

84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans

Job Name: 202509-81714 81714

Project #:

DB₁ 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED

Level: 2ND FLR





Const

0

0

3 1/2'

Wind

0

0

Page 1 of 2

11'8 3/4'

Floor

ASD

No

IRC 2021

Not Checked

Member Inform	nation
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

Rea	ctions PAT	TERNED Ib	(Uplift)
Brg	Direction	Live	Dead
1	Vertical	575	631
2	Vertical	602	655

Bearings							
Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	5.500"	Vert	8%	631 / 575	1206	L	D+L
2 - SPF End Grain	2.750"	Vert	17%	655 / 602	1256	L	D+L

Snow

0

0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3417 ft-lb	5'11 3/4"	12416 ft-lb	28%	D+L	L
Shear	1042 lb	1'2 3/4"	6151 lb	17%	D+L	L
LL Defl inch	0.085 (L/1570)	5'11 3/4"	0.372 (L/360)	23%	L	L
TL Defl inch	0.178 (L/752)	5'11 3/4"	0.558 (L/240)	32%	D+L	L

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.093", Long Term = 0.139".
- 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	0-6-0 to 11-8-8		Тор	105 PLF	105 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.

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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 888-613-5078





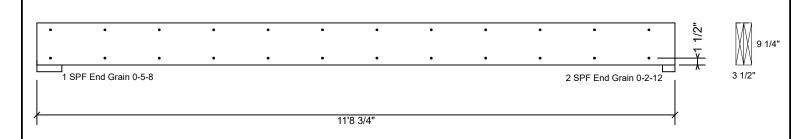
84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans

Job Name: 202509-81714 Project #: 81714

DB₁ 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED

Level: 2ND FLR



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.
CM	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1 00

Notes

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 Client:
 84 Lumber-Fayetteville #2307

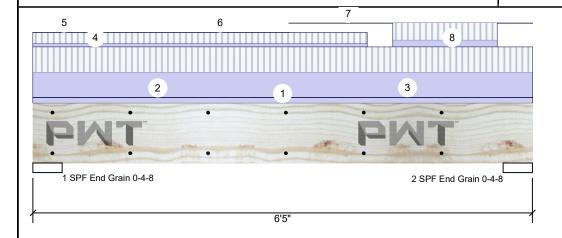
 Project:
 CL3281-3C-GR-CS518

 Address:
 CL3281-3C-GR-CS518

Date: 9/16/2025
Input by: Will Evans
Job Name: 202509-81714
Project #: 81714

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

Level: 2ND FLR



Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Floor

ASD

No

IRC 2021

Not Checked



Page 1 of 3

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

Reactions PATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2091	2019	0	0	0
2	Vertical	2066	2046	0	0	0

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Allalysis	Actual	Location	Allowed	Capacity	COITID.	Case
Moment	5380 ft-lb	3'2 9/16"	12416 ft-lb	43%	D+L	L
Shear	2653 lb	5'3 1/4"	6151 lb	43%	D+L	L
LL Defl inch	0.045 (L/1528)	3'2 1/2"	0.193 (L/360)	24%	L	L
TL Defl inch	0.090 (L/776)	3'2 1/2"	0.290 (L/240)	31%	D+L	L

Bearings

Grain

Bearing Leng	gth Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 4.500 End Grain	O" Vert	35%	2019 / 2091	4110	L	D+L
2 - SPF 4.500 End	0" Vert	35%	2046 / 2066	4112	L	D+L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.044", Long Term = 0.066".
- 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 7	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 6-5-0		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
2	Part. Uniform	0-0-0 to 6-5-0		Тор	5 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
3	Part. Uniform	0-0-0 to 6-5-0		Тор	450 PLF	450 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-0-0 to 4-3-8		Тор	67 PLF	201 PLF	0 PLF	0 PLF	0 PLF	J10
5	Tapered Start	0-0-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	1-3-8			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
Continued or	n page 2									

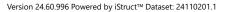
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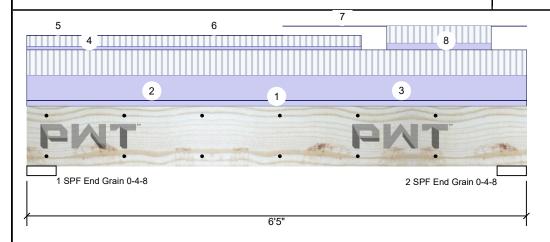


84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714 Project #: 81714

Level: 2ND FLR

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





Page 2 of 3

Continued fro	om 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	Tapered Start	1-3-8		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	3-3-8			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
7	Tapered Start	3-3-8		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	6-5-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	4-7-8 to 5-11-8		Тор	137 PLF	300 PLF	0 PLF	0 PLF	0 PLF	J10
	Self Weight				9 PLF					

Notes

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Client: 84 I Project: CL3 Address: CL

