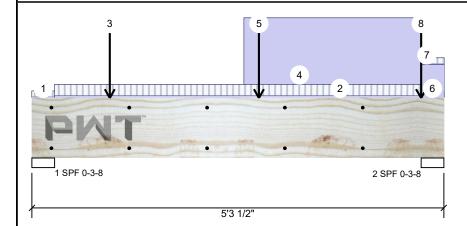


CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans Job Name: 202504-73124

Project #: 73124

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

Level: 2nd Floor



Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Floor

ASD

No

IRC 2021

Not Checked

Address:



Page 1 of 3

	М	em	ber	Infor	matior
--	---	----	-----	-------	--------

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

General Load 40 PSF Floor Live: 10 PSF

Reactions PATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	953	525	0	0	0
2	Vertical	817	655	0	0	0

Bearings

Bearing	Length	DIr.	Сар. ке	act D/L ID	iotai	Ld. Case	La. Com
1 - SPF	3.500"	Vert	28%	525 / 953	1477	L	D+L
2 - SPF	3.500"	Vert	28%	655 / 817	1472	L	D+L

Analysis Results

Dead:

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	
ı	Moment	2166 ft-lb	2'11"	12416 ft-lb	17%	D+L	L	
l	Shear	1384 lb	1' 3/4"	6151 lb	22%	D+L	L	
l	LL Defl inch	0.013 (L/4315)	2'9 9/16"	0.161 (L/360)	8%	L	L	
ı	TL Defl inch	0.025 (L/2339)	2'10 11/16"	0.242 (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 = 0.011", Long Term = 0.017".
- 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	Tapered Start	0-0-0		Тор	1 PLF	5 PLF	0 PLF	0 PLF	0 PLF	
	End	0-3-8			1 PLF	5 PLF	0 PLF	0 PLF	0 PLF	
2	Tapered Start	0-3-8		Тор	2 PLF	10 PLF	0 PLF	0 PLF	0 PLF	
	End	5-0-0			2 PLF	10 PLF	0 PLF	0 PLF	0 PLF	
3	Point	1-0-0		Тор	179 lb	717 lb	0 lb	0 lb	0 lb	J3
	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.

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Manufacturer Info

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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078





Address:

5

5'3 1/2"

CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans
Job Name: 202504-73124

Job Name: 202504-731 Project #: 73124

Level: 2nd Floor

DB1 2.0E 2900Fb PWT LVL

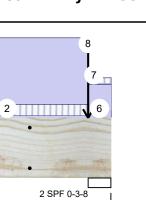
3

1 SPF 0-3-8

1.750" X 9.250"

4

2-Ply - PASSED





3 1/2"

Page 2 of 3

Continued from	n 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	Part. Uniform	2-8-11 to 5-0-0		Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Partition Wall Self Weight
5	Point	2-11-0		Тор	700 lb	732 lb	0 lb	0 lb	0 lb	J3
	Bearing Length	0-3-8								
6	Part. Uniform	5-0-0 to 5-3-8		Тор	30 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Partition Wall Self Weight
7	Tapered Start	5-0-0		Тор	1 PLF	5 PLF	0 PLF	0 PLF	0 PLF	
	End	5-3-8			1 PLF	5 PLF	0 PLF	0 PLF	0 PLF	
8	Point	5-0-0		Тор	96 lb	271 lb	0 lb	0 lb	0 lb	J4
	Bearing Length	0-3-8								
	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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Address:

CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

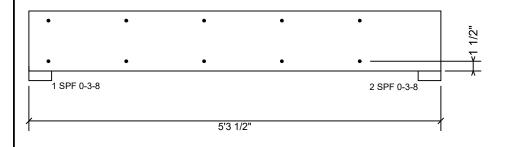
Level: 2nd Floor

DB₁ 2.0E 2900Fb PWT LVL 1.750" X 9.250"

2-Ply - PASSED



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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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078





Address:

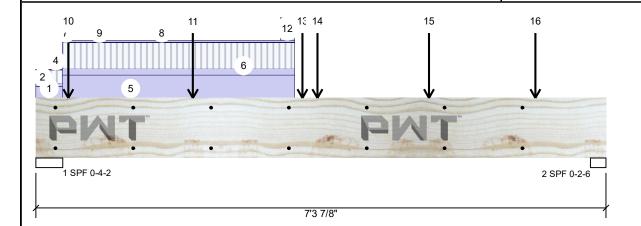
CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

evel: 2nd Floor

DB₂ 2.0E 2900Fb PWT LVL

1.750" X 9.250" 2-Ply - PASSED





Const

0

0

Wind

0

0

0

Page 1 of 3

Member Information

Type: Girder Plies: 2 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance: Normal - II Temp <= 100°F Temperature:

40 PSF

10 PSF

Application: Floor Design Method: ASD **Building Code:** IRC 2021 Load Sharing: No Deck:

Not Checked

Reactions PATTERNED Ib (Uplift) Brg Direction Live Snow Vertical 1888 1246 0 1

1996

Bearings

Vertical

2

Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. D+L 1 - SPF 4.125" Vert 1246 / 1888 3134 L 2 - SPF 2.375" Vert 84% 956 / 1996 2952 L D+I

956

Analysis Results

General Load

Floor Live:

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4837 ft-lb	3'7 3/8"	12416 ft-lb	39%	D+L	L
Shear	2841 lb	6'4 1/4"	6151 lb	46%	D+L	L
LL Defl inch	0.070 (L/1189)	3'9 5/8"	0.230 (L/360)	30%	L	L
TL Defl inch	0.107 (L/776)	3'9 1/8"	0.345 (L/240)	31%	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.037", Long Term = 0.056".
- 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

