

### Member Report

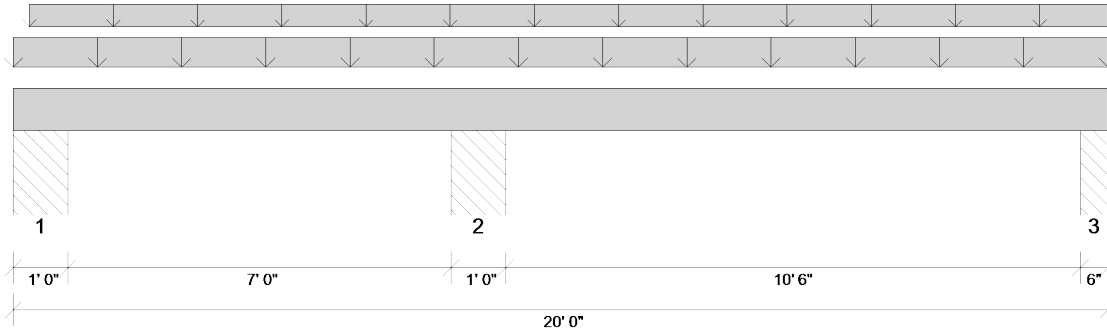
Label: M6-2 | Design Tag: i8006

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 20' 0"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	4075 lb @ 8' 6"	31500 lb (12")	Passed - 13%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	1820 lb @ 9' 9 1/4"	7074 lb	Passed - 26%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	-4102 lb-ft @ 8' 6"	12884 lb-ft	Passed - 32%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.10" @ 14' 5 15/16"	0.37" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.16" @ 14' 6 9/16"	0.56" L/240	Passed - L/810	-	1.0 D + 0.75 L + 0.75 S - (0)

**Design Notes:**

\* Top Edge Bracing (Lu): Top compression edge must be braced at 20-00-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 20-00-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1' 0"	1.5"	PBO25(i2579)	425 lb	327 / -48 lb	-	677 lb
2	8' 0" : 9' 0"	1.55"	PBO27(i2581)	1683 lb	1000 lb	-	2162 lb
3	19' 6" : 20' 0"	1.5"	PBO28(i2582)	687 lb	425 / -21 lb	-	899 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 20' 0"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 20' 0"	-	User Load	90 lb/ft	-	-	180 lb/ft
Uniform	3 1/2" : 20' 0"	-	User Load	41 lb/ft	83 lb/ft	-	-

**Errors, Warnings, & Notes:**

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M6-2 | Design Tag: i8006

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

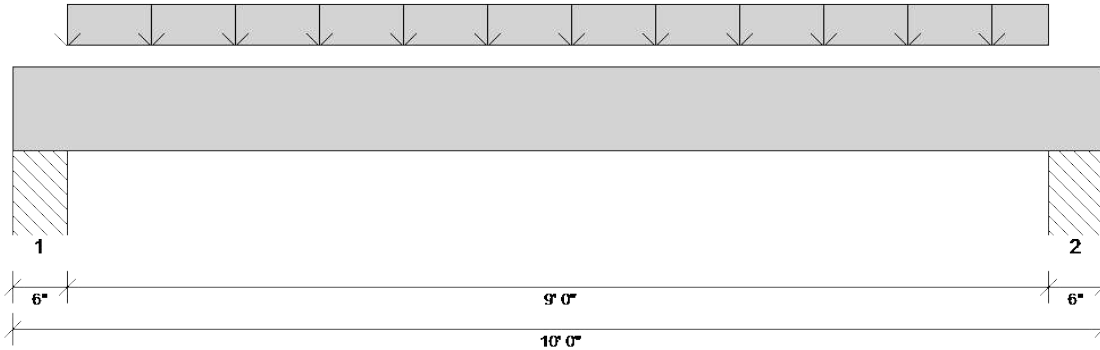
Label: M8-2 | Design Tag: i8005

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 10' 0"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	1864 lb @ 4 1/2"	15750 lb (6")	Passed - 12%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	1540 lb @ 1' 3 1/4"	7074 lb	Passed - 22%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	4415 lb-ft @ 5' 0"	12884 lb-ft	Passed - 34%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.10" @ 5' 0"	0.31" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.16" @ 5' 0"	0.46" L/240	Passed - L/681	-	1.0 D + 0.75 L + 0.75 S - (0)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 10-00-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 10-00-00 o/c based on loads applied, unless detailed otherwise.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 6"	1.5"	PBO28(i2582)	771 lb	463 lb	-	990 lb
2	9' 6" : 10' 0"	1.5"	PBO29(i2583)	771 lb	463 lb	-	990 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 10' 0"	-	Self Weight	9 lb/ft	-	-	-
Uniform	6" : 9' 6"	-	User Load	161 lb/ft	103 lb/ft	-	220 lb/ft

#### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M8-2 | Design Tag: i8005

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

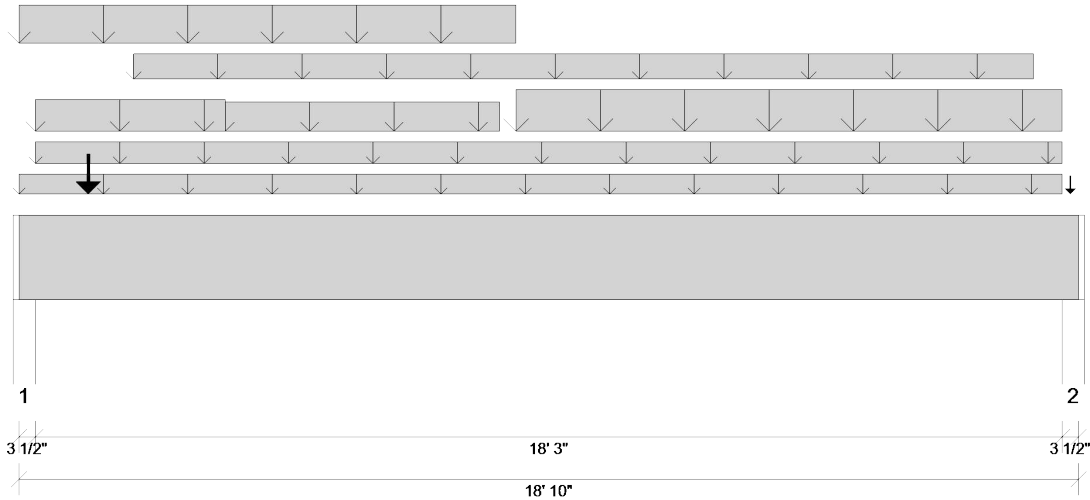
Label: M2-2 | Design Tag: i8004

**Design Passed**

**2 piece(s) of 1 3/4" x 18" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 18' 10"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	7944 lb @ 2"	9187 lb (3.5")	Passed - 86%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	5955 lb @ 1' 9 1/2"	11970 lb	Passed - 50%	1.00	1.0 D + 1.0 L - (0)
Moment	31769 lb-ft @ 9' 2 13/16"	38753 lb-ft	Passed - 82%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.38" @ 9' 4"	0.62" L/360	Passed - L/582	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.69" @ 9' 4 1/16"	0.93" L/240	Passed - L/322	-	1.0 D + 0.75 L + 0.75 S - (0)

**Design Notes:**

\* Top Edge Bracing (Lu): Top compression edge must be braced at 4-11-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 18-10-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 3 1/2"	3.03"	B3(i2310)	3536 lb	3538 lb	-	2323 lb
2	18' 6 1/2" : 18' 10"	2.67"	E15(i2289)	3167 lb	3402 lb	-	1704 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 18' 10"	-	Self Weight	17 lb/ft	-	-	-
Uniform	0" : 18' 6 1/2"	-	E38(i2344)	81 lb/ft	-	-	-
Uniform	0" : 8' 10"	-	E38(i2344)	140 lb/ft	-	-	280 lb/ft
Uniform	3 1/2" : 18' 6 1/2"	-	User Load	38 lb/ft	75 lb/ft	-	-
Uniform	3 1/2" : 3' 8"	-	E38(i2344)	98 lb/ft	195 lb/ft	-	-
Uniform	2' 0 3/8" : 18' 0 3/8"	-	Smoothed Load	36 lb/ft	145 lb/ft	-	-
Uniform	3' 8" : 8' 6 1/2"	-	E38(i2344)	86 lb/ft	172 lb/ft	-	-
Uniform	8' 10" : 18' 6 1/2"	-	E38(i2344)	160 lb/ft	160 lb/ft	-	160 lb/ft
Point	1' 2 13/16" : -	-	B8'(i7951)	51 lb	205 lb	-	-
Point	18' 8 1/4" : -	-	E30(i2338)	24 lb	-	-	-

**Errors, Warnings, & Notes:**

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

## Member Report

Label: M2-2 | Design Tag: i8004

**2 piece(s) of 1 3/4" x 18" 2.0E Microllam<sup>®</sup> LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

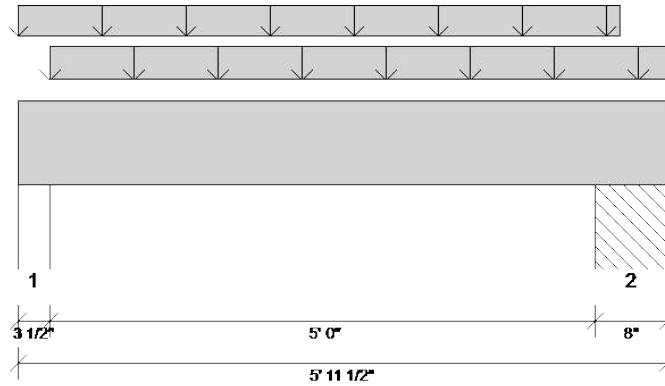
Label: M9-2 | Design Tag: i8003

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 5' 11 1/2"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	1395 lb @ 2"	9187 lb (3.5")	Passed - 15%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	914 lb @ 1' 0 3/4"	7074 lb	Passed - 13%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	1819 lb-ft @ 2' 9 1/2"	12884 lb-ft	Passed - 14%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.02" @ 2' 9 7/16"	0.18" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.03" @ 2' 9 7/16"	0.26" L/240	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)

