Client:
Project:
Address:
Date: 3/10/2021
Input by:
Job Name: Hobbs
Project #:
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isDesign

Game Room Wdw Header   LP-LVL 2900Fb-2.0E   1.750" X 9.250"   2-Ply - PASSED Level: Level

1 SPF
2 SPF
10'
10'
9 1/4"
3 1/2"
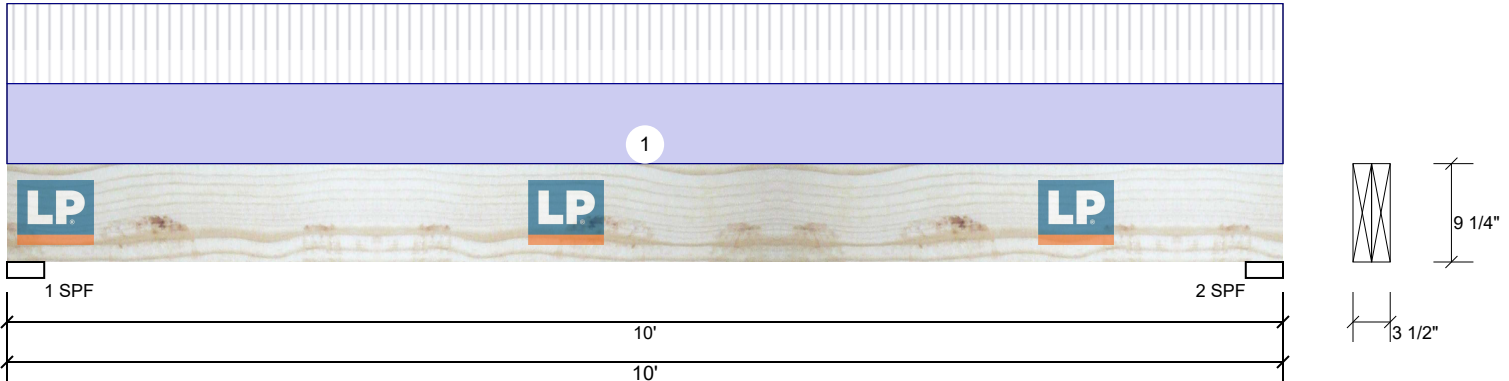
Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	2200	2246	0	0	0
2	2200	2246	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	85%	2246 / 2200	4446	L	D+L
2 - SPF	3.500"	85%	2246 / 2200	4446	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10120 ft-lb	5'	12416 ft-lb	0.815 (82%)	D+L	L
Shear	3557 lb	1'	6151 lb	0.578 (58%)	D+L	L
LL Defl inch	0.196 (L/585)	5'	0.239 (L/480)	0.820 (82%)	L	L
TL Defl inch	0.395 (L/290)	5'	0.477 (L/240)	0.830 (83%)	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 = 0.200", Long Term = 0.300"
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	440 PLF	440 PLF	0 PLF	0 PLF	0 PLF	
	Self Weight				9 PLF					

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

This design is valid until 10/31/2021

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