

2nd Floor\Dropped Beams\DB1-2(i14664) (Floor Beam)

Dry | 2 spans | No cant.

October 10, 2019 15:24:52

BC CALC® Member Report

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Dropped Beams\DB1-2(i14664)

City, State, Zip:

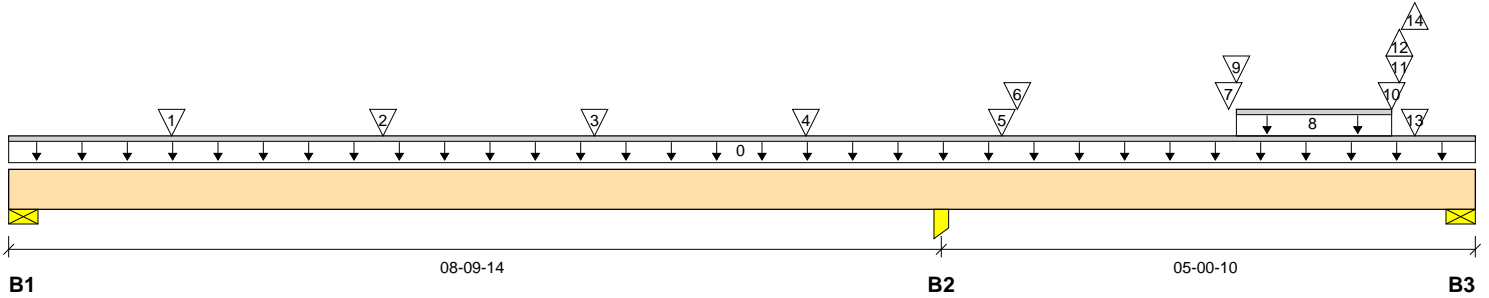
Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:



Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live | Dead | Snow | Wind | Roof Live |
|------------|-----------|----------|------|------|-----------|
| B1, 8-1/2" | 2433 / 79 | 822 / 0 | | | |
| B2, 5-1/2" | 5760 / 0 | 2008 / 0 | | | |
| B3, 5-1/2" | 986 / 832 | 112 / 0 | | | |

Load Summary

| Tag | Description | Load Type | Ref. | Start | End | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|--------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----------|
| 0 | Self-Weight | Unf. Lin. (lb/ft) | L | 00-00-00 | 13-10-08 | Top | | 9 | | | | 00-00-00 |
| 1 | FJ-5(i14556) | Conc. Pt. (lbs) | L | 01-06-08 | 01-06-08 | Top | 1383 | 461 | | | | n/a |
| 2 | FJ-6(i14671) | Conc. Pt. (lbs) | L | 03-06-08 | 03-06-08 | Top | 1383 | 461 | | | | n/a |
| 3 | FJ-6(i14661) | Conc. Pt. (lbs) | L | 05-06-08 | 05-06-08 | Top | 1383 | 461 | | | | n/a |
| 4 | FJ-6(i14573) | Conc. Pt. (lbs) | L | 07-06-08 | 07-06-08 | Top | 1352 | 449 | | | | n/a |
| 5 | FJ-7(i14549) | Conc. Pt. (lbs) | L | 09-04-12 | 09-04-12 | Top | 313 | 135 | | | | n/a |
| 6 | FJ-6(i14564) | Conc. Pt. (lbs) | L | 09-06-08 | 09-06-08 | Top | 994 | 310 | | | | n/a |
| 7 | FJ-6(i14562) | Conc. Pt. (lbs) | L | 11-06-08 | 11-06-08 | Top | 1308 | 431 | | | | n/a |
| 8 | Bk1(i14563) | Unf. Lin. (lb/ft) | L | 11-07-06 | 13-01-00 | Top | 6 | 2 | | | | n/a |
| 9 | Bk1(i14563) | Conc. Pt. (lbs) | L | 11-07-06 | 11-07-06 | Top | 0 | 0 | | | | n/a |
| 10 | Bk1(i14563) | Conc. Pt. (lbs) | L | 13-01-00 | 13-01-00 | Top | 0 | 0 | | | | n/a |
| 11 | FJ-7(i14545) | Conc. Pt. (lbs) | L | 13-01-14 | 13-01-14 | Top | 116 | 83 | | | | n/a |
| 12 | FJ-7(i14545) | Conc. Pt. (lbs) | L | 13-01-14 | 13-01-14 | Top | -2 | | | | | n/a |
| 13 | FJ-7(i14579) | Conc. Pt. (lbs) | L | 13-03-10 | 13-03-10 | Top | 53 | 18 | | | | n/a |
| 14 | FJ-7(i14579) | Conc. Pt. (lbs) | L | 13-03-10 | 13-03-10 | Top | -25 | | | | | n/a |