0 DOLLOITI	illust be laterally braced a	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 0-4-2		Тор	30 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Partition Wall Self Weight
2	Tapered Start	0-0-0		Тор	9 PLF	34 PLF	0 PLF	0 PLF	0 PLF	
	End	0-4-2			9 PLF	34 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-0-0 to 0-4-2		Тор	2 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
5	Part. Uniform	0-4-2 to 3-3-13		Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Partition Wall Self Weight
6	Tapered Start	0-4-2		Тор	17 PLF	69 PLF	0 PLF	0 PLF	0 PLF	
Continued on	page 2									

Notes

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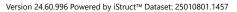
Manufacturer Info

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www.pwtewp.com ICC-ES: ESR-2909 ESR-2403 APA: PR-L233 PR-L280

US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078









84 Lumber-Fayetteville #2307 Client: Project:

Address:

CL3034-GR-CS470 CL3034-GR-CS470

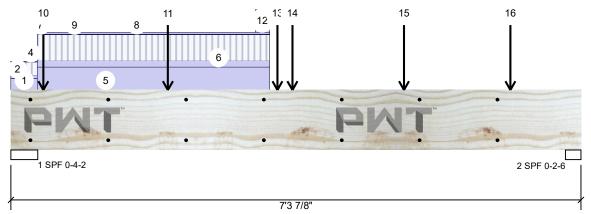
4/1/2025 Date: Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL DB2

2-Ply - PASSED 1.750" X 9.250"







Page 2 of 3

Continued f	rom 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	3-3-13			17 PLF	69 PLF	0 PLF	0 PLF	0 PLF	
7	Tapered Start	0-4-2		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	0-5-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	0-4-2 to 3-3-13		Тор	5 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
9	Tapered Start	0-5-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	3-3-13			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
10	Point	0-5-0		Тор	463 lb	570 lb	0 lb	0 lb	0 lb	J10
	Bearing Length	0-3-8								
11	Point	2-0-3		Тор	256 lb	569 lb	0 lb	0 lb	0 lb	J10
	Bearing Length	0-3-8								
12	Part. Uniform	3-1-11 to 3-3-13		Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Partition Wall Self Weight
13	Point	3-5-1		Тор	117 lb	56 lb	0 lb	0 lb	0 lb	J2
	Bearing Length	0-3-8								
14	Point	3-7-6		Тор	233 lb	528 lb	0 lb	0 lb	0 lb	J10
	Bearing Length	0-3-8								
15	Point	5-0-10		Тор	421 lb	1060 lb	0 lb	0 lb	0 lb	J1
	Bearing Length	0-3-8								
16	Point	6-5-0		Тор	375 lb	881 lb	0 lb	0 lb	0 lb	J5
	Bearing Length	0-3-8								
	Self Weight				9 PLF					

Notes

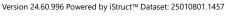
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Address:

CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans
Job Name: 202504-73124

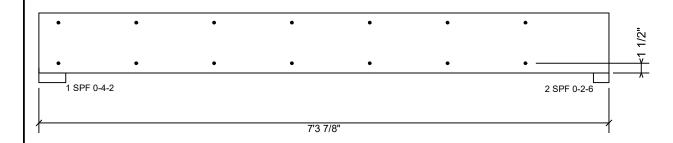
Job Name: 202504-73 Project #: 73124

DB2 2.0E 2900Fb PWT LVL

1.750" X 9.250"

2-Ply - PASSED

Level: 2nd Floor





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

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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HD₁

Client: 84 Lumber-Fayetteville #2307
Project: CL3034-GR-CS470

CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans Job Name: 202504-73124 Project #: 73124

Level: 2nd Floor

7 9 _

Address:

8

2 SPF End Grain 0-3-0

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Floor

ASD

No

IRC 2021

Not Checked



Page 1 of 3

3'6"

1 SPF End Grain 0-3-0

1

3

Ν	/16	m	b	er	lr	ıfo	rn	na	ıti	o	n

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

Reactions PATTERNED Ib (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	427	921	545	0	0
2	Vertical	164	1343	987	0	0

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	1742 ft-lb	2'2 1/2"	14278 ft-lb	12%	D+S	L
Shear	1879 lb	2'5 3/4"	7074 lb	27%	D+S	L
LL Defl inch	0.005 (L/7665)	2'2 1/2"	0.104 (L/360)	5%	S	L
TL Defl inch	0.012 (L/3185)	2'2 1/16"	0.156 (L/240)	8%	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.007", Long Term = 0.010".
- 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

Bearings										
Γ	Bearing	Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.		
	1 - SPF End Grain	3.000"	Vert	21%	921 / 729	1650	L	D+0.75(L+S)		
	2 - SPF End Grain	3.000"	Vert	30%	1343 / 987	2330	L	D+S		

l	8 Bottom must be laterally braced at end bearings.											
I	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
I	1	Part. Uniform	0-0-0 to 2-0-12		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight	
I	2	Part. Uniform	0-0-0 to 2-8-8		Тор	5 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight	
I	3	Part. Uniform	0-0-0 to 2-2-14		Тор	120 PLF	0 PLF	120 PLF	0 PLF	0 PLF		
I	4	Point	0-1-0		Тор	134 lb	329 lb	41 lb	0 lb	0 lb	FB4	
I		Bearing Length	0-3-8									
I	5	Tapered Start	0-2-4		Тор	10 PLF	39 PLF	0 PLF	0 PLF	0 PLF		

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.

