to protect it from degradation and ensure an extensive service life.

Weyerhaeuser has partnered with Koppers Performance Chemicals Inc. to create Parallam® Plus PSL, which effectively resists fungal decay and termite attack. Parallam® Plus PSL is suitable for applications that are exposed directly to weather and water-such as decks, pavilions, and pool enclosures-and direct ground contact applications like deck posts. Column members can even be used in saltwater splash applications.

#### **DURABILITY AGAINST FUNGAL DECAY—GUARANTEED**

Parallam® Plus PSL is backed by two 30-year limited warranties to provide long-term peace of mind. As the manufacturer of Parallam® PSL, Weyerhaeuser warrants Parallam® Plus PSL against manufacturing defects. Koppers Performance Chemicals Inc. warrants against termites and fungal decay. For more details, see our Parallam® Plus PSL Limited 30-Year Warranty, TJ-7101, available from your Weyerhaeuser representative or online at weyerhaeuser.com/woodproducts.



**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 and www.P65Warnings.ca.gov/wood.

## PRODUCT FEATURES AND SIZES

# Trus Joist® Parallam® Plus PSL with Preservative Protection

- Preservative treatment penetrates all the way to the core of the cross section
- · Kiln dried after treatment
- · Provides termite and fungal decay protection

Parallam® Plus PSL beams and columns are treated with waterborne preservatives. They are treated and dried only at Weyerhaeuser-authorized treatment facilities.

Treated beam and header products are suitable for exposed exterior applications such as decks, pavilions, and pool enclosures. Treated column products are suitable for direct ground contact applications such as deck posts and construction poles for elevated house construction, as well as for saltwater splash applications.



# Features and Use Characteristics for Parallam® Plus PSL Beams, Headers, and Columns

Facture (Hea Observatoriation	Parallam® Plus PSL					
Feature/Use Characteristics	Beams and Headers	Columns				
AWPA Use Category	UC3B or lower	UC4B or lower				
Saltwater splash permitted	No	Yes				
Treatment	Copper Azole	CCA				
Kiln dried after treating	Yes (KD 19)	Yes (KD 19)				
Fungal decay protection	Yes	Yes				
Termite protection	Yes	Yes				
Corrosion-resistant hardware required	Yes	Yes				
Suitable for interior applications	Yes	Yes				
Paintable or stainable	Yes	Yes				

# Available Widths and Depths of Parallam® Plus PSL

Parallam® Plus PSL beams and headers are available in the following sizes:

Widths: 31/2" and 51/4"

**Depths:** 91/4". 117/8". 14". and 16"

Parallam® Plus PSL columns and posts are available in the following sizes:

 $3\frac{1}{2}$ " x  $5\frac{1}{4}$ "  $5\frac{1}{4}$ " x  $5\frac{1}{4}$ " 7" x 7"

Some sizes may not be available in your region.

Contact your Weyerhaeuser representative for dealer locations, available sizes, and lead times for treatment and delivery.

Parallam® Plus PSL has an inherently industrial finish. Surface preparation may be required to achieve an acceptable architectural finish. Routine maintenance, such as the application of quality exterior stains and sealers, is required to improve and maintain the finish. Deck flashing tape is recommended for the top edge of beams used in exposed deck applications to enhance moisture protection.

In order for Parallam® Plus PSL to perform as described, the product must maintain its original cross section. Parallam Plus® beams, headers and columns may be cut to length, but must not be resawn in depth or thickness.



DO NOT cut, notch, or drill holes in Parallam® Plus PSL except as indicated in the Trus Joist® Beams, Headers, and Columns Specifier's Guide, TJ-9000.

# PARALLAM® PLUS PSL APPLICATIONS

#### Where to Use Parallam® Plus PSL

The American Wood Protection Association (AWPA) created Use Categories (UC) to characterize the end-use environments that require treated wood products.

Parallam® Plus PSL may be used for interior, dry or damp, above ground applications (AWPA UC1 and AWPA UC2) to help protect against termites.

Parallam® Plus PSL is also suitable for exterior applications where a structural member is either partly or entirely located outside of the waterproof building envelope and exposed directly to weather (AWPA UC3) and ground contact (AWPA UC4). In these applications it can help protect against both termites and fungal decay.



Parallam® PSL products enter an airtight treatment cylinder—a highly controlled, pressurized environment where they are exposed to the treatment process.

# **How to Specify Parallam® Plus PSL**

Using the table below:

- **Step 1:** Verify the appropriate **AWPA Use Category** for your application.
- Step 2: Verify the associated moisture content for the corresponding Service Level meets the application.
- Step 3: Design the members using the Service Level from Step 2 with one of the following:
  - Allowable design stresses on page 5
  - Load and application tables in this guide (only for SLO, SL1 and SL2).
  - ForteWEB® software

## **Use Categories and Service Levels**

				-	arallam® Plus PS ceptable Conditi	_
AWPA Use Category <sup>(1)</sup>	Service Conditions	Use Environment	Typical Applications	Service Level <sup>(2)</sup>	CA-C Beams and Headers	CCA Columns
UC1	Interior Construction, Above Ground, dry	Continuously protected from weather or other sources of moisture	Interior termite resistant construction	SLO or SL1	✓	✓
UC2	Interior Construction, Above Ground, damp	Protected from weather, but may be subject to sources of moisture	Sill Plates, Crawl Space Beams	SLO or SL1	✓	✓
UC3A	Exterior Construction, Above Ground, rapid runoff	Exposed to all weather cycles, not exposed to prolonged wetting	Exterior framing fully protected from exposure to liquid moisture	SL2	✓	✓
<b>UC3B</b>	Exterior Construction, Above Ground, poor water runoff	Exposed to all weather cycles, including intermittent wetting, but with sufficient air circulation so wood can readily dry	Above ground joists and beams for decks and freshwater docks	SL2	<b>√</b> (3)	✓
UC4A	Ground Contact or Fresh Water, Non-critical Components	Exposed to all weather cycles, including continuous or prolonged wetting	Fence and deck posts	SL3	Not Permitted	✓
UC4B	Ground Contact or Fresh Water, Critical Components or difficult replacement	Exposed to all weather cycles, including continuous or prolonged wetting, high decay potential includes salt water splash	Embedded deck posts, freshwater dock support posts, and wood used in salt water splash zones	SL3	Not Permitted	✓
UC4C	Ground Contact or Fresh Water, Critical Structural Components	Exposed to all weather cycles, severe environments	Foundation Piling	NA	Not Permitted	Not Permitted
UC5A	Salt or brackish water and adjacent mudzone	Continuous marine exposure	Piling and Bulkheads	NA	Not Permitted	Not Permitted

<sup>(1)</sup> Refer to AWPA Book of Standards (Standard U1, Table 2-1) for a complete description of use category designations and typical applications.

