

2.0E PWLVL PRODUCT LINE



You've probably been building with traditional sawn lumber beams and headers for as long as you've been building. Now through advances in technology and design, there is a better choice – Pacific Woodtech LVL headers and beams. They are simply a better alternative than traditional sawn lumber pieces.

Work with a stronger, stiffer, more consistent and more predictable building material. Compared with similar sized sections, our PWLVL headers and beams can support heavier loads and allows greater spans than conventional lumber.

Each piece of PWLVL is pressure sprayed with a UV inhibitor and sealed with emulsified wax.

HANDLING & INSTALLATION

- PWLVL should be stored lying flat and protected from the weather.
- Keep the material above ground to minimize the absorption of ground moisture and allow circulation of air.
- PWLVL is for use in covered, dry conditions only. Protect from the weather on the job site both before and after installation.
- Except for cutting to length, PWLVL shall not be cut, drilled or notched. Heel cuts may be possible. Contact your Pacific Woodtech representative.
- **Do not install any damaged LVL.**

2.0E PWLVL DESIGN PROPERTIES

ALLOWABLE DESIGN PROPERTIES – 1 3/4" 2.0E PWLVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	1829	2103	2286	2664	3064	3330	49	2.50
7 1/4"	2411	2772	3013	4380	5037	5475	111	3.30
9 1/2"	3159	3633	3948	7125	8194	8907	250	4.32
11 7/8"	3948	4541	4936	10647	12245	13309	488	5.40
14"	4655	5353	5819	14320	16468	17900	800	6.36
16"	5320	6118	6650	18210	20942	22763	1195	7.27
18"	5985	6883	7481	22511	25888	28139	1701	8.18

ALLOWABLE DESIGN PROPERTIES – 3 1/2" 2.0E PWLVL

Depth	Maximum Vertical Shear (lbs)			Maximum Bending Moment (ft-lbs)			EI (x 10 ⁶ lbs-in ²)	Weight (plf)
	100%	115%	125%	100%	115%	125%		
5 1/2"	3658	4206	4572	5328	6128	6660	97	5.00
7 1/4"	4821	5544	6027	8761	10075	10951	222	6.59
9 1/2"	6318	7265	7897	14251	16388	17813	500	8.64
11 7/8"	7897	9081	9871	21295	24489	26619	977	10.79
14"	9310	10707	11638	28639	32935	35799	1601	12.73
16"	10640	12236	13300	36421	41884	45526	2389	14.54
18"	11970	13766	14963	45022	51775	56277	3402	16.36

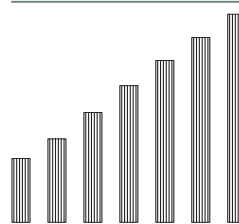
2.0E PWLVL Allowable Design Stresses⁽¹⁾

- Modulus of Elasticity E = 2,000,000 psi⁽²⁾
- Bending F_b = 3,100 psi⁽³⁾⁽⁴⁾
- Horizontal Shear (joist) F_v = 285 psi
- Compression Perpendicular to Grain (joist) F_{c⊥} = 850 psi⁽²⁾
- Compression Parallel to Grain F_c = 2,750 psi

- (1) These allowable design stresses apply to dry service conditions.
- (2) No increase is allowed for load duration.
- (3) Multiply by (12/d)^{1/5} where d = depth of member (in).
- (4) A factor of 1.04 may be applied for repetitive members as defined in the National Design Specification® for Wood Construction.

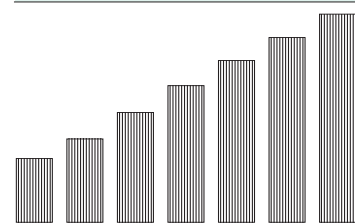
1 3/4" 2.0E PWLVL

AVAILABLE SIZES (INCHES):



3 1/2" 2.0E PWLVL

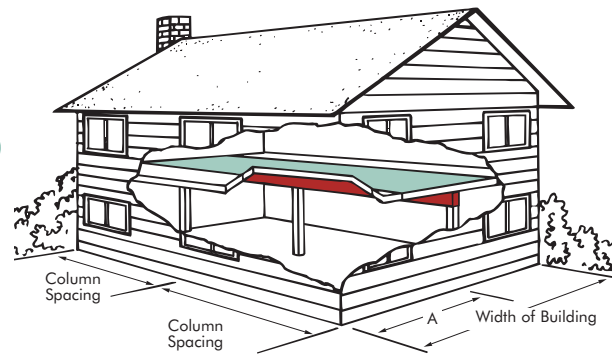
AVAILABLE SIZES:



For additional grades and sizes, please visit our Web site at www.pacificwoodtech.com

2.0E PWLVL FLOOR BEAMS

This table provides PWLVL beam sizes for center support of one level of floor framing over various column spacings. Where floor joists are continuous over the beam, this table applies only when the 'A' span is between 45% and 55% of the building width.



1 3/4" x 2.0E PWLVL

Width of Building (ft)	Column Spacing									
	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'
24'	2 - 1 1/8"	2 - 1 1/8"	2 - 1 1/8"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"
	3 - 9/2"	3 - 9/2"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"
28'	2 - 1 1/8"	2 - 1 1/8"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	-
	3 - 9/2"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/8"
32'	2 - 1 1/8"	2 - 1 1/8"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	-
	3 - 9/2"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/8"
36'	2 - 1 1/8"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	-	-
	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/8"
40'	2 - 1 1/8"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	2 - 1 1/4"	-	-
	3 - 1 1/8"	3 - 1 1/8"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	3 - 1 1/4"	-

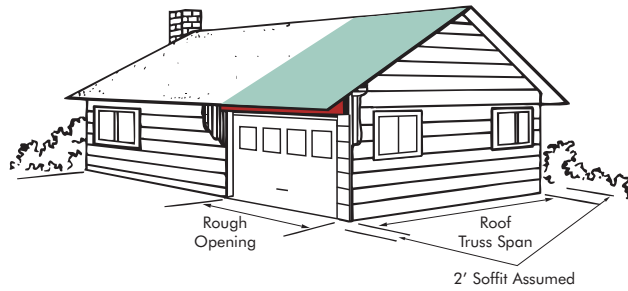
+ see note 3

Notes:

1. PWLVL beam sizes are listed as the number of 1 3/4" thick pieces by the beam depth, e.g. 2 - 9 1/2" indicates two 1 3/4" pieces by 9 1/2" deep.
2. All PWLVL beams require support across their full width.
3. The minimum required end and intermediate bearing lengths (based on 850 psi) are 3" and 7 1/2" respectively unless the + symbol is shown. In that case, 4 1/2" and 10 1/2" end and intermediate bearing lengths are required.
4. PWLVL beam sizes are based on residential floor loading of 40 psf live load and 10 psf dead load. The roof framing must be trusses supported at the exterior walls only.
5. Deflection is limited to L/360 at live load and L/240 at total load.
6. PWLVL beam sizes are based on continuous floor joist spans and simple or continuous beam spans. If the floor joists are not continuous, it is permissible to consider a "Width of Building" dimension that is equal to 0.8 times the actual width of the building.

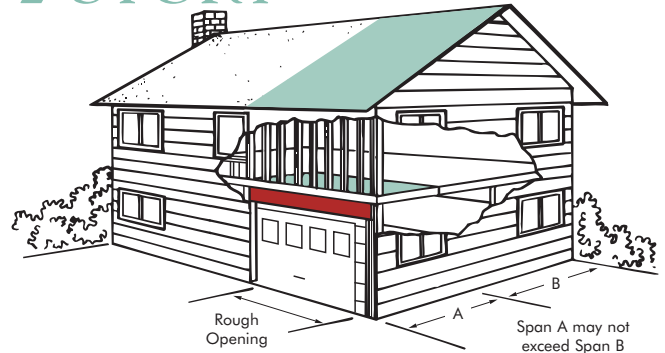
2.0E PWLVL GARAGE DOOR HEADERS

1-STORY



This table provides PWLVL header sizes for the support of roof trusses over various rough openings. A 2 foot maximum roof overhang is assumed.

