

Level			
Member Name	Results (Max UTIL %)	Current Solution	Comments
Garage Door Header	Passed (49% ΔT)	2 piece(s) 1 3/4" x 14" 2.0E Microllam® LVL	

ForteWEB Software Operator	Job Notes
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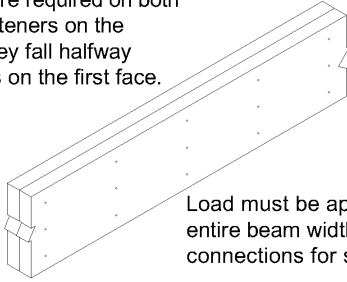
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File Name: Sercy - Licata

### Top-Loaded Beam

When fasteners are required on both faces, stagger fasteners on the second face so they fall halfway between fasteners on the first face.



Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams.

L6

When connecting 4-ply members, nail each ply to the other and offset nail rows by 2" from rows in the ply below.

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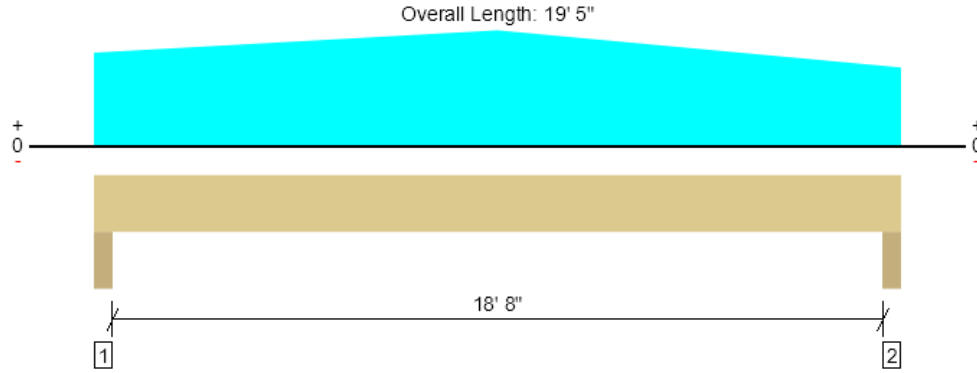


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Level, Garage Door Header  
2 piece(s) 1 3/4" x 14" 2.0E Microllam® LVL



Drawing is Conceptual. All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal (typ.).

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2334 @ 3"	11419 (4.50")	Passed (20%)	--	1.0 D + 0.75 L + 0.75 Lr (All Spans)
Shear (lbs)	1711 @ 1' 6 1/2"	9310	Passed (18%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	9510 @ 9' 6 15/16"	24258	Passed (39%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.143 @ 9' 8 1/2"	0.631	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 Lr (All Spans)
Total Load Defl. (in)	0.468 @ 9' 8 1/8"	0.946	Passed (L/485)	--	1.0 D + 0.75 L + 0.75 Lr (All Spans)

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Member Length : 19' 5"  
System : Floor  
Member Type : Drop Beam  
Building Use : Residential  
Building Code : IBC 2018  
Design Methodology : ASD

Supports	Bearing Length			Loads to Supports (lbs)					Accessories
	Total	Available	Required	Dead	Floor Live	Roof Live	Snow	Factored	
1 - Trimmer - SPF	4.50"	4.50"	1.50"	1606	388	583	291	2334	None
2 - Trimmer - SPF	4.50"	4.50"	1.50"	1473	388	583	291	2201	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	15' 7" o/c	
Bottom Edge (Lu)	19' 5" o/c	

- Maximum allowable bracing intervals based on applied load.

### Multiple Member Connections

Type	Location	Fastener	Placement	Rows	O.C.	# of Fasteners	Details
Uniform	0 to 19' 5"	10d (0.128" x 3") or (0.131" x 3") Nail	One Face	4	12"	--	L6

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Roof Live (1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 19' 5"	N/A	14.3	--	--	--	
1 - Uniform (PSF)	0 to 19' 5" (Top)	2'	12.0	20.0	--	--	Floor - Light attic storage
2 - Uniform (PSF)	0 to 19' 5" (Top)	3'	13.4	--	20.0	10.0	Roof
3 - Tapered (PLF)	0 to 9' 8 1/2" (Top)	N/A	60.0 to 120.0	--	--	--	Gable end wall
4 - Tapered (PLF)	9' 8 1/2" to 19' 5" (Top)	N/A	120.0 to 20.0	--	--	--	Gable end wall

- Side loads are assumed to not induce cross-grain tension.

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

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