

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10920) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10920)

City, State, Zip:

Specifier:

Customer:

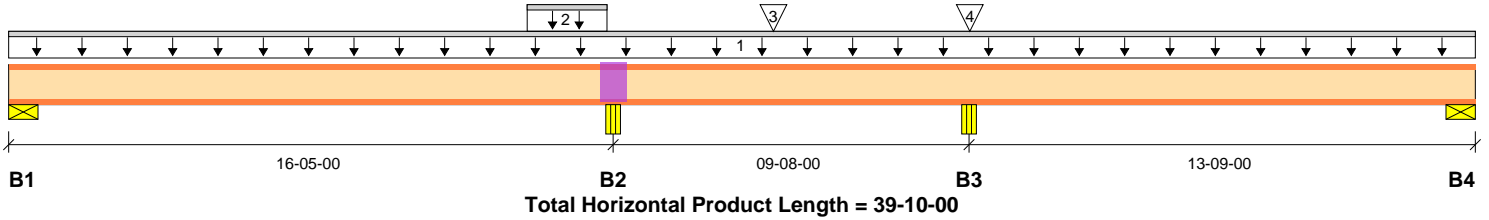
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	465 / 14	136 / 0			
B2, 4-1/2"	1064 / 0	421 / 0			
B3, 4-1/2"	1044 / 0	309 / 0			
B4, 4-1/2"	405 / 19	114 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	64	19				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	14-01-00	16-03-00	Top		42				n/a
3	NB2(i2669)	Conc. Pt. (lbs)	L	20-09-04	20-09-04	Top		67				n/a
4	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top	128	58				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1984 ft-lbs	65.6%	100%	2	07-01-09
Neg. Moment	-1991 ft-lbs	65.8%	100%	4	16-05-00
End Reaction	601 lbs	42.2%	100%	2	00-00-00
Int. Reaction	1486 lbs	61.7%	100%	4	16-05-00
End Shear	569 lbs	35.0%	100%	2	00-04-08
Cont. Shear	860 lbs	52.9%	100%	4	16-02-12
Total Load Deflection	L/673 (0.287")	35.7%	n/a	2	07-11-01
Live Load Deflection	L/864 (0.224")	55.6%	n/a	7	07-11-01
Total Neg. Defl.	L/999 (-0.053")	n/a	n/a	2	21-00-06
Max Defl.	0.287"	19.2%	n/a	2	07-11-01
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	601 lbs	17.9%	42.2%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1486 lbs	46.6%	61.7%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1353 lbs	42.4%	56.2%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	518 lbs	15.5%	36.4%	Unspecified

Cautions

Squash Blocks required at support B2.

Crawl\Floor Joists\FJ-1(i10920) (Floor Joist)

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Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10924) (Floor Joist)

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Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

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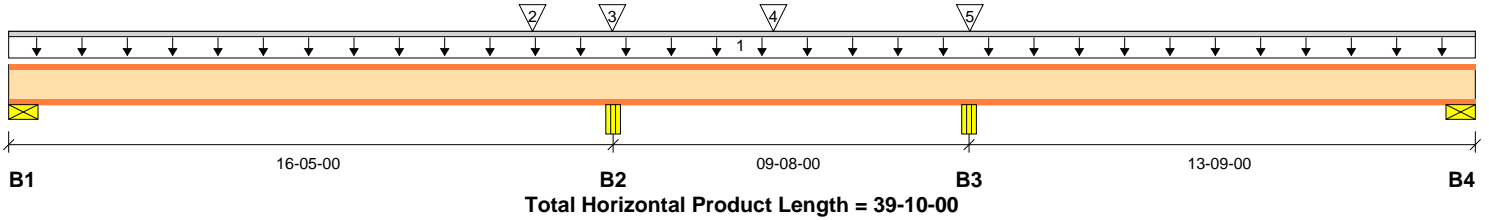
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	232 / 7	70 / 0			
B2, 4-1/2"	532 / 0	287 / 0			
B3, 4-1/2"	458 / 0	166 / 0			
B4, 4-1/2"	202 / 10	56 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	32	10				n/a
2	NB7(i2674)	Conc. Pt. (lbs)	L	14-02-12	14-02-12	Top		73				n/a
3	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top		23				n/a
4	NB2(i2669)	Conc. Pt. (lbs)	L	20-09-04	20-09-04	Top		73				n/a
5	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top		27				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1006 ft-lbs	33.3%	100%	2	07-02-05
Neg. Moment	-1067 ft-lbs	35.3%	100%	4	16-05-00
End Reaction	302 lbs	21.2%	100%	2	00-00-00
Int. Reaction	819 lbs	34.0%	100%	4	16-05-00
End Shear	287 lbs	17.6%	100%	2	00-04-08
Cont. Shear	456 lbs	28.1%	100%	4	16-02-12
Total Load Deflection	L/1317 (0.147")	18.2%	n/a	2	08-00-00
Live Load Deflection	L/999 (0.112")	n/a	n/a	7	08-00-00
Total Neg. Defl.	L/999 (-0.024")	n/a	n/a	2	21-01-02
Max Defl.	0.147"	9.8%	n/a	2	08-00-00
Span / Depth	16.3				

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	302 lbs	9.0%	21.2%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	819 lbs	25.7%	34.0%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	624 lbs	19.6%	25.9%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	258 lbs	7.7%	18.1%	Unspecified

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Crawl\Floor Joists\FJ-1(i10928) (Floor Joist)

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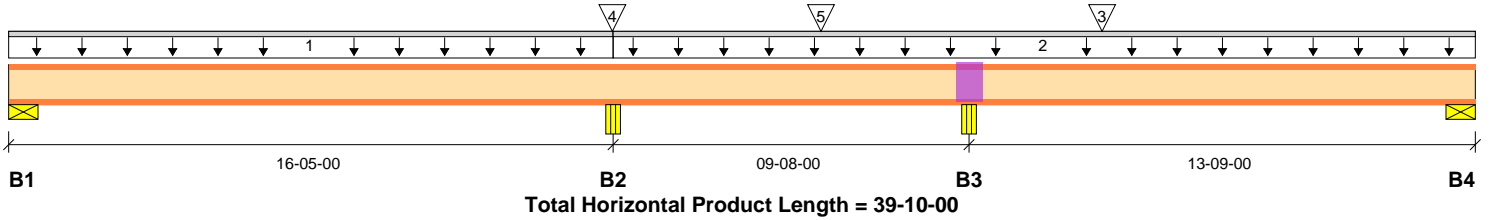
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	469 / 10	137 / 0			
B2, 4-1/2"	984 / 0	273 / 0			
B3, 4-1/2"	1204 / 0	574 / 0			
B4, 4-1/2"	394 / 14	146 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	64	19				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	39-10-00	Top	46	14				n/a
3	-	Conc. Pt. (lbs)	L	29-08-06	29-08-06	Top	556	377				n/a
4	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top		26				n/a
5	NB1(i2668)	Conc. Pt. (lbs)	L	22-00-12	22-00-12	Top		87				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2257 ft-lbs	74.6%	100%	2	30-09-10
Neg. Moment	-2181 ft-lbs	72.1%	100%	5	26-01-00
End Reaction	606 lbs	42.5%	100%	2	00-00-00
Int. Reaction	1778 lbs	73.8%	100%	5	26-01-00
End Shear	575 lbs	35.4%	100%	2	00-04-08
Cont. Shear	1236 lbs	76.1%	100%	5	26-03-04
Total Load Deflection	L/648 (0.249")	37.1%	n/a	2	32-03-11
Live Load Deflection	L/843 (0.229")	57.0%	n/a	7	07-11-12
Total Neg. Defl.	L/999 (-0.075")	n/a	n/a	2	21-02-11
Max Defl.	0.294"	19.6%	n/a	2	07-11-12
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	606 lbs	18.1%	42.5%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1257 lbs	39.4%	52.2%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1778 lbs	55.7%	73.8%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	539 lbs	16.1%	37.8%	Unspecified

Cautions

Squash Blocks required at support B3.

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Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10930) (Floor Joist)

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Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

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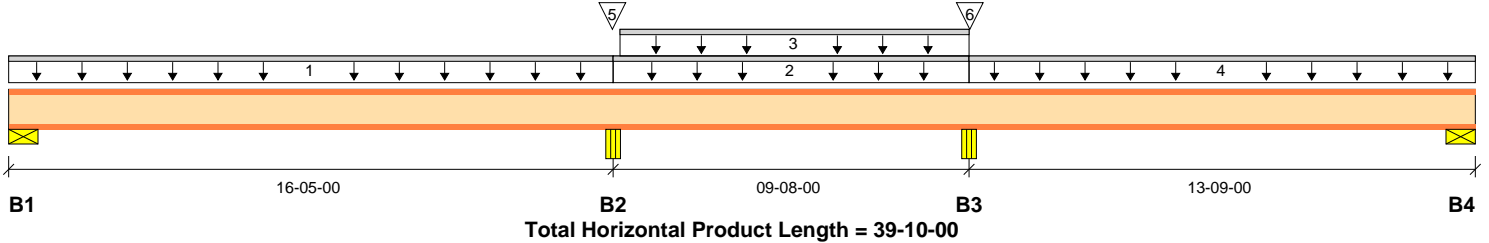
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	300 / 14	86 / 0			
B2, 4-1/2"	791 / 0	215 / 0			
B3, 4-1/2"	916 / 0	252 / 0			
B4, 4-1/2"	400 / 19	114 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	41	12				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	26-01-00	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-07-04	26-01-00	Top	32	10				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	26-01-00	39-10-00	Top	64	19				n/a
5	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top		8				n/a
6	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top		9				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1430 ft-lbs	47.3%	100%	2	33-08-14
Neg. Moment	-1341 ft-lbs	44.3%	100%	5	26-01-00
End Reaction	514 lbs	36.1%	100%	2	39-10-00
Int. Reaction	1169 lbs	48.5%	100%	5	26-01-00
End Shear	483 lbs	29.7%	100%	2	39-05-08
Cont. Shear	643 lbs	39.6%	100%	5	26-03-04
Total Load Deflection	L/1043 (0.185")	23.0%	n/a	2	07-10-07
Live Load Deflection	L/1317 (0.147")	36.4%	n/a	7	07-10-07
Total Neg. Defl.	L/999 (-0.043")	n/a	n/a	2	21-03-00
Max Defl.	0.185"	12.3%	n/a	2	07-10-07
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	386 lbs	11.5%	27.1%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1006 lbs	31.5%	41.8%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1169 lbs	36.6%	48.5%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	514 lbs	15.4%	36.1%	Unspecified

Crawl\Floor Joists\FJ-1(i10930) (Floor Joist)

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Specifier:

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Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets User specified (L/480) Live load deflection criteria.
Design meets arbitrary (1.5") Maximum Total load deflection criteria.
Design meets arbitrary (1") Maximum live load deflection criteria.
Calculations assume member is fully braced.
BC CALC® analysis is based on IBC 2012.
Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

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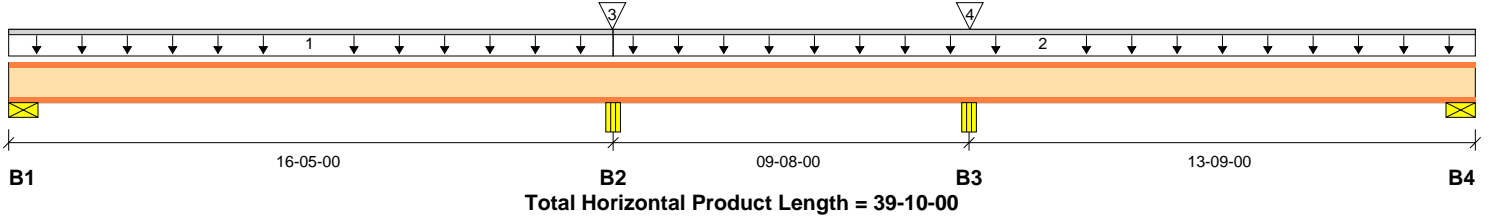
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Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	463 / 11	136 / 0			
B2, 4-1/2"	1142 / 0	324 / 0			
B3, 4-1/2"	1178 / 0	411 / 0			
B4, 4-1/2"	319 / 15	91 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	64	19				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	39-10-00	Top	50	15				n/a
3	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top	149	50				n/a
4	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top	465	247				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1970 ft-lbs	65.1%	100%	2	07-02-10
Neg. Moment	-1836 ft-lbs	60.7%	100%	4	16-05-00
End Reaction	599 lbs	42.0%	100%	2	00-00-00
Int. Reaction	1590 lbs	66.0%	100%	5	26-01-00
End Shear	567 lbs	34.9%	100%	2	00-04-08
Cont. Shear	768 lbs	47.3%	100%	4	16-02-12
Total Load Deflection	L/681 (0.284")	35.3%	n/a	2	07-10-07
Live Load Deflection	L/872 (0.222")	55.1%	n/a	7	07-10-07
Total Neg. Defl.	L/999 (-0.054")	n/a	n/a	2	20-09-08
Max Defl.	0.284"	18.9%	n/a	2	07-10-07
Span / Depth	16.3				

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	599 lbs	17.9%	42.0%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1466 lbs	46.0%	60.9%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1590 lbs	49.8%	66.0%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	410 lbs	12.2%	28.7%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
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 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
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PASSED

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Description: Crawl\Floor Joists\FJ-1(i10945)

City, State, Zip:

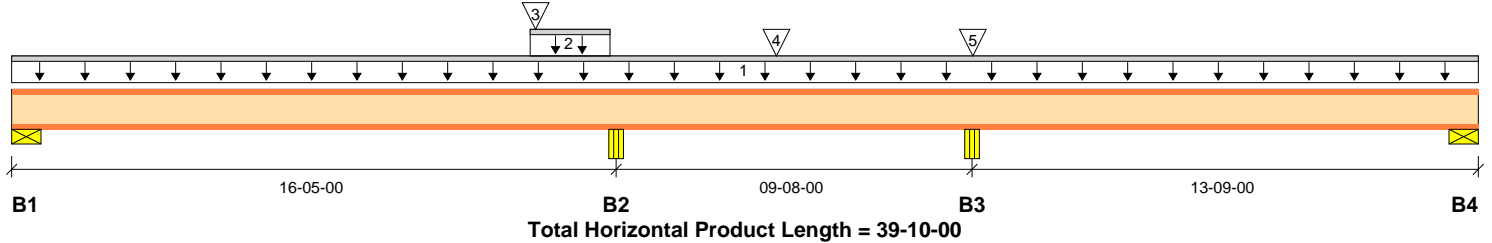
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	465 / 14	141 / 0			
B2, 4-1/2"	1064 / 0	521 / 0			
B3, 4-1/2"	1044 / 0	315 / 0			
B4, 4-1/2"	405 / 19	113 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	64	19				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	14-01-00	16-03-00	Top		22				n/a
3	NB7(i2674)	Conc. Pt. (lbs)	L	14-02-12	14-02-12	Top		108				n/a
4	NB2(i2669)	Conc. Pt. (lbs)	L	20-09-04	20-09-04	Top		102				n/a
5	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top	128	58				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2017 ft-lbs	66.7%	100%	2	07-03-15
Neg. Moment	-2099 ft-lbs	69.4%	100%	4	16-05-00
End Reaction	605 lbs	42.5%	100%	2	00-00-00
Int. Reaction	1585 lbs	65.9%	100%	4	16-05-00
End Shear	574 lbs	35.3%	100%	2	00-04-08
Cont. Shear	922 lbs	56.8%	100%	4	16-02-12
Total Load Deflection	L/657 (0.294")	36.6%	n/a	2	07-11-01
Live Load Deflection	L/864 (0.224")	55.6%	n/a	7	07-11-01
Total Neg. Defl.	L/999 (-0.052")	n/a	n/a	2	21-00-06
Max Defl.	0.294"	19.6%	n/a	2	07-11-01
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	605 lbs	18.1%	42.5%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1585 lbs	49.7%	65.9%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1359 lbs	42.6%	56.5%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	518 lbs	15.5%	36.3%	Unspecified

Crawl\Floor Joists\FJ-1(i10945) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10945)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets User specified (L/480) Live load deflection criteria.
Design meets arbitrary (1.5") Maximum Total load deflection criteria.
Design meets arbitrary (1") Maximum live load deflection criteria.
Calculations assume member is fully braced.
BC CALC® analysis is based on IBC 2012.
Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
Design based on Dry Service Condition.