2-STORY



This table provides PWLVL header sizes for the support of one level of floor framing, an exterior wall and roof trusses over various rough openings. A 2 foot maximum roof overhang and center support for the floor framing are assumed.

1-STORY – 1 3/4" x 2.0E PWLVL

Roof Loading		Snow (115%)									Non-Snow (125%)								
		25 psf LL + 20 psf DL			30 psf LL + 20 psf DL			40 psf LL + 20 psf DL			20 psf LL + 15 psf DL			20 psf LL + 20 psf DL			20 psf LL + 25 psf DL		
Width of Building		9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"
Roof Truss Span with 2' Soffit Assumed	20'	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-14"	2-14"	2-7 1/4"	2-11 7/8"	2-11 7/8"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-11 7/8"	2-14"
		3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-9 1/2"	3-11 7/8"	3-7 1/4"	3-9 1/2"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-11 7/8"
	24'	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-14"	2-14"	2-9 1/2"	2-14"	2-16"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-11 7/8"	2-14"
		3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-11 7/8"
	28'	2-7 1/4"	2-14"	2-14"	2-9 1/2"	2-14"	2-16"	2-9 1/2"	2-14"	2-16"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-14"	2-14"
		3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-14"
	32'	2-9 1/2"	2-14"	2-16"	2-9 1/2"	2-14"	2-16"	2-9 1/2"	2-16"	2-18"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-14"	2-14"	2-9 1/2"	2-14"	2-16"
		3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-14"	3-14"	3-7 1/4"	3-11 7/8"	3-11 7/8"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"
	36'	2-9 1/2"	2-14"	2-16"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"	2-7 1/4"	2-11 7/8"	2-14"	2-7 1/4"	2-14"	2-14"	2-9 1/2"	2-14"	2-16"
		3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-14"	3-14"	3-9 1/2"	3-14"	3-16"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"	3-7 1/4"	3-11 7/8"	3-14"

+ see note 3

Notes:

- PWLVL header sizes are listed as the number of 1 3/4" thick pieces by the header depth, e.g. 2 - 9 1/2" indicates two 1 3/4" pieces by 9 1/2" deep.
- All PWLVL headers require support across their full width.
- The minimum required bearing length (based on 850 psi) is 3" unless the + symbol is shown. In that case, 4 1/2" is required.
- The roof framing is assumed to be trusses supported by the exterior walls only.
- Deflection is limited to L/240 at live load and L/180 at total load.

2-STORY – 1 3/4" x 2.0E PWLVL

Roof Loading		Snow (115%)									Non-Snow (125%)								
		25 psf LL + 20 psf DL			30 psf LL + 20 psf DL			40 psf LL + 20 psf DL			20 psf LL + 15 psf DL			20 psf LL + 20 psf DL			20 psf LL + 25 psf DL		
Width of Building		9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"	9' 3"	16' 3"	18' 3"
Roof Truss Span with 2' Soffit Assumed	20'	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-14"	2-16"	2-9 1/2"	2-16"	2-16"	2-9 1/2"	2-16"	2-18"
		3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"	3-7 1/4"	3-14"	3-14"	3-7 1/4"	3-14"	3-14"	3-9 1/2"	3-14"	3-16"
	24'	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-18"	2-18"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"
		3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-16"	3-16"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"
	28'	2-9 1/2"	2-18"	2-18"	2-9 1/2"	2-18"	-	2-11 7/8"	2-18"	-	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-18"	2-18"
		3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-14"	3-16"
	32'	2-11 7/8"	2-18"	-	2-11 7/8"	2-18"	-	2-11 7/8"	-	-	2-9 1/2"	2-16"	2-18"	2-9 1/2"	2-18"	-	2-11 7/8"	2-18"	-
		3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-14"	3-16"	3-9 1/2"	3-16"	3-16"	3-9 1/2"	3-16"	3-18"
	36'	2-11 7/8"	2-18"	-	2-11 7/8"	-	-	2-11 7/8"	-	-	2-9 1/2"	2-18"	-	2-11 7/8"	2-18"	-	2-11 7/8"	2-18"	-
		3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-16"	3-9 1/2"	3-16"	3-18"	3-9 1/2"	3-16"	3-18"

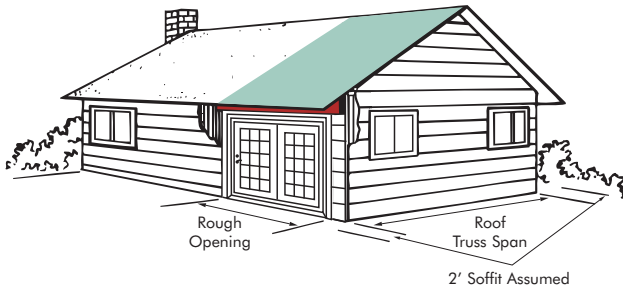
+ see note 3

Notes:

- PWLVL header sizes are listed as the number of 1 3/4" thick pieces by the header depth, e.g. 2 - 9 1/2" indicates two 1 3/4" pieces by 9 1/2" deep.
- All PWLVL headers require support across their full width.
- The minimum required bearing length (based on 850 psi) is 3" unless the + symbol is shown. In that case, 4 1/2" is required.
- PWLVL header sizes are based on residential floor loading of 40 psf live load and 10 psf dead load, and an exterior wall weight of 100 plf. The roof framing is assumed to be trusses supported by the exterior walls only.
- Deflection is limited to L/360 at live load and L/240 at total load.
- PWLVL header sizes are based on the assumption that the floor joists are supported in the middle of the building by a beam or wall.

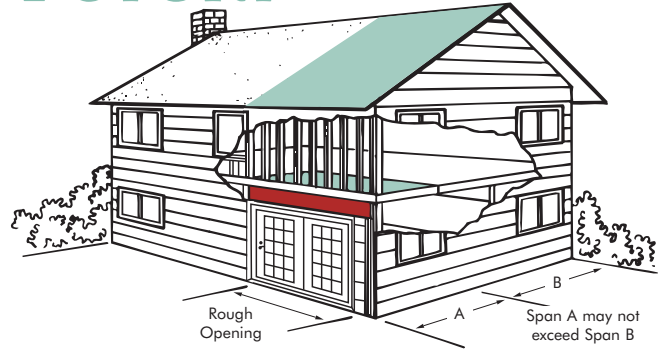
2.0E PWLVL WINDOW & PATIO DOOR HEADERS

1-STORY



This table provides PWLVL header sizes for the support of roof trusses over various rough openings. A 2 foot maximum roof overhang is assumed.

2-STORY



This table provides PWLVL header sizes for the support of one level of floor framing, an exterior wall and roof trusses over various rough openings. A 2 foot maximum roof overhang and center support for the floor framing are assumed.

1-STORY – 1 3/4" x 2.0E PWLVL

Roof Loading		Snow (115%)										Non-Snow (125%)									
		25 psf LL + 20 psf DL					40 psf LL + 20 psf DL					20 psf LL + 15 psf DL					20 psf LL + 25 psf DL				
Width of Building		6'	8'	9'	10'	12'	6'	8'	9'	10'	12'	6'	8'	9'	10'	12'	6'	8'	9'	10'	12'
Roof Truss Span with 2' Soffit Assumed	20'	2-7/4"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-7/4"	2-7/4"	2-9 1/2"	2-11 7/8"	2-7/4"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"
	24'	2-7/4"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-7/4"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"
	28'	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-14"	2-7/4"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"
	32'	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"
	36'	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"

Notes:

- PWLVL header sizes are listed as the number of 1 3/4" thick pieces by the header depth, e.g. 2 - 9 1/2" indicates two 1 3/4" pieces by 9 1/2" deep.
- All PWLVL headers require support across their full width.
- The minimum required bearing length (based on 850 psi) is 3".
- The roof framing is assumed to be trusses supported by the exterior walls only.
- Deflection is limited to L/240 at live load and the lesser of L/180 or 5/16" at total load.