Controls Summary

| | Value | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment | 5681 ft-lbs | 43.5% | 100% | 3 | 03-06-08 |
| Neg. Moment | -5916 ft-lbs | 45.8% | 100% | 1 | 08-09-14 |
| End Shear | 3241 lbs | 52.7% | 100% | 3 | 01-05-12 |
| Cont. Shear | 4231 lbs | 68.8% | 100% | 1 | 07-09-14 |
| Total Load Deflection | L/999 (0.125") | n/a | n/a | 3 | 04-05-00 |
| Live Load Deflection | L/999 (0.095") | n/a | n/a | 7 | 04-05-00 |
| Total Neg. Defl. | L/999 (-0.023") | n/a | n/a | 3 | 10-08-03 |
| Max Defl. | 0.125" | n/a | n/a | 3 | 04-05-00 |
| Span / Depth | 10.6 | | | | |

Bearing Supports

| | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|----|----------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 8-1/2" x 3-1/2" | 3255 lbs | 15.1% | 14.6% | Unspecified |
| B2 | Column 5-1/2" x 3-1/2" | 7768 lbs | 55.7% | 53.8% | Unspecified |
| B3 | Wall/Plate 5-1/2" x 3-1/2" | 1098 lbs | 7.9% | 7.6% | Unspecified |

BC CALC® Member Report

Dry | 2 spans | No cant.

October 10, 2019 15:24:52

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Dropped Beams\DB1-2(i14664)

City, State, Zip:

Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:

| Bearing Supports | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|-------------------------|------------|---------|-----------------|----------------|----------|
| B3 | Uplift | 720 lbs | | | |

Cautions

Uplift of -720 lbs found at bearing B3.

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets Code minimum (L/360) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Calculations assume unbraced length of Top: 01-10-04, Bottom: 01-10-04.
- BC CALC® analysis is based on IBC 2015.
- Design based on Dry Service Condition.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Dropped Beams\DB2-2(i14636)

City, State, Zip:

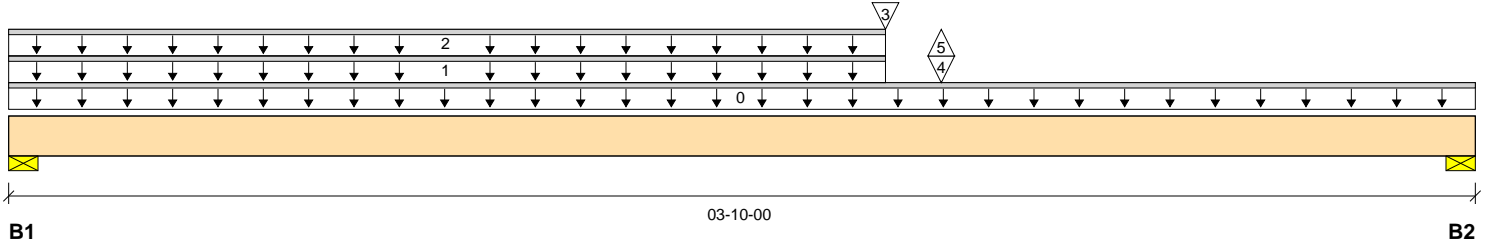
Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:



Total Horizontal Product Length = 03-10-00

Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live | Dead | Snow | Wind | Roof Live |
|--------------|----------|---------|------|------|-----------|
| B1, 4-1/2" | 192 / 12 | 558 / 0 | | | |
| B2, 3-15/16" | 310 / 24 | 844 / 0 | | | |

Load Summary

| Tag | Description | Load Type | Ref. | Start | End | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|---------------|-------------------|------|----------|----------|------|-----------|----------|-----------|-----------|----------------|-----------|
| 0 | Self-Weight | Unf. Lin. (lb/ft) | L | 00-00-00 | 03-10-00 | Top | 9 | | | | | 00-00-00 |
| 1 | Rim1(i14623) | Unf. Lin. (lb/ft) | L | 00-00-00 | 02-03-08 | Top | | 65 | | | | n/a |
| 2 | Rim1(i14623) | Unf. Lin. (lb/ft) | L | 00-00-00 | 02-03-08 | Top | 19 | 8 | | | | n/a |
| 3 | Rim1(i14623) | Conc. Pt. (lbs) | L | 02-03-08 | 02-03-08 | Top | 6 | 1 | | | | n/a |
| 4 | FB2-2(i14621) | Conc. Pt. (lbs) | L | 02-05-04 | 02-05-04 | Top | 452 | 1197 | | | | n/a |
| 5 | FB2-2(i14621) | Conc. Pt. (lbs) | L | 02-05-04 | 02-05-04 | Top | -36 | | | | | n/a |

