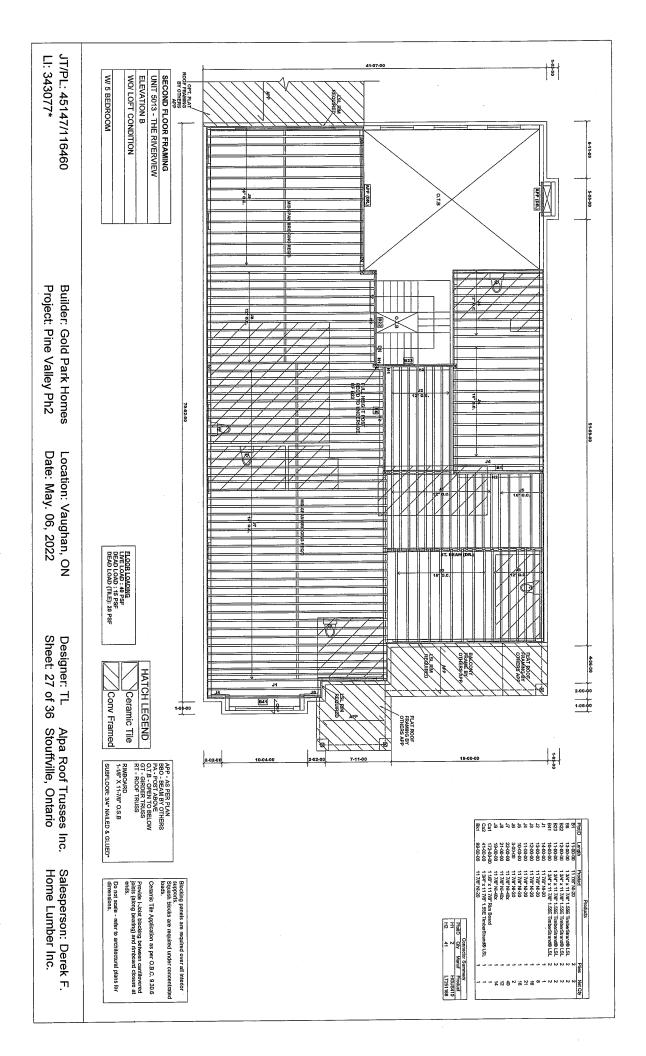
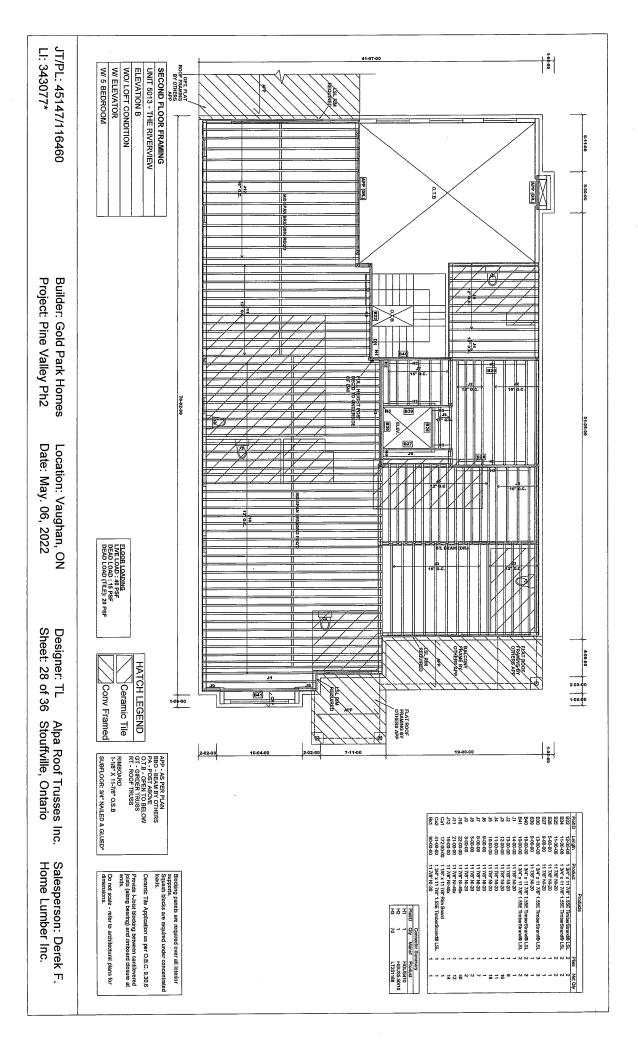
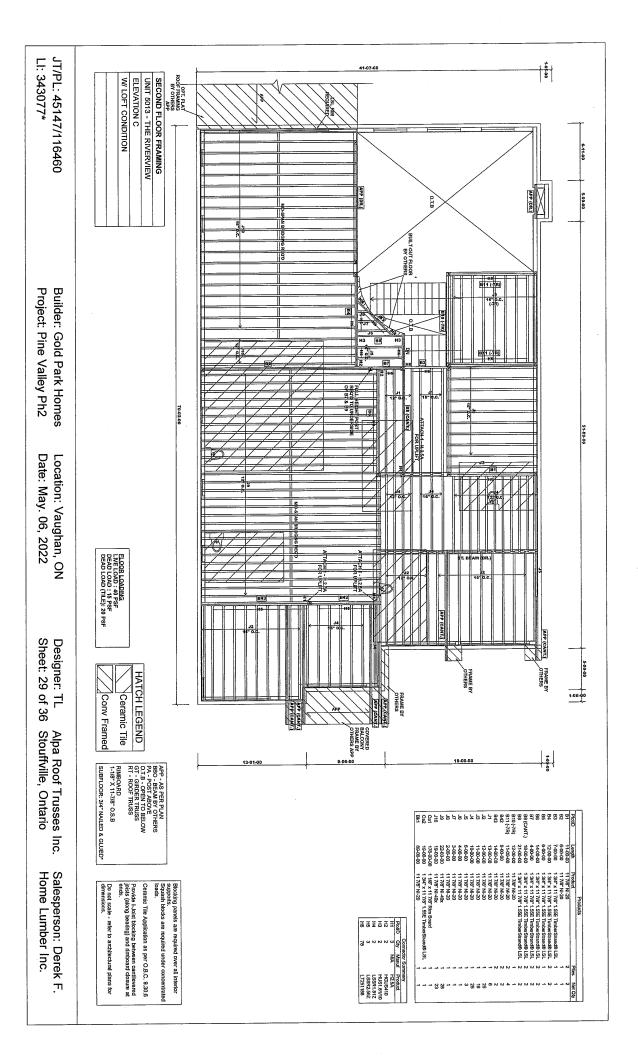
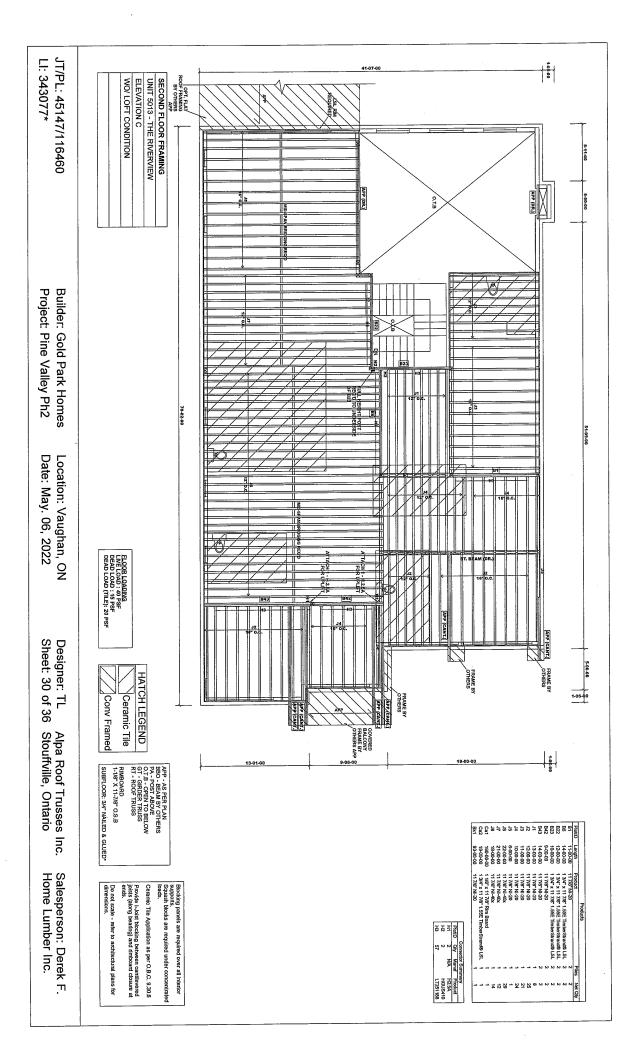