2-STORY – 1 3/4" x 2.0E PWLVL

Roof Loading		Snow (115%)										Non-Snow (125%)									
		25 psf LL + 20 psf DL					40 psf LL + 20 psf DL					20 psf LL + 15 psf DL					20 psf LL + 25 psf DL				
Width of Building		6'	8'	9'	10'	12'	6'	8'	9'	10'	12'	6'	8'	9'	10'	12'	6'	8'	9'	10'	12'
Roof Truss Span with 2' Soffit Assumed	20'	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"
	24'	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"	2-7/4"	2-9 1/2"	2-9 1/2"	2-11 7/8"	2-14"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"
	28'	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"
	32'	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-18"	2-7/4"	2-9 1/2"	2-11 7/8"	2-11 7/8"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"
	36'	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-18"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"	2-7/4"	2-9 1/2"	2-11 7/8"	2-14"	2-16"

+ see note 3

Notes:

- PWLVL header sizes are listed as the number of 1 3/4" thick pieces by the header depth, e.g. 2 - 9 1/2" indicates two 1 3/4" pieces by 9 1/2" deep.
- All PWLVL headers require support across their full width.
- The minimum required bearing length (based on 850 psi) is 3" unless the + symbol is shown. In that case, 4 1/2" is required.
- PWLVL header sizes are based on residential floor loading of 40 psf live load and 10 psf dead load, and an exterior wall weight of 100 plf. The roof framing is assumed to be trusses supported by the exterior walls only.
- Deflection is limited to L/360 at live load and the lesser of L/240 or 5/16" at total load.
- PWLVL header sizes are based on the assumption that the floor joists are supported in the middle of the building by a beam or wall.

2.0E PWLVL ALLOWABLE UNIFORM LOADS FLOOR 100%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT – 1¾" 2.0E PWLVL

Span (ft)	Key	One 1¾" PWLVL			Two 1¾" PWLVL					Three 1¾" PWLVL				
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	18"	9½"	11⅞"	14"	16"	18"
6	LL	-	-	-	-	-	-	-	-	-	-	-	-	-
	TL	1063	1425	1796	2127	2850	3591	4388	5304	3190	4275	5387	6582	7955
	BRG	2.2/5.4	2.9/7.2	3.6/9.1	2.2/5.4	2.9/7.2	3.6/9.1	4.4/11.1	5.4/13.4	2.2/5.4	2.9/7.2	3.6/9.1	4.4/11.1	5.4/13.4
8	LL	724	-	-	1447	-	-	-	-	2171	-	-	-	-
	TL	746	979	1208	1493	1958	2416	2887	3404	2239	2937	3624	4331	5105
	BRG	2/5	2.6/6.6	3.3/8.2	2/5	2.6/6.6	3.3/8.2	3.9/9.8	4.6/11.5	2/5	2.6/6.6	3.3/8.2	3.9/9.8	4.6/11.5
10	LL	370	724	-	741	1447	-	-	-	1111	2171	-	-	-
	TL	551	745	909	1103	1490	1819	2150	2504	1654	2236	2728	3224	3755
	BRG	1.9/4.7	2.5/6.3	3.1/7.7	1.9/4.7	2.5/6.3	3.1/7.7	3.6/9.1	4.2/10.6	1.9/4.7	2.5/6.3	3.1/7.7	3.6/9.1	4.2/10.6
11	LL	278	544	-	557	1087	-	-	-	835	1631	-	-	-
	TL	413	665	809	826	1331	1618	1905	2211	1240	1996	2427	2858	3316
	BRG	1.5/3.9	2.5/6.2	3/7.5	1.5/3.9	2.5/6.2	3/7.5	3.5/8.9	4.1/10.3	1.5/3.9	2.5/6.2	3/7.5	3.5/8.9	4.1/10.3
12	LL	214	419	686	429	837	1372	-	-	643	1256	2058	-	-
	TL	317	586	729	635	1172	1457	1711	1979	952	1758	2186	2566	2968
	BRG	1.5/3.2	2.4/6	3/7.4	1.5/3.2	2.4/6	3/7.4	3.5/8.7	4/10.1	1.5/3.2	2.4/6	3/7.4	3.5/8.7	4/10.1
13	LL	169	329	540	337	659	1079	-	-	506	988	1619	-	-
	TL	249	489	663	497	977	1325	1552	1790	746	1466	1988	2328	2686
	BRG	1.5/3	2.2/5.4	2.9/7.3	1.5/3	2.2/5.4	2.9/7.3	3.4/8.6	3.9/9.9	1.5/3	2.2/5.4	2.9/7.3	3.4/8.6	3.9/9.9
14	LL	135	264	432	270	527	864	1290	-	405	791	1296	1935	-
	TL	198	390	578	396	780	1156	1420	1635	595	1170	1734	2130	2452
	BRG	1.5/3	1.9/4.7	2.8/6.9	1.5/3	1.9/4.7	2.8/6.9	3.4/8.4	3.9/9.7	1.5/3	1.9/4.7	2.8/6.9	3.4/8.4	3.9/9.7
15	LL	110	214	351	220	429	703	1049	1493	329	643	1054	1573	2240
	TL	160	316	503	321	632	1006	1280	1504	481	949	1508	1921	2255
	BRG	1.5/3	1.6/4.1	2.6/6.4	1.5/3	1.6/4.1	2.6/6.4	3.3/8.2	3.8/9.6	1.5/3	1.6/4.1	2.6/6.4	3.3/8.2	3.8/9.6
16	LL	90	177	289	181	353	579	864	1230	271	530	868	1296	1846
	TL	131	260	428	263	519	856	1124	1391	394	779	1284	1685	2086
	BRG	1.5/3	1.5/3.6	2.3/5.8	1.5/3	1.5/3.6	2.3/5.8	3.1/7.7	3.8/9.5	1.5/3	1.5/3.6	2.3/5.8	3.1/7.7	3.8/9.5
17	LL	75	147	241	151	295	483	720	1026	226	442	724	1081	1539
	TL	109	216	356	218	431	711	994	1230	326	647	1067	1490	1845
	BRG	1.5/3	1.5/3.2	2.1/5.2	1.5/3	1.5/3.2	2.1/5.2	2.9/7.2	3.6/8.9	1.5/3	1.5/3.2	2.1/5.2	2.9/7.2	3.6/8.9
18	LL	64	124	203	127	248	407	607	864	191	372	610	910	1296
	TL	91	181	299	182	361	597	885	1095	273	542	896	1327	1643
	BRG	1.5/3	1.5/3	1.8/4.6	1.5/3	1.5/3	1.8/4.6	2.7/6.8	3.4/8.4	1.5/3	1.5/3	1.8/4.6	2.7/6.8	3.4/8.4
19	LL	54	105	173	108	211	346	516	735	162	316	519	774	1102
	TL	77	153	253	153	306	506	760	981	230	459	759	1139	1472
	BRG	1.5/3	1.5/3	1.7/4.1	1.5/3	1.5/3	1.7/4.1	2.5/6.2	3.2/8	1.5/3	1.5/3	1.7/4.1	2.5/6.2	3.2/8
20	LL	46	90	148	93	181	296	442	630	139	271	445	664	945
	TL	65	130	216	130	261	432	649	884	195	391	648	974	1326
	BRG	1.5/3	1.5/3	1.5/3.7	1.5/3	1.5/3	1.5/3.7	2.2/5.6	3/7.6	1.5/3	1.5/3	1.5/3.7	2.2/5.6	3/7.6
22	LL	35	68	111	70	136	223	332	473	104	204	334	499	710
	TL	48	97	161	96	193	321	484	694	144	290	482	726	1040
	BRG	1.5/3	1.5/3	1.5/3.1	1.5/3	1.5/3	1.5/3.1	1.8/4.6	2.6/6.6	1.5/3	1.5/3	1.5/3.1	1.8/4.6	2.6/6.6
24	LL	27	52	86	54	105	172	256	365	80	157	257	384	547
	TL	36	73	122	72	146	245	370	530	108	219	367	554	796
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.9	2.2/5.5	1.5/3	1.5/3	1.5/3	1.5/3.9	2.2/5.5
26	LL	21	41	67	42	82	135	201	287	63	124	202	302	430
	TL	27	56	95	55	113	190	288	414	82	169	284	431	621
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7
28	LL	17	33	54	34	66	108	161	230	51	99	162	242	344
	TL	21	44	75	42	88	149	227	328	63	132	224	341	492
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.6/4.1	1.5/3	1.5/3	1.5/3	1.5/3	1.6/4.1
30	LL	14	27	44	27	54	88	131	187	41	80	132	197	280
	TL	16	35	60	33	70	119	182	264	49	104	179	273	395
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.5	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.5

* Can be applied to the PWLVL beam in addition to its own weight.
Simple or multiple PWLVL beam spans

Key to Table:

LL = Maximum live load – limits deflection to L/360

TL = Maximum total load – limits deflections to L/240

BRG = Required end/intermediate bearing length (inches), based on plate bearing stress of 850 psi.

