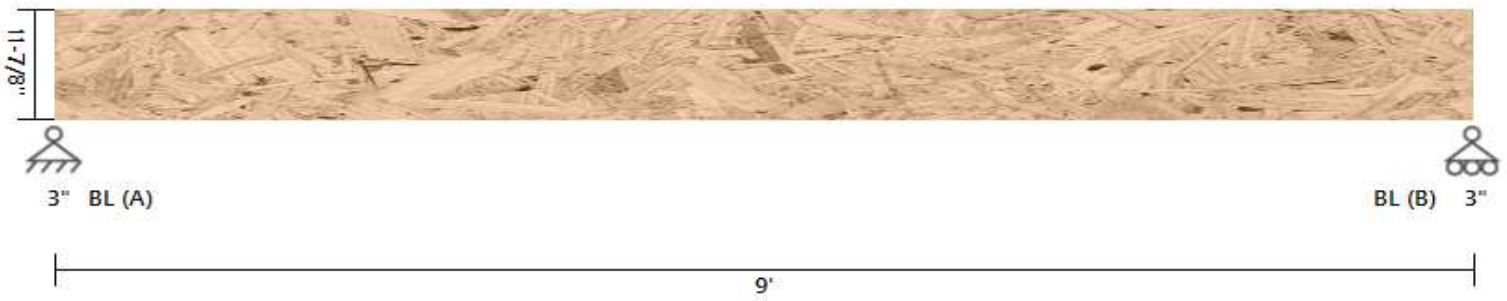
PASS

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 11.875	DRY		

16 ft garage header DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 9 Member Slope: 0/12 Actual Length (ft): 9

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
41.56	488.41	10.61	11.83	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 = 1 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) Top	Unbraced Length (ft) Bottom	Beam End Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	9	0	9	0	1.00	0.97	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (79.0%)	59.9	285.0	9	D+L	1
Bending Stress Y (psi)	PASS (81.2%)	544.8	2903.4	4.5	D+L	1
Deflection (in)	PASS (82.0%)	0.054 (=L/2000)	0.300 (=L/360)	4.5	L	
Bearing Stress (psi)	PASS (78.9%)	158.1	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	53	1606	1659
B	53	1606	1659

Reaction Location

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	Uniform	357	357	0	9	Live	Y
Self Weight (lbf/ft)	-	11.83	11.83	0	9	Dead	Y