Date: 9/29/2020 Page 1 of 1 Client: Moss Homebuilders Input by: Project: isDesign Job Name: Fink Job Address: Project #: 1.750" X 11.875" 2-Ply - PASSED Level: Level LP-LVL 2900Fb-2.0E 10' Garage door Header No Girder 2 11 7/8 2 SPF End Grain 1 SPF End Grain 11' Reactions UNPATTERNED Ib (Uplift) Member Information Brg Application: Girder Floor Live Dead Snow Wind Const Type: Design Method: ASD 3410 2155 0 0 0 Plies: 2 1 IBC/IRC 2015 Moisture Condition: Dry **Building Code:** 0 0 0 2 3410 2155 Deflection LL: 480 Load Sharing: No Deflection TL: Deck: Not Checked Importance: Normal Temp <= 100°F Temperature: **Bearings** Ld. Comb. Bearing Length Cap. React D/L lb Total Ld. Case 1 - SPF 3.500" 61% 2155 / 3410 5565 L D+L End Grain Analysis Results 2 - SPF 3.500" 5565 L D+L 61% 2155 / 3410 Case Actual Location Allowed Capacity Comb. Analysis End 14056 ft-lb 5'6" 19902 ft-lb 0.706 (71%) D+L Moment Grain 0.549 (55%) D+L 4332 lb 7897 lb L 9'9 3/8" Shear 5'6" 0.264 (L/480) 0.760 (76%) L LL Defl inch 0.200 (L/632) 1 TL Defl inch 0.327 (L/387) 5'6" 0.527 (L/240) 0.620 (62%) D+L **Design Notes** 1 Provide lateral support to prevent rotation at end bearings and at interior bearings when required by code for seismic design. 2 Dead Load Deflection: Instant = 0.127", Long Term = 0.190" 3 Girders are designed to be supported on the bottom edge only. 4 Multiple plies must be fastened together as per manufacturer's details. 5 Top loads must be supported equally by all plies. 6 Top must be continuously braced. 7 Bottom braced at bearings. Dead 0.9 Snow 1.15 Wind 1.6 Const. 1.25 Comments Trib Width Side Live 1 ID Load Type Location 80 PLF 320 PLF 0 PLF 0 PLF 0 PLF Floor Load Uniform Тор 1 0 PLF Roof Load 0 PLF 2 Uniform Top 300 PLF 300 PLF 0 PLF 12 PLF Self Weight

### Notes

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Manufacturer Info

Louisiana-Pacific Corp 414 Union Street, Suite 2000 Nashville, TN 37219 (888) 820-0325 www.lpcorp.com APA: PR-L280, ICC-ES: ESR-2403, LADBS: RR-25783, Florida; FL15228 BMC/Locust Lumber Company 312 E. Main Street, North Carolina 28127 704-888-4411





Client:

Address:

Moss Homebuilders

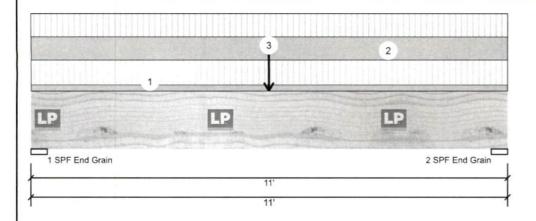
Project:

Date: Input by: 9/29/2020

Job Name: Fink Job Project #:

LP-LVL 2900Fb-2.0E 10' Garage Door Header

1.750" X 16.000" 2-Ply - PASSED Level: Level





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Member Information

Girder Type: Plies:

Moisture Condition: Dry Deflection LL: Deflection TL: 240

Importance: Temperature: Normal

Temp <= 100°F

Application: Design Method:

ASD **Building Code:** IBC/IRC 2015 Load Sharing:

Deck:

Not Checked

Floor

Reactions UNPATTERNED Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const	
1	5248	4016	0	0	0	
2	5248	4016	0	0	0	