2.0E PWLVL FLOOR ALLOWABLE UNIFORM LOADS 100%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT – 3½" 2.0E PWLVL

Span (ft)	Key	One 3½" PWLVL					Two 3½" PWLVL				
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	18"	9½"	11⅞"
6	LL	-	-	-	-	-	-	-	-	-	-
	TL	2127	2850	3591	4388	5304	4254	5700	7182	8776	10607
	BRG	2.2/5.4	2.9/7.2	3.6/9.1	4.4/11.1	5.4/13.4	2.2/5.4	2.9/7.2	3.6/9.1	4.4/11.1	5.4/13.4
8	LL	1447	-	-	-	-	2894	-	-	-	-
	TL	1493	1958	2416	2887	3404	2985	3917	4832	5775	6807
	BRG	2/5	2.6/6.6	3.3/8.2	3.9/9.8	4.6/11.5	2/5	2.6/6.6	3.3/8.2	3.9/9.8	4.6/11.5
10	LL	741	1447	-	-	-	1482	2894	-	-	-
	TL	1103	1490	1819	2150	2504	2206	2981	3637	4299	5007
	BRG	1.9/4.7	2.5/6.3	3.1/7.7	3.6/9.1	4.2/10.6	1.9/4.7	2.5/6.3	3.1/7.7	3.6/9.1	4.2/10.6
11	LL	557	1087	-	-	-	1113	2175	-	-	-
	TL	826	1331	1618	1905	2211	1653	2662	3236	3811	4421
	BRG	1.5/3.9	2.5/6.2	3/7.5	3.5/8.9	4.1/10.3	1.5/3.9	2.5/6.2	3/7.5	3.5/8.9	4.1/10.3
12	LL	429	837	1372	-	-	858	1675	2745	-	-
	TL	635	1172	1457	1711	1979	1269	2344	2915	3422	3957
	BRG	1.5/3.2	2.4/6	3/7.4	3.5/8.7	4/10.1	1.5/3.2	2.4/6	3/7.4	3.5/8.7	4/10.1
13	LL	337	659	1079	-	-	675	1317	2159	-	-
	TL	497	977	1325	1552	1790	994	1954	2650	3104	3581
	BRG	1.5/3	2.2/5.4	2.9/7.3	3.4/8.6	3.9/9.9	1.5/3	2.2/5.4	2.9/7.3	3.4/8.6	3.9/9.9
14	LL	270	527	864	1290	-	540	1055	1728	2580	-
	TL	396	780	1156	1420	1635	793	1561	2312	2840	3269
	BRG	1.5/3	1.9/4.7	2.8/6.9	3.4/8.4	3.9/9.7	1.5/3	1.9/4.7	2.8/6.9	3.4/8.4	3.9/9.7
15	LL	220	429	703	1049	1493	439	858	1405	2098	2987
	TL	321	632	1006	1280	1504	641	1265	2011	2561	3007
	BRG	1.5/3	1.6/4.1	2.6/6.4	3.3/8.2	3.8/9.6	1.5/3	1.6/4.1	2.6/6.4	3.3/8.2	3.8/9.6
16	LL	181	353	579	864	1230	362	707	1158	1728	2461
	TL	263	519	856	1124	1391	525	1038	1711	2247	2781
	BRG	1.5/3	1.5/3.6	2.3/5.8	3.1/7.7	3.8/9.5	1.5/3	1.5/3.6	2.3/5.8	3.1/7.7	3.8/9.5
17	LL	151	295	483	720	1026	302	589	965	1441	2052
	TL	218	431	711	994	1230	435	862	1423	1987	2460
	BRG	1.5/3	1.5/3.2	2.1/5.2	2.9/7.2	3.6/8.9	1.5/3	1.5/3.2	2.1/5.2	2.9/7.2	3.6/8.9
18	LL	127	248	407	607	864	254	496	813	1214	1728
	TL	182	361	597	885	1095	364	723	1194	1769	2191
	BRG	1.5/3	1.5/3	1.8/4.6	2.7/6.8	3.4/8.4	1.5/3	1.5/3	1.8/4.6	2.7/6.8	3.4/8.4
19	LL	108	211	346	516	735	216	422	691	1032	1470
	TL	153	306	506	760	981	307	611	1012	1519	1963
	BRG	1.5/3	1.5/3	1.7/4.1	2.5/6.2	3.2/8	1.5/3	1.5/3	1.7/4.1	2.5/6.2	3.2/8
20	LL	93	181	296	442	630	185	362	593	885	1260
	TL	130	261	432	649	884	261	521	864	1298	1768
	BRG	1.5/3	1.5/3	1.5/3.7	2.2/5.6	3/7.6	1.5/3	1.5/3	1.5/3.7	2.2/5.6	3/7.6
22	LL	70	136	223	332	473	139	272	445	665	947
	TL	96	193	321	484	694	191	386	643	968	1387
	BRG	1.5/3	1.5/3	1.5/3.1	1.8/4.6	2.6/6.6	1.5/3	1.5/3	1.5/3.1	1.8/4.6	2.6/6.6
24	LL	54	105	172	256	365	107	209	343	512	729
	TL	72	146	245	370	530	144	292	489	739	1061
	BRG	1.5/3	1.5/3	1.5/3	1.5/3.9	2.2/5.5	1.5/3	1.5/3	1.5/3	1.5/3.9	2.2/5.5
26	LL	42	82	135	201	287	84	165	270	403	574
	TL	55	113	190	288	414	109	225	379	575	828
	BRG	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7
28	LL	34	66	108	161	230	68	132	216	322	459
	TL	42	88	149	227	328	84	176	299	455	656
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.6/4.1	1.5/3	1.5/3	1.5/3	1.5/3	1.6/4.1
30	LL	27	54	88	131	187	55	107	176	262	373
	TL	33	70	119	182	264	65	139	238	364	527
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.5	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.5

* Can be applied to the PWLVL beam in addition to its own weight.
Simple or multiple PWLVL beam spans

Key to Table:

LL = Maximum live load – limits deflection to L/360

TL = Maximum total load – limits deflections to L/240

BRG = Required end/intermediate bearing length (inches), based on plate bearing stress of 850 psi.

