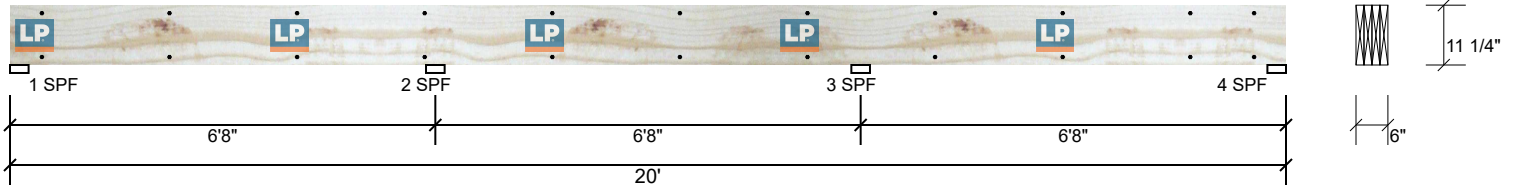


B3 LP-LVL 2900Fb-2.0E 1.500" X 11.250" 4-Ply - PASSED Level: Level



User Inputs

Design Method:	ASD	Load Sharing:	Yes	Spans	
Building Code:	IBC/IRC 2015	Importance:	Normal - II	Span 1:	6-8-0
Type:	Girder	Moisture Condition:	Dry	Span 2:	6-8-0
Application:	Floor	Temperature:	Temp <= 100°F	Span 3:	6-8-0
Plies:	4	Decking:	Not Checked	Bearings	
Material Type:	LVL	Defl. LL Span:	L / 480	Brg 1:	3.5" SPF
Material Name:	LP LVL 2900F-2.0E	Defl. LL Cant:	L / 240	Brg 2:	3.5" SPF
Depth:	11.25	Defl. TL Span:	L / 240	Brg 3:	3.5" SPF
Width:	1.5	Defl. TL Cant:	L / 120	Brg 4:	3.5" SPF

Analysis Details

Material Properties

Name	E	Fb	Fcp	Fv	G	Density
LP LVL 2900F-2.0E	2E6	2900	750	285	125000	41.2

Resistance Factors

Moment Factor	Shear Factor	Comp Perp Factor	Cr-Bending	Cr-Shear	Load Sharing	Ct	Ct (E)
0.246143364217874	1	1	1.04	1	Yes	1	1
EI (including Ct (E))		Composite EI		Ct (E) (temp. factor for E)			
1.423828E+009		1.423828E+009		1			

Load Combinations Checked for Strength (Factors include importance factor)

Comb. No.	Description	Pattern Count	Cd-Duration	D	L	S	W	C
1	D	1	0.9	1	0	0	0	0
2	D+L	7	1	1	1	0	0	0

Load Combinations Checked for Deflection (Total Loads: Dead + Live Loads)

Comb. No.	Description	Pattern Count	Cd-Duration	D	L	S	W	C
1	D	1	0.9	1	0	0	0	0
2	D+L	7	1	1	1	0	0	0

Load Combinations Checked for Deflection (Live Loads)

Comb. No.	Description	Pattern Count	Cd-Duration	D	L	S	W	C
1	L	7	1	0	1	0	0	0

B3 LP-LVL 2900Fb-2.0E 1.500" X 11.250" 4-Ply - PASSED

Level: Level

Bearing Calculation (MR: Max Reaction)

Brg. No.	Capacity	Input Length	Req'd Length	Reaction	MR Load Comb.	MR Load Case	MR Dead	MR Live	Uplift
1	425	3.5	3.5	1539.8	D+L	L_L	443.3	1096.5	0
2	425	3.5	3.5	6392.6	D+L	LL_	1149.8	5242.8	0
3	425	3.5	3.5	6392.6	D+L	_LL	1149.8	5242.8	0
4	425	3.5	3.5	1539.8	D+L	L_L	443.3	1096.5	0

Maximum Moment at Each Member

Mem No.	Span No.	Combination	Load Case	Cd	CL	Resist. Factors	Moment	Span-X	Mr	Mr_orig	Ratio
1	Spn 1	D+L	LL_	1	0.237	0.246	-2421	6-5-4	32038	7702	0.0756
2	Spn 2	D+L	LL_	1	0.237	0.246	-2423	0-0-0	32038	7702	0.0756
3	Spn 3	D+L	_LL	1	0.237	0.246	-2423	0-0-0	32038	7702	0.0756

Maximum Shear at Each Member

Mem No.	Span No.	Brg No.	Max	Combination	Load Case	Cd	Res... Fac...	Max Shear	Vr	Ratio
1	Spn 1	2	Yes	D+L	LL_	1	1	1482	12825	0.1156
2	Spn 2	3	No	D+L	_LL	1	1	1343	12825	0.1047
3	Spn 3	3	No	D+L	_LL	1	1	1482	12825	0.1156

Maximum Deflection on Span and Cantilever for Total Load (Dead + Live)

Def. Span Desc.	Combination	Load Case	Max Deflection	Span ID	Span-X	Span Analog Length	L / Allowable	L / Actual	Ratio
Critical Span	D+L	L_L	0.0141	Spn 3	3-4-4	6-5-4	240	5461.1	0.0439

Maximum Deflection on Span and Cantilever for Live Load Only

Def. Span Desc.	Combination	Load Case	Max Deflection	Span ID	Span-X	Span Analog Length	L / Allowable	L / Actual	Ratio
Critical Span	L	L_L	0.0105	Spn 3	3-3-12	6-5-4	480	7387.5	0.065