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CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans Job Name: 202504-73124

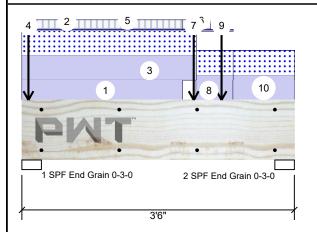
Project #: 73124

Level: 2nd Floor

HD1 2.0E 2900Fb PWT LVL 1.750" X 9.250"

2-Ply - PASSED







Page 2 of 3

Continued fi	rom 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	2-0-12			10 PLF	39 PLF	0 PLF	0 PLF	0 PLF	
6	Tapered Start	2-0-12		Тор	10 PLF	39 PLF	0 PLF	0 PLF	0 PLF	
	End	2-5-0			10 PLF	39 PLF	0 PLF	0 PLF	0 PLF	
7	Point	2-2-8		Тор	428 lb	0 lb	330 lb	0 lb	0 lb	Wall Self Weight Wall Self Weight
	Bearing Length	0-3-8								
8	Part. Uniform	2-2-14 to 2-8-8		Тор	120 PLF	0 PLF	120 PLF	0 PLF	0 PLF	
9	Point	2-6-12		Тор	1016 lb	175 lb	741 lb	0 lb	0 lb	FB1
	Bearing Length	0-3-8								
10	Part. Uniform	2-8-8 to 3-6-0		Тор	120 PLF	0 PLF	120 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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US Lumber 3312 North Berkeley Lake Rd, GA 30096 888-613-5078







2.0E 2900Fb PWT LVL

HD1

Client: 84 Project: Cl

Address:

84 Lumber-Fayetteville #2307 CL3034-GR-CS470

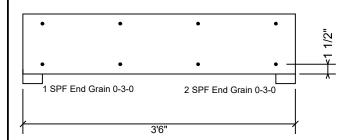
CL3034-GR-CS470

Date: 4/1/2025
Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

1.750" X 9.250" 2-Ply - PASSED

Level: 2nd Floor





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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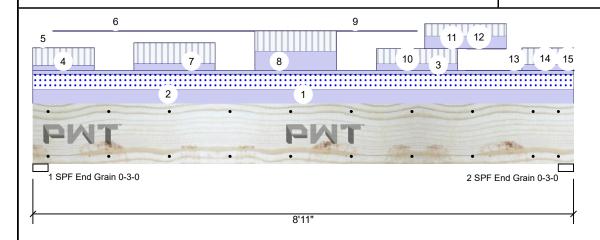


CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans
Job Name: 202504-73124
Project #: 73124

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

Address:

Level: 2nd Floor





Page 1 of 3

Member Information

Туре	e:	Girder
Plies	s:	2
Mois	sture Condition:	Dry
Defl	ection LL:	360
Defl	ection TL:	240
Impo	ortance:	Normal - II
Tem	perature:	Temp <= 100°F

General Load
Floor Live: 40 PSF

10 PSF

Application: Floor
Design Method: ASD
Building Code: IRC 2021
Load Sharing: No

Deck: Not Checked

Reactions PATTERNED Ib (Uplift)

В	rg	Direction	Live	Dead	Snow	Wind	Const
	1	Vertical	1567	3032	1694	0	0
	2	Vertical	1606	3277	1694	0	0

Bearings

Bearing	Length	Dir.	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End	3.000"	Vert	70%	3032 / 2446	5478	L	D+0.75(L+S)
Crain							

Grain

Grain

 $2 - {\sf SPF} \quad 3.000" \qquad {\sf Vert} \qquad 73\% \quad 3277 \, / \, 2475 \qquad 5752 \quad {\sf L} \qquad \qquad {\sf D+0.75(L+S)} \\ {\sf End} \qquad \qquad \\$

Analysis Results

Dead:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11810 ft-lb	4'5 5/8"	22888 ft-lb	52%	D+0.75(L+S)	L
Shear	4302 lb	7'8 1/8"	9081 lb	47%	D+0.75(L+S)	L
LL Defl inch	0.081 (L/1262)	4'5 1/2"	0.285 (L/360)	29%	0.75(L+S)	L
TL Defl inch	0.190 (L/539)	4'5 11/16"	0.427 (L/240)	45%	D+0.75(L+S)	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.109", Long Term = 0.163".
- 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

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 8-11-0		Тор	5 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rim Board Self Weight
2	Part. Uniform	0-0-0 to 8-11-0		Тор	380 PLF	0 PLF	380 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 8-11-0		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-0-0 to 1-0-0		Тор	147 PLF	450 PLF	0 PLF	0 PLF	0 PLF	J5
5	Tapered Start	0-0-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	0-4-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	

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.

