

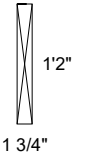
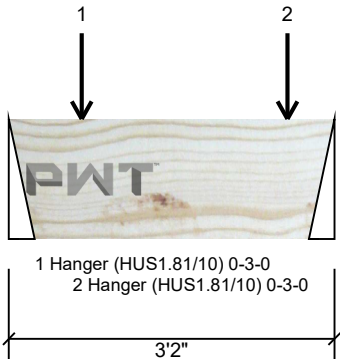


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**FB3 2.0E 2900Fb PWT LVL 1.750" X 14.000" - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	No
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	351	254	0	0	0
2	Vertical	420	263	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	15%	254 / 351	605	L	D+L
2 - Hanger	3.000"	Vert	17%	263 / 420	683	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	314 ft-lb	8 1/2"	13396 ft-lb	2%	D+L	L
Shear	673 lb	1'9"	4655 lb	14%	D+L	L
LL Defl inch	0.001 (L/31145)	1' 13/16"	0.093 (L/360)	1%	L	L
TL Defl inch	0.002 (L/18189)	1' 5/8"	0.140 (L/240)	1%	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.001", Long Term = 0.001".
- 3 Fill all hanger nailing holes.
- 4 Left Header: SPF, Thickness: 2 1/2"
- 5 Right Header: DF, Thickness: 3 1/2"
- 6 Girders are designed to be supported on the bottom edge only.
- 7 Top must be laterally braced at end bearings.
- 8 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Point	0-8-8		Far Face	272 lb	386 lb	0 lb	0 lb	0 lb	J3
2	Point	2-8-8		Far Face	223 lb	385 lb	0 lb	0 lb	0 lb	J3
	Self Weight				7 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

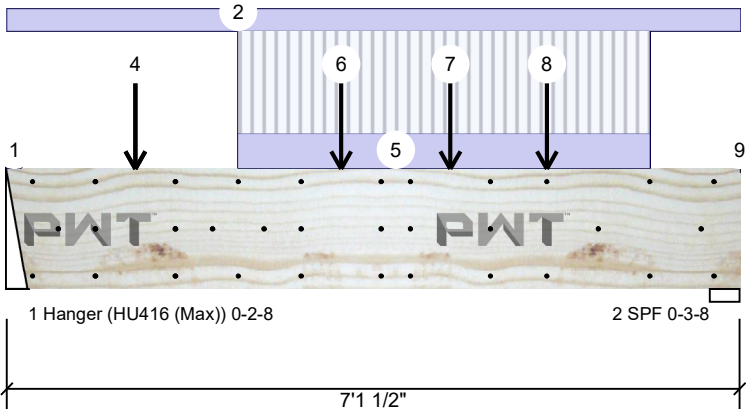
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB4 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	No
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1693	1152	0	0	0
2	Vertical	1445	1086	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	2.500"	Vert	43%	1152 / 1693	2845	L	D+L
2 - SPF	3.500"	Vert	49%	1086 / 1445	2531	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	5325 ft-lb	3'4 15/16"	26792 ft-lb	20%	D+L	L
Shear	2930 lb	1'4 1/2"	9310 lb	31%	D+L	L
LL Defl inch	0.023 (L/3538)	3'5 3/8"	0.225 (L/360)	10%	L	L
TL Defl inch	0.039 (L/2057)	3'6 1/8"	0.338 (L/240)	12%	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.016", Long Term = 0.025".
- 3 Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 6 Fill all hanger nailing holes.
- 7 Left Header: DF, Thickness: 3 1/2"
- 8 Girders are designed to be supported on the bottom edge only.
- 9 Top loads must be supported equally by all plies.
- 10 Top must be laterally braced at end bearings.
- 11 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-0-0 to 0-1-12		Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 7-1-8		Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Point	1-3-0		Far Face	185 lb	511 lb	0 lb	0 lb	0 lb	J4

Continued on page 2...

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

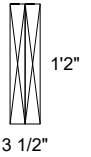
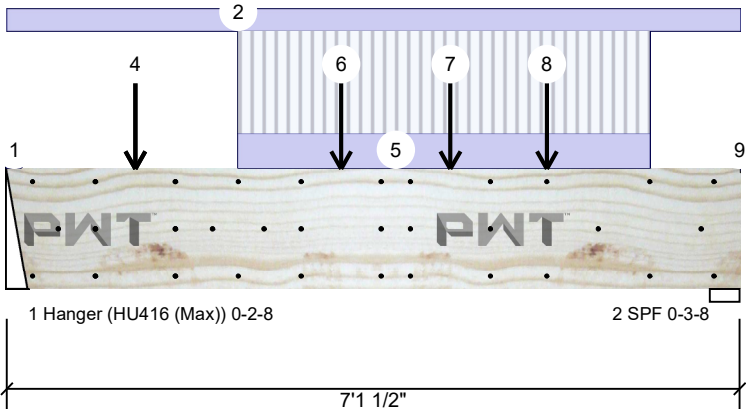
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB4 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
4	Point	1-3-0		Near Face	264 lb	495 lb	0 lb	0 lb	0 lb	J6
5	Part. Uniform	2-3-0 to 6-3-0		Far Face	97 PLF	277 PLF	0 PLF	0 PLF	0 PLF	
6	Point	3-3-0		Near Face	248 lb	446 lb	0 lb	0 lb	0 lb	J6
7	Point	4-3-12		Near Face	510 lb	257 lb	0 lb	0 lb	0 lb	J6
8	Point	5-3-0		Near Face	107 lb	321 lb	0 lb	0 lb	0 lb	J6
9	Part. Uniform	7-1-8 to 7-1-8		Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				14 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

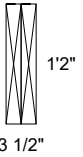
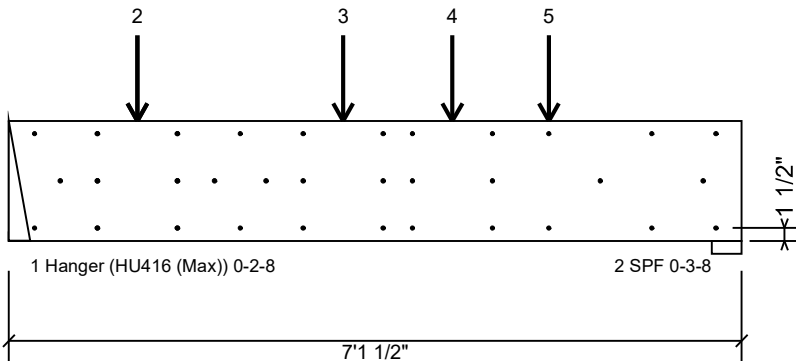
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB4 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. except for regions covered by concentrated load fastening. Maximum end distance not to exceed 6". Clinch Nails where possible.

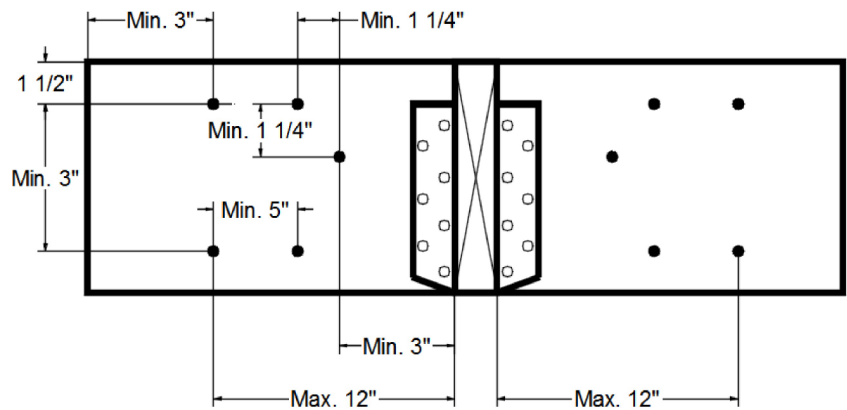
Capacity	53.0 %
Load	187.0 PLF
Yield Limit per Foot	352.8 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>M</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