84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans

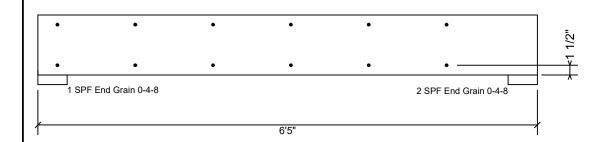
> Job Name: 202509-81714 Project #: 81714

HD1-A 2.0E 2900Fb PWT LVL

1.750" X 9.250"

2-Ply - PASSED

Level: 2ND FLR





Page 3 of 3

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.			
CM	1			
Yield Mode	IV			
Edge Distance	1 1/2"			
Min. End Distance	3"			
Load Combination				
Duration Factor	1 00			

Notes

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Client: 84 Lumber-Fayetteville #2307 Project: Address:

CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

Level: 2ND FLR

Project #: 81714

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

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

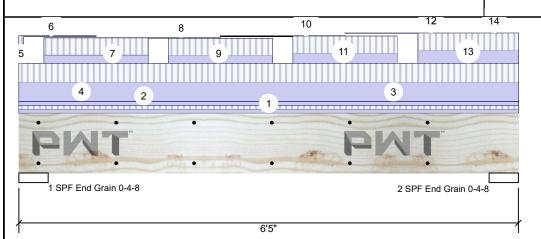
Floor

ASD

No

IRC 2021

Not Checked





Page 1 of 3

Member Information

Type: Plies: Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal - II Temperature: Temp <= 100°F

General Load Floor Live: 40 PSF 10 PSF Dead:

Reactions PATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2771	2605	0	0	0
2	Vertical	2859	2797	0	0	0

/	Analysis Results											
	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case					
	Moment	7142 ft-lb	3'2 5/16"	12416 ft-lb	58%	D+L	L					
	Shear	3484 lb	1'1 3/4"	6151 lb	57%	D+L	L					
	LL Defl inch	0.061 (L/1135)	3'2 3/8"	0.193 (L/360)	32%	L	L					
	TL Defl inch	0.119 (L/584)	3'2 1/2"	0.290 (L/240)	41%	D+L	L					

Bearings

Grain

Bearing	Length	Dir.	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	4.500"	Vert	46%	2605 / 2771	5376	L	D+L
2 - SPF End	4.500"	Vert	48%	2797 / 2859	5656	L	D+L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.058", Long Term = 0.087".
- 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 6-5-0		Тор	88 PLF	88 PLF	0 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 6-5-0		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	0-0-0 to 6-5-0		Тор	5 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
4	Part. Uniform	0-0-0 to 6-5-0		Тор	450 PLF	450 PLF	0 PLF	0 PLF	0 PLF	
5	Part. Uniform	0-0-0 to 0-0-11		Тор	238 PLF	406 PLF	0 PLF	0 PLF	0 PLF	J4
6	Tapered Start	0-0-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
Continued on page	ontinued on page 2									

Continued on page 2...

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HD1-B

Continued from page 1

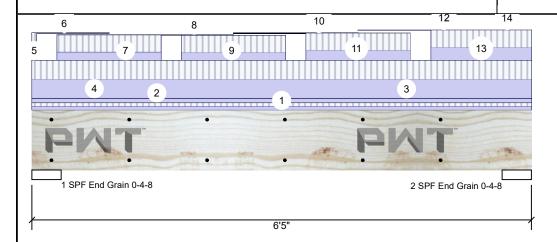
84 Lumber-Fayetteville #2307 Client: Project: CL3281-3C-GR-CS518

Address:

9/16/2025 Date: Input by: Will Evans Job Name: 202509-81714 CL3281-3C-GR-CS518 81714

Project #: 2.0E 2900Fb PWT LVL 1.750" X 9.250" 2-Ply - PASSED

Level: 2ND FLR





Page 2 of 3

Continued t	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
	End	0-11-14			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	0-3-14 to 1-7-14		Тор	196 PLF	406 PLF	0 PLF	0 PLF	0 PLF	J4
8	Tapered Start	0-11-14		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	2-7-2			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
9	Part. Uniform	1-11-2 to 3-3-2		Тор	186 PLF	406 PLF	0 PLF	0 PLF	0 PLF	J4
10	Tapered Start	2-7-2		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	4-2-5			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
11	Part. Uniform	3-6-5 to 4-10-5		Тор	237 PLF	406 PLF	0 PLF	0 PLF	0 PLF	J4
12	Tapered Start	4-2-5		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	5-9-8			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
13	Part. Uniform	5-1-8 to 6-5-0		Тор	312 PLF	406 PLF	0 PLF	0 PLF	0 PLF	J4
14	Tapered Start	5-9-8		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	6-5-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				9 PLF					

Notes

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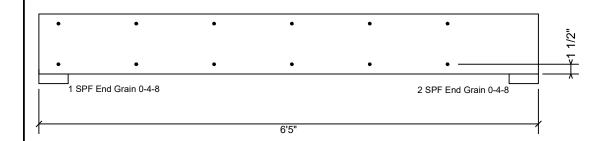
Job Name: 202509-81714 Project #: 81714

HD1-B 2.0E 2900Fb PWT LVL

1.750" X 9.250"

2-Ply - PASSED

Level: 2ND FLR





Page 3 of 3

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.	
См	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.