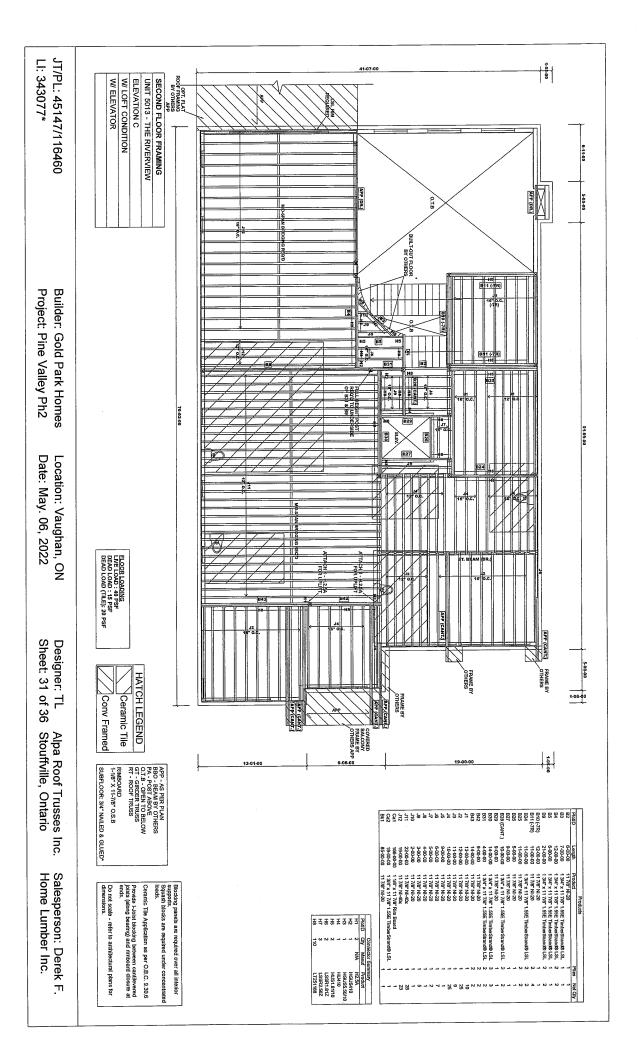
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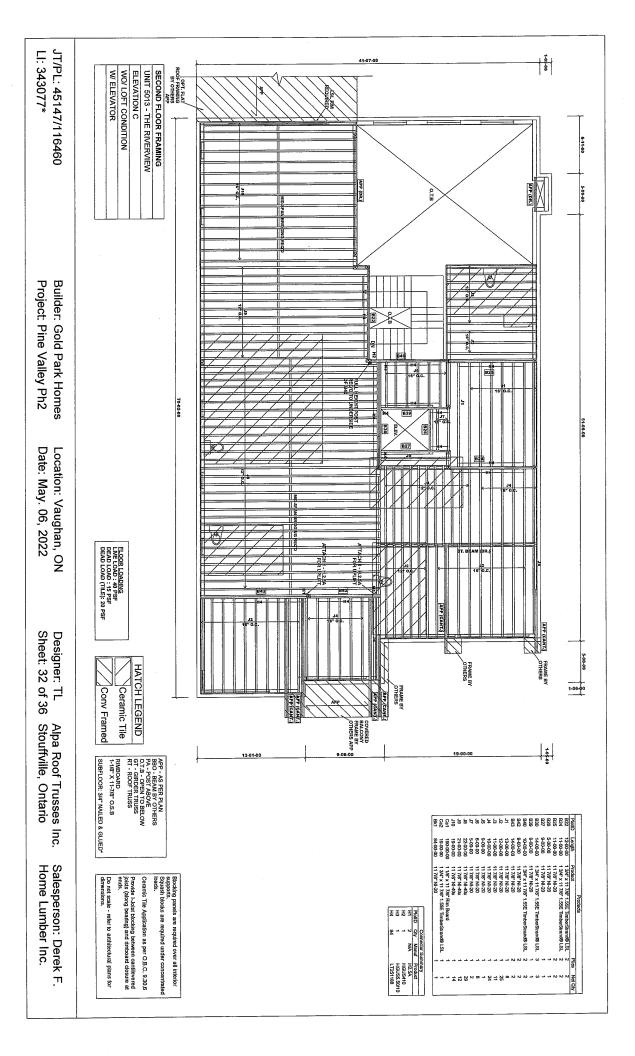