<sup>(2)</sup> Parallam® Plus PSL Service Level takes into account moisture content ranges that affect design properties. The equilibrium moisture content (EMC) for each service level is as follows:  $SL0 \le 12\%$ ,  $12\% < SL1 \le 16\%$ ,  $16\% < SL2 \le 28\%$ , and SL3 > 28%.

<sup>(3)</sup> Parallam® Plus PSL beams and headers have been treated to UC4A requirements to meet the intent of AWPA Standard U1, Table 2-1, footnote 1.

## DESIGN PROPERTIES

# Allowable Design Stresses for Beams and Columns (100% Load Duration)

Parallam® Plus PSL	Design Service Level <sup>(1)</sup>	Orientation	E Modulus of Elasticity <sup>(4)(5)</sup> (x 10 <sup>6</sup> psi)	E <sub>min</sub> Adjusted Modulus of Elasticity <sup>(6)</sup> (x 10 <sup>6</sup> psi)	F <sub>b</sub> Flexural Stress <sup>(7)</sup> (psi)	F <sub>v</sub> Horizontal Shear Parallel to Grain (psi)	F <sub>c⊥</sub> Compression Perpendicular to Grain <sup>(8)</sup> (psi)	F <sub>t</sub> Tension Stress <sup>(9)</sup> (psi)	F <sub>oll</sub> Compression Parallel to Grain (psi)
	SLO	Beam	1.69	0.860	2,370	225	415	1,890	2,175(10)
	310	Plank	1.79	0.911	2,290	165	250	1,090	2,173(10)
	SL1	Beam	1.65	0.840	2,275	215	380	1,850	2,005(10)
Beams(2)		Plank	1.76	0.893	2,205	160	230	1,000	2,003(10)
(CA-C)	SL2	Beam	1.49	0.759	1,885	180	240	1,690	1.310(10)
		Plank	1.61	0.819	1,855	130	150	1,030	1,510***
	SL3	Beam	1.39	0.708	1,675	150	170	1,570	1,050(10)
	SLJ	Plank	1.50	0.763	1,605	110	85	1,370	
	SLO	Beam	1.52	0.774	2,045	180	335	1,640	1,875
	SLU	Plank	1.61	0.820	1,965	150	205	1,040	1,073
	SL1	Beam	1.49	0.756	1,960	170	305	1,605	1,725
Columns(3)	SLI	Plank	1.58	0.804	1,890	145	185	1,000	1,725
(CCA)	SL2	Beam	1.34	0.683	1,625	140	195	1,465	1,130
	3LZ	Plank	1.45	0.737	1,590	120	120	1,400	1,130
	SL3	Beam	1.25	0.637	1,445	120	135	1,360	905
	SLS	Plank	1.35	0.987	1,375	100	70	1,300	300

- (1) The equilibrium moisture content (EMC) associated with each Design Service Level is as follows:  $SL0 \le 12\%$ ,  $12\% < SL1 \le 16\%$ ,  $16\% < SL2 \le 28\%$ , and SL3 > 28%.
- (2) Beams are defined as those products which are 2.0E Parallam PSL prior to treatment.
- (3) Columns are defined as those products which are 1.8E Parallam PSL prior to treatment.
- (4) To properly calculate deflections for the full range of typical SCL span and loading applications, bending and shear deflections must be considered. Use the following equation for simple span, uniformly loaded beams:

$$\Delta = \frac{270 \text{ wL}^4}{\text{Ebd}^3} + \frac{28.8 \text{ wL}^2}{\text{Ebd}}$$

Where:  $\Delta = \text{deflection (in.)}$ 

w = uniform load (plf)

L = span (feet)

b = beam thickness (in.)

d = beam depth (in.) E = modulus of elasticity (psi)

For other span and loading conditions, use engineering mechanics to account for both bending and shear deflection or use ForteWEB® software.

- (5) Total deflection under long-term loading may be estimated in accordance with NDS® Section 3.5.2. Use Kcr = 1.5 for SLO and SL1 and Kcr = 2.0 for SL2 and SL3.
- (6) Reference modulus of elasticity for beam and column stability calculation per NDS®.
- (7) For 12 in. depth. For other depth, multiply by [12/d]0.111
- (8)  $F_{\text{c}\perp}$  must not be increased for duration of load.
- (9) Reference tension design values are based on a standard length of 4 feet. For lengths longer than 4 feet multiply Ft by the following adjustment: Parallam® PSL: (4/L)0.056, where L is in feet.
- (10) For beam products used in column applications, capacity can be determined using the provisions of Chapter 15 of the NDS in conjuction with the published F<sub>6</sub> value above and a minimum eccentricity, e2, applied to the narrow face of the member.

 $e_2 = t/6 + 5L^2/4608$ 

 $e_2 = \mbox{Eccentricity applied parallel to the narrow face of the member, inches}$ 

t = Member thickness, inches

L = Unbranced column length about the weak axis, feet

## **General Notes**

- Surface checking is an inherent characteristic of Parallam® Plus PSL and is common to all wood products. The design values in this guide account for surface checking.
- Lateral support is required at bearing and along the span at 24" on center maximum.

