

84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

Date: Input by: 68922

Project #:

1/31/2025 Will Evans Job Name: 202501-68922

**Reactions PATTERNED Ib (Uplift)** 

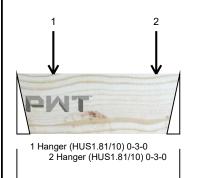
Live

351

420

Level: 2nd Floor

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



3'2"



Const

0

0

Page 1 of 1

# Member Information

Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F

General Load Floor Live: 40 PSF 10 PSF Dead:

#### Application: Floor Design Method: ASD

Building Code:	IRC 202
Load Sharing:	No

Deck: Not Checked

Brg

1

2

Direction

Vertical

Vertical

Bearings	5						
Bearing	Length	Dir.	Cap. F	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - Hanger	3.000"	Vert	15%	254 / 351	605	L	D+L
2 - Hanger	3.000"	Vert	17%	263 / 420	683	L	D+L

254

263

Snow

0

0

Wind

0

0

### **Analysis Results**

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

### **Design Notes**

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

Į	o Dottom must i	o 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	Point	0-8-8		Far Face	272 lb	386 lb	0 lb	0 lb	0 lb	J3	
I	2	Point	2-8-8		Far Face	223 lb	385 lb	0 lb	0 lb	0 lb	J3	
ı		Self Weight				7 DI E						

#### 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

CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

South

Job Name: 202501-68922 Project #: 68922

Date:

Input by:

2.0E 2900Fb PWT LVL

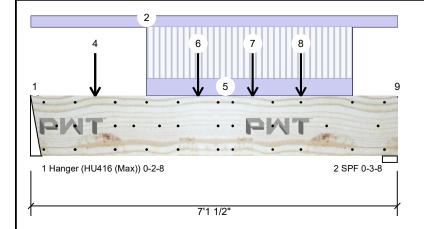
1.750" X 14.000"

2-Ply - PASSED

Level: 2nd Floor

1/31/2025

Will Evans





Page 1 of 4

N	Member Information								
	Type:	Girder							
	Plies:	2							
	Moisture Condition:	Dry							
	Deflection LL:	360							
	Deflection TL:	240							
	Importance:	Normal - II							
	Temperature:	Temn <= 100°							

Temp <= 100°F General Load 40 PSF Floor Live:

10 PSF

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

Not Checked

# Reactions PATTERNED Ib (Uplift)

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

# **Bearings**

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

### Analysis Results

Dead:

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

Deck:

### **Design Notes**

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

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

Continued on page 2...

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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:

Address:

CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

South

Input by: Will Evans Job Name: 202501-68922 Project #:

Date:

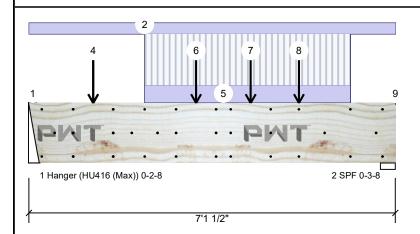
68922 Level: 2nd Floor

1/31/2025

#### 2.0E 2900Fb PWT LVL FB4

1.750" X 14.000"

2-Ply - PASSED





Page 2 of 4

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
4	Point	1-3-0		Near Face	264 lb	495 lb	0 lb	0 lb	0 lb	J6
5	Part. Uniform	2-3-0 to 6-3-0		Far Face	97 PLF	277 PLF	0 PLF	0 PLF	0 PLF	
6	Point	3-3-0		Near Face	248 lb	446 lb	0 lb	0 lb	0 lb	J6
7	Point	4-3-12		Near Face	510 lb	257 lb	0 lb	0 lb	0 lb	J6
8	Point	5-3-0		Near Face	107 lb	321 lb	0 lb	0 lb	0 lb	J6
9	Part. Uniform	7-1-8 to 7-1-8		Тор	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				14 PLF					

### Notes

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Client: 84 Lumber-Fayetteville #2307
Project: CC2724-Lot 501 Creekside O

Address:

CC2724-Lot 501 Creekside Oaks South
CC2724-Lot 501 Creekside Oaks

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

Project #:

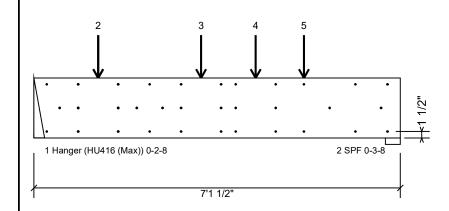
South

FB4 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

#: 68922 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	53.0 %
Load	187.0 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	D+L
Duration Factor	1.00

### **Concentrated Load**

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

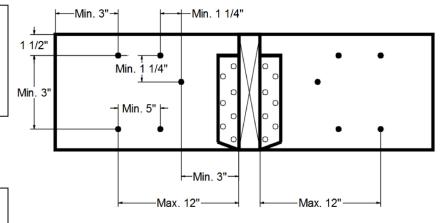
J		
Capacity	53.8 %	
Load	379.5lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

