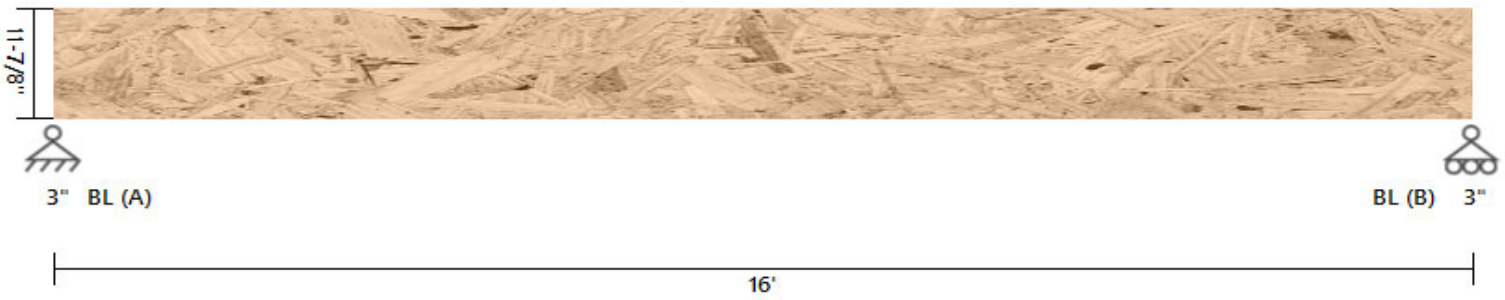
PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	-- --	PROJECT NAME:	Bass DU700 022 0177
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 11.875	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
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

		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	0.33	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (86.0%)	39.8	285.0	0	D+L	1
Bending Stress Y (psi)	PASS (77.8%)	643.4	2903.4	8	D+L	1
Deflection (in)	PASS (74.0%)	0.208 (=L/923)	0.800 (=L/240)	8	D+L	
Bearing Stress (psi)	PASS (86.0%)	105.0	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	527	576	1103
B	527	576	1103

Reaction Location

A B

LOAD LIST

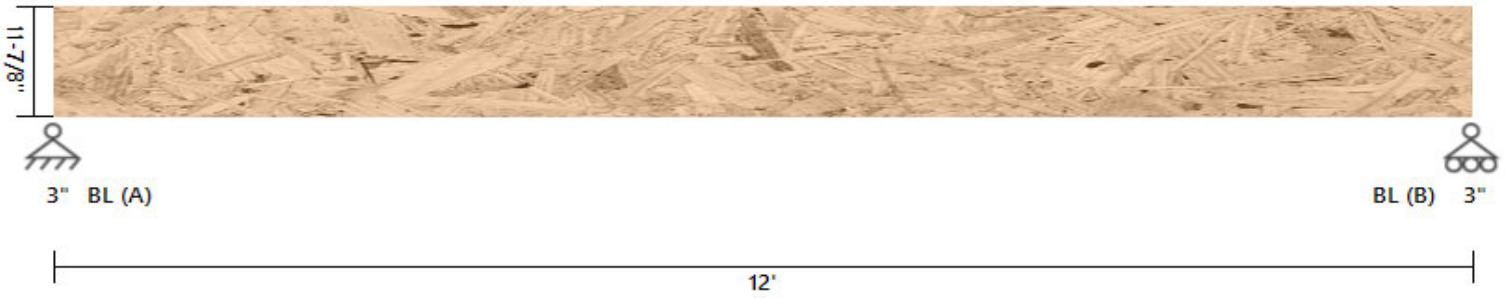
Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	72	72	0	16	Live	Y
Uniform (lbf/ft)	54	54	0	16	Dead	Y
Self Weight (lbf/ft)	11.83	11.83	0	16	Dead	Y

PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	--	PROJECT NAME:	Bass DU700 022 0177
	--		
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	foyer beam	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		

foyer beam DIAGRAM



BEAM PROPERTIES

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

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

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	12	0	12	0	1.00	0.44	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (62.6%)	106.5	285.0	12	D+L	1
Bending Stress Y (psi)	PASS (55.5%)	1291.5	2903.4	6	D+L	1
Deflection (in)	PASS (57.0%)	0.172 (=L/838)	0.400 (=L/360)	6	L	
Bearing Stress (psi)	PASS (62.5%)	281.0	750.0	12	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	791	2160	2951
B	791	2160	2951