**Design Notes:**

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-00-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6-00-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 3 1/2"	1.5"	E14(i2297)	581 lb	555 lb	-	558 lb
2	5' 3 1/2" : 5' 11 1/2"	1.5"	PBO32(i2592)	634 lb	521 lb	-	689 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 5' 11 1/2"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 5' 6 1/4"	-	User Load	98 lb/ft	195 lb/ft	-	-
Uniform	3 1/2" : 5' 11 1/2"	-	User Load	110 lb/ft	-	-	220 lb/ft

**Errors, Warnings, & Notes:**

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M9-2 | Design Tag: i8003

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

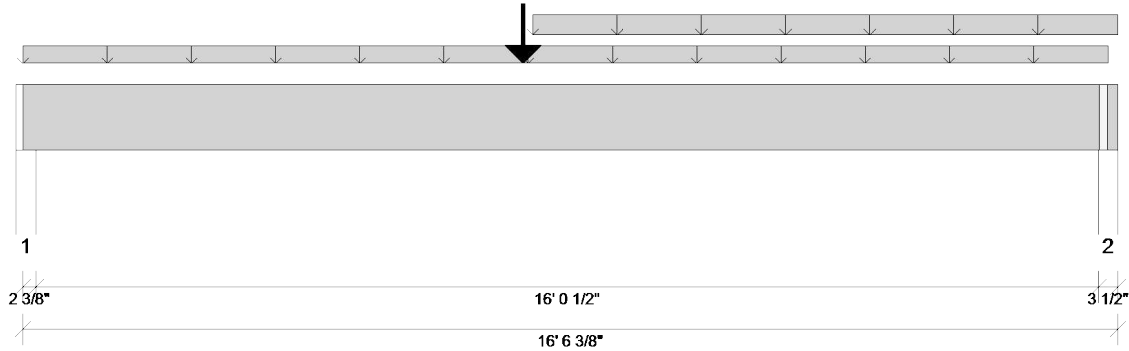
Label: M4-2 | Design Tag: i8001

**2 piece(s) of 1 3/4" x 11 7/8" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 16' 6 3/8"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	777 lb @ 7/8"	6221 lb (2.37")	Passed - 12%	-	1.0 D + 1.0 L - (0)
Shear	928 lb @ 15' 3"	7897 lb	Passed - 12%	1.00	1.0 D + 1.0 L - (0)
Moment	4356 lb-ft @ 8' 3 1/4"	17848 lb-ft	Passed - 24%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.07" @ 8' 1 5/8"	0.54" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.22" @ 8' 4 1/4"	0.81" L/240	Passed - L/892	-	1.0 D + 0.75 L + 0.75 S - (0)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 16-06-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 16-06-00 o/c based on loads applied, unless detailed otherwise.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 2 3/8"	1.5"	E16(i2299)	457 lb	313 lb	-	86 lb
2	16' 2 7/8" : 16' 6 3/8"	1.5"	E24(i2330)	788 lb	304 lb	-	77 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 16' 6 3/8"	-	Self Weight	11 lb/ft	-	-	-
Uniform	0" : 16' 4 5/8"	-	FC2 Floor Decking	8 lb/ft	32 lb/ft	-	-
Uniform	7' 8 3/8" : 16' 6 3/8"	-	E30(i2338)	81 lb/ft	-	-	-
Point	7' 6 5/8" : -	-	E31(i2341)	209 lb	90 lb	-	163 lb

#### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M4-2 | Design Tag: i8001

**2 piece(s) of 1 3/4" x 11 7/8" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

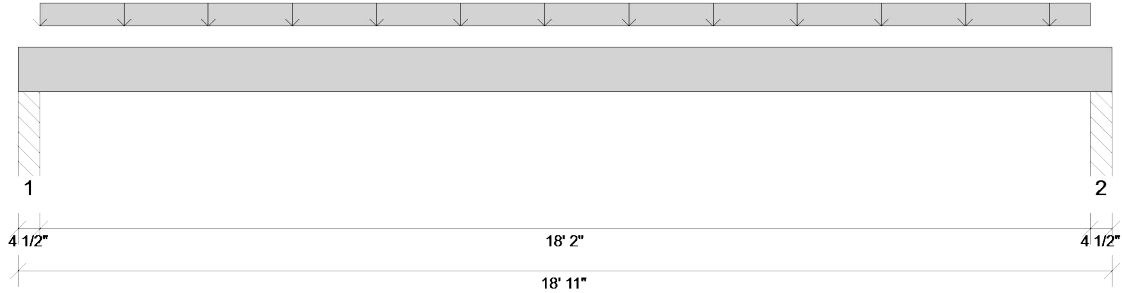
Label: M7-3 | Design Tag: i7998

**3 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 18' 11"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	1406 lb @ 3"	17719 lb (4.5")	Passed - 8%	-	1.0 D + 1.0 S - (0)
Shear	1281 lb @ 1' 1 3/4"	10611 lb	Passed - 12%	1.15	1.0 D + 1.0 S - (0)
Moment	6535 lb-ft @ 9' 5 1/2"	19327 lb-ft	Passed - 34%	1.15	1.0 D + 1.0 S - (0)
Live Load Deflection	0.15" @ 9' 5 1/2"	0.61" L/360	Passed - L/999	-	1.0 D + 1.0 S - (0)
Total Load Deflection	0.59" @ 9' 5 1/2"	0.92" L/240	Passed - L/374	-	1.0 D + 1.0 S - (0)

**Design Notes:**

\* Top Edge Bracing (Lu): Top compression edge must be braced at 18-11-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 18-11-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 4 1/2"	1.5"	PBO31(i2591)	1035 lb	-	-	363 lb
2	18' 6 1/2" : 18' 11"	1.5"	PBO32(i2592)	1035 lb	-	-	363 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 18' 11"	-	Self Weight	13 lb/ft	-	-	-
Uniform	4 1/2" : 18' 6 1/2"	-	User Load	100 lb/ft	-	-	40 lb/ft

**Errors, Warnings, & Notes:**

\* CAUTION: The span to depth ratio of this beam has exceeded the user-defined maximum setting.

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M7-3 | Design Tag: i7998

**3 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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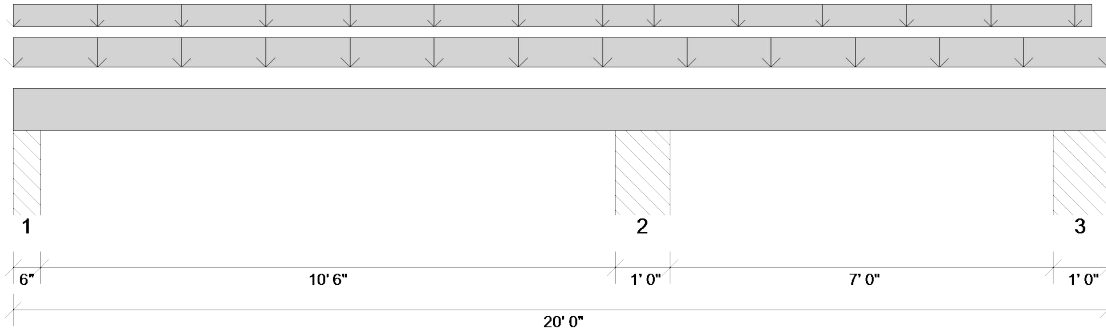
Label: M6-2 | Design Tag: i7997

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 20' 0"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	4078 lb @ 11' 6"	31500 lb (12")	Passed - 13%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	1820 lb @ 10' 2 3/4"	7074 lb	Passed - 26%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	-4103 lb-ft @ 11' 6"	12884 lb-ft	Passed - 32%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.10" @ 5' 6 1/16"	0.37" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.16" @ 5' 5 7/16"	0.56" L/240	Passed - L/810	-	1.0 D + 0.75 L + 0.75 S - (0)

### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 20-00-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 20-00-00 o/c based on loads applied, unless detailed otherwise.

### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 6"	1.5"	PBO29(i2583)	686 lb	425 / -21 lb	-	899 lb
2	11' 0" : 12' 0"	1.55"	PBO30(i2584)	1684 lb	1001 lb	-	2162 lb
3	19' 0" : 20' 0"	1.5"	PBO24(i2578)	426 lb	329 / -48 lb	-	677 lb

### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 20' 0"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 20' 0"	-	User Load	90 lb/ft	-	-	180 lb/ft
Uniform	0" : 11' 8 1/2"	-	User Load	41 lb/ft	83 lb/ft	-	-
Uniform	11' 8 1/2" : 19' 8 1/2"	-	User Load	42 lb/ft	83 lb/ft	-	-

### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M6-2 | Design Tag: i7997

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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## Member Report

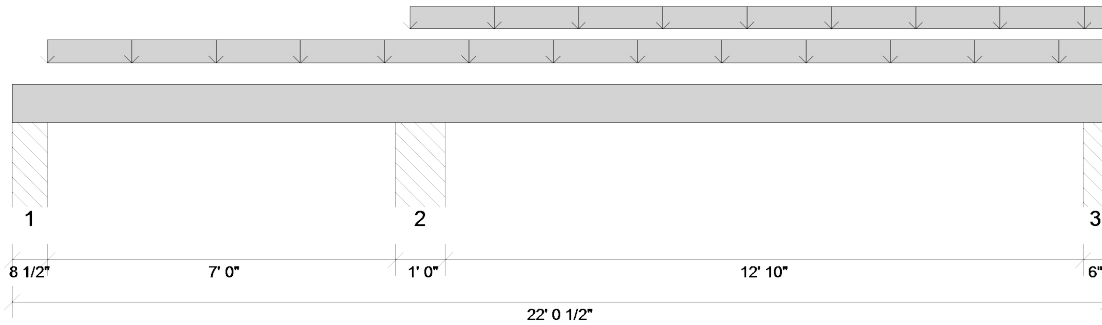
Label: M5-2 | Design Tag: i7993

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 22' 0 1/2"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	2916 lb @ 8' 2 1/2"	31500 lb (12")	Passed - 9%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	1582 lb @ 9' 5 3/4"	7074 lb	Passed - 22%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	-3795 lb-ft @ 8' 2 1/2"	12884 lb-ft	Passed - 29%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.14" @ 15' 5 13/16"	0.45" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.25" @ 15' 6 1/16"	0.67" L/240	Passed - L/658	-	1.0 D + 0.75 L + 0.75 S - (0)

### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 22-01-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 22-01-00 o/c based on loads applied, unless detailed otherwise.

### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 8 1/2"	1.5"	PBO24(i2578)	16 lb	-159 lb	-	246 / -19 lb
2	7' 8 1/2" : 8' 8 1/2"	1.5"	PBO23(i2577)	1232 lb	816 lb	-	1397 lb
3	21' 6 1/2" : 22' 0 1/2"	1.5"	PBO22(i2576)	598 lb	508 lb	-	594 lb

### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 22' 0 1/2"	-	Self Weight	9 lb/ft	-	-	-
Uniform	8 1/2" : 22' 0 1/2"	-	User Load	50 lb/ft	-	-	100 lb/ft
Uniform	8' 0" : 22' 0 1/2"	-	User Load	41 lb/ft	83 lb/ft	-	-

### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M5-2 | Design Tag: i7993

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

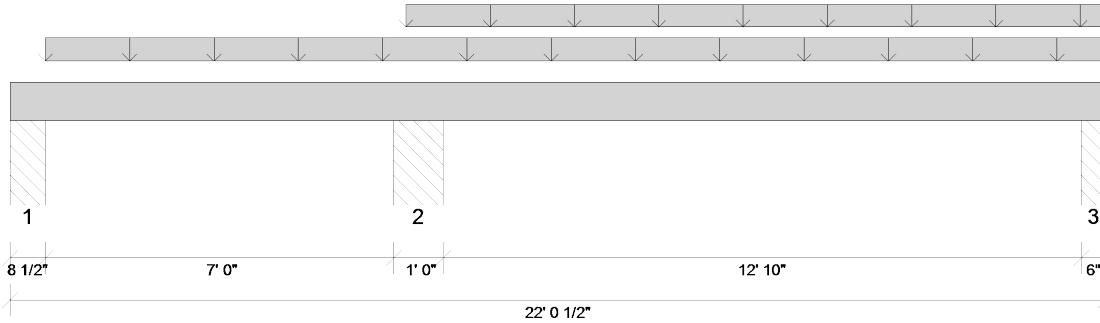
Label: M5-2 | Design Tag: i7991

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 22' 0 1/2"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	2920 lb @ 8' 2 1/2"	31500 lb (12")	Passed - 9%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	1582 lb @ 9' 5 3/4"	7074 lb	Passed - 22%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	-3795 lb-ft @ 8' 2 1/2"	12884 lb-ft	Passed - 29%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.14" @ 15' 5 13/16"	0.45" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.25" @ 15' 6 1/16"	0.67" L/240	Passed - L/658	-	1.0 D + 0.75 L + 0.75 S - (0)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 22-01-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 22-01-00 o/c based on loads applied, unless detailed otherwise.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 8 1/2"	1.5"	PBO25(i2579)	16 lb	-160 lb	-	246 / -19 lb
2	7' 8 1/2" : 8' 8 1/2"	1.5"	PBO26(i2580)	1233 lb	818 lb	-	1397 lb
3	21' 6 1/2" : 22' 0 1/2"	1.5"	PBO21(i2575)	599 lb	509 lb	-	594 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 22' 0 1/2"	-	Self Weight	9 lb/ft	-	-	-
Uniform	8 1/2" : 22' 0 1/2"	-	User Load	50 lb/ft	-	-	100 lb/ft
Uniform	7' 11 1/2" : 22' 0 1/2"	-	User Load	41 lb/ft	83 lb/ft	-	-

#### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M5-2 | Design Tag: i7991

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

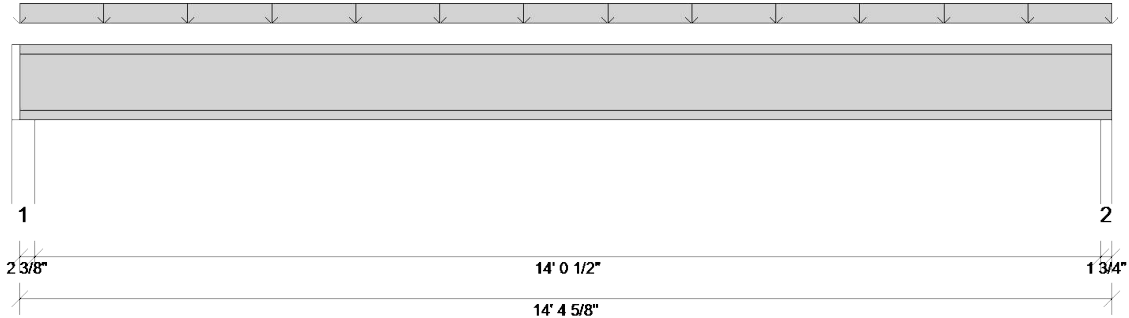
Floor Container: FC2 | Label: B16' | Design Tag: i7973

**1 piece(s) of 11 7/8" TJI@ 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 14' 4 5/8"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDf</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	573 lb @ 14' 3 7/8"	910 lb (1.75")	Passed - 63%	1.00	1.0 D + 1.0 L - (0)
Shear	562 lb @ 2 3/8"	1560 lb	Passed - 36%	1.00	1.0 D + 1.0 L - (0)
Moment	2019 lb-ft @ 7' 2 5/8"	3160 lb-ft	Passed - 64%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.20" @ 7' 2 5/8"	0.36" L/480	Passed - L/854	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.25" @ 7' 2 5/8"	0.71" L/240	Passed - L/683	-	1.0 D + 1.0 L - (0)
TJ Pro Rating	50	25	Passed		

Decking Material & Attachment: 23/32"x48"x96" Weyerhaeuser Edge Gold Panel (0/24) T&G SF - Glue And Nail

#### Design Notes:

- \* Top Edge Bracing (Lu): Top compression edge must be braced at 3-11-00 o/c based on loads applied, unless detailed otherwise.
- \* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 14-05-00 o/c based on loads applied, unless detailed otherwise.
- \* Additional considerations for TJ-Pro™ Rating include ceiling.
- \* For TJ-Pro™ Rating calculation the controlling span is considered to be supported by walls.
- \* Member design (strength) is based on loads shown in loading section. TJ-Pro™ Rating, if shown, is based on 1-07-03 o.c. spacing.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 2 3/8"	1.75"	E18(i2287)	117 lb	468 lb	-	-
2	14' 2 7/8" : 14' 4 5/8"	1.75"	B2(i2309)	115 lb	459 lb	-	-

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Uniform	0" : 14' 4 5/8"	-	FC2 Floor Decking	16 lb/ft	64 lb/ft	-	-

#### Errors, Warnings, & Notes:

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* The TJ-Pro™ Rating shown above is based on the default decking for the floor container. Special decking (if used) was not used in determination of the TJ-Pro™ Rating.



## Member Report

Floor Container: FC2 | Label: B16' | Design Tag: i7973

**1 piece(s) of 11 7/8" TJI® 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

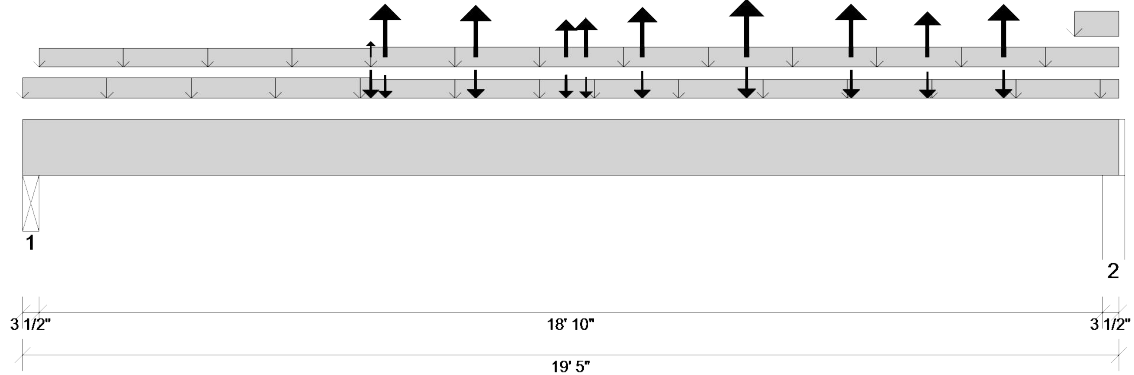
Label: M3-2 | Design Tag: i7960

2 piece(s) of 1 3/4" x 11 7/8" 2.0E Microllam® LVL

Member Type: Beam | Level: 2nd Floor

Design Passed

Product is Sufficient for Application and Loads Described



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 19' 5"

Member Drawing Not to Scale

Design Results:	Design @ Location	Allowed	Result	LDF	Load Combination - (Load Group)
Critical Reaction	1667 lb @ 2"	9188 lb (3.5")	Passed - 18%	-	1.0 D + 1.0 L - (1)
Shear	1470 lb @ 1' 3 3/8"	7897 lb	Passed - 19%	1.00	1.0 D + 1.0 L - (1)
Moment	7641 lb-ft @ 8' 9 15/16"	17848 lb-ft	Passed - 43%	1.00	1.0 D + 1.0 L - (1)
Live Load Deflection	0.34" @ 9' 10 3/4"	0.64" L/360	Passed - L/668	-	1.0 D + 1.0 L - (1)
Total Load Deflection	0.53" @ 9' 7"	0.95" L/240	Passed - L/430	-	1.0 D + 1.0 L - (1)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 19-05-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 19-05-00 o/c based on loads applied, unless detailed otherwise.