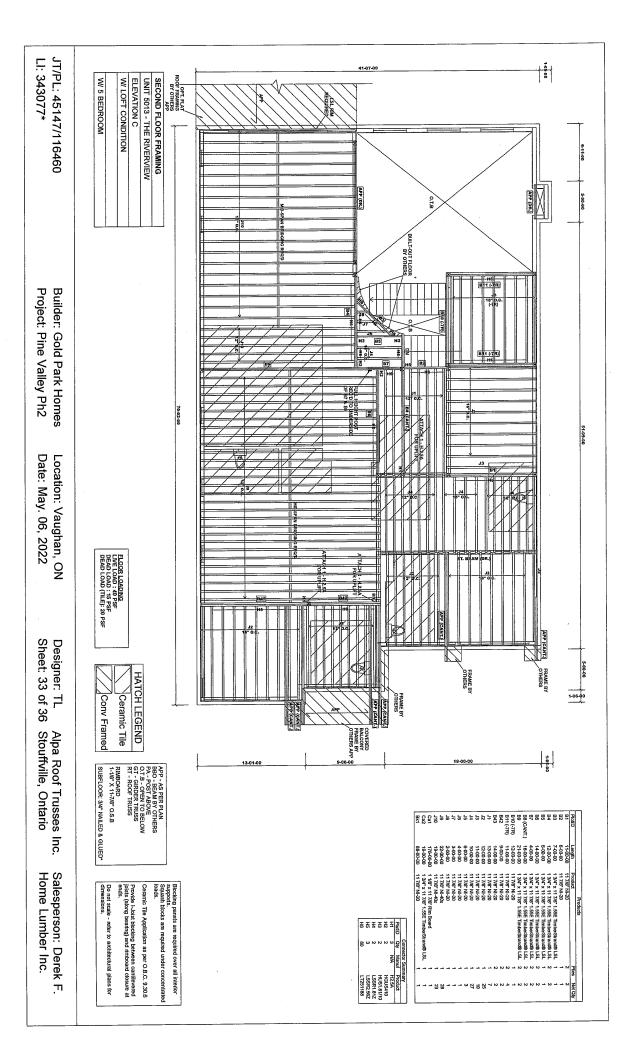


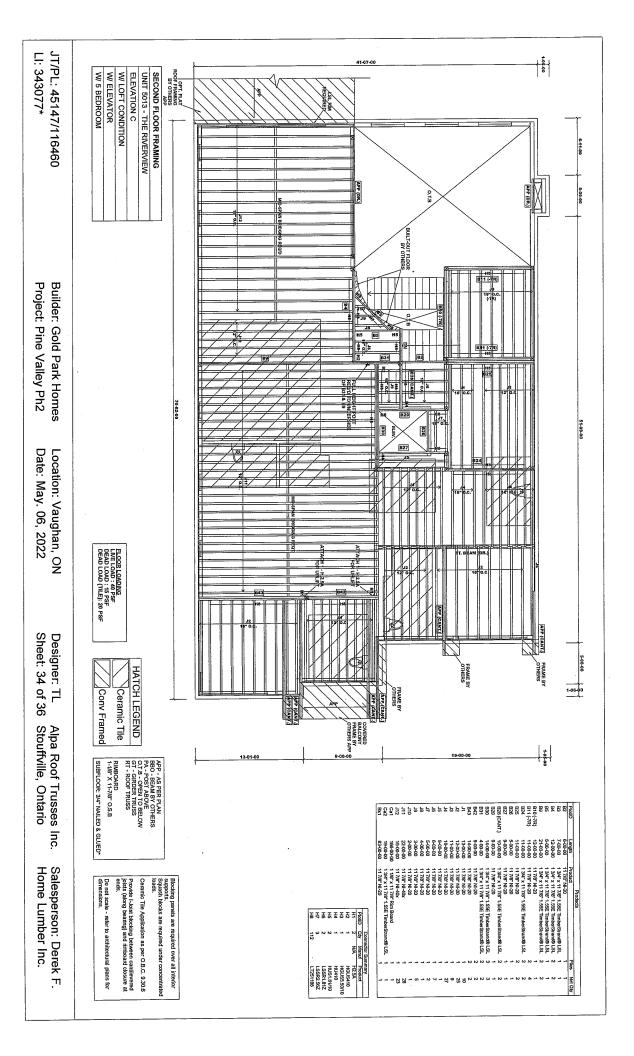


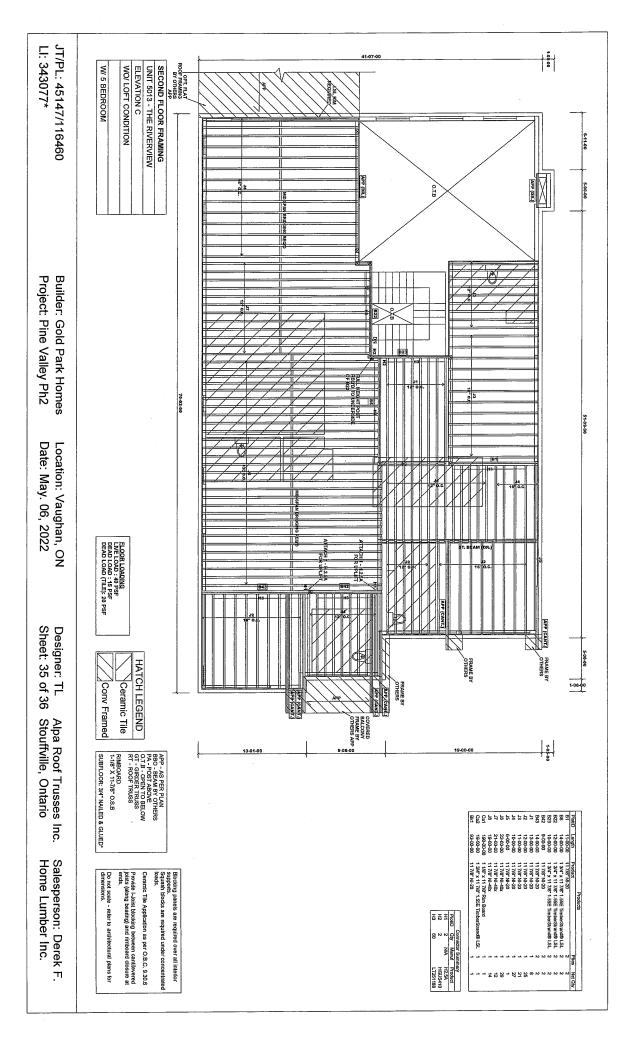


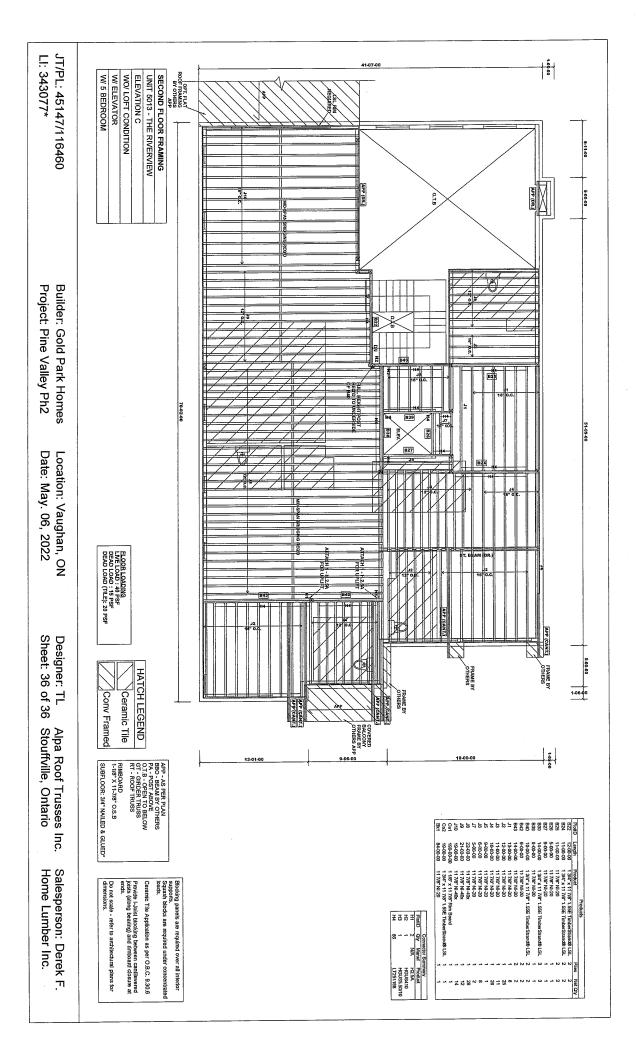














Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track:

Vaughan 45147

Job Name: 343077 Ground A + Second A (1

Level: Second Floor Label: B1 - i50389 Type: Beam

2 Ply Member

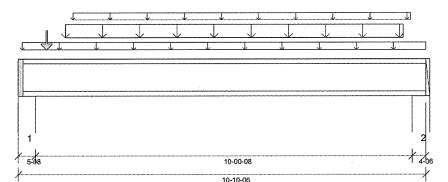
11 7/8" NI-20

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/02/2022 17:05 Report Version: 2021.03.26



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Drv LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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'- 9 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 4 1/2"
- 615 psi Wall @ 10'- 7"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 9 1/8"	1.25D + 1.5L	1.00	5751 lb ft	11160 lb ft	Passed - 52%
Factored Shear:	0'- 5 9/16"	1.25D + 1.5L	1.00	2310 lb	4480 lb	Passed - 52%
Live Load (LL) Pos. Defl.:	5'- 5 3/4"	L		0.122"	L/360	Passed - L/990
Total Load (TL) Pos. Defl.:	5'- 5 3/4"	D+L		0.182"	L/240	Passed - L/663

C:7:77	TURLARU N	(=4; (A) () (A)	NECKWALION					
ΙD	Input Bearing Length	Controlling Combine		Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D +	1.5L 1.00	2326 lb		4480 lb	16918 lb	Passed - 52%
2	4-06	1.25D +	1.5L 1.00	2135 lb		4480 lb	13458 lb	Passed - 48%
SPE	OFFED LOAD)\$						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weigh	t 0'	10'- 10 3/8"	Self Weight	Тор	6 lb/ft	•	¥	*
Uniform	n 0'- 1 1/4"	10'- 10 3/8"	FC3 Floor Decking (Plan View Fill)	Тор	7 lb/ft	18 lb/ft	*	-
Uniforn	n 1'- 3 1/8"	10'- 3 1/8"	Smoothed Load	Front	87 lb/ft	189 lb/ft	~	~