### **Concentrated Load**

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

l'		
Capacity	49.2 %	
Load	347.0lb.	
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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ICC-ES: ESR-2909 ESR-2 PR-L233 PR-L280

This design is valid until 9/3/2027

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



Version 24.60.996 Powered by iStruct™ Dataset: 25010801.1457





Client: Project:

Address:

84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South

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

CC2724-Lot 501 Creekside Oaks Project #:

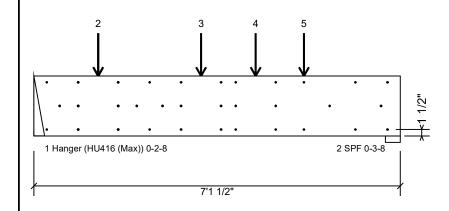
2.0E 2900Fb PWT LVL

1.750" X 14.000"

South

2-Ply - PASSED

68922 Level: 2nd Floor





Page 4 of 4

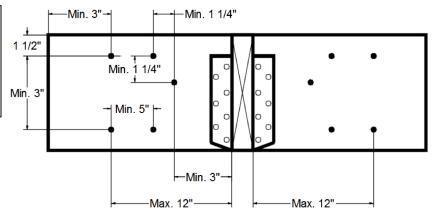
### **Multi-Ply Analysis**

### **Concentrated Load**

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

I.		
Capacity	54.4 %	
Load	383.5lb.	
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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84 Lumber-Fayetteville #2307

CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

South

Date:

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

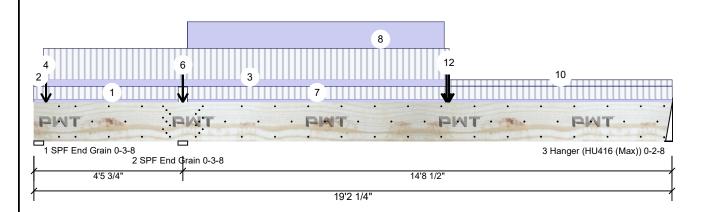
Project #: 68922

2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

Level: 2nd Floor





Page 1 of 3

Member Informatio
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Type:	Girder	Application:	Floor
Plies:	2	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		
Dead:	10 PSF		

## Reactions PATTERNED Ib (Uplift)

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

### Analysis Results

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

### **Bearings**

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

### **Design Notes**

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

#### Notes

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





Client: Project:

South

84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

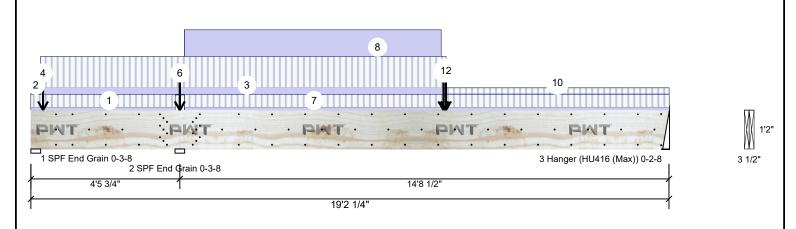
Date: 1/31/2025 Input by: Will Evans Job Name: 202501-68922

Project #: 68922

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

Address:

Level: 2nd Floor



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

### Notes

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Page 2 of 3





84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South Date: 1/31/2025 Input by: Will Evans Job Name: 202501-68922

Project #:

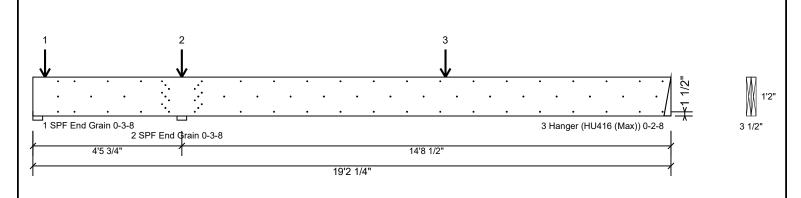
CC2724-Lot 501 Creekside Oaks South

FB5 2.0E 2900Fb PWT LVL

1.750" X 14.000"

2-Ply - PASSED

#: 68922 Level: 2nd Floor



### **Multi-Ply Analysis**

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

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	352.8 PLF
Yield Limit per Fastener	117.6 lb.
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 0-4-6 with a minimum of (3) – 16d Sinker Nails (.148x3.25") in the pattern shown.