2.0E PWLVL ALLOWABLE UNIFORM LOADS ROOF SNOW 115%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT – 1 3/4" 2.0E PWLVL

Span (ft)	Key	One 1 3/4" PWLVL			Two 1 3/4" PWLVL					Three 1 3/4" PWLVL				
		9 1/2"	11 7/8"	14"	9 1/2"	11 7/8"	14"	16"	18"	9 1/2"	11 7/8"	14"	16"	18"
6	LL	-	-	-	-	-	-	-	-	-	-	-	-	-
	TL	1224	1640	2066	2447	3279	4132	5049	6102	3671	4919	6198	7573	9152
	BRG	2.5/6.2	3.3/8.3	4.2/10.4	2.5/6.2	3.3/8.3	4.2/10.4	5.1/12.8	6.2/15.4	2.5/6.2	3.3/8.3	4.2/10.4	5.1/12.8	6.2/15.4
8	LL	-	-	-	-	-	-	-	-	-	-	-	-	-
	TL	859	1127	1390	1718	2254	2780	3323	3917	2577	3380	4170	4984	5875
	BRG	2.3/5.8	3/7.6	3.8/9.4	2.3/5.8	3/7.6	3.8/9.4	4.5/11.2	5.3/13.2	2.3/5.8	3/7.6	3.8/9.4	4.5/11.2	5.3/13.2
10	LL	556	-	-	1111	-	-	-	-	1667	-	-	-	-
	TL	651	858	1047	1302	1716	2093	2474	2882	1954	2573	3140	3711	4322
	BRG	2.2/5.5	2.9/7.3	3.5/8.8	2.2/5.5	2.9/7.3	3.5/8.8	4.2/10.5	4.9/12.2	2.2/5.5	2.9/7.3	3.5/8.8	4.2/10.5	4.9/12.2
11	LL	418	-	-	835	-	-	-	-	1253	-	-	-	-
	TL	537	766	931	1075	1532	1863	2193	2545	1612	2298	2794	3290	3817
	BRG	2/5	2.9/7.1	3.5/8.7	2/5	2.9/7.1	3.5/8.7	4.1/10.2	4.7/11.8	2/5	2.9/7.1	3.5/8.7	4.1/10.2	4.7/11.8
12	LL	322	628	-	643	1256	-	-	-	965	1884	-	-	-
	TL	424	675	839	849	1350	1678	1970	2278	1273	2025	2517	2954	3417
	BRG	1.7/4.3	2.7/6.9	3.4/8.5	1.7/4.3	2.7/6.9	3.4/8.5	4/10	4.6/11.6	1.7/4.3	2.7/6.9	3.4/8.5	4/10	4.6/11.6
13	LL	253	494	-	506	988	-	-	-	759	1482	-	-	-
	TL	333	574	763	666	1148	1526	1787	2061	999	1723	2289	2681	3092
	BRG	1.5/3.7	2.5/6.3	3.4/8.4	1.5/3.7	2.5/6.3	3.4/8.4	3.9/9.8	4.5/11.3	1.5/3.7	2.5/6.3	3.4/8.4	3.9/9.8	4.5/11.3
14	LL	203	396	648	405	791	1296	-	-	608	1187	1944	-	-
	TL	266	494	666	531	989	1332	1635	1882	797	1483	1997	2453	2823
	BRG	1.5/3.2	2.4/5.9	3.2/7.9	1.5/3.2	2.4/5.9	3.2/7.9	3.9/9.7	4.5/11.2	1.5/3.2	2.4/5.9	3.2/7.9	3.9/9.7	4.5/11.2
15	LL	165	322	527	329	643	1054	-	-	494	965	1581	-	-
	TL	215	423	579	430	847	1158	1475	1732	646	1270	1737	2212	2597
	BRG	1.5/3	2.2/5.4	3/7.4	1.5/3	2.2/5.4	3/7.4	3.8/9.4	4.4/11	1.5/3	2.2/5.4	3/7.4	3.8/9.4	4.4/11
16	LL	136	265	434	271	530	868	-	-	407	795	1303	-	-
	TL	177	348	508	353	696	1016	1294	1602	530	1044	1525	1941	2402
	BRG	1.5/3	1.9/4.8	2.8/6.9	1.5/3	1.9/4.8	2.8/6.9	3.5/8.8	4.4/10.9	1.5/3	1.9/4.8	2.8/6.9	3.5/8.8	4.4/10.9
17	LL	113	221	362	226	442	724	1081	-	339	663	1086	1621	-
	TL	146	289	449	293	578	899	1145	1417	439	867	1348	1717	2125
	BRG	1.5/3	1.7/4.2	2.6/6.5	1.5/3	1.7/4.2	2.6/6.5	3.3/8.3	4.1/10.2	1.5/3	1.7/4.2	2.6/6.5	3.3/8.3	4.1/10.2
18	LL	95	186	305	191	372	610	910	-	286	558	915	1366	-
	TL	123	243	400	245	485	800	1020	1262	368	728	1201	1529	1893
	BRG	1.5/3	1.5/3.8	2.5/6.2	1.5/3	1.5/3.8	2.5/6.2	3.1/7.8	3.9/9.7	1.5/3	1.5/3.8	2.5/6.2	3.1/7.8	3.9/9.7
19	LL	81	158	259	162	316	519	774	1102	243	475	778	1161	1653
	TL	104	206	339	207	411	679	914	1131	311	617	1018	1370	1696
	BRG	1.5/3	1.5/3.4	2.2/5.5	1.5/3	1.5/3.4	2.2/5.5	3/7.4	3.7/9.2	1.5/3	1.5/3.4	2.2/5.5	3/7.4	3.7/9.2
20	LL	69	136	222	139	271	445	664	945	208	407	667	996	1418
	TL	88	175	290	177	351	580	823	1019	265	526	870	1235	1529
	BRG	1.5/3	1.5/3	2/5	1.5/3	1.5/3	2/5	2.8/7	3.5/8.7	1.5/3	1.5/3	2/5	2.8/7	3.5/8.7
22	LL	52	102	167	104	204	334	499	710	157	306	501	748	1065
	TL	65	131	216	131	261	433	650	839	196	392	649	975	1259
	BRG	1.5/3	1.5/3	1.6/4.1	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.2/7.9	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.2/7.9
24	LL	40	79	129	80	157	257	384	547	121	236	386	576	820
	TL	49	99	165	99	199	330	498	703	148	298	496	746	1054
	BRG	1.5/3	1.5/3	1.5/3.5	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.3	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.3
26	LL	32	62	101	63	124	202	302	430	95	185	304	453	645
	TL	38	77	129	76	154	257	388	557	114	231	386	582	836
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3
28	LL	25	49	81	51	99	162	242	344	76	148	243	363	517
	TL	29	61	102	59	121	203	308	443	88	182	305	462	664
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4
30	LL	21	40	66	41	80	132	197	280	62	121	198	295	420
	TL	23	48	81	46	96	163	248	357	69	145	244	371	535
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7

* Can be applied to the PWLVL beam in addition to its own weight.
Simple or multiple PWLVL beam spans

Key to Table:

LL = Maximum live load – limits deflection to L/240

TL = Maximum total load – limits deflections to L/180

BRG = Required end/intermediate bearing length (inches), based on plate bearing stress of 850 psi.