#### **Beam Orientation**



#### **Plank Orientation**



## **Connection Design Adjustment Factors**(1)

Service Level of Beam or Column Application <sup>(2)</sup>	Na (Installed in l	ils Face or Edge)		ews Face or Edge)	Bolts and Lag Screws <sup>(3)</sup> (Installed in Face)
	Lateral	Withdrawal	Lateral	Withdrawal	Lateral
SLO	0.70	0.81(4)	0.70	0.81	0.74(6)
SL1	0.66	0.79(4)	0.66	0.79	0.69(6)
SL2	<b>SL2</b> 0.49		0.49	0.70	0.50(6)
SL3	0.36	0.25(5)	0.36	0.64	0.39

- (1) Adjustment factors are applied after connection is designed with SG = 0.50. Connection design adjustment factors above are used in lieu of NDS Wet Service Factor, C<sub>m</sub>.
- (2) The equilibrium moisture content (EMC) associated with each Design Service Level is as follows: SL0 ≤ 12%, 12% < SL1 ≤ 16%, 16% < SL2 ≤ 28%, and SL3 > 28%.
- (3) Bolts and lag screws must not be installed into the edge of Parallam® Plus PSL.
- (4) If product moisture content is expected to temporarily exceed SL1, use connection design adjustment factor of 0.25 per NDS®.
- (5) Adjustment factor assumes that moisture fluctuations between dry conditions (SL0 or SL1) and wet conditions (SL2 or SL3) may occur in service. If product moisture content will be continuously subject to SL2 or greater levels, use connection design adjustment factor of 0.70 for SL2 and 0.64 for SL3.
- (6) Connection design adjustment factor shall be 0.40 to avoid drying induced splitting when a bolted connection is installed in wet material (SL2 or SL3) that is allowed to dry (SL0, SL1), subject to the exceptions noted in NDS Table 11.3.3, footnote 2 (single fastener or row, separate side member for each row.)

# Allowable Design Properties (100% Load Duration) 3½" Beams—Service Level 2

Docian Property	Depth						
Design Property	91/4"	117/8"	14"	16"			
Moment (ft-lbs)	8,070	12,935	17,655	22,720			
Shear (lbs)	3,885	4,990	5,880	6,720			
Moment of Inertia (in.4)	231	488	800	1,195			
Weight (plf)	11.7	15.1	17.7	20.3			

#### 51/4" Beams—Service Level 2

Docian Branarty	Depth						
Design Property	91/4"	117/8"	14"	16"			
Moment (ft-lbs)	12,105	19,405	26,485	34,080			
Shear (lbs)	5,830	7,480	8,820	10,080			
Moment of Inertia (in.4)	346	733	1,201	1,792			
Weight (plf)	17.6	22.6	26.6	30.4			

# HARDWARE RECOMMENDATIONS AND BEARING REQUIREMENTS

#### **Hardware Recommendations**

Due to the high moisture content typically present where Parallam® Plus PSL is used, it is very important to use corrosion-resistant fasteners and connectors for all applications. Fasteners include nails, screws, and bolts. Connectors include joist hangers, post bases, and hurricane or mudsill anchors.

Fasteners and connectors must have a coating that will provide the required level of corrosion resistance for the treatment types, retention levels, and end use conditions for Parallam® Plus PSL. To ensure that you select the appropriate hardware, follow the hardware manufacturer's recommendation for AWPA Use Category UC4A for columns and beams in exposed above ground applications. For columns exposed to salt water splash follow recommendations for UC4B. Fasteners and hardware must comply with building codes.

# Beam Bearing Length Requirements—Service Level 2

Reaction	Treated Be	am Width
Reaction	3½"	51/4"
2,000	2½''	1¾''
4,000	5''	3 1/4"
6,000	71/4''	5''
8,000	9¾''	6½''
10,000	12''	8''
12,000	14½''	9¾''
14,000		11¼''
16,000		12¾''
18,000		141/2''
20,000		16''

- **Minimum bearing length:** 1½" at ends, 3½" at intermediate supports.
- Bearing across full beam width required.
- Interpolation between reaction loads is permitted for determining bearing lengths.

# **BEAM LOAD TABLES**



## How to Use Beam Load Tables on pages 7 and 8

- 1. Calculate total load and live load (neglect beam weight) on the beam or header in pounds per linear foot (plf).
- 2. Select appropriate **Span** (center-to-center of bearing).
- 3. Scan horizontally to find the proper width, and a depth with a capacity that exceeds actual total and live loads.
- 4. Review bearing length requirements to ensure adequacy.

#### Floor Load (PLF)—Service Level 2

Load	Cnon	Condition		3½" \	Width			51/4" !	Width	
Duration	Span	Condition	91/4"	117/8"	14"	16"	91/4"	117/8"	14"	16"
		Total Load	906	924	924	924	1360	1387	1387	1387
	8'	Live Load L/360	871	*	*	*	1306	*	*	*
		Min. End/Int. Bearing (in.)	4.4/10.9	4.5/11.3	4.5/11.3	4.5/11.3	4.4/10.9	4.5/11.3	4.5/11.3	4.5/11.3
		Total Load	557	735	735	735	836	1103	1103	1103
	10'	Live Load L/360	466	*	*	*	700	*	*	*
		Min. End/Int. Bearing (in.)	3.4/8.5	4.5/11.3	4.5/11.3	4.5/11.3	3.4/8.5	4.5/11.3	4.5/11.3	4.5/11.3
		Total Load	326	609	609	609	489	914	914	914
	12'	Live Load L/360	277	564	*	*	415	847	*	*
		Min. End/Int. Bearing (in.)	2.4/6	4.5/11.3	4.5/11.3	4.5/11.3	2.4/6	4.5/11.3	4.5/11.3	4.5/11.3
		Total Load	204	429	519	519	306	644	779	779
	14'	Live Load L/360	177	364	*	*	266	547	*	*
		Min. End/Int. Bearing (in.)	1.8/4.5	3.7/9.3	4.5/11.3	4.5/11.3	1.8/4.5	3.7/9.3	4.5/11.3	4.5/11.3
		Total Load	134	288	452	452	202	432	678	678
	16'	Live Load L/360	120	248	398	*	180	372	598	*
100%		Min. End/Int. Bearing (in.)	1.5/3.5	2.9/7.2	4.5/11.3	4.5/11.3	1.5/3.5	2.9/7.2	4.5/11.3	4.5/11.3
Floor		Total Load	91	200	329	399	137	300	493	599
	18'	Live Load L/360	84	176	284	*	127	264	426	*
		Min. End/Int. Bearing (in.)	1.5/3.5	2.3/5.8	3.7/9.3	4.5/11.3	1.5/3.5	2.3/5.8	3.7/9.3	4.5/11.3
		Total Load	64	143	238	355	96	214	357	533
	20'	Live Load L/360	62	129	209	308	93	194	314	462
		Min. End/Int. Bearing (in.)	1.5/3.5	1.9/4.7	3/7.6	4.5/11.2	1.5/3.5	1.9/4.7	3/7.6	4.5/11.2
		Total Load		77	132	201		116	198	302
	24'	Live Load L/360		76	123	182		114	184	273
		Min. End/Int. Bearing (in.)		1.5/3.5	2.1/5.4	3.2/7.9		1.5/3.5	2.1/5.4	3.2/7.9
		Total Load			77	121		65	116	181
	28'	Live Load L/360			*	116		*	*	174
		Min. End/Int. Bearing (in.)			1.6/4	2.4/5.9		1.5/3.5	1.6/4	2.4/5.9
		Total Load				75			70	113
	32'	Live Load L/360				*			*	*
		Min. End/Int. Bearing (in.)				1.8/4.6			1.5/3.5	1.8/4.6

<sup>\*</sup> Indicates Total Load value controls.