Controls Summary

| | Value | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment | 1295 ft-lbs | 9.8% | 100% | 1 | 02-05-04 |
| End Shear | 1144 lbs | 18.6% | 100% | 1 | 02-08-13 |
| Total Load Deflection | L/999 (0.004") | n/a | n/a | 1 | 02-00-08 |
| Live Load Deflection | L/999 (0.001") | n/a | n/a | 3 | 02-00-15 |
| Max Defl. | 0.004" | n/a | n/a | 1 | 02-00-08 |
| Span / Depth | 4.2 | | | | |

Bearing Supports

| | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|----|------------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 4-1/2" x 3-1/2" | 750 lbs | 6.6% | 6.3% | Unspecified |
| B2 | Wall/Plate 3-15/16" x 3-1/2" | 1155 lbs | 11.6% | 11.2% | Unspecified |

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
 Calculations assume unbraced length of Top: 00-11-02, Bottom: 00-11-02.
 BC CALC® analysis is based on IBC 2015.
 Design based on Dry Service Condition.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Floor Beams\FB1(i14683)

City, State, Zip:

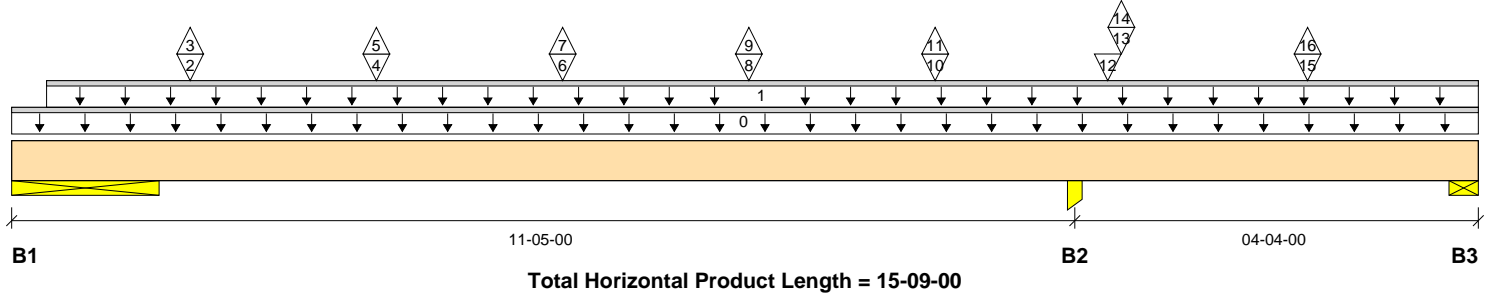
Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:



Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live | Dead | Snow | Wind | Roof Live |
|------------|------------|----------|------|------|-----------|
| B1, 19" | 1313 / 100 | 638 / 0 | | | |
| B2, 4-1/2" | 2764 / 176 | 1303 / 0 | | | |
| B3, 3-1/2" | 361 / 579 | 0 / 53 | | | |

