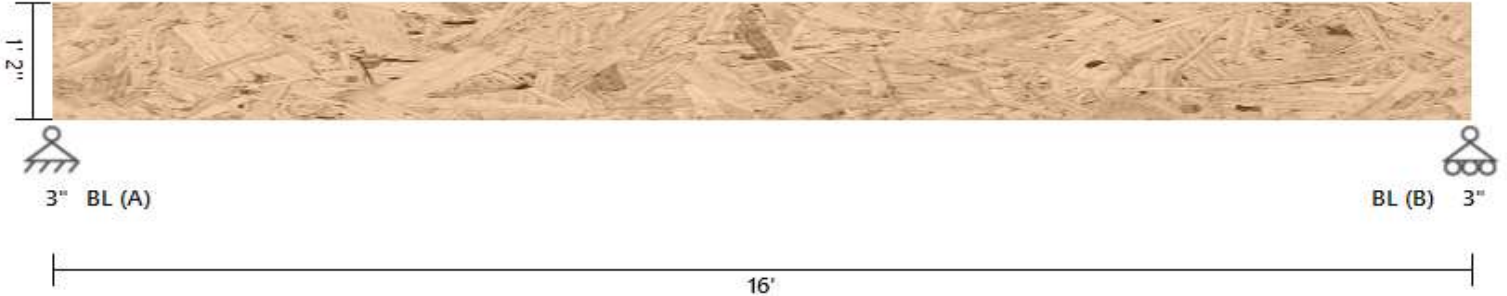


DATE:	7/12/2023	COMPANY:	--
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Terry Selby
CUSTOMER:		REVIEWED BY:	--
PROJ. ADDRESS:	--	PROJECT NAME:	Cua
	--		
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	16 ft garage header	CODE:	2021 International Building Code
MEMBER TYPE:	FLOOR BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		
Louisiana Pacific	2.0E LVL	(2) 1.75 X 14	DRY

16 ft garage header DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 16 Member Slope: 0/12 Actual Length (ft): 16

Area	Ix	Iy	BSW	Lams	Cfn	Kcr
(in ²)	(in ⁴)	(in ⁴)	(lbf/ft)			Creep Factor
49	800.33	12.51	13.95	2	9	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10 ³	Emin (psi) x10 ³
Base Values	2900	1800	285	3200	750	2000	1000
Adjusted Values	2900	1800	285	3200	750	2000	1000
C _M	1	1	1	1	1	1	1
C _T	1	1	1	1	1	1	1

Bending Adjustment Factors C_V = 0.98 C_r = 1 Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

Span	Length (ft)	Unbraced Length (ft)		Beam End				
		Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	16	0	16	0	1.00	0.87	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (68.1%)	90.8	285.0	0	D+L	1
Bending Stress Y (psi)	PASS (56.3%)	1245.9	2850.8	8	D+L	1
Deflection (in)	PASS (38.3%)	0.329 (=L/584)	0.533 (=L/360)	8	L	
Bearing Stress (psi)	PASS (62.3%)	282.6	750.0	0	D+L	1

REACTIONS

Units for V: lbf Units for M: lbf-ft

Y axis	DEAD	LIVE	TOTAL
A	112	2856	2968
B	112	2856	2968

Reaction Location

A

B

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	357	357	0	16	Live	Y
Self Weight (lbf/ft)	-	13.95	13.95	0	16	Dead	Y