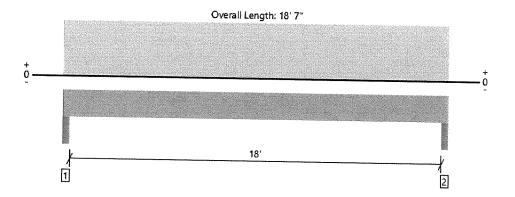


### MEMBER REPORT

**PASSED** 

# Level, Wall: Garage Door Header 3 piece(s) 1 3/4" x 18" 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)                                 | 8892 @ 2"         | 13322 (3.50") | Passed (67%)   |     | 1.0 D + 0.75 L + 0.75 Lr (All Spans)   |
| Shear (lbs)   | 6746 @ 1' 9 1/2"  | 17955         | Passed (38%)   |     | 1.0 D + 1.0 L (All Spans)              |
| Moment (Ft-lbs)                                       | 37449 @ 9' 3 1/2" | 58130         | Passed (64%)   |     | 1.0 D + 1.0 L (All Spans)              |
| Live Load Defl. (in)                                  | 0.279 @ 9' 3 1/2" | 0.608         | Passed (L/784) |     | 1.0 D + 0.75 L + 0.75 Lr (All Spans)   |
| Total Load Defl. (in)                                 | 0.517 @ 9' 3 1/2" | 0.913         | Passed (L/424) |     | 1.0 D + 0.75 L + 0.75 Lr (All Spans)   |
| <ul> <li>Deflection criteria: LL (L/360) a</li> </ul> | nd TL (1/240)     | wit           | 1              |     | 11.0 D 1 0.75 E + 0.75 EI (All Spalls) |

System: Wall Member Type : Header Building Use: Residential Building Code : IBC 2015 Design Methodology : ASD

Allowed moment does not reflect the adjustment for the beam stability factor.

|                   | Bearing Length |           |          |      | Loads to Sup |           |       |             |
|-------------------|----------------|-----------|----------|------|--------------|-----------|-------|-------------|
| Supports          | Total          | Available | Required | Dead | Floor Live   | Roof Live | Total | Accessories |
| 1 - Trimmer - SPF | 3.50"          | 3.50"     | 2.34"    | 4084 | 4274         | 2137      | 10495 | None        |
| 2 - Trimmer - SPF | 3.50"          | 3.50"     | 2.34"    | 4084 | 4274         | 2137      |       | None        |
|                   |                |           |          |      |              |           |       | L           |

| Lateral Bracing              | Bracing Intervals | Comments |
|------------------------------|-------------------|----------|
| Top Edge (Lu)                | 9' 3" o/c         |          |
| Bottom Edge (Lu)             | 18' 7" o/c        |          |
| Administration of the second |                   |          |

Maximum allowable bracing intervals based on applied load.

| Vertical Loads        | Location    | Tributary Width (0.90) |      | Floor Live<br>(1.00) | Roof Live<br>(non-snow: 1.25) | Comments            |
|-----------------------|-------------|------------------------|------|----------------------|-------------------------------|---------------------|
| 0 - Self Weight (PLF) | 0 to 18' 7" | N/A                    | 27.6 |                      |                               |                     |
| 1 - Uniform (PSF)     | 0 to 18' 7" | 11' 6"                 | 12.0 | 40.0                 |                               | Default Floor Load  |
| 2 - Uniform (PSF)     | 0 to 18' 7" | 11' 6"                 | 21.2 | -                    | 20.0                          | Default Rafter Load |
| 3 - Uniform (PLF)     | 0 to 18' 7" | N/A                    | 30.0 | -                    | -                             | Kneewall Above      |

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

| ForteWEB Software Operator  | Job Notes |  |
|---|-----------|--|
| John Moore<br>JMP Design Group<br>(919) 522-0182<br>jmoore@jmpdesigngroup.com |           |  |



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LL (L/360) and TL (L/240).