Load Summary

| Tag | Description | Load Type | Ref. | Start | End | Loc. | Live | | | | Roof Live | Tributary |
|-----|--------------|-------------------|------|----------|----------|-------|------|-----|------|------|-----------|-----------|
| | | | | | | | 100% | 90% | 115% | 160% | | |
| 0 | Self-Weight | Unf. Lin. (lb/ft) | L | 00-00-00 | 15-09-00 | Top | | 7 | | | | 00-00-00 |
| 1 | E31(i8186) | Unf. Lin. (lb/ft) | L | 00-04-08 | 15-09-00 | Top | | 57 | | | | n/a |
| 2 | FJ-5(i14568) | Conc. Pt. (lbs) | L | 01-11-00 | 01-11-00 | Front | 548 | 129 | | | | n/a |
| 3 | FJ-5(i14568) | Conc. Pt. (lbs) | L | 01-11-00 | 01-11-00 | Front | -35 | | | | | n/a |
| 4 | FJ-5(i14556) | Conc. Pt. (lbs) | L | 03-11-00 | 03-11-00 | Front | 548 | 129 | | | | n/a |
| 5 | FJ-5(i14556) | Conc. Pt. (lbs) | L | 03-11-00 | 03-11-00 | Front | -35 | | | | | n/a |
| 6 | FJ-6(i14671) | Conc. Pt. (lbs) | L | 05-11-00 | 05-11-00 | Front | 548 | 129 | | | | n/a |
| 7 | FJ-6(i14671) | Conc. Pt. (lbs) | L | 05-11-00 | 05-11-00 | Front | -35 | | | | | n/a |
| 8 | FJ-6(i14661) | Conc. Pt. (lbs) | L | 07-11-00 | 07-11-00 | Front | 548 | 129 | | | | n/a |
| 9 | FJ-6(i14661) | Conc. Pt. (lbs) | L | 07-11-00 | 07-11-00 | Front | -35 | | | | | n/a |
| 10 | FJ-6(i14573) | Conc. Pt. (lbs) | L | 09-11-00 | 09-11-00 | Front | 528 | 124 | | | | n/a |
| 11 | FJ-6(i14573) | Conc. Pt. (lbs) | L | 09-11-00 | 09-11-00 | Front | -35 | | | | | n/a |
| 12 | FJ-7(i14549) | Conc. Pt. (lbs) | L | 11-09-04 | 11-09-04 | Front | 319 | 80 | | | | n/a |
| 13 | FJ-6(i14564) | Conc. Pt. (lbs) | L | 11-11-00 | 11-11-00 | Front | 294 | 65 | | | | n/a |
| 14 | FJ-6(i14564) | Conc. Pt. (lbs) | L | 11-11-00 | 11-11-00 | Front | -35 | | | | | n/a |
| 15 | FJ-6(i14562) | Conc. Pt. (lbs) | L | 13-11-00 | 13-11-00 | Front | 495 | 116 | | | | n/a |
| 16 | FJ-6(i14562) | Conc. Pt. (lbs) | L | 13-11-00 | 13-11-00 | Front | -36 | | | | | n/a |

Controls Summary

| | Value | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment | 3289 ft-lbs | 22.7% | 100% | 3 | 05-11-00 |
| Neg. Moment | -3611 ft-lbs | 24.9% | 100% | 1 | 11-05-00 |
| End Shear | 1118 lbs | 24.0% | 100% | 3 | 02-09-00 |
| Cont. Shear | 2050 lbs | 44.0% | 100% | 1 | 10-00-12 |
| Total Load Deflection | L/999 (0.06") | n/a | n/a | 3 | 06-00-08 |
| Live Load Deflection | L/999 (0.041") | n/a | n/a | 7 | 06-00-08 |
| Total Neg. Defl. | L/999 (-0.007") | n/a | n/a | 3 | 13-01-09 |
| Max Defl. | 0.06" | n/a | n/a | 3 | 06-00-08 |
| Span / Depth | 8.5 | | | | |
| Dist. Load (B1) | 56.90 lb/ft | 0.4% | 90% | | |

Bearing Supports

| | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|----|-------------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 19" x 1-3/4" | 1950 lbs | 13.8% | 7.8% | Unspecified |

BC CALC® Member Report

Dry | 2 spans | No cant.

October 10, 2019 15:24:52

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Floor Beams\FB1(i14683)

City, State, Zip:

Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:

| Bearing Supports | | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|-------------------------|------------|-------------------|--------------|------------------------|-----------------------|-----------------|
| B2 | Column | 4-1/2" x 1-3/4" | 4067 lbs | 71.2% | 68.9% | Unspecified |
| B3 | Wall/Plate | 3-1/2" x 1-3/4" | 308 lbs | 11.8% | 6.7% | Unspecified |
| B3 | Uplift | | 632 lbs | | | |

Cautions

Uplift of -632 lbs found at bearing B3.

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets Code minimum (L/360) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2015.
- Design based on Dry Service Condition.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

2nd Floor\Floor Beams\FB2-2(i14621) (Floor Beam)

BC CALC® Member Report

Dry | 1 span | No cant.