**Concentrated Load**

Fasten at concentrated side load at 1-3-0 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity	53.8 %
Load	379.5lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>M</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Concentrated Load**

Fasten at concentrated side load at 3-3-0 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity	49.2 %
Load	347.0lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>M</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

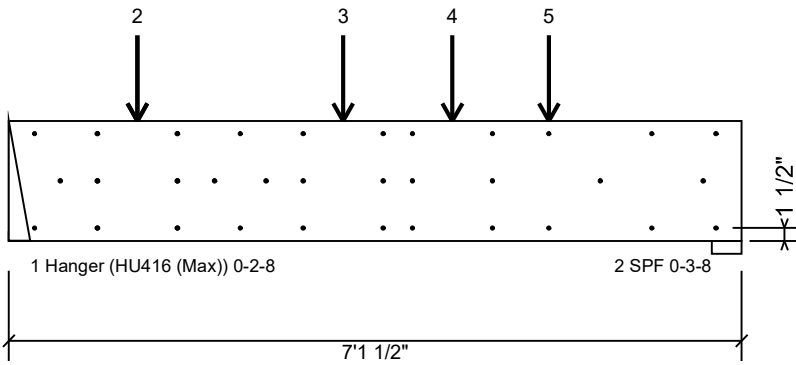
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB4 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



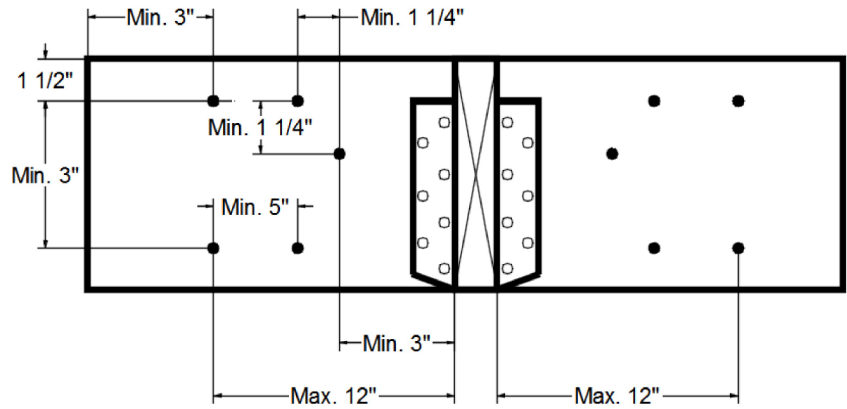
**Multi-Ply Analysis**

**Concentrated Load**

Fasten at concentrated side load at 4-3-12 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity	54.4 %
Load	383.5lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>m</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

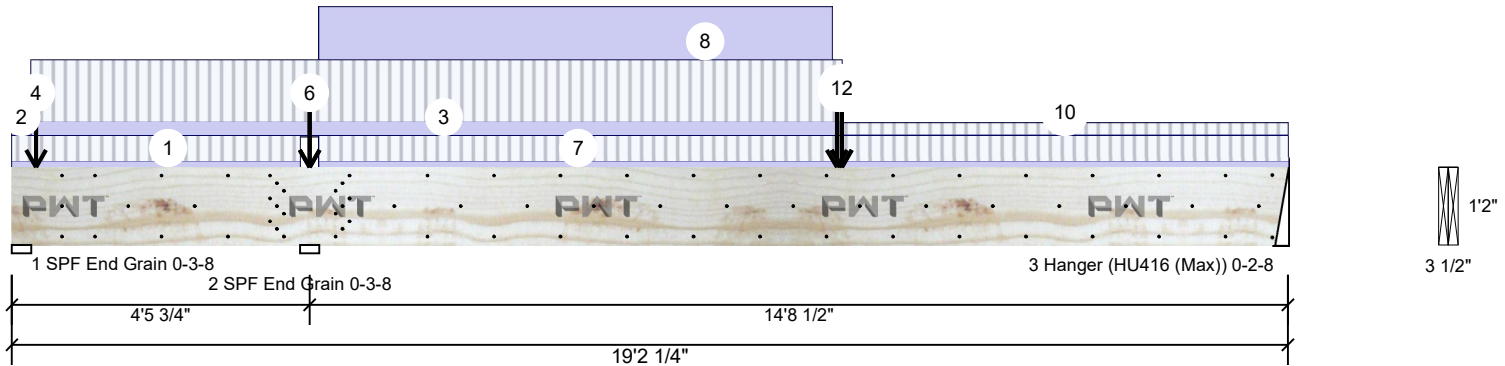
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB5 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	No
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	605 (-406)	(-60)	0	0	0
2	Vertical	3160	2451	0	0	0
3	Vertical	405	332	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	Vert	5%	-103 / 604	501 (-552)	L_	D+(D+L)
2 - SPF End Grain	3.500"	Vert	56%	2506 / 3218	5724	LL	D+L
3 - Hanger	2.500"	Vert	11%	320 / 392	712	_L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-3886 ft-lb	4'5 3/4"	26792 ft-lb	15%	D+L	LL
Pos Moment	3249 ft-lb	12'4 7/8"	26792 ft-lb	12%	D+L	_L
Shear	1412 lb	5'9 1/2"	9310 lb	15%	D+L	LL
LL Defl inch	0.040 (L/4345)	12'1 15/16"	0.485 (L/360)	8%	L	_L
TL Defl inch	0.078 (L/2254)	12'1 3/8"	0.728 (L/240)	11%	D+L	_L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Dead Load Deflection: Instant = 0.037", Long Term = 0.056".
- 3 Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 6 Fill all hanger nailing holes.
- 7 Right Header: DF, Thickness: 5 1/4"
- 8 Girders are designed to be supported on the bottom edge only.
- 9 Top loads must be supported equally by all plies.
- 10 Tie-down connection required at bearing 1 for uplift 552 lb (Combination D+L, Load Case \_L).
- 11 Top must be laterally braced at end bearings.
- 12 Bottom must be laterally braced at end bearings.

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

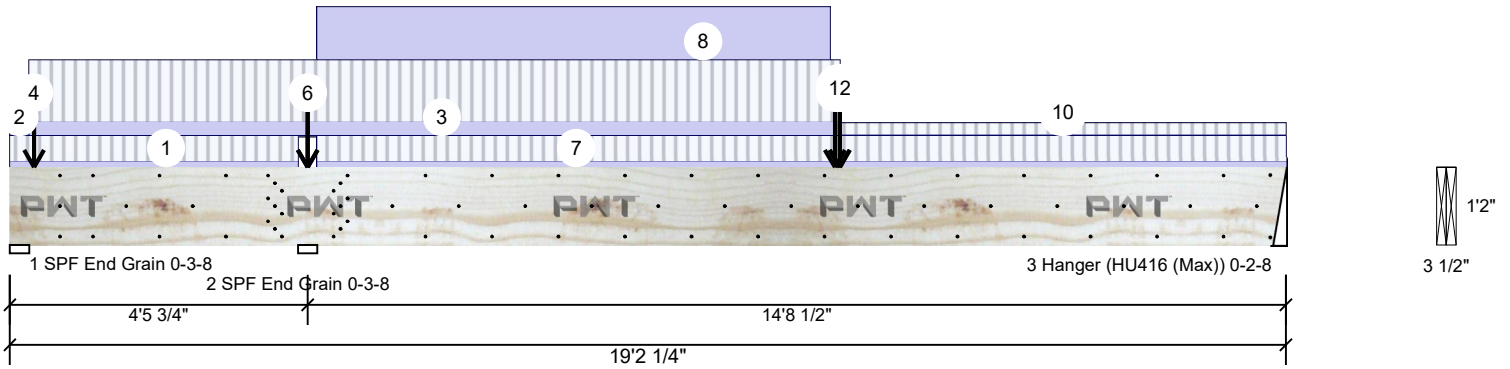
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB5 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 4-4-0	0-8-6	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 0-3-8	0-3-10	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
3	Tie-In	0-3-8 to 12-5-12	1-8-8	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
4	Point	0-4-6		Near Face	263 lb	420 lb	0 lb	0 lb	0 lb	FB3
5	Point	4-5-12		Top	9 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
6	Point	4-5-12		Far Face	1152 lb	1693 lb	0 lb	0 lb	0 lb	FB4
7	Tie-In	4-7-8 to 19-2-4	0-8-6	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
8	Part. Uniform	4-7-8 to 12-4-0		Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
9	Point	12-4-14		Near Face	149 lb	194 lb	0 lb	0 lb	0 lb	FB3
10	Tie-In	12-5-12 to 19-2-4	0-3-10	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
11	Point	12-5-12		Top	6 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
12	Point	12-5-12		Top	51 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
	Self Weight				14 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