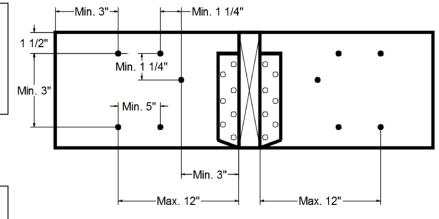
Capacity	96.8 %	
Load	341.5lb.	
Total Yield Limit	352.7 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

### **Concentrated Load**

Fasten at concentrated side load at 4-5-12 with a minimum of (18) – 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	67.2 %	
Load	1422.5lb.	
Total Yield Limit	2116.2 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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Pacific Woodtech Corp

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Burlington, WA 98233
(800) 515-7570
www.pwtewp.com
ICC-ES: ESR-2909 ESR-2403 APA:
PR-L239 PR-L280

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Page 3 of 3







84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

South

Floor

ASD

Yes

IRC 2021

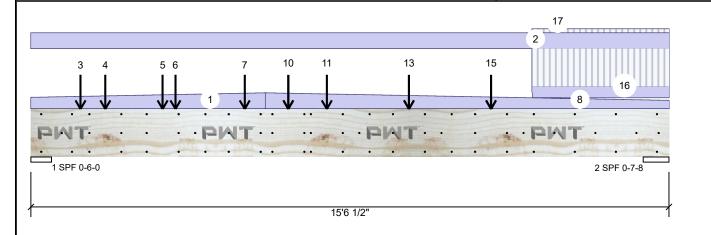
Not Checked

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

2.0E 2900Fb PWT LVL FB6

3-Ply - PASSED 1.750" X 14.000"

Level: 2nd Floor





Page 1 of 6

Member Information

Type: Girder Plies: 3 Moisture Condition: Dry Deflection LL: 360 Deflection TL: 240 Importance:

Normal - II Temp <= 100°F Temperature:

General Load Floor Live: 40 PSF 10 PSF Dead:

Reactions PATTERNED Ib (Uplift)

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

# **Bearings**

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

### Analysis Results

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

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

9 Bottom must be laterally braced at end bearings.

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

Continued on page 2...

#### Notes

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Manufacturer Info

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Continued from page 1

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

CC2724-Lot 501 Creekside Oaks

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

Project #: 68922

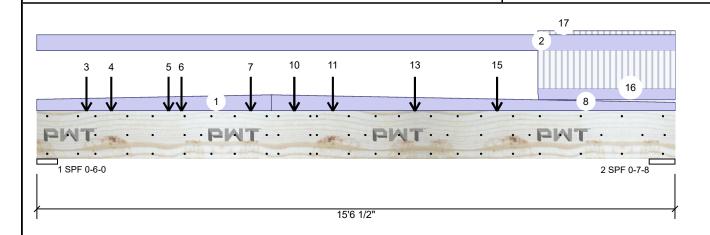
2.0E 2900Fb PWT LVL FB6

1.750" X 14.000"

South

3-Ply - PASSED

Level: 2nd Floor





5 1/4"