October 10, 2019 15:24:52

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Floor Beams\FB2-2(i14621)

City, State, Zip:

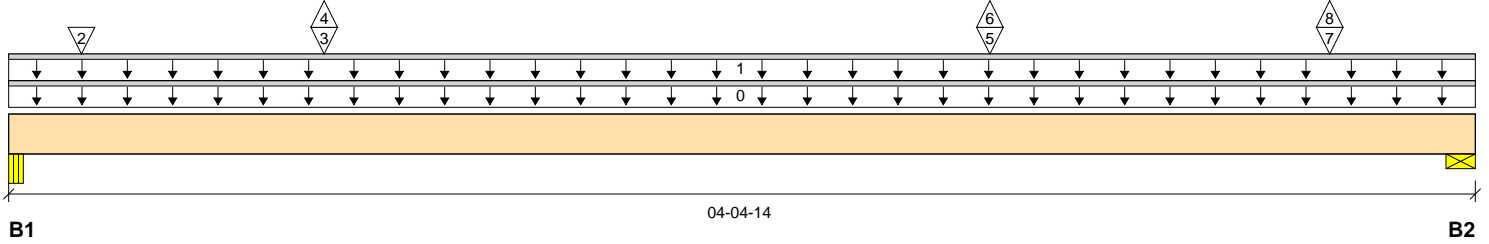
Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:



Total Horizontal Product Length = 04-04-14

Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live | Dead | Snow | Wind | Roof Live |
|------------|----------|----------|------|------|-----------|
| B1, 3-3/8" | 452 / 36 | 1152 / 0 | | | |
| B2, 7-1/2" | 708 / 48 | 384 / 0 | | | |

Load Summary

| Tag | Description | Load Type | Ref. | Start | End | Loc. | Live 100% | Dead 90% | Snow 115% | Wind 160% | Roof Live 125% | Tributary |
|-----|--------------|-------------------|------|----------|----------|-------|-----------|----------|-----------|-----------|----------------|-----------|
| 0 | Self-Weight | Unf. Lin. (lb/ft) | L | 00-00-00 | 04-04-14 | Top | 14 | | | | | 00-00-00 |
| 1 | E27(i7309) | Unf. Lin. (lb/ft) | L | 00-00-00 | 04-04-14 | Top | 65 | | | | | n/a |
| 2 | E28(i7311) | Conc. Pt. (lbs) | L | 00-02-10 | 00-02-10 | Top | 867 | | | | | n/a |
| 3 | FJ-4(i14650) | Conc. Pt. (lbs) | L | 00-11-06 | 00-11-06 | Front | 430 | 117 | | | | n/a |
| 4 | FJ-4(i14650) | Conc. Pt. (lbs) | L | 00-11-06 | 00-11-06 | Front | -37 | | | | | n/a |
| 5 | FJ-3(i14622) | Conc. Pt. (lbs) | L | 02-11-06 | 02-11-06 | Front | 439 | 126 | | | | n/a |
| 6 | FJ-3(i14622) | Conc. Pt. (lbs) | L | 02-11-06 | 02-11-06 | Front | -28 | | | | | n/a |
| 7 | FJ-3(i14658) | Conc. Pt. (lbs) | L | 03-11-10 | 03-11-10 | Front | 291 | 78 | | | | n/a |
| 8 | FJ-3(i14658) | Conc. Pt. (lbs) | L | 03-11-10 | 03-11-10 | Front | -19 | | | | | n/a |

Controls Summary

| | Value | % Allowable | Duration | Case | Location |
|-----------------------|----------------|-------------|----------|------|----------|
| Pos. Moment | 588 ft-lbs | 2.0% | 100% | 1 | 02-04-12 |
| End Shear | 420 lbs | 4.5% | 100% | 1 | 02-07-06 |
| Total Load Deflection | L/999 (0.001") | n/a | n/a | 1 | 02-00-06 |
| Live Load Deflection | L/999 (0.001") | n/a | n/a | 3 | 02-00-06 |
| Max Defl. | 0.001" | n/a | n/a | 1 | 02-00-06 |
| Span / Depth | 3.1 | | | | |

Bearing Supports

| | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|----|----------------------------|----------|-----------------|----------------|-------------|
| B1 | Beam 3-3/8" x 3-1/2" | 1604 lbs | 18.1% | 18.1% | Unspecified |
| B2 | Wall/Plate 7-1/2" x 3-1/2" | 1092 lbs | 9.8% | 5.5% | Unspecified |

Cautions

Distributed side-load and/or concentrated side loads exceeds allowable magnitude for connection design. Please consult a technical representative or Professional Engineer for the design of the connection.

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Floor Beams\FB2-2(i14621)

City, State, Zip:

Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Design meets arbitrary (1.5") Maximum Total load deflection criteria.
Calculations assume member is fully braced.
BC CALC® analysis is based on IBC 2015.
Design based on Dry Service Condition.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

Triple 1-3/4" x 18" VERSA-LAM® 2.0 3100 SP
2nd Floor\Floor Beams\FB3-3(i14640) (Floor Beam)

PASSED

BC CALC® Member Report

Dry | 1 span | No cant.