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
- Total load values meet the IBC deflection limit of L/240 for floor beams for dead load to live load ratios up to 60%. Live load values are based on deflection of L/360. Check local code for other deflection criteria.
- For deflection limits of L/240 and L/480, multiply Live Load L/360 values by 1.5 and 0.75 respectively. The resulting live load must not exceed the total load shown.
- Lateral support is required at bearing and along the span at 24" on-center, maximum.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.
- For conditions beyond the scope of this table, including applications other than Service Level 2, use Weyerhaeuser software or contact your Weyerhaeuser representative.

# **BEAM LOAD TABLES**

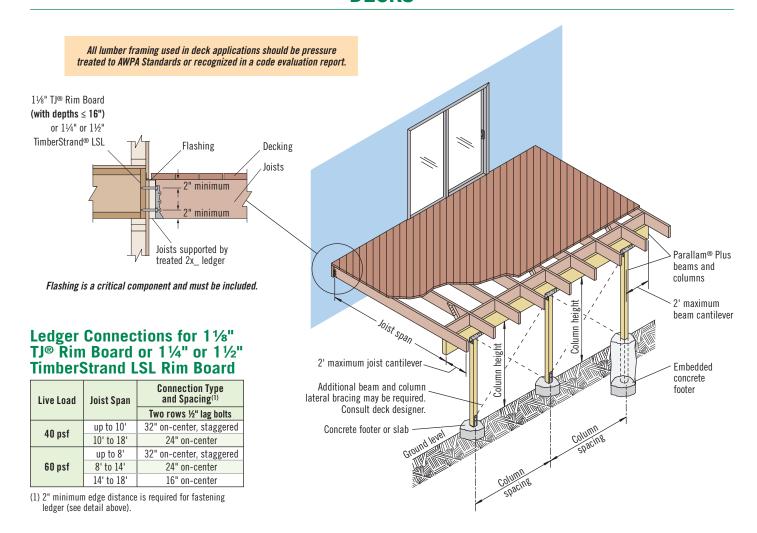
# Roof Load (PLF)—Service Level 2

Total Load   794   974   974   974   974   974   1187   978   11787   1187	Load	Cnon	Condition		3½"\	Width		5¼" Width				
B	Duration	Span	Condition	91/4"	117/8"	14"	16"	91/4	117/8"	14"	16"	
Min. End/Int. Bearing (in.)   4-5/11.3   4			Total Load	924	924	924	924	1,387	1,387	1,387	1,387	
Total Load		8'	Live Load L/240	*	*	*	*	*	*	*	*	
10			Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	
Min. End/Int. Bearing (in.)		10'	Total Load	719	735	735	735	1079	1103	1103	1103	
12			Live Load L/240	700	*	*	*	1050	*	*	*	
12'   Live Load I/Z40			Min. End/Int. Bearing (in.)	4.4/10.9	4.5/11.3	4.5/11.3	4.5/11.3	4.4/10.9	4.5/11.3	4.5/11.3	4.5/11.3	
Min. End/Int. Bearing (in.)   3.17/8   4.5711.3   4.5711.3   3.17/8   4.5711.3   4.571			Total Load		609	609	609		914	914	914	
14		12'	Live Load L/240	415	*	*	*	623	*	*	*	
14'   Live Load L/240			Min. End/Int. Bearing (in.)	3.1/7.8	4.5/11.3	4.5/11.3	4.5/11.3	3.1/7.8	4.5/11.3	4.5/11.3	4.5/11.3	
Non-Show   Non-Show			Total Load	266	519	519	519	399	779	779	779	
115%   Snow   16		14'	Live Load L/240	266	*	*	*	399	*	*	*	
16'   Live Load L/240			Min. End/Int. Bearing (in.)	2.3/5.8	4.5/11.3	4.5/11.3	4.5/11.3	2.3/5.8	4.5/11.3	4.5/11.3	4.5/11.3	
Show   No. End/Int. Bearing (in.)   18/4.5   3.7/9.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3	1150/		Total Load	176	374	452	452	264	561	678	678	
Min. End/Int. Bearing (in.)   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3		16'	Live Load L/240	*	372	*	*	*	559	*	*	
Total Load	Silow		Min. End/Int. Bearing (in.)	1.8/4.5	3.7/9.3	4.5/11.3	4.5/11.3	1.8/4.5	3.7/9.3	4.5/11.3	4.5/11.3	
Min. End/Int. Bearing (in.)   1.5/3.6   3/7.4   4.5/11.3   4.5/11.3   1.5/3.6   3/7.4   4.5/11.3   4.5/11.3   4.5/11.3   3.57   128   282   466   53   53   53   53   53   53   53						399	399	182	392	599	599	
Total Load   S5   188   311   357   128   282   466   530   1194   Live Load L/240   * * * * * * * * * * * * * * * * * *		18'	Live Load L/240	*	*	*	*	*	*	*	*	
Total Load   15/3   18/8   311   357   128   282   466   538   18/8   18/8   311   357   128   282   466   538   18/8   18/8   28/8   45/11   15/3			Min. End/Int. Bearing (in.)	1.5/3.6	3/7.4	4.5/11.3	4.5/11.3	1.5/3.6	3/7.4	4.5/11.3	4.5/11.3	
Min. End/Int. Bearing (in.)   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3			Total Load	85	188	311	357	128	282	466	536	
Total Load   104   175   265   67   156   263   39		20'	Live Load L/240	*	*	*	*	*	*	*	*	
Total Load   104   175   265   67   156   263   39   28   174   28   28   41/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   2.5/5.1   3/7.6   1.5/3.5   2.5/5.1   3/7.4   4.5/1.3   4.5/			Min. End/Int. Bearing (in.)	1.5/3.5	2.4/6.1	3.9/9.8	4.5/11.3	1.5/3.5	2.4/6.1	3.9/9.8	4.5/11.3	
Nin. End/Int. Bearing (in.)   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   28'   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/10.2   28'   1.5/3.5   1.5/3.5   1.5/3.5   1.5/3.5   2.4/6.1   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.1/10.2   1.5/3.5   2.1/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   4.5/11.3   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   1.5/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   2.8/6.9   4.1/10.2   1.5/3.5   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3					104	175	265	67	156	263	397	
Total Load   Live Load L/240		24'	Live Load L/240		*	*	*	*	*	*	*	