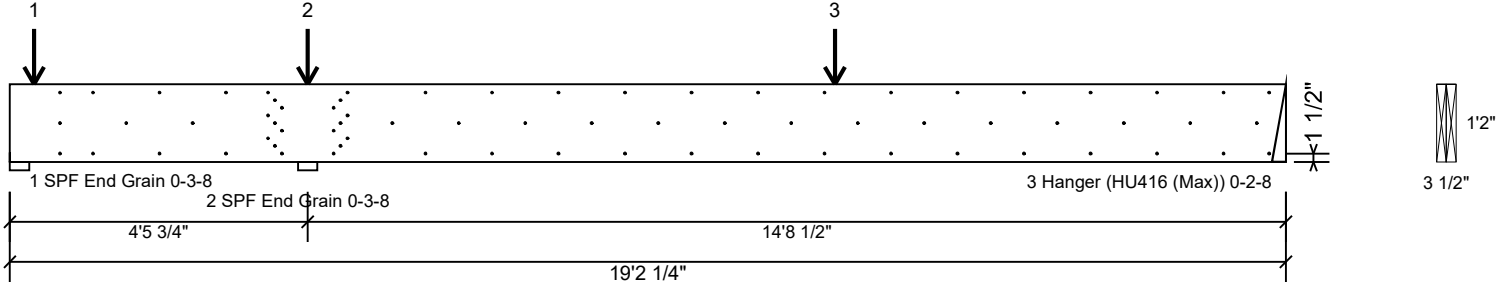
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB5 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. except for regions covered by concentrated load fastening. Maximum end distance not to exceed 6". Clinch Nails where possible.

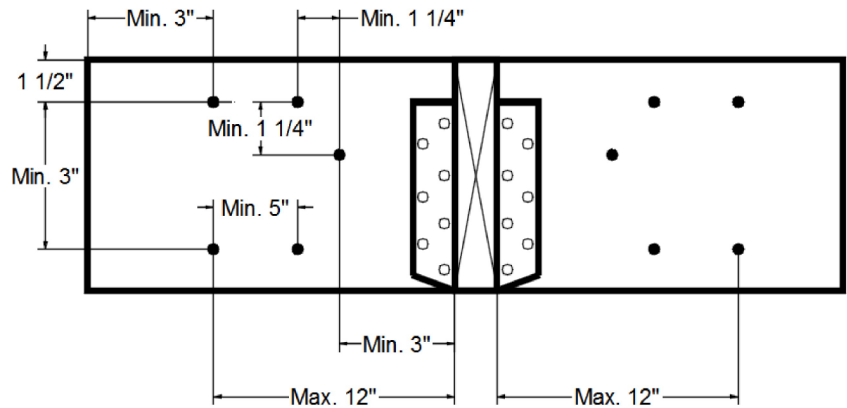
Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	352.8 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>M</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Concentrated Load**

Fasten at concentrated side load at 0-4-6 with a minimum of (3) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity	96.8 %
Load	341.5lb.
Total Yield Limit	352.7 lb.
C <sub>g</sub>	0.9998
C <sub>M</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Concentrated Load**

Fasten at concentrated side load at 4-5-12 with a minimum of (18) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity	67.2 %
Load	1422.5lb.
Total Yield Limit	2116.2 lb.
C <sub>g</sub>	0.9998
C <sub>M</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078

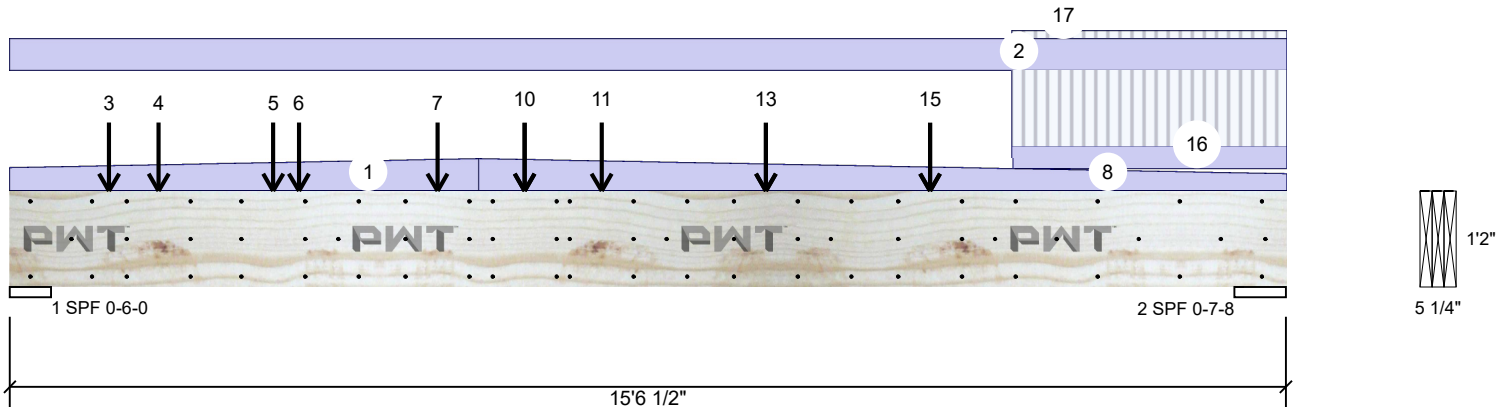


This design is valid until 9/3/2027



**FB6 2.0E 2900Fb PWT LVL 1.750" X 14.000" 3-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	Yes
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1877 (-38)	2761	0	0	0
2	Vertical	1789 (-135)	2294	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	Vert	35%	2761 / 1877	4638	L	D+L
2 - SPF	7.500"	Vert	24%	2294 / 1789	4083	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	15663 ft-lb	6'11 3/16"	41795 ft-lb	37%	D+L	L
Shear	4671 lb	1'8"	13965 lb	33%	D+L	L
LL Defl inch	0.110 (L/1583)	7'6 5/16"	0.485 (L/360)	23%	L	L
TL Defl inch	0.269 (L/648)	7'5 7/8"	0.727 (L/240)	37%	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.159", Long Term = 0.239".
- 3 Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Nail from both sides. Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Concentrated load fastener specification is in addition to hanger fasteners if a hanger is present.
- 6 Girders are designed to be supported on the bottom edge only.
- 7 Top loads must be supported equally by all plies.
- 8 Top must be laterally braced at a maximum of 13'5 9/16" o.c.
- 9 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tapered Start	0-0-0		Top	73 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	5-8-8			100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 15-6-8		Top	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Point	1-2-8		Far Face	44 lb	175 lb	0 lb	0 lb	0 lb	J11
4	Point	1-9-12		Far Face	332 lb	405 lb	0 lb	0 lb	0 lb	FB5

Continued on page 2...