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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 US Lumber 3312 North Berkeley Lake Rd, GA 30096 888-613-5078







Continued from page 1

Client: 84 Lumber-Fayetteville #2307 Project:

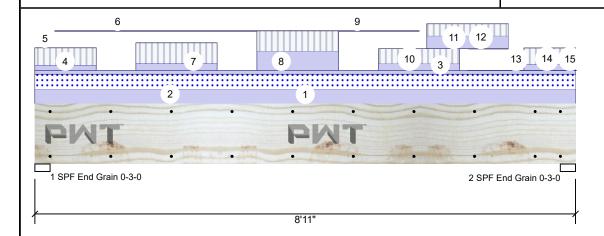
CL3034-GR-CS470 Address: CL3034-GR-CS470

4/1/2025 Date: Input by:

Will Evans Job Name: 202504-73124 Project #: 73124

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

Level: 2nd Floor





Page 2 of 3

Continued t	rom 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	0-4-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	4-4-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	1-8-0 to 3-0-0		Тор	188 PLF	534 PLF	0 PLF	0 PLF	0 PLF	J3
8	Part. Uniform	3-8-0 to 5-0-0		Тор	504 PLF	534 PLF	0 PLF	0 PLF	0 PLF	J3
9	Tapered Start	4-4-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	6-4-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
10	Part. Uniform	5-8-0 to 7-0-0		Тор	190 PLF	374 PLF	0 PLF	0 PLF	0 PLF	J3
11	Tapered Start	6-4-0		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	7-1-10			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
12	Part. Uniform	6-5-10 to 7-9-10		Тор	337 PLF	321 PLF	0 PLF	0 PLF	0 PLF	J10
13	Tapered Start	7-1-10		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	8-8-13			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
14	Part. Uniform	8-0-13 to 8-11-0		Тор	166 PLF	428 PLF	0 PLF	0 PLF	0 PLF	J10
15	Tapered Start	8-8-13		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	8-11-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				12 PLF					

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Manufacturer Info

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Client: Project: Address: 84 Lumber-Fayetteville #2307 CL3034-GR-CS470

CL3034-GR-CS470

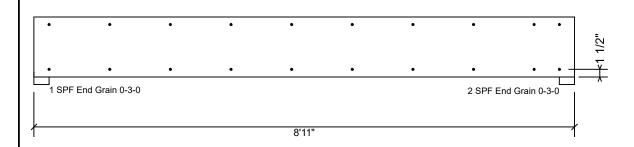
Date: 4/1/2025 Input by:

Will Evans Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL HD2

1.750" X 11.875"

Level: 2nd Floor 2-Ply - PASSED





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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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078







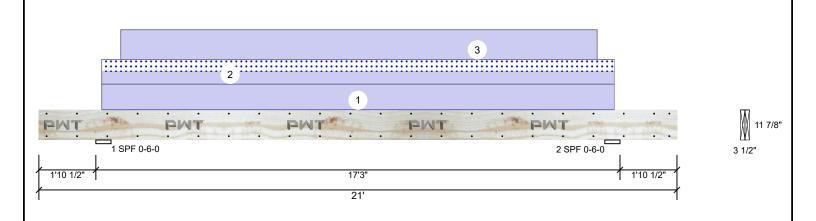
Client: Project: Address:

84 Lumber-Fayetteville #2307 CL3034-GR-CS470 CL3034-GR-CS470

Date: 4/1/2025 Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL 1.750" X 11.875" 2-Ply - PASSED Level: 2nd Floor



Member Inform	nation			Reactions PATTERNED lb (Uplift)								
Туре:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const		
Plies:	2	Design Method:	ASD	1	Vertical	0	1917	337	0	0		
Moisture Condition	: Dry	Building Code:	IRC 2021	2	Vertical	0	1923	337	0	0		
Deflection LL:	360	Load Sharing:	No									
Deflection TL:	240	Deck:	Not Checked									
Importance:	Normal - II											
Temperature:	Temp <= 100°F											
General Load				Bear	rings							
Floor Live:	40 PSF			Bea	aring Length	Dir.	Cap. React D/L l	b Total	Ld. Case	Ld. Comb.		
Dead:	10 PSF			1 -	SPF 6.000"	Vert	25% 1917 / 33	7 2254	_L_	D+S		
				2_	SPF 6.000"	Vert	25% 1923 / 33	7 2260	L	D+S		

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-21 ft-lb	19'1 1/2"	17912 ft-lb	0%	D	Uniform
Pos Moment	8097 ft-lb	10'6"	17912 ft-lb	45%	D	Uniform
Shear	1655 lb	3'4 3/8"	7107 lb	23%	D	Uniform
LL Defl inch	0.076 (L/2630)	10'6 1/16"	0.558 (L/360)	14%	S	LLL
TL Defl inch	0.517 (L/389)	10'6 1/16"	0.838 (L/240)	62%	D+S	LLL
LL Cant	-0.026 (2L/1732)	Lt Cant	0.200 (2L/360)	13%	S	LLL
TL Cant	-0.176 (2L/256)	Rt Cant	0.300 (2L/360)	59%	D+S	LLL

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 = 0.441", Long Term = 0.661".
- 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 12'7 9/16" o.c.
- 8 Bottom must be laterally braced at end bearings.
- 9 Cantilever Upward Deflection Total Load 0.17551 greater than recommended 0.125
- 10 Cantilever Upward Deflection Total Load 0.17554 greater than recommended 0.125

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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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078

Page 1 of 3







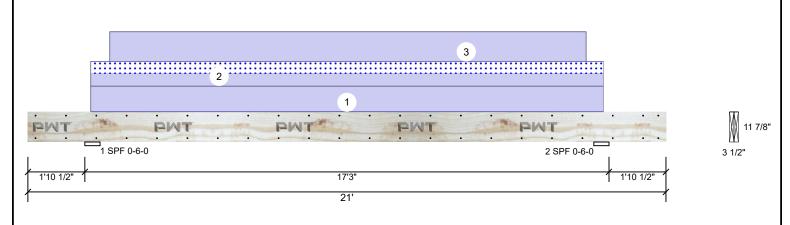
Project: CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans
Job Name: 202504-73124