October 10, 2019 15:24:52

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Floor Beams\FB3-3(i14640)

City, State, Zip:

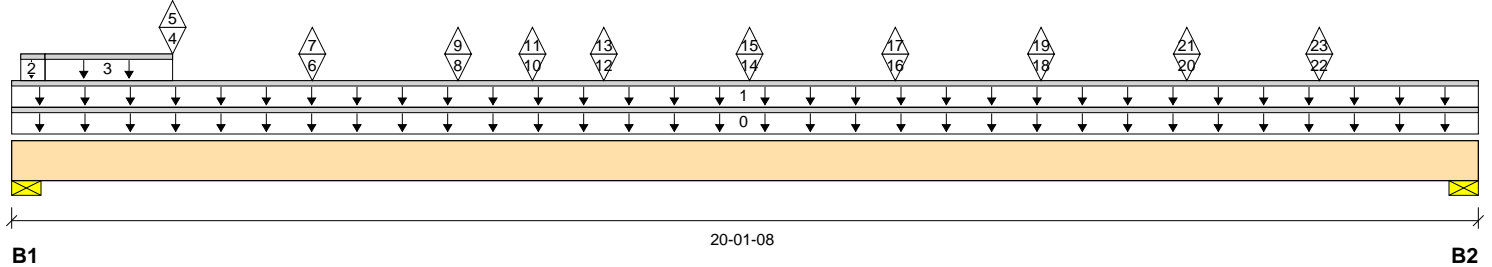
Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:



Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live | Dead | Snow | Wind | Roof Live |
|------------|------------|----------|------|------|-----------|
| B1, 5-1/2" | 1995 / 431 | 1457 / 0 | | | |
| B2, 5-1/2" | 2071 / 560 | 1312 / 0 | | | |

Load Summary

| Tag | Description | Load Type | Ref. | Start | End | Loc. | Live | | | | Roof Live | Tributary |
|-----|--------------------|-------------------|------|----------|----------|------|------|-----|------|------|-----------|-----------|
| | | | | | | | 100% | 90% | 115% | 160% | | |
| 0 | Self-Weight | Unf. Lin. (lb/ft) | L | 00-00-00 | 20-01-08 | Top | | 27 | | | | 00-00-00 |
| 1 | E22(i7303) | Unf. Lin. (lb/ft) | L | 00-00-00 | 20-01-08 | Top | | 65 | | | | n/a |
| 2 | FC2 Floor Material | Unf. Lin. (lb/ft) | L | 00-01-08 | 00-05-08 | Top | 9 | 2 | | | | n/a |
| 3 | FC2 Floor Material | Unf. Lin. (lb/ft) | L | 00-05-08 | 02-02-08 | Top | 9 | 2 | | | | n/a |
| 4 | FJ-8(i14544) | Conc. Pt. (lbs) | L | 02-02-08 | 02-02-08 | Back | 368 | 115 | | | | n/a |
| 5 | FJ-8(i14544) | Conc. Pt. (lbs) | L | 02-02-08 | 02-02-08 | Back | -1 | | | | | n/a |
| 6 | FJ-4(i14650) | Conc. Pt. (lbs) | L | 04-01-08 | 04-01-08 | Back | 454 | 77 | | | | n/a |
| 7 | FJ-4(i14650) | Conc. Pt. (lbs) | L | 04-01-08 | 04-01-08 | Back | -95 | | | | | n/a |
| 8 | FJ-3(i14622) | Conc. Pt. (lbs) | L | 06-01-08 | 06-01-08 | Back | 350 | 48 | | | | n/a |
| 9 | FJ-3(i14622) | Conc. Pt. (lbs) | L | 06-01-08 | 06-01-08 | Back | -96 | | | | | n/a |
| 10 | FJ-3(i14658) | Conc. Pt. (lbs) | L | 07-01-12 | 07-01-12 | Back | 232 | 314 | | | | n/a |
| 11 | FJ-3(i14658) | Conc. Pt. (lbs) | L | 07-01-12 | 07-01-12 | Back | -64 | | | | | n/a |
| 12 | FJ-1(i14648) | Conc. Pt. (lbs) | L | 08-01-08 | 08-01-08 | Back | 345 | 50 | | | | n/a |
| 13 | FJ-1(i14648) | Conc. Pt. (lbs) | L | 08-01-08 | 08-01-08 | Back | -96 | | | | | n/a |
| 14 | FJ-2(i14624) | Conc. Pt. (lbs) | L | 10-01-08 | 10-01-08 | Back | 464 | 67 | | | | n/a |
| 15 | FJ-2(i14624) | Conc. Pt. (lbs) | L | 10-01-08 | 10-01-08 | Back | -129 | | | | | n/a |
| 16 | FJ-2(i14654) | Conc. Pt. (lbs) | L | 12-01-08 | 12-01-08 | Back | 464 | 58 | | | | n/a |
| 17 | FJ-2(i14654) | Conc. Pt. (lbs) | L | 12-01-08 | 12-01-08 | Back | -129 | | | | | n/a |
| 18 | FJ-2(i14643) | Conc. Pt. (lbs) | L | 14-01-08 | 14-01-08 | Back | 464 | 50 | | | | n/a |
| 19 | FJ-2(i14643) | Conc. Pt. (lbs) | L | 14-01-08 | 14-01-08 | Back | -129 | | | | | n/a |
| 20 | FJ-2(i14651) | Conc. Pt. (lbs) | L | 16-01-08 | 16-01-08 | Back | 442 | 64 | | | | n/a |
| 21 | FJ-2(i14651) | Conc. Pt. (lbs) | L | 16-01-08 | 16-01-08 | Back | -123 | | | | | n/a |
| 22 | FJ-2(i14634) | Conc. Pt. (lbs) | L | 17-11-05 | 17-11-05 | Back | 464 | 62 | | | | n/a |
| 23 | FJ-2(i14634) | Conc. Pt. (lbs) | L | 17-11-05 | 17-11-05 | Back | -129 | | | | | n/a |