\* -245 lb uplift at support located at 19-03-00. Strapping or other restraint may be required.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 3 1/2"	1.5"	M1-2(i7813)	883 lb	779 / -465 lb	-	-3 lb
2	19' 1 1/2" : 19' 5"	1.5"	B37(i2568)	517 lb	1134 / -766 lb	-	-2 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 19' 5"	-	Self Weight	11 lb/ft	-	-	-
Uniform	0" : 6' 2"	-	E28(i2333)	92 lb/ft	-	-	-
Uniform	3 1/2" : 6' 2"	-	E28(i2333)	22 lb/ft	43 lb/ft	-	-
Uniform	6' 2" : 19' 5"	-	E40(i2606)	81 lb/ft	-	-	-
Uniform	6' 2" : 10' 1 1/2"	-	E40(i2606)	21 lb/ft	43 lb/ft	-	-
Uniform	10' 1 1/2" : 19' 5"	-	E40(i2606)	21 lb/ft	42 lb/ft	-	-
Uniform	18' 7 1/2" : 19' 5"	-	E40(i2606)	71 lb/ft	107 lb/ft	-	-
Point	6' 2" : -	-	B4(i7876)	123 lb	8 lb	-	-5 lb
Point	6' 5 1/8" : -	-	B20'(i7978)	-64 lb	78 / -333 lb	-	-
Point	8' 0 5/16" : -	-	B20'(i7864)	-49 lb	135 / -333 lb	-	-
Point	9' 7 1/2" : -	-	B20'(i7863)	-30 lb	83 / -204 lb	-	-
Point	9' 11 3/4" : -	-	B18'-2(i7942)	-148 lb	57 / -100 lb	-	-
Point	10' 11 11/16" : -	-	B18'(i7862)	-152 lb	120 / -211 lb	-	-
Point	12' 9 7/8" : -	-	B18'(i7861)	-174 lb	156 / -275 lb	-	-
Point	14' 8 1/8" : -	-	B18'(i7981)	-158 lb	135 / -238 lb	-	-
Point	16' 0 5/16" : -	-	B18'(i7953)	-114 lb	114 / -200 lb	-	-
Point	17' 4 1/2" : -	-	B18'(i7858)	-153 lb	135 / -238 lb	-	-

## Member Report

Label: M3-2 | Design Tag: i7960

**2 piece(s) of 1 3/4" x 11 7/8" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

### Errors, Warnings, & Notes:

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

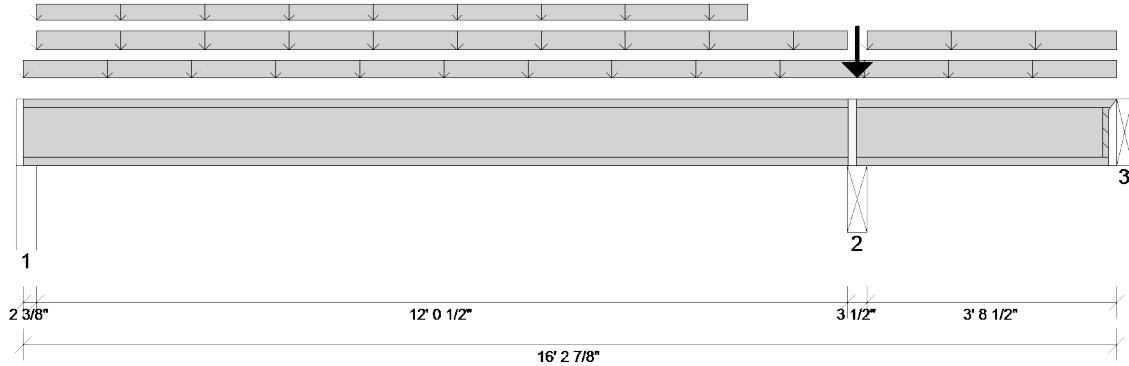
Floor Container: FC2 | Label: B18'-2 | Design Tag: i7942

**2 piece(s) of 11 7/8" TJI@ 110 joist**

Member Type: Joist As Flush Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 16' 2 7/8"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	1352 lb @ 12' 4 5/8"	3870 lb (3.5")	Passed - 35%	1.00	1.0 D + 1.0 L - (0)
Shear	600 lb @ 2 3/8"	3120 lb	Passed - 19%	1.00	1.0 D + 1.0 L - (0)
Moment	1754 lb-ft @ 5' 9 9/16"	6320 lb-ft	Passed - 28%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.03" @ 6' 2 3/4"	0.31" L/480	Passed - L/999	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.10" @ 6' 0 13/16"	0.62" L/240	Passed - L/999	-	1.0 D + 1.0 L - (0)

**Design Notes:**

\* Uplift constraint has been released at support location 16-02-14.

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-02-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 7-04-00 o/c based on loads applied, unless detailed otherwise.

\* Member design (strength) is based on loads shown in loading section. TJ-Pro™ Rating, if shown, is based on 1-07-03 o.c. spacing.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 2 3/8"	1.75"	E20(i2295)	369 lb	139 / -1 lb	-	-
2	12' 2 7/8" : 12' 6 3/8"	3.5"	M3-2(i7835)	1092 lb	466 lb	-	125 lb
3	16' 2 7/8" : -	1.75"	M3-2(i7960)	-148 lb	57 / -100 lb	-	-

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Uniform	0" : 16' 2 7/8"	-	FC2 Floor Decking	7 lb/ft	27 lb/ft	-	-
Uniform	2 3/8" : 12' 2 7/8"	-	NB16(i2600)	65 lb/ft	-	-	-
Uniform	2 3/8" : 10' 9 1/8"	-	FC2 Floor Decking	4 lb/ft	-	-	-
Uniform	12' 6 3/8" : 16' 2 7/8"	-	NB19(i2603)	65 lb/ft	-	-	-
Point	12' 4 5/8" : -	-	B25(i2349)	142 lb	112 lb	-	125 lb

**Connector Information:**

Support	Manufacturer	Model	Nailing Requirements				Other Information
			Top	Face	Member	Min. Seat Length	
3	SST	MIU3.56/11	Not Applicable	20- 10dx1.5	6- 10dx1.5	1.75"	Minimum seat length reported is based on the design load Web stiffener Required - see reinforcing accessories table

## Member Report

Floor Container: FC2 | Label: B18'-2 | Design Tag: i7942

**2 piece(s) of 11 7/8" TJI® 110 joist**

Member Type: Joist As Flush Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

### Reinforcing Accessories:

Support / Location

Accessory Product(s)

16' 1 3/8"

(4) 5/8" x 2 5/16" Web Stiffeners

### Errors, Warnings, & Notes:

\* This member was designed as a girder member due to load and/or framing conditions. T-J-Pro™ Rating, and other joist member modifiers were not used in the design of this member.

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

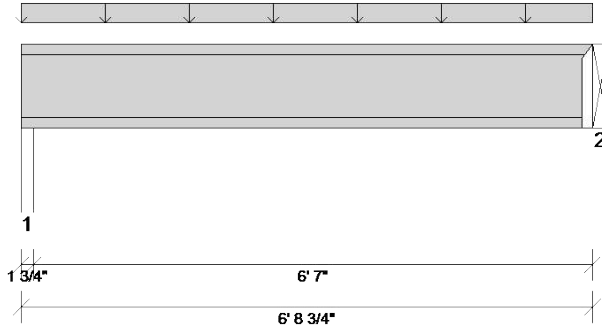
Floor Container: FC2 | Label: B8' | Design Tag: i7911

**1 piece(s) of 11 7/8" TJI@ 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 6' 8 3/4"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	272 lb @ 3/4"	910 lb (1.75")	Passed - 30%	1.00	1.0 D + 1.0 L - (0)
Shear	267 lb @ 6' 8 3/4"	1560 lb	Passed - 17%	1.00	1.0 D + 1.0 L - (0)
Moment	444 lb-ft @ 3' 4 3/4"	3160 lb-ft	Passed - 14%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.01" @ 3' 4 3/4"	0.17" L/480	Passed - L/999	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.02" @ 3' 4 3/4"	0.33" L/240	Passed - L/999	-	1.0 D + 1.0 L - (0)
TJ Pro Rating	68	25	Passed		

Decking Material & Attachment: 23/32"x48"x96" Weyerhaeuser Edge Gold Panel (0/24) T&G SF - Glue And Nail

#### Design Notes:

- \* Top Edge Bracing (Lu): Top compression edge must be braced at 6-09-00 o/c based on loads applied, unless detailed otherwise.
- \* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6-09-00 o/c based on loads applied, unless detailed otherwise.
- \* Additional considerations for TJ-Pro™ Rating include ceiling.
- \* For TJ-Pro™ Rating calculation the controlling span is considered to be supported by beams.
- \* Member design (strength) is based on loads shown in loading section. TJ-Pro™ Rating, if shown, is based on 1-07-03 o.c. spacing.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1 3/4"	1.75"	B5(i2312)	54 lb	217 lb	-	-
2	6' 8 3/4" : -	1.75"	M2-2(i8004)	58 lb	232 lb	-	-