Job Name: 202504-73 Project #: 73124

HD3 2.0E 2900Fb PWT LVL 1.750" X

1.750" X 11.875" 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	Part. Uniform	2-1-0 to 18-11-0		Тор	84 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
2	Part. Uniform	2-1-0 to 18-11-0		Тор	40 PLF	0 PLF	40 PLF	0 PLF	0 PLF	
3	Part. Uniform	2-8-7 to 18-4-5		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				12 PLF					

Notes

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Page 2 of 3





Client: Project:

Address:

CL3034-GR-CS470

84 Lumber-Fayetteville #2307 CL3034-GR-CS470

Date: 4/1/2025 Input by: Will Evans Job Name: 202504-73124

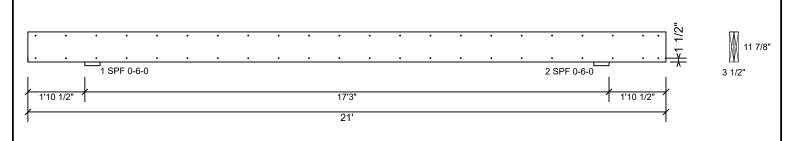
73124

Page 3 of 3

2.0E 2900Fb PWT LVL HD3

1.750" X 11.875"

Project #: Level: 2nd Floor 2-Ply - PASSED



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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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078





Client: 84 Lumber-Fayetteville #2307

Project: CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans

Job Name:

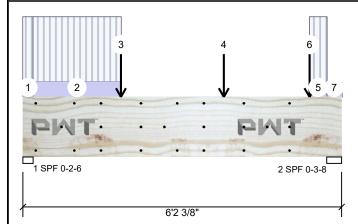
Project #: 73124

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

2-Ply - PASSED

Level: 2nd Floor

202504-73124





Page 1 of 4

Member Inform	ation
---------------	-------

Type: Girder 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	175	1016	741	0	0
2	Vertical	146	1224	911	0	0

Bearings

Bearing	g Length	Dir.	Cap. R	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.375"	Vert	50%	1016 / 741	1757	L	D+S
2 - SPE	3.500"	Vert	41%	1224 / 911	2135	L	D+S

Analysis Results

Г	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	3230 ft-lb	3'10 7/8"	30810 ft-lb	10%	D+S	L
	Shear	2110 lb	4'8 7/8"	10707 lb	20%	D+S	L
	LL Defl inch	0.009 (L/8199)	3'1 3/8"	0.194 (L/360)	4%	S	L
	TL Defl inch	0.020 (L/3508)	3'1 5/16"	0.292 (L/240)	7%	D+S	L

Application:

Design Method:

Building Code:

Load Sharing:

Deck:

Floor

ASD

No

IRC 2021

Not Checked

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.011", Long Term = 0.017".
- 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.

ı												
I	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments	
ı	1	Tie-In	0-0-0 to 0-2-6	1-2-14	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		
ı	2	Tie-In	0-2-6 to 1-10-14	1-2-14	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		
ı	3	Point	1-10-14		Far Face	905 lb	88 lb	704 lb	0 lb	0 lb	J2	
ı	4	Point	3-10-14		Far Face	839 lb	82 lb	652 lb	0 lb	0 lb	J2	
ı	5	Tie-In	5-6-14 to 5-10-14	1-2-14	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		

Continued on page 2...

Notes

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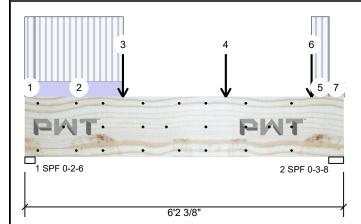
Client: 84 Lumber-Fayetteville #2307

Project: CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

FB1 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED

Level: 2nd Floor





Page 2 of 4

..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	5-6-14		Far Face	381 lb	37 lb	296 lb	0 lb	0 lb	J2	
7	Tie-In	5-10-14 to 6-2-6	0-2-10	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF		
	Self Weight				14 PLF						

Notes

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Address:

CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans
Job Name: 202504-73124

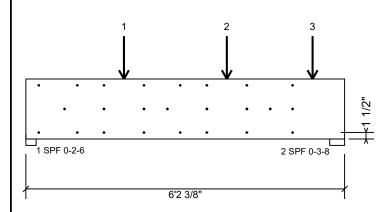
Project #: 73124

FB1 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2nd Floor





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	0.0 %
Load	0.0 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	
Duration Factor	1.00

Concentrated Load

Fasten at concentrated side load at 1-10-14 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

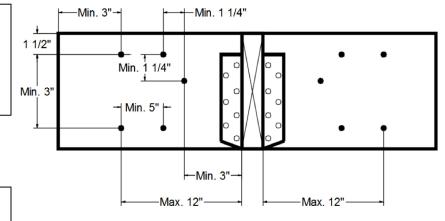
Capacity	99.2 %	
Load	804.5lb.	
Total Yield Limit	811.2 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	135.2 lb.	
Yield Mode	IV	
Load Combination	D+S	
Duration Factor	1.15	

Concentrated Load

Fasten at concentrated side load at 3-10-14 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity 91.9 % Load 745.5lb. Total Yield Limit 811.2 lb. 0.9998 Сg См Yield Limit per Fastener 135.2 lb. Yield Mode IV oad Combination D+S Duration Factor 1.15

Min/Max fastener distances for Concentrated Side Loads



Notes

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ICC-ES: ESR-2909 ESR-240 PR-L233 PR-L280 US Lumber 3312 North Berkeley Lake Rd, GA 30096 888-613-5078