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

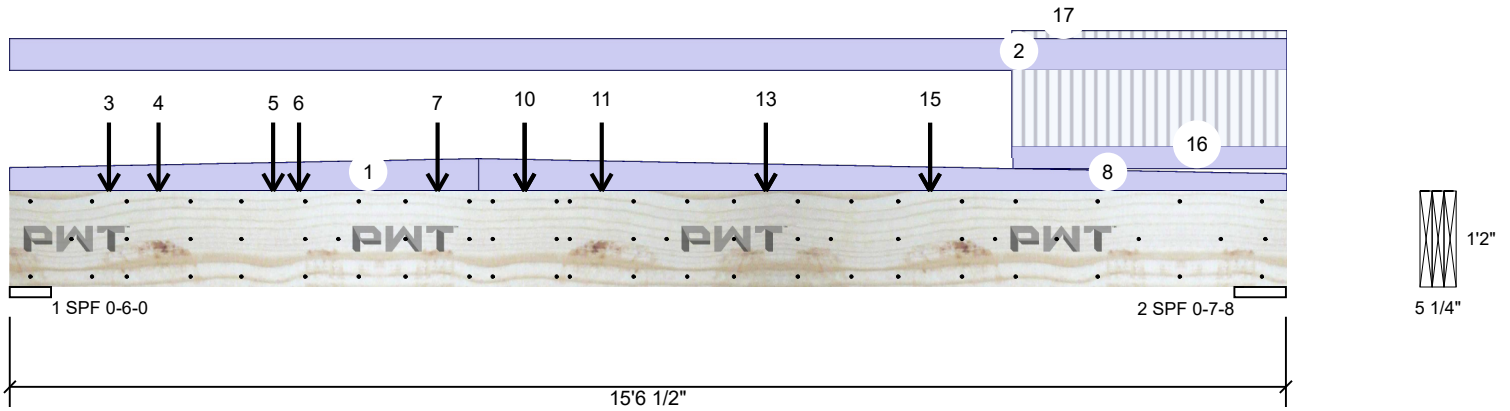
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A.  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB6 2.0E 2900Fb PWT LVL 1.750" X 14.000" 3-Ply - PASSED**

Level: 2nd Floor



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
5	Point	3-2-8		Far Face	279 lb	495 lb	0 lb	0 lb	0 lb	J6
6	Point	3-6-4		Top	2 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
7	Point	5-2-8		Far Face	267 lb	446 lb	0 lb	0 lb	0 lb	J6
8	Tapered Start	5-8-8		Top	100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	15-6-8			55 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
9	Point	6-3-4		Top	2 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
10	Point	6-3-4		Far Face	510 lb	257 lb	0 lb	0 lb	0 lb	J6
11	Point	7-2-8		Far Face	107 lb	321 lb	0 lb	0 lb	0 lb	J6
12	Point	9-2-8		Far Face	105 lb	392 lb	0 lb	0 lb	0 lb	J10
13	Point	9-2-8		Far Face	0 lb	-57 lb	0 lb	0 lb	0 lb	J10
14	Point	11-2-8		Far Face	99 lb	392 lb	0 lb	0 lb	0 lb	J10
15	Point	11-2-8		Far Face	0 lb	-32 lb	0 lb	0 lb	0 lb	J10
16	Part. Uniform	12-2-8 to 15-6-8		Far Face	70 PLF	235 PLF	0 PLF	0 PLF	0 PLF	
17	Part. Uniform	12-2-8 to 15-6-8		Far Face	0 PLF	-25 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				21 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtwp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

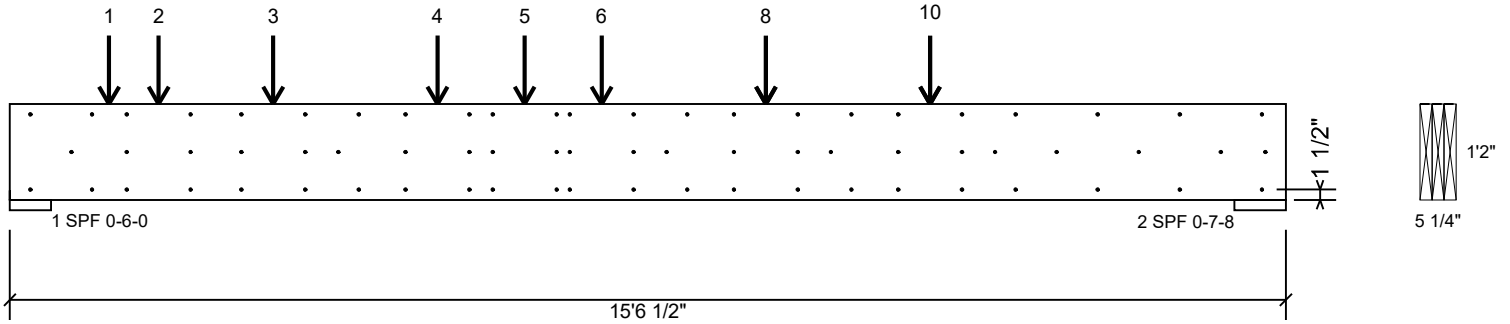
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB6 2.0E 2900Fb PWT LVL 1.750" X 14.000" 3-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. except for regions covered by concentrated load fastening. Nail from both sides. Maximum end distance not to exceed 6". Clinch Nails where possible.

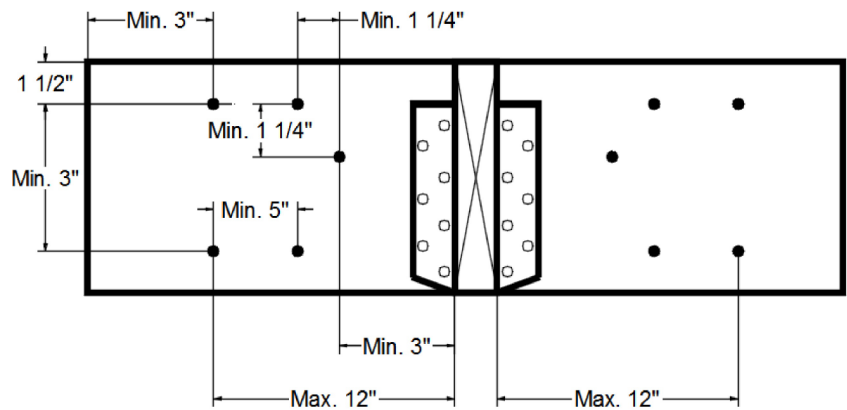
Capacity	57.6 %
Load	203.3 PLF
Yield Limit per Foot	352.8 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>M</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

**Concentrated Load**

Fasten at concentrated side load at 1-9-12 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	69.7 %
Load	491.3lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>M</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Concentrated Load**

Fasten at concentrated side load at 3-2-8 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	73.2 %
Load	516.0lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>M</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

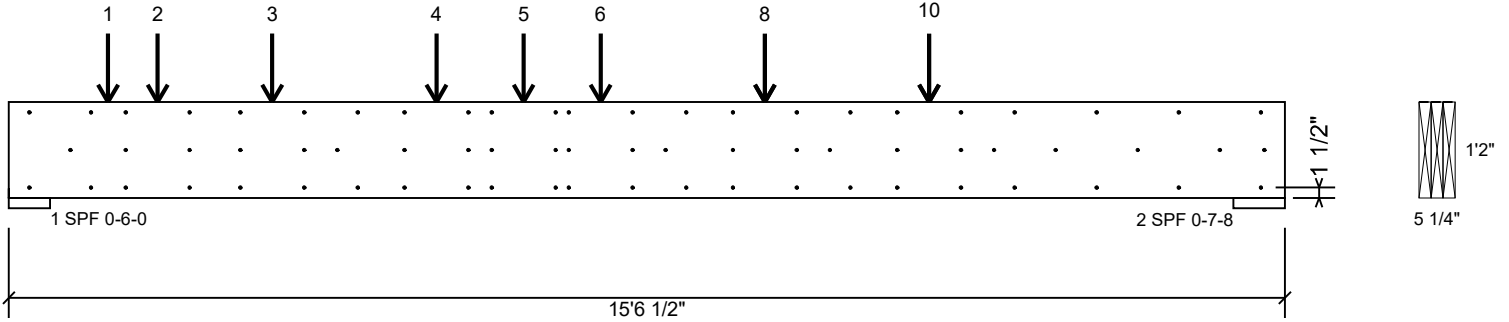
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB6 2.0E 2900Fb PWT LVL 1.750" X 14.000" 3-Ply - PASSED**