Total Load			Min. End/Int. Bearing (in.)		1.7/4.3	2.8/6.9	4.1/10.2	1.5/3.5	1.7/4.3	2.8/6.9	4.1/10.2	
Non-Snow   Non-Snow					60	105	161		90	157	242	
Stand		28'	Live Load L/240		*	*	*		*	*	*	
Non-Snow   Non-Snow			Min. End/Int. Bearing (in.)		1.5/3.5	2/5.1	3/7.6		1.5/3.5	2/5.1	3/7.6	
Non-Snow   Non-Snow				924	924	924	924	1387	1387	1387	1387	
10'		8'	Live Load L/240	*	*	*	*	*	*	*	*	
10'			Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3	
Min. End/Int. Bearing (in.)   4.4/10.9   4.5/11.3   4.5/11.3   4.5/11.3   4.4/10.9   4.5/11.3   4			Total Load		735	735	735		1103	1103	1103	
12'		10'	Live Load L/240	700	*	*	*	1050	*	*	*	
12'			Min. End/Int. Bearing (in.)	4.4/10.9	4.5/11.3	4.5/11.3	4.5/11.3	4.4/10.9	4.5/11.3	4.5/11.3	4.5/11.3	
125			Total Load	422		609	609			914	914	
Total Load   Live Load L/240   Min. End/Int. Bearing (in.)   Live Load L/240   Min. End/Int. Min. End/Int. Bearing (in.)   Live Load L/240   Min. End/Int. Min. Min. End/Int. Min. End/Int. Min.		12'	Live Load L/240	415	*	*	*	623	*	*	*	
14'   Live Load L/240   266   *   *   *   399   *   *   *   *   *   *   *   *   *			Min. End/Int. Bearing (in.)	3.1/7.8	4.5/11.3	4.5/11.3	4.5/11.3	3.1/7.8	4.5/11.3	4.5/11.3	4.5/11.3	
125%   Non-Snow   No			Total Load	266	519	519	519	399	779	779	779	
Total Load   176   374   452   452   264   561   678		14'	Live Load L/240	266	*	*	*	399	*	*	*	
16'   Live Load L/240			Min. End/Int. Bearing (in.)			4.5/11.3	4.5/11.3			4.5/11.3	4.5/11.3	
Non-Snow   Non-Snow   Min. End/Int. Bearing (in.)   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.	1250/			176			452	264			678	
Min. End/Int. Bearing (in.)   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3   4.5/11.3   4.5/11.3   1.8/4.5   3.7/9.3   4.5/11.3		16'	Live Load L/240			*		*		*		
18'   Live Load L/240	311011		Min. End/Int. Bearing (in.)								4.5/11.3	
Min. End/Int. Bearing (in.)   1.5/3.6   3/7.4   4.5/11.3   4.5/11.3   1.5/3.6   3/7.4   4.5/11.3   4.5/11.3   4.5/11.3   4.5/11.3   4.5/11.3   4.5/11.3   4.5/11.3   4.5/11.3   4.5/11.3   2.5/1   20'   Live Load L/240   * * * * * * * * * * * * * * * * * *				121	261			182	392		599	
20'         Total Load Live Load L/240         85         188         311         357         128         282         466         531           Min. End/Int. Bearing (in.)         1.5/3.5         2.4/6.1         3.9/9.8         4.5/11.3         1.5/3.5         2.4/6.1         3.9/9.8         4.5/11.3           Total Load Live Load L/240         104         175         265         67         156         263         393           4.5/1         4.5/1         4.5/1         4.5/1         4.5/1         4.5/1         4.5/1		18'	Live Load L/240	*	*	*	*	*	*	*	*	
20'   Live Load L/240											4.5/11.3	
Min. End/Int. Bearing (in.)   1.5/3.5   2.4/6.1   3.9/9.8   4.5/11.3   1.5/3.5   2.4/6.1   3.9/9.8   4.5/1   Total Load   104   175   265   67   156   263   393   24'   Live Load L/240   * * * * * * * * * * * * * * * * * *				85	188	311	357	128	282	466	536	
Total Load Live Load L/240		20'							*		*	
24' Live Load L/240			Min. End/Int. Bearing (in.)	1.5/3.5	2.4/6.1	3.9/9.8	4.5/11.3	1.5/3.5	2.4/6.1	3.9/9.8	4.5/11.3	
			Total Load		104	175	265	67	156	263	397	
		24'	Live Load L/240		*	*	*	*	*	*	*	
Min. End/Int. Bearing (in.)   1.7/4.3   2.8/6.9   4.1/10.2   1.5/3.5   1.7/4.3   2.8/6.9   4.1/1			Min. End/Int. Bearing (in.)		1.7/4.3	2.8/6.9	4.1/10.2	1.5/3.5	1.7/4.3	2.8/6.9	4.1/10.2	
					60				90		242	
		28'			*		*		*	*	*	
					1.5/3.5	2/5.1	3/7.6		1.5/3.5	2/5.1	3/7.6	

<sup>\*</sup> Indicates Total Load value controls.

See page 7 for how to use this table.

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
- Total load values meet the IBC deflection limit of L/180 for roof beams for dead load to live load ratios up to 65%. For stiffer deflection criteria, Live Load L/240 values are provided. Check local code for other deflection criteria.
- Lateral support is required at bearing and along the span at 24" on-center, maximum.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.
- For conditions beyond the scope of this table, including applications other than Service Level 2, use Weyerhaeuser software or contact your Weyerhaeuser representative.