Version 24.60.996 Powered by iStruct™ Dataset: 25010801.1457





Client: 84 Lumber-Fayetteville #2307

Project: CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans

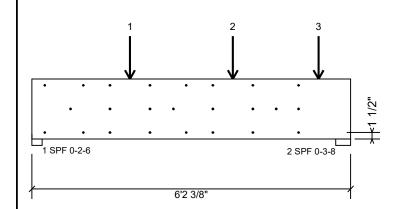
Job Name: 202504-73124 Project #: 73124

FB1 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2nd Floor





Page 4 of 4

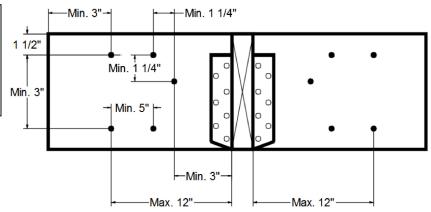
Multi-Ply Analysis

Concentrated Load

Fasten at concentrated side load at 5-6-14 with a minimum of (3) – 16d Sinker Nails (.148x3.25") in the pattern shown.

1.		
Capacity	83.5 %	
Load	338.5lb.	
Total Yield Limit	405.6 lb.	
Cg Cm	0.9998	
См	1	
Yield Limit per Fastener	135.2 lb.	
Yield Mode	IV	
Load Combination	D+S	
Duration Factor	1.15	

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.

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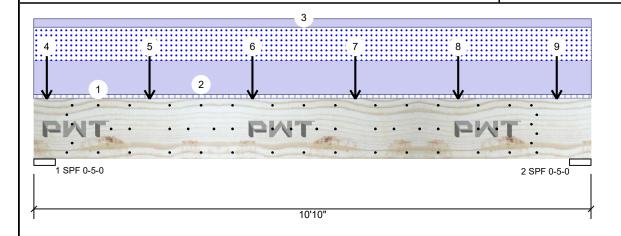
Client: Project:

84 Lumber-Fayetteville #2307 Date: 4/1/2025 CL3034-GR-CS470 Input by: Will Evans Job Name: 202504-73124 CL3034-GR-CS470 Project #: 73124

2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED FB2

Address:

Level: 2nd Floor





Page 1 of 5

Member Information Reactions PATTERNED Ib (Uplift) Type: Girder Application: Floor Wind Const Brg Direction Live Snow Plies: 2 Design Method: ASD Vertical 1968 3609 2058 0 0 1 Moisture Condition: Dry **Building Code:** IRC 2021 2117 4058 2058 0 0 2 Vertical Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Normal - II Temp <= 100°F Temperature: **Bearings** General Load **40 PSF** Floor Live: Bearing Length Dir. Cap. React D/L lb Total Ld. Case Ld. Comb. 10 PSF Dead: D+0.75(L+S) 1 - SPF 5.000" Vert 3609 / 3020 6628 L D+0.75(L+S) 2 - SPF 5.000" Vert 97% 4058 / 3131 7190 L

Analysis Results

I	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
ı	Moment	15742 ft-lb	5'9 15/16"	30810 ft-lb	51%	D+0.75(L+S)	L
I	Shear	5314 lb	9'3"	9310 lb	57%	D+L	L
I	LL Defl inch	0.096 (L/1270)	5'5 9/16"	0.338 (L/360)	28%	0.75(L+S)	L
I	TL Defl inch	0.217 (L/559)	5'5 7/8"	0.506 (L/240)	43%	D+0.75(L+S)	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.122", Long Term = 0.182".
- 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 a maximum of 8' 3/8" o.c.

9 Bottom must be laterally braced at end bearings.

o Bottom made so laterally staced 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	Tie-In	0-0-0 to 10-10-0	1-0-14	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	2	Part. Uniform	0-0-0 to 10-10-0		Тор	380 PLF	0 PLF	380 PLF	0 PLF	0 PLF	
	3	Part. Uniform	0-0-0 to 10-10-0		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	4	Point	0-3-0		Near Face	250 lb	541 lb	0 lb	0 lb	0 lb	J3
	5	Point	2-3-0		Near Face	205 lb	534 lb	0 lb	0 lb	0 lb	J3

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.

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Manufacturer Info

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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078



CSD DESIGN



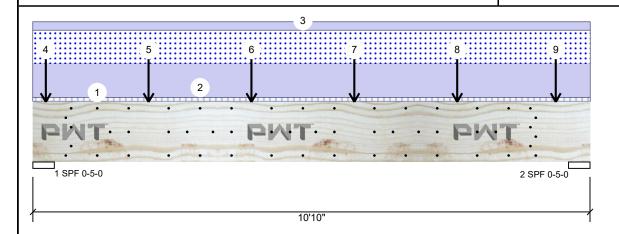


CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025 Input by:

Will Evans Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL FB₂

1.750" X 14.000" 2-Ply - PASSED Level: 2nd Floor





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	4-3-0		Near Face	198 lb	534 lb	0 lb	0 lb	0 lb	J3	
	7	Point	6-3-0		Near Face	714 lb	619 lb	0 lb	0 lb	0 lb	J3	
	8	Point	8-3-0		Near Face	172 lb	689 lb	0 lb	0 lb	0 lb	J3	
	9	Point	10-2-0		Near Face	703 lb	703 lb	0 lb	0 lb	0 lb	J3	
		Self Weight				14 PLF						

Notes

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Client: 84 L Project: CL30

Address:

84 Lumber-Fayetteville #2307 CL3034-GR-CS470

CL3034-GR-CS470

Date: 4/1/2025 Input by: Will Evans

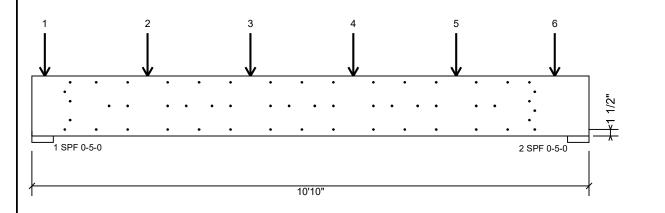
Job Name: 202504-73124 Project #: 73124

FB2 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2nd Floor





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	0.0 %
Load	0.0 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	
Duration Factor	1.00

Concentrated Load

Fasten at concentrated side load at 0-3-0 with a minimum of (5) – 16d Sinker Nails (.148x3.25") in the pattern shown.