Level: 2nd Floor



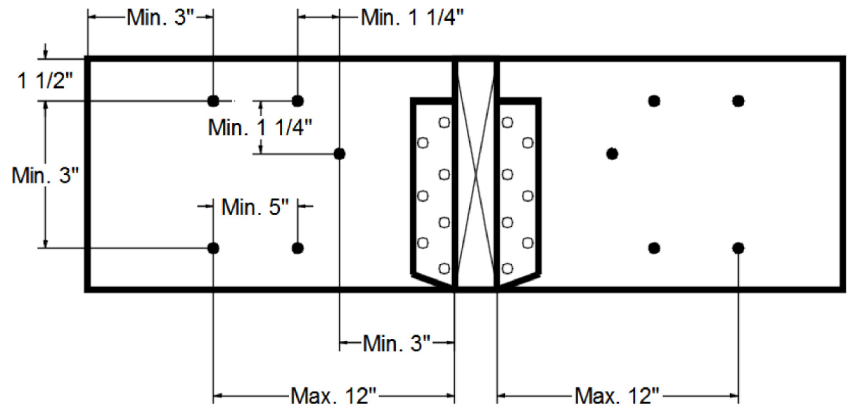
**Multi-Ply Analysis**

**Concentrated Load**

Fasten at concentrated side load at 5-2-8 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	67.4 %
Load	475.3lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>m</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Concentrated Load**

Fasten at concentrated side load at 6-3-4 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	72.5 %
Load	511.3lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>m</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

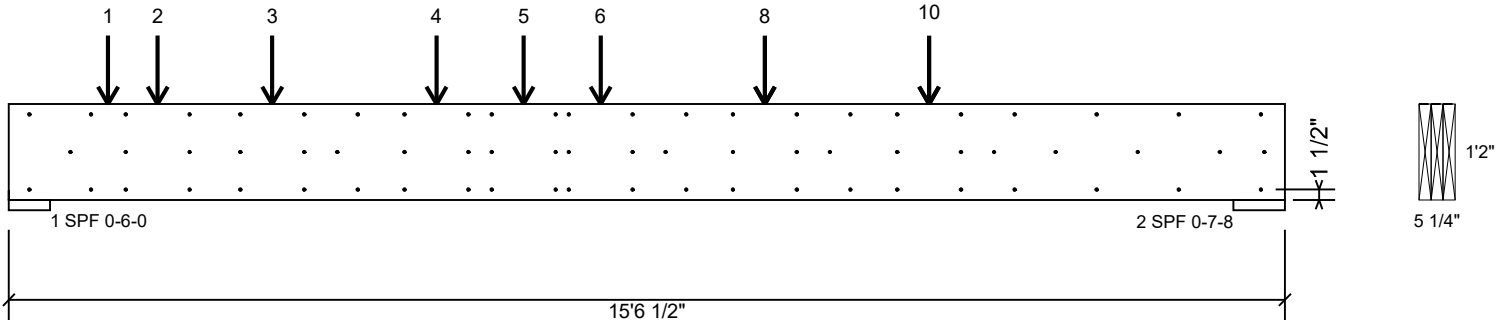
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB6 2.0E 2900Fb PWT LVL 1.750" X 14.000" 3-Ply - PASSED**

Level: 2nd Floor



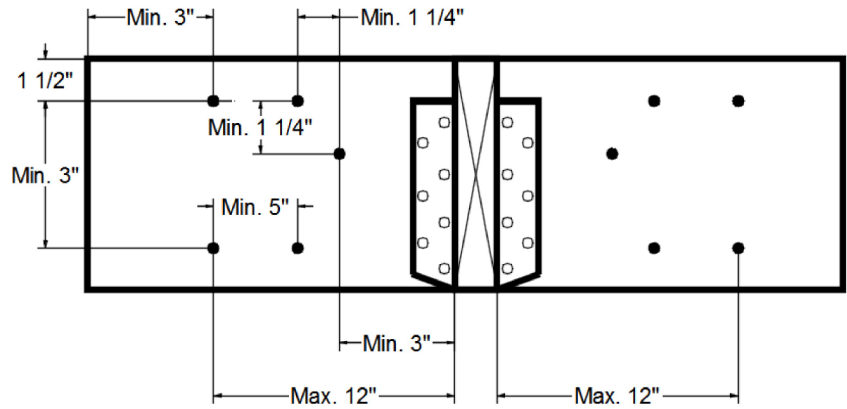
**Multi-Ply Analysis**

**Concentrated Load**

Fasten at concentrated side load at 7-2-8 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	40.5 %
Load	285.3lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>m</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Concentrated Load**

Fasten at concentrated side load at 9-2-8 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	47.0 %
Load	331.3lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>m</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

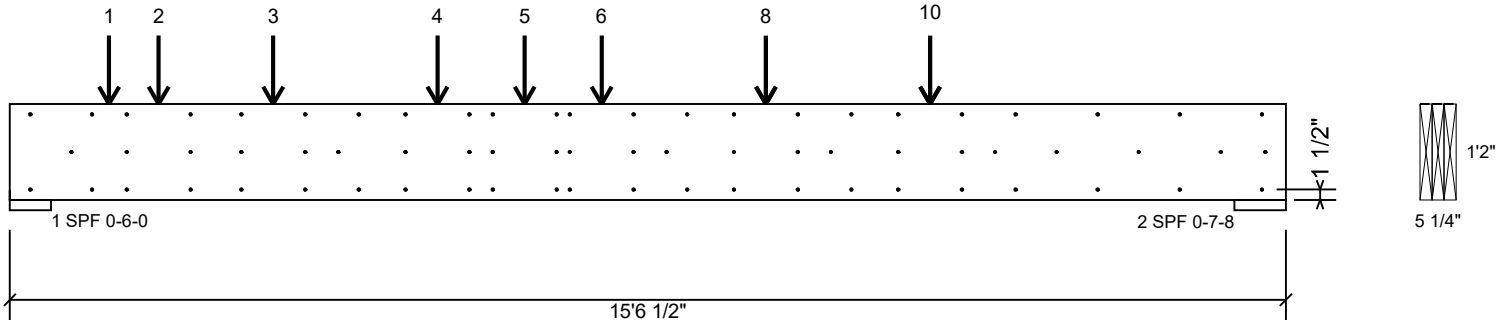
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB6 2.0E 2900Fb PWT LVL 1.750" X 14.000" 3-Ply - PASSED**

Level: 2nd Floor



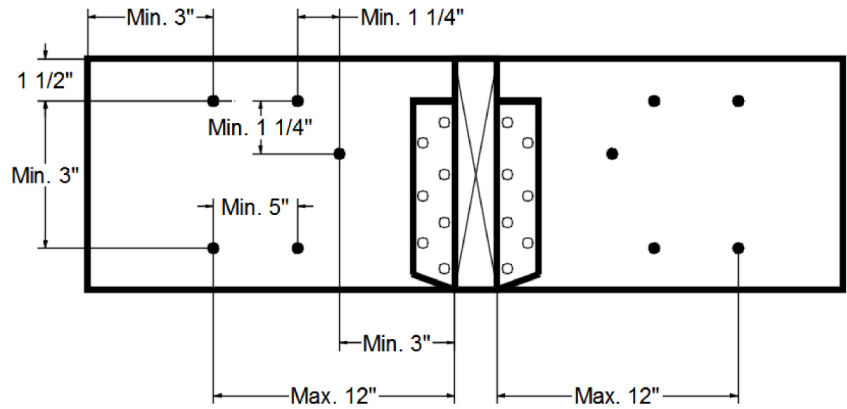
**Multi-Ply Analysis**

**Concentrated Load**

Fasten at concentrated side load at 11-2-8 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

Capacity	46.4 %
Load	327.3lb.
Total Yield Limit	705.4 lb.
C <sub>g</sub>	0.9998
C <sub>m</sub>	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