Reaction Location

A B

LOAD LIST

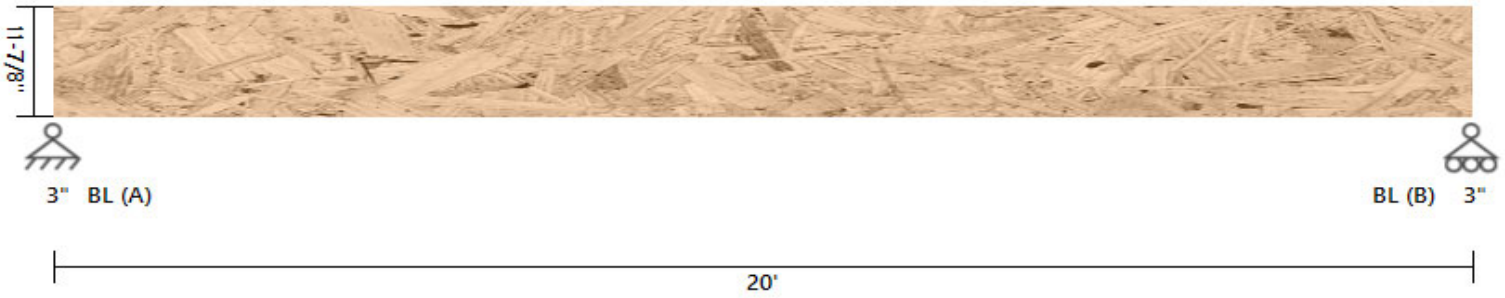
Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	360	360	0	12	Live	Y
Uniform (lbf/ft)	120	120	0	12	Dead	Y
Self Weight (lbf/ft)	11.83	11.83	0	12	Dead	Y

PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	--	PROJECT NAME:	Bass DU700 022 0177
	--		
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	great room beam	CODE:	2021 International Building Code
MEMBER TYPE:	FLOOR BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Louisiana Pacific	2.0E LVL	(3) 1.75 X 11.875	DRY		

great room beam DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 20 Member Slope: 0/12 Actual Length (ft): 20

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
62.34	732.62	15.91	17.75	3	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

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	20	0	20	0	1.00	0.27	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (85.0%)	42.8	285.0	0	D+L	1
Bending Stress Y (psi)	PASS (70.2%)	864.3	2903.4	10	D+L	1
Deflection (in)	PASS (55.8%)	0.295 (=L/814)	0.667 (=L/360)	10	L	
Bearing Stress (psi)	PASS (85.0%)	112.9	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	578	1200	1778
B	578	1200	1778

Reaction Location

A B

LOAD LIST

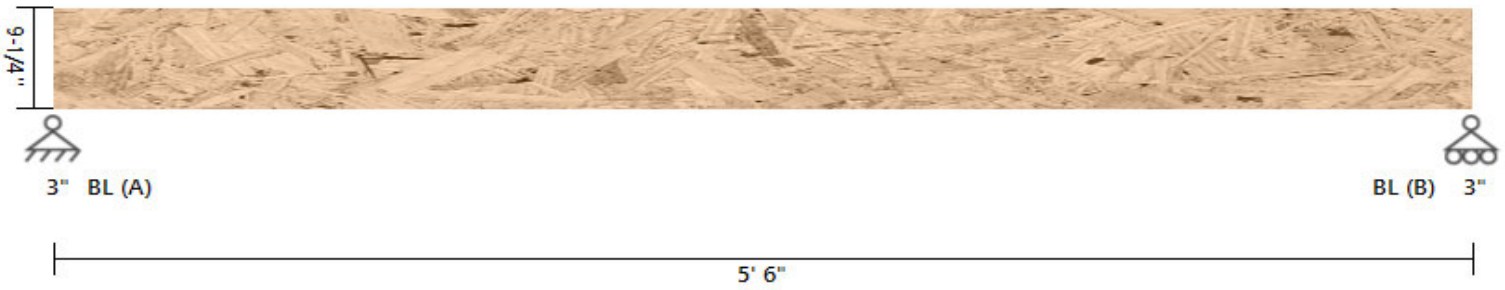
Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	120	120	0	20	Live	Y
Uniform (lbf/ft)	40	40	0	20	Dead	Y
Self Weight (lbf/ft)	17.75	17.75	0	20	Dead	Y

PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	-- --	PROJECT NAME:	Bass DU700 022 0177
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	kitchen beam	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 9.25	DRY		

kitchen beam DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 5.5 Member Slope: 0/12 Actual Length (ft): 5.5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
32.38	230.84	8.26	9.22	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 = 1.03 C_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	5.5	0	5.5	0	1.00	0.90	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (76.3%)	67.4	285.0	5.5	D+L	1
Bending Stress Y (psi)	PASS (83.9%)	481.1	2985.1	2.75	D+L	1
Deflection (in)	PASS (90.5%)	0.017 (=L/3792)	0.183 (=L/360)	2.75	L	
Bearing Stress (psi)	PASS (81.5%)	138.6	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	383	1072	1455
B	383	1072	1455

Reaction Location

LOAD LIST

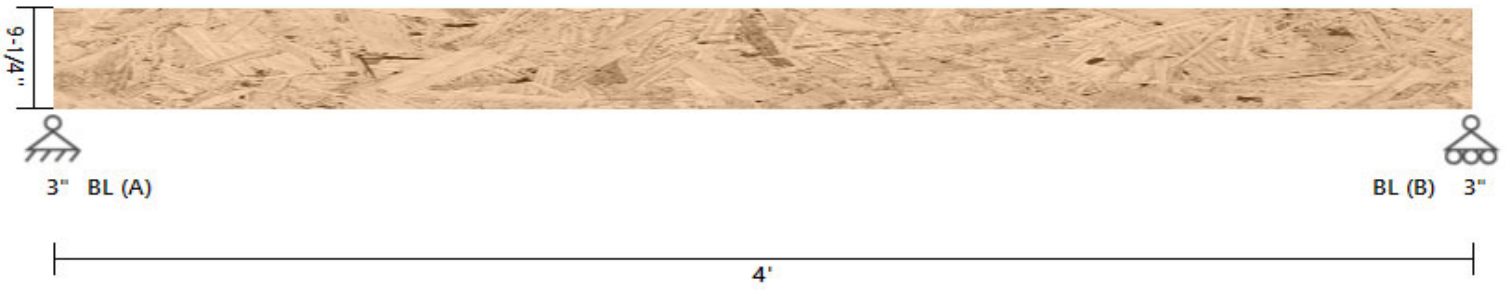
Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	390	390	0	5.5	Live	Y
Uniform (lbf/ft)	130	130	0	5.5	Dead	Y
Self Weight (lbf/ft)	9.22	9.22	0	5.5	Dead	Y

PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	--	PROJECT NAME:	Bass DU700 022 0177
	--		
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	Dining room Beam	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 9.25	DRY		

Dining room Beam DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 4 Member Slope: 0/12 Actual Length (ft): 4

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
32.38	230.84	8.26	9.22	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 = 1.03 C_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	4	0	4	0	1.00	0.95	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (85.4%)	41.6	285.0	0	D+L	1
Bending Stress Y (psi)	PASS (92.8%)	216.0	2985.1	2	D+L	1
Deflection (in)	PASS (96.9%)	0.004 (=L/11704)	0.133 (=L/360)	2	L	
Bearing Stress (psi)	PASS (88.6%)	85.6	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	238	660	898
B	238	660	898