Disclosure

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

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10954) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10954)

City, State, Zip:

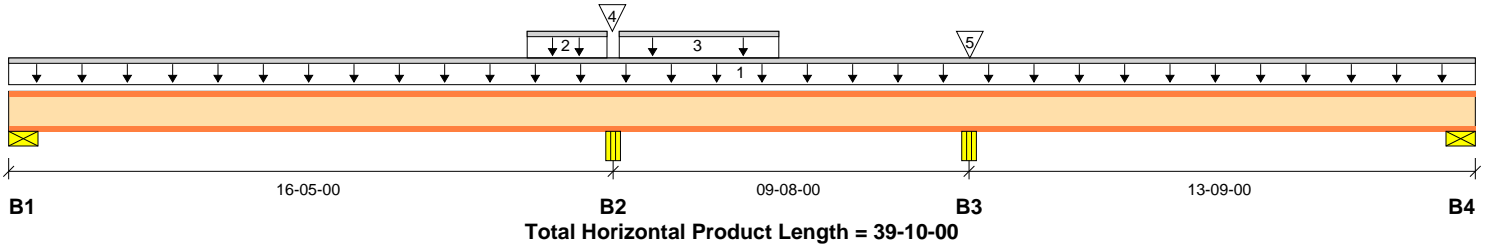
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	465 / 14	134 / 0			
B2, 4-1/2"	1188 / 0	427 / 0			
B3, 4-1/2"	1029 / 0	294 / 0			
B4, 4-1/2"	405 / 19	114 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	64	19				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	14-01-00	16-03-00	Top		18				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-07-00	20-11-00	Top		18				n/a
4	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top	124	34				n/a
5	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top	113	50				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1972 ft-lbs	65.2%	100%	2	07-01-09
Neg. Moment	-1956 ft-lbs	64.6%	100%	4	16-05-00
End Reaction	599 lbs	42.0%	100%	2	00-00-00
Int. Reaction	1615 lbs	67.1%	100%	4	16-05-00
End Shear	568 lbs	34.9%	100%	2	00-04-08
Cont. Shear	811 lbs	49.9%	100%	4	16-02-12
Total Load Deflection	L/679 (0.285")	35.3%	n/a	2	07-11-01
Live Load Deflection	L/864 (0.224")	55.6%	n/a	7	07-11-01
Total Neg. Defl.	L/999 (-0.053")	n/a	n/a	2	21-00-08
Max Defl.	0.285"	19.0%	n/a	2	07-11-01
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	599 lbs	17.9%	42.0%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1615 lbs	50.7%	67.1%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1324 lbs	41.5%	55.0%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	519 lbs	15.5%	36.4%	Unspecified

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10954) (Floor Joist)

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10954)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10959) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10959)

City, State, Zip:

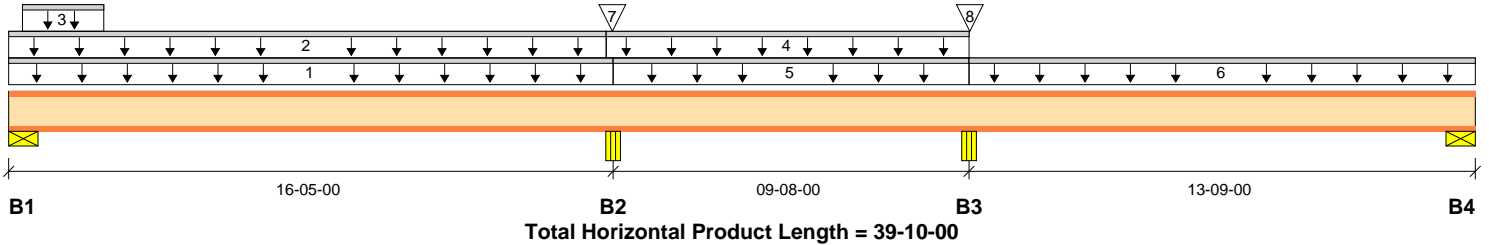
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	319 / 9	179 / 0			
B2, 4-1/2"	717 / 0	212 / 0			
B3, 4-1/2"	806 / 0	213 / 0			
B4, 4-1/2"	400 / 13	117 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	12	4				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-02-12	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-04-08	02-07-00	Top		43				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-02-12	26-01-00	Top	11	3				n/a
5	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	26-01-00	Top	32	10				n/a
6	FC1 Floor Material	Unf. Lin. (lb/ft)	L	26-01-00	39-10-00	Top	64	19				n/a
7	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top		15				n/a
8	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top		9				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1448 ft-lbs	47.9%	100%	2	33-06-12
Neg. Moment	-1310 ft-lbs	43.3%	100%	4	16-05-00
End Reaction	517 lbs	36.3%	100%	2	39-10-00
Int. Reaction	1019 lbs	42.3%	100%	5	26-01-00
End Shear	486 lbs	29.9%	100%	2	39-05-08
Cont. Shear	634 lbs	39.0%	100%	5	26-03-04
Total Load Deflection	L/938 (0.206")	25.6%	n/a	2	07-11-01
Live Load Deflection	L/1241 (0.156")	38.7%	n/a	7	07-11-01
Total Neg. Defl.	L/999 (-0.049")	n/a	n/a	2	21-01-10
Max Defl.	0.206"	13.7%	n/a	2	07-11-01
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	499 lbs	14.9%	35.0%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	930 lbs	29.2%	38.6%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1019 lbs	31.9%	42.3%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	517 lbs	15.4%	36.3%	Unspecified

Crawl\Floor Joists\FJ-1(i10959) (Floor Joist)

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10959)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10960) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10960)

City, State, Zip:

Specifier:

Customer:

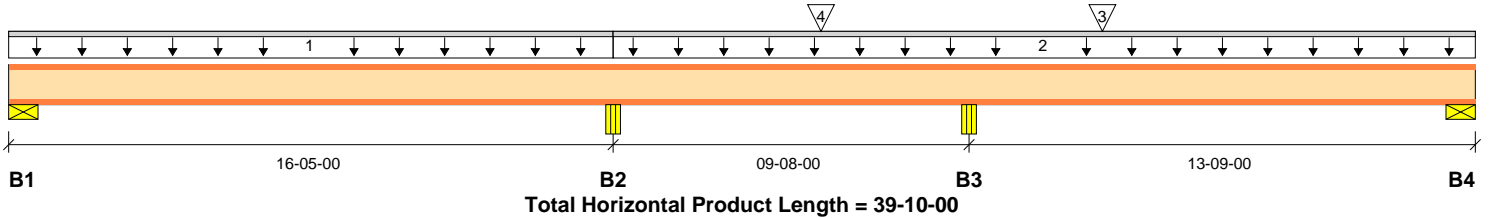
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	468 / 8	138 / 0			
B2, 4-1/2"	919 / 0	236 / 0			
B3, 4-1/2"	1043 / 0	470 / 0			
B4, 4-1/2"	325 / 10	122 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	64	19				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	39-10-00	Top	35	11				n/a
3	-	Conc. Pt. (lbs)	L	29-08-07	29-08-07	Top	556	341				n/a
4	NB1(i2668)	Conc. Pt. (lbs)	L	22-00-12	22-00-12	Top		56				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2062 ft-lbs	68.2%	100%	2	29-11-13
Neg. Moment	-1873 ft-lbs	61.9%	100%	5	26-01-00
End Reaction	606 lbs	42.5%	100%	2	00-00-00
Int. Reaction	1512 lbs	62.8%	100%	5	26-01-00
End Shear	575 lbs	35.4%	100%	2	00-04-08
Cont. Shear	1091 lbs	67.1%	100%	5	26-03-04
Total Load Deflection	L/659 (0.293")	36.4%	n/a	2	07-11-12
Live Load Deflection	L/849 (0.228")	56.6%	n/a	7	07-11-12
Total Neg. Defl.	L/999 (-0.074")	n/a	n/a	2	21-02-11
Max Defl.	0.293"	19.6%	n/a	2	07-11-12
Span / Depth	16.3				

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	606 lbs	18.1%	42.5%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1154 lbs	36.2%	48.0%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1512 lbs	47.4%	62.8%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	447 lbs	13.3%	31.4%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
 Design meets arbitrary (1") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10965) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10965)

City, State, Zip:

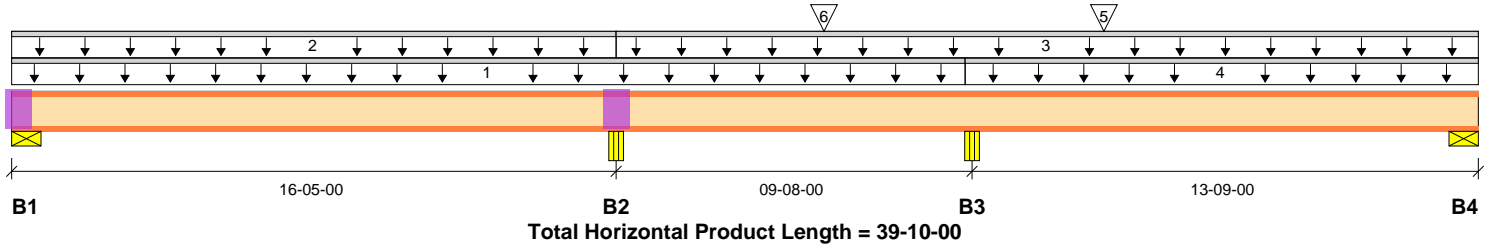
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	468 / 14	135 / 0			
B2, 4-1/2"	1050 / 0	292 / 0			
B3, 4-1/2"	1223 / 0	495 / 0			
B4, 4-1/2"	319 / 18	106 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	25-10-12	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	39-10-00	Top	29	9				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	25-10-12	39-10-00	Top	3	1				n/a
5	-	Conc. Pt. (lbs)	L	29-08-00	29-08-00	Top	634	307				n/a
6	NB1(i2668)	Conc. Pt. (lbs)	L	22-00-12	22-00-12	Top		98				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2037 ft-lbs	67.3%	100%	2	29-08-08
Neg. Moment	-2038 ft-lbs	67.4%	100%	5	26-01-00
End Reaction	603 lbs	42.3%	100%	2	00-00-00
Int. Reaction	1718 lbs	71.4%	100%	5	26-01-00
End Shear	572 lbs	35.2%	100%	2	00-04-08
Cont. Shear	1114 lbs	68.5%	100%	5	26-03-04
Total Load Deflection	L/668 (0.289")	35.9%	n/a	2	07-10-07
Live Load Deflection	L/846 (0.228")	56.7%	n/a	7	07-11-12
Total Neg. Defl.	L/999 (-0.066")	n/a	n/a	2	21-01-00
Max Defl.	0.289"	19.3%	n/a	2	07-10-07
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	603 lbs	18.0%	42.3%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1342 lbs	42.1%	55.7%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1718 lbs	53.9%	71.4%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	425 lbs	12.7%	29.8%	Unspecified

Cautions

- Squash Blocks required at support B1.
- Squash Blocks required at support B2.

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10965) (Floor Joist)

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10965)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10966) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10966)

City, State, Zip:

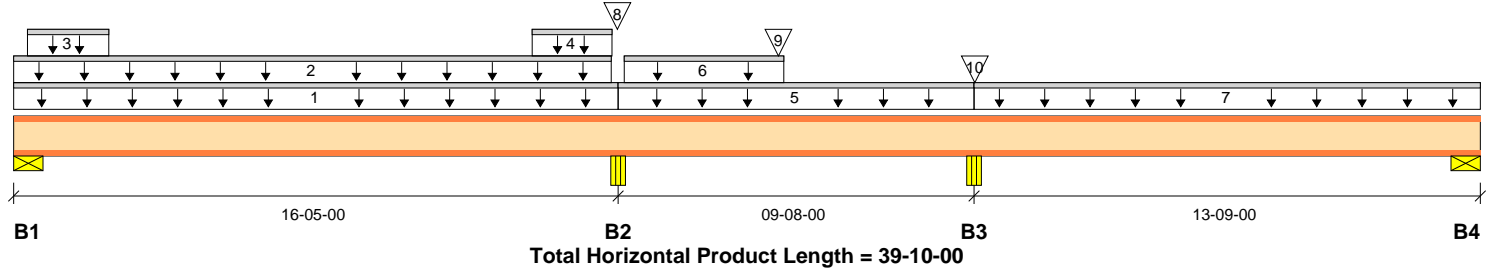
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	465 / 12	174 / 0			
B2, 4-1/2"	1178 / 0	633 / 0			
B3, 4-1/2"	988 / 0	341 / 0			
B4, 4-1/2"	405 / 16	112 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-02-12	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-04-08	02-07-00	Top		21				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	14-01-00	16-03-00	Top		28				n/a
5	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	26-01-00	Top	53	16				n/a
6	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-07-00	20-11-00	Top		28				n/a
7	FC1 Floor Material	Unf. Lin. (lb/ft)	L	26-01-00	39-10-00	Top	64	19				n/a
8	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top	173	164				n/a
9	FC1 Floor Material	Conc. Pt. (lbs)	L	20-09-04	20-09-04	Top		51				n/a
10	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top	127	79				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1985 ft-lbs	65.6%	100%	2	07-00-15
Neg. Moment	-1986 ft-lbs	65.6%	100%	4	16-05-00
End Reaction	639 lbs	44.8%	100%	2	00-00-00
Int. Reaction	1811 lbs	75.2%	100%	4	16-05-00
End Shear	608 lbs	37.4%	100%	2	00-04-08
Cont. Shear	836 lbs	51.4%	100%	4	16-02-12
Total Load Deflection	L/675 (0.286")	35.5%	n/a	2	07-09-08
Live Load Deflection	L/864 (0.224")	55.6%	n/a	7	07-11-11
Total Neg. Defl.	L/999 (-0.048")	n/a	n/a	2	21-02-00
Max Defl.	0.286"	19.1%	n/a	2	07-09-08
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	639 lbs	19.1%	44.8%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1811 lbs	56.8%	75.2%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1329 lbs	41.7%	55.2%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	517 lbs	15.4%	36.3%	Unspecified

Crawl\Floor Joists\FJ-1(i10966) (Floor Joist)

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10966)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Disclosure

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

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10971) (Floor Joist)

BC CALC® Member Report

Dry | 4 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10971)

City, State, Zip:

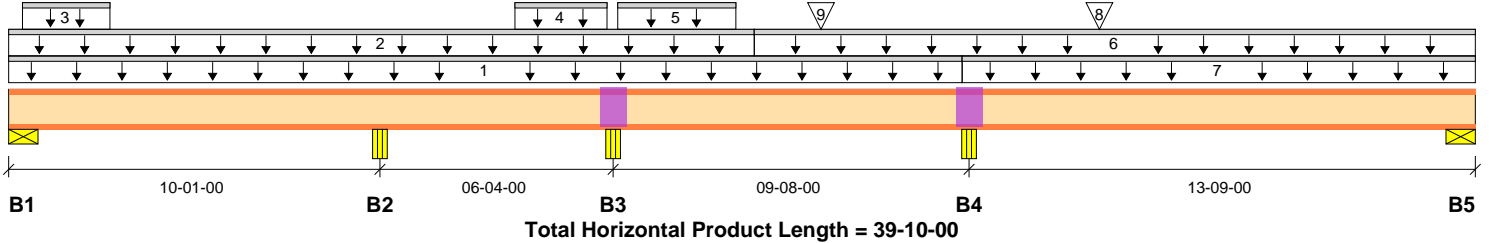
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	215 / 10	99 / 0			
B2, 4-1/2"	515 / 0	148 / 0			
B3, 4-1/2"	432 / 101	193 / 0			
B4, 4-1/2"	1169 / 0	506 / 0			
B5, 4-1/2"	352 / 13	116 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	25-10-12	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-03-00	Top	15	4				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-04-08	02-09-00	Top		19				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	13-09-00	16-03-00	Top		19				n/a
5	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-06-08	19-09-00	Top		30				n/a
6	FC1 Floor Material	Unf. Lin. (lb/ft)	L	20-03-00	39-10-00	Top	13	4				n/a
7	FC1 Floor Material	Unf. Lin. (lb/ft)	L	25-10-12	39-10-00	Top	29	9				n/a
8	-	Conc. Pt. (lbs)	L	29-07-08	29-07-08	Top	553	274				n/a
9	NB1(i2668)	Conc. Pt. (lbs)	L	22-00-12	22-00-12	Top		62				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1841 ft-lbs	60.8%	100%	3	31-04-04
Neg. Moment	-2036 ft-lbs	67.3%	100%	6	26-01-00
End Reaction	467 lbs	32.8%	100%	3	39-10-00
Int. Reaction	1675 lbs	69.6%	100%	6	26-01-00
End Shear	447 lbs	27.5%	100%	3	39-05-08
Cont. Shear	1120 lbs	68.9%	100%	6	26-03-04
Total Load Deflection	L/778 (0.207")	30.8%	n/a	3	32-05-06
Live Load Deflection	L/1057 (0.153")	45.4%	n/a	9	32-05-06
Total Neg. Defl.	L/999 (-0.032")	n/a	n/a	3	22-09-05
Max Defl.	0.207"	13.8%	n/a	3	32-05-06
Span / Depth	13.6				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	314 lbs	9.4%	22.0%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	663 lbs	20.8%	27.5%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	625 lbs	19.6%	26.0%	Unspecified
B4	Beam 4-1/2" x 1-3/4"	1675 lbs	52.5%	69.6%	Unspecified
B5	Wall/Plate 4-1/2" x 1-3/4"	467 lbs	14.0%	32.8%	Unspecified

Crawl\Floor Joists\FJ-1(i10971) (Floor Joist)

Dry | 4 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10971)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Cautions

Squash Blocks required at support B3.

