

## General Data

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Name: Designs\FB01  
Design Type: Floor Beam 0/12  
Number or spans: 1 Repetitive: n/a  
Left Cant.: No Construction: n/a  
Right Cant.: No

## Product Data

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Product name: 3-1/2" x 11-1/4" VERSA-LAM® 1.7 2650 DF

E / 10<sup>6</sup> = 1.70 psi EI / 10<sup>6</sup> = 705.98 lb-in<sup>2</sup>  
K / 10<sup>6</sup> = 0.00 lbs

Allowable resistive moment at 100% = 16,421 ft-lbs  
Allowable end shear at 100% = 7,481 lbs  
Allowable continuous shear at 100% = 7,481 lbs

## Modification Factors

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### Pos. Moment

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Load Duration	115.00
Lateral Stability	1.00
Moisture Content	1.00

### End Shear

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Load Duration	115.00
Moisture Content	1.00

### Member Bearing

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Load Duration	1.15
Moisture Content	1.00

## Member Final Load Cases: Span Data

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Load Case #0: (1.00D)  
1.00 Dead Load

Type	Start Pos	End Pos	Start Value	End Value
Dead Load	00-02-12	09-07-12	225 lb/ft	----
Dead Load	00-02-12	09-07-12	10 lb/ft	----
Dead Load	00-00-00	----	52 lbs	----
Dead Load	00-00-00	----	2 lbs	----
Dead Load	09-10-08	----	52 lbs	----
Dead Load	09-10-08	----	2 lbs	----

### Span 1

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Moment Left:	-0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	2,606 ft-lbs
Shear Left:	-1,092 lbs
Shear Right:	1,092 lbs
Shear Red. Left:	220 lbs
Shear Red. Right:	220 lbs
Total Defl:	0.059"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	1,161 lbs

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Load Case #1: (1.00D+1.00L)  
1.00 Dead Load + 1.00 Live Load on span #1

Type	Start Pos	End Pos	Start Value	End Value
Live Load	00-02-12	09-07-12	600 lb/ft	----
Dead Load	00-02-12	09-07-12	225 lb/ft	----
Dead Load	00-02-12	09-07-12	10 lb/ft	----
Live Load	00-00-00	----	138 lbs	----
Dead Load	00-00-00	----	52 lbs	----
Dead Load	00-00-00	----	2 lbs	----
Live Load	09-10-08	----	138 lbs	----
Dead Load	09-10-08	----	52 lbs	----
Dead Load	09-10-08	----	2 lbs	----

Span 1

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Moment Left:	-0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	9,257 ft-lbs
Shear Left:	-3,880 lbs
Shear Right:	3,880 lbs
Shear Red. Left:	783 lbs
Shear Red. Right:	783 lbs
Total Defl:	0.209"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	4,123 lbs

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Load Case #2: (1.00D+1.00S)

1.00 Dead Load + 1.00 Snow Load on span #1

Type	Start Pos	End Pos	Start Value	End Value
Dead Load	00-02-12	09-07-12	225 lb/ft	----
Snow Load	00-02-12	09-07-12	600 lb/ft	----
Dead Load	00-02-12	09-07-12	10 lb/ft	----
Dead Load	00-00-00	----	52 lbs	----
Snow Load	00-00-00	----	138 lbs	----
Dead Load	00-00-00	----	2 lbs	----
Dead Load	09-10-08	----	52 lbs	----
Snow Load	09-10-08	----	138 lbs	----
Dead Load	09-10-08	----	2 lbs	----

Span 1

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Moment Left:	-0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	9,257 ft-lbs
Shear Left:	-3,880 lbs
Shear Right:	3,880 lbs
Shear Red. Left:	783 lbs
Shear Red. Right:	783 lbs
Total Defl:	0.209"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	4,123 lbs

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Load Case #3: (1.00D+0.75S+0.75L)

1.00 Dead Load + 0.75 Live Load on span #1 + 0.75 Snow Load on span #1

Type	Start Pos	End Pos	Start Value	End Value
Live Load	00-02-12	09-07-12	600 lb/ft	----
Dead Load	00-02-12	09-07-12	225 lb/ft	----
Snow Load	00-02-12	09-07-12	600 lb/ft	----
Dead Load	00-02-12	09-07-12	10 lb/ft	----
Live Load	00-00-00	----	138 lbs	----
Dead Load	00-00-00	----	52 lbs	----
Snow Load	00-00-00	----	138 lbs	----
Dead Load	00-00-00	----	2 lbs	----
Live Load	09-10-08	----	138 lbs	----
Dead Load	09-10-08	----	52 lbs	----
Snow Load	09-10-08	----	138 lbs	----
Dead Load	09-10-08	----	2 lbs	----