Reaction Location

A B

LOAD LIST

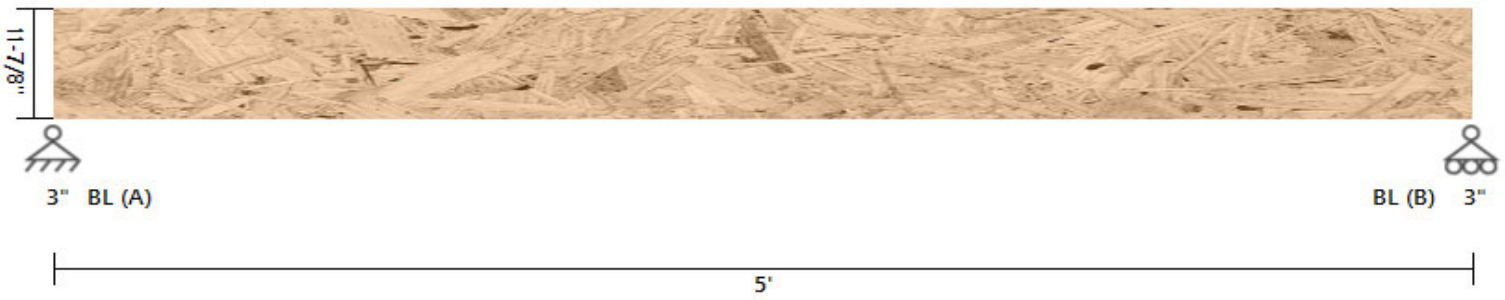
Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	330	330	0	4	Live	Y
Uniform (lbf/ft)	110	110	0	4	Dead	Y
Self Weight (lbf/ft)	9.22	9.22	0	4	Dead	Y

PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	-- --	PROJECT NAME:	Bass DU700 022 0177
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	half bath door hdr	CODE:	2021 International Building Code
MEMBER TYPE:	FLOOR BEAM	NDS:	2018 NDS
MATERIAL:	Structural Composite Lumber		

Louisiana Pacific	2.0E LVL	(3) 1.75 X 11.875	DRY		

half bath door hdr DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 5 Member Slope: 0/12 Actual Length (ft): 5

Area (in^2)	Ix (in^4)	Iy (in^4)	BSW (lbf/ft)	Lams	Cfn	Kcr Creep Factor
62.34	732.62	15.91	17.75	3	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

		Unbraced Length (ft)		Beam End				
Span	Length (ft)	Top	Bottom	Elev. Diff (ft)	CL(Top)	CL(Bottom)	CL(Left)	CL(Right)
1	5	0	5	0	1.00	0.88	1.00	1.00

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	LOAD COMBO	DURATION FACTOR CD
Shear Stress Y (psi)	PASS (92.1%)	22.5	285.0	0	D+L	1
Bending Stress Y (psi)	PASS (97.0%)	86.6	2903.4	1	D+L	1
Deflection (in)	PASS (99.0%)	0.002 (=L/35301)	0.167 (=L/360)	2.25	L	
Bearing Stress (psi)	PASS (92.1%)	59.2	750.0	0	D+L	1

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	270	663	933
B	127	267	394

Reaction Location

A B

LOAD LIST

Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	54	54	0	5	Live	Y
Uniform (lbf/ft)	14	14	0	5	Dead	Y
Self Weight (lbf/ft)	17.75	17.75	0	5	Dead	Y

LINKED LOAD LIST

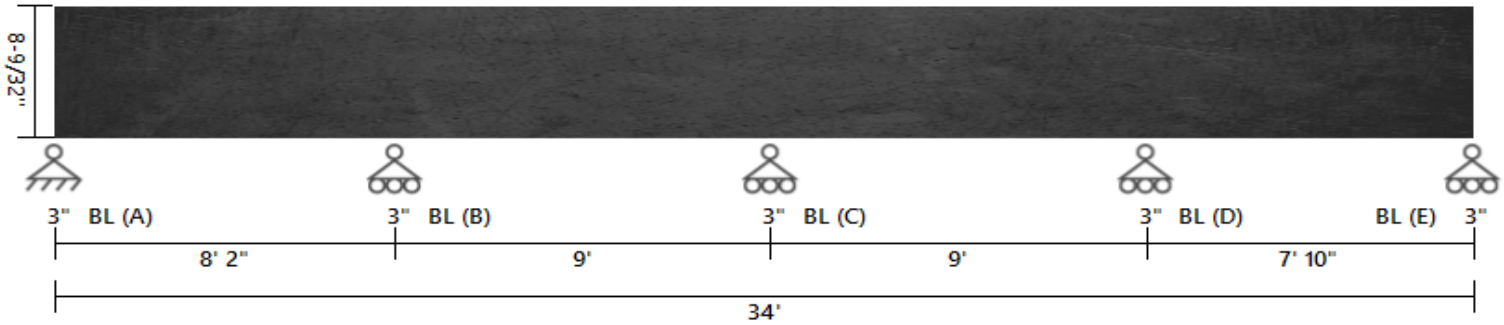
Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lbf)	238.4358	-	1	-	Dead	Y
Point (lbf)	660	-	1	-	Live	Y