Uniform	n 1'- 5 1/2"	10'- 5 1/2"	FC3 Floor Decking (Plan View Fill)	Тор	2 lb/ft	-	-	-
Point	0'- 9 1/8"	0'- 9 1/8"	J4(i50378)	Front	82 lb	216 lb	-	
UNF	ACTORED R	EACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'- 5 1/2"	9(i41702)		528 lb	1111 lb	-	*
2	10'- 6"	10'- 10 3/8"	E25(i41701)		500 lb	1007 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.





Job Track:

Gold Park Homes

Job Address: Pine Valley Ph2 City:

Vaughan 45147

Label: Type:

Job Name: 343077 Ground A + Second A (1 Level: Second Floor

B2 - i50409 Beam

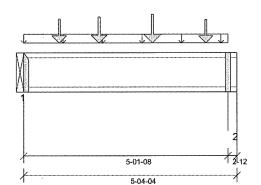
1 Ply Member 11 7/8" NI-20

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/02/2022 17:06



ESIGN		

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: LL Deflection Limit:

Dry L/360, TL Deflection Limit: L/240,

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:

Bottom: 1'- 1 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 615 psi Wall @ 5'- 2 1/2"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	2'- 9 9/16"	1.25D + 1.5L	1.00	1932 lb ft	5580 lb ft	Passed - 35%
Factored Shear:	5'- 1 7/16"	1.25D + 1.5L	1.00	1392 lb	2240 lb	Passed - 62%
Live Load (LL) Pos. Defl.:	2'- 7 1/8"	L		0.030"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	2'- 7 3/16"	D+L		0.048"	L/240	Passed - L/999
CHEROST AND BEAC	TIANUNIEAES	AATION				

SUF	PORTAND	REACTION INFOR	VIATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-12	1.25D + 1.5L	1.00	1359 lb	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1970 lb	-	Passed - 69%
2	2-12	1.25D + 1.5L	1.00	1396 lb		2090 lb	4230 lb	Passed - 67%

CONNECTOR INFORMATION	

 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.