Controls Summary

| | Value | % Allowable | Duration | Case | Location |
|-----------------------|-----------------|-------------|----------|------|----------|
| Pos. Moment | 17627 ft-lbs | 25.2% | 100% | 1 | 10-01-08 |
| End Shear | 3250 lbs | 18.1% | 100% | 1 | 01-11-08 |
| Total Load Deflection | L/1003 (0.231") | 23.9% | n/a | 1 | 10-01-08 |
| Live Load Deflection | L/1638 (0.142") | 22.0% | n/a | 3 | 10-01-08 |
| Max Defl. | 0.231" | 15.4% | n/a | 1 | 10-01-08 |
| Span / Depth | 12.9 | | | | |

BC CALC® Member Report

Dry | 1 span | No cant.

October 10, 2019 15:24:52

Build 7295

Job name: HDL002

File name:

Address:

Description: 2nd Floor\Floor Beams\FB3-3(i14640)

City, State, Zip:

Specifier:

Builder: A&G Residential

Designer:

Code reports: ESR-1040

Company:

| Bearing Supports | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|-------------------------|----------------------------|--------------|------------------------|-----------------------|-----------------|
| B1 | Wall/Plate 5-1/2" x 5-1/4" | 3451 lbs | 16.5% | 15.9% | Unspecified |
| B2 | Wall/Plate 5-1/2" x 5-1/4" | 3382 lbs | 16.2% | 15.6% | Unspecified |

Cautions

Distributed side-load and/or concentrated side loads
 4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23 exceeds allowable magnitude for connection design. Please consult a technical representative or Professional Engineer for the design of the connection.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2015.
 Design based on Dry Service Condition.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

Double 2 x 10 SP #2

PASSED

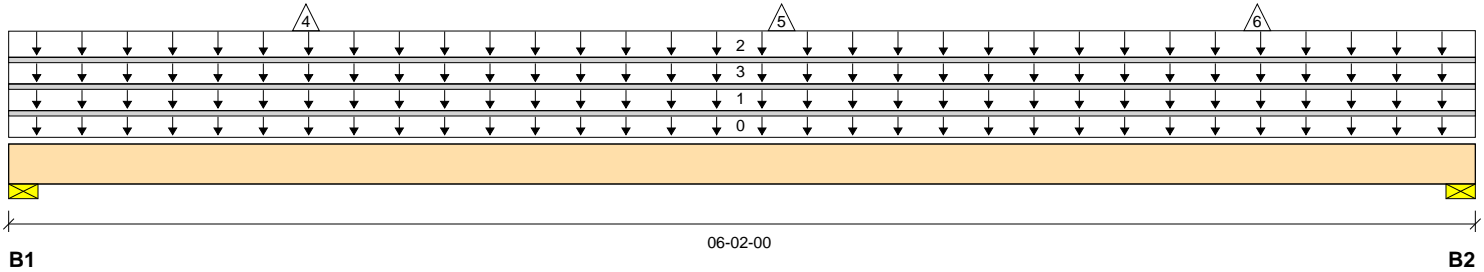
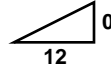
2nd Floor\Wall Headers\E1_Hdr1(i14688) (RoofHeader)

BC CALC® Member Report
 Build 7295
 Job name:
 Address:
 City, State, Zip:
 Builder:
 Code reports: SPIB

Dry | 1 span | No cant.