**Min/Max fastener distances for Concentrated Side Loads**



**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

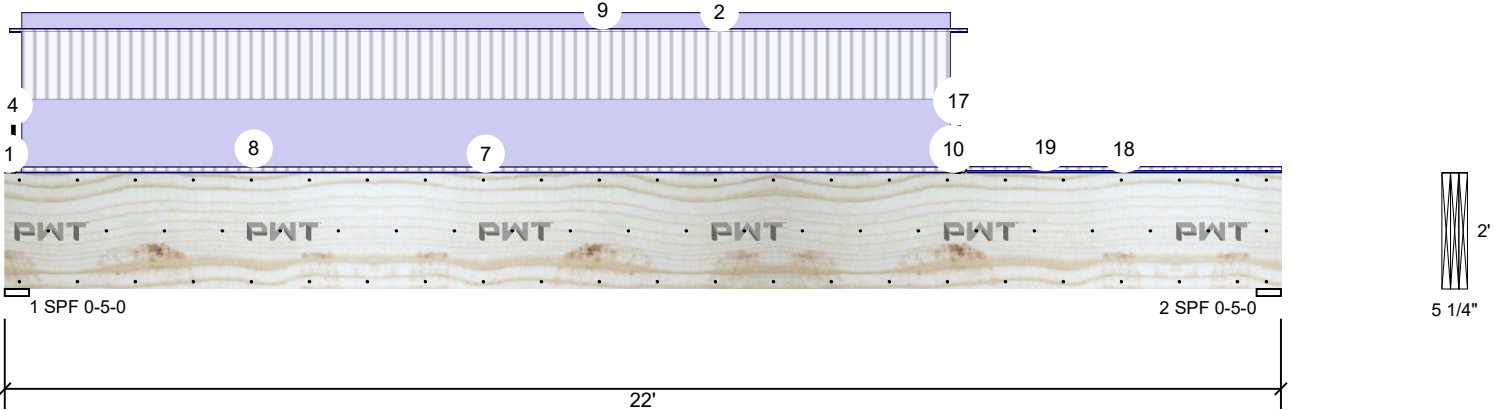


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**FB7 2.0E 2900Fb PWT LVL 1.750" X 24.000" 3-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	Yes
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	4895 (-2)	6143	0	0	0
2	Vertical	4652 (-5)	5564	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.000"	Vert	99%	6143 / 4895	11038	L	D+L
2 - SPF	5.000"	Vert	92%	5564 / 4652	10216	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	62537 ft-lb	11'9 9/16"	110274 ft-lb	57%	D+L	L
Shear	10052 lb	19'7"	23940 lb	42%	D+L	L
LL Defl inch	0.217 (L/1179)	11'2 15/16"	0.710 (L/360)	31%	L	L
TL Defl inch	0.482 (L/531)	11'2 9/16"	1.066 (L/240)	45%	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.265", Long Term = 0.397".
- 3 Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Nail from both sides. Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be laterally braced at a maximum of 5'2 7/16" o.c.
- 8 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie-In	0-0-0 to 0-3-8	1-0-2	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-2 to 16-7-0	0-2-12	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
3	Point	0-1-12		Top	4 lb	0 lb	0 lb	0 lb	0 lb	GE
	Bearing Length	0-3-8								
4	Point	0-1-12		Top	35 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								

Continued on page 2...

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

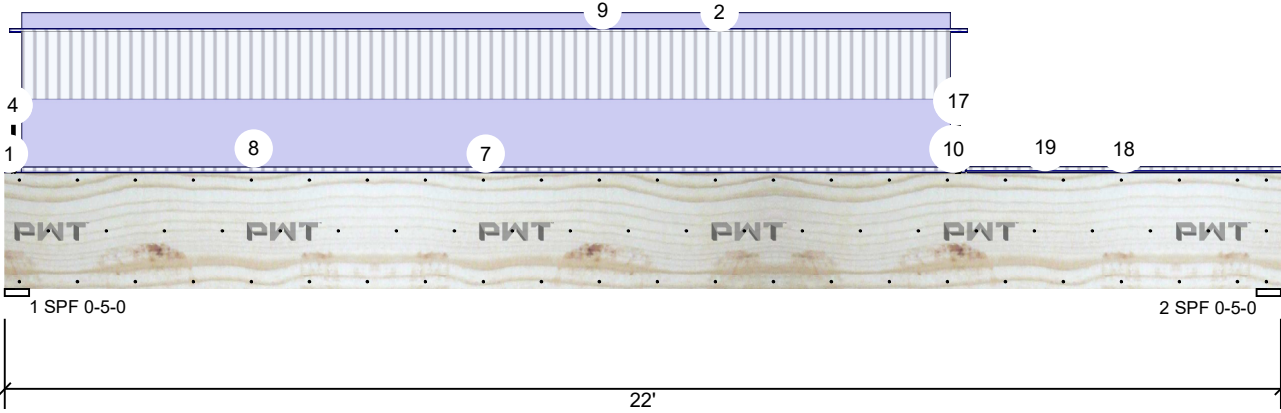
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**FB7 2.0E 2900Fb PWT LVL 1.750" X 24.000" 3-Ply - PASSED**

Level: 2nd Floor



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
7	Tie-In	0-3-8 to 16-3-8	1-0-2	Top	10 PSF	20 PSF	0 PSF	0 PSF	0 PSF	
8	Part. Uniform	0-3-8 to 16-3-8		Top	390 PLF	390 PLF	0 PLF	0 PLF	0 PLF	R
9	Part. Uniform	0-3-8 to 16-3-8		Top	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
10	Tie-In	16-3-8 to 16-6-8	1-0-2	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
11	Point	16-5-0		Near Face	95 lb	83 lb	0 lb	0 lb	0 lb	FB1
12	Point	16-5-0		Near Face	0 lb	-7 lb	0 lb	0 lb	0 lb	FB1
13	Point	16-5-4		Top	55 lb	55 lb	0 lb	0 lb	0 lb	R
	Bearing Length	0-3-8								
14	Point	16-5-4		Top	26 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
15	Point	16-5-4		Top	2639 lb	2535 lb	0 lb	0 lb	0 lb	
	Bearing Length	0-3-8								
16	Point	16-5-4		Top	9 lb	9 lb	0 lb	0 lb	0 lb	R
	Bearing Length	0-3-8								
17	Point	16-5-4		Top	27 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
18	Tie-In	16-7-0 to 22-0-0	0-2-12	Top	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
19	Tie-In	16-7-0 to 22-0-0	0-6-14	Top	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				36 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027



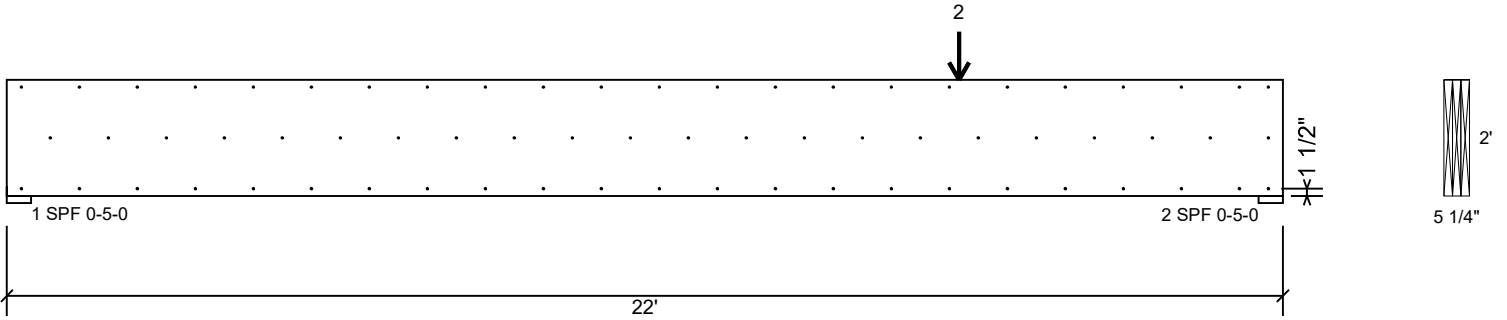


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**FB7 2.0E 2900Fb PWT LVL 1.750" X 24.000" 3-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 3 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6". Clinch Nails where possible.