Page 2 of 6

Load Type Point	Location	Trib Width	0.1						
Point		THE WIGHT	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1 Ollit	3-2-8		Far Face	279 lb	495 lb	0 lb	0 lb	0 lb	J6
Point	3-6-4		Тор	2 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
Bearing Length	0-3-8								
Point	5-2-8		Far Face	267 lb	446 lb	0 lb	0 lb	0 lb	J6
Tapered Start	5-8-8		Тор	100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
End	15-6-8			55 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
Point	6-3-4		Тор	2 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
Bearing Length	0-3-8								
Point	6-3-4		Far Face	510 lb	257 lb	0 lb	0 lb	0 lb	J6
Point	7-2-8		Far Face	107 lb	321 lb	0 lb	0 lb	0 lb	J6
Point	9-2-8		Far Face	105 lb	392 lb	0 lb	0 lb	0 lb	J10
Point	9-2-8		Far Face	0 lb	-57 lb	0 lb	0 lb	0 lb	J10
Point	11-2-8		Far Face	99 lb	392 lb	0 lb	0 lb	0 lb	J10
Point	11-2-8		Far Face	0 lb	-32 lb	0 lb	0 lb	0 lb	J10
Part. Uniform	12-2-8 to 15-6-8		Far Face	70 PLF	235 PLF	0 PLF	0 PLF	0 PLF	
Part. Uniform	12-2-8 to 15-6-8		Far Face	0 PLF	-25 PLF	0 PLF	0 PLF	0 PLF	
Self Weight				21 PLF					
	Bearing Length Point Tapered Start End Point Bearing Length Point	Bearing Length       0-3-8         Point       5-2-8         Tapered Start       5-8-8         End       15-6-8         Point       6-3-4         Bearing Length       0-3-8         Point       6-3-4         Point       7-2-8         Point       9-2-8         Point       11-2-8         Point       11-2-8         Part. Uniform       12-2-8 to 15-6-8         Part. Uniform       12-2-8 to 15-6-8	Bearing Length       0-3-8         Point       5-2-8         Tapered Start       5-8-8         End       15-6-8         Point       6-3-4         Bearing Length       0-3-8         Point       6-3-4         Point       7-2-8         Point       9-2-8         Point       9-2-8         Point       11-2-8         Point       11-2-8         Part. Uniform       12-2-8 to 15-6-8         Part. Uniform       12-2-8 to 15-6-8	Bearing Length         0-3-8           Point         5-2-8         Far Face           Tapered Start         5-8-8         Top           End         15-6-8         Top           Point         6-3-4         Top           Bearing Length         0-3-8         Far Face           Point         6-3-4         Far Face           Point         7-2-8         Far Face           Point         9-2-8         Far Face           Point         9-2-8         Far Face           Point         11-2-8         Far Face           Point         11-2-8         Far Face           Part. Uniform         12-2-8 to 15-6-8         Far Face           Part. Uniform         12-2-8 to 15-6-8         Far Face	Bearing Length         0-3-8           Point         5-2-8         Far Face         267 lb           Tapered Start         5-8-8         Top         100 PLF           End         15-6-8         55 PLF           Point         6-3-4         Top         2 lb           Bearing Length         0-3-8           Point         6-3-4         Far Face         510 lb           Point         7-2-8         Far Face         107 lb           Point         9-2-8         Far Face         105 lb           Point         9-2-8         Far Face         0 lb           Point         11-2-8         Far Face         99 lb           Point         11-2-8         Far Face         0 lb           Part. Uniform         12-2-8 to 15-6-8         Far Face         0 PLF	Bearing Length         0-3-8           Point         5-2-8         Far Face         267 lb         446 lb           Tapered Start         5-8-8         Top         100 PLF         0 PLF           End         15-6-8         55 PLF         0 PLF           Point         6-3-4         Top         2 lb         0 lb           Bearing Length         0-3-8         Far Face         510 lb         257 lb           Point         6-3-4         Far Face         107 lb         321 lb           Point         7-2-8         Far Face         105 lb         392 lb           Point         9-2-8         Far Face         0 lb         -57 lb           Point         11-2-8         Far Face         99 lb         392 lb           Point         11-2-8         Far Face         0 lb         -32 lb           Part. Uniform         12-2-8 to 15-6-8         Far Face         0 PLF         235 PLF           Part. Uniform         12-2-8 to 15-6-8         Far Face         0 PLF         -25 PLF	Bearing Length         0-3-8           Point         5-2-8         Far Face         267 lb         446 lb         0 lb           Tapered Start         5-8-8         Top         100 PLF         0 PLF         0 PLF           End         15-6-8         55 PLF         0 PLF         0 PLF           Point         6-3-4         Top         2 lb         0 lb         0 lb           Bearing Length         0-3-8	Bearing Length         0-3-8           Point         5-2-8         Far Face         267 lb         446 lb         0 lb         0 lb           Tapered Start         5-8-8         Top         100 PLF         0 PLF         0 PLF         0 PLF           End         15-6-8         55 PLF         0 PLF         0 PLF         0 PLF           Point         6-3-4         Top         2 lb         0 lb         0 lb         0 lb           Bearing Length         0-3-8	Bearing Length         0-3-8           Point         5-2-8         Far Face         267 lb         446 lb         0 lb         0 lb         0 lb           Tapered Start         5-8-8         Top         100 PLF         0 PLF

### Notes

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84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks Date: 1/31/2025
Input by: Will Evans
Job Name: 202501-68

Job Name: 202501-68922 Project #: 68922

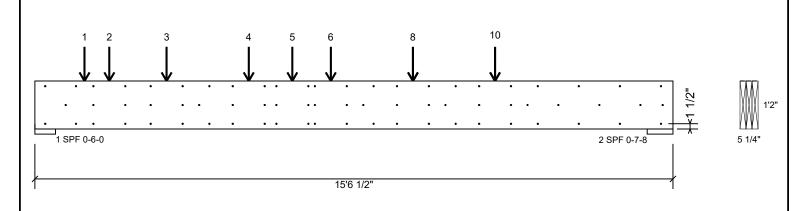
FB6 2.0E 2900Fb PWT LVL

1.750" X 14.000"

South

3-Ply - PASSED

Level: 2nd Floor



### **Multi-Ply Analysis**

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

Capacity	57.6 %
Load	203.3 PLF
Yield Limit per Foot	352.8 PLF
Yield Limit per Fastener	117.6 lb.
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 1-9-12 with a minimum of (6) – 16d Sinker Nails (.148x3.25") in the pattern shown. Nail from both sides.

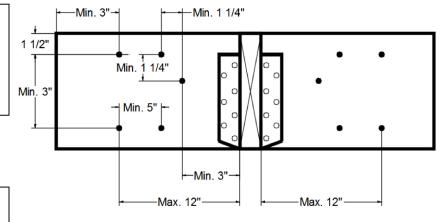
•	
Capacity	69.7 %
Load	491.3lb.
Total Yield Limit	705.4 lb.
Cg Cm	0.9998
CM	1
Yield Limit per Fastener	117.6 lb.
Yield Mode	IV
Load Combination	D+L
Duration Factor	1.00

### **Concentrated Load**

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

!		
Capacity	73.2 %	
Load	516.0lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
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

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

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Page 3 of 6

CSD DRAW DESIGN

U.S.A



84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

Date: 1/31/2025 Input by:

Will Evans Job Name: 202501-68922 Project #: 68922

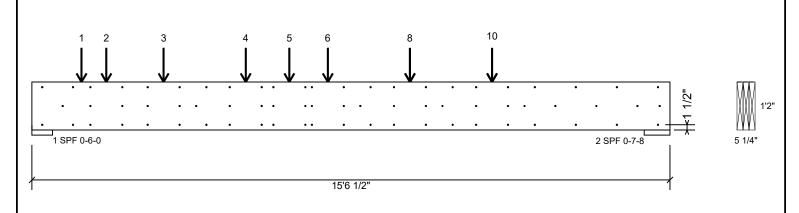
2.0E 2900Fb PWT LVL FB<sub>6</sub>

1.750" X 14.000"

South

3-Ply - PASSED

Level: 2nd Floor



### **Multi-Ply Analysis**

#### **Concentrated Load**

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

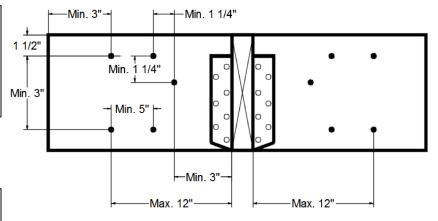
Capacity	67.4 %	
Load	475.3lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
См	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

#### **Concentrated Load**

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

pattern snown. Ivan ne	in both sides.	
Capacity	72.5 %	
Load	511.3lb.	
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

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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Page 4 of 6





FB<sub>6</sub>

2.0E 2900Fb PWT LVL

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

Date:
Input by:
Job Name

1/31/2025 Will Evans Page 5 of 6

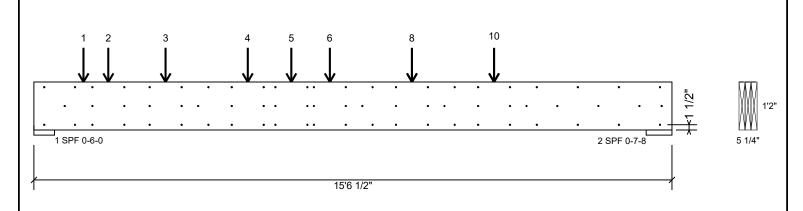
Job Name: 202501-68922 Project #: 68922

South

1.750" X 14.000"

3-Ply - PASSED

Level: 2nd Floor



### **Multi-Ply Analysis**

#### **Concentrated Load**

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

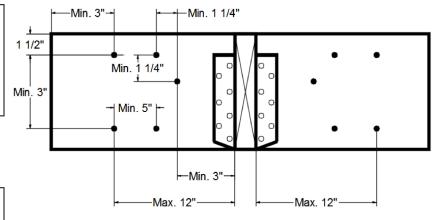
<u>.</u>		
Capacity	40.5 %	
Load	285.3lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
Cg Cm	1	
Yield Limit per Fastener	117.6 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1 00	

#### **Concentrated Load**

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

pattern snown, rian ne	iii botti siacs.	
Capacity	47.0 %	
Load	331.3lb.	
Total Yield Limit	705.4 lb.	
Cg	0.9998	
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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84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

Date: 1/31/2025 Input by: Job Name: 202501-68922

Project #:

Will Evans

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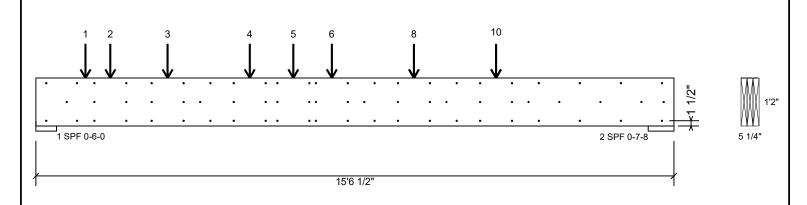
South

2.0E 2900Fb PWT LVL FB<sub>6</sub>

1.750" X 14.000"

3-Ply - PASSED

68922 Level: 2nd Floor



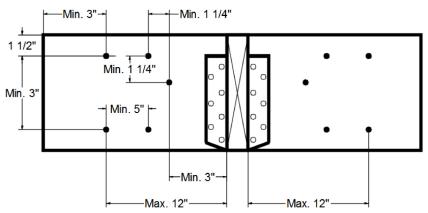
### **Multi-Ply Analysis**

#### **Concentrated Load**

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

Capacity	46.4 %
Load	327.3lb.
Total Yield Limit	705.4 lb.
Cg Cm	0.9998
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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84 Lumber-Fayetteville #2307

CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

South

Input by: Will Evans Job Name: 202501-68922

Date:

Project #: 68922

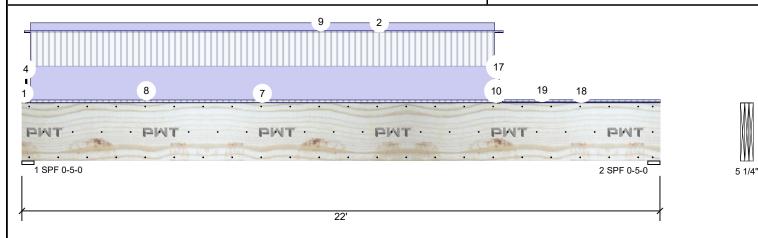
#### 2.0E 2900Fb PWT LVL FB7

3-Ply - PASSED 1.750" X 24.000"

Level: 2nd Floor

1/31/2025

Page 1 of 3



Member Information Reactions PATTERNED Ib (Uplift) Type: Girder Application: Floor Snow Wind Const Brg Direction Live Plies: 3 Design Method: ASD Vertical 4895 (-2) 6143 0 0 0 1 Moisture Condition: Dry **Building Code:** IRC 2021 4652 (-5) 5564 0 0 0 2 Vertical Deflection LL: 360 Load Sharing: Yes Deflection TL: 240 Deck: Not Checked Importance: Normal - II Temp <= 100°F Temperature: **Bearings** General Load

Bearing Length

1 - SPF 5.000"

2 - SPF 5.000"

Dir.

Vert

Vert

Cap. React D/L lb

92%

6143 / 4895

5564 / 4652

Total Ld. Case

11038 L

10216 L

Ld. Comb.

D+L

D+I

## Analysis Results

Floor Live:

Dead:

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

### **Design Notes**

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

**40 PSF** 

10 PSF

- 7 Top must be laterally braced at a maximum of 5'2 7/16" o.c.
- 8 Bottom must be laterally braced at end bearings

o Bottom must be laterally braced at end bearings.											
	ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
	1	Tie-In	0-0-0 to 0-3-8	1-0-2	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	2	Tie-In	0-1-2 to 16-7-0	0-2-12	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	3	Point	0-1-12		Тор	4 lb	0 lb	0 lb	0 lb	0 lb	GE
		Bearing Length	0-3-8								
	4	Point	0-1-12		Тор	35 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
		Bearing Length	0-3-8								

Continued on page 2...

#### Notes

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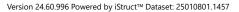
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..Continued from page 1

Client: Project: Address: 84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South Date: 1/31/2025 Input by:

Project #:

Will Evans Job Name: 202501-68922

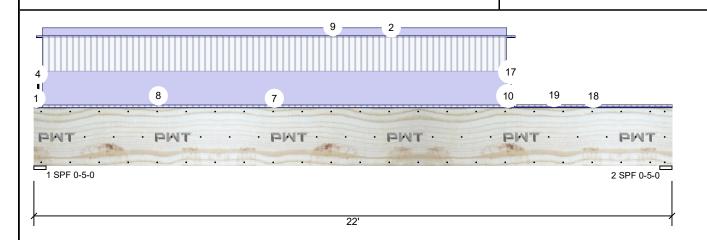
CC2724-Lot 501 Creekside Oaks South

2.0E 2900Fb PWT LVL FB7

1.750" X 24.000"

3-Ply - PASSED

68922 Level: 2nd Floor





5 1/4"

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
7	Tie-In	0-3-8 to 16-3-8	1-0-2	Тор	10 PSF	20 PSF	0 PSF	0 PSF	0 PSF	
8	Part. Uniform	0-3-8 to 16-3-8		Тор	390 PLF	390 PLF	0 PLF	0 PLF	0 PLF	R
9	Part. Uniform	0-3-8 to 16-3-8		Тор	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
10	Tie-In	16-3-8 to 16-6-8	1-0-2	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
11	Point	16-5-0		Near Face	95 lb	83 lb	0 lb	0 lb	0 lb	FB1
12	Point	16-5-0		Near Face	0 lb	-7 lb	0 lb	0 lb	0 lb	FB1
13	Point	16-5-4		Тор	55 lb	55 lb	0 lb	0 lb	0 lb	R
	Bearing Length	0-3-8								
14	Point	16-5-4		Тор	26 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
15	Point	16-5-4		Тор	2639 lb	2535 lb	0 lb	0 lb	0 lb	
	Bearing Length	0-3-8								
16	Point	16-5-4		Тор	9 lb	9 lb	0 lb	0 lb	0 lb	R
	Bearing Length	0-3-8								
17	Point	16-5-4		Тор	27 lb	0 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Bearing Length	0-3-8								
18	Tie-In	16-7-0 to 22-0-0	0-2-12	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
19	Tie-In	16-7-0 to 22-0-0	0-6-14	Тор	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				36 PLF					

#### Notes

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FB7

2.0E 2900Fb PWT LVL

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

Date: Input by: 1/31/2025 Will Evans

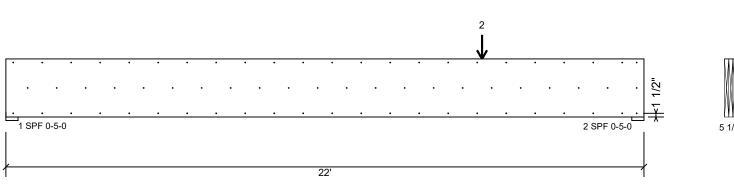
Job Name: 202501-68922

South

1.750" X 24.000"