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CL3281-3C-GR-CS518

84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

Project #: 81714 Level: 2ND FLR

Live

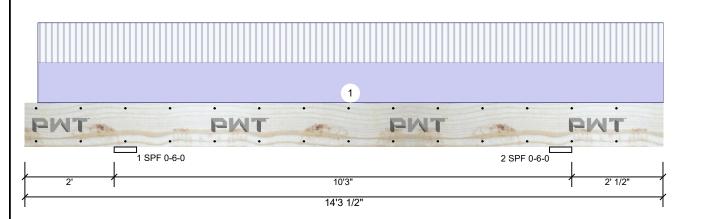
1494

1579

2.0E 2900Fb PWT LVL HD2

1.750" X 11.875"

2-Ply - PASSED





Const

0

0

Page 1 of 3

Member Information Reactions PATTERNED Ib (Uplift) Type: Girder Application: Floor Brg Direction Plies: 2 Design Method: ASD Vertical 1 Moisture Condition: Dry **Building Code:** IRC 2021 2 Vertical Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal - II Temp <= 100°F Temperature: General Load

Bearings											
Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.				
1 - SPF	6.000"	Vert	34%	1533 / 1494	3028	LL_	D+L				
2-SPF	6.000"	Vert	36%	1633 / 1579	3212	_LL	D+L				

1533

1633

Snow

0

0

Wind

0

0

Analysis Results

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-917 ft-lb	12'3"	19902 ft-lb	5%	D+L	LLL
Pos Moment	4824 ft-lb	7'1 1/8"	19902 ft-lb	24%	D+L	_L_
Shear	1659 lb	10'9 1/8"	7897 lb	21%	D+L	_LL
LL Defl inch	0.052 (L/2268)	7'1 1/2"	0.325 (L/360)	16%	L	_L_
TL Defl inch	0.098 (L/1199)	7'1 3/8"	0.488 (L/240)	20%	D+L	_L_
LL Cant	-0.030 (2L/1642)	Rt Cant	0.204 (2L/240)	15%	L	_L_
TL Cant	-0.052 (2L/921)	Lt Cant	0.300 (2L/180)	17%	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 = 0.046", Long Term = 0.069".
- 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.

40 PSF

10 PSF

- 7 Top must be laterally braced at end bearings.
- 8 Bottom must be laterally braced at end bearings.

Notes

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84 Lumber-Fayetteville #2307 Client: Project:

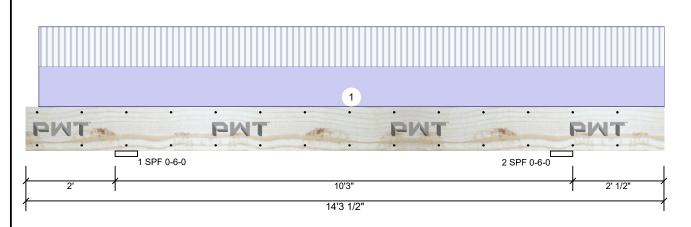
CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

9/16/2025 Date: Input by: Will Evans Job Name: 202509-81714 Project #:

81714 Level: 2ND FLR

2.0E 2900Fb PWT LVL 1.750" X 11.875" 2-Ply - PASSED HD2

Address:



11 7/8" 3 1/2"

Page 2 of 3

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	0-3-8 to 14-3-8		Тор	214 PLF	214 PLF	0 PLF	0 PLF	0 PLF		
	Self Weight				12 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.

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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



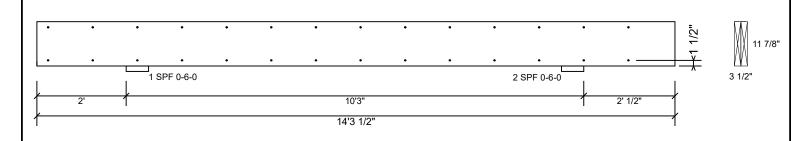


84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans

Job Name: 202509-81714
Project #: 81714

HD2 2.0E 2900Fb PWT LVL 1.750" X 11.875" 2-Ply - PASSED

Level: 2ND FLR



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.	
См	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.

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Manufacturer Info

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Page 3 of 3







Client: 84 Lumber-Fayetteville #2307 Project:

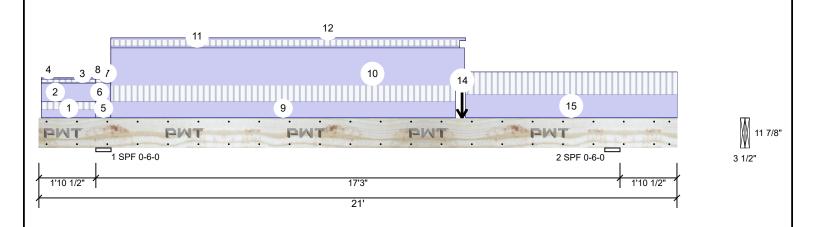
CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans

Job Name: 202509-81714 Project #: 81714

2.0E 2900Fb PWT LVL 1.750" X 11.875" 2-Ply - PASSED

Address:

Level: 2ND FLR



Member Infor	mation			Rea	ctions PAT	TERNED	lb (Uplift)			
Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	2	Design Method:	ASD	1	Vertical	595	1617	135	0	0
Moisture Conditio	n: Dry	Building Code:	IRC 2021	2	Vertical	807	1596	322	0	0
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II									
Temperature:	Temp <= 100°F									
General Load				Bea	rings					
Floor Live:	40 PSF			Bea	aring Length	Dir.	Cap. React D/L	b Total	Ld. Case	Ld. Comb.
Dead:	10 PSF			1 -	SPF 6.000"	Vert	25% 1617 / 59	5 2212	LL_	D+L
				2-	SPF 6.000"	Vert	27% 1596 / 84	6 2443	_LL	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-221 ft-lb	19'1 1/2"	19902 ft-lb	1%	D+L	_LL
Pos Moment	9418 ft-lb	11'7 3/4"	19902 ft-lb	47%	D+L	_L_
Shear	1979 lb	17'7 5/8"	7897 lb	25%	D+L	_LL
LL Defl inch	0.160 (L/1254)	11' 3/8"	0.558 (L/360)	29%	0.75(L+S)	_L_
TL Defl inch	0.522 (L/385)	10'9 7/16"	0.838 (L/240)	62%	D+0.75(L+S)	_L_
LL Cant	-0.058 (2L/775)	Rt Cant	0.200 (2L/240)	29%	0.75(L+S)	_L_
TL Cant	-0.181 (2L/248)	Rt Cant	0.300 (2L/180)	60%	D+0.75(L+S)	_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 = 0.361", Long Term = 0.542".
- 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 a maximum of 12'3 5/8" o.c.
- 8 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.

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This design is valid until 9/3/2027

Manufacturer Info

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

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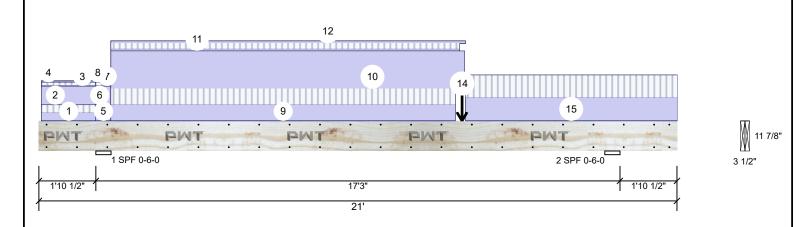
Client: 84 Lumber-Fayetteville #2307
Project: CL3281-3C-GR-CS518

CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025
Input by: Will Evans
Job Name: 202509-81714
Project #: 81714

HD3 2.0E 2900Fb PWT LVL 1.750" X 11.875" 2-Ply - PASSED

Address:

Level: 2ND FLR



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	0-1-2 to 1-10-8		Тор	20 PLF	20 PLF	0 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-1-2 to 1-10-8		Тор	47 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Tapered Start	0-1-2		Тор	2 PLF	7 PLF	0 PLF	0 PLF	0 PLF	
	End	1-10-8			2 PLF	7 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-1-2 to 1-10-8		Тор	3 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
5	Part. Uniform	1-10-8 to 2-4-8		Тор	20 PLF	20 PLF	0 PLF	0 PLF	0 PLF	
6	Part. Uniform	1-10-8 to 2-4-8		Тор	47 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
7	Tapered Start	1-10-8		Тор	2 PLF	7 PLF	0 PLF	0 PLF	0 PLF	
	End	2-4-8			2 PLF	7 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	1-10-8 to 2-4-8		Тор	3 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
9	Part. Uniform	2-4-8 to 13-8-8		Тор	40 PLF	40 PLF	0 PLF	0 PLF	0 PLF	
10	Part. Uniform	2-4-8 to 14-0-0		Тор	94 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
11	Tapered Start	2-4-8		Тор	5 PLF	14 PLF	0 PLF	0 PLF	0 PLF	
	End	13-10-0			5 PLF	14 PLF	0 PLF	0 PLF	0 PLF	
12	Part. Uniform	2-4-8 to 14-0-8		Тор	6 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
13	Point	13-11-0		Тор	310 lb	0 lb	310 lb	0 lb	0 lb	PL3
	Bearing Length	0-3-8								
14	Point	13-11-4		Тор	419 lb	321 lb	147 lb	0 lb	0 lb	FB5
	Bearing Length	0-3-8								
15	Part. Uniform	14-0-8 to 21-0-0		Тор	57 PLF	57 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				12 PLF					

Notes

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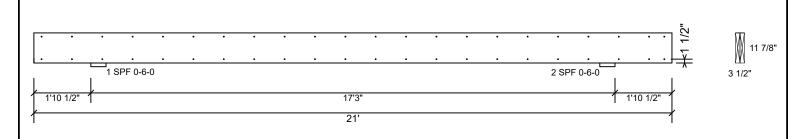


84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans

Job Name: 202509-81714 Project #: 81714

2.0E 2900Fb PWT LVL 1.750" X 11.875" HD3 2-Ply - PASSED Level: 2ND FLR



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.
См	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.