2.0E PWLVL ALLOWABLE UNIFORM LOADS ROOF SNOW 115%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT – 3½" 2.0E PWLVL

Span (ft)	Key	One 3½" PWLVL						Two 3½" PWLVL			
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	18"	9½"	11⅞"
6	LL	-	-	-	-	-	-	-	-	-	-
	TL	2447	3279	4132	5049	6102	4894	6558	8263	10097	12203
	BRG	2.5/6.2	3.3/8.3	4.2/10.4	5.1/12.8	6.2/15.4	2.5/6.2	3.3/8.3	4.2/10.4	5.1/12.8	6.2/15.4
8	LL	-	-	-	-	-	-	-	-	-	-
	TL	1718	2254	2780	3323	3917	3435	4507	5561	6645	7833
	BRG	2.3/5.8	3/7.6	3.8/9.4	4.5/11.2	5.3/13.2	2.3/5.8	3/7.6	3.8/9.4	4.5/11.2	5.3/13.2
10	LL	1111	-	-	-	-	2223	-	-	-	-
	TL	1302	1716	2093	2474	2882	2605	3431	4187	4948	5763
	BRG	2.2/5.5	2.9/7.3	3.5/8.8	4.2/10.5	4.9/12.2	2.2/5.5	2.9/7.3	3.5/8.8	4.2/10.5	4.9/12.2
11	LL	835	-	-	-	-	1670	-	-	-	-
	TL	1075	1532	1863	2193	2545	2150	3064	3726	4387	5089
	BRG	2/5	2.9/7.1	3.5/8.7	4.1/10.2	4.7/11.8	2/5	2.9/7.1	3.5/8.7	4.1/10.2	4.7/11.8
12	LL	643	1256	-	-	-	1286	2512	-	-	-
	TL	849	1350	1678	1970	2278	1698	2699	3356	3939	4556
	BRG	1.7/4.3	2.7/6.9	3.4/8.5	4/10	4.6/11.6	1.7/4.3	2.7/6.9	3.4/8.5	4/10	4.6/11.6
13	LL	506	988	-	-	-	1012	1976	-	-	-
	TL	666	1148	1526	1787	2061	1332	2297	3052	3574	4123
	BRG	1.5/3.7	2.5/6.3	3.4/8.4	3.9/9.8	4.5/11.3	1.5/3.7	2.5/6.3	3.4/8.4	3.9/9.8	4.5/11.3
14	LL	405	791	1296	-	-	810	1582	2593	-	-
	TL	531	989	1332	1635	1882	1063	1977	2663	3270	3765
	BRG	1.5/3.2	2.4/5.9	3.2/7.9	3.9/9.7	4.5/11.2	1.5/3.2	2.4/5.9	3.2/7.9	3.9/9.7	4.5/11.2
15	LL	329	643	1054	-	-	659	1286	2108	-	-
	TL	430	847	1158	1475	1732	861	1694	2317	2949	3463
	BRG	1.5/3	2.2/5.4	3/7.4	3.8/9.4	4.4/11	1.5/3	2.2/5.4	3/7.4	3.8/9.4	4.4/11
16	LL	271	530	868	-	-	543	1060	1737	-	-
	TL	353	696	1016	1294	1602	706	1392	2033	2589	3203
	BRG	1.5/3	1.9/4.8	2.8/6.9	3.5/8.8	4.4/10.9	1.5/3	1.9/4.8	2.8/6.9	3.5/8.8	4.4/10.9
17	LL	226	442	724	1081	-	452	884	1448	2161	-
	TL	293	578	899	1145	1417	586	1157	1798	2290	2834
	BRG	1.5/3	1.7/4.2	2.6/6.5	3.3/8.3	4.1/10.2	1.5/3	1.7/4.2	2.6/6.5	3.3/8.3	4.1/10.2
18	LL	191	372	610	910	-	381	744	1220	1821	-
	TL	245	485	800	1020	1262	491	971	1601	2039	2524
	BRG	1.5/3	1.5/3.8	2.5/6.2	3.1/7.8	3.9/9.7	1.5/3	1.5/3.8	2.5/6.2	3.1/7.8	3.9/9.7
19	LL	162	316	519	774	1102	324	633	1037	1548	2204
	TL	207	411	679	914	1131	415	822	1357	1827	2262
	BRG	1.5/3	1.5/3.4	2.2/5.5	3/7.4	3.7/9.2	1.5/3	1.5/3.4	2.2/5.5	3/7.4	3.7/9.2
20	LL	139	271	445	664	945	278	543	889	1327	1890
	TL	177	351	580	823	1019	353	702	1160	1646	2038
	BRG	1.5/3	1.5/3	2/5	2.8/7	3.5/8.7	1.5/3	1.5/3	2/5	2.8/7	3.5/8.7
22	LL	104	204	334	499	710	209	408	668	997	1420
	TL	131	261	433	650	839	261	522	865	1301	1679
	BRG	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.2/7.9	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.2/7.9
24	LL	80	157	257	384	547	161	314	515	768	1094
	TL	99	199	330	498	703	197	397	661	995	1405
	BRG	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.3	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.3
26	LL	63	124	202	302	430	126	247	405	604	860
	TL	76	154	257	388	557	151	308	514	776	1114
	BRG	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3
28	LL	51	99	162	242	344	101	198	324	484	689
	TL	59	121	203	308	443	118	242	407	616	886
	BRG	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4
30	LL	41	80	132	197	280	82	161	263	393	560
	TL	46	96	163	248	357	92	193	326	495	714
	BRG	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7

* Can be applied to the PWLVL beam in addition to its own weight.
Simple or multiple PWLVL beam spans

Key to Table:

LL = Maximum live load – limits deflection to L/240

TL = Maximum total load – limits deflections to L/180

BRG = Required end/intermediate bearing length (inches), based on plate bearing stress of 850 psi.

2.0E PWLVL ALLOWABLE UNIFORM LOADS ROOF NON-SNOW 125%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT – 1¾" 2.0E PWLVL

Span (ft)	Key	One 1¾" PWLVL			Two 1¾" PWLVL					Three 1¾" PWLVL				
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	18"	9½"	11⅞"	14"	16"	18"
6	LL	-	-	-	-	-	-	-	-	-	-	-	-	-
	TL	1330	1783	2246	2661	3565	4492	5489	6634	3991	5348	6738	8233	9950
	BRG	2.7/6.7	3.6/9	4.5/11.4	2.7/6.7	3.6/9	4.5/11.4	5.5/13.9	6.7/16.8	2.7/6.7	3.6/9	4.5/11.4	5.5/13.9	6.7/16.8
8	LL	-	-	-	-	-	-	-	-	-	-	-	-	-
	TL	934	1225	1512	1868	2451	3023	3613	4259	2802	3676	4535	5419	6388
	BRG	2.5/6.3	3.3/8.3	4.1/10.2	2.5/6.3	3.3/8.3	4.1/10.2	4.9/12.2	5.7/14.4	2.5/6.3	3.3/8.3	4.1/10.2	4.9/12.2	5.7/14.4
10	LL	556	-	-	1111	-	-	-	-	1667	-	-	-	-
	TL	708	933	1138	1416	1866	2277	2691	3134	2125	2799	3415	4036	4700
	BRG	2.4/6	3.2/7.9	3.8/9.6	2.4/6	3.2/7.9	3.8/9.6	4.5/11.4	5.3/13.2	2.4/6	3.2/7.9	3.8/9.6	4.5/11.4	5.3/13.2
11	LL	418	815	-	835	1631	-	-	-	1253	2446	-	-	-
	TL	552	833	1013	1105	1666	2026	2385	2767	1657	2500	3039	3578	4151
	BRG	2.1/5.1	3.1/7.8	3.8/9.4	2.1/5.1	3.1/7.8	3.8/9.4	4.4/11.1	5.1/12.9	2.1/5.1	3.1/7.8	3.8/9.4	4.4/11.1	5.1/12.9
12	LL	322	628	-	643	1256	-	-	-	965	1884	-	-	-
	TL	424	734	912	849	1468	1825	2142	2477	1273	2202	2737	3213	3716
	BRG	1.7/4.3	3/7.5	3.7/9.3	1.7/4.3	3/7.5	3.7/9.3	4.3/10.9	5/12.6	1.7/4.3	3/7.5	3.7/9.3	4.3/10.9	5/12.6
13	LL	253	494	810	506	988	1619	-	-	759	1482	2429	-	-
	TL	333	625	830	666	1249	1660	1944	2242	999	1874	2490	2916	3363
	BRG	1.5/3.7	2.8/6.9	3.7/9.1	1.5/3.7	2.8/6.9	3.7/9.1	4.3/10.7	4.9/12.3	1.5/3.7	2.8/6.9	3.7/9.1	4.3/10.7	4.9/12.3
14	LL	203	396	648	405	791	1296	-	-	608	1187	1944	-	-
	TL	266	522	724	531	1044	1448	1779	2047	797	1566	2173	2668	3071
	BRG	1.5/3.2	2.5/6.2	3.4/8.6	1.5/3.2	2.5/6.2	3.4/8.6	4.2/10.5	4.9/12.1	1.5/3.2	2.5/6.2	3.4/8.6	4.2/10.5	4.9/12.1
15	LL	165	322	527	329	643	1054	1573	-	494	965	1581	2360	-
	TL	215	423	630	430	847	1260	1604	1884	646	1270	1890	2406	2825
	BRG	1.5/3	2.2/5.4	3.2/8	1.5/3	2.2/5.4	3.2/8	4.1/10.2	4.8/12	1.5/3	2.2/5.4	3.2/8	4.1/10.2	4.8/12
16	LL	136	265	434	271	530	868	1296	-	407	795	1303	1944	-
	TL	177	348	553	353	696	1106	1408	1742	530	1044	1659	2112	2613
	BRG	1.5/3	1.9/4.8	3/7.5	1.5/3	1.9/4.8	3/7.5	3.8/9.6	4.7/11.8	1.5/3	1.9/4.8	3/7.5	3.8/9.6	4.7/11.8
17	LL	113	221	362	226	442	724	1081	1539	339	663	1086	1621	2308
	TL	146	289	476	293	578	953	1246	1541	439	867	1429	1869	2312
	BRG	1.5/3	1.7/4.2	2.8/6.9	1.5/3	1.7/4.2	2.8/6.9	3.6/9	4.5/11.1	1.5/3	1.7/4.2	2.8/6.9	3.6/9	4.5/11.1
18	LL	95	186	305	191	372	610	910	1296	286	558	915	1366	1944
	TL	123	243	400	245	485	800	1110	1373	368	728	1201	1664	2060
	BRG	1.5/3	1.5/3.8	2.5/6.2	1.5/3	1.5/3.8	2.5/6.2	3.4/8.5	4.2/10.5	1.5/3	1.5/3.8	2.5/6.2	3.4/8.5	4.2/10.5
19	LL	81	158	259	162	316	519	774	1102	243	475	778	1161	1653
	TL	104	206	339	207	411	679	994	1231	311	617	1018	1491	1846
	BRG	1.5/3	1.5/3.4	2.2/5.5	1.5/3	1.5/3.4	2.2/5.5	3.2/8.1	4/10	1.5/3	1.5/3.4	2.2/5.5	3.2/8.1	4/10
20	LL	69	136	222	139	271	445	664	945	208	407	667	996	1418
	TL	88	175	290	177	351	580	870	1109	265	526	870	1306	1664
	BRG	1.5/3	1.5/3	2/5	1.5/3	1.5/3	2/5	3/7.4	3.8/9.5	1.5/3	1.5/3	2/5	3/7.4	3.8/9.5
22	LL	52	102	167	104	204	334	499	710	157	306	501	748	1065
	TL	65	131	216	131	261	433	650	914	196	392	649	975	1371
	BRG	1.5/3	1.5/3	1.6/4.1	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.4/8.6	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.4/8.6
24	LL	40	79	129	80	157	257	384	547	121	236	386	576	820
	TL	49	99	165	99	199	330	498	713	148	298	496	746	1069
	BRG	1.5/3	1.5/3	1.5/3.5	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.4	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.4
26	LL	32	62	101	63	124	202	302	430	95	185	304	453	645
	TL	38	77	129	76	154	257	388	557	114	231	386	582	836
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3
28	LL	25	49	81	51	99	162	242	344	76	148	243	363	517
	TL	29	61	102	59	121	203	308	443	88	182	305	462	664
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4
30	LL	21	40	66	41	80	132	197	280	62	121	198	295	420
	TL	23	48	81	46	96	163	248	357	69	145	244	371	535
	BRG	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7