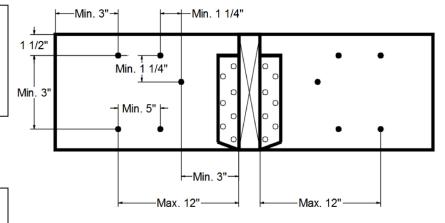
partie se		
Capacity	67.3 %	
Load	395.5lb.	
Total Yield Limit	587.8 lb.	
Cg	0.9998	
Cg См	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

Fasten at concentrated side load at 2-3-0 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown.

Capacity 52.4 % Load 369.5lb. 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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ICC-ES: ESR-2909 ESR-240 PR-L233 PR-L280

This design is valid until 9/3/2027

US Lumber 3312 North Berkeley Lake Rd, GA 30096 888-613-5078



Version 24.60.996 Powered by iStruct™ Dataset: 25010801.1457





Address:

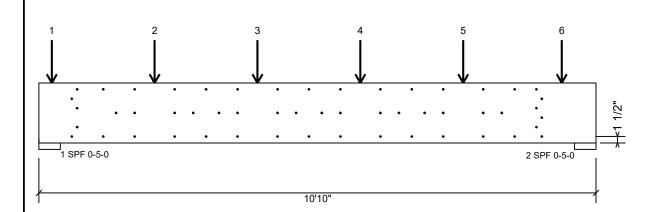
CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans

Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL FB₂

1.750" X 14.000"

Level: 2nd Floor 2-Ply - PASSED





Page 4 of 5

Multi-Ply Analysis

Concentrated Load

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

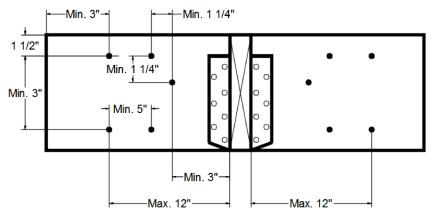
<u>.</u>		
Capacity	51.9 %	
Load	366.0lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

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

pattern snown.		
Capacity	94.5 %	
Load	666.5lb.	
Total Yield Limit	705.4 lb.	
Cg	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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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078







Address:

CL3034-GR-CS470 CL3034-GR-CS470 Date: 4/1/2025 Input by: Will Evans

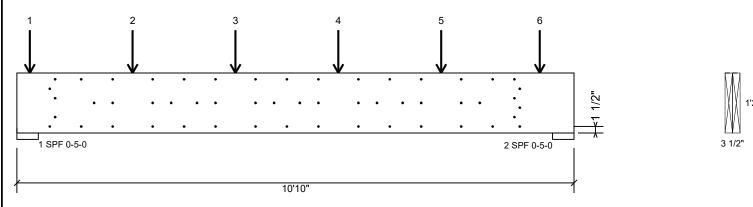
Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL FB₂

1.750" X 14.000"

2-Ply - PASSED

Level: 2nd Floor



Page 5 of 5

Multi-Ply Analysis

Concentrated Load

Fasten at concentrated side load at 8-3-0 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the pattern shown.

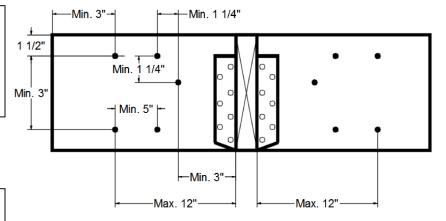
<u>!</u>		
Capacity	61.0 %	
Load	430.5lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

Concentrated Load

Fasten at concentrated side load at 10-2-0 with a minimum of (6) - 16d Sinker Nails (.148x3.25") in the nattern shown

pattern snown.		
Capacity	99.7 %	
Load	703.0lb.	
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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US Lumber 3312 North Berkeley Lake Rd, GA 888-613-5078







Project: CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025
Input by: Will Evans
Job Name: 202504-73124

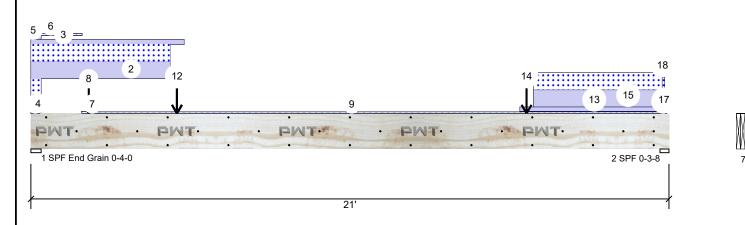
Job Name: 202504-73⁻¹ Project #: 73124

FB3 2.0E 2900Fb PWT LVL

1.750" X 14.000"