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

Page 3 of 3



This design is valid until 9/3/2027

CSD DESIGN

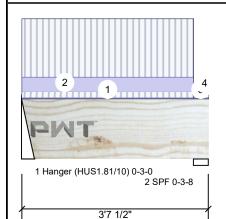


84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans

Job Name: 202509-81714 Project #: 81714

FB1 2.0E 2900Fb PWT LVL 1.750" X 14.000" - PASSED

Level: 2ND FLR





Page 1 of 1

Member Int	ormation						Reac	tion	s PATT	ERNED	lb (l	Jplift)			
Type:	Girder		Applicat	ion:	Floor		Brg	Dire	ction	Live		Dead	Snow	Wind	Const
Plies:	1		Design	Method:	ASD		1	Verti	ical	470		130	0	0	0
Moisture Cond	lition: Dry		Building	Code:	IRC 2021		2	Verti	ical	412		117	0	0	0
Deflection LL:	360		Load Sh	naring:	No										
Deflection TL:	240		Deck:		Not Checked										
Importance:	Normal - II														
Temperature:	Temp <= 10	0°F					<u> </u>								
General Load							Bear	ings	;						
Floor Live:	40 PSF						Bea	ring	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
Dead:	10 PSF						1 - Han	iger	3.000"	Vert	15%	130 / 470	600	L	D+L
Analysis Re	sults						2 - 5	-	3.500"	Vert	20%	117 / 412	529	L	D+L
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case									
Moment	431 ft-lb	1'9 1/2"	13396 ft-lb	3%	D+L	L									

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D+I

Design Notes

LL Defl inch 0.002

TL Defl inch 0.003

Shear

1 Provide support to prevent lateral movement and rotation at the end bearings.

2'2" 4655 lb

1'9 1/2" 0.107 (L/360) 2%

1'9 1/2" 0.160 (L/240) 2%

- 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"

126 lb

(L/16270)

(L/12743)

- 5 Girders are designed to be supported on the bottom edge only.
- 6 Top must be laterally braced at end bearings.
- 7 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 3-4-0	0-6-11	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 3-4-0		Тор	60 PLF	240 PLF	0 PLF	0 PLF	0 PLF	
3	Tie-In	3-4-0 to 3-7-8	0-7-7	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
4	Tie-In	3-5-2 to 3-7-8	0-4-9	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				7 PLF					

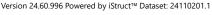
Notes

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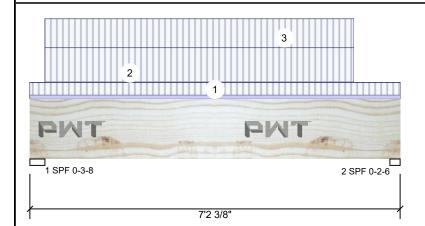
84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

Project #: 81714

1.750" X 14.000" - PASSED FB₂ 2.0E 2900Fb PWT LVL

Level: 2ND FLR





Const

0

0

Page 1 of 1

Member Information										
Type:	Girder	Application:	Floor							
Plies:	1	Design Method:	ASD							
Moisture Condition:	Dry	Building Code:	IRC 2021							
Deflection LL:	360	Load Sharing:	No							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal - II									
Temperature:	Temp <= 100°F									
General Load										
Floor Live:	40 PSF									

			Re	aring Lengt	h_	Dir	
•			Bea	rings			
'F	Deck:	Not Checked					
	Building Code: Load Sharing:	IRC 2021 No	2	Vertical		31 (-19	,
	Design Method:	ASD	1	Vertical	38	36 (-23	5)

D+I

D+L

					Bearing	Length	Dir.	Cap. Re	act D/L lb	Total	Ld. Case	Ld. Comb.
					1 - SPF	3.500"	Vert	18%	73 / 386	458 (-163)	L	D+L(D+L)
					2 - SPF	2.375"	Vert	23%	69 / 331	400 (-122)	L	D+L(D+L)
Location	Allowed	Capacity	Comb.	Case						(-122)		
3'7 1/16"	13396 ft-lb	2%	D+L	L								

Brg

Direction

Reactions PATTERNED Ib (Uplift)

Live

Dead

73

69

Snow

0

0

Wind

0

0

Design Notes

Analysis Results Analysis

Neg Moment -287 ft-lb

Pos Moment 767 ft-lb

Dead:

Shear

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.002", Long Term = 0.003".
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Tie-down connection required at bearing 1 for uplift 163 lb (Combination D+L, Load Case L).