Project #: 3-Ply - PASSED

68922 Level: 2nd Floor





Page 3 of 3

**Multi-Ply Analysis** 

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

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

### Notes

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South

84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

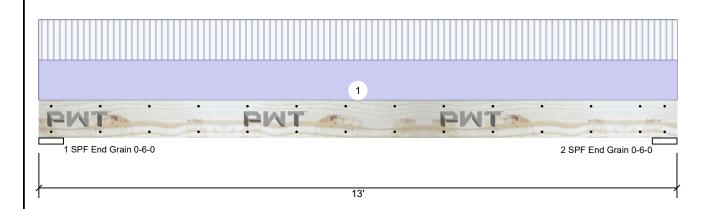
Input by:

Date: 1/31/2025 Will Evans Job Name: 202501-68922

Project #: 68922

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

Level: 2nd Floor





Page 1 of 2

3 1/2'

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

Actual

4581 ft-lb

1303 lb

LL Defl inch 0.134 (L/1084) TL Defl inch 0.279 (L/522)

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

Rea	ctions PAT	TERNED Ib	(Uplift)			
Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	780	840	0	0	0
2	Vertical	780	840	0	0	0
1						

Location	Allowed	Capacity	Comb.	Case
6'6"	12416 ft-lb	37%	D+L	L
11'8 3/4"	6151 lb	21%	D+L	L
6'6"	0.404 (L/360)	33%	L	L

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

### **Design Notes**

Analysis Results Analysis

Moment

Shear

- 1 Provide support to prevent lateral movement and rotation at the end bearings.
- 2 Dead Load Deflection: Instant = 0.145", Long Term = 0.217".
- 3 Fasten all plies using 2 rows of 16d Sinker Nails (.148x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.

6'6" 0.606 (L/240) 46%

- 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 Trib Width Side Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Const. 1.25 Comments Location Тор Part. Uniform 0-0-0 to 13-0-0 120 PLF 120 PLF 0 PLF 0 PLF 0 PLF R 1

> 9 PLF Self Weight

#### Notes

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84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

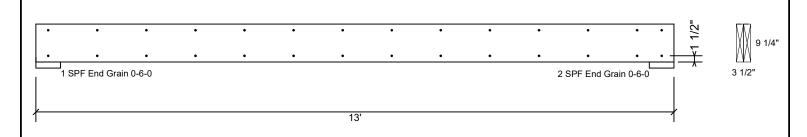
Date: 1/31/2025 Input by:

Will Evans Job Name: 202501-68922

Project #: 68922

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

Level: 2nd Floor



### **Multi-Ply Analysis**

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

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	235.2 PLF
Yield Limit per Fastener	117.6 lb.
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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Page 2 of 2





84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South

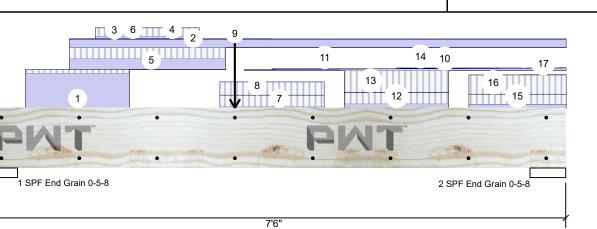
CC2724-Lot 501 Creekside Oaks

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

Project #: 68922 Level: 2nd Floor

HD<sub>1</sub> 2.0E 2900Fb PWT LVL 1.750" X 9.250"

2-Ply - PASSED



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

40 PSF Floor Live: 10 PSF Dead:

### Reactions PATTERNED Ib (Uplift)

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

### **Analysis Results**

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

Application:

Design Method:

**Building Code:** 

Load Sharing:

Deck:

# Bearings

Bearing	Length	DIr.	Сар. г	React D/L ID	iotai	Ld. Case	La. Comb
1 - SPF End Grain	5.500"	Vert	31%	2507 / 1938	4445	L	D+L
2 - SPF End Grain	5.500"	Vert	22%	1632 / 1546	3178	L	D+L

## **Design Notes**

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

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

#### Notes

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..Continued from page 1

Client: Project: Address:

84 Lumber-Fayetteville #2307

CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

Input by: Will Evans Job Name: 202501-68922

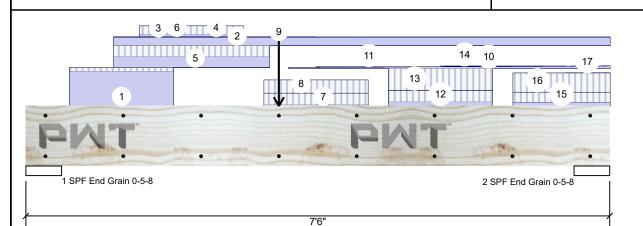
1/31/2025

Level: 2nd Floor

Project #: 68922

Date:

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





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
6	Part. Uniform	1-5-8 to 2-9-8		Тор	31 PLF	99 PLF	0 PLF	0 PLF	0 PLF	J8
7	Part. Uniform	3-0-11 to 4-4-11		Тор	-16 PLF	133 PLF	0 PLF	0 PLF	0 PLF	J2
8	Part. Uniform	3-0-11 to 4-4-11		Тор	0 PLF	-153 PLF	0 PLF	0 PLF	0 PLF	J2
9	Point	3-3-0		Тор	2639 lb	2535 lb	0 lb	0 lb	0 lb	
	Bearing Length	0-3-8								
10	Tapered Start	3-4-8		Тор	10 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	7-6-0			29 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
11	Tapered Start	3-8-11		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	5-3-14			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
12	Part. Uniform	4-7-14 to 5-11-14		Тор	-49 PLF	133 PLF	0 PLF	0 PLF	0 PLF	J1
13	Part. Uniform	4-7-14 to 5-11-14		Тор	0 PLF	-255 PLF	0 PLF	0 PLF	0 PLF	J1
14	Tapered Start	5-3-14		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	6-11-2			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
15	Part. Uniform	6-3-2 to 7-6-0		Тор	-43 PLF	116 PLF	0 PLF	0 PLF	0 PLF	J1
16	Part. Uniform	6-3-2 to 7-6-0		Тор	0 PLF	-223 PLF	0 PLF	0 PLF	0 PLF	J1
17	Tapered Start	6-11-2		Тор	0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	End	7-6-0			0 PLF	1 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				9 PLF					

#### Notes

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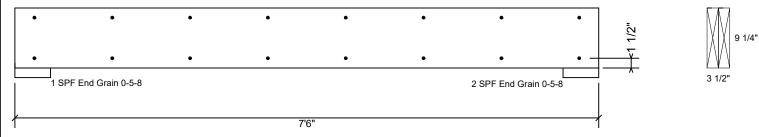
84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South CC2724-Lot 501 Creekside Oaks

Date: 1/31/2025 Input by:

Will Evans Job Name: 202501-68922 Project #: 68922

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

Level: 2nd Floor





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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84 Lumber-Fayetteville #2307

CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

South

Input by: Will Evans Job Name: 202501-68922

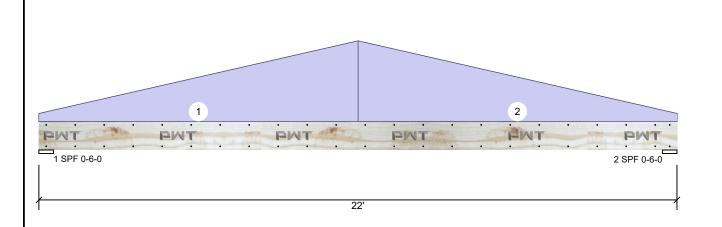
Date:

Project #: 68922

Level: 2nd Floor

1/31/2025

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





5 1/4"

D

D

Page 1 of 2

Member Inform	nation			Read	ctions PATT	ERNED	lb (Uplift)			
Type:	Girder	Application:	Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies:	3	Design Method:	ASD	1	Vertical	0	801	0	0	0
Moisture Condition:	: Dry	Building Code:	IRC 2021	2	Vertical	0	801	0	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	aring Length	Dir.	Cap. React D/L lb	Total	Ld. Case	Ld. Comb.

1-SPF 6.000"

2 - SPF 6.000"

Vert

Vert

6%

6%

#### Analysis Results

Dead:

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

### **Design Notes**

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

10 PSF

8 Bottom must be laterally braced at end bearings

0 Dottom mast i	be laterally braced at eria be	zaririgs.								
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	10 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	11-0-0			100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
2	Tapered Start	11-0-0		Тор	100 PLF	0 PLF	0 PLF	0 PLF	0 PLF	GE
	End	22-0-0			10 PLF	0 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				18 PLF					

#### Notes

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U.S.A

801/0

801/0

801 Uniform

801 Uniform



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84 Lumber-Fayetteville #2307 CC2724-Lot 501 Creekside Oaks South

CC2724-Lot 501 Creekside Oaks

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

Project #: 68922

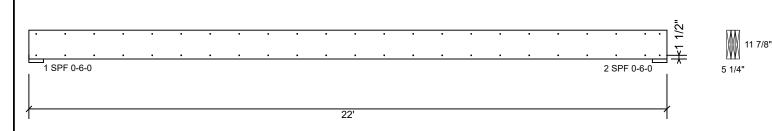
2.0E 2900Fb PWT LVL HD2

1.750" X 11.875"

South

3-Ply - PASSED

Level: 2nd Floor



## **Multi-Ply Analysis**

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

	•	
Capacity	0.0 %	
Load	0.0 PLF	
Yield Limit per Foot	235.2 PLF	
Yield Limit per Fastener	117.6 lb.	
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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