**Analysis Results** 

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	32833 ft-lb	5'6"	34636 ft-lb	0.948 (95%)	D+L	L
Shear	7603 lb	1'7 5/8"	10640 lb	0.715 (71%)	D+L	L
LL Defl inch	0.167 (L/746)	5'6"	0.260 (L/480)	0.640 (64%)	L	L
TL Defl inch	0.304 (L/411)	5'6"	0.520 (L/240)	0.580 (58%)	D+L	L

# **Bearings**

This design is valid until 10/31/2021

Bearing	Length	Cap.	React D/L lb	Total	Ld, Case	Ld. Comb.
1 - SPF End . Grain	4.500"	78%	4016 / 5248	9264	L	D+L
2 - SPF End Grain	4.500"	78%	4016 / 5248	9264	L	D+L

## **Design Notes**

- 1 Provide lateral support to prevent rotation at end bearings and at interior bearings when required by code for seismic design.
- 2 Dead Load Deflection: Instant = 0.136", Long Term = 0.205"
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously braced.

/ Bottom braced	d at bearings.									
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	80 PLF	320 PLF	0 PLF	0 PLF	0 PLF	Floor Load
2	Uniform			Тор	300 PLF	300 PLF	0 PLF	0 PLF	0 PLF	Roof Load
3	Point	5-6-0		Тор	3676 lb	3676 lb	0 lb	0 lb	0 lb	Girder Truss
	Bearing Length	0-3-8								
	Self Weight				16 PLF					

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isDesign

Client: Project:

Address:

Moss Homebuilders

Date: 9/29/2020

Input by:

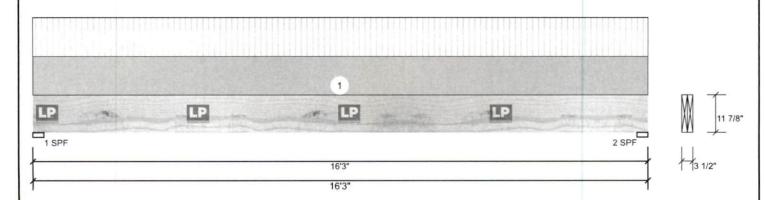
Job Name: Fink Job

Level: Level

Project #:

Back Porch Beam LP-LVL 2900Fb-2.0E

1.750" X 11.875" 2-Ply - PASSED



Reactions UNPATTERNED Ib (Uplift)

Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const	
Plies:	2	Design Method:	ASD	1	1463	1559	0	0	0	
Moisture Conditi	on: Dry	Building Code:	IBC/IRC 2015	2	1463	1559	0	0	0	
Deflection LL:	480	Load Sharing:	No							

240 Normal

Temperature: Temp <= 100°F

Member Information

Deck: Not Checked

> Bearings Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1-SPF 3.500" 58% 1559 / 1463 D+L 2 - SPF 3.500" 58% 1559 / 1463 3022 L D+L

**Analysis Results** 

Deflection TL:

Importance:

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	11593 ft-lb	8'1 1/2"	19902 ft-lb	0.582 (58%)	D+L	L
Shear	2568 lb	1'2 5/8"	7897 lb	0.325 (33%)	D+L	L
LL Defl inch	0.273 (L/693)	8'1 9/16"	0.395 (L/480)	0.690 (69%)	L	L
TL Defl inch	0.565 (L/335)	8'1 9/16"	0.790 (L/240)	0.720 (72%)	D+L	L

# Design Notes

- 1 Provide lateral support to prevent rotation at end bearings and at interior bearings when required by code for seismic design.
- 2 Dead Load Deflection: Instant = 0.291", Long Term = 0.437"
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Multiple plies must be fastened together as per manufacturer's details.
- 5 Top loads must be supported equally by all plies.
- 6 Top must be continuously braced.
- 7 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Тор	180 PLF	180 PLF	0 PLF	0 PLF	0 PLF	Roof Load
	Self Weight				12 PLF					

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