3'7 7/16" 13396 ft-lb

5'10" 4655 lb

3'7 9/16" 0.228 (L/360) 4%

3'7 9/16" 0.342 (L/240) 3%

8%

5 Top must be laterally braced at end bearings.

10 PSF

Actual

391 lb

LL Defl inch 0.010 (L/8320)

TL Defl inch 0.012 (L/7046)

6 Bottom must be laterally braced at end bearings

	Dottom mast be la	aterally braced at end	bearings.								
ID	Lo	oad Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Tie	e-In	0-0-0 to 7-2-6	1-0-3	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
2	Pa	art. Uniform	0-3-8 to 6-3-8		Far Face	3 PLF	83 PLF	0 PLF	0 PLF	0 PLF	
3	Pa	art. Uniform	0-3-8 to 6-3-8		Far Face	0 PLF	-71 PLF	0 PLF	0 PLF	0 PLF	
	Se	elf Weight				7 PLF					

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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.

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





Client: 84 Lumber-Fayetteville #2307 Project: CL3281-3C-GR-CS518

CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

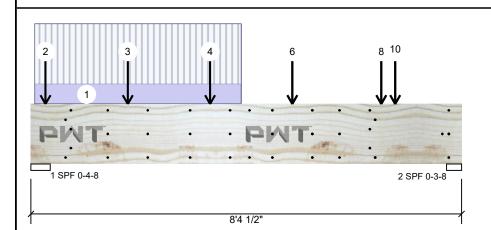
Project #: 81714

Level: 2ND FLR

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED



Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Floor

ASD

No

IRC 2021

Not Checked

Address:



Page 1 of 5

 	 	rmatior	ı

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 10 PSF Dead:

Reactions PATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2144	1354	0	0	0
2	Vertical	1335	1068	0	0	0

Bearings

Bearing	Length	DIr.	Сар. г	React D/L ID	iotai	Ld. Case	La. Com
1 - SPF	4.500"	Vert	52%	1354 / 2144	3498	L	D+L
2 - SPF	3.500"	Vert	46%	1068 / 1335	2403	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4764 ft-lb	3'6 11/16"	26792 ft-lb	18%	D+L	L
Shear	2692 lb	6'11"	9310 lb	29%	D+L	L
LL Defl inch	0.028 (L/3306)	4' 5/16"	0.261 (L/360)	11%	L	L
TL Defl inch	0.044 (L/2128)	4'1 5/8"	0.392 (L/240)	11%	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 = 0.024".
- 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 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 end bearings.
- 9 Rottom must be laterally braced at end bearings

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	Part. Uniform	0-1-0 to 4-1-0		Far Face	66 PLF	199 PLF	0 PLF	0 PLF	0 PLF	
	2	Point	0-3-6		Near Face	594 lb	526 lb	0 lb	0 lb	0 lb	J4
	3	Point	1-10-10		Near Face	204 lb	526 lb	0 lb	0 lb	0 lb	J4
	4	Point	3-5-13		Near Face	193 lb	484 lb	0 lb	0 lb	0 lb	J4
	5	Point	5-1-0		Far Face	184 lb	397 lb	0 lb	0 lb	0 lb	J10

Continued on page 2...

Notes

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





Client: 84 Lu Project: CL32

Address:

84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025

Input by: Will Evans

Job Name: 202509-81714

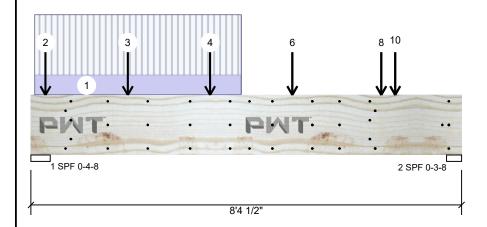
Project #: 81714

FB3-A 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR





Page 2 of 5

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	Point	5-1-0	Near Face	112 lb	144 lb	0 lb	0 lb	0 lb	J2
7	Point	6-9-12	Тор	22 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8							
8	Point	6-9-12	Тор	9 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8							
9	Point	7-1-0	Far Face	595 lb	444 lb	0 lb	0 lb	0 lb	J10
10	Point	7-1-0	Near Face	128 lb	162 lb	0 lb	0 lb	0 lb	J2
	Self Weight			14 PLF					

Notes

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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





Client: 84 Lumber-Fayetteville #2307 Project: CL3281-3C-GR-CS518 Address:

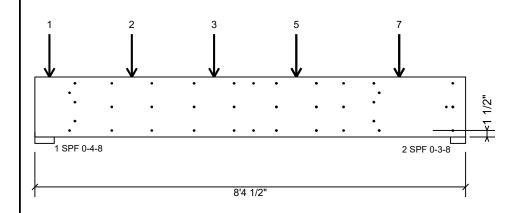
Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714 CL3281-3C-GR-CS518 Project #: 81714

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR





Page 3 of 5

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	37.6 %	
Load	132.5 PLF	
Yield Limit per Foot	352.8 PLF	
Yield Limit per Fastener	117.6 lb.	
См	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 0-3-6 with a minimum of (5) - 16d Sinker Nails (.148x3.25") in the pattern shown.