SPECIF	FED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	o	5'- 4 1/4"	Self Weight	Тор	3 lb/ft	-	-	- 1
Uniform	-0'	5'- 1 1/2"	User Load	Тор	60 lb/ft	*	*	•
Point	0'- 10 3/4"	0'- 10 3/4"	J2(i50074)	Front	105 lb	269 lb	-	-
Point	1'- 10 3/4"	1'- 10 3/4"	J2(i50075)	Front	115 lb	307 lb	•	-
Point	3'- 2 3/4"	3'- 2 3/4"	J2(i50504)	Front	132 lb	351 lb	•	•
Point	4'- 6 3/4"	4'- 6 3/4"	J2(i50340)	Front	99 lb	263 lb	-	•
UNFAC	TORED R	EACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'	B8 (CANT.)(i5	0483)	386 lb	584 lb	•	•
2	5'- 1 1/2"	5'- 4 1/4"	9(i41702)	388.lb	607 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



CG04665



Gold Park Homes

Job Address: Pine Valley Ph2 Vaughan

City: Job Track: 45147

Second Floor Label: B3 - i50326

Beam

Job Name: 343077 Ground A + Second A (1

1 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

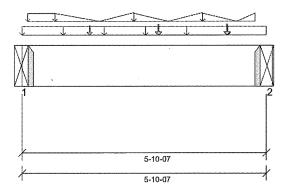
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Type:

05/02/2022 17:06 Report Version: 2021.03.26



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:**

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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'- 1 3/4"

Bottom: 1'- 5 1/8"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 5'- 10 7/16"



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 3 3/8"	1.25D + 1.5L	1.00	585 lb ft	13266 lb ft	Passed - 4%
Factored Shear:	0'- 11 7/8"	1.25D + 1.5L	1.00	256 lb	7207 lb	Passed - 4%
CHEROST AND DEAG	TION INCODE	IATION				

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-08	1.25D + 1.5L	1.00	332 lb		3440 lb	-	Passed - 10%
2	1-08	1.25D + 1.5L	1.00	397 lb		3440 lb	-	Passed - 12%

	Part No. Manufac	, Naili	ng Requirem	ents	Other Information or Requirement for
I IU	Part No. Manurac	Тор	Face	Member	Reinforcement Accessories
1	LSSR1.81Z			-	Connector manually specified by the user.
2	LSSR1.81Z	*			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.

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	-O.	5'- 10 7/16"	Self Weight	Тор	6 lb/ft	-	-	-
Uniform	-0'	5'- 10 7/16"	User Load	Тор	10 lb/ft	27 lb/ft	-	*
Tapered	0'- 1 5/8"	0'- 9 1/2"	FC3 Floor Decking (Plan View Fill)	Тор	2 To 4 lb/ft	4 To 11 lb/ft	•	-
Tapered	0'- 9 1/2"	1'- 10 3/8"	FC3 Floor Decking (Plan View Fill)	Тор	4 To 0 lb/ft	11 To 0 lb/ft	•	~
Tapered	1'- 10 3/8"	2'- 8,1/4"	FC3 Floor Decking (Plan View Fill)	Тор	0 To 12 lb/ft	0 To 33 lb/ft	-	
Tapered	2'- 8 1/4"	3'- 6 3/16"	FC3 Floor Decking (Plan View Fill)	Тор	6 To 0 lb/ft	17 To 0 lb/ft	•	-
Tapered	3'- 6 3/16"	4'- 4 1/16"	FC3 Floor Decking (Plan View Fill)	Тор	0 To 12 lb/ft	0 To 33 lb/ft	-	-
Tapered	4'- 4 1/16"	5'- 1 15/16"	FC3 Floor Decking (Plan View Fill)	Тор	6 To 0 lb/ft	17 To 0 lb/ft	-	-
Tapered	5'- 1 15/16"	5'- 7 1/4"	FC3 Floor Decking (Plan View Fill)	Тор	0 To 7 lb/ft	0 To 18 lb/ft	~	-
Point	1'- 7 9/16"	1'- 7 9/16"	J8(i50020)	Front	10 lb	28 lb	*	*
Point	3'- 3 3/8"	3'- 3 3/8"	J7(i50303)	Front	18 lb	49 lb	•	-
Point	4'- 11 1/8"	4'- 11 1/8"	J6(i50022)	Front	20 lb	53 lb	*	*
UNFAC	TOREDR	EACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	-0'	0'- 1 3/4"	B4(i49924)	************	76 lb	153 lb	*	
2	5'- 8 11/16"	5'- 10 7/16"	B5(i50292)		90 lb	192 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



Gold Park Homes

Job Address: Pine Valley Ph2

Vaughan

City: Job Track: 45147

Job Name: 343077 Ground A + Second A (1

Level: Second Floor B4 - i49924 Label: Type: Beam

2 Ply Member

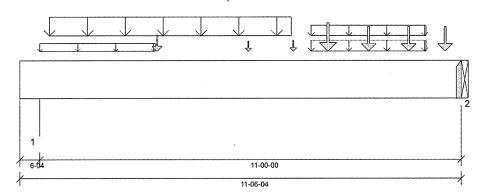
1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/02/2022 17:07



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:**

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360,

TL Deflection Limit: 1./240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 615 psì Wall @ 0'- 5 1/4"
- 769 psi Beam @ 11'- 6 1/4"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 9 " O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 11 5/8"	1.25D + 1.5L	1.00	14090 lb ft	26531 lb ft	Passed - 53%
Factored Shear:	10'- 6 3/8"	1.25D + 1.5L	1.00	4544 lb	14414 lb	Passed - 32%
Live Load (LL) Pos. Defl.:	6'	L		0.211"	L/360	Passed - L/627
Total Load (TL) Pos. Defl.:	6'- 1/16"	D+L		0.300"	L/240	Passed - L/439

SU	PPORTAND	REACTION INFOR	MATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction		Factored Resistance of Support	Result
1	6-04	1.25D + 1.5L	1.00	4683 lb		28665 lb	13458 lb	Passed - 35%
2	1-08	1.25D + 1.5L	1.00	5160 lb		6880 lb	-	Passed - 75%

CON	NECTOR	RINFO	RMA	TION

2	HGUS410			•	_	Connector manua	ally specified b	v the user.
"	raitino.	Manufacturer To	p F	ace l	Member	Reinforcement Ad	cessories	
l in	Dort No.	Monufacturer	Nailing R	equirements		Other Information	or Requireme	nt for

* 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.

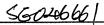
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	11'- 6 1/4"	Self Weight	Тор	13 lb/ft	-	-	•
Uniform	0'- 6 1/4"	3'- 6 7/16"	User Load	Тар	10 lb/ft	27 lb/ft	•	-
Uniform	0'- 9 1/4"	7'- 1 1/16"	Smoothed Load	Front	148 lb/ft	395 lb/ft	-	-
Uniform	7'- 7 1/4"	10'- 7 1/4"	Smoothed Load	Front	169 lb/ft	•	-	-
Tapered	7'-7 1/4"	10'- 7 1/4"	Smoothed Load	Back	-	163 To 146 lb/ft	•	
Point	8'- 9/16"	8'- 9/16"		Front	84 lb	434 lb		-
Point	9'- 1 5/16"	9'- 1 5/16"	-	Front	58 lb	372 lb	-	-
Point	10'- 1 13/16"	10'- 1 13/16"	•	Front	54 lb	372 lb	•	-
Point	11'- 1 1/4"	11'- 1 1/4"	J10(i50070)	Front	131 lb	291 lb	-	-
Point	3'- 6 15/16"	3'- 6 15/16"	B3(i50326)	Back	76 lb	153 lb	•	~
Point	5'- 11 5/8"	5'- 11 5/8"	J7(i50303)	Back	21 lb	56 lb	•	-
Point	7'- 1 5/8"	7'- 1 5/8"	J6(i50022)	Back	24 lb	64 lb	•	-

	UNFA	CTORED RI	EACTIONS					
I	al	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
ı	1	0'	0'- 6 1/4"	7(i41696)	977 lb	2311 lb	•	*
١	2	11'- 6 1/4"	11'- 6 1/4"	B9(i49806)	1107 lb	2514 lb	-	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION





Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track: Vaughan

45147

Job Name: 343077 Ground A + Second A (1

Level: Label: Type:

Second Floor B5 - i50292 Beam

1 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Report Version: 2021.03.26

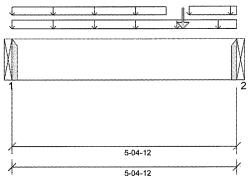
Status: Design **Passed**

05/02/2022 17:07

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version

8.5.3.233.Update5.15



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019)

Amendment) Design Methodology: LSD

Service Condition: LL Deflection Limit: TL Deflection Limit:

Dry L/360, L/240,

Lateral Restraint Requirements:

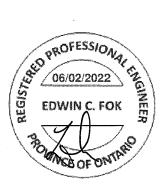
Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 0'

Bottom: 4'- 9/16"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 5'- 4 3/4"



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 10 1/16"	1.25D + 1.5L	1.00	630 lb ft	13266 lb ft	Passed - 5%
Factored Shear:	4'- 4 7/8"	1.25D + 1.5L	1.00	446 lb	7207 lb	Passed - 6%

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-08	1.25D + 1.5L	1.00	342 lb		3440 lb	*	Passed - 10%
2	1-08	1.25D + 1.5L	1.00	579 lb	•	3440 lb		Passed - 17%

	Part No. Ma	Nailing	Require	ments	Other Information or Requirement for
ľ	Partino. IVI	Тор	Face	Member	Reinforcement Accessories
1	HUS1.81/10	* .	-	-	Connector manually specified by the user.
2	HUS1.81/10	186	*		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.

SPECIF	IED LOAD	13						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	5'- 4 3/4"	Self Weight	Тор	6 lb/ft	-	-	*
Uniform	0,	5'- 4 3/4"	•	Тор	10 lb/ft	27 lb/ft	-	•
Uniform	O,	3'- 8 7/16"	FC3 Floor Decking (Plan View Fill)	Тор	5 lb/ft	12 lb/ft	-	•
Uniform	4'- 3 1/16"	5'- 4 3/4"	FC3 Floor Decking (Plan View Fill)	Тор	11 lb/ft	29 lb/ft	•	•
Point	4'- 1 5/16"	4'- 1 5/16"	B3(i50326)	Back	90 lb	192 lb	-	-
UNFAC	TORED RI	ACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	O,	O,	B4(i49924)	11111111111111111111111111111111111111	84 lb	165 lb	=	•
2	5'- 4 3/4"	5'- 4 3/4"	B8 (CANT.)(i504	183)	132 lb	270 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

SZ046662_



Job Track:

Gold Park Homes

Job Address: Pine Valley Ph2 City:

Vaughan 45147

Job Name: 343077 Ground A + Second A (1

Level: Label: Type:

Second Floor B6 - i50354 Beam

2 Ply Member

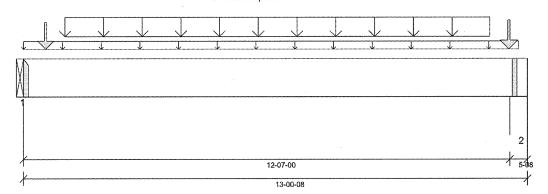
1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/02/2022 17:08



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment) LSD

Design Methodology: Service Condition:

Dry L/360.

LL Deflection Limit: TL Deflection Limit:

L/240,

_ateral 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'- 9 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 615 psi Wall @ 12'-8"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 9 " O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	6'- 6 3/4"	1.25D + 1.5L	1.00	18610 lb ft	26531 lb ft	Passed - 70%
Factored Shear:	11'- 7 1/8"	1.25D + 1.5L	1.00	6119 lb	14414 lb	Passed - 42%
live Load (LL) Pos. Defl.:	6'- 4"	L		0.348"	L/360	Passed - L/433
Total Load (TL) Pos. Defl.:	6'- 4 1/16"	D + L		0.513"	L/240	Passed - L/294
Permanent Deflection:	6'- 4 3/16"			-	L/360	Passed - L/943

	Input	Controlling Load		Factored	Factored	Factored	Factored	
ID	Bearing	Controlling Load	LDF	Downward	Uplift	Resistance	Resistance	Result
	Length	Combination		Reaction	Reaction	of Member	of Support	
1	1-08	1.25D + 1.5L	1.00	5674 lb		6880 lb	-	Passed - 82%
2	5-08	1.25D + 1.5L	1.00	6192 lb		25225 lb	11842 lb	Passed - 52%

		100	M3				888		w	ж	80	×	w	***				88	w	33	377	w	88		×	88			88		æ	w			
87	200	33		 88	ং	8	2001	۲.	w	b.	×	43		4	13	38	3.	٠.	8 4	w	44	3	*	\$	3	. 3	۴.	.98	5 3	ĸ.	e s	٠,	٠.	ε:	
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	Daw Na	Manufacturer ———	Nailing Requirer	nents	Other Information or Requirement for
w	raitivo.	Top	Face	Member	Reinforcement Accessories
1	HGUS410	•			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.

SPECIF	IED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	Oʻ	13'- 1/2"	Self Weight	Тор	13 lb/ft	-	-	•
Uniform	O,	12'- 9 3/4"	FC3 Floor Decking (Plan View Fill)	Тор	7 lb/ft	19 lb/ft	-	-
Uniform	1'- 3/4"	12'~ 3/4"	Smoothed Load	Front	189 lb/ft	424 lb/ft	*	•
Point	0'- 6 3/4"	0'- 6 3/4"	J9(i50295)	Front	157 lb	362 lb	~	-
Point	12'- 6 3/4"	12'- 6 3/4"	J9(i50177)	Front	166 lb	406 lb	~	-
UNFAC	TORED R	ACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	Oʻ	0'	B7(i50432)		1272 lb	2718 lb		•
2	12'- 7"	13'- 1/2"	4(i41664)		1404 lb	2962 lb	~	-

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall study, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION.

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



Gold Park Homes

Job Address: Pine Valley Ph2

City: Job Track: Vaughan 45147

Job Name: 343077 Ground A + Second A (1 Level:

Label:

Type:

Second Floor

B7 - i50432 Beam

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

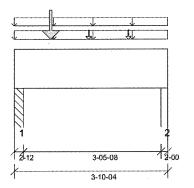
Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

05/02/2022 17:08



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, Building Code:

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD

Service Condition: Dry LL Deflection Limit: L/360,

L/240, TL Deflection Limit:

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'- 10 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 1 3/4"
- 615 psi Wall @ 3'- 9 1/4"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @6 "O/C STAGGERED IN 2 ROWS



ANAL	VSIS RESUL	r s							
D	Design Criteria	Lor	cation	Load	Combination	n LDF	Design	Limit	Result
Factore	d Pos. Moment:	: 0'	'- 11"	1.2	25D + 1.5L	1.00	3907 lb ft	26531 lb ft	Passed - 15%
Factore	d Shear:	1'-	2 5/8"	1.2	25D + 1.5L	1.00	4966 lb	14414 lb	Passed - 34%
SUPP	ORT AND RE	EACTION	INFORMA	TION					
ID	Input Bearing Length	Controlling Combina		LDF	Factored Downward Reaction	Factored Uplift Reaction	Resistance	2 12 2 11 X 11 X 12 X 12 X 12 X 12 X 12	Result
1	2-12	1.25D +	1.5L	1.00	5160 lb		12613 lb	12844 lb	Passed - 41%
2	2-00	1.25D +	1.5L	1.00	2136 lb		9171 lb	4306 lb	Passed - 50%
SPEC	IFIED LOADS								
Туре	Start Loc	End Loc	Source		Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	3'- 10 1/4"	Self Weig	jht	Тор	13 lb/ft	~		~
Uniform	0,	3'- 10 1/4"	User Loa		Тор	60 lb/ft	•	•	•
Uniform	0'	3'- 10 1/4"	FC3 Floor De (Plan View		Тор	9 lb/ft	24 lb/ft	~	•
Point	0'- 11"	0'- 11"	B6(i5035		Front	1272 lb	2718 lb	-	•
Point	1'- 10 1/2"	1'- 10 1/2"	J2(i5007:	2)	Front	103 lb	254 lb	•	*
Point	2'- 10 1/2"	2'- 10 1/2"	J2(i5053	1)	Front	112 lb	275 lb	-	~
UNFA	CTORED RE	ACTIONS	3						
ID	Start Loc	End Loc	Sar	urce		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	O,	0'- 2 3/4"	Pt1(i	49783)		1243 lb	2389 lb	*	•
2	3'- 8 1/4"	3'- 10 1/4"	10(i/	41708)		567 lb	967 lb	•	-

DESIGN NOTES

- · The dead loads used in the design of this member were applied to the structure as projected dead loads
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.
- User loads assume a bearing length of 3.5" in determining member capacity for loads near supports.
- Bearing capacity of member at support 1, 2 was verified for the effect of concentrated load applied near the support. At support 1, Required Load Area: L=3.500", W=3.500". LDF=1.00, Pf=5667 lb, Q'r=9555 lb, Result=59.31%.

PLY TO PLY CONNECTION.

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

SE04666C



omer: Gold Park Homes

Job Address: Pine Valley Ph2

City: Job Track:

Vaughan 45147

Job Name: 343077 Ground A + Second A (1

Level: Label: Type: Second Floor B8 (CANT.) - i50483

Beam

B8 (CAN I.

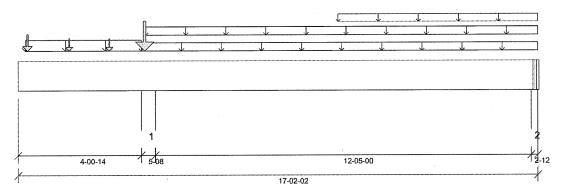
2 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL Status:

Design
Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8,5,3,293,Update5.15

Report Version: 2021.03.26 05/02/2022 17:08



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)
Design Methodology: LSD
Service Condition: Dry

Service Condition: Dry
LL Deflection Limit: L/360,
TL Deflection Limit: L/240,

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'- 2 7/8"

Bottom: 12'- 5"

Factored Resistance of Support Material:

- 615 psi Wall @ 4'- 3 5/8"
- 615 psi Wall @ 17'- 3/8"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ (2- O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	11'- 10 5/8"	1.25D + 1.5L	0.82	1431 lb ft	21868 lb ft	Passed - 7%
Factored Neg. Moment:	4'- 3 5/8"	1.25D + 1.5L	1.00	5448 lb ft	5612 lb ft	Passed - 97%
Factored Shear:	3'- 1"	1.25D + 1.5L	1.00	1795 lb	14414 lb	Passed - 12%
Live Load (LL) Neg. Defl.:	9'- 8 3/16"	L		0.063"	L/360	Passed - L/999
Total Load (TL) Neg. Defl.:	9'- 3 7/16"	D + L		0.069"	L/240	Passed - L/999