# Deck Beam and Column Selection (100% Load Duration)—Service Level 2

		3½" x 9¼" Beam 3½" x 5¼" Column		3½" x 11	3½" x 11½" Beam		⁄8" Beam	5¼" x 14" Beam	
Deck Load	Joist Span			3½" x 5¼" Column		5¼" x 5¼	5¼" x 5¼" Column		5¼" x 5¼" Column
(psf)		Maximum Column Spacing	Maximum Column Height	Maximum Column Spacing	Maximum Column Height	Maximum Column Spacing	Maximum Column Height	Maximum Column Spacing	Maximum Column Height
	8'	11'-6''	11'-6''	11'-6''	11'-6''	16'-6''	17'-0''	16'-6''	16'-6''
	10'	10'-0''	11'-6''	10'-0''	11'-6''	14'-6''	16'-6''	14'-6''	16'-6''
40LL +10DL	12'	8'-6''	12'-0''	8'-6''	11'-6''	13'-0''	16'-6''	13'-0''	16'-6''
	14'	8'-0''	11'-6''	8'-0''	11'-6''	11'-6''	17'-0''	11'-6''	16'-6''
	16'	7'-0''	11'-6''	7'-0''	11'-6''	10'-6''	16'-6''	10'-6''	16'-6''
	8'	8'-0''	12'-0''	8'-0''	11'-6''	12'-0''	17'-0''	12'-0''	16'-6''
	10'	7'-0''	11'-6''	7'-0''	11'-6''	10'-6''	17'-0''	10'-6''	16'-6''
60LL + 10DL	12'	6'-0''	12'-0''	6'-0''	12'-0''	9'-6''	16'-6''	9'-0''	17'-0''
	14'	5'-6''	12'-0''	5'-6''	11'-6''	8'-6''	16'-6''	8'-6''	16'-6''
	16'	5'-0''	11'-6''	5'-0''	11'-6''	7'-6''	17'-0''	7'-6''	17'-0''

#### How to Use this Table

- 1. Determine the appropriate Deck Load.
- 2. Locate the Joist Span that meets or exceeds your condition.
- Scan across the row to find both the Maximum Column Spacing and Maximum Column Height that meet or exceed your condition.
- 4. Scan up to determine the required Beam and Column sizes.

- Table also applies to columns used in a Service Level 3 condition.
- Total load deflection for the beam is limited to L/240. Live load deflection is limited to L/360.
- Beams can be used in either continuous-span (up to 48') or simple-span applications.
- For conditions beyond the scope of this table, including beam applications other than Service Level 2, use Weyerhaeuser software or contact your Weyerhaeuser representative.

#### Allowable Axial Loads (lbs)—Service Level 2

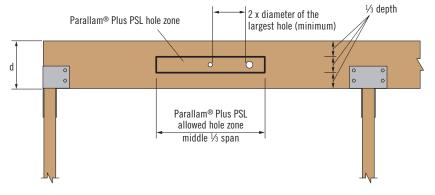
Effective					Column Size					
Column	3½" x 5¼" 100% 115% 125%				5¼" x 5¼"		7" x 7"			
Length				100%	115%	125%	100%	115%	125%	
6'	10,885 11,795 12,325			19,660	22,050	23,565	36,965	40,000	40,000	
8'	8,080 8,485 8,710			17,155	18,775	19,735	34,575	38,775	40,000	
10'	5,940 6,155 6,275			14,220	15,145	15,670	31,375	34,575	36,510	
12'	4,495	4,495 4,620 4,695		11,470	12,015	12,320	27,630	29,820	31,085	
14'	3,500	3,585	3,630	9,275	9,625	9,825	23,750	25,180	25,990	
16'	Slenderness ratio exceeds 50			7,600	7,840	7,975	20,215	21,185	21,735	
18'				6,320	6,490	6,590	17,235	17,925	18,320	
20'		exceeds 50		5,325	5,455	5,525	14,795	15,310	15,600	

#### **General Notes**

- Table is based on:
  - Solid, one-piece column members.
  - Bracing in both directions at column ends.
  - NDS®.
  - Simple columns with axial loads only. For side loads or other combined bending and axial loads, see the NDS®.
- Allowable loads have been adjusted to accommodate the worst case of the following eccentric conditions: ¼ of the column thickness (first dimension) or ⅓ of the column width.
- For conditions beyond the scope of this table, including applications other than Service Level 2, use Weyerhaeuser software or contact your Weyerhaeuser representative.

# **ALLOWABLE HOLES**

#### Parallam® Plus PSL Beam



DO NOT cut, notch, or drill holes in Parallam® Plus PSL except as indicated in the illustrations and table above.

# **General Notes**

- Allowed hole zone suitable for headers and beams with uniform loads only.
- Round holes only.
- No holes in cantilevers.
- No holes in headers or beams in plank orientation.

#### **Parallam Plus PSL Beams**

Header or Beam Depth	Maximum Round Hole Size
5 ¼" - 7"	1¾"
9 ¼" - 16"	2"

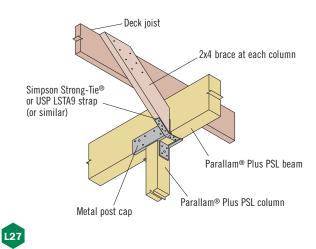
See illustration for allowed hole zone.

Larger holes in Trus Joist® structural composite lumber may be possible; refer to ForteWEB® or Javelin® software.

 $\wedge$ 

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 and www.P65Warnings.ca.gov/wood.

#### **Beam to Column Connection**

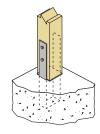


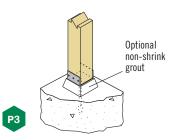
All lumber framing used in deck applications should be pressure treated to AWPA Standards or recognized in a code evaluation report.

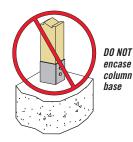
#### **Column Base Connections**

#### **Column Base**

#### **Elevated Column Base**

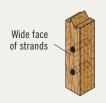








DO NOT size base plate larger than column



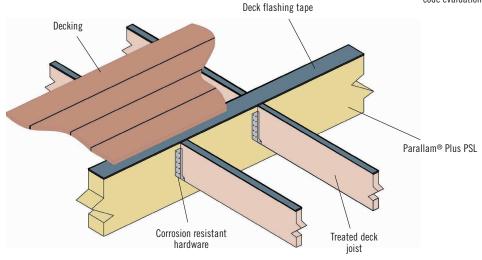
In order to use the manufacturer's published capacities when designing column caps, bases, or holdowns for uplift, the bolts or screws must be installed perpendicular to the wide face of strands as shown at left.



