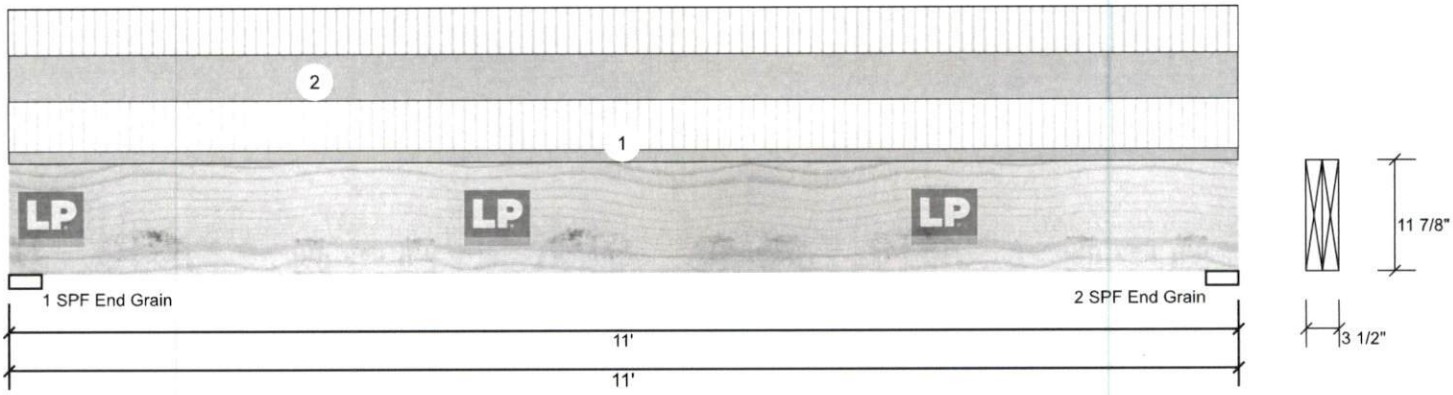
isDesign

Client: Moss Homebuilders
Project:
Address:

Date: 9/29/2020
Input by:
Job Name: Fink Job
Project #:

10' Garage door Header No Girder LP-LVL 2900Fb-2.0E 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	3410	2155	0	0	0
2	3410	2155	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	61%	2155 / 3410	5565	L	D+L
2 - SPF End Grain	3.500"	61%	2155 / 3410	5565	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14056 ft-lb	5'6"	19902 ft-lb	0.706 (71%)	D+L	L
Shear	4332 lb	9'9 3/8"	7897 lb	0.549 (55%)	D+L	L
LL Defl inch	0.200 (L/632)	5'6"	0.264 (L/480)	0.760 (76%)	L	L
TL Defl inch	0.327 (L/387)	5'6"	0.527 (L/240)	0.620 (62%)	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 = 0.127", 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.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	80 PLF	320 PLF	0 PLF	0 PLF	0 PLF	Floor Load
2	Uniform			Top	300 PLF	300 PLF	0 PLF	0 PLF	0 PLF	Roof Load
	Self Weight				12 PLF					

Notes

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

This design is valid until 10/31/2021

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

BMC

CSD DESIGN BUILD

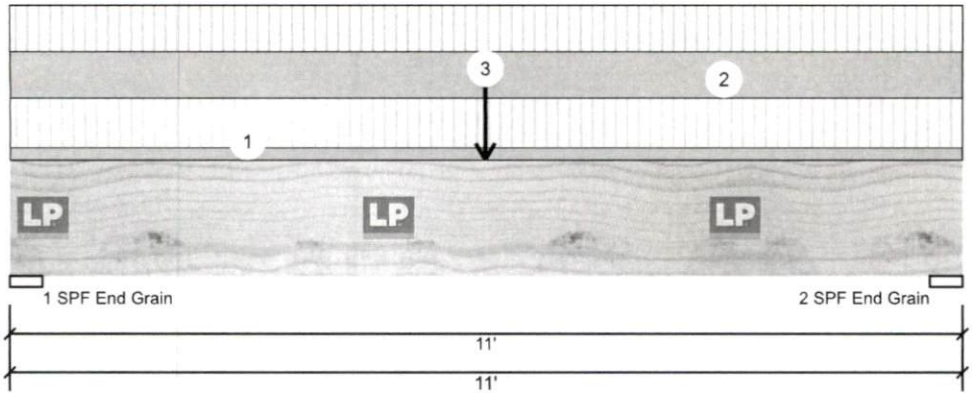
iStruct Design

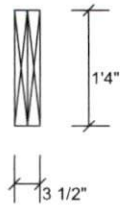
Client: Moss Homebuilders
Project:
Address:

Date: 9/29/2020
Input by:
Job Name: Fink Job
Project #:

10' Garage Door Header LP-LVL 2900Fb-2.0E 1.750" X 16.000" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

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

Bearings

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

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

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.
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			Top	80 PLF	320 PLF	0 PLF	0 PLF	0 PLF	Floor Load
2	Uniform			Top	300 PLF	300 PLF	0 PLF	0 PLF	0 PLF	Roof Load
3	Point	5-6-0		Top	3676 lb	3676 lb	0 lb	0 lb	0 lb	Girder Truss
	Bearing Length	0-3-8								
	Self Weight				16 PLF					

Notes

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CSD DRAW DESIGN BUILD

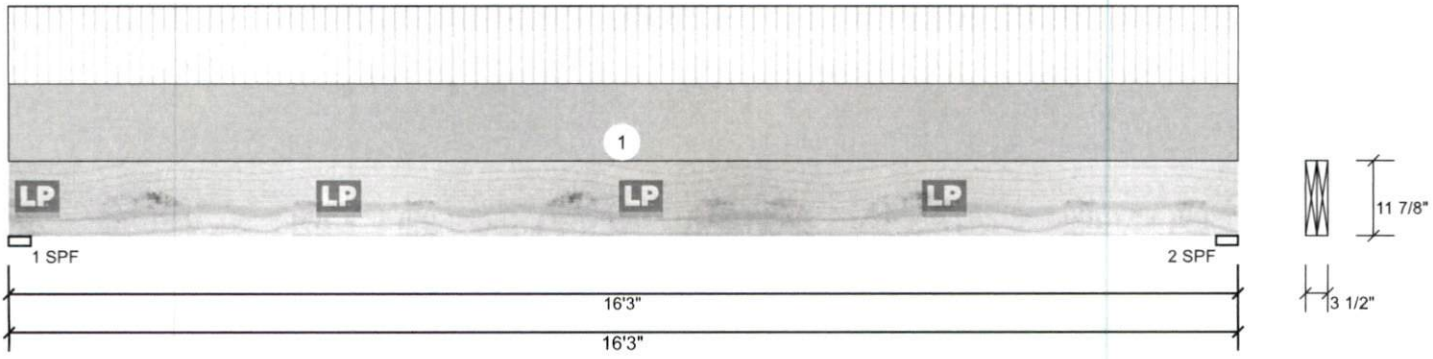
isDesign

Client: Moss Homebuilders
Project:
Address:

Date: 9/29/2020
Input by:
Job Name: Fink Job
Project #:

Back Porch Beam LP-LVL 2900Fb-2.0E 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	1463	1559	0	0	0
2	1463	1559	0	0	0

Bearings

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

Analysis Results

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			Top	180 PLF	180 PLF	0 PLF	0 PLF	0 PLF	Roof Load
	Self Weight				12 PLF					

Notes

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