Span 1

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Moment Left:	-0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	12,582 ft-lbs
Shear Left:	-5,274 lbs
Shear Right:	5,274 lbs
Shear Red. Left:	1,064 lbs
Shear Red. Right:	1,064 lbs
Total Defl:	0.284"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	5,605 lbs

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Load Case #4: (1.00L)

1.00 Live Load on span #1

Type	Start Pos	End Pos	Start Value	End Value
Live Load	00-02-12	09-07-12	600 lb/ft	----
Live Load	00-00-00	----	138 lbs	----
Live Load	09-10-08	----	138 lbs	----

Span 1

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Moment Left:	0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	6,651 ft-lbs
Shear Left:	-2,787 lbs
Shear Right:	2,788 lbs
Shear Red. Left:	562 lbs
Shear Red. Right:	562 lbs
Total Defl:	0.15"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	2,962 lbs

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Load Case #5: (1.00S)

1.00 Snow Load on span #1

Type	Start Pos	End Pos	Start Value	End Value
Snow Load	00-02-12	09-07-12	600 lb/ft	----
Snow Load	00-00-00	----	138 lbs	----
Snow Load	09-10-08	----	138 lbs	----

	Span 1
Moment Left:	0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	6,651 ft-lbs
Shear Left:	-2,787 lbs
Shear Right:	2,788 lbs
Shear Red. Left:	562 lbs
Shear Red. Right:	562 lbs
Total Defl:	0.15"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	2,962 lbs

Load Case #6: (0.75S+0.75L)  
0.75 Live Load on span #1 + 0.75 Snow Load on span #1

Type	Start Pos	End Pos	Start Value	End Value
Live Load	00-02-12	09-07-12	600 lb/ft	----
Snow Load	00-02-12	09-07-12	600 lb/ft	----
Live Load	00-00-00	----	138 lbs	----
Snow Load	00-00-00	----	138 lbs	----
Live Load	09-10-08	----	138 lbs	----
Snow Load	09-10-08	----	138 lbs	----

	Span 1
Moment Left:	0 ft-lbs
Moment Right:	0 ft-lbs
Bending:	9,976 ft-lbs
Shear Left:	-4,181 lbs
Shear Right:	4,181 lbs
Shear Red. Left:	844 lbs
Shear Red. Right:	844 lbs
Total Defl:	0.226"
Total Neg. Defl:	-0"
Uplift:	0 lbs
Reaction @ B0:	4,444 lbs

### Member Final Load Cases: Maximums

Load Case #0: (1.00D)  
1.00 Dead Load

Max Moment	Span: 1	2,606 ft-lbs
Max Shear	Span: 1	1,092 lbs

Load Case #1: (1.00D+1.00L)  
1.00 Dead Load + 1.00 Live Load on span #1

Max Moment	Span: 1	9,257 ft-lbs
Max Shear	Span: 1	3,880 lbs

Load Case #2: (1.00D+1.00S)  
1.00 Dead Load + 1.00 Snow Load on span #1

Max Moment	Span: 1	9,257 ft-lbs
Max Shear	Span: 1	3,880 lbs

Load Case #3: (1.00D+0.75S+0.75L)  
1.00 Dead Load + 0.75 Live Load on span #1 + 0.75 Snow Load on span #1

Max Moment	Span: 1	12,582 ft-lbs
Max Shear	Span: 1	5,274 lbs

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Load Case #4: (1.00L)  
1.00 Live Load on span #1

Max Moment	Span: 1	6,651 ft-lbs
Max Shear	Span: 1	2,788 lbs

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Load Case #5: (1.00S)  
1.00 Snow Load on span #1

Max Moment	Span: 1	6,651 ft-lbs
Max Shear	Span: 1	2,788 lbs

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Load Case #6: (0.75S+0.75L)  
0.75 Live Load on span #1 + 0.75 Snow Load on span #1

Max Moment	Span: 1	9,976 ft-lbs
Max Shear	Span: 1	4,181 lbs