DO NOT install bolts or screws into the narrow face of strands

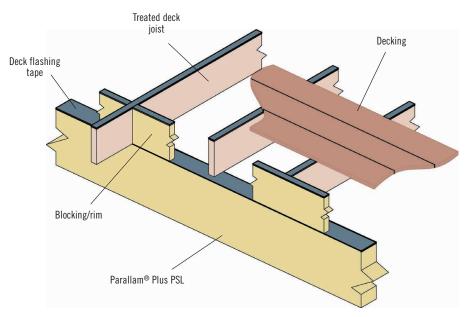
# Flashing Tape on Flush Beam

All lumber framing used in deck applications should be pressure treated to AWPA Standards or recognized in a code evaluation report.





# **Flashing Tape on Dropped Beam**



All lumber framing used in deck applications should be pressure treated to AWPA Standards or recognized in a code evaluation report.

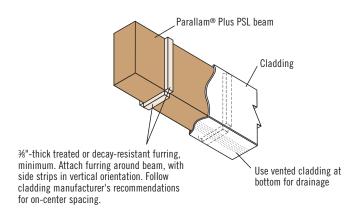


#### **CLADDING INFORMATION**

Parallam® Plus PSL is suitable for exposed conditions with wet-dry moisture cycles. However it may be desirable for aesthetic reasons to wrap the product in a decorative cladding. As with all treated wood products, avoid applications that can trap moisture. If decorative cladding is used, the following considerations are critical for Parallam® Plus PSL to perform satisfactorily:

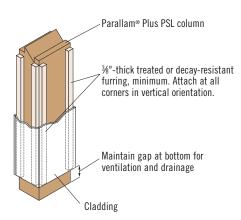
- The designer, builder, and owner must share responsibility for ensuring that the assembly is designed, installed, and maintained in a way that will prevent water from entering and being trapped.
- If the prevention of water intrusion over the life of the structure cannot be assured, then cladding must be designed and installed in a manner that allows adequate drainage and sufficient air-flow to facilitate drying. Suggested beam and column details are shown below.
- Water runoff from repeated wetting may transfer residue, such as excess preservative, natural wood extractives, and dirt, which can result in discoloration of architecturally sensitive surrounding construction. Where this is a concern, detailing that limits the potential for repeated water exposure should be used.
- Metal cladding materials should not be used, as the preservative treatment can react with the metal and lead to corrosion of the cladding and fasteners.
- All fasteners, furring strips, and other materials used in the cladding assembly must be corrosion-resistant, treated, or otherwise resistant to decay.
- Vented cladding, such as a soffit or drilled cladding material, should be used to allow proper drainage. Routine maintenance is also required to ensure that vent holes remain
  open and free of debris.
- For column bases with ground contact, maintain a 3" (minimum) gap between cladding and finish grade for drainage. For bases with patio or deck surface contact, maintain a 1" (minimum) gap between cladding and surface.

## **Cladding on Beams**



IMPORTANT: Moisture trapped inside the cladding may cause mold. The treatment used in Parallam® Plus does not prevent mold.

## **Cladding on Columns**





DO NOT wrap exterior Parallam® Plus PSL products with materials that may trap moisture, such as wood, metal, or plastic trim that does not allow for proper ventilation and drainage.

Cladding details shown are intended for use with Parallam® Plus PSL only and should not be used with untreated Weyerhaeuser products.

#### Q1: What is Parallam® Plus PSL?

**A1:** Parallam® Plus PSL is Parallam® PSL that has been treated with Koppers Performance Chemicals Inc.'s preservative solution at a Weyerhaeuser-authorized treating facility. The treating facility is licensed by Koppers to produce treated product and is required to follow a strict quality assurance program.

Parallam® Plus PSL is produced from southern pine and is undersized to accommodate dimensional change during treatment. It is treated then kiln dried after treatment to a uniform moisture content.

Only Parallam® Plus PSL is manufactured using these methods, and it's the only product covered by both Weyerhaeuser (structural) and Koppers (treatment) limited 30-year warranties.

#### Q2: Does Parallam® Plus PSL prevent mold growth on the product surface?

**A2:** No. Parallam® Plus PSL has been treated to effectively resist fungal decay. The preservative treatment solutions used to treat Parallam® Plus PSL also contain moldicides that inhibit surface mold growth on freshly treated product; however, they are not intended to provide continual protection from surface mold growth once the product is in service.

Mold fungi cause discoloration of the wood surface, commonly appearing as a colored, fuzzy or powdery surface growth that can quickly spread over surfaces with high moisture levels. Mold will not impact the strength or stiffness of a wood member, but the presence of mold indicates a high moisture condition where, without preservative treatment and proper maintenance, decay or deterioration would likely develop.

#### Q3: How can I be sure that I have genuine Parallam® Plus PSL?

**A3:** Parallam<sup>®</sup> Plus PSL is stamped with the product description, type of treatment, and treating facility. The stamp also references the treating standards and third-party quality program monitor. The following stamps are examples of those found on Parallam® Plus PSL.

Trus Joist Parallam® Plus PSL (TREATED) STRUCTUR

BEAM / HEADER USE AL COMPOSITE LUMBER **✓** SPIB

AWPA U1/ UC4A 0.15 pcf CA-C KDAT 19% SYP CULPEPER WOOD

Trus Toist Parallam® Plus PSL (TREATED) STRUCTURAL COMPOSITE LUMBER

GROUND CONTACT COLUMN USE **√** SPIB

AWPA U1/ UC4B 0.60 pcf CCA-C KDAT 19% SYP CULPEPER WOOD

#### Q4: Was CCA phased out for residential use?

A4: In 2004, CCA was phased out for certain dimension-lumber, residential applications such as deck railings and play sets. However, CCA is an excellent preservative and remains an approved form of treatment for Parallam® PSL columns used in structural ground-contact applications (AWPA UC4B). Parallam® Plus PSL columns are well suited for residential applications such as structural support columns, deck posts, and retaining walls. It is ideal for applications that result in occasional, intermittent saltwater splash exposure that will not support degradation by marine organisms.

