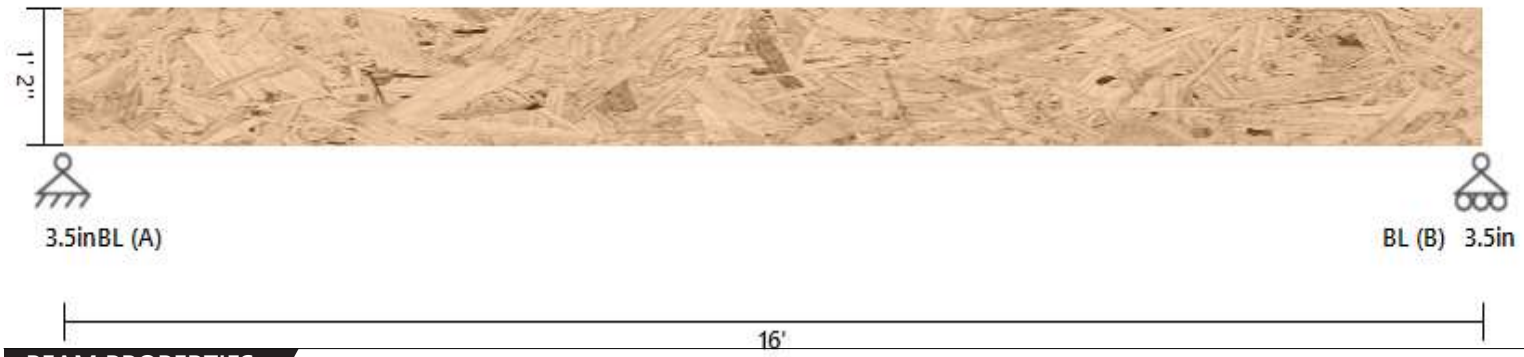
PASS

DATE:	5/8/2024	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:		REVIEWED BY:	--
PROJ. ADDRESS:	--	PROJECT NAME:	Nikolaou DU700 023 0254
	--		
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	Garage Door 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		

Garage Door Header DIAGRAM



BEAM PROPERTIES

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

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr 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 $C_V = 0.98C_r = 1$ Volume factor Is applied on a load combination basis And Is Not reflected in the adjusted values

BEAM DATA

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	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 (88.0%)	34.3	285.0	0	D+L	1
Bending Stress Y (psi)	PASS (83.5%)	470.0	2850.8	8	D+L	1
Deflection Y (in)	PASS (83.9%)	0.129 (=L/1488)	0.800 (=L/240)	8	D+L	1
Bearing Stress (psi)	PASS (87.8%)	91.4	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	544	576	1120
B	544	576	1120

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	72	72	0	16	Live	Y
Uniform (lbf/ft)	Uniform	54	54	0	16	Dead	Y
Self Weight (lbf/ft)	-	13.95	13.95	0	16	Dead	Y

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CUSTOMER:		REVIEWED BY:	--
PROJ. ADDRESS:	--	PROJECT NAME:	Nikolaou DU700 023 0254
	--		
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	Covered Porch Beam	CODE:	2021 International Building Code
MEMBER TYPE:	FLOOR BEAM	NDS:	2018 NDS
MATERIAL:	Solid Sawn		

Southern Pine	No. 2	(2) 1.5 X 11.25	DRY		

Covered Porch Beam DIAGRAM

BEAM PROPERTIES

Start (ft): 0 End (ft): 11.5 Member Slope: 0/12 Actual Length (ft): 11.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	G	Kcr Creep Factor
33.75	355.96	25.31	8.43	2	0.55	1

STRENGTH PROPERTIES

	Fb (psi)	Ft (psi)	Fv (psi)	Fc (psi)	Fc⊥ (psi)	E (psi) x10^3	Emin (psi) x10^3
Base Values	750	450	175	1250	565	1400	510
Adjusted Values	750	450	175	1250	565	1400	510
C_M	1	1	1	1	1	1	1
C_T	1	1	1	1	1	1	1
C_i	1	1	1	1	1	1	1
C_F	1	1	1	1	1	1	1

Bending Adjustment Factors C_{fu} = 1 C_r = 1

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	11.5	0	11.5	0	1.00	0.98	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (76.6%)	41.0	175.0	0	D+L	1
Bending Stress Y (psi)	PASS (32.9%)	502.9	750.0	5.75	D+L	1
Deflection Y (in)	PASS (78.0%)	0.127 (=L/1087)	0.575 (=L/240)	5.75	D+L	1
Bearing Stress (psi)	PASS (84.5%)	87.9	565.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	422	500	922
B	422	500	922

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	87	87	0	11.5	Live	Y
Uniform (lbf/ft)	Uniform	65	65	0	11.5	Dead	Y
Self Weight (lbf/ft)	-	8.43	8.43	0	11.5	Dead	Y