Squash Blocks required at support B4.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-1(i10982) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10982)

City, State, Zip:

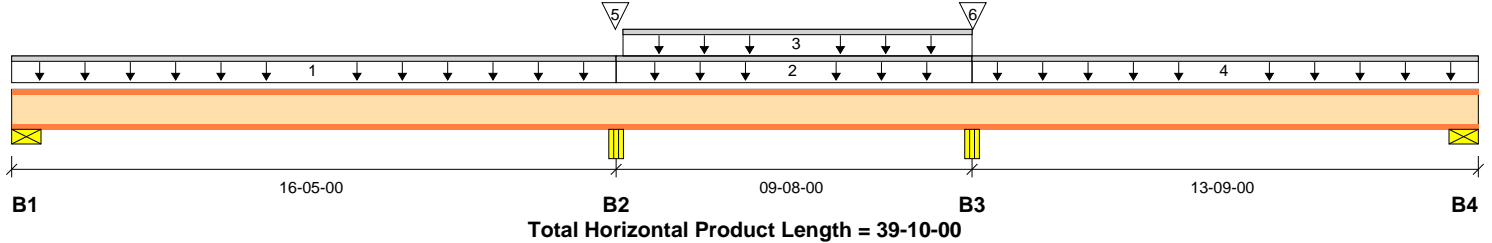
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	317 / 14	91 / 0			
B2, 4-1/2"	818 / 0	223 / 0			
B3, 4-1/2"	1044 / 0	322 / 0			
B4, 4-1/2"	400 / 19	114 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	43	13				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-05-00	26-01-00	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-07-04	26-01-00	Top	32	10				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	26-01-00	39-10-00	Top	64	19				n/a
5	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top		8				n/a
6	E1(i837)	Conc. Pt. (lbs)	L	26-01-04	26-01-04	Top	128	81				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1434 ft-lbs	47.4%	100%	2	33-07-13
Neg. Moment	-1366 ft-lbs	45.1%	100%	4	16-05-00
End Reaction	514 lbs	36.1%	100%	2	39-10-00
Int. Reaction	1367 lbs	56.8%	100%	5	26-01-00
End Shear	483 lbs	29.7%	100%	2	39-05-08
Cont. Shear	643 lbs	39.6%	100%	5	26-03-04
Total Load Deflection	L/990 (0.195")	24.2%	n/a	2	07-10-07
Live Load Deflection	L/1252 (0.154")	38.3%	n/a	7	07-11-12
Total Neg. Defl.	L/999 (-0.044")	n/a	n/a	2	21-03-00
Max Defl.	0.195"	13.0%	n/a	2	07-10-07
Span / Depth	16.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	407 lbs	12.2%	28.6%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1040 lbs	32.6%	43.2%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	1367 lbs	42.9%	56.8%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	514 lbs	15.4%	36.1%	Unspecified

Crawl\Floor Joists\FJ-1(i10982) (Floor Joist)

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-1(i10982)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-10(i10915) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-10(i10915)

City, State, Zip:

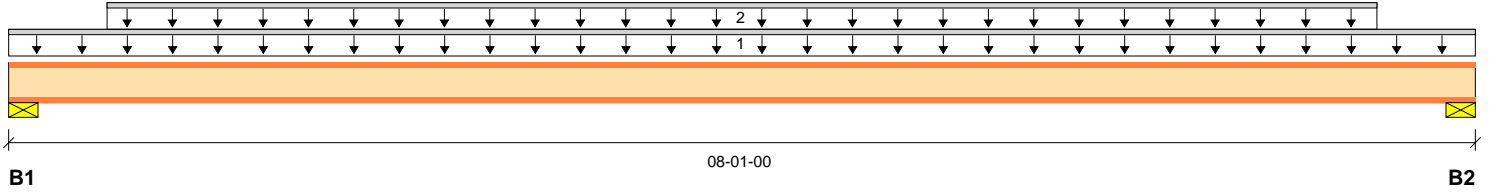
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 08-01-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 6-3/8"	119 / 0	36 / 0			
B2, 6-3/8"	119 / 0	36 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live		Snow	Wind	Roof Live	OCS
							100%	90%				
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	08-01-00	Top	18	5				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-06-08	07-06-08	Top	13	4				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	255 ft-lbs	8.4%	100%	1	04-00-08
End Reaction	154 lbs	10.8%	100%	1	00-00-00
End Shear	140 lbs	8.6%	100%	1	00-06-06
Total Load Deflection	L/999 (0.011")	n/a	n/a	1	04-00-08
Live Load Deflection	L/999 (0.008")	n/a	n/a	2	04-00-08
Max Defl.	0.011"	n/a	n/a	1	04-00-08
Span / Depth	7.2				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 6-3/8" x 1-3/4"	154 lbs	3.3%	10.8%	Unspecified
B2	Wall/Plate 6-3/8" x 1-3/4"	154 lbs	3.3%	10.8%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-2(i10919) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-2(i10919)

City, State, Zip:

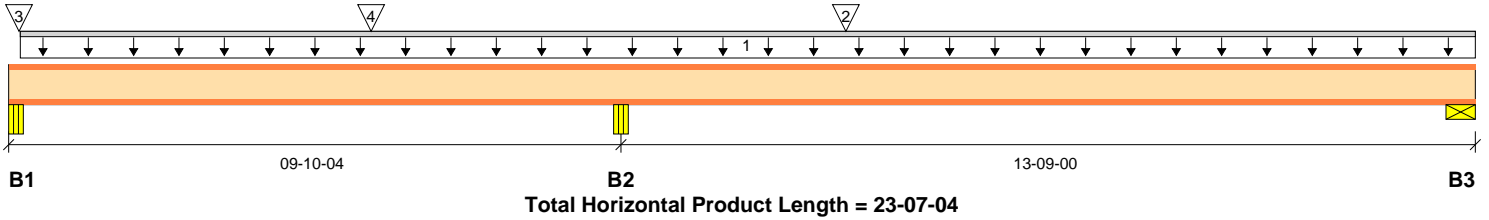
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	142 / 83	32 / 0			
B2, 4-1/2"	765 / 0	350 / 0			
B3, 4-1/2"	251 / 11	85 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-02-04	23-07-04	Top	32	10				n/a
2	-	Conc. Pt. (lbs)	L	13-05-11	13-05-11	Top	315	183				n/a
3	E4(i834)	Conc. Pt. (lbs)	L	00-02-00	00-02-00	Top		8				n/a
4	NB1(i2668)	Conc. Pt. (lbs)	L	05-10-00	05-10-00	Top		51				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1256 ft-lbs	41.5%	100%	3	15-06-06
Neg. Moment	-1357 ft-lbs	44.9%	100%	1	09-10-04
End Reaction	336 lbs	23.6%	100%	3	23-07-04
Int. Reaction	1115 lbs	46.3%	100%	1	09-10-04
End Shear	321 lbs	19.7%	100%	3	23-02-12
Cont. Shear	737 lbs	45.3%	100%	1	10-00-08
Total Load Deflection	L/1136 (0.142")	21.1%	n/a	3	16-02-10
Live Load Deflection	L/999 (0.103")	n/a	n/a	6	16-02-10
Total Neg. Defl.	L/999 (-0.023")	n/a	n/a	3	06-04-06
Max Defl.	0.142"	9.5%	n/a	3	16-02-10
Span / Depth	13.6				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Beam 4-1/2" x 1-3/4"	174 lbs	5.4%	12.2%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1115 lbs	34.9%	46.3%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	336 lbs	10.0%	23.6%	Unspecified

Cautions

Uplift of -51 lbs found at bearing B1.

Crawl\Floor Joists\FJ-2(i10919) (Floor Joist)

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-2(i10919)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-2(i10978) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-2(i10978)

City, State, Zip:

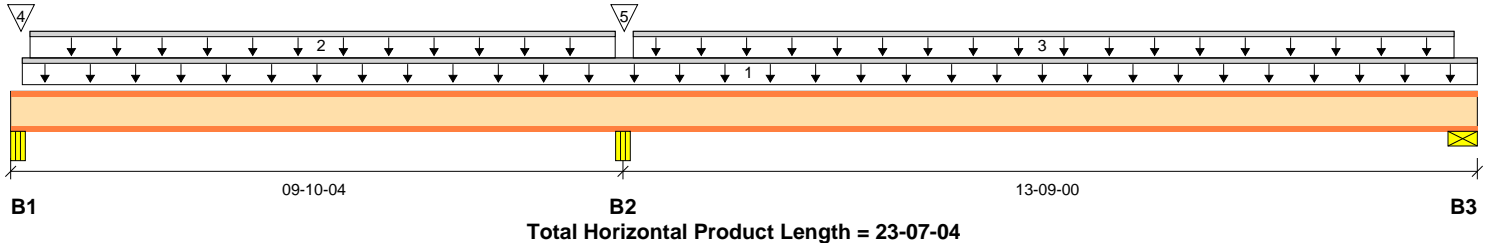
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	383 / 41	314 / 0			
B2, 4-1/2"	929 / 0	1294 / 0			
B3, 4-1/2"	196 / 11	401 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-02-04	23-07-04	Top	32	10				n/a
2	E3(i2667)	Unf. Lin. (lb/ft)	L	00-03-12	09-08-12	Top		64				n/a
3	E2(i848)	Unf. Lin. (lb/ft)	L	10-00-04	23-02-12	Top		64				n/a
4	E4(i834)	Conc. Pt. (lbs)	L	00-02-00	00-02-00	Top	241	91				n/a
5	E1(i837)	Conc. Pt. (lbs)	L	09-10-08	09-10-08	Top	465	247				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1637 ft-lbs	54.1%	100%	3	17-08-04
Neg. Moment	-1768 ft-lbs	58.4%	100%	1	09-10-04
End Reaction	697 lbs	48.9%	100%	2	00-00-00
Int. Reaction	2222 lbs	92.3%	100%	1	09-10-04
End Shear	581 lbs	35.8%	100%	3	23-02-12
Cont. Shear	821 lbs	50.5%	100%	1	10-00-08
Total Load Deflection	L/939 (0.172")	25.6%	n/a	3	16-11-13
Live Load Deflection	L/999 (0.058")	n/a	n/a	6	16-11-13
Total Neg. Defl.	L/999 (-0.005")	n/a	n/a	3	08-05-06
Max Defl.	0.172"	11.4%	n/a	3	16-11-13
Span / Depth	13.6				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Beam 4-1/2" x 1-3/4"	697 lbs	21.8%	48.9%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	2222 lbs	69.7%	92.3%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	597 lbs	17.8%	41.9%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
 Design meets arbitrary (1") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-3(i10796) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-3(i10796)

City, State, Zip:

Specifier:

Customer:

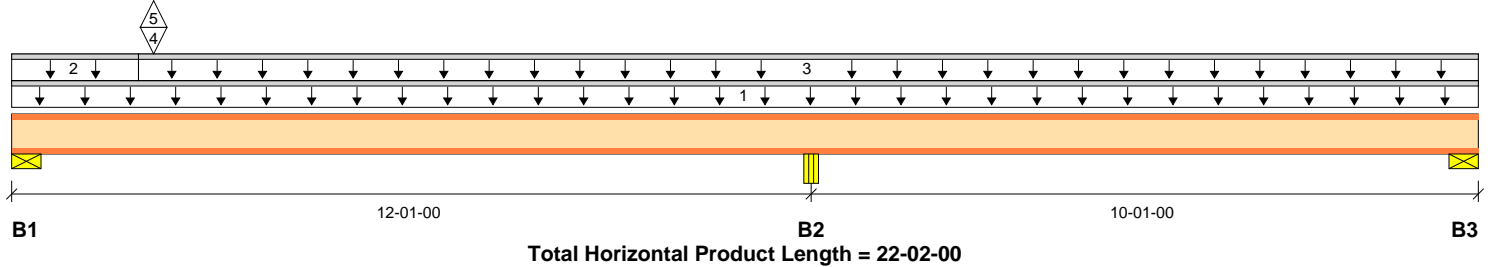
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	330 / 27	213 / 0		2 / 4	12 / 3
B2, 4-1/2"	853 / 0	293 / 0		0 / 1	4 / 1
B3, 4-1/2"	300 / 57	66 / 0		0 / 0	0 / 1

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	22-02-00	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	01-11-00	Top	21	6				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	01-11-00	22-02-00	Top	32	10				n/a
4	B1(i844)	Conc. Pt. (lbs)	L	02-01-12	02-01-12	Top		152			15	n/a
5	B1(i844)	Conc. Pt. (lbs)	L	02-01-12	02-01-12	Top					-4	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1183 ft-lbs	39.1%	100%	2	05-00-04
Neg. Moment	-1213 ft-lbs	40.1%	100%	1	12-01-00
End Reaction	543 lbs	38.1%	100%	2	00-00-00
Int. Reaction	1146 lbs	47.6%	100%	1	12-01-00
End Shear	517 lbs	31.8%	100%	2	00-04-08
Cont. Shear	599 lbs	36.9%	100%	1	11-10-12
Total Load Deflection	L/999 (0.102")	n/a	n/a	2	05-08-07
Live Load Deflection	L/999 (0.073")	n/a	n/a	191	05-11-12
Total Neg. Defl.	L/999 (-0.014")	n/a	n/a	2	15-04-09
Max Defl.	0.102"	n/a	n/a	2	05-08-07
Span / Depth	11.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	543 lbs	16.2%	38.1%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1146 lbs	35.9%	47.6%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	365 lbs	10.9%	25.6%	Unspecified

Crawl\Floor Joists\FJ-3(i10796) (Floor Joist)

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-3(i10796)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Wind loads determined from building geometry were used in selected product's verification.

Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-3(i10858) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-3(i10858)

City, State, Zip:

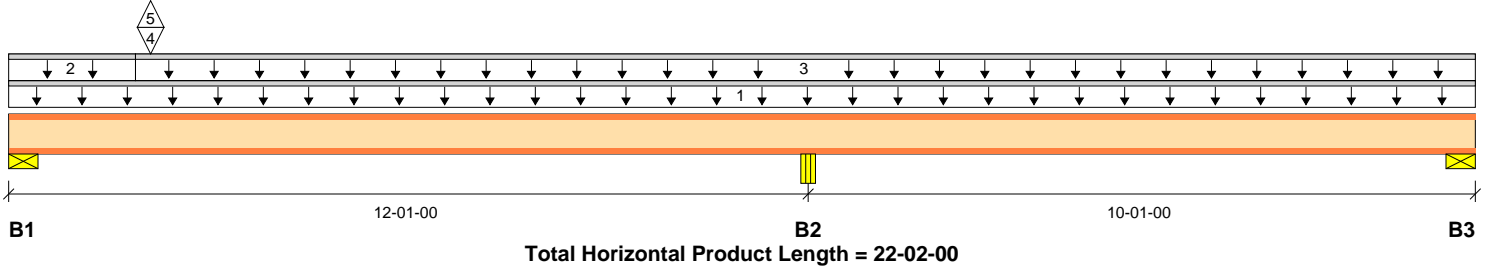
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-3/8"	318 / 27	330 / 0		38 / 55	188 / 20
B2, 4-1/2"	852 / 0	329 / 0		11 / 16	56 / 6
B3, 4-1/2"	300 / 57	59 / 0		3 / 2	1 / 11

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	22-02-00	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	01-11-00	Top	15	4				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	01-11-00	22-02-00	Top	32	10				n/a
4	B1(i844)	Conc. Pt. (lbs)	L	02-01-12	02-01-12	Top		302			233	n/a
5	B1(i844)	Conc. Pt. (lbs)	L	02-01-12	02-01-12	Top					-25	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1322 ft-lbs	43.7%	100%	2	04-07-05
Neg. Moment	-1280 ft-lbs	42.3%	100%	1	12-01-00
End Reaction	648 lbs	45.5%	100%	2	00-00-00
Int. Reaction	1181 lbs	49.1%	100%	1	12-01-00
End Shear	626 lbs	38.5%	100%	2	00-04-06
Cont. Shear	628 lbs	38.6%	100%	1	11-10-12
Total Load Deflection	L/999 (0.113")	n/a	n/a	2	05-08-07
Live Load Deflection	L/999 (0.073")	n/a	n/a	227	05-11-12
Total Neg. Defl.	L/999 (-0.016")	n/a	n/a	2	15-06-00
Max Defl.	0.113"	n/a	n/a	2	05-08-07
Span / Depth	11.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-3/8" x 1-3/4"	648 lbs	22.2%	45.5%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1181 lbs	37.0%	49.1%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	358 lbs	10.7%	25.2%	Unspecified

Crawl\Floor Joists\FJ-3(i10858) (Floor Joist)

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-3(i10858)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Wind loads determined from building geometry were used in selected product's verification.

Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-3(i10867) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-3(i10867)

City, State, Zip:

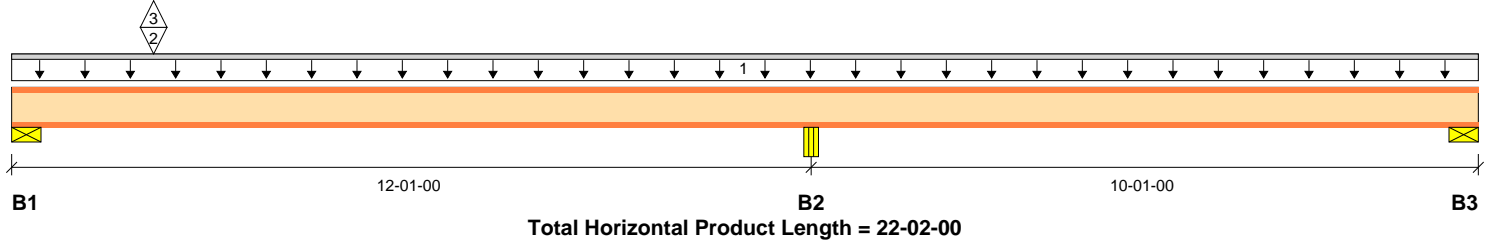
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	349 / 27	329 / 0		22 / 31	121 / 15
B2, 4-1/2"	855 / 0	326 / 0		7 / 9	36 / 4
B3, 4-1/2"	300 / 58	59 / 0		2 / 1	1 / 7

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	22-02-00	Top	64	19				n/a
2	B1(i844)	Conc. Pt. (lbs)	L	02-01-12	02-01-12	Top		289			150	n/a
3	B1(i844)	Conc. Pt. (lbs)	L	02-01-12	02-01-12	Top					-18	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1323 ft-lbs	43.7%	100%	2	04-07-05
Neg. Moment	-1280 ft-lbs	42.3%	100%	1	12-01-00
End Reaction	678 lbs	47.6%	100%	2	00-00-00
Int. Reaction	1181 lbs	49.1%	100%	1	12-01-00
End Shear	647 lbs	39.8%	100%	2	00-04-08
Cont. Shear	628 lbs	38.6%	100%	1	11-10-12
Total Load Deflection	L/999 (0.113")	n/a	n/a	2	05-08-07
Live Load Deflection	L/999 (0.074")	n/a	n/a	227	05-11-12
Total Neg. Defl.	L/999 (-0.016")	n/a	n/a	2	15-06-00
Max Defl.	0.113"	n/a	n/a	2	05-08-07
Span / Depth	11.9				

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	678 lbs	20.7%	47.6%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	1181 lbs	37.0%	49.1%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	359 lbs	10.7%	25.2%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Wind loads determined from building geometry were used in selected product's verification.
- Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-4(i10872) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10872)

City, State, Zip:

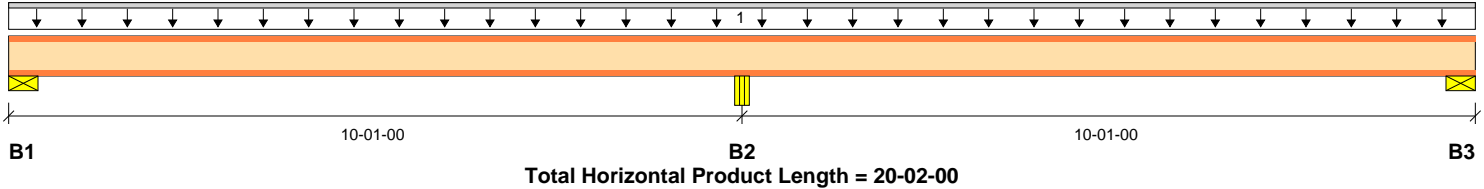
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	297 / 36	78 / 0			
B2, 4-1/2"	768 / 0	231 / 0			
B3, 4-1/2"	297 / 36	78 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	64	19				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	733 ft-lbs	24.2%	100%	2	04-06-09
Neg. Moment	-908 ft-lbs	30.0%	100%	1	10-01-00
End Reaction	375 lbs	26.3%	100%	2	00-00-00
Int. Reaction	999 lbs	41.5%	100%	1	10-01-00
End Shear	344 lbs	21.2%	100%	2	00-04-08
Cont. Shear	484 lbs	29.8%	100%	1	09-10-12
Total Load Deflection	L/999 (0.048")	n/a	n/a	2	05-00-03
Live Load Deflection	L/999 (0.04")	n/a	n/a	5	05-00-03
Total Neg. Defl.	L/999 (-0.004")	n/a	n/a	2	12-05-04
Max Defl.	0.048"	n/a	n/a	2	05-00-03
Span / Depth	9.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	26.3%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	999 lbs	31.3%	41.5%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	26.3%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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

Crawl\Floor Joists\FJ-4(i10872) - 01 (Floor Joist)

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10872)

City, State, Zip:

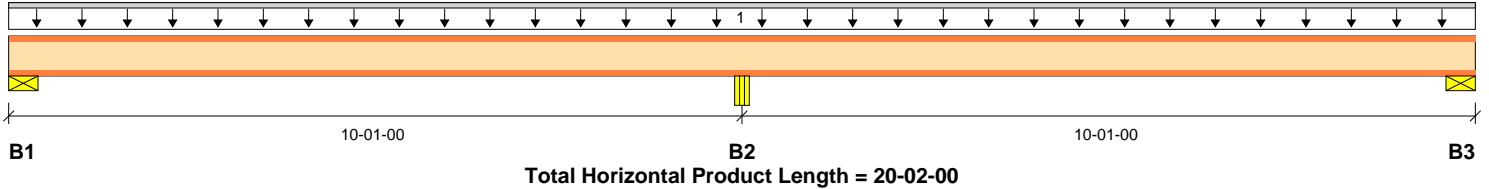
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	297 / 36	78 / 0			
B2, 4-1/2"	768 / 0	231 / 0			
B3, 4-1/2"	297 / 36	78 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	64	19				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	733 ft-lbs	24.2%	100%	2	04-06-09
Neg. Moment	-908 ft-lbs	30.0%	100%	1	10-01-00
End Reaction	375 lbs	26.3%	100%	2	00-00-00
Int. Reaction	999 lbs	41.5%	100%	1	10-01-00
End Shear	344 lbs	21.2%	100%	2	00-04-08
Cont. Shear	484 lbs	29.8%	100%	1	09-10-12
Total Load Deflection	L/999 (0.048")	n/a	n/a	2	05-00-03
Live Load Deflection	L/999 (0.04")	n/a	n/a	5	05-00-03
Total Neg. Defl.	L/999 (-0.004")	n/a	n/a	2	12-05-04
Max Defl.	0.048"	n/a	n/a	2	05-00-03
Span / Depth	9.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	26.3%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	999 lbs	31.3%	41.5%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	26.3%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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

Crawl\Floor Joists\FJ-4(i10872) - 02 (Floor Joist)

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10872)

City, State, Zip:

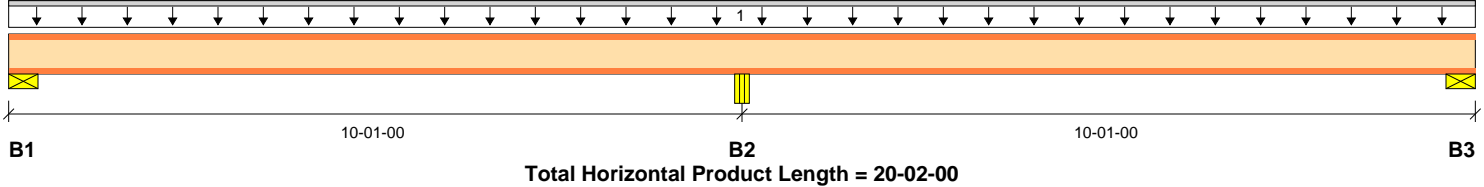
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	297 / 36	78 / 0			
B2, 4-1/2"	768 / 0	230 / 0			
B3, 4-1/2"	297 / 36	78 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	64	19				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	732 ft-lbs	24.2%	100%	2	04-06-09
Neg. Moment	-907 ft-lbs	30.0%	100%	1	10-01-00
End Reaction	375 lbs	26.3%	100%	2	00-00-00
Int. Reaction	998 lbs	41.5%	100%	1	10-01-00
End Shear	344 lbs	21.2%	100%	2	00-04-08
Cont. Shear	483 lbs	29.7%	100%	1	09-10-12
Total Load Deflection	L/999 (0.048")	n/a	n/a	2	05-00-03
Live Load Deflection	L/999 (0.04")	n/a	n/a	5	05-00-03
Total Neg. Defl.	L/999 (-0.004")	n/a	n/a	2	12-05-04
Max Defl.	0.048"	n/a	n/a	2	05-00-03
Span / Depth	9.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	26.3%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	998 lbs	31.3%	41.5%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	26.3%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-4(i10899) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10899)

City, State, Zip:

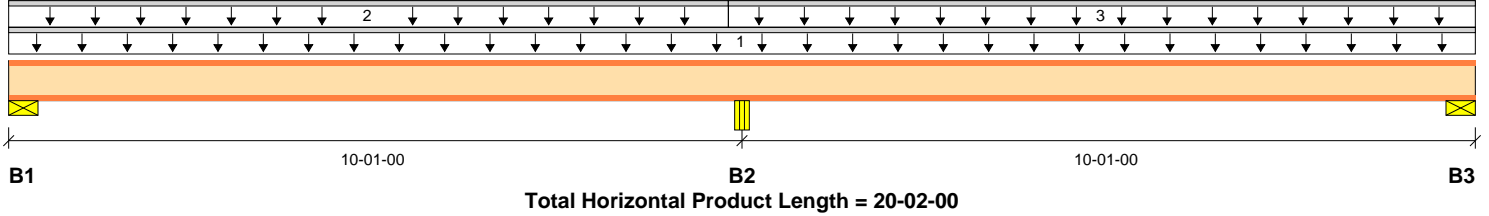
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	297 / 34	79 / 0			
B2, 4-1/2"	749 / 0	225 / 0			
B3, 4-1/2"	282 / 36	74 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	09-10-12	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	09-10-12	20-02-00	Top	29	9				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	735 ft-lbs	24.3%	100%	2	04-06-09
Neg. Moment	-886 ft-lbs	29.3%	100%	1	10-01-00
End Reaction	376 lbs	26.4%	100%	2	00-00-00
Int. Reaction	973 lbs	40.4%	100%	1	10-01-00
End Shear	345 lbs	21.2%	100%	2	00-04-08
Cont. Shear	482 lbs	29.6%	100%	1	09-10-12
Total Load Deflection	L/999 (0.049")	n/a	n/a	2	05-00-03
Live Load Deflection	L/999 (0.04")	n/a	n/a	5	05-00-03
Total Neg. Defl.	L/999 (-0.004")	n/a	n/a	2	12-06-11
Max Defl.	0.049"	n/a	n/a	2	05-00-03
Span / Depth	9.9				

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	376 lbs	11.2%	26.4%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	973 lbs	30.5%	40.4%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	356 lbs	10.6%	25.0%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-4(i10926) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10926)

City, State, Zip:

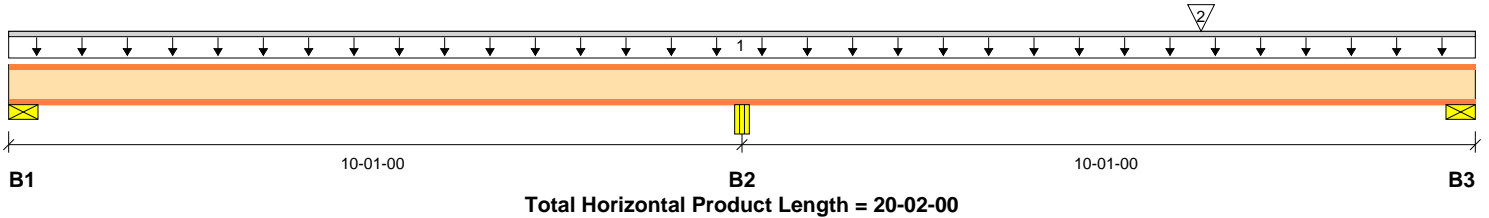
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	229 / 28	52 / 0			
B2, 4-1/2"	597 / 0	236 / 0			
B3, 4-1/2"	235 / 28	129 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	49	15				n/a
2	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top	12	119				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	807 ft-lbs	26.7%	100%	3	16-04-12
Neg. Moment	-790 ft-lbs	26.1%	100%	1	10-01-00
End Reaction	364 lbs	25.6%	100%	3	20-02-00
Int. Reaction	834 lbs	34.6%	100%	1	10-01-00
End Shear	340 lbs	20.9%	100%	3	19-09-08
Cont. Shear	428 lbs	26.3%	100%	1	10-03-04
Total Load Deflection	L/999 (0.05")	n/a	n/a	3	15-05-03
Live Load Deflection	L/999 (0.032")	n/a	n/a	6	15-01-05
Total Neg. Defl.	L/999 (-0.006")	n/a	n/a	3	07-03-01
Max Defl.	0.05"	n/a	n/a	3	15-05-03
Span / Depth	9.9				

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	280 lbs	8.4%	19.7%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	834 lbs	26.1%	34.6%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	364 lbs	10.9%	25.6%	Unspecified

Disclosure

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Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- 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®,

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-4(i10948) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10948)

City, State, Zip:

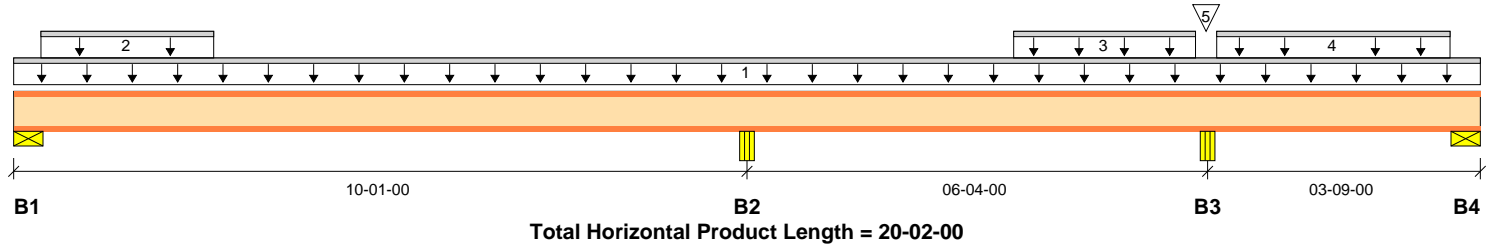
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	145 / 5	130 / 0			
B2, 4-1/2"	317 / 0	139 / 0			
B3, 4-1/2"	318 / 0	529 / 0			
B4, 4-1/2"	69 / 20	69 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-04-08	02-09-00	Top		45				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	13-09-00	16-03-00	Top		45				n/a
4	FC1 Floor Material	Unf. Lin. (lb/ft)	L	16-06-08	19-09-00	Top		43				n/a
5	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top	133	315				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	424 ft-lbs	14.0%	100%	2	04-00-00
Neg. Moment	-384 ft-lbs	12.7%	100%	4	10-01-00
End Reaction	275 lbs	19.3%	100%	2	00-00-00
Int. Reaction	847 lbs	35.2%	100%	5	16-05-00
End Shear	260 lbs	16.0%	100%	2	00-04-08
Cont. Shear	248 lbs	15.3%	100%	4	09-10-12
Total Load Deflection	L/999 (0.028")	n/a	n/a	2	04-09-04
Live Load Deflection	L/999 (0.019")	n/a	n/a	7	04-11-09
Total Neg. Defl.	L/999 (-0.001")	n/a	n/a	2	11-06-14
Max Defl.	0.028"	n/a	n/a	2	04-09-04
Span / Depth	9.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	275 lbs	8.2%	19.3%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	456 lbs	14.3%	18.9%	Unspecified
B3	Beam 4-1/2" x 1-3/4"	847 lbs	26.5%	35.2%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	138 lbs	4.1%	9.7%	Unspecified

Crawl\Floor Joists\FJ-4(i10948) (Floor Joist)

Dry | 3 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10948)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (1.5") Maximum Total load deflection criteria.

