

Customer Ph..

Job Name: B

Level: 1st FLOOR
Label: GDH2 - i28
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8

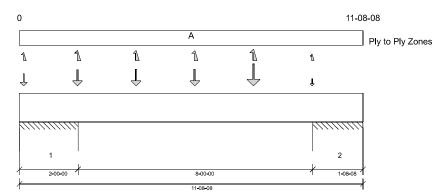
Report Version: 2023.09.18

Status:

Design Passed

09/11/2024 15:36

Illustration Not to Scale. Pitch: 0/12 Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential

Service Condition: Dry System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 1'- 10 1/2" Bottom: 11'- 8 1/2"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 1 1/2"
- 1323 psi Wall @ 1'- 10 1/2"

1323 psi	vvali	@ 1-10 1/2
1323 psi	Wall	@ 10'- 1 1/2"
1323 psi	Wall	@ 11'- 7"
	1323 psi	1323 psi Wall 1323 psi Wall 1323 psi Wall

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	5'- 11 3/4"	D + Lr	1.15	1827 lb ft	24296 lb ft	Passed - 8%
Max Neg. Moment:	10'- 1 1/2"	D + Lr	1.15	2575 lb ft	22324 lb ft	Passed - 12%
Max Shear:	9'- 1/8"	D + Lr	1.15	1710 lb	9241 lb	Passed - 19%
Total Load (TL) Pos. Defl.:	6'- 11/16"	D + Lr		0.015"	L/240	Passed - L/999

SUF	PPORT AND	REACTION INFORM	IATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	5-04	0.6D + 0.6W	1.60	143 lb		19174 lb	24310 lb	Passed - 1%
1	5-04	D + Lr	1.15		-965 lb	-	-	
1	1-06-00	D + Lr	1.15	3550 lb		47250 lb	83349 lb	Passed - 8%
1	1-06-00	0.6D + 0.6W	1.60		-540 lb	-	-	
2	1-01-12	D + Lr	1.15	3620 lb		36094 lb	63669 lb	Passed - 10%
2	1-01-12	0.6D + 0.6W	1.60		-355 lb	-	-	
2	6-12	0.6D + 0.6W	1.60	177 lb		24652 lb	31256 lb	Passed - 1%
2	6-12	D + Lr	1.15		-1756 lb	-	-	

l	LOADI	NG								
l	Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
l	Self Weight	0'	11'- 8 1/2"	Self Weight	Тор	11 lb/ft	-	-	-	-
ı	Point	0'- 1 3/4"	0'- 1 3/4"	C1(c01)	Top	316 lb	-	162 l b	234 l b	82/-317 lb
ı	Point	1'- 11 3/4"	1'- 11 3/4"	C1(c02)	Тор	409 lb	-	291 lb	421 lb	148/-574 lb
ı	Point	3'- 11 3/4"	3'- 11 3/4"	C2(c01)	Тор	419 lb	-	304 l b	440 lb	134/-568 lb
ı	Point	5'- 11 3/4"	5'- 11 3/4"	C3(c01)	Тор	419 lb	-	304 l b	440 lb	134/-534 lb
ı	Point	7'- 11 3/4"	7'- 11 3/4"	C4GR(c01)	Тор	698 l b	-	415 lb	628/-15 l b	182/-690 lb
ı	Point	9'- 11 3/4"	9'- 11 3/4"	J9(c01)	Тор	55 l b	-	49 l b	71 l b	32/-131 lb

UNFAC	UNFACTORED REACTIONS											
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)				
1	0'	2'	E14(i26)	1754/-285 lb	-	1172/-244 lb	1978/-631 l b	533 lb/ -2141 lb				
==>	0'- 1 1/2"	0'- 1 1/2"	E14(i26)	-285 l b	-	-244 l b	252/-612 lb	-				
==>	1'- 10 1/2"	1'- 10 1/2"	E14(i26)	1754 l b	-	1172 l b	1726/-19 l b	-				
2	10'	11'- 8 1/2"	E8(i5)	1876/-901 I b	-	1166/-569 lb	1739/ - 865 l b	533 lb/ -2141 lb				
==>	10'- 1 1/2"	10'- 1 1/2"	E8(i5)	1876 I b	-	1166 I b	1729/-22 lb	-				
==>	11'- 7"	11'- 7"	E8(i5)	-901 l b	-	-569 l b	10/-843 I b	-				

DESIGN NOTES

- CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99

PLY TO PLY CONNECTION



Customer Ph...