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Uniform	-0" : 6' 8 3/4"	-	FC2 Floor Decking	16 lb/ft	64 lb/ft	-	-

#### Connector Information:

#### Nailing Requirements

Support	Manufacturer	Model	Top	Face	Member	Min. Seat Length	Other Information
2	SST	IUS1.81/11.88	Not Applicable	10- 10dx1.5	2- Strong-Grip	1.75"	Minimum seat length reported is based on the design load

#### Errors, Warnings, & Notes:

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

## Member Report

Floor Container: FC2 | Label: B8' | Design Tag: i7911

**1 piece(s) of 11 7/8" TJI® 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* The TJ-Pro™ Rating shown above is based on the default decking for the floor container. Special decking (if used) was not used in determination of the TJ-Pro™ Rating.
- \* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

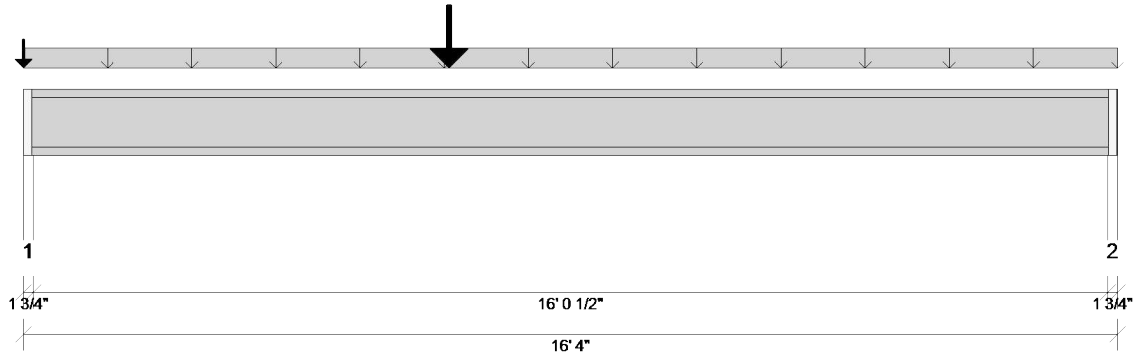
Floor Container: FC2 | Label: B18'-2 | Design Tag: i7902

**2 piece(s) of 11 7/8" TJI@ 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 16' 4"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	1198 lb @ 3/4"	1820 lb (1.75")	Passed - 66%	1.00	1.0 D + 1.0 L - (0)
Shear	1054 lb @ 1 3/4"	3120 lb	Passed - 34%	1.00	1.0 D + 1.0 L - (0)
Moment	5087 lb-ft @ 6' 4 1/4"	6320 lb-ft	Passed - 80%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.27" @ 7' 11 11/16"	0.41" L/480	Passed - L/711	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.39" @ 7' 11 1/8"	0.81" L/240	Passed - L/495	-	1.0 D + 1.0 L - (0)
TJ Pro Rating	55	25	Passed		

Decking Material & Attachment: 23/32"x48"x96" Weyerhaeuser Edge Gold Panel (0/24) T&G SF - Glue And Nail

#### Design Notes:

- \* Top Edge Bracing (Lu): Top compression edge must be braced at 3-06-00 o/c based on loads applied, unless detailed otherwise.
- \* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 16-04-00 o/c based on loads applied, unless detailed otherwise.
- \* Additional considerations for TJ-Pro™ Rating include ceiling.
- \* For TJ-Pro™ Rating calculation the controlling span is considered to be supported by walls.
- \* Member design (strength) is based on loads shown in loading section. TJ-Pro™ Rating, if shown, is based on 1-07-03 o.c. spacing.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1 3/4"	1.75"	B2(i2309)	385 lb	808 lb	-	58 lb
2	16' 2 1/4" : 16' 4"	1.75"	B5(i2312)	246 lb	673 lb	-	-

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Uniform	0" : 16' 4"	-	FC2 Floor Decking	16 lb/ft	64 lb/ft	-	-
Point	0" : -	-	B25(i2349)	76 lb	56 lb	-	58 lb
Point	6' 4 1/4" : -	-	B33(i2357)	294 lb	379 lb	-	-

#### Errors, Warnings, & Notes:

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.



## Member Report

Floor Container: FC2 | Label: B18'-2 | Design Tag: i7902

**2 piece(s) of 11 7/8" TJI® 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* The TJ-Pro™ Rating shown above is based on the default decking for the floor container. Special decking (if used) was not used in determination of the TJ-Pro™ Rating.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

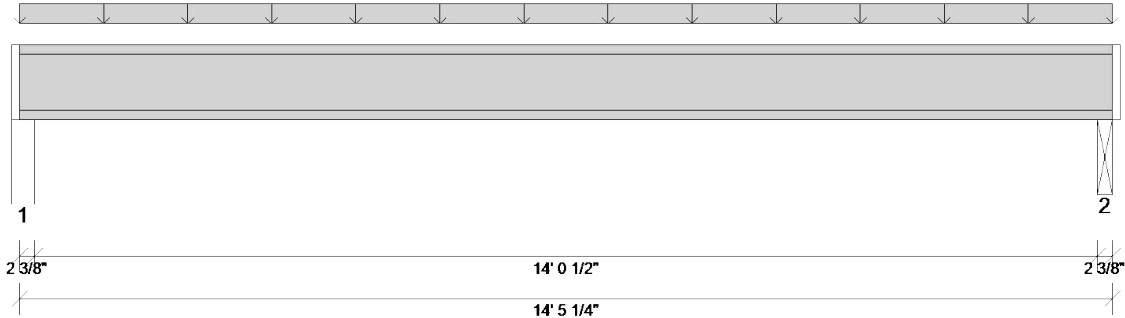
Floor Container: FC2 | Label: B16' | Design Tag: i7866

**1 piece(s) of 11 7/8" TJI@ 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 14' 5 1/4"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	577 lb @ 1 3/8"	1073 lb (2.37")	Passed - 54%	1.00	1.0 D + 1.0 L - (0)
Shear	562 lb @ 2 3/8"	1560 lb	Passed - 36%	1.00	1.0 D + 1.0 L - (0)
Moment	2019 lb-ft @ 7' 2 5/8"	3160 lb-ft	Passed - 64%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.20" @ 7' 2 5/8"	0.36" L/480	Passed - L/854	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.25" @ 7' 2 5/8"	0.71" L/240	Passed - L/683	-	1.0 D + 1.0 L - (0)
TJ Pro Rating	46	25	Passed		

Decking Material & Attachment: 23/32"x48"x96" Weyerhaeuser Edge Gold Panel (0/24) T&G SF - Glue And Nail

**Design Notes:**

- \* Top Edge Bracing (Lu): Top compression edge must be braced at 3-11-00 o/c based on loads applied, unless detailed otherwise.
- \* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 14-05-00 o/c based on loads applied, unless detailed otherwise.
- \* Additional considerations for TJ-Pro™ Rating include ceiling.
- \* For TJ-Pro™ Rating calculation the controlling span is considered to be supported by beams.
- \* Member design (strength) is based on loads shown in loading section. TJ-Pro™ Rating, if shown, is based on 1-07-03 o.c. spacing.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 2 3/8"	1.75"	E22(i2293)	117 lb	468 lb	-	-
2	14' 2 7/8" : 14' 5 1/4"	1.75"	M3-2(i7835)	117 lb	468 lb	-	-

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Uniform	0" : 14' 5 1/4"	-	FC2 Floor Decking	16 lb/ft	64 lb/ft	-	-

**Errors, Warnings, & Notes:**

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* The TJ-Pro™ Rating shown above is based on the default decking for the floor container. Special decking (if used) was not used in determination of the TJ-Pro™ Rating.



## Member Report

Floor Container: FC2 | Label: B16' | Design Tag: i7866

**1 piece(s) of 11 7/8" TJI® 110 joist**

Member Type: FloorJoist | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

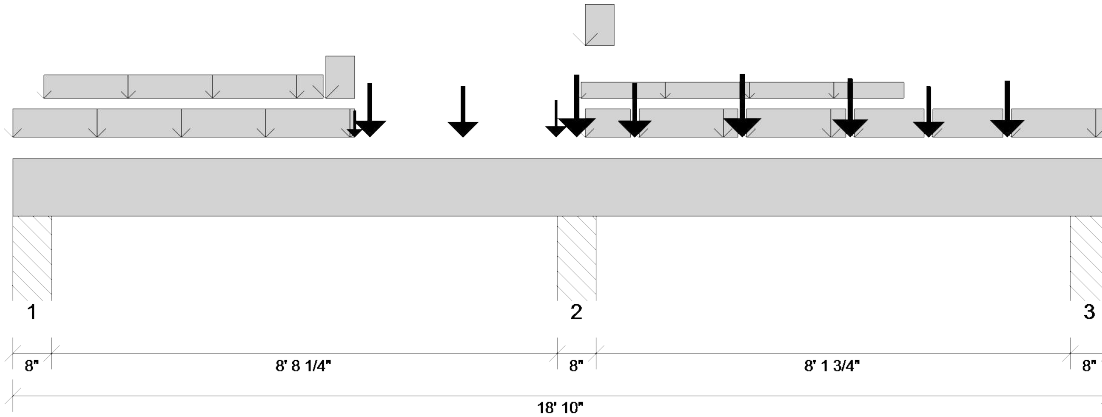
Label: M3-2 | Design Tag: i7835

**2 piece(s) of 1 3/4" x 11 7/8" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 18' 10"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	14026 lb @ 9' 8 1/4"	21000 lb (8")	Passed - 67%	-	1.0 D + 1.0 L - (0)
Shear	5755 lb @ 11' 0 1/8"	7897 lb	Passed - 73%	1.00	1.0 D + 1.0 L - (0)
Moment	-11280 lb-ft @ 9' 8 1/4"	17848 lb-ft	Passed - 63%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.08" @ 14' 4 5/8"	0.29" L/360	Passed - L/999	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.14" @ 14' 4 5/8"	0.43" L/240	Passed - L/718	-	1.0 D + 1.0 L - (0)