PASS

DATE:	12/29/2022	COMPANY:	Schumacher Homes
STRUCALC BUILD:	StruCalc Plus	DESIGNED BY:	Dan Fishtorn
CUSTOMER:	Bass DU700 022 0177	REVIEWED BY:	Dan Fishtorn
PROJ. ADDRESS:	--	PROJECT NAME:	Bass DU700 022 0177
	--		
LEVEL:	Basement	LOADING:	ASD
MEMBER NAME:	Basement Steel Beam	CODE:	2021 International Building Code
MEMBER TYPE:	FLOOR BEAM	AISC:	AISC 360-16
MATERIAL:	Steel		

W Shapes	W8x21	A36-36			

Basement Steel Beam DIAGRAM



BEAM PROPERTIES

Start (ft): 0 End (ft): 34 Member Slope: 0/12 Actual Length (ft): 34

Es x10^3	Fy x10^3	Fu x10^3	Area	depth	tw	tf	bf	Ix	Iy	Zx	Zy	J	Cw
(psi)	(psi)	(psi)	(in^2)	(in)	(in)	(in)	(in)	(in^4)	(in^4)	(in^3)	(in^3)	(in^4)	(in^6)
29000	36	58	6.16	8.28	0.25	0.4	5.27	75.3	9.77	20.4	5.69	0.282	152

DESIGN PROPERTIES

Lp	Lr	Flange	Web	Flange	Web		
(in)	(in)	Flexure	Flexure	Compression	Compression	Cv	Cv_WA
63	231	Compact	Compact	Non-Slender	Non-Slender	1	1

BEAM DATA

		Unbraced Length		Beam End							
Span	Length	Top	Bottom	Elev. Diff	Pnt/ω	Pnc/ω	Mn/ω	Mn-OOP/ω	Vn/ω	Vn-OOP/ω	Cb	Cb-OOP
1	8.1667	0	8.1667	0	0	0	0	0	0	0	1.822	1
1	9	0	9	0	0	0	0	0	0	0	2.393	1
1	9	0	9	0	0	0	0	0	0	0	2.222	1
1	7.833	0	7.833	0	0	0	0	0	0	0	1.906	1

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOCATION (ft)	AISC CODE	LOAD COMBO
Shear Force Y (lbf)	PASS (79.1%)	-6237.9	29808.0	8.16	G2-1	D+L
Moment Y (lbf-ft)	PASS (74.3%)	9418.7	36646.7	8.16	F2-1	D+L
Deflection (in)	PASS (93.5%)	0.027 (=L/3684)	0.408 (=L/240)	3.4		D+L

REACTIONS

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

Y axis	DEAD	LIVE	TOTAL
A	1728	2201	3929
B	5285	6732	12017
C	4808	6124	10932
D	5173	6589	11762
E	1638	2086	3724

Reaction Location

LOAD LIST

Type	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Uniform (lbf/ft)	596	596	0	33.9997	Live	Y
Uniform (lbf/ft)	450	450	0	33.9997	Dead	Y
Uniform (lbf/ft)	102	102	0	33.9997	Live	Y
Uniform (lbf/ft)	77	77	0	33.9997	Dead	Y
Self Weight (lbf/ft)	21	21	0	33.9997	Dead	Y