* Can be applied to the PWLVL beam in addition to its own weight.
Simple or multiple PWLVL beam spans

Key to Table:

LL = Maximum live load – limits deflection to L/240

TL = Maximum total load – limits deflections to L/180

BRG = Required end/intermediate bearing length (inches), based on plate bearing stress of 850 psi.

2.0E PWLVL ALLOWABLE UNIFORM LOADS ROOF NON-SNOW 125%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT – 3½" 2.0E PWLVL

Span (ft)	Key	One 3½" PWLVL						Two 3½" PWLVL			
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	18"	9½"	11⅞"
6	LL	-	-	-	-	-	-	-	-	-	-
	TL	2661	3565	4492	5489	6634	5321	7130	8984	10978	13267
	BRG	2.7/6.7	3.6/9	4.5/11.4	5.5/13.9	6.7/16.8	2.7/6.7	3.6/9	4.5/11.4	5.5/13.9	6.7/16.8
8	LL	-	-	-	-	-	-	-	-	-	-
	TL	1868	2451	3023	3613	4259	3736	4901	6046	7225	8517
	BRG	2.5/6.3	3.3/8.3	4.1/10.2	4.9/12.2	5.7/14.4	2.5/6.3	3.3/8.3	4.1/10.2	4.9/12.2	5.7/14.4
10	LL	1111	-	-	-	-	2223	-	-	-	-
	TL	1416	1866	2277	2691	3134	2833	3731	4553	5381	6267
	BRG	2.4/6	3.2/7.9	3.8/9.6	4.5/11.4	5.3/13.2	2.4/6	3.2/7.9	3.8/9.6	4.5/11.4	5.3/13.2
11	LL	835	1631	-	-	-	1670	3262	-	-	-
	TL	1105	1666	2026	2385	2767	2209	3333	4052	4771	5535
	BRG	2.1/5.1	3.1/7.8	3.8/9.4	4.4/11.1	5.1/12.9	2.1/5.1	3.1/7.8	3.8/9.4	4.4/11.1	5.1/12.9
12	LL	643	1256	-	-	-	1286	2512	-	-	-
	TL	849	1468	1825	2142	2477	1698	2936	3650	4284	4955
	BRG	1.7/4.3	3/7.5	3.7/9.3	4.3/10.9	5/12.6	1.7/4.3	3/7.5	3.7/9.3	4.3/10.9	5/12.6
13	LL	506	988	1619	-	-	1012	1976	3238	-	-
	TL	666	1249	1660	1944	2242	1332	2498	3319	3887	4484
	BRG	1.5/3.7	2.8/6.9	3.7/9.1	4.3/10.7	4.9/12.3	1.5/3.7	2.8/6.9	3.7/9.1	4.3/10.7	4.9/12.3
14	LL	405	791	1296	-	-	810	1582	2593	-	-
	TL	531	1044	1448	1779	2047	1063	2088	2897	3557	4095
	BRG	1.5/3.2	2.5/6.2	3.4/8.6	4.2/10.5	4.9/12.1	1.5/3.2	2.5/6.2	3.4/8.6	4.2/10.5	4.9/12.1
15	LL	329	643	1054	1573	-	659	1286	2108	3146	-
	TL	430	847	1260	1604	1884	861	1694	2520	3208	3767
	BRG	1.5/3	2.2/5.4	3.2/8	4.1/10.2	4.8/12	1.5/3	2.2/5.4	3.2/8	4.1/10.2	4.8/12
16	LL	271	530	868	1296	-	543	1060	1737	2593	-
	TL	353	696	1106	1408	1742	706	1392	2212	2816	3485
	BRG	1.5/3	1.9/4.8	3/7.5	3.8/9.6	4.7/11.8	1.5/3	1.9/4.8	3/7.5	3.8/9.6	4.7/11.8
17	LL	226	442	724	1081	1539	452	884	1448	2161	3078
	TL	293	578	953	1246	1541	586	1157	1905	2491	3083
	BRG	1.5/3	1.7/4.2	2.8/6.9	3.6/9	4.5/11.1	1.5/3	1.7/4.2	2.8/6.9	3.6/9	4.5/11.1
18	LL	191	372	610	910	1296	381	744	1220	1821	2593
	TL	245	485	800	1110	1373	491	971	1601	2219	2746
	BRG	1.5/3	1.5/3.8	2.5/6.2	3.4/8.5	4.2/10.5	1.5/3	1.5/3.8	2.5/6.2	3.4/8.5	4.2/10.5
19	LL	162	316	519	774	1102	324	633	1037	1548	2204
	TL	207	411	679	994	1231	415	822	1357	1989	2462
	BRG	1.5/3	1.5/3.4	2.2/5.5	3.2/8.1	4/10	1.5/3	1.5/3.4	2.2/5.5	3.2/8.1	4/10
20	LL	139	271	445	664	945	278	543	889	1327	1890
	TL	177	351	580	870	1109	353	702	1160	1741	2218
	BRG	1.5/3	1.5/3	2/5	3/7.4	3.8/9.5	1.5/3	1.5/3	2/5	3/7.4	3.8/9.5
22	LL	104	204	334	499	710	209	408	668	997	1420
	TL	131	261	433	650	914	261	522	865	1301	1828
	BRG	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.4/8.6	1.5/3	1.5/3	1.6/4.1	2.5/6.1	3.4/8.6
24	LL	80	157	257	384	547	161	314	515	768	1094
	TL	99	199	330	498	713	197	397	661	995	1426
	BRG	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.4	1.5/3	1.5/3	1.5/3.5	2.1/5.2	2.9/7.4
26	LL	63	124	202	302	430	126	247	405	604	860
	TL	76	154	257	388	557	151	308	514	776	1114
	BRG	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3	1.5/3	1.5/3	1.5/3	1.8/4.4	2.5/6.3
28	LL	51	99	162	242	344	101	198	324	484	689
	TL	59	121	203	308	443	118	242	407	616	886
	BRG	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4	1.5/3	1.5/3	1.5/3	1.5/3.8	2.2/5.4
30	LL	41	80	132	197	280	82	161	263	393	560
	TL	46	96	163	248	357	92	193	326	495	714
	BRG	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7	1.5/3	1.5/3	1.5/3	1.5/3.3	1.9/4.7