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	352.8 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

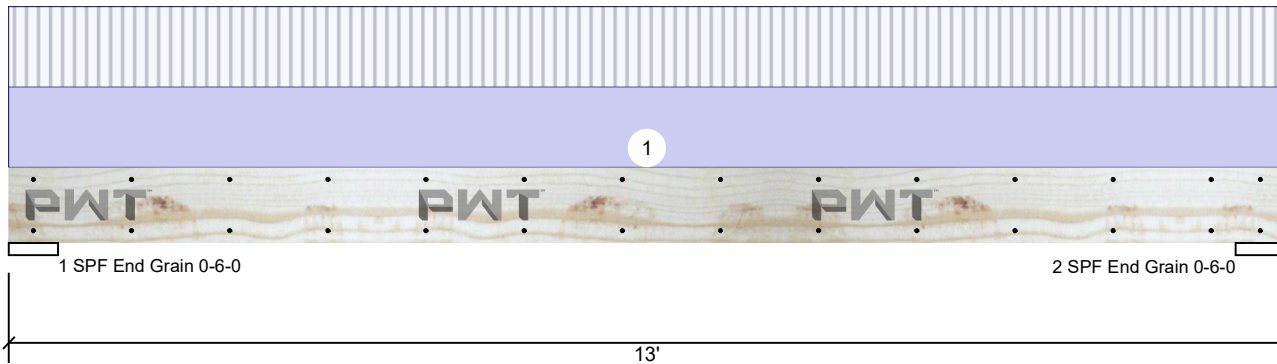


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**DB4 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	No
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	780	840	0	0	0
2	Vertical	780	840	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	6.000"	Vert	10%	840 / 780	1620	L	D+L
2 - SPF End Grain	6.000"	Vert	10%	840 / 780	1620	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4581 ft-lb	6'6"	12416 ft-lb	37%	D+L	L
Shear	1303 lb	11'8 3/4"	6151 lb	21%	D+L	L
LL Defl inch	0.134 (L/1084)	6'6"	0.404 (L/360)	33%	L	L
TL Defl inch	0.279 (L/522)	6'6"	0.606 (L/240)	46%	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.145", Long Term = 0.217".
- 3 Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be laterally braced at end bearings.
- 8 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-0-0 to 13-0-0		Top	120 PLF	120 PLF	0 PLF	0 PLF	0 PLF	R
	Self Weight				9 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

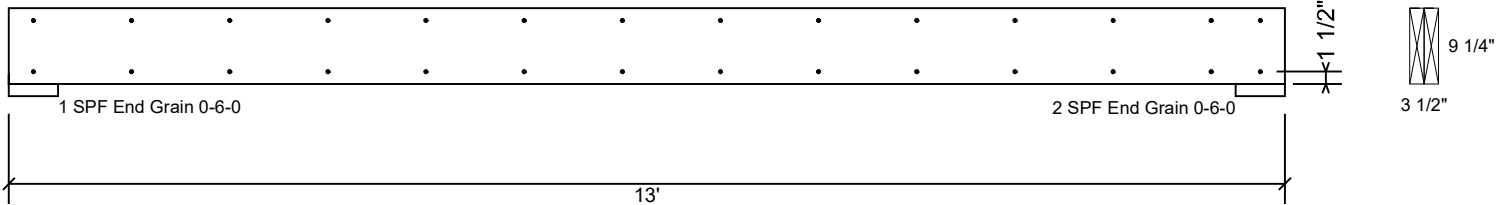


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**DB4 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. Maximum end distance not to exceed 6". Clinch Nails where possible.

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	235.2 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

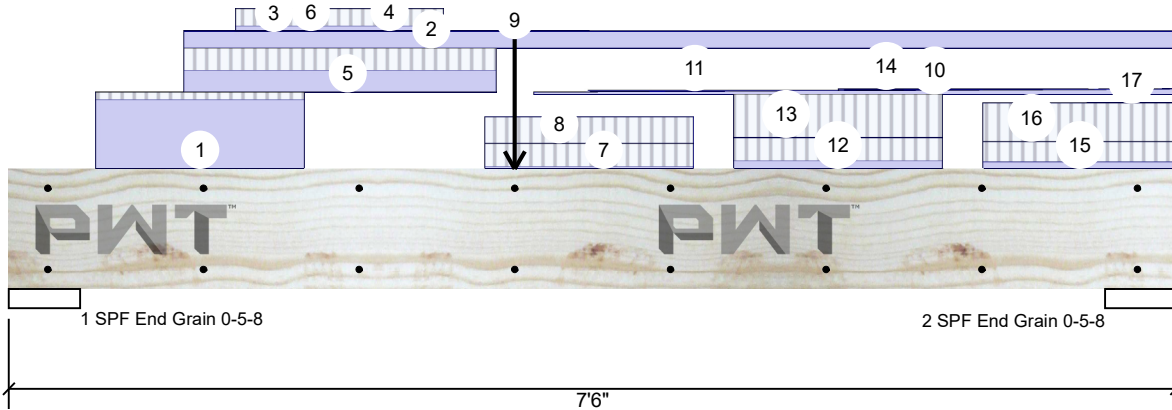
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**HD1 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	No
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1938 (-205)	2507	0	0	0
2	Vertical	1546 (-616)	1632	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.500"	Vert	31%	2507 / 1938	4445	L	D+L
2 - SPF End Grain	5.500"	Vert	22%	1632 / 1546	3178	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10419 ft-lb	3'3"	12416 ft-lb	84%	D+L	L
Shear	4098 lb	1'2 3/4"	6151 lb	67%	D+L	L
LL Defl inch	0.089 (L/904)	3'4 11/16"	0.224 (L/360)	40%	L	L
TL Defl inch	0.187 (L/430)	3'4 1/2"	0.335 (L/240)	56%	D+L	L

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.098", Long Term = 0.147".
- 3 Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be laterally braced at end bearings.
- 8 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-6-12 to 1-10-12		Top	409 PLF	39 PLF	0 PLF	0 PLF	0 PLF	J7
2	Part. Uniform	1-1-8 to 7-6-0		Top	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	1-1-8 to 7-6-0		Top	5 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
4	Tapered Start	1-1-8		Top	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	3-8-11		Top	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
5	Part. Uniform	1-1-8 to 3-1-8		Top	130 PLF	130 PLF	0 PLF	0 PLF	0 PLF	R

Continued on page 2...

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

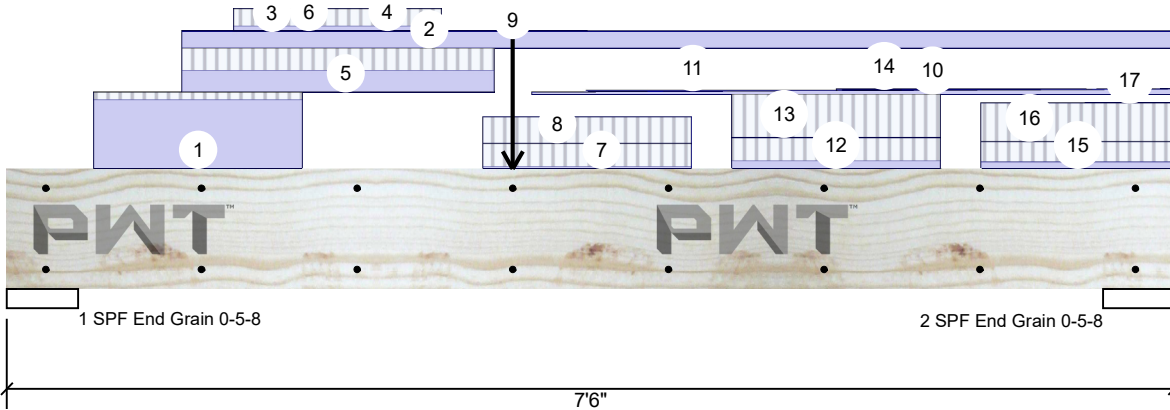
U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