SUF	SUPPORT AND REACTION INFORMATION												
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result					
1	5-08	1.25D + 1.5L	1.00	4479 lb		25225 lb	11843 lb	Passed - 38%					
2	2-12	1.25D + 1.5L	0.82	573 lb		10395 lb	4880 lb	Passed - 12%					
2	2-12	0.9D + 1.5L	1.00		-198 lb	-	-						

SPECI	FIED LOAD	is						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	-0'	17'- 2 1/8"	Self Weight	Тор	13 lb/ft	#	•	*
Uniform	0'- 2 7/8"	4'- 7/8"	User Load	Top	38 lb/ft	100 lb/ft	-	-
Uniform	4'- 7/8"	17'- 2 1/8"	FC3 Floor Decking (Plan View Fill)	Тор	8 lb/ft	21 lb/ft	*	•
Uniform	4'- 2 5/8"	17'- 2 1/8"	FC3 Floor Decking (Plan View Fill)	Тор	8 lb/ft	23 lb/ft	•	•
Uniform	10'- 6 7/8"	17'- 2 1/8"	FC3 Floor Decking (Plan View Fill)	Тор	5 lb/ft	•	-	-
Point	0'- 3 3/4"	0'- 3 3/4"	B5(i50292)	Front	132 lb	270 lb	•	•
Point	1'- 8 1/8"	1'- 8 1/8"	J5(i50491)	Front	61 lb	163 lb	-	•
Point	3'- 1/8"	3'- 1/8"	J5(i50024)	Front	56 lb	148 lb	-	•
Point	4'~ 2 1/8"	4'~ 2 1/8"	B2(i50409)	Back	386 lb	584 lb		•

l	UNFA	CTORED RI	EACTIONS					
l	ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
ı	1	4'- 7/8"	4'- 6 3/8"	10(i41708)	1129 lb	2032 lb	-	•
ı	2	16'- 11 3/8"	17'- 2 1/8"	3(141663)	125 lb	282/-197 lb	~	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- The deflection at the cantilever for either live and/or total loads is less than 3/8" and therefore has been excluded from the deflection ratio considerations.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load
 transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

 Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



Gold Park Homes

City:

Job Address: Pine Valley Ph2 Vaughan

Job Track:

45147

Level: Label: Type:

Job Name: 343077 Ground A + Second A (1

Second Floor B9 - i49806 Beam

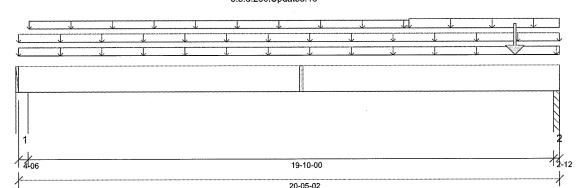
2 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8,5,3,233.Update5.15

Report Version: 2021.03.26 05/02/2022 17:09



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 **Building Code:**

Amendment)

LSD Design Methodology: Service Condition: LL Deflection Limit:

Dry L/360,

TL Deflection Limit: L/240,

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: 10'- 3 3/4"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 3 3/8"
- 1334 psi Column @ 20'- 3 3/8"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @12", O/C STAGGERED IN 2 ROWS



Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	15'- 8 13/16"	1.25D + 1.5L	1.00	9437 lb ft	26531 lb ft	Passed - 36%
Factored Shear:	19'- 2 1/2"	1.25D + 1.5L	1.00	5658 lb	14414 lb	Passed - 39%
Live Load (LL) Pos. Defl.:	11'- 2 7/8"	L		0.355"	L/360	Passed - L/670
Total Load (TL) Pos. Defl.:	11'- 1 7/8"	D+L		0.631"	L/240	Passed - L/377
Permanent Deflection:	11'- 9/16"			•	L/360	Passed - L/888

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	4-06	1.25D + 1.5L	1.00	1179 lb		20065 lb	9420 lb	Passed - 13%
2	2-12	1.25D + 1.5L	1.00	5861 lb		12613 lb	12844 lb	Passed - 46%

								1975 - 2700
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	20'- 5 1/8"	Self Weight	Тор	13 lb/ft	-	-	-
Uniform	0,	20'- 5 1/8"	FC3 Floor Decking (Plan View Fill)	Тор	5 lb/ft	14 lb/ft	~	•
Uniform	0,	18'- 8 7/8"	FC3 Floor Decking (Plan View Fill)	Тор	4 lb/ft	11 lb/ft	•	-
Uniform	0'- 4 7/8"	14'- 8 7/8"	FC3 Floor Decking (Plan View Fill)	Тор	3 lb/ft	•	-	•
Uniform	14'- 8 7/8"	20'- 5 1/8"	User Load	Top	60 lb/ft	*	*	*
Uniform	18'- 8 7/8"	20'- 5 1/8"	FC3 Floor Decking (Plan View Fill)	Тор	•	24 lb/ft	~	•
Point	18'- 8 7/8"	18'- 8 7/8"	B4(i49924)	Back	1107 lb	2514 lb	-	-

l	UNFAC	TOREDR	EACTIONS					
l	ID.	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
l	1	0,	0'- 4 3/8"	E12(i41614)	393 lb	458 lb	•	•
l	2	20'- 2 3/8"	20'- 5 1/8"	Pt1(i49783)	1570 lb	2599 lb	•	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION:

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

51-046666



Gold Park Homes

City:

Job Address: Pine Valley Ph2

Job Track:

45147

Vaughan

Job Name: **343077 Ground A + Second A (1** Level:

Second Floor B10 (-7R) - i49990

Beam

1 Ply Member 11 7/8" NI-20

Status: Design **Passed**

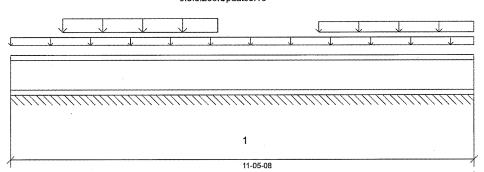
Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Label:

Type:

Report Version: 2021.03.26 05/02/2022 17:09



11-05-08

DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 **Building Code:**

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit:

TL Deflection Limit:

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'

Factored Resistance of Support Material:

ID B	Input earing ength	Controlling Combine		Factored Downward Reaction	l Uplift	Factored Resistance of Member	Factored Resistance of Support	Result
	N/A	1.25D +	1.5L 1.00	396 lb/ft		3300 lb/ft	-	Passed - 12%
	N/A	1.40	