

MEMBER REPORT Level, BM2 2 piece(s) 1 3/4" x 16" 1.55E TimberStrand® LSL

Overall Length: 7 0 8



All Dimensions Are Horizontal; Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4874 @ 6 9 0	4874	Passed (100%)		1.0 D + 1.0 Lr (All Spans)
Shear (lbs)	3668 @ 1 9 8	14467	Passed (25%)	1.25	1.0 D + 1.0 Lr (All Spans)
Moment (Ft-Ibs)	8014 @ 3 5 9	35222	Passed (23%)	1.25	1.0 D + 1.0 Lr (All Spans)
Live Load Defl. (in)	0.031 @ 3 6 1	0.214	Passed (L/999+)		1.0 D + 1.0 Lr (All Spans)
Total Load Defl. (in)	0.054 @ 3 6 1	0.321	Passed (L/999+)		1.0 D + 1.0 Lr (All Spans)

System : Floor Member Type : Flush Beam Building Use : Residential Building Code : IBC Design Methodology : ASD

• Deflection criteria: LL (L/360) and TL (L/240).

• Bracing (Lu): All compression edges (top and bottom) must be braced at 6 7 12 o/c unless detailed otherwise. Proper attachment and positioning of lateral bracing is required to achieve member stability.

	Bearing Length				Loads to S			
Supports	Total	Available	Required	Dead	Floor Live	Roof Live	Total	Accessories
1 - Stud wall - SYP	5.50"	4.25"	3.76"	3104	142	4351	7597	1 1/4" Rim Board
2 - Hanger on 16" SYP beam	3.50"	Hanger ¹	1.74"	2291	140	3010	5441	See note 1

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

• At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger

• 1 See Connector grid below for additional information and/or requirements.

Connector: Simpson Strong-Tie Connectors									
Support	Model	Seat Length	Top Nails	Face Nails	Member Nails	Accessories			
2 - Face Mount Hanger	HGUS412	4.00"	N/A	56-16d common	20-16d double shear				

Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Roof Live (non-snow: 1.25)	Comments
1 - Uniform(PSF)	0 0 0 to 7 0 8	100	12.0	40.0	-	Residential - Living Areas
2 - Uniform(PLF)	2 0 0 to 7 0 8	N/A	489.0	-	814.0	T18, T19
3 - Point(lb)	0 10 4	N/A	1849	-	3081	T20
4 - Uniform(PLF)	0 0 0 to 7 0 8	N/A	15.0	-	25.0	T13
5 - Uniform(PLF)	0 0 0 to 7 0 8	N/A	110.0	-	-	WALL ABOVE

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The product application, input design loads, dimensions and support information have been provided by Forte Software Operator

Forte Software Operator
Job Notes

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MEMBER REPORTLevel, BM32 piece(s) 1 3/4" x 11 7/8" 1.9E Microllam® LVL

Overall Length: 17 11 8



All Dimensions Are Horizontal; Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)	
Member Reaction (lbs)	3219 @ 0 2 0	6921	Passed (47%)		1.0 D + 1.0 Lr (All Spans)]
Shear (lbs)	2760 @ 1 3 6	9871	Passed (28%)	1.25	1.0 D + 1.0 Lr (All Spans)]
Moment (Ft-Ibs)	13920 @ 8 11 12	22310	Passed (62%)	1.25	1.0 D + 1.0 Lr (All Spans)	
Live Load Defl. (in)	0.515 @ 8 11 12	0.587	Passed (L/411)		1.0 D + 1.0 Lr (All Spans)	1
Total Load Defl. (in)	0.879 @ 8 11 12	0.881	Passed (L/241)		1.0 D + 1.0 Lr (All Spans)]

System : Floor Member Type : Flush Beam Building Use : Residential Building Code : IBC Design Methodology : ASD

• Deflection criteria: LL (L/360) and TL (L/240).

• Bracing (Lu): All compression edges (tog and bottom) must be braced at 10 1 4 o/c unless detailed otherwise. Proper attachment and positioning of lateral bracing is required to achieve member stability.

	Bearing Length				Loads to S			
Supports	Total	Available	Required	Dead	Floor Live	Roof Live	Total	Accessories
1 - Stud wall - SYP	3.50"	3.50"	1.63"	1333	359	1886	3578	Blocking
2 - Stud wall - SYP	3.50"	3.50"	1.63"	1333	359	1886	3578	Blocking

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Roof Live (non-snow: 1.25)	Comments
1 - Uniform(PSF)	0 0 0 to 17 11 8	100	12.0	40.0	-	Residential - Living Areas
2 - Uniform(PLF)	0 0 0 to 17 11 8	N/A	80.0	-	135.0	T31
3 - Uniform(PLF)	0 0 0 to 17 11 8	N/A	45.0	-	75.0	CONV FRAME

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MEMBER REPORTLevel, BM92 piece(s) 1 3/4" x 16" 1.9E Microllam® LVL

Overall Length: 9 1 8



All Dimensions Are Horizontal; Drawing is Conceptual

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)	
Member Reaction (lbs)	3469 @ 8 10 0	3938	Passed (88%)		1.0 D + 1.0 L (All Spans)]
Shear (lbs)	2401 @ 7 6 0	10640	Passed (23%)	1.00	1.0 D + 1.0 L (All Spans)]
Moment (Ft-Ibs)	7515 @ 4 6 0	31114	Passed (24%)	1.00	1.0 D + 1.0 L (All Spans)]
Live Load Defl. (in)	0.044 @ 4 6 0	0.289	Passed (L/999+)		1.0 D + 1.0 L (All Spans)	1
Total Load Defl. (in)	0.061 @ 4 6 0	0.433	Passed (L/999+)		1.0 D + 1.0 L (All Spans)	1

System : Floor Member Type : Flush Beam Building Use : Residential Building Code : IBC Design Methodology : ASD

• Deflection criteria: LL (L/360) and TL (L/240).

• Bracing (Lu): All compression edges (top and bottom) must be braced at 8 10 0 o/c unless detailed otherwise. Proper attachment and positioning of lateral bracing is required to achieve member stability.

	Bearing Length			Loads	s to Suppor	ts (lbs)	
Supports	Total	Available	Required	Dead	Floor Live	Total	Accessories
1 - Stud wall - SPF	3.50"	3.50"	2.42"	1024	2579	3603	Blocking
2 - Hanger on 16" SPF beam	3.50"	Hanger ¹	1.50"	1048	2650	3698	See note 1

• Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

• At hanger supports, the Total Bearing dimension is equal to the width of the material that is supporting the hanger

• 1 See Connector grid below for additional information and/or requirements.

Connector: Simpson Strong-Tie Connectors									
Support	Model	Seat Length	Top Nails	Face Nails	Member Nails	Accessories			
2 - Face Mount Hanger	HGUS412	4.00"	N/A	56-16d common	20-16d double shear				

Loads	Location	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform(PSF)	0 0 0 to 9 1 8	100	12.0	40.0	Residential - Living Areas
2 - Uniform(PLF)	0 0 0 to 9 1 8	N/A	88.0	235.0	F35
3 - Uniform(PLF)	0 0 0 to 9 1 8	N/A	112.0	298.0	F37

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