Design meets arbitrary (1") Maximum live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-4(i10983) (Floor Joist)

BC CALC® Member Report

Dry | 2 spans | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-4(i10983)

City, State, Zip:

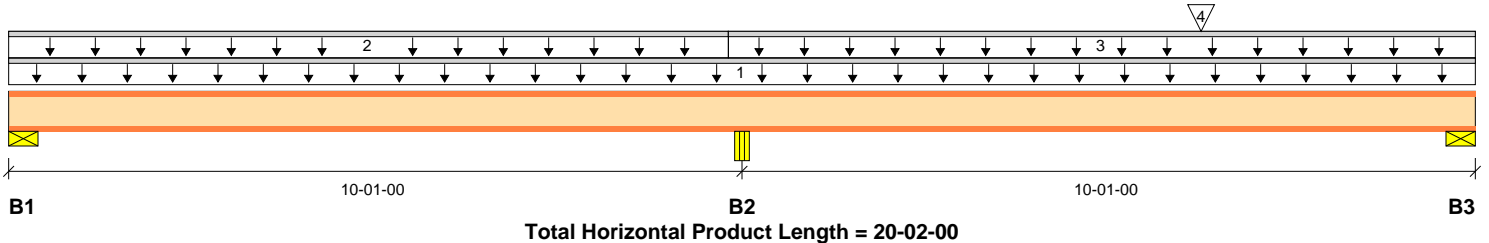
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	297 / 20	80 / 0			
B2, 4-1/2"	590 / 0	201 / 0			
B3, 4-1/2"	163 / 36	66 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	20-02-00	Top	32	10				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	09-10-12	Top	32	10				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	09-10-12	20-02-00	Top	3	1				n/a
4	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top		48				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	739 ft-lbs	24.4%	100%	2	04-06-09
Neg. Moment	-737 ft-lbs	24.4%	100%	1	10-01-00
End Reaction	377 lbs	26.4%	100%	2	00-00-00
Int. Reaction	791 lbs	32.8%	100%	1	10-01-00
End Shear	345 lbs	21.3%	100%	2	00-04-08
Cont. Shear	466 lbs	28.7%	100%	1	09-10-12
Total Load Deflection	L/999 (0.049")	n/a	n/a	2	05-00-03
Live Load Deflection	L/999 (0.04")	n/a	n/a	5	05-00-03
Total Neg. Defl.	L/999 (-0.005")	n/a	n/a	2	12-06-09
Max Defl.	0.049"	n/a	n/a	2	05-00-03
Span / Depth	9.9				

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	377 lbs	11.3%	26.4%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	791 lbs	24.8%	32.8%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	229 lbs	6.8%	16.1%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
 Design meets arbitrary (1") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-5(i10969) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-5(i10969)

City, State, Zip:

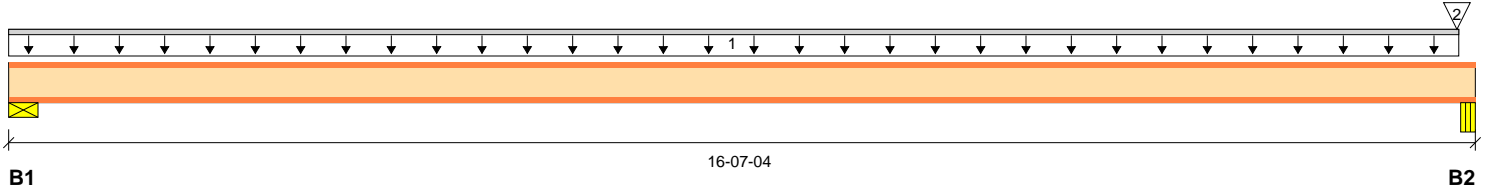
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 16-07-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	266 / 0	80 / 0			
B2, 4-1/2"	409 / 0	154 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live		Snow	Wind	Roof Live	OCS
							100%	90%				
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	32	10				n/a
2	E4(i834)	Conc. Pt. (lbs)	L	16-04-12	16-04-12	Top	149	76				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1328 ft-lbs	43.9%	100%	1	08-03-10
End Reaction	563 lbs	39.5%	100%	1	16-07-04
End Shear	330 lbs	20.3%	100%	1	00-04-08
Total Load Deflection	L/959 (0.2")	25.0%	n/a	1	08-03-10
Live Load Deflection	L/1246 (0.154")	38.5%	n/a	2	08-03-10
Max Defl.	0.2"	13.3%	n/a	1	08-03-10
Span / Depth	16.1				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	345 lbs	10.3%	24.2%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	563 lbs	17.6%	39.5%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-5(i10980) (Floor Joist)

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-5(i10980)

City, State, Zip:

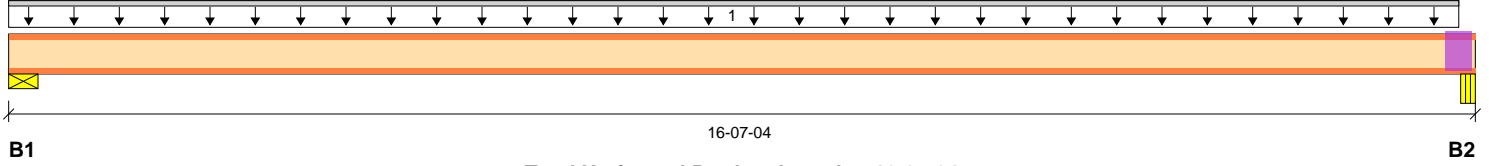
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 16-07-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	266 / 0	80 / 0			
B2, 4-1/2"	261 / 0	78 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-00	Top	32	10				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1328 ft-lbs	43.9%	100%	1	08-03-10
End Reaction	345 lbs	24.2%	100%	1	00-00-00
End Shear	330 lbs	20.3%	100%	1	00-04-08
Total Load Deflection	L/959 (0.2")	25.0%	n/a	1	08-03-10
Live Load Deflection	L/1246 (0.154")	38.5%	n/a	2	08-03-10
Max Defl.	0.2"	13.3%	n/a	1	08-03-10
Span / Depth	16.1				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	345 lbs	10.3%	24.2%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	339 lbs	10.6%	23.8%	Unspecified

Cautions

Squash Blocks required at support B2.

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- 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®,

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-6(i10953) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-6(i10953)

City, State, Zip:

Specifier:

Customer:

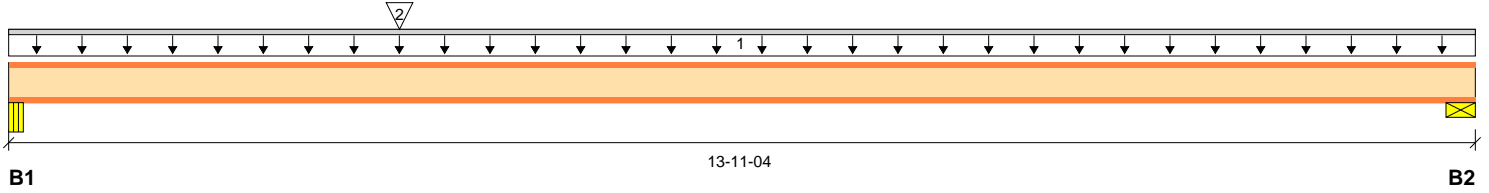
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Total Horizontal Product Length = 13-11-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	417 / 0	184 / 0			
B2, 4-1/2"	289 / 0	107 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	13-11-04	Top	32	10				n/a
2	-	Conc. Pt. (lbs)	L	03-08-09	03-08-09	Top	260	158				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1770 ft-lbs	58.5%	100%	1	04-04-05
End Reaction	601 lbs	42.2%	100%	1	00-00-00
End Shear	585 lbs	36.0%	100%	1	00-04-08
Total Load Deflection	L/860 (0.186")	27.9%	n/a	1	06-04-15
Live Load Deflection	L/1227 (0.13")	39.1%	n/a	2	06-06-10
Max Defl.	0.186"	12.4%	n/a	1	06-04-15
Span / Depth	13.5				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Beam 4-1/2" x 1-3/4"	601 lbs	18.8%	42.2%	Unspecified
B2	Wall/Plate 4-1/2" x 1-3/4"	397 lbs	11.9%	27.8%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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

Crawl\Floor Joists\FJ-7(i10913) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-7(i10913)

City, State, Zip:

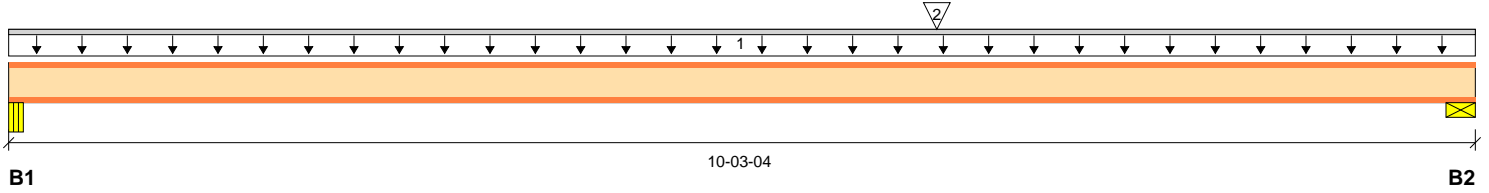
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	164 / 0	60 / 0			
B2, 4-1/2"	164 / 0	69 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	10-03-04	Top	32	10				n/a
2	E4(i834)	Conc. Pt. (lbs)	L	06-06-00	06-06-00	Top		30				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	537 ft-lbs	17.8%	100%	1	05-04-08
End Reaction	233 lbs	16.3%	100%	1	10-03-04
End Shear	217 lbs	13.4%	100%	1	09-10-12
Total Load Deflection	L/999 (0.035")	n/a	n/a	1	05-02-09
Live Load Deflection	L/999 (0.024")	n/a	n/a	2	05-01-10
Max Defl.	0.035"	n/a	n/a	1	05-02-09
Span / Depth	9.7				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Beam 4-1/2" x 1-3/4"	224 lbs	7.0%	15.7%	Unspecified
B2	Wall/Plate 4-1/2" x 1-3/4"	233 lbs	7.0%	16.3%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-8(i10962) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-8(i10962)

City, State, Zip:

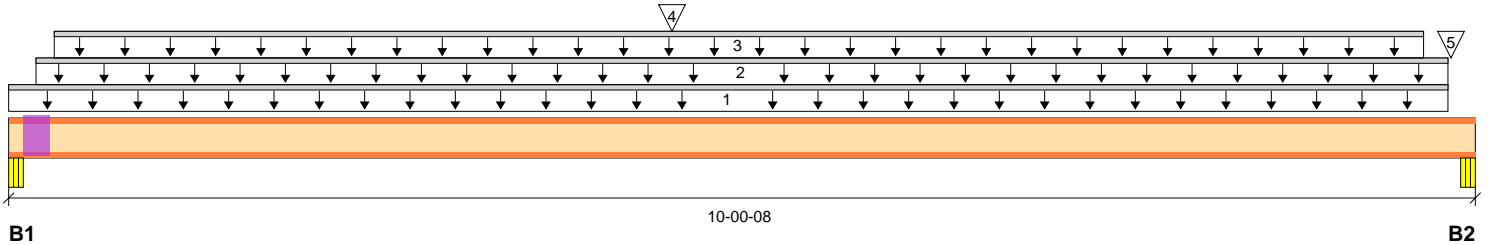
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 10-00-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	157 / 0	190 / 0			
B2, 4-1/2"	233 / 0	227 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	09-10-04	Top	11	3				n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-02-04	09-10-04	Top	21	6				n/a
3	NB3(i2670)	Unf. Lin. (lb/ft)	L	00-03-12	09-08-04	Top		27				n/a
4	FC1 Floor Material	Conc. Pt. (lbs)	L	04-06-08	04-06-08	Top		26				n/a
5	E1(i837)	Conc. Pt. (lbs)	L	09-10-08	09-10-08	Top	78	41				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	821 ft-lbs	27.1%	100%	1	04-10-06
End Reaction	460 lbs	32.3%	100%	1	10-00-08
End Shear	335 lbs	20.6%	100%	1	00-04-08
Total Load Deflection	L/999 (0.051")	n/a	n/a	1	04-11-15
Live Load Deflection	L/999 (0.022")	n/a	n/a	2	04-11-15
Max Defl.	0.051"	n/a	n/a	1	04-11-15
Span / Depth	9.5				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Beam 4-1/2" x 1-3/4"	347 lbs	10.9%	24.4%	Unspecified
B2	Beam 4-1/2" x 1-3/4"	460 lbs	14.4%	32.3%	Unspecified

Disclosure

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Cautions

Squash Blocks required at support B1.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Design meets arbitrary (1.5") Maximum Total load deflection criteria.
 Design meets arbitrary (1") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 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®,

Single 11-7/8" BCI® 4500s-1.8

PASSED

Crawl\Floor Joists\FJ-9(i10970) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 19.2 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: Crawl\Floor Joists\FJ-9(i10970)

City, State, Zip:

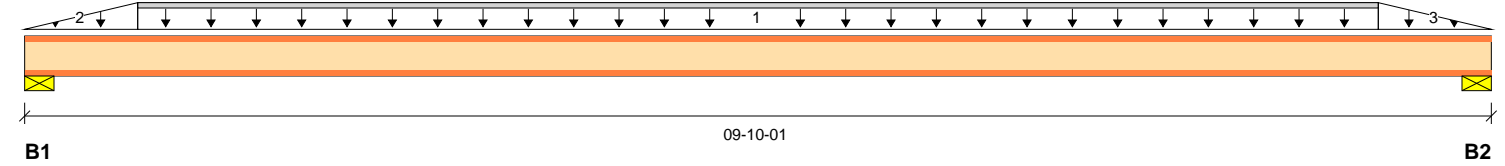
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 09-10-01

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 6-3/8"	76 / 0	23 / 0			
B2, 6-3/8"	76 / 0	23 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-09-02	09-00-15	Top	18	5				n/a
2	FC1 Floor Material	Trapezoidal (lb/ft)	L	00-00-00	00-09-02	Top	0	0				n/a
3	FC1 Floor Material	Trapezoidal (lb/ft)	L	09-00-15	09-10-01	Top	9	3				n/a