**HD1 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: 2nd Floor



...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
6	Part. Uniform	1-5-8 to 2-9-8		Top	31 PLF	99 PLF	0 PLF	0 PLF	0 PLF	J8
7	Part. Uniform	3-0-11 to 4-4-11		Top	-16 PLF	133 PLF	0 PLF	0 PLF	0 PLF	J2
8	Part. Uniform	3-0-11 to 4-4-11		Top	0 PLF	-153 PLF	0 PLF	0 PLF	0 PLF	J2
9	Point	3-3-0		Top	2639 lb	2535 lb	0 lb	0 lb	0 lb	
	Bearing Length	0-3-8								
10	Tapered Start	3-4-8		Top	10 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	7-6-0			29 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
11	Tapered Start	3-8-11		Top	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	5-3-14			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
12	Part. Uniform	4-7-14 to 5-11-14		Top	-49 PLF	133 PLF	0 PLF	0 PLF	0 PLF	J1
13	Part. Uniform	4-7-14 to 5-11-14		Top	0 PLF	-255 PLF	0 PLF	0 PLF	0 PLF	J1
14	Tapered Start	5-3-14		Top	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	6-11-2			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
15	Part. Uniform	6-3-2 to 7-6-0		Top	-43 PLF	116 PLF	0 PLF	0 PLF	0 PLF	J1
16	Part. Uniform	6-3-2 to 7-6-0		Top	0 PLF	-223 PLF	0 PLF	0 PLF	0 PLF	J1
17	Tapered Start	6-11-2		Top	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	7-6-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				9 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

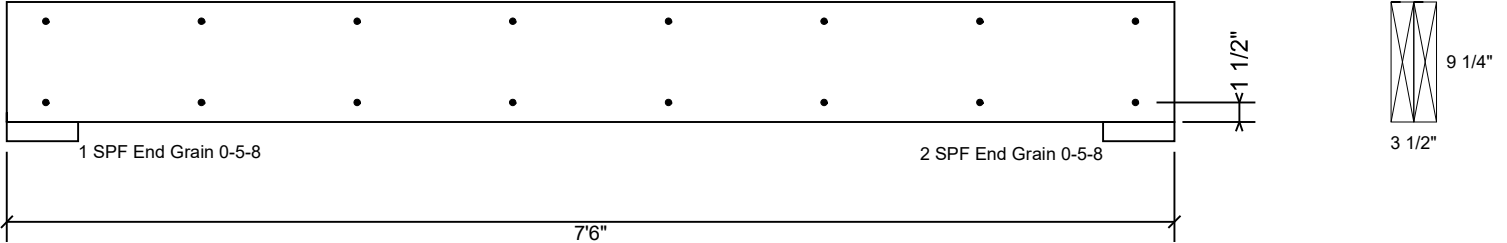


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**HD1 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. Maximum end distance not to exceed 6". Clinch Nails where possible.

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	235.2 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtwpc.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

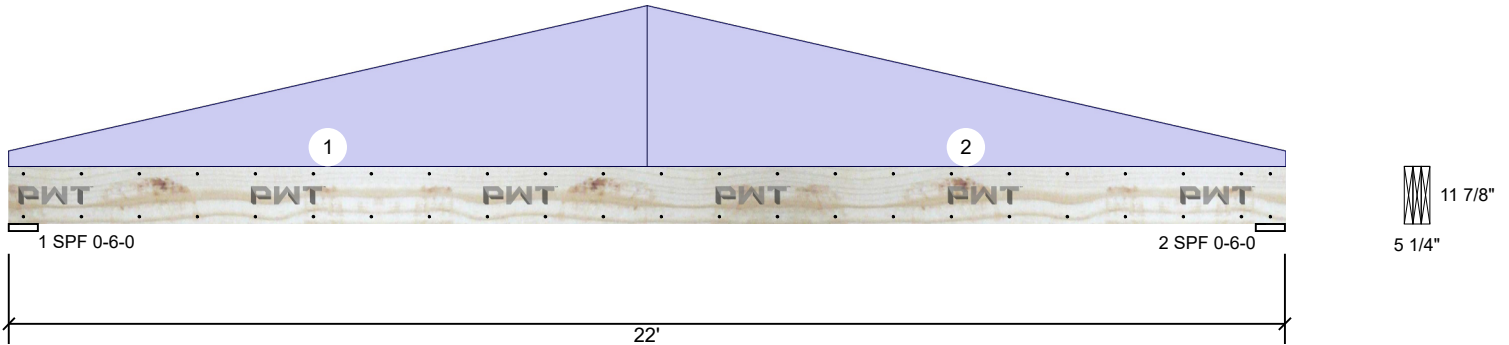


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**HD2 2.0E 2900Fb PWT LVL 1.750" X 11.875" 3-Ply - PASSED**

Level: 2nd Floor



**Member Information**

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	Yes
Deck:	Not Checked

**Reactions PATTERNED lb (Uplift)**

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	801	0	0	0
2	Vertical	0	801	0	0	0

**Bearings**

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	Vert	6%	801 / 0	801	Uniform	D
2 - SPF	6.000"	Vert	6%	801 / 0	801	Uniform	D

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4966 ft-lb	11'	27943 ft-lb	18%	D	Uniform
Shear	751 lb	20'6 1/8"	10661 lb	7%	D	Uniform
LL Defl inch	0.000 (L/999)	0	999.000 (L/0)	0%		
TL Defl inch	0.274 (L/924)	11' 1/16"	1.056 (L/240)	26%	D	Uniform

**Design Notes**

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.274", Long Term = 0.412".
- 3 Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Nail from both sides. Clinch Nails where possible.
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top loads must be supported equally by all plies.
- 7 Top must be laterally braced at end bearings.
- 8 Bottom must be laterally braced at end bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tapered Start	0-0-0		Top	10 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	11-0-0			100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
2	Tapered Start	11-0-0		Top	100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	22-0-0			10 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				18 PLF					

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.  
 Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027

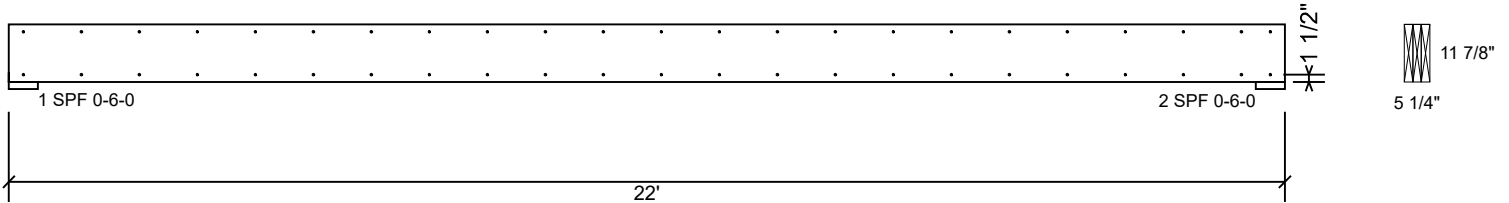


Client: 84 Lumber-Fayetteville #2307  
 Project: CC2724-Lot 501 Creekside Oaks South  
 Address: CC2724-Lot 501 Creekside Oaks South

Date: 1/31/2025  
 Input by: Will Evans  
 Job Name: 202501-68922  
 Project #: 68922

**HD2 2.0E 2900Fb PWT LVL 1.750" X 11.875" 3-Ply - PASSED**

Level: 2nd Floor



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6". Clinch Nails where possible.

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	235.2 PLF
Yield Limit per Fastener	117.6 lb.
C <sub>m</sub>	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.

Copyright 2023 All rights reserved by Pacific Woodtech Corp 1850 Park Lane, Burlington, WA 98233

**Manufacturer Info**

Pacific Woodtech Corp  
 1850 Park Lane  
 Burlington, WA 98233  
 (800) 515-7570  
 www.pwtewp.com  
 ICC-ES: ESR-2909 ESR-2403 APA:  
 PR-L233 PR-L280

U.S. Lumber  
 2160 Satellite Blvd., Suite 450, GA  
 U.S.A  
 30097  
 888-613-5078



This design is valid until 9/3/2027