**Design Notes:**

\* Top Edge Bracing (Lu): Top compression edge must be braced at 16-01-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 12-06-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 8"	1.5"	PBO18(i2508)	1262 lb	2173 / -338 lb	-	882 lb
2	9' 4 1/4" : 10' 0 1/4"	5.34"	PBO20(i2511)	6174 lb	7533 lb	-	2082 lb
3	18' 2" : 18' 10"	1.85"	PBO19(i2509)	2202 lb	2596 / -376 lb	-	829 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 18' 10"	-	Self Weight	11 lb/ft	-	-	-
Uniform	-0" : 5' 10 1/2"	-	STCa1(i7986)	249 lb/ft	169 lb/ft	-	200 lb/ft
Uniform	6 3/8" : 5' 4"	-	Smoothed Load	73 lb/ft	293 lb/ft	-	-
Uniform	5' 4 1/2" : 5' 10 1/2"	-	STCa1(i7986)	437 lb/ft	413 lb/ft	-	427 lb/ft
Uniform	9' 9 1/8" : 15' 3"	-	Smoothed Load	-	-	-	16 lb/ft
Uniform	9' 10" : 10' 7 5/16"	-	BBk1(i7982)	249 lb/ft	169 lb/ft	-	200 lb/ft
Uniform	9' 10" : 10' 4"	-	BBk1(i7982)	423 lb/ft	385 lb/ft	-	427 lb/ft
Uniform	10' 9 1/16" : 12' 5"	-	BBk1(i7982)	249 lb/ft	169 lb/ft	-	200 lb/ft
Uniform	12' 7 1/4" : 14' 3 3/4"	-	BBk1(i7982)	249 lb/ft	169 lb/ft	-	200 lb/ft
Uniform	14' 5 1/2" : 15' 7"	-	BBk1(i7982)	249 lb/ft	169 lb/ft	-	200 lb/ft
Uniform	15' 9 11/16" : 17' 0"	-	BBk1(i7982)	249 lb/ft	169 lb/ft	-	200 lb/ft
Uniform	17' 1 7/8" : 18' 10"	-	BBk1(i7982)	249 lb/ft	169 lb/ft	-	200 lb/ft
Point	5' 10 1/2" : -	-	B4(i7876)	221 lb	73 lb	-	97 lb
Point	6' 1 5/8" : -	-	B20(i7978)	304 lb	1003 lb	-	66 lb
Point	7' 8 13/16" : -	-	B20(i7864)	253 lb	1011 lb	-	-
Point	9' 4" : -	-	B20(i7863)	155 lb	618 lb	-	-
Point	9' 8 1/4" : -	-	B18'-2(i7942)	1092 lb	466 lb	-	125 lb
Point	10' 8 3/16" : -	-	B18(i7862)	615 lb	770 lb	-	-
Point	12' 6 3/8" : -	-	B18(i7861)	711 lb	994 lb	-	-
Point	14' 4 5/8" : -	-	B18(i7981)	682 lb	863 lb	-	-

## Member Report

Label: M3-2 | Design Tag: i7835

**2 piece(s) of 1 3/4" x 11 7/8" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

Point	15' 8 13/16" :-	-	B18'(i7953)	500 lb	732 lb	-	29 lb
Point	17' 1" :-	-	B18'(i7858)	580 lb	863 lb	-	29 lb

### Errors, Warnings, & Notes:

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

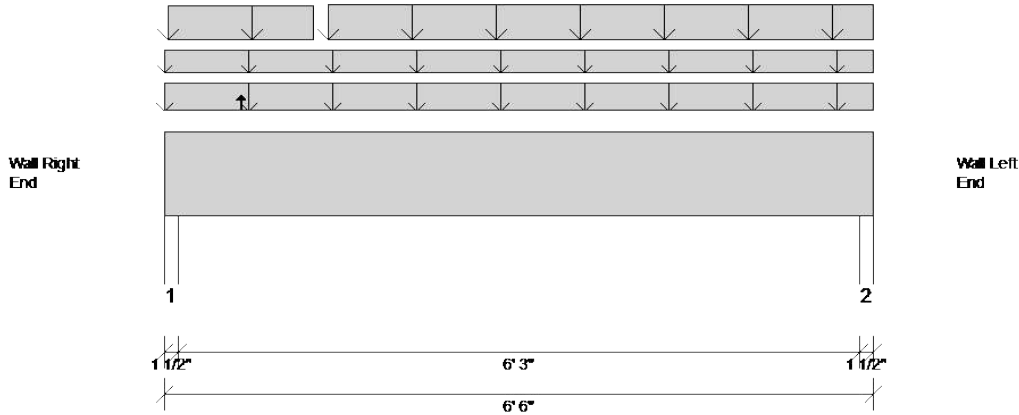
Wall: E22 | Label: E22\_MHd2-2 | Design Tag: i7819

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 6' 6"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	2037 lb @ 6' 6"	3937 lb (1.5")	Passed - 52%	-	1.0 D + 1.0 L - (0)
Shear	1472 lb @ 5' 7 1/4"	6151 lb	Passed - 24%	1.00	1.0 D + 1.0 L - (0)
Moment	3290 lb-ft @ 3' 3 1/4"	11204 lb-ft	Passed - 29%	1.00	1.0 D + 1.0 L - (0)
Live Load Deflection	0.04" @ 3' 3 1/8"	0.22" L/360	Passed - L/999	-	1.0 D + 1.0 L - (0)
Total Load Deflection	0.07" @ 3' 3 1/8"	0.33" L/240	Passed - L/999	-	1.0 D + 1.0 L - (0)

**Design Notes:**

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-06-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6-06-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1 1/2"	1.5"	Trimmer	811 lb	1164 lb	-	324 lb
2	6' 4 1/2" : 6' 6"	1.5"	Trimmer	828 lb	1218 lb	-	326 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 6' 6"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 6' 6"	-	STCa1 (i7881)	131 lb/ft	-	-	100 lb/ft
Uniform	0" : 6' 6"	-	User Load	41 lb/ft	83 lb/ft	-	-
Uniform	3/8" : 1' 4 3/8"	-	Smoothed Load	71 lb/ft	286 lb/ft	-	-
Tapered	1' 6" : 6' 6"	-	Smoothed Load	73 To 73 lb/ft	293 To 292 lb/ft	-	-
Point	8 3/8" : -	-	B20 (i7978)	-	-1 lb	-	-

**Errors, Warnings, & Notes:**

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



### Member Report

Wall: E22 | Label: E22\_MHd2-2 | Design Tag: i7819

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

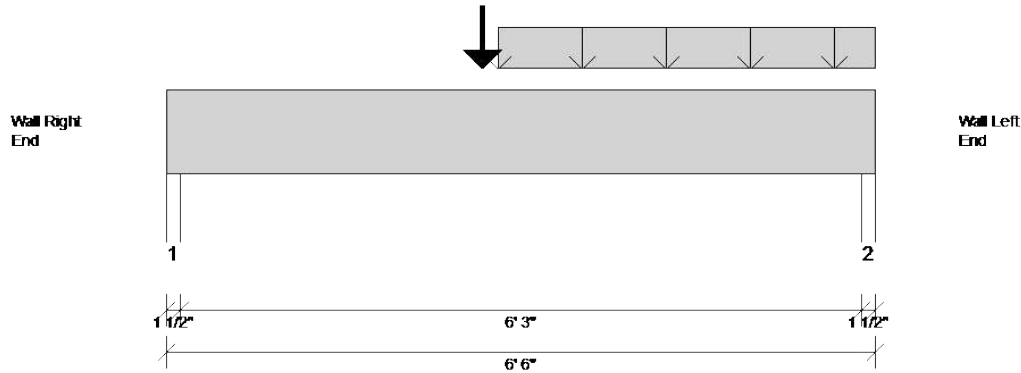
Wall: E12 | Label: E12\_MHd2-2 | Design Tag: i7818

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 6' 6"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	2290 lb @ 6' 6"	3937 lb (1.5")	Passed - 58%	-	1.0 D + 1.0 S - (0)
Shear	1852 lb @ 5' 7 1/4"	7074 lb	Passed - 26%	1.15	1.0 D + 1.0 S - (0)
Moment	5081 lb-ft @ 2' 10 3/4"	12884 lb-ft	Passed - 39%	1.15	1.0 D + 1.0 S - (0)
Live Load Deflection	0.06" @ 3' 0 1/2"	0.22" L/360	Passed - L/999	-	1.0 D + 1.0 S - (0)
Total Load Deflection	0.09" @ 3' 0 1/2"	0.33" L/240	Passed - L/863	-	1.0 D + 1.0 S - (0)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-06-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6-06-00 o/c based on loads applied, unless detailed otherwise.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1 1/2"	1.5"	Trimmer	676 lb	-	-	1033 lb
2	6' 4 1/2" : 6' 6"	1.5"	Trimmer	878 lb	-	-	1468 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 6' 6"	-	Self Weight	9 lb/ft	-	-	-
Uniform	3' 0 1/2" : 6' 6"	-	User Load	160 lb/ft	-	-	320 lb/ft
Point	2' 10 3/4" : -	-	PBO37(i6666)	943 lb	-	-	1394 lb

#### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



### Member Report

Wall: E12 | Label: E12\_MHd2-2 | Design Tag: i7818

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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## Member Report