4-Ply - PASSED

Level: 2nd Floor



Member Info	rmation			Read	ctions PAT	ΓERNED	lb (U	plift)			
Type:	Girder	Application:	Floor	Brg	Direction	Live	!	Dead	Snow	Wind	Const
Plies:	4	Design Method:	ASD	1	Vertical	285	;	5125	4082	0	0
Moisture Condition	on: Dry	Building Code:	IRC 2021	2	Vertical	269)	4829	3886	0	0
Deflection LL:	360	Load Sharing:	Yes								
Deflection TL:	240	Deck:	Not Checked								
Importance:	Normal - II										
Temperature:	Temp <= 100°F										
General Load				Bear	rings						
Floor Live:	40 PSF			Bea	ring Length	Dir.	Сар.	React D/L lb	Total	Ld. Case	Ld. Comb.
Dead:	10 PSF			1 - End	SPF 4.000"	Vert	44%	5125 / 4082	9206	L	D+S
Analysis Resu	lts			Gra							
Analysis A	Actual Location	Allowed Capac	itv Comb. Ca	se 2 -	SPF 3.500"	Vert	84%	4829 / 3886	8715	L	D+S

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	30582 ft-lb	9'5 5/8"	64086 ft-lb	48%	D+S	L
Shear	7597 lb	1'6"	21413 lb	35%	D+S	L
LL Defl inch	0.379 (L/650)	10'6 1/8"	0.683 (L/360)	55%	S	L
TL Defl inch	0.849 (L/290)	10'6"	1.025 (L/240)	83%	D+S	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.470", Long Term = 0.706".
- 3 Fasten all plies using 3 rows of SDW22634 at 24" o.c. Maximum end distance not to exceed 12".
- 4 Refer to last page of calculations for fasteners required for specified loads.
- 5 Simpson fasteners applied from a single side of the member use tip values where published.
- 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 8'4 7/16" 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	Tie-In	0-0-0 to 0-3-8	0-2-10	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 4-6-15		Тор	376 PLF	0 PLF	376 PLF	0 PLF	0 PLF	
3	Part. Uniform	0-0-0 to 5-0-7		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Part. Uniform	0-0-0 to 0-4-0		Тор	376 PLF	0 PLF	376 PLF	0 PLF	0 PLF	
5	Part. Uniform	0-0-0 to 0-4-0		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight

Continued on page 2...

Notes

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Page 1 of 3





Client: 84 Lumber-Fayetteville #2307

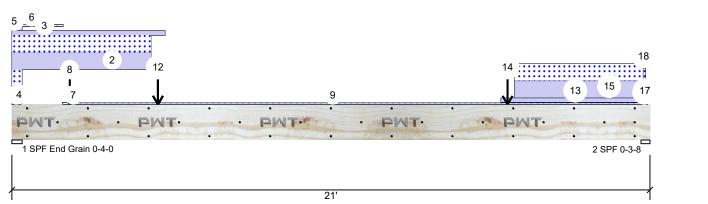
Project: CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025 Input by:

Will Evans Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL 1.750" X 14.000"

4-Ply - PASSED

Level: 2nd Floor





Page 2 of 3

Continued fror	n 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	Tie-In	0-1-12 to 1-8-1	0-10-4	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
7	Tie-In	1-8-1 to 2-1-10	0-10-4	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
8	Point	1-10-13		Тор	47 lb	0 lb	0 lb	0 lb	0 lb	Partition Wall Self Weight
	Bearing Length	0-3-8								
9	Tie-In	2-1-10 to 20-8-9	0-10-4	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
10	Point	4-9-11		Тор	5 lb	0 lb	0 lb	0 lb	0 lb	Partition Wall Self Weight
	Bearing Length	0-3-8								
11	Point	4-9-11		Тор	4 lb	0 lb	0 lb	0 lb	0 lb	Partition Wall Self Weight
	Bearing Length	0-3-8								
12	Point	4-9-11		Тор	2345 lb	0 lb	2250 lb	0 lb	0 lb	FB1
	Bearing Length	0-3-8								
13	Part. Uniform	16-1-0 to 20-9-4		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
14	Point	16-3-12		Тор	2345 lb	0 lb	2250 lb	0 lb	0 lb	FB1
	Bearing Length	0-3-8								
15	Part. Uniform	16-6-8 to 20-9-4		Тор	376 PLF	0 PLF	376 PLF	0 PLF	0 PLF	
16	Tie-In	20-8-9 to 20-10-14	0-10-4	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
17	Part. Uniform	20-9-4 to 20-10-4		Тор	376 PLF	0 PLF	376 PLF	0 PLF	0 PLF	
18	Part. Uniform	20-9-4 to 20-10-4		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				28 PLF					

Notes

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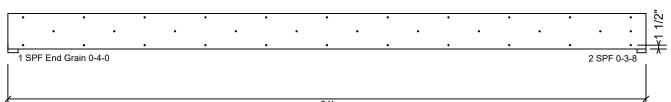




CL3034-GR-CS470 Address: CL3034-GR-CS470 Date: 4/1/2025 Input by:

Will Evans Job Name: 202504-73124 Project #: 73124

2.0E 2900Fb PWT LVL 1.750" X 14.000" FB3 4-Ply - PASSED Level: 2nd Floor



Page 3 of 3

Multi-Ply Analysis

Fasten all plies using 3 rows of SDW22634 at 24" o.c.. Maximum end distance not to exceed 12".

Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	450.0 PLF	
Yield Limit per Fastener	300.0 lb.	
CM	1	
Yield Mode	Lookup	
Edge Distance	1 1/2"	
Min. End Distance	6"	
Load Combination		
Duration Factor	1 00	

Notes

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