October 7, 2019 11:33:34

File name:
 Description: 2nd Floor\Wall Headers\E1_Hdr1(i14688)
 Specifier:
 Designer:
 Company:



Total Horizontal Product Length = 06-02-00

Reaction Summary (Down / Uplift) (lbs)

| Bearing | Live | Dead | Snow | Wind | Roof Live |
|---------|-----------|---------|------|------|-----------|
| B1, 3" | 680 / 174 | 340 / 0 | | | |
| B2, 3" | 680 / 195 | 341 / 0 | | | |

Load Summary

| Tag | Description | Load Type | Ref. | Start | End | Loc. | 100% | 90% | 115% | 160% | Roof Live 125% | Tributary |
|-----|---------------|---------------------|------|----------|----------|------|------|-----|------|------|----------------|-----------|
| 0 | Self-Weight | Unf. Lin. (lb/ft) | L | 00-00-00 | 06-02-00 | Top | | 6 | | | | 00-00-00 |
| 1 | Rim1(i14557) | Unf. Lin. (lb/ft) | L | 00-00-00 | 06-02-00 | Top | | 65 | | | | n/a |
| 2 | Smoothed Load | Trapezoidal (lb/ft) | L | 00-00-00 | 06-02-00 | Top | | 39 | | | | n/a |
| 3 | Smoothed Load | Unf. Lin. (lb/ft) | L | 00-00-00 | 06-02-00 | Top | 220 | | | | | n/a |
| 4 | FJ-5(i14556) | Conc. Pt. (lbs) | L | 01-03-00 | 01-03-00 | Top | -123 | | | | | n/a |
| 5 | FJ-6(i14661) | Conc. Pt. (lbs) | L | 03-03-00 | 03-03-00 | Top | -123 | | | | | n/a |
| 6 | FJ-6(i14661) | Conc. Pt. (lbs) | L | 05-03-00 | 05-03-00 | Top | -123 | | | | | n/a |

Controls Summary

| | Value | % Allowable | Duration | Case | Location |
|-----------------------|---------------|-------------|----------|------|----------|
| Pos. Moment | 1387 ft-lbs | 52.3% | 100% | 1 | 03-01-06 |
| End Shear | 713 lbs | 22.0% | 100% | 1 | 05-01-12 |
| Total Load Deflection | L/999 (0.03") | n/a | n/a | 1 | 03-01-06 |
| Live Load Deflection | L/999 (0.02") | n/a | n/a | 6 | 03-01-06 |
| Max Defl. | 0.03" | n/a | n/a | 1 | 03-01-06 |
| Span / Depth | 7.5 | | | | |

Bearing Supports

| | Dim. (LxW) | Value | % Allow Support | % Allow Member | Material |
|----|--------------------|----------|-----------------|----------------|-------------|
| B1 | Wall/Plate 3" x 3" | 1020 lbs | 15.6% | 20.1% | Unspecified |
| B2 | Wall/Plate 3" x 3" | 1020 lbs | 15.6% | 20.1% | Unspecified |

Cautions

For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.

For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.

Double 2 x 10 SP #2

PASSED

2nd Floor\Wall Headers\E1_Hdr1(i14688) (RoofHeader)

Dry | 1 span | No cant.

October 7, 2019 11:33:34

BC CALC® Member Report
Build 7295
Job name:
Address:
City, State, Zip:
Builder:
Code reports: SPIB

File name:
Description: 2nd Floor\Wall Headers\E1_Hdr1(i14688)
Specifier:
Designer:
Company:

Notes

Design meets User specified (L/240) Total load deflection criteria.
Design meets User specified (L/360) Live load deflection criteria.
Design meets arbitrary (1.5") Maximum Total load deflection criteria.
BC CALC® analysis is based on IBC 2015.
Design based on Dry Service Condition.

The analysis of solid sawn wood members is in accordance with the NDS and is limited to the output shown above. All other support and design for these products, including but not limited to notching, connections, installation, and engineer/architect certification is the responsibility of the project's design professional of record.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJST™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,