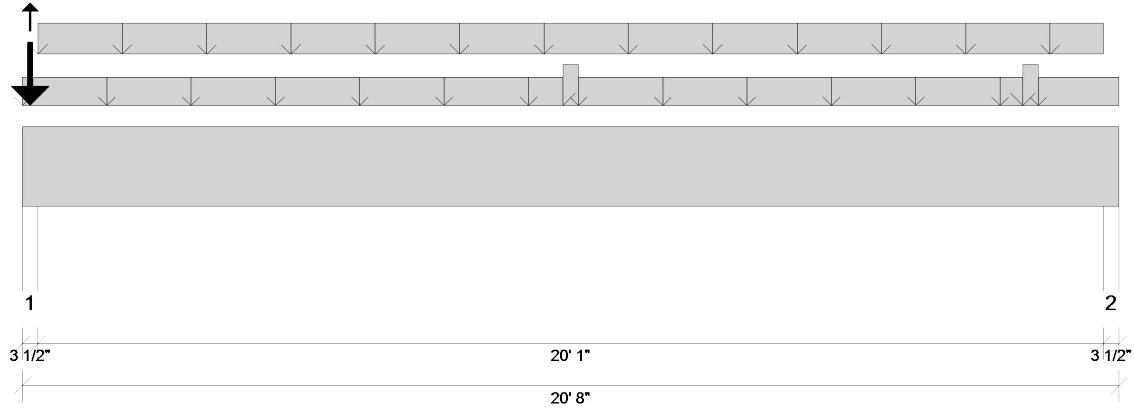
Label: M1-2 | Design Tag: i7813

**2 piece(s) of 1 3/4" x 18" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 20' 8"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	7244 lb @ 2"	9187 lb (3.5")	Passed - 79%	-	1.0 D + 1.0 L - (1)
Shear	4802 lb @ 18' 10 1/2"	11970 lb	Passed - 40%	1.00	1.0 D + 1.0 L - (1)
Moment	28547 lb-ft @ 10' 4"	38753 lb-ft	Passed - 74%	1.00	1.0 D + 1.0 L - (1)
Live Load Deflection	0.44" @ 10' 4"	0.68" L/360	Passed - L/561	-	1.0 D + 1.0 L - (1)
Total Load Deflection	0.68" @ 10' 4"	1.02" L/240	Passed - L/361	-	1.0 D + 1.0 L - (1)

### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-01-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 20-08-00 o/c based on loads applied, unless detailed otherwise.

### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 3 1/2"	2.76"	B12(i2320)	2859 lb	4364 lb	-	-3 lb
2	20' 4 1/2" : 20' 8"	2.15"	E12(i2292)	1998 lb	3654 lb	-	-

### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 20' 8"	-	Self Weight	17 lb/ft	-	-	-
Uniform	0" : 10' 2 1/4"	-	User Load	78 lb/ft	157 lb/ft	-	-
Uniform	3 1/2" : 20' 4 1/2"	-	User Load	97 lb/ft	194 lb/ft	-	-
Uniform	10' 2 1/4" : 10' 5 3/4"	-	User Load	157 lb/ft	313 lb/ft	-	-
Uniform	10' 5 3/4" : 18' 10"	-	User Load	78 lb/ft	157 lb/ft	-	-
Uniform	18' 10 1/4" : 19' 1"	-	User Load	157 lb/ft	313 lb/ft	-	-
Uniform	19' 1 3/4" : 20' 8"	-	User Load	78 lb/ft	157 lb/ft	-	-
Point	1 3/4" : -	-	M3-2(i7960)	883 lb	779 / -465 lb	-	-3 lb

### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



## Member Report

Label: M1-2 | Design Tag: i7813

**2 piece(s) of 1 3/4" x 18" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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### Member Report

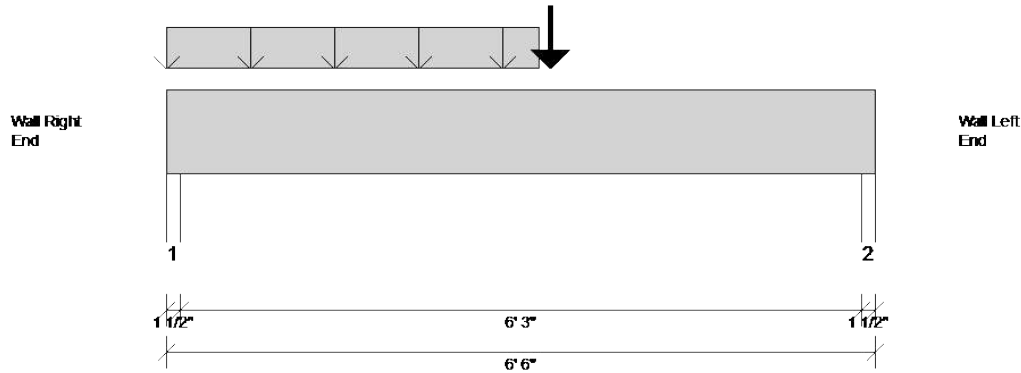
Wall: E12 | Label: E12\_MHd2-2 | Design Tag: i7812

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 6' 6"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	2311 lb @ 0"	3937 lb (1.5")	Passed - 59%	-	1.0 D + 1.0 S - (0)
Shear	1872 lb @ 10 3/4"	7074 lb	Passed - 26%	1.15	1.0 D + 1.0 S - (0)
Moment	5105 lb-ft @ 3' 6 1/4"	12884 lb-ft	Passed - 40%	1.15	1.0 D + 1.0 S - (0)
Live Load Deflection	0.06" @ 3' 5"	0.22" L/360	Passed - L/999	-	1.0 D + 1.0 S - (0)
Total Load Deflection	0.09" @ 3' 5"	0.33" L/240	Passed - L/861	-	1.0 D + 1.0 S - (0)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-06-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6-06-00 o/c based on loads applied, unless detailed otherwise.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1 1/2"	1.5"	Trimmer	862 lb	-	-	1440 lb
2	6' 4 1/2" : 6' 6"	1.5"	Trimmer	686 lb	-	-	1048 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 6' 6"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 3' 5"	-	User Load	160 lb/ft	-	-	320 lb/ft
Point	3' 6 1/4" : -	-	PBO36(i6664)	943 lb	-	-	1394 lb

#### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



### Member Report

Wall: E12 | Label: E12\_MHd2-2 | Design Tag: i7812

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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### Member Report

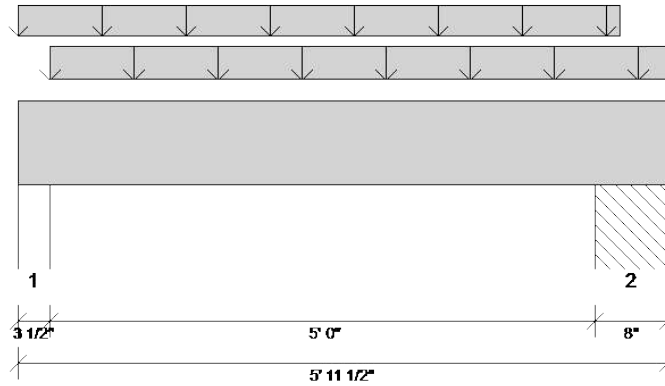
Label: M9-2 | Design Tag: i7761

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 5' 11 1/2"

Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDF</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	1389 lb @ 2"	9187 lb (3.5")	Passed - 15%	-	1.0 D + 0.75 L + 0.75 S - (0)
Shear	910 lb @ 1' 0 3/4"	7074 lb	Passed - 13%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Moment	1812 lb-ft @ 2' 9 7/16"	12884 lb-ft	Passed - 14%	1.15	1.0 D + 0.75 L + 0.75 S - (0)
Live Load Deflection	0.02" @ 2' 9 7/16"	0.18" L/360	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)
Total Load Deflection	0.03" @ 2' 9 7/16"	0.26" L/240	Passed - L/999	-	1.0 D + 0.75 L + 0.75 S - (0)

#### Design Notes:

\* Top Edge Bracing (Lu): Top compression edge must be braced at 6-00-00 o/c based on loads applied, unless detailed otherwise.

\* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6-00-00 o/c based on loads applied, unless detailed otherwise.

#### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 3 1/2"	1.5"	E10(i2298)	579 lb	550 lb	-	558 lb
2	5' 3 1/2" : 5' 11 1/2"	1.5"	PBO31(i2591)	632 lb	517 lb	-	689 lb

#### Loads:

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 5' 11 1/2"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 5' 6 1/4"	-	User Load	97 lb/ft	193 lb/ft	-	-
Uniform	3 1/2" : 5' 11 1/2"	-	User Load	110 lb/ft	-	-	220 lb/ft

#### Errors, Warnings, & Notes:

\* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.

\* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

\* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



## Member Report

Label: M9-2 | Design Tag: i7761

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: Beam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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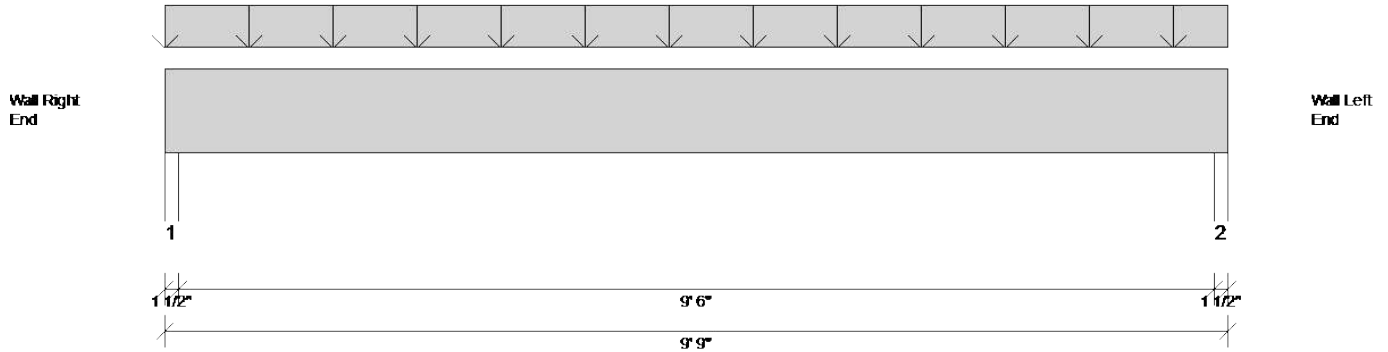


### Member Report

Wall: E10 | Label: E10\_MHd1-2 | Design Tag: i7563  
**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**  
 Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

**Design Passed**

*Product is Sufficient for Application and Loads Described*



Building Code: IBC 2018      Design Methodology: ASD      Member Cut Length: 9' 9"      Member Drawing Not to Scale

<b>Design Results:</b>	<b>Design @ Location</b>	<b>Allowed</b>	<b>Result</b>	<b>LDf</b>	<b>Load Combination - (Load Group)</b>
Critical Reaction	2532 lb @ 0"	3937 lb (1.5")	Passed - 64%	-	1.0 D + 1.0 S - (0)
Shear	2067 lb @ 10 3/4"	7074 lb	Passed - 29%	1.15	1.0 D + 1.0 S - (0)
Moment	6172 lb-ft @ 4' 10 1/2"	12884 lb-ft	Passed - 48%	1.15	1.0 D + 1.0 S - (0)
Live Load Deflection	0.16" @ 4' 10 1/2"	0.33" L/360	Passed - L/713	-	1.0 D + 1.0 S - (0)
Total Load Deflection	0.25" @ 4' 10 1/2"	0.49" L/240	Passed - L/467	-	1.0 D + 1.0 S - (0)

**Design Notes:**

- \* Top Edge Bracing (Lu): Top compression edge must be braced at 9-09-00 o/c based on loads applied, unless detailed otherwise.
- \* Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 9-09-00 o/c based on loads applied, unless detailed otherwise.

**Supports:**

Support	Start : End	Req'd Br'g	Source	Maximum Loads to Supports			
				Dead	Floor Live	Roof Live	Snow
1	0" : 1 1/2"	1.5"	Trimmer	872 lb	-	-	1658 lb
2	9' 7 1/2" : 9' 9"	1.5"	Trimmer	872 lb	-	-	1658 lb

**Loads:**

Type	Start : End	Combine	Source	Maximum Loads on Member			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0" : 9' 9"	-	Self Weight	9 lb/ft	-	-	-
Uniform	0" : 9' 9"	-	User Load	170 lb/ft	-	-	340 lb/ft

**Errors, Warnings, & Notes:**

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15



### Member Report

Wall: E10 | Label: E10\_MHd1-2 | Design Tag: i7563

**2 piece(s) of 1 3/4" x 9 1/4" 2.0E Microllam® LVL**

Member Type: HeaderAsDroppedBeam | Level: 2nd Floor

*Product is Sufficient for Application and Loads Described*

**Design Passed**

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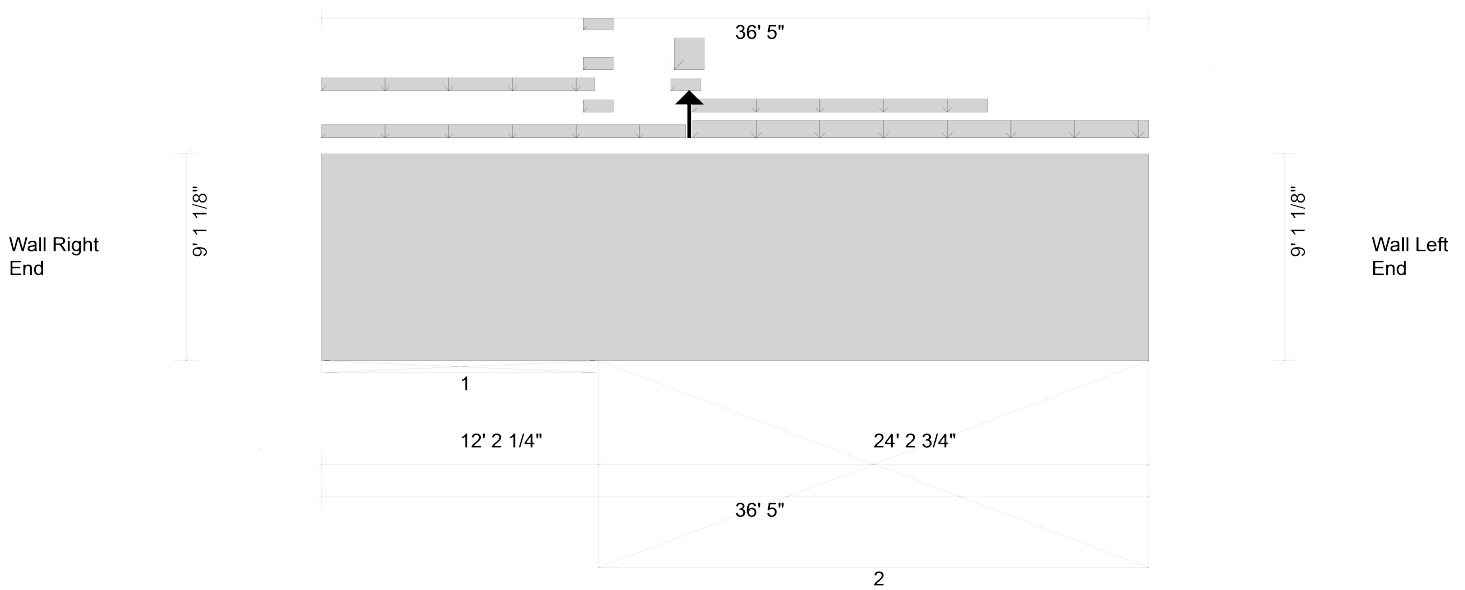
## Member Report

Label: WallB37 | Design Tag: i2568

Member Type: WoodWall | Level: 2nd Floor

### Load Distribution Complete

Loading and support reactions have been established for this member



Building Code: IBC 2018

Design Methodology: ASD

Member Cut Length: 36' 5"

Member Drawing Not to Scale

### Design Results:

This wall has not been designed.

### Loads:

Type	Start : End	Combine	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Uniform	0" : 16' 0 1/2"	-	B18'(i7857)	19 lb/ft	69 lb/ft	-	-
Uniform	0" : 12' 0 1/2"	-	B18'(i7857)	73 lb/ft	-	-	-
Uniform	11' 6 1/4" : 12' 10 1/4"	-	B18'(i7857)	20 lb/ft	4 lb/ft	-	22 lb/ft
Uniform	11' 6 1/4" : 12' 10 1/4"	-	BBk1(i7950)	17 lb/ft	4 lb/ft	-	18 lb/ft
Uniform	11' 6 1/4" : 12' 10 1/4"	-	BBk1(i7982)	5 lb/ft	3 lb/ft	-	4 lb/ft
Uniform	15' 4 1/2" : 16' 8 1/2"	-	B18'(i7857)	4 lb/ft	15 lb/ft	-	-
Uniform	15' 6 1/4" : 16' 10 1/4"	-	M3-2(i7960)	388 lb/ft	851 lb/ft	-	-
Uniform	16' 4" : 36' 5"	-	User Load	117 lb/ft	234 lb/ft	-	-
Uniform	16' 4" : 29' 4"	-	E29(i2334)	92 lb/ft	-	-	-
Point	16' 2 1/4" : -	-	M3-2(i7960)	-	-766 lb	-	-2 lb

### Supports:

Support	Start : End	Req'd Br'g	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0" : 12' 2 1/4"		B14'-2(i7766)	2037 lb	849 lb	-	29 lb
==>	0" : 12' 0 1/2"	-	B14'-2(i7766)	73 lb/ft	-	-	-
==>	0" : 12' 2 1/4"	-	B14'-2(i7766)	93 lb/ft	69 lb/ft	-	-
==>	11' 6 1/4" : 12' 2 1/4"	-	B14'-2(i7766)	42 lb/ft	12 lb/ft	-	44 lb/ft
2	12' 2 1/4" : 36' 5"		M1-2(i7816)	5927 lb	6123 / -766 lb	-	29 / -2 lb
==>	12' 2 1/4" : 12' 10 1/4"	-	M1-2(i7816)	42 lb/ft	12 lb/ft	-	44 lb/ft
==>	12' 2 1/4" : 16' 0 1/2"	-	M1-2(i7816)	20 lb/ft	69 lb/ft	-	-
==>	12' 2 1/4" : 36' 5"	-	M1-2(i7816)	73 lb/ft	-	-	-

## Member Report

Label: WallB37 | Design Tag: i2568

Member Type: WoodWall | Level: 2nd Floor

### Load Distribution Complete

*Loading and support reactions have been established for this member*

==>	15' 4 1/2" : 16' 8 1/2"	-	M1-2(i7816)	4 lb/ft	15 lb/ft	-	-
==>	15' 6 1/4" : 16' 10 1/4"	-	M1-2(i7816)	388 lb/ft	850 lb/ft	-	-
==>	16' 2 1/4" : -	-	M1-2(i7816)	-	-766 lb	-	-2 lb
==>	16' 4" : 36' 5"	-	M1-2(i7816)	117 lb/ft	234 lb/ft	-	-
==>	16' 4" : 29' 4"	-	M1-2(i7816)	92 lb/ft	-	-	-

### Errors, Warnings, & Notes:

- \* If sloping roof loads are applied to this member, the roof dead load has been adjusted for slope.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* Load Duration Factors: Dead - 0.90, Floor Live - 1.00, Roof Live - 1.25, Snow - 1.15

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