The U.S. EPA concluded that CCA-treated wood does not pose unreasonable risks to the public, and they do not require CCA-treated products to be removed from service, coated/sealed, or encapsulated. However, they do note that the use of a suitable coating could reduce potential exposure.

Additional information is available on the U.S. EPA website at: epa.gov/ingredients-used-pesticide-products/chromated-arsenicals-cca.

#### Q5: What are wet-service and dry-service conditions?

**A5:** The definitions of wet and dry service vary slightly from one publication to the next. The NDS® defines dry service for structural composite lumber products as an in-service moisture content of less than 16%. CSA 086 defines dry service as a climatic condition in which the average equilibrium

moisture content (EMC) of sawn lumber over a year's time is 15% or less and does not exceed 19%.

Not all exterior applications are necessarily a wet-service condition and, conversely, not all interior applications are a dry-service condition. The EMC of wood is a function of the relative humidity and temperature of the surrounding environment. However, high moisture content and the ensuing degradation can be observed in local areas where water collects and doesn't readily evaporate, such as improperly detailed column bases and connections in saddles where water accumulates.

#### Q6: How does Weyerhaeuser define "saltwater splash" with respect to applications for Parallam® Plus PSL?

**A6:** Saltwater splash applications are those in which incidental saltwater contact may occur, but at a level or time period insufficient to support the growth of marine organisms. Examples of incidental saltwater exposure include members used in proximity to saltwater and exposed to occasional or intermittent splash from storms or waves, or to saltwater spray or mist. Examples of conditions that would not be appropriate for Parallam® Plus PSL include members that are in or adjacent to the tidal zone where they would remain wetted with saltwater for extended periods of time.

#### Q7: What applications are not suitable for Parallam® Plus PSL?

A7: Parallam® Plus PSL is not suited for applications where conditions support degradation by marine organisms, or for direct contact with animal wastes, caustic fertilizers, or other chemicals. These types of applications are not covered by the Weyerhaeuser and Koppers limited 30-year warranties.

#### **Q8:** Why does Weverhaeuser use a different treatment for columns than for beams?

**A8:** Column applications where Parallam® Plus PSL is exposed to direct ground contact or occasional, intermittent saltwater splash require a higher level of protection, which is best achieved using the traditional CCA

Parallam® Plus PSL that is intended for beam and header applications is treated with copper azole at a retention level that eliminates the need to use stainless steel connectors and fasteners in most applications. Refer to hardware manufacturer's recommendations for your specific application.

#### Q9: Can I use Parallam® Plus PSL beams in column applications?

**A9:** Yes, provided it is an above ground application (i.e., not in contact with the ground).

#### Q10: Do I need to field-treat holes or end cuts?

**A10:** It is not required; however, it is recommended for good construction practice. Recommended endcoat wood preservatives include copper napthenate, oxine copper, or zinc napthenate products.

For the standard sizes shown in this guide, the unique structure of Parallam® PSL allows for penetration of preservative treatment throughout the cross section, eliminating the need to field treat holes or end cuts.

#### Q11: Are sealers, coatings, or remedial treatments effective alternatives to Parallam® Plus PSL?

**A11:** No. Current commercially available coatings that contain a preservative do not provide adequate protection from fungal decay or termites throughout the cross section of Parallam® PSL. Field-applied treatments (other than those recommended for beams with drilled holes and end cuts as described in Q10) are not covered by the Weyerhaeuser and Koppers limited 30-year warranties.

# **Q&A (CONTINUED)**

# Q12: Do I need to apply deck flashing tape, clad or finish my Parallam® Plus PSL products?

**A12:** In the case of exposed deck beams, deck flashing tape is recommended on the top edge to enhance moisture protection. Finishing or cladding your Parallam® Plus PSL may be desirable for aesthetic reasons, however, it is not required. In architecturally sensitive applications where Parallam Plus PSL is subjected to repeated wetting, properly designed flashing and/or cladding is recommended to minimize the potential for water runoff which may discolor surrounding building components. Finishes that trap or seal in moisture should not be used. Cladding must be designed and installed in a way that provides adequate drainage and ventilation to prevent moisture build-up. See details L28 and L29 on page 12.

# Q13: Can Parallam® Plus PSL products be painted or stained?

**A13:** Yes. Parallam® Plus PSL can be painted or stained with either oil- or water-based finishes; we recommend following the manufacturer's instructions and the label on the finish product. However, before you start, we recommend applying the finish product to a small exposed test area to insure it provides the intended results before proceeding.

Untreated and treated wood products may exhibit discoloration, checking, warping, or splitting when exposed to the weather. Appropriate maintenance, such as the application of quality exterior stains and paints, will help reduce the extent of these weathering effects. However, these finishes may not hide inherent surface irregularities, and the final color may be affected by the tint of the treatment. Commercial paints and finishes that are compatible with preservative-treated products do exist; however, finishes that seal in or trap moisture should not be used.

# Q14: Where can I find more information about Parallam® Plus PSL?

**A14:** For more information on Parallam® Plus PSL, see the Weyerhaeuser Consumer Safety Information Sheet for Trus Joist® Parallam® Plus PSL at weyerhaeuser.com/woodproducts/document-library/TJ-1021

Also see the following Safety Data Sheets (SDSs), available on our website:

- WC S311-13 Parallam® Plus PSL (CCA)
   weyerhaeuser.com/woodproducts/document-library/document\_library\_ detail/parallam-plus-psl-cca-sds/
- WC S457-04 Parallam® Plus PSL (CA-C) weyerhaeuser.com/woodproducts/document-library/document\_library\_ detail/parallampluspsl-ca-c-sds/

# Q15: Where can I purchase Parallam® Plus PSL beams and columns?

**A15:** Parallam® Plus PSL is intended for use by professional building contractors; therefore, it can be purchased only through professional contractor yards. It is not available for sale through retail channels.





You want to build solid and durable structures—we want to help. Weyerhaeuser provides high-quality building products and unparalleled technical and field assistance to support you and your project from start to finish.

Floors and Roofs: Start with the best framing components in the industry: our Trus Joist® TJI® joists; TimberStrand® LSL rim board; and TimberStrand® LSL, Microllam® LVL, and Parallam® PSL headers and beams. Pull them all together with our self-gapping and self-draining Weyerhaeuser Edge Gold™ floor panels and durable Weyerhaeuser roof sheathing.

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