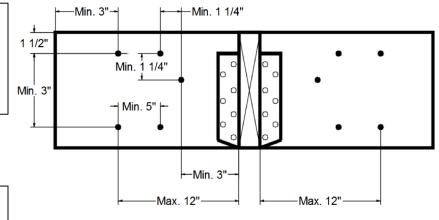
Capacity	95.3 %	
Load	560.0lb.	
Total Yield Limit	587.8 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

Fasten at concentrated side load at 1-10-10 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the pattern shown.

Ja 4. 444 - 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		
Capacity	51.7 %	
Load	365.0lb.	
Total Yield Limit	705.4 lb.	
Cg Cm	0.9998	
См	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

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PR-L233 PR-L280

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





Client: 84 Lumber-Fayetteville #2307 Project:

Address:

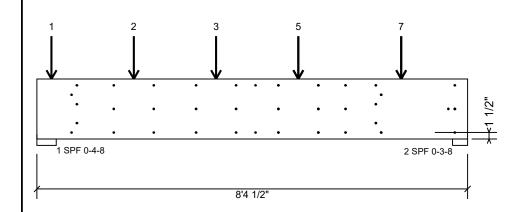
CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

Project #: 81714 Level: 2ND FLR

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED





Page 4 of 5

Multi-Ply Analysis

Concentrated Load

Fasten at concentrated side load at 3-5-13 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

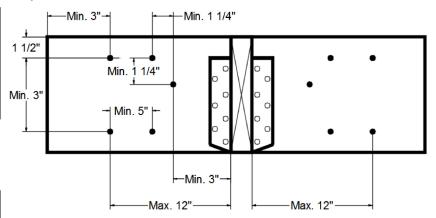
<u>.</u>		
Capacity	48.0 %	
Load	338.5lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

Fasten at concentrated side load at 5-1-0 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the nattern shown

pattern snown.		
Capacity	41.2 %	
Load	290.5lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	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

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





Client: 84 Lumber-Fayetteville #2307 Project:

Address:

CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

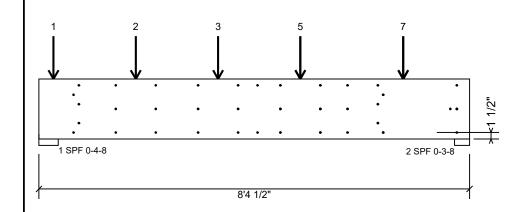
Project #: 81714

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR





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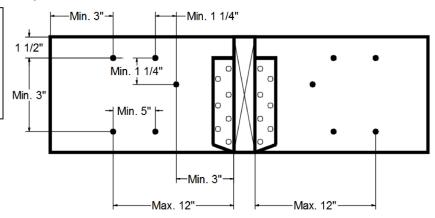
Multi-Ply Analysis

Concentrated Load

Fasten at concentrated side load at 7-1-0 with a minimum of (5) - 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity	88.4 %	
Load	519.5lb.	
Total Yield Limit	587.8 lb.	
Cg Cm	0.9998	
См	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

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





Client: 84 Lumber-Fayetteville #2307
Project: CL3281-3C-GR-CS518

Address:

CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025
Input by: Will Evans
Job Name: 202509-81714

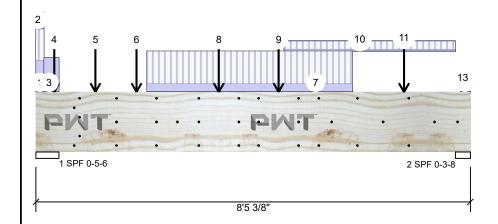
Project #: 81714

FB3-B 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR



Application:

Design Method:

Building Code:

Load Sharing:

Deck:

ASD

No

IRC 2021

Not Checked



Page 1 of 4

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

Reactions PATTERNED Ib (Uplift) Floor Brg Direction Live Dead

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	1906	1078	0	0	0
2	Vertical	1062	410	0	0	0

Bearings

Bearing	Length	Dir.	Сар. н	React D/L Ib	Iotai	Ld. Case	La. Comi
1 - SPF	5.375"	Vert	37%	1078 / 1906	2984	L	D+L
2 - SPF	3.500"	Vert	28%	410 / 1062	1472	L	D+L

Analysis Results

ſ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
ı	Moment	4324 ft-lb	4'8 5/8"	26792 ft-lb	16%	D+L	L
ı	Shear	1813 lb	1'7 3/8"	9310 lb	19%	D+L	L
ı	LL Defl inch	0.028 (L/3365)	4'3 1/4"	0.261 (L/360)	11%	L	L
ı	TL Defl inch	0.038 (L/2460)	4'3 3/4"	0.392 (L/240)	10%	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.010", Long Term = 0.015".
- 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 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 end bearings.
- 9 Bottom must be laterally braced at end bearings.

o Bottom made so laterally stated at one searings.										
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 0-1-14		Тор	88 PLF	88 PLF	0 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 0-1-14		Тор	48 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Part. Uniform	0-1-14 to 0-5-6		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Point	0-4-4		Far Face	556 lb	529 lb	0 lb	0 lb	0 lb	J4
5	Point	1-1-14		Near Face	34 lb	134 lb	0 lb	0 lb	0 lb	J2

Continued on page 2...