Controls Summary

Value	% Allowable	Duration	Case	Location
Pos. Moment	225 ft-lbs	7.4%	100%	1 04-11-00
End Reaction	99 lbs	7.0%	100%	1 09-10-01
End Shear	97 lbs	6.0%	100%	1 00-06-06
Total Load Deflection	L/999 (0.013")	n/a	n/a	1 04-11-00
Live Load Deflection	L/999 (0.01")	n/a	n/a	2 04-11-00
Max Defl.	0.013"	n/a	n/a	1 04-11-00
Span / Depth	9.0			

Bearing Supports

Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1 Wall/Plate 6-3/8" x 1-3/4"	99 lbs	2.1%	7.0%	Unspecified
B2 Wall/Plate 6-3/8" x 1-3/4"	99 lbs	2.1%	7.0%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1.5") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-1(i10979) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-1(i10979)

City, State, Zip:

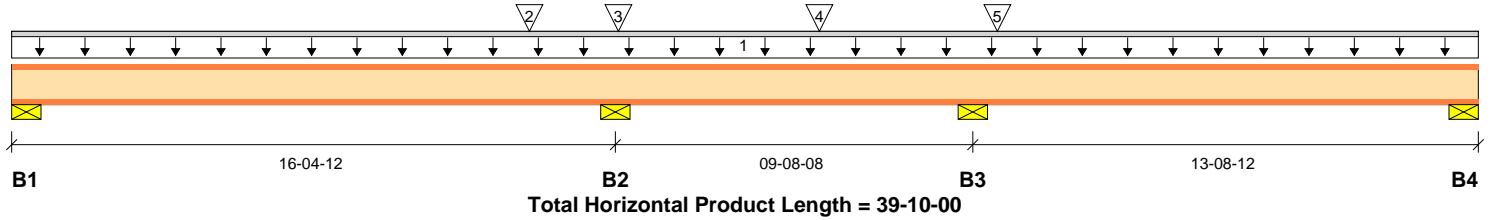
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	581 / 18	147 / 0			
B2, 3-1/2"	1327 / 0	710 / 0			
B3, 3-1/2"	1143 / 0	449 / 0			
B4, 4-1/2"	506 / 24	119 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	80	20				n/a
2	NB25(i2820)	Conc. Pt. (lbs)	L	14-00-12	14-00-12	Top		142				n/a
3	NB27(i2821)	Conc. Pt. (lbs)	L	16-05-12	16-05-12	Top		202				n/a
4	NB13(i2808)	Conc. Pt. (lbs)	L	21-11-04	21-11-04	Top		142				n/a
5	NB10(i2806)	Conc. Pt. (lbs)	L	26-09-04	26-09-04	Top		142				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2427 ft-lbs	67.7%	100%	2	07-02-09
Neg. Moment	-2487 ft-lbs	69.4%	100%	4	16-04-12
End Reaction	728 lbs	50.2%	100%	2	00-00-00
Int. Reaction	2036 lbs	86.6%	100%	4	16-04-12
End Shear	690 lbs	37.8%	100%	2	00-04-08
Cont. Shear	1066 lbs	58.4%	100%	4	16-03-00
Total Load Deflection	L/800 (0.241")	30.0%	n/a	2	08-00-00
Live Load Deflection	L/1014 (0.19")	47.4%	n/a	7	08-00-00
Total Neg. Defl.	L/999 (-0.042")	n/a	n/a	2	20-07-06
Max Defl.	0.241"	n/a	n/a	2	08-00-00
Span / Depth	13.8				

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	728 lbs	21.8%	50.2%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	2036 lbs	78.2%	86.6%	Unspecified
B3	Wall/Plate 3-1/2" x 1-3/4"	1592 lbs	61.2%	67.7%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	624 lbs	18.7%	43.1%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 Design based on Dry Service Condition.

Disclosure

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

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-10(i10981) (Floor Joist)

BC CALC® Member Report

Dry | 1 span | No cant. | 24 OCS | Non-Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-10(i10981)

City, State, Zip:

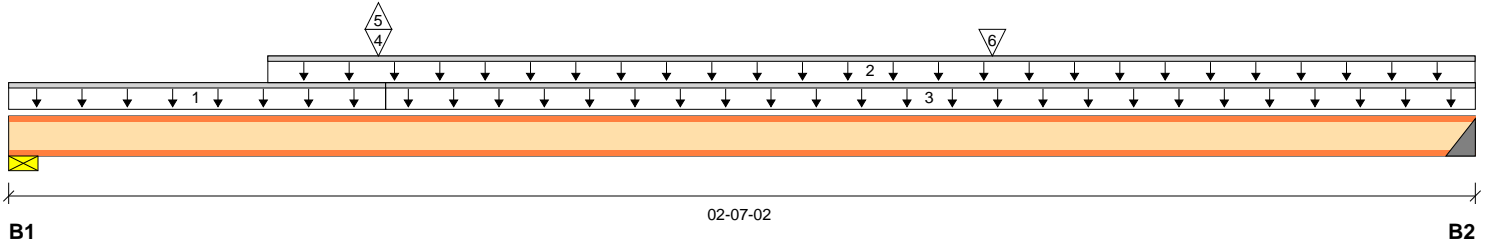
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 02-07-02

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 5-1/2"	220 / 31	169 / 0			
B2, 2"	53 / 5	86 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	00-08-00	Top	18	5				n/a
2	NB17(i2812)	Unf. Lin. (lb/ft)	L	00-05-08	02-07-02	Top		57				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-08-00	02-07-02	Top	3					n/a
4	-	Conc. Pt. (lbs)	L	00-07-14	00-07-14	Top	223	121				n/a
5	-	Conc. Pt. (lbs)	L	00-07-14	00-07-14	Top	-36					n/a
6	FJ-9(i10886)	Conc. Pt. (lbs)	L	01-08-14	01-08-14	Top	32	8				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	101 ft-lbs	2.8%	100%	1	00-11-09
End Reaction	389 lbs	26.8%	100%	1	00-00-00
End Shear	369 lbs	20.2%	100%	1	00-05-08
Total Load Deflection	L/999 (0.001")	n/a	n/a	1	01-01-05
Live Load Deflection	L/999 (0.001")	n/a	n/a	3	00-08-07
Max Defl.	0.001"	n/a	n/a	1	01-01-05
Span / Depth	1.8				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 5-1/2" x 1-3/4"	389 lbs	9.5%	26.8%	Unspecified
B2	Hanger 2" x 1-3/4"	139 lbs	12.0%	13.0%	IUS 1.81/14

Cautions

Hanger IUS1.81/14 requires (12) 10dx1.5 face nails, (2) Strong-Grip joist nails.

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Calculations assume member is fully braced.
 Hanger Manufacturer: Simpson Strong-Tie, Inc.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 Design based on Dry Service Condition.

Disclosure

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

2nd floor\Floor Joists\FJ-2(i10931) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10931)

City, State, Zip:

Specifier:

Customer:

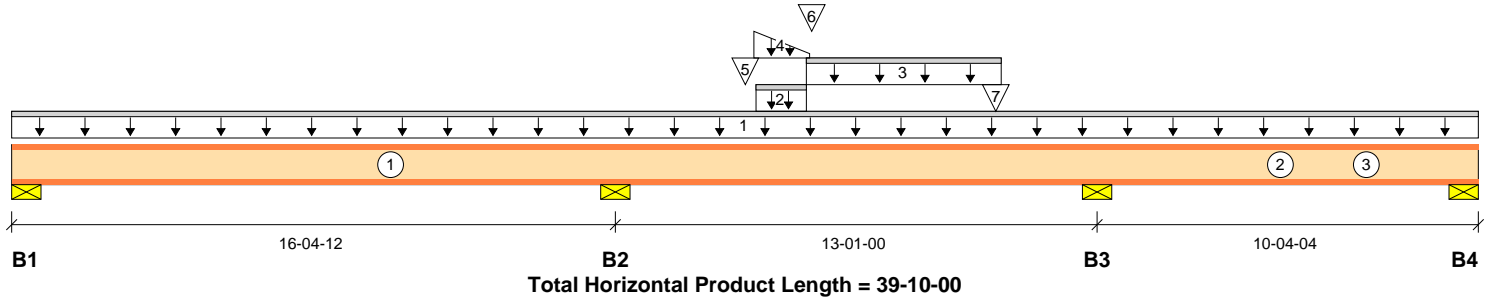
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	585 / 37	112 / 0			
B2, 3-1/2"	1413 / 0	638 / 0			
B3, 5-1/2"	1096 / 0	552 / 0			
B4, 4-1/2"	417 / 76	37 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	80	20				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	20-02-10	21-07-00	Top		52				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	21-07-00	26-10-08	Top		9				n/a
4	FC2 Floor Material	Trapezoidal (lb/ft)	L	20-01-14	21-08-01	Top		73				n/a
5	-	Conc. Pt. (lbs)	L	19-11-02	19-11-02	Top		79				n/a
6	NB22(i2816)	Conc. Pt. (lbs)	L	21-08-12	21-08-12	Top		134				n/a
7	NB24(i2818)	Conc. Pt. (lbs)	L	26-08-12	26-08-12	Top		144				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2217 ft-lbs	61.9%	100%	2	07-00-07
Neg. Moment	-2892 ft-lbs	80.7%	100%	4	16-04-12
End Reaction	697 lbs	48.1%	100%	2	00-00-00
Int. Reaction	2050 lbs	87.2%	100%	4	16-04-12
End Shear	660 lbs	36.1%	100%	2	00-04-08
Cont. Shear	1052 lbs	57.6%	100%	4	16-06-08
Hole #1 Shear	396 lbs	61.8%	100%	6	10-03-08
Hole #2 Shear	192 lbs	29.9%	100%	5	34-05-08
Hole #3 Shear	153 lbs	23.9%	100%	10	36-09-08
Total Load Deflection	L/905 (0.213")	26.5%	n/a	2	07-08-05
Live Load Deflection	L/994 (0.194")	48.3%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.023")	n/a	n/a	3	12-03-01
Max Defl.	0.213"	n/a	n/a	2	07-08-05
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10931) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10931)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	697 lbs	20.8%	48.1%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	2050 lbs	78.8%	87.2%	Unspecified
B3	Wall/Plate 5-1/2" x 1-3/4"	1647 lbs	40.3%	65.2%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	455 lbs	13.6%	31.4%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10935) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10935)

City, State, Zip:

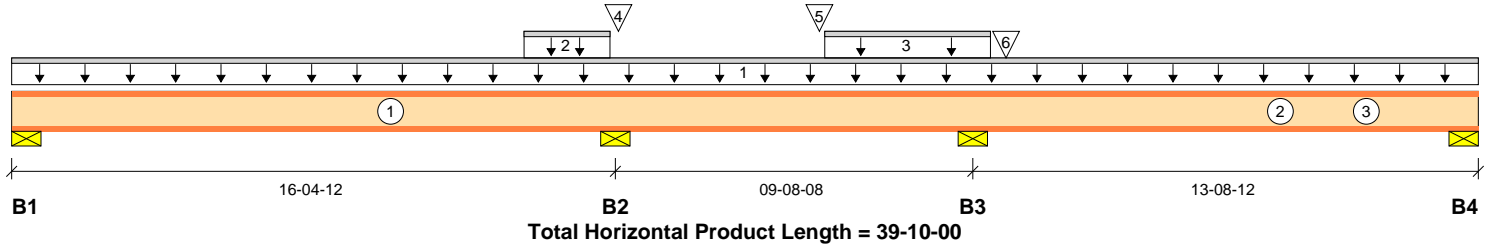
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	581 / 18	137 / 0			
B2, 3-1/2"	1327 / 0	618 / 0			
B3, 3-1/2"	1143 / 0	584 / 0			
B4, 4-1/2"	506 / 24	112 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	80	20				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	13-11-00	16-03-00	Top		29				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	22-01-00	26-07-00	Top		48				n/a
4	NB27(i2821)	Conc. Pt. (lbs)	L	16-05-12	16-05-12	Top		162				n/a
5	NB13(i2808)	Conc. Pt. (lbs)	L	21-11-04	21-11-04	Top		114				n/a
6	NB11(i2805)	Conc. Pt. (lbs)	L	27-00-01	27-00-01	Top		94				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2355 ft-lbs	65.7%	100%	2	07-02-00
Neg. Moment	-2411 ft-lbs	67.3%	100%	4	16-04-12
End Reaction	718 lbs	49.5%	100%	2	00-00-00
Int. Reaction	1944 lbs	82.7%	100%	4	16-04-12
End Shear	680 lbs	37.3%	100%	2	00-04-08
Cont. Shear	1002 lbs	54.9%	100%	4	16-03-00
Hole #1 Shear	376 lbs	58.7%	100%	6	10-03-08
Hole #2 Shear	158 lbs	24.7%	100%	8	34-05-08
Hole #3 Shear	324 lbs	50.5%	100%	10	36-09-08
Total Load Deflection	L/834 (0.231")	28.8%	n/a	2	07-09-14
Live Load Deflection	L/1013 (0.19")	47.4%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.036")	n/a	n/a	2	20-05-13
Max Defl.	0.231"	n/a	n/a	2	07-09-14
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	718 lbs	21.4%	49.5%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1944 lbs	74.7%	82.7%	Unspecified

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10935) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10935)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B3	Wall/Plate 3-1/2" x 1-3/4"	1727 lbs	66.3%	73.5%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	618 lbs	18.5%	42.6%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10938) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10938)

City, State, Zip:

Specifier:

Customer:

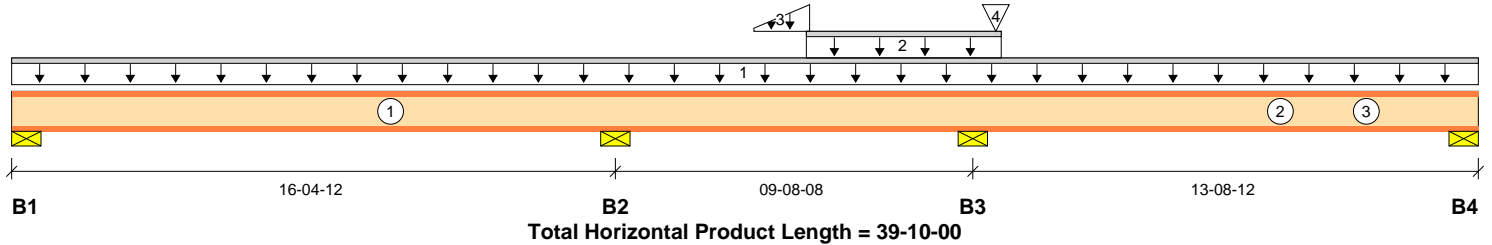
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	581 / 18	135 / 0			
B2, 3-1/2"	1327 / 0	379 / 0			
B3, 3-1/2"	1143 / 0	538 / 0			
B4, 4-1/2"	506 / 24	112 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	80	20				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	21-07-00	26-10-08	Top		48				n/a
3	FC2 Floor Material	Trapezoidal (lb/ft)	L	20-01-14	21-08-01	Top		8				n/a
4	FC2 Floor Material	Conc. Pt. (lbs)	L	26-08-12	26-08-12	Top		48				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2341 ft-lbs	65.3%	100%	2	07-02-00
Neg. Moment	-2355 ft-lbs	65.7%	100%	4	16-04-12
End Reaction	716 lbs	49.3%	100%	2	00-00-00
Int. Reaction	1706 lbs	72.6%	100%	4	16-04-12
End Shear	678 lbs	37.2%	100%	2	00-04-08
Cont. Shear	936 lbs	51.3%	100%	4	16-03-00
Hole #1 Shear	378 lbs	59.0%	100%	6	10-03-08
Hole #2 Shear	158 lbs	24.6%	100%	8	34-05-08
Hole #3 Shear	324 lbs	50.5%	100%	10	36-09-08
Total Load Deflection	L/842 (0.229")	28.5%	n/a	2	07-09-14
Live Load Deflection	L/1013 (0.19")	47.4%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.036")	n/a	n/a	2	20-06-03
Max Defl.	0.229"	n/a	n/a	2	07-09-14
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	716 lbs	21.4%	49.3%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1706 lbs	65.5%	72.6%	Unspecified
B3	Wall/Plate 3-1/2" x 1-3/4"	1681 lbs	64.6%	71.5%	Unspecified