* Can be applied to the PWLVL beam in addition to its own weight.
Simple or multiple PWLVL beam spans

Key to Table:

LL = Maximum live load – limits deflection to L/240

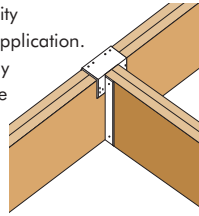
TL = Maximum total load – limits deflections to L/180

BRG = Required end/intermediate bearing length (inches), based on plate bearing stress of 850 psi.

BEARING DETAILS

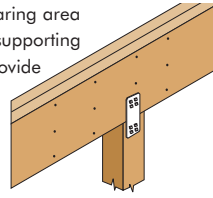
3a BEAM-TO-BEAM CONNECTION

Make sure hanger capacity is appropriate for each application. Hangers must be properly installed to accommodate full capacity.



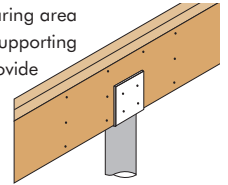
3b BEARING ON WOOD COLUMN

Verify the required bearing area and the ability of the supporting column member to provide adequate strength.



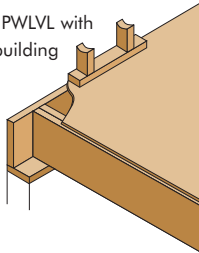
3c BEARING ON STEEL COLUMN

Verify the required bearing area and the ability of the supporting column member to provide adequate strength.



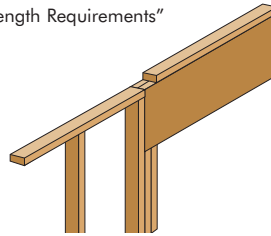
3d BEARING ON EXTERIOR WALL

Prevent direct contact of PWLVL with concrete. Consult local building code for requirements.



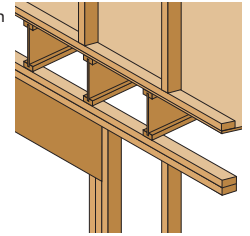
3e BEARING FOR DOOR OR WINDOW HEADER – 1-STORY TYPICAL

See "Bearing Length Requirements" below.



3f WINDOW/DOOR HEADER – 2-STORY TYPICAL

See "Bearing Length Requirements" below.



For multiple-ply PWLVL beam assembly conditions and fastening recommendations, see page 59.

BEARING LENGTH REQUIREMENTS

PWLVL BEARING LENGTH REQUIREMENTS

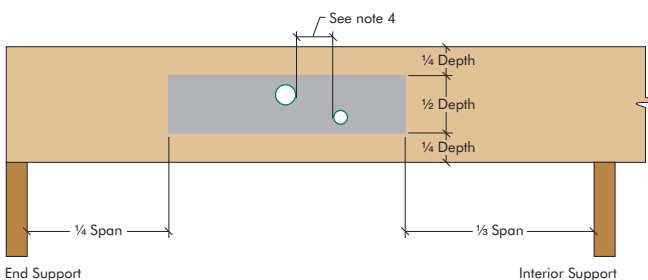
Support Material	S-P-F (South Hem-Fir (North) ⁽⁵⁾		Hem-Fir S-P-F ⁽⁵⁾		Southern Pine Douglas Fir – Larch ⁽⁵⁾		1.5E PWLVL ⁽⁶⁾		1.8E or 2.0E PWLVL ⁽⁶⁾	
F _{c1} (psi)	335		405		565		575		850	
PWLVL Beam Width (in)	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"
1	3"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
2	3 1/2"	3"	3"	1 1/2"	3"	1 1/2"	3"	3"	1 1/2"	1 1/2"
3	5 1/2"	3"	4 1/2"	3"	3 1/2"	3"	4 1/2"	3"	3"	1 1/2"
4	7 1/4"	3 1/2"	6"	3"	4 1/2"	3"	6"	4 1/2"	3"	1 1/2"
5	9 1/4"	4 1/2"	7 1/4"	4 1/2"	5 1/2"	3"	7 1/2"	5 1/2"	3 1/2"	3"
6		5 1/2"	9 1/4"	4 1/2"	7 1/4"	3 1/2"	9"	6"	4 1/2"	3"
7		6"		5 1/2"	7 1/4"	4 1/2"		7 1/2"	5 1/2"	3"
8		7 1/4"		6"	9 1/4"	4 1/2"		9"	5 1/2"	3"
9		9 1/4"		7 1/4"	9 1/4"	5 1/2"		9"	7 1/2"	3 1/2"
10		9 1/4"		7 1/4"		5 1/2"			7 1/2"	3 1/2"
11				9 1/4"		6"			7 1/2"	4 1/2"
12				9 1/4"		7 1/4"			9"	4 1/2"
13				9 1/4"		7 1/4"			9"	4 1/2"
14						7 1/4"				5 1/2"
15						9 1/4"				5 1/2"
16						9 1/4"				5 1/2"
17						9 1/4"				6"
18						9 1/4"				7 1/2"
19										7 1/2"
20										7 1/2"
21										7 1/2"
22										7 1/2"
23										9"

Notes:

- The minimum required bearing length is 1 1/2"
- Duration of load factors may not be applied to bearing length requirements.
- All PWLVL beams require support across their full width.
- All PWLVL beams require lateral support at bearing points.
- Use these values when the PWLVL beam is supported by a wall plate, timber or built-up girder.
- Use these values when the PWLVL beam is supported by the end of a column or connection hardware.
- The support member must be sized to carry the load from the PWLVL beam.

HOLE DETAILS

HOLES IN PWLVL BEAMS



Notes:

- This technical note applies only to uniformly loaded, simple and multiple span PWLVL beams. Beams that carry concentrated loads, or cantilevered beams, are outside the scope of this technical note.
- Square and rectangular holes are not permitted.
- Round holes may be drilled or cut with a hole saw anywhere within the shaded area of the PWLVL beam.
- The horizontal distance between adjacent holes must be at least two times the size of the larger hole. This restriction also applies to the location of access holes relative to bolt holes in multi-ply PWLVL beams.
- Do not drill more than three access holes in any four foot long section of PWLVL beam.
- The maximum round hole diameter permitted is:

PWLVL Beam Depth	5 1/2"	7 1/4"	9 1/2" to 24"
Maximum Hole Diameter	3/4"	1"	1 1/2"

- These limitations apply to holes drilled for plumbing or wiring access only. The size and location of holes drilled for fasteners are governed by the provisions of the *National Design Specification® for Wood Construction*.
- PWLVL beams deflect under load. Size holes to provide clearance where required.