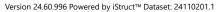
Notes

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Client: Project:

Address:

84 Lumber-Fayetteville #2307 CL3281-3C-GR-CS518 CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714 Project #:

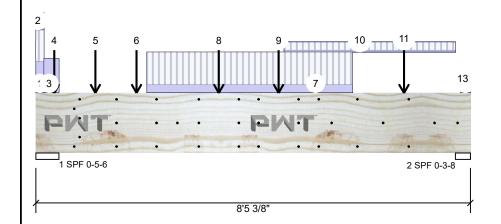
81714

2.0E 2900Fb PWT LVL FB3-B

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR





Page 2 of 4

Continued fro	m 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	Point	1-11-8		Far Face	134 lb	529 lb	0 lb	0 lb	0 lb	J4
7	Part. Uniform	2-1-14 to 6-1-14		Near Face	23 PLF	91 PLF	0 PLF	0 PLF	0 PLF	
8	Point	3-6-11		Far Face	117 lb	461 lb	0 lb	0 lb	0 lb	J4
9	Point	4-8-10		Far Face	332 lb	719 lb	0 lb	0 lb	0 lb	FB4
10	Tie-In	4-9-14 to 8-1-14	0-6-11	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
11	Point	7-1-14		Near Face	35 lb	138 lb	0 lb	0 lb	0 lb	J2
12	Tie-In	8-3-0 to 8-5-6	0-2-2	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
13	Tie-In	8-3-0 to 8-5-6	0-9-14	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				14 PLF					

Notes

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Client: 84 Lumber-Fayetteville #2307 Project: CL3281-3C-GR-CS518 Address: CL3281-3C-GR-CS518

Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714

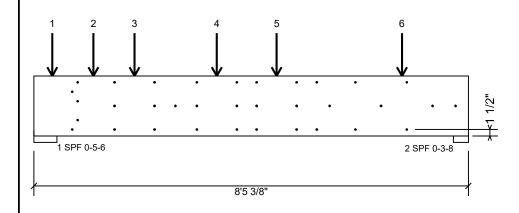
Project #: 81714

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR





Page 3 of 4

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	16.2 %	
Load	57.0 PLF	
Yield Limit per Foot	352.8 PLF	
Yield Limit per Fastener	117.6 lb.	
CM	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 0-4-4 with a minimum of (5) - 16d Sinker Nails (.148x3.25") in the pattern shown.

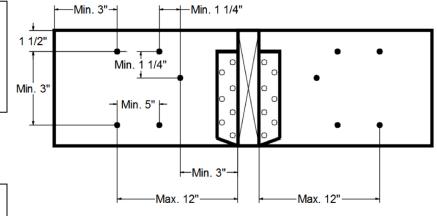
partern silven		
Capacity	92.3 %	
Load	542.5lb.	
Total Yield Limit	587.8 lb.	
Cg	0.9998	
CM	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

Fasten at concentrated side load at 1-11-8 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity 47.0 % Load 331.5lb. Total Yield Limit 705.4 lb. 0.9998 Сg См Yield Limit per Fastener 117.6 lb. Yield Mode IV oad Combination D+L Duration Factor 1.00

Min/Max fastener distances for Concentrated Side Loads



Notes

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PR-L233 PR-L280

This design is valid until 9/3/2027

888-613-5078

U.S. Lumber 2160 Satellite Blvd., Suite 450, GA

U.S. LUMBER CSD DESIGN

U.S.A



Client: 84 Lumber-Fayetteville #2307 Project:

Address:

CL3281-3C-GR-CS518 CL3281-3C-GR-CS518 Date: 9/16/2025 Input by: Will Evans Job Name: 202509-81714 81714

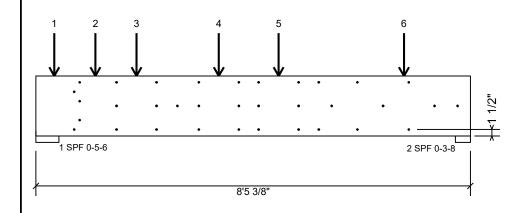
Project #:

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2ND FLR





Page 4 of 4

Multi-Ply Analysis

Concentrated Load

Fasten at concentrated side load at 3-6-11 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the pattern shown.

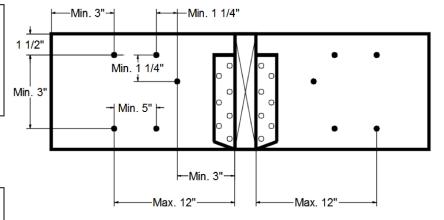
Capacity	41.0 %	
Load	289.0lb.	
Total Yield Limit	705.4 lb.	
Cg Cm	0.9998	
См	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

Fasten at concentrated side load at 4-8-10 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the nattern shown

pattern snown.		
Capacity	74.5 %	
Load	525.5lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	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

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