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10938) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10938)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B4	Wall/Plate 4-1/2" x 1-3/4"	617 lbs	18.4%	42.6%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10943) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10943)

City, State, Zip:

Specifier:

Customer:

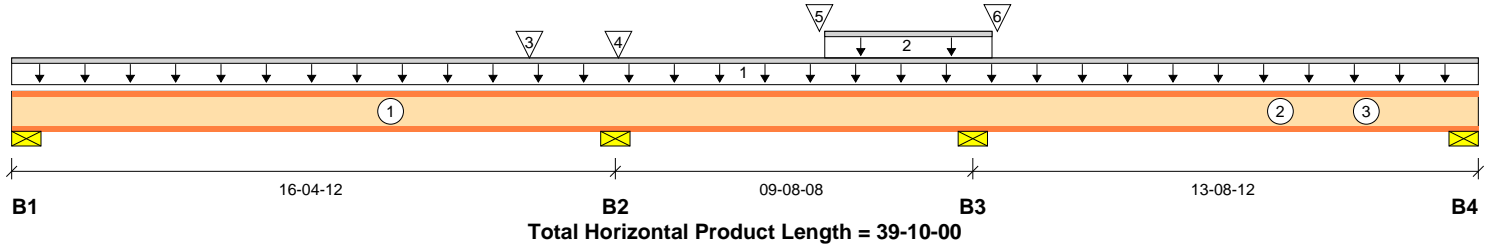
H & H HOMES

Designer:

Code reports:

ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	581 / 18	145 / 0			
B2, 3-1/2"	1327 / 0	638 / 0			
B3, 3-1/2"	1143 / 0	450 / 0			
B4, 4-1/2"	506 / 24	118 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	80	20				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	22-01-00	26-07-08	Top		11				n/a
3	NB25(i2820)	Conc. Pt. (lbs)	L	14-00-12	14-00-12	Top		114				n/a
4	NB27(i2821)	Conc. Pt. (lbs)	L	16-05-12	16-05-12	Top		162				n/a
5	NB13(i2808)	Conc. Pt. (lbs)	L	21-11-04	21-11-04	Top		114				n/a
6	NB10(i2806)	Conc. Pt. (lbs)	L	26-09-04	26-09-04	Top		114				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2413 ft-lbs	67.3%	100%	2	07-03-09
Neg. Moment	-2454 ft-lbs	68.5%	100%	4	16-04-12
End Reaction	726 lbs	50.1%	100%	2	00-00-00
Int. Reaction	1964 lbs	83.6%	100%	4	16-04-12
End Shear	688 lbs	37.7%	100%	2	00-04-08
Cont. Shear	1040 lbs	57.0%	100%	4	16-03-00
Hole #1 Shear	368 lbs	57.4%	100%	6	10-03-08
Hole #2 Shear	164 lbs	25.5%	100%	8	34-05-08
Hole #3 Shear	329 lbs	51.3%	100%	10	36-09-08
Total Load Deflection	L/807 (0.239")	29.8%	n/a	2	07-11-07
Live Load Deflection	L/1013 (0.19")	47.4%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.042")	n/a	n/a	2	20-07-06
Max Defl.	0.239"	n/a	n/a	2	07-11-07
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	726 lbs	21.7%	50.1%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1964 lbs	75.5%	83.6%	Unspecified

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10943) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10943)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B3	Wall/Plate 3-1/2" x 1-3/4"	1593 lbs	61.2%	67.8%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	623 lbs	18.6%	43.0%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10951) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10951)

City, State, Zip:

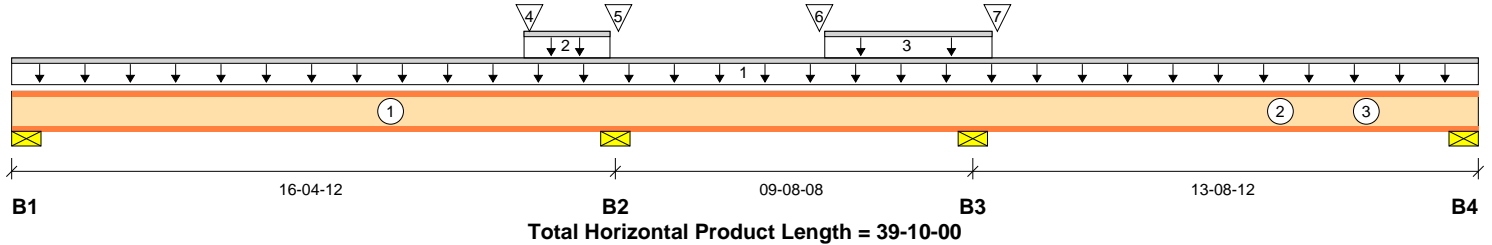
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	581 / 18	145 / 0			
B2, 3-1/2"	1327 / 0	731 / 0			
B3, 3-1/2"	1143 / 0	660 / 0			
B4, 4-1/2"	506 / 24	113 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	80	20				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	13-11-00	16-03-00	Top		28				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	22-01-00	26-07-08	Top		55				n/a
4	NB25(i2820)	Conc. Pt. (lbs)	L	14-00-12	14-00-12	Top		107				n/a
5	NB27(i2821)	Conc. Pt. (lbs)	L	16-05-12	16-05-12	Top		162				n/a
6	NB13(i2808)	Conc. Pt. (lbs)	L	21-11-04	21-11-04	Top		114				n/a
7	NB10(i2806)	Conc. Pt. (lbs)	L	26-09-04	26-09-04	Top		157				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2408 ft-lbs	67.2%	100%	2	07-03-09
Neg. Moment	-2533 ft-lbs	70.7%	100%	4	16-04-12
End Reaction	725 lbs	50.0%	100%	2	00-00-00
Int. Reaction	2058 lbs	87.6%	100%	4	16-04-12
End Shear	688 lbs	37.7%	100%	2	00-04-08
Cont. Shear	1098 lbs	60.2%	100%	4	16-03-00
Hole #1 Shear	369 lbs	57.5%	100%	6	10-03-08
Hole #2 Shear	160 lbs	24.9%	100%	8	34-05-08
Hole #3 Shear	325 lbs	50.7%	100%	10	36-09-08
Total Load Deflection	L/807 (0.239")	29.7%	n/a	2	07-11-07
Live Load Deflection	L/1013 (0.19")	47.4%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.038")	n/a	n/a	2	20-04-03
Max Defl.	0.239"	n/a	n/a	2	07-11-07
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	725 lbs	21.7%	50.0%	Unspecified

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10951) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10951)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B2	Wall/Plate 3-1/2" x 1-3/4"	2058 lbs	79.1%	87.6%	Unspecified
B3	Wall/Plate 3-1/2" x 1-3/4"	1803 lbs	69.3%	76.7%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	619 lbs	18.5%	42.7%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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

2nd floor\Floor Joists\FJ-2(i10964) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10964)

City, State, Zip:

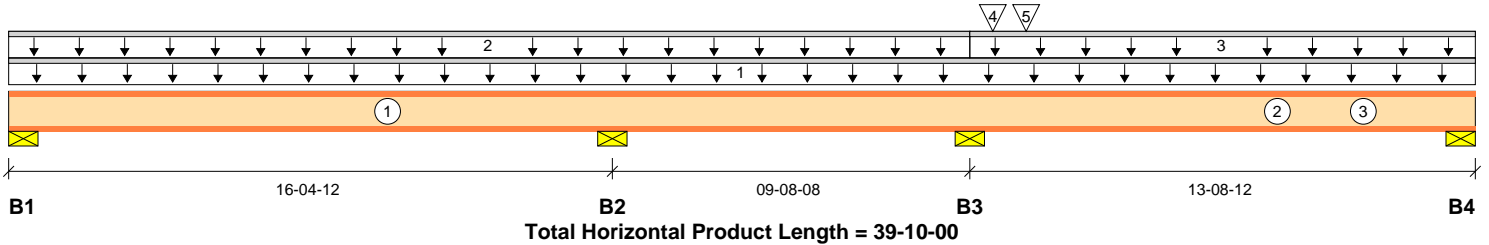
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	485 / 15	118 / 0			
B2, 3-1/2"	1106 / 0	235 / 0			
B3, 3-1/2"	1013 / 0	373 / 0			
B4, 4-1/2"	462 / 20	119 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	40	10				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	26-01-04	Top	27	7				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	26-01-04	39-10-00	Top	33	8				n/a
4	FC2 Floor Material	Conc. Pt. (lbs)	L	26-08-12	26-08-12	Top		19				n/a
5	NB21(i2814)	Conc. Pt. (lbs)	L	27-07-10	27-07-10	Top		140				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1996 ft-lbs	55.7%	100%	2	07-03-09
Neg. Moment	-1869 ft-lbs	52.1%	100%	4	16-04-12
End Reaction	603 lbs	41.6%	100%	2	00-00-00
Int. Reaction	1386 lbs	59.0%	100%	5	26-01-04
End Shear	572 lbs	31.3%	100%	2	00-04-08
Cont. Shear	858 lbs	47.0%	100%	5	26-03-00
Hole #1 Shear	310 lbs	48.3%	100%	6	10-03-08
Hole #2 Shear	162 lbs	25.2%	100%	8	34-05-08
Hole #3 Shear	314 lbs	48.9%	100%	10	36-09-08
Total Load Deflection	L/981 (0.197")	24.5%	n/a	2	07-11-07
Live Load Deflection	L/1211 (0.159")	39.6%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.043")	n/a	n/a	2	21-00-06
Max Defl.	0.197"	n/a	n/a	2	07-11-07
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	603 lbs	18.0%	41.6%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1340 lbs	51.5%	57.0%	Unspecified
B3	Wall/Plate 3-1/2" x 1-3/4"	1386 lbs	53.3%	59.0%	Unspecified

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10964) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10964)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B4	Wall/Plate 4-1/2" x 1-3/4"	581 lbs	17.4%	40.1%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10986) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10986)

City, State, Zip:

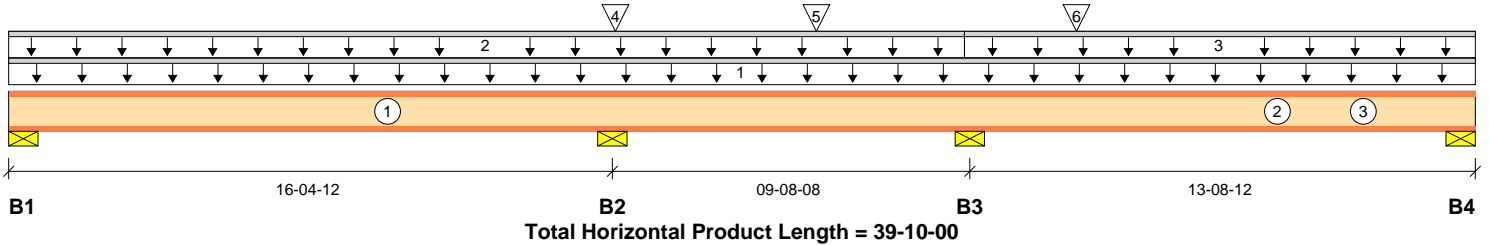
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	386 / 12	92 / 0			
B2, 3-1/2"	884 / 0	351 / 0			
B3, 3-1/2"	700 / 0	291 / 0			
B4, 4-1/2"	296 / 16	78 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	40	10				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	25-11-08	Top	13	3				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	25-11-08	39-10-00	Top	7	2				n/a
4	NB27(i2821)	Conc. Pt. (lbs)	L	16-05-12	16-05-12	Top		122				n/a
5	NB13(i2808)	Conc. Pt. (lbs)	L	21-11-04	21-11-04	Top		88				n/a
6	NB11(i2805)	Conc. Pt. (lbs)	L	29-00-00	29-00-00	Top		94				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1568 ft-lbs	43.7%	100%	2	07-02-00
Neg. Moment	-1542 ft-lbs	43.0%	100%	4	16-04-12
End Reaction	478 lbs	33.0%	100%	2	00-00-00
Int. Reaction	1235 lbs	52.6%	100%	4	16-04-12
End Shear	453 lbs	24.8%	100%	2	00-04-08
Cont. Shear	622 lbs	34.1%	100%	4	16-03-00
Hole #1 Shear	251 lbs	39.1%	100%	6	10-03-08
Hole #2 Shear	105 lbs	16.4%	100%	8	34-05-08
Hole #3 Shear	202 lbs	31.5%	100%	10	36-09-08
Total Load Deflection	L/1256 (0.154")	19.1%	n/a	2	07-09-14
Live Load Deflection	L/1528 (0.126")	31.4%	n/a	13	07-11-07
Total Neg. Defl.	L/999 (-0.026")	n/a	n/a	2	20-07-06
Max Defl.	0.154"	n/a	n/a	2	07-09-14
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	34-05-08	7"	L	9"		Circular	Horizontal
H03	36-09-08	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	478 lbs	14.3%	33.0%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1235 lbs	47.5%	52.6%	Unspecified

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-2(i10986) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-2(i10986)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B3	Wall/Plate 3-1/2" x 1-3/4"	992 lbs	38.1%	42.2%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	375 lbs	11.2%	25.8%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-3(i10956) (Floor Joist)

BC CALC® Member Report

Dry | 3 spans | No cant. | 24 OCS | Non-Repetitive | Glued & nailed

February 2, 2021 11:28:02

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-3(i10956)

City, State, Zip:

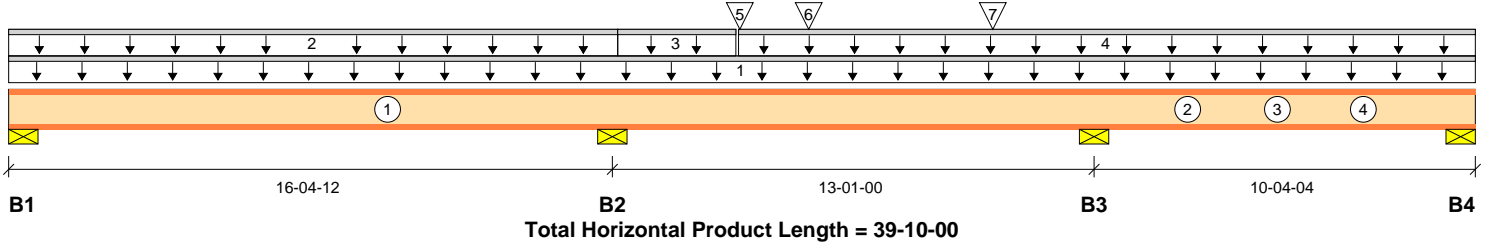
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	585 / 35	122 / 0			
B2, 3-1/2"	1369 / 0	527 / 0			
B3, 5-1/2"	1091 / 0	435 / 0			
B4, 4-1/2"	417 / 75	56 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	39-10-00	Top	40	10				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-06-08	Top	40	10				n/a
3	FC2 Floor Material	Unf. Lin. (lb/ft)	L	16-06-08	19-09-00	Top	20	5				n/a
4	FC2 Floor Material	Unf. Lin. (lb/ft)	L	19-09-14	39-10-00	Top	40	10				n/a
5	-	Conc. Pt. (lbs)	L	19-10-05	19-10-05	Top		126				n/a
6	NB22(i2816)	Conc. Pt. (lbs)	L	21-08-12	21-08-12	Top		114				n/a
7	NB24(i2818)	Conc. Pt. (lbs)	L	26-08-12	26-08-12	Top		114				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2280 ft-lbs	63.6%	100%	2	07-00-07
Neg. Moment	-2725 ft-lbs	76.0%	100%	4	16-04-12
End Reaction	706 lbs	48.7%	100%	2	00-00-00
Int. Reaction	1896 lbs	80.7%	100%	4	16-04-12
End Shear	669 lbs	36.7%	100%	2	00-04-08
Cont. Shear	959 lbs	52.5%	100%	4	16-03-00
Hole #1 Shear	387 lbs	60.3%	100%	6	10-03-08
Hole #2 Shear	416 lbs	64.9%	100%	5	32-00-04
Hole #3 Shear	173 lbs	26.9%	100%	11	34-05-08
Hole #4 Shear	171 lbs	26.7%	100%	12	36-09-08
Total Load Deflection	L/872 (0.221")	27.5%	n/a	2	07-09-14
Live Load Deflection	L/994 (0.194")	48.3%	n/a	15	07-11-07
Total Neg. Defl.	L/999 (-0.02")	n/a	n/a	2	20-02-09
Max Defl.	0.221"	n/a	n/a	2	07-09-14
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal
H02	32-00-04	7"	L	9"		Circular	Horizontal
H03	34-05-08	7"	L	9"		Circular	Horizontal
H04	36-09-08	7"	L	9"		Circular	Horizontal

