

| Level | | | |
|-------------|---------|--|----------|
| Member Name | Results | Current Solution | Comments |
| BM1-3 | Passed | 3 piece(s) 1 3/4" x 9 1/4" 2.0E Microllam® LVL | |

| ForteWEB Software Operator | Job Notes |
|--|---|
| Steve Farr Carolina Structural Systems (844) 767-1926 sfarr@carolinastructuralsystems.com | 2115423RT1 GARRIS EVANS - DAWSON 6983 US 401 HWY FUQUAY-VARINA, NC 27526 |

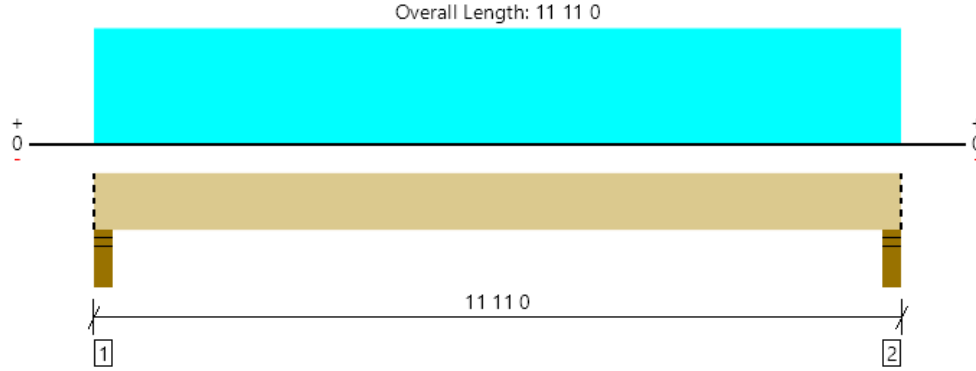


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ForteWEB v3.6

File Name: 221543RT1

Level, BM1-3
 3 piece(s) 1 3/4" x 9 1/4" 2.0E Microllam® LVL



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

| Design Results | Actual @ Location | Allowed | Result | LDF | Load: Combination (Pattern) |
|-----------------------|-------------------|---------------|----------------|------|-----------------------------|
| Member Reaction (lbs) | 4355 @ 0 3 0 | 10041 (4.50") | Passed (43%) | -- | 1.0 D + 1.0 Lr (All Spans) |
| Shear (lbs) | 3517 @ 1 1 12 | 11534 | Passed (30%) | 1.25 | 1.0 D + 1.0 Lr (All Spans) |
| Moment (Ft-lbs) | 11907 @ 5 11 8 | 21007 | Passed (57%) | 1.25 | 1.0 D + 1.0 Lr (All Spans) |
| Live Load Defl. (in) | 0.212 @ 5 11 8 | 0.571 | Passed (L/647) | -- | 1.0 D + 1.0 Lr (All Spans) |
| Total Load Defl. (in) | 0.432 @ 5 11 8 | 0.761 | Passed (L/317) | -- | 1.0 D + 1.0 Lr (All Spans) |

System : Roof
 Member Type : Flush Beam
 Building Use : Residential
 Building Code : IBC 2018
 Design Methodology : ASD
 Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.

| Supports | Bearing Length | | | Loads to Supports (lbs) | | | Accessories |
|---------------------|----------------|-----------|----------|-------------------------|-----------|-------|-------------|
| | Total | Available | Required | Dead | Roof Live | Total | |
| 1 - Stud wall - SPF | 4.50" | 4.50" | 1.95" | 2219 | 2135 | 4354 | Blocking |
| 2 - Stud wall - SPF | 4.50" | 4.50" | 1.95" | 2219 | 2135 | 4354 | Blocking |

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

| Lateral Bracing | Bracing Intervals | Comments |
|------------------|-------------------|----------|
| Top Edge (Lu) | 11 11 0 o/c | |
| Bottom Edge (Lu) | 11 11 0 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 0 0 to 11 11 0 | 10d Nail (0.128" x 3") [1] | | Both Faces | 3 | 6" | -- | L17 |

| Vertical Loads | Location (Side) | Tributary Width | Dead (0.90) | Roof Live (non-snow: 1.25) | Comments |
|-----------------------|--------------------------|-----------------|-------------|----------------------------|--------------|
| 0 - Self Weight (PLF) | 0 0 0 to 11 11 0 | N/A | 14.2 | -- | |
| 1 - Uniform (PSF) | 0 0 0 to 11 11 0 (Front) | 17 11 0 | 20.0 | 20.0 | Default Load |

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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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