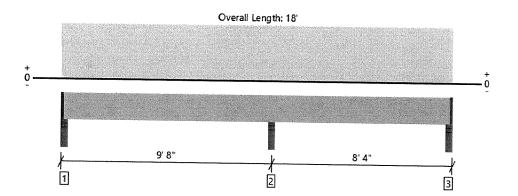


# MEMBER REPORT

**PASSED** 

System : Floor Member Type : Flush Beam Building Use: Residential Building Code: IBC 2015 Design Methodology : ASD

### Level, Floor: Dining Room Flush Beam 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.

| Actual @ Location  | Allowed   | Result   | LDF   | Load: Combination (Pattern)   |
|--------------------|---|--|---|---|
| 5836 @ 9' 8"       | 7809 (3.50")  | Passed (75%)   |   | 1.0 D + 1.0 L (All Spans)   |
| 2566 @ 8' 9"       | 9227  | · · · · · · · · · · · · · · · · · · ·  |   | 1.0 D + 1.0 L (All Spans)   |
| -5220 @ 9' 8"      | 16806   | · · · · · · · · · · · · · · · · · · ·  |   | 1.0 D + 1.0 L (All Spans)   |
| 0.066 @ 4' 7 9/16" | 0.237   |  |   | 1.0 D + 1.0 L (Alt Spans)   |
| 0.098 @ 4' 6 5/16" | 0.475   |  |   | 1.0 D + 1.0 L (Alt Spans)   |
|                    | 5836 @ 9' 8"<br>2566 @ 8' 9"<br>-5220 @ 9' 8"<br>0.066 @ 4' 7 9/16" | 5836 @ 9' 8" 7809 (3.50") 2566 @ 8' 9" 9227 -5220 @ 9' 8" 16806 0.066 @ 4' 7 9/16" 0.237 | 5836 @ 9' 8" 7809 (3.50") Passed (75%) 2566 @ 8' 9" 9227 Passed (28%) -5220 @ 9' 8" 16806 Passed (31%) 0.066 @ 4' 7 9/16" 0.237 Passed (L/999+) | 5836 @ 9' 8" 7809 (3.50") Passed (75%) 2566 @ 8' 9" 9227 Passed (28%) 1.00 -5220 @ 9' 8" 16806 Passed (31%) 1.00 0.066 @ 4' 7 9/16" 0.237 Passed (L/999+) |

Allowed moment does not reflect the adjustment for the beam stability factor.

|                     |       | Bearing Leng | th       | Loads | to Supports |               |                  |
|---------------------|-------|--------------|----------|-------|-------------|---------------|------------------|
| Supports            | Total | Available    | Required | Dead  | Floor Live  | Total         | Accessories      |
| 1 - Stud wall - SPF | 3.50" | 2.25"        | 1.50"    | 797   | 1369/-96    | 2166/-<br>96  | 1 1/4" Rim Board |
| 2 - Stud wall - SPF | 3.50" | 3.50"        | 2.62"    | 2287  | 3550        | 5837          | None             |
| 3 - Stud wall - SPF | 3.50" | 2.25"        | 1.50"    | 624   | 1209/-204   | 1833/-<br>204 | 1 1/4" Rím Board |

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

| Lateral Bracing  | Bracing Intervals | Comments |
|------------------|-------------------|----------|
| Top Edge (Lu)    | 17' 10" o/c       |          |
| Bottom Edge (Lu) | 17' 10" o/c       |          |

Maximum allowable bracing intervals based on applied load.

| 1 - Uniform (PSF)     | 0 to 18' (Front)      | 16'             | 12.0           | 20.0                 | Default Ceiling Load |
|-----------------------|-----------------------|-----------------|----------------|----------------------|----------------------|
| 0 - Self Weight (PLF) | 1 1/4" to 17' 10 3/4" | N/A             | 14.2           |                      |                      |
| Vertical Loads        | Location (Side)       | Tributary Width | Dead<br>(0.90) | Floor Live<br>(1.00) | Comments             |

# **Member Notes**

Harrington Properties Willow Run

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

| ForteWEB Software Operator  | Job Notes |  |
|---|-----------|--|
| John Moore<br>JMP Design Group<br>(919) 522-0182<br>jmoore@jmpdesigngroup.com |           |  |



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