2nd floor\Floor Joists\FJ-3(i10956) (Floor Joist)

Dry | 3 spans | No cant. | 24 OCS | Non-Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-3(i10956)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	706 lbs	21.1%	48.7%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1896 lbs	72.8%	80.7%	Unspecified
B3	Wall/Plate 5-1/2" x 1-3/4"	1527 lbs	37.3%	60.5%	Unspecified
B4	Wall/Plate 4-1/2" x 1-3/4"	473 lbs	14.1%	32.6%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-4(i10932) (Floor Joist)

Dry | 2 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-4(i10932)

City, State, Zip:

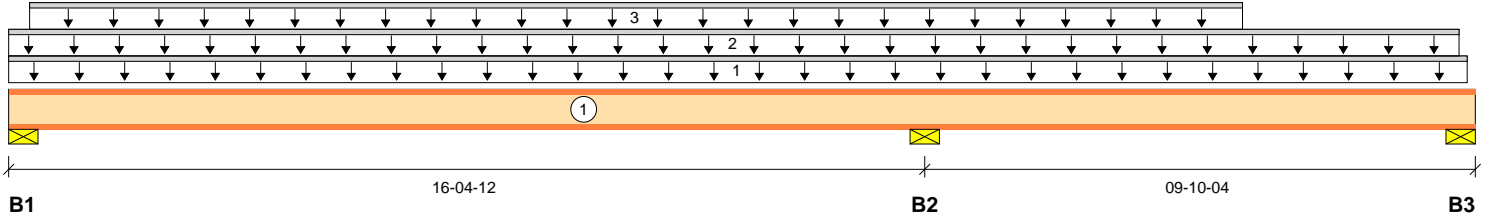
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 26-03-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	287 / 10	446 / 0			
B2, 3-1/2"	668 / 0	1059 / 0			
B3, 3-1/2"	178 / 79	0 / 9			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
							100%	90%	115%	160%	125%	
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	26-01-04	Top	27	7				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	25-11-08	Top	13	3				n/a
3	NB14(i2807)	Unf. Lin. (lb/ft)	L	00-04-08	22-01-00	Top		57				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2430 ft-lbs	67.8%	100%	2	07-00-07
Neg. Moment	-2397 ft-lbs	66.8%	100%	1	16-04-12
End Reaction	733 lbs	50.5%	100%	2	00-00-00
Int. Reaction	1726 lbs	73.5%	100%	1	16-04-12
End Shear	714 lbs	39.1%	100%	2	00-04-08
Cont. Shear	993 lbs	54.4%	100%	1	16-03-00
Hole #1 Shear	374 lbs	58.4%	100%	4	10-03-08
Total Load Deflection	L/819 (0.236")	29.3%	n/a	2	07-09-14
Live Load Deflection	L/999 (0.092")	n/a	n/a	7	07-09-14
Total Neg. Defl.	L/999 (-0.022")	n/a	n/a	2	19-10-12
Max Defl.	0.236"	n/a	n/a	2	07-09-14
Span / Depth	13.8				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	10-03-08	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	733 lbs	21.9%	50.5%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1726 lbs	66.3%	73.5%	Unspecified
B3	Wall/Plate 3-1/2" x 1-3/4"	169 lbs	6.5%	11.7%	Unspecified
B3	Uplift	88 lbs			

Cautions

Uplift of -88 lbs found at bearing B3.

2nd floor\Floor Joists\FJ-4(i10932) (Floor Joist)

Dry | 2 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-4(i10932)

City, State, Zip:

Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Disclosure

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

Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-5(i10897) (Floor Joist)

Dry | 2 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-5(i10897)

City, State, Zip:

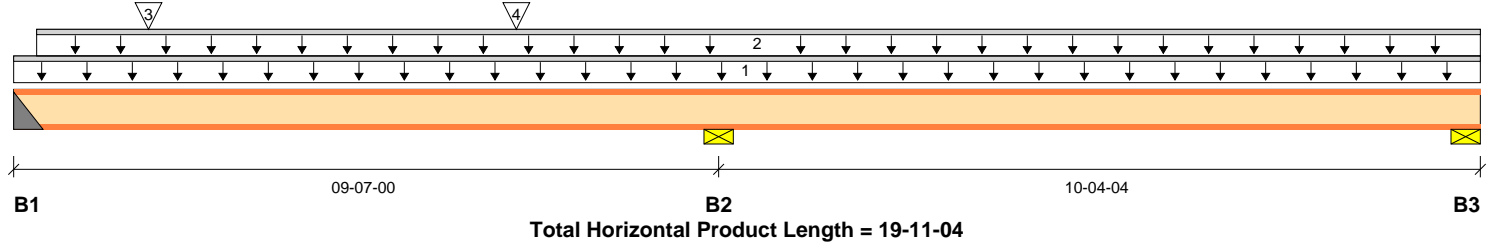
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 2"	226 / 33	115 / 0			
B2, 5-1/2"	639 / 0	236 / 0			
B3, 4-1/2"	253 / 26	49 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	19-11-04	Top	40	10				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-03-12	19-11-04	Top	13	3				n/a
3	NB22(i2816)	Conc. Pt. (lbs)	L	01-10-00	01-10-00	Top		67				n/a
4	NB24(i2818)	Conc. Pt. (lbs)	L	06-10-00	06-10-00	Top		69				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	674 ft-lbs	18.8%	100%	2	04-02-02
Neg. Moment	-796 ft-lbs	22.2%	100%	1	09-07-00
End Reaction	342 lbs	31.8%	100%	2	00-00-00
Int. Reaction	875 lbs	34.7%	100%	1	09-07-00
End Shear	333 lbs	18.3%	100%	2	00-02-00
Cont. Shear	446 lbs	24.4%	100%	1	09-04-04
Total Load Deflection	L/999 (0.03")	n/a	n/a	2	04-07-12
Live Load Deflection	L/999 (0.025")	n/a	n/a	6	14-09-10
Total Neg. Defl.	L/999 (-0.003")	n/a	n/a	2	12-04-07
Max Defl.	0.03"	n/a	n/a	2	04-07-12
Span / Depth	8.6				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Hanger 2" x 1-3/4"	342 lbs	29.3%	31.8%	IUS 1.81/14
B2	Wall/Plate 5-1/2" x 1-3/4"	875 lbs	21.4%	34.7%	Unspecified
B3	Wall/Plate 4-1/2" x 1-3/4"	303 lbs	9.0%	20.9%	Unspecified

Cautions

Hanger IUS1.81/14 requires (12) 10dx1.5 face nails, (2) Strong-Grip joist nails.

2nd floor\Floor Joists\FJ-5(i10897) (Floor Joist)

Dry | 2 spans | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

Address:

City, State, Zip:

Customer: H & H HOMES

Code reports: ESR-1336

File name: 2564083 MLP745 KENT.mmdl

Description: 2nd floor\Floor Joists\FJ-5(i10897)

Specifier:

Designer:

Company:

Notes

Design meets Code minimum (L/240) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

BC CALC® analysis is based on IBC 2012.

Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

Disclosure

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-6(i10904) (Floor Joist)

Dry | 1 span | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-6(i10904)

City, State, Zip:

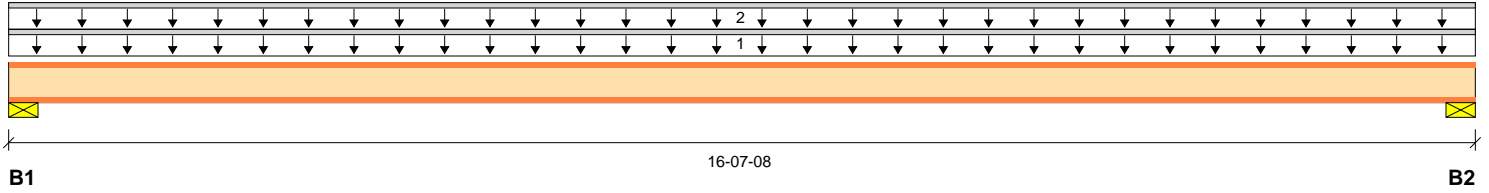
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 5-1/2"	112 / 0	506 / 0			
B2, 3-1/2"	110 / 0	496 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	E13(i2679)	Unf. Lin. (lb/ft)	L	00-00-00	16-07-08	Top		57				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-07-08	Top	13	3				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2354 ft-lbs	65.7%	100%	1	08-04-12
End Reaction	618 lbs	42.6%	100%	1	00-00-00
End Shear	584 lbs	32.0%	100%	1	00-05-08
Total Load Deflection	L/795 (0.242")	30.2%	n/a	1	08-04-12
Live Load Deflection	L/999 (0.044")	n/a	n/a	2	08-04-12
Max Defl.	0.242"	n/a	n/a	1	08-04-12
Span / Depth	13.7				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 5-1/2" x 1-3/4"	618 lbs	15.1%	42.6%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	605 lbs	23.3%	41.8%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 Design based on Dry Service Condition.

Disclosure

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2nd floor\Floor Joists\FJ-7(i10947) (Floor Joist)

Dry | 1 span | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-7(i10947)

City, State, Zip:

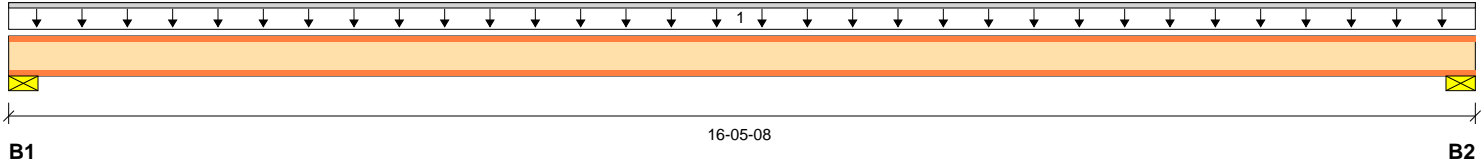
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 4-1/2"	443 / 0	111 / 0			
B2, 2-1/2"	434 / 0	109 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-05-08	Top	53	13				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2133 ft-lbs	59.5%	100%	1	08-03-12
End Reaction	543 lbs	45.3%	100%	1	16-05-08
End Shear	529 lbs	29.0%	100%	1	00-04-08
Total Load Deflection	L/877 (0.219")	27.4%	n/a	1	08-03-12
Live Load Deflection	L/1097 (0.175")	43.8%	n/a	2	08-03-12
Max Defl.	0.219"	n/a	n/a	1	08-03-12
Span / Depth	13.7				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 4-1/2" x 1-3/4"	554 lbs	16.6%	38.2%	Unspecified
B2	Wall/Plate 2-1/2" x 1-3/4"	543 lbs	29.2%	45.3%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

Disclosure

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-8(i10887) (Floor Joist)

Dry | 1 span | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-8(i10887)

City, State, Zip:

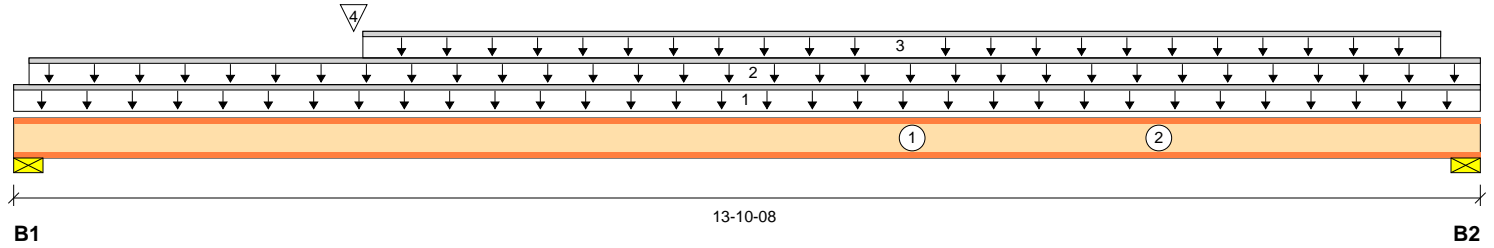
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Total Horizontal Product Length = 13-10-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	272 / 0	349 / 0			
B2, 4-1/2"	279 / 0	442 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	13-10-08	Top	7	2				n/a
2	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-01-12	13-10-08	Top	33	8				n/a
3	NB12(i2804)	Unf. Lin. (lb/ft)	L	03-03-10	13-06-00	Top		57				n/a
4	-	Conc. Pt. (lbs)	L	03-02-10	03-02-10	Top		73				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2350 ft-lbs	65.6%	100%	1	06-11-00
End Reaction	721 lbs	49.7%	100%	1	13-10-08
End Shear	702 lbs	38.5%	100%	1	13-06-00
Hole #1 Shear	206 lbs	32.1%	100%	2	08-06-00
Hole #2 Shear	428 lbs	66.8%	100%	4	10-10-00
Total Load Deflection	L/914 (0.175")	26.3%	n/a	1	06-11-00
Live Load Deflection	L/999 (0.066")	n/a	n/a	6	06-11-00
Max Defl.	0.175"	n/a	n/a	1	06-11-00
Span / Depth	11.4				
Hole Location	Valid				

Hole Summary

	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	08-06-00	7"	L	9"		Circular	Horizontal
H02	10-10-00	7"	L	9"		Circular	Horizontal

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 1-3/4"	621 lbs	23.9%	42.8%	Unspecified
B2	Wall/Plate 4-1/2" x 1-3/4"	721 lbs	21.5%	49.7%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
 Design based on Dry Service Condition.

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Single 14" BCI® 4500s-1.8

PASSED

2nd floor\Floor Joists\FJ-9(i10886) (Floor Joist)

Dry | 1 span | No cant. | 24 OCS | Repetitive | Glued & nailed

February 2, 2021 11:28:02

BC CALC® Member Report

Build 7493

Job name:

File name: 2564083 MLP745 KENT.mmdl

Address:

Description: 2nd floor\Floor Joists\FJ-9(i10886)

City, State, Zip:

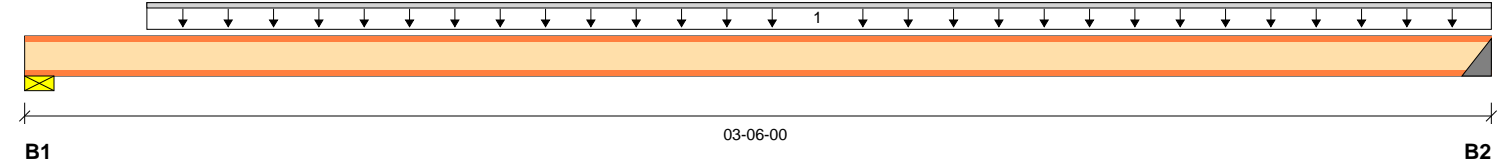
Specifier:

Customer: H & H HOMES

Designer:

Code reports: ESR-1336

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	30 / 0	8 / 0			
B2, 2"	34 / 0	8 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	OCS
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-03-08	03-06-00	Top	20	5				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	31 ft-lbs	0.9%	100%	1	01-09-12
End Reaction	42 lbs	3.9%	100%	1	03-06-00
End Shear	38 lbs	2.1%	100%	1	00-03-08
Total Load Deflection	L/999 (0")	n/a	n/a	1	01-09-12
Live Load Deflection	L/999 (0")	n/a	n/a	2	01-09-12
Max Defl.	0"	n/a	n/a	1	01-09-12
Span / Depth	2.7				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 1-3/4"	38 lbs	1.5%	2.6%	Unspecified
B2	Hanger 2" x 1-3/4"	42 lbs	3.6%	3.9%	IUS 1.81/14

Cautions

Hanger IUS1.81/14 requires (12) 10dx1.5 face nails, (2) Strong-Grip joist nails.

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Calculations assume member is fully braced.
- Hanger Manufacturer: Simpson Strong-Tie, Inc.
- BC CALC® analysis is based on IBC 2012.
- Composite EI value based on 23/32" thick OSB sheathing glued and nailed to member.
- Design based on Dry Service Condition.

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