Job Name: B

Level: 1st FLOOR Label: GDH2 - i28 Type: Beam

2 Ply Member

Status: Design

2.0 RigidLam DF LVL 1-3/4 x 11-7/8 **Passed**

PLY TO PLY CONNECTION

• Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 24. Row = 2, Spacing = 12" 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.

X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)

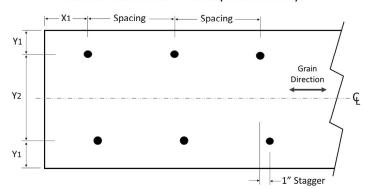




Illustration Not to Scale. Pitch: 0/12

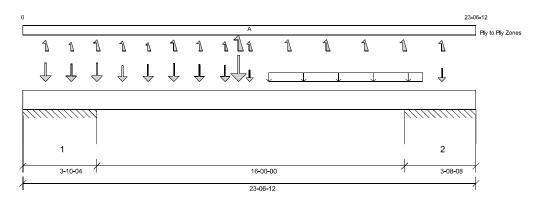
City: Customer Ph.. Job Name: B

Level: 1st FLOOR Label: GDH1 - i29 Type: Beam 2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8 Status:

Design Passed

Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26

Report Version: 2023.09.18 09/11/2024 15:36



DESIGN INFORMATION a

Building Code: IRC 2021
Design Methodology: ASD

Risk Category: II (General Construction)

Residential

Service Condition: Dry System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 11'- 2 3/4" Bottom: 23'- 6 3/4"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 1 1/2"
- 1323 psi Wall @ 3'- 8 3/4"
- 1323 psi Wall @ 19'- 11 3/4"
- 1323 psi Wall @ 23'- 5 1/4"

l	ANALYSIS RESULTS						
1	Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
l	Max Pos. Moment:	11'- 4 1/2"	D + 0.75(L + Lr)	1.15	2513 lb ft	22480 lb ft	Passed - 11%
l	Max Neg. Moment:	3'- 8 3/4"	D + 0.75(L + Lr)	1.15	3419 lb ft	15816 lb ft	Passed - 22%
l	Max Shear:	4'- 10 1/8"	D + 0.75(L + Lr)	1.15	1341 lb	9241 lb	Passed - 15%
l	Live Load (LL) Pos. Defl.:	11'- 6 7/16"	0.75(L + Lr + 0.6W)		0.033"	L/360	Passed - L/999
l	Total Load (TL) Pos. Defl.:	11'- 5 1/4"	D + 0.75(L + Lr + 0.6W)		0.081"	L/240	Passed - L/999

SUP	PORT AND	REACTION INFORM	ATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	9-12	0.6D + 0.6W	1.60	9 lb		35609 lb	45147 lb	Passed - 0%
1	9-12	D + 0.75(L + Lr)	1.15		-746 lb	-	-	
1	1-06-00	D + 0.75(L + Lr)	1.15	2812 lb		47250 lb	83349 lb	Passed - 6%
2	1-06-00	D + S	1.15	1839 lb		47250 lb	83349 lb	Passed - 4%
2	1-06-00	0.6D + 0.6W	1.60		-220 lb	-	-	
2	1-00-08	0.6D + 0.6W	1.60	28 lb		45652 lb	57881 lb	Passed - 0%
2	1-00-08	D + 0.75(L + Lr)	1.15		-715 lb	-	-	

Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	23'- 6 3/4"	Self Weight	Тор	11 lb/ft	-	-	-	-
Uniform	12'- 9 1/2"	20'- 9 1/2"	Smoothed Load	Тор	29 lb/ft	-	28 lb/ft	41 lb/ft	12 lb/ft
Point	1'- 2 1/4"	1'- 2 1/4"	F4GE(c01)	Тор	170 l b	35 l b	44 lb	82 l b	27/ - 131 l b
Point	2'- 6 1/4"	2'- 6 1/4"	F4GE(c01)	Тор	167 l b	36 l b	39 lb	69 l b	20/-71 l b
Point	3'- 10 1/4"	3'- 10 1/4"	F4GE(c01)	Top	164 l b	37 lb	41 l b	81 l b	26/-145 l b
Point	5'- 2 1/4"	5'- 2 1/4"	F4GE(c01)	Тор	148 l b	37 lb	25 l b	58/-3 lb	13/-106 l b
Point	6'- 6 1/4"	6'- 6 1/4"	F4GE(c01)	Тор	166 l b	37 l b	38 lb	63 lb	16/-64 l b
Point	7'- 10 1/4"	7'- 10 1/4"	F4GE(c01)	Тор	162 l b	36 lb	40 l b	80 l b	26/-141 l b
Point	9'- 2 1/4"	9'- 2 1/4"	F4GE(c01)	Тор	159 l b	36 lb	31 lb	69 lb	19/-113 l b
Point	10'- 6 1/4"	10'- 6 1/4"	F4GE(c01)	Тор	135 l b	31/-1 l b	31 l b	67/-10 l b	20/-82 lb
Point	11'- 2 11/16"	11'- 2 11/16"	-	Тор	225 l b	127/-7 I b	68 l b	116/-19 l b	44/-255 l b
Point	11'- 9 1/2"	11'- 9 1/2"	J8(c01)	Тор	44 l b	-	36 lb	52 lb	15/-95 l b
Point	13'- 9 1/2"	13'- 9 1/2"	J8(c02)	Top	-	-	-	-	-150 lb
Point	15'- 9 1/2"	15'- 9 1/2"	J8(c03)	Top	-	-	-	-	-150 l b
Point	17'- 9 1/2"	17'- 9 1/2"	J8(c04)	Top	-	-	-	-	-150 l b
Point	19'- 9 1/2"	19'- 9 1/2"	J8(c01)	Top	-	-	-	-	-150 lb
Point	21'- 9 1/2"	21'- 9 1/2"	J8(c01)	Тор	54 l b	-	49 lb	71 l b	21/-127 l b

UNFA	CTORED R	EACTIONS						
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	3'- 10 1/4"	E15(i27)	1834/-404 lb	465/ - 154 l b	471/-127 l b	938/-334 lb	153 lb/ -1121 lb
==>	0'- 1 1/2"	0'- 1 1/2"	E15(i27)	-404 l b	34/-146 lb	-127 l b	77/-299 l b	=
==>	3'- 8 3/4"	3'- 8 3/4"	E15(i27)	1834 I b	431/-8 l b	471 lb	861/-35 l b	=
2	19'- 10 1/4"	23'- 6 3/4"	E10(i7)	1074/-416 lb	201/-111 l b	473/-152 l b	789/-317 l b	153 lb/ -1121 lb
==>	19'- 11 3/4"	19'- 11 3/4"	E10(i7)	1074 I b	197/-7 I b	473 lb	752/-27 I b	-
==>	23'- 5 1/4"	23'- 5 1/4"	E10(i7)	-416 l b	4/-104 lb	-152 l b	37/-290 lb	-

DESIGN NOTES

LOADING

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Customer Ph...

Job Name: B

Level: 1st FLOOR Label: **GDH1 - i29** Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8

Status: Design **Passed**

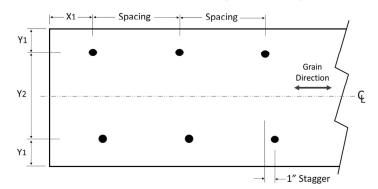
DESIGN NOTES

- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.83

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 48. Row = 2, Spacing = 12" 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.
 - X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION - 2 ROWS (FROM ONE FACE)





Customer Ph..

Job Name: B

Level: 1st FLOOR
Label: DB1-2 - i30
Type: Beam

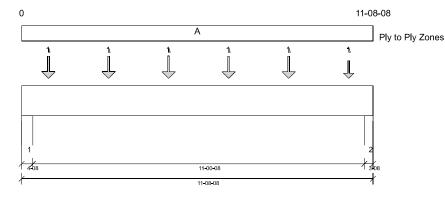
2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 11-7/8 Status:

Design Passed

2 lb/ -31 lb

Illustration Not to Scale. Pitch: 0/12 Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26

Report Version: 2023.09.18 09/11/2024 15:36



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential ndition: Dry

Service Condition: Dry
System Spacing: LL Deflection Limit: L/260 0.75"

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 1'- 8 1/2" Bottom: 11'- 5"

Bearing Stress of Support Material:

- 1323 psi Wall @ 0'- 3 1/2"
- 1323 psi Wall @ 11'- 6"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	4'- 10 3/4"	D + L	1.00	18290 lb ft	21161 lb ft	Passed - 86%
Max Shear:	1'- 4 3/8"	D + L	1.00	5925 lb	8035 lb	Passed - 74%
Live Load (LL) Pos. Defl.:	5'- 10 5/8"	L		0.306"	L/360	Passed - L/433
Total Load (TL) Pos. Defl.:	5'- 10 5/8"	D + L		0.427"	L/240	Passed - L/310

П	SUP	PORT AND	REACTION IN	IFORMAT	ION								
	ID	Input Bearing Length	Controlling Lo		LDF	Downwa Reactio			Resistance of Member		stance ipport	Res	ult
П	1	4-08	D + L		1.00	7047 ll)		11813 lb	208	37 lb	Passed	- 60%
Ш	2	3-08	D + L		1.00	6484 II)		9188 lb	162	07 lb	Passed	- 71%
l	LOA	DING											
l	Туре	Start Loc	End Loc	Source	F	ace I	Dead (D)	Live (L) Sno	w (S)	Roof Live (Lr) W	ind (W)

Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	2110W (2)	Roof Live (Lr)	vvina (vv)				
Self Weight	0'	11'- 8 1/2"	Self Weight	Тор	11 lb/ft	-	-	-	-				
Point	0'- 10 3/4"	0'- 10 3/4"	F1(c04)	Тор	644 I b	1693 lb	5 l b	7 l b	2/-11 l b				
Point	2'- 10 3/4"	2'- 10 3/4"	F1(c03)	Тор	644 I b	1695 lb	4 lb	6 lb	2/ - 9 l b				
Point	4'- 10 3/4"	4'- 10 3/4"	F1(c04)	Тор	643 lb	1695 lb	3 lb	5 l b	2/-7 lb				
Point	6'- 10 3/4"	6'- 10 3/4"	F1(c05)	Тор	647 I b	1695 lb	6 l b	10/0 l b	3/-11 l b				
Point	8'- 10 3/4"	8'- 10 3/4"	F1(c06)	Тор	649 lb	1695 l b	9 l b	15/0 l b	5/-19 l b				
Point	10'- 10 3/4"	10'- 10 3/4"	F1(c01)	Тор	511 l b	1192 l b	0 l b	1 l b	0/-1 l b				
UNFA	UNFACTORED REACTIONS												
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)				
1	0'	0'- 4 1/2"	4(i25)		1991 lb	5056 lb	14 lb	22 l b	2 lb/ -31 lb				

1875 lb

4609 lb

13 lb

22 lb

DESIGN NOTES

11'- 5"

11'- 8 1/2"

• The dead loads used in the design of this member were applied to the structure as projected dead loads.

E2(i3)

- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- · Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 0.99

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 24. Row = 2, Spacing = 12"
 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5"
 - X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



Customer: Street 1: City: Customer Ph... Job Name: **B**

Level: 1st FLOOR
Label: DB1-2 - i30
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4

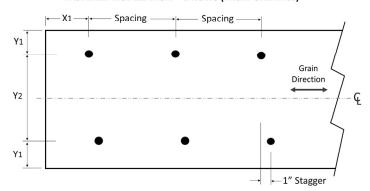
x 11-7/8

Status:

Design
Passed

PLY TO PLY CONNECTION

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)





Customer Ph..

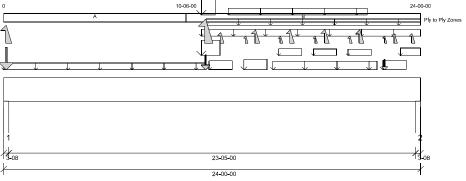
Job Name: B

Level: 1st FLOOR
Label: FB4-2 - i39
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 16 Status:

Design Passed

Illustration Not to Scale. Pitch: 0/12 Designed by Single Member Design Engine in MiTek® Structure Version Report Version: 2023.09.18 09/11/2024 15:36



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential

Service Condition: Dry System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0' Bottom: 0'

Bearing Stress of Support Material:

- 405 psi Beam @ 0'- 2 1/2"
- 425 psi Wall @ 23'- 9 1/2"

ANALYSIS RESULTS								
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result		
Max Pos. Moment:	12'- 3"	D + 0.75(L + Lr)	1.15	17644 lb ft	42799 lb ft	Passed - 41%		
Max Shear:	22'- 4 1/2"	D + 0.75(L + Lr)	1.15	2680 lb	12451 l b	Passed - 22%		
Live Load (LL) Pos. Defl.:	12'- 3 7/16"	0.75(L + Lr + 0.6W)		0.298"	L/360	Passed - L/944		
Total Load (TL) Pos. Defl.:	12'- 4 7/16"	D + 0.75(L + Lr + 0.6W)		0.720"	L/240	Passed - L/390		

l	SUPPORT AND REACTION INFORMATION								
	ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
l	1	3-08	D + 0.75(L + Lr)	1.15	2238 lb		9188 lb	4961 lb	Passed - 45%
l	2	3-08	D + 0.75(L + Lr)	1.15	3056 lb		9188 lb	5206 lb	Passed - 59%
l	LOA	DING							

Uniform 11'- 4 1/2" 12'- 2 1/4" E18(i33) Top 276 lb/ft - 188 lb/ft 273 lb/ft Uniform 11'- 8" 24' Decking (Plan View Fill) Uniform 11'- 10" 13'- 2" E18(i33) Top 79 lb/ft - 47 lb/ft 73 lb/ft Uniform 12'- 11 1/4" 20'- 11 1/4" Smoothed Load Front 16 lb/ft - 10 lb/ft 18 lb/ft Uniform 13'- 10" 15'- 2" E18(i33) Top 98 lb/ft - 72 lb/ft 112 lb/ft	- - - 82 lb/ft 89 lb/ft -
Uniform 0' 11'-8" Decking (Plan View Fill)	- 82 lb/ft
Uniform 11'- 4 1/2" 24' E18(i33) Top 65 lb/ft	
Uniform 11'- 4 1/2" 12'- 2 1/4" E18(i33) Top 276 lb/ft - 188 lb/ft 273 lb/ft Uniform 11'- 8" 24' Decking (Plan View Fill) Uniform 11'- 10" 13'- 2" E18(i33) Top 79 lb/ft - 47 lb/ft 73 lb/ft Uniform 12'- 11 1/4" 20'- 11 1/4" Smoothed Load Front 16 lb/ft - 10 lb/ft 18 lb/ft Uniform 13'- 10" 15'- 2" E18(i33) Top 98 lb/ft - 72 lb/ft 112 lb/ft	
Uniform 11'-8" 24' Decking (Plan Top 6 lb/ft 24 lb/ft	89 lb/ft -
Uniform 11'- 8" 24' Decking (Plan Top 6 lb/ft 24 lb/ft	-
Uniform 12'- 11 1/4" 20'- 11 1/4" Smoothed Load Front 16 lb/ft - 10 lb/ft 18 lb/ft Uniform 13'- 10" 15'- 2" E18(i33) Top 98 lb/ft - 72 lb/ft 112 lb/ft	
Uniform 13'-10" 15'-2" E18(i33) Top 98 lb/ft - 72 lb/ft 112 lb/ft	44 lb/ft
	4 lb/ft
Uniform 15'- 6" 21'- 6" E18(i33) Top 66 lb/ft - 50 lb/ft 77 lb/ft	66 lb/ft
	25 lb/ft
Uniform 15'-10" 17'-2" E18(i33) Top	68 lb/ft
Uniform 17'-10" 19'-2" E18(i33) Top	57 lb/ft
Uniform 19'-10" 21'-2" E18(i33) Top	16 lb/ft
Uniform 21'-10" 23'-2" E18(i33) Top 103 lb/ft - 50 lb/ft 94 lb/ft	24 lb/ft
Uniform 22'- 10 1/16" 24' E18(i33) Top 31 lb/ft - 26 lb/ft 41 lb/ft	24 lb/ft
Point 11- 7 1/2" 11- 7 1/2" - Front 133 lb 143 lb 12/-3 lb 23/-14 lb 2	2/-660 lb
Point 13'- 11 1/4" 13'- 11 1/4"	-35 lb
Point 15'- 11 1/4" 15'- 11 1/4" J8(c03) Front 9 lb	-35 lb
Point 17'- 11 1/4" 17'- 11 1/4"	-35 lb
Point 19'- 11 1/4" 19'- 11 1/4" J8(c01) Front 9 lb	-35 lb
Point 21'- 11 1/4" 21'- 11 1/4" J8(c01) Front 61 lb - 27 lb 50/- 13 lb 1	12/-29 lb
Point 0'-1 3/4" 0'-1 3/4" E21(i36) Top 239 lb - 132 lb 190 lb 6	3/-451 lb
Point 12'- 6" 12'- 6" E18(i33) Top	-178 lb
Point 14'- 6" 14'- 6" E18(i33) Top	-278 lb
Point 16'- 6" 16'- 6" E18(i33) Top	-282 l b
Point 18'- 6" 18'- 6" E18(i33) Top	-293 l b
Point 20'- 6" 20'- 6" E18(i33) Top	-274 lb
Point 22'- 6" 22'- 6" E18(i33) Top23 lb	
Point 23'-6 1/16" 23'-6 1/16" E18(i33) Top	-107 lb

UNFACTORED REACTIONS											
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)			
1	0'	0'- 3 1/2"	-	1321 l b	503 lb	467 lb	713/ - 20 l b	-			
++>	0'- 1/4"	0'- 1/4"	E12(i12)	189 l b	72 l b	67 l b	102/-3 l b	-			
++>	0'- 1 1/2"	0'- 1 1/2"	BBO1(i17)	1132 l b	431 l b	400 lb	611/-17 lb	-			
2	23'- 8 1/2"	24'	E9(i2)	1957 l b	400 lb	664 lb	1073/-66 l b	0 lb/ -184 lb			
DESIG	DESIGN NOTES										

• CAUTION: One or more plies are not supported properly at 1-12. At least 75% of every ply must be contacting support.



City: Customer Ph... Job Name: B

Level: 1st FLOOR
Label: FB4-2 - i39
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 16 Status:

Design
Passed

DESIGN NOTES

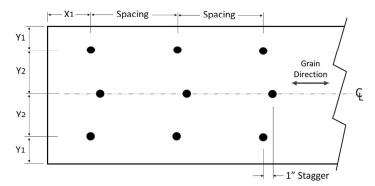
- CAUTION: One or more plies are not supported properly at 1-12. At least 75% of every ply must be contacting support.
- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 1.00
- Bearing length at support 1 was calculated based on the actual bearing area divided by the supported member width and
 may not match expected value when bearing is not rectangular or when the supported member is not supported by its full
 width.
- One or more plies are not properly supported at 1. Verify with structural engineer or EWP manufacturer if this condition is acceptable.

PLY TO PLY CONNECTION

Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 33. Row = 3, Spacing = 12"
 Zone B: Factored load = 228 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 42. Row = 3, Spacing = 12"
 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.

X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION - 3 ROWS (FROM ONE FACE)





Customer Ph..

Job Name: B

Level: 1st FLOOR
Label: FB5-2 - i40
Type: Beam

2 Ply Member 2.0 RigidLam DF LVL 1-3/4 x 16

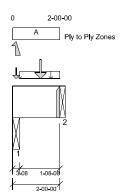
Report Version: 2023.09.18

Status: Design

Passed

09/11/2024 15:36

Illustration Not to Scale. Pitch: 0/12 Designed by Single Member Design Engine in MiTek® Structure Version 8.7.3.303.Update13.26



DESIGN INFORMATION a

Building Code: IRC 2021 Design Methodology: ASD

Risk Category: II (General Construction)

Residential rvice Condition: Dry

Service Condition: Dry System Spacing: -

LL Deflection Limit: L/360, 0.75" (absolute)
TL Deflection Limit: L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0' Bottom: 0'

Bearing Stress of Support Material:

• 750 psi Beam @ 0'- 2 1/2"

• 405 psi Beam @ 2'

	ANA	LYSIS RESU	LTS						
1		Design Criteria	Location	Load	Combination	LDF	Design	Limit	Result
l	Max F	os. Moment:	1'- 2 1/4"		D + L	1.00	198 lb ft	37216 lb ft	Passed - 1%
l	SUP	PORT AND R	EACTION INFORM	ATION					
	ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member		Result
l	1	3-08	D + L	1.00	288 lb		9188 lb	9188 lb	Passed - 3%
l	1	3-08	0.6D + 0.6W	1.60		-62 lb	-	-	
١	2	1-08	D + L	1.00	276 lb		3937 lb	-	Passed - 7%
1	001	INICATOR INIC	CONTRACT						

CONNECTOR INFORMATION

ın	Part No.	Manufacturer	Na	iling Requirem	ents	Other Information or Requirement for
ID	Part No.	Manuacturer	Тор	Face	Member	Reinforcement Accessories
2	HU414	Simpson	-	-	-	Connector manually specified by the user.

* Connectors: Refer to manufacturer's specifications, fasteners requirements and installation instruction. Where header fasteners are longer than the width of the supporting member, install backer block or clinch header nails.

LOADII	NG										
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)		
Self Weight	0'	2'	Self Weight	Тор	15 lb/ft	-	-	-	-		
Uniform	0'- 3 1/2"	2'	E19(i31)	Тор	65 lb/ft	-	-	-	-		
Point	1'- 2 1/4"	1'- 2 1/4"	F4(c01)	Back	121 l b	257 lb	-	-	-		
Point	0'- 1 3/4"	0'- 1 3/4"	E20(i32)	Тор	46 lb	-	29 lb	44 l b	16/-233 l b		
UNFAC	UNFACTORED REACTIONS										
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)		
1	0'	0'- 3 1/2"	GDH1(i29	9)	174 l b	114 lb	32 lb	48 l b	33 lb/ -290 lb		
2	2'	2'	FB4-2(i39	9)	133 lb	143 l b	-3 l b	-4 lb	33 lb/ -290 lb		

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the
 default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.
- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already
 specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if
 required) as per manufacturer's instruction.
- Beam Stability Factor used in the calculation for Allowable Max Pos Moment (CL) = 1.00

PLY TO PLY CONNECTION

- Zone A: Factored load = 209 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 6. Row = 3, Spacing = 12"
 12d (0.148"x3.25") nails properties: D = 0.148", L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25", Y1 = 0.75", Y2 = 1.5" Install fasteners from one face.
 - X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.



City: Customer Ph... Job Name: **B**

Level: 1st FLOOR
Label: FB5-2 - i40
Type: Beam

2 Ply Member

2.0 RigidLam DF LVL 1-3/4 x 16 Status:

Design
Passed

PLY TO PLY CONNECTION

FASTENER INSTALLATION – 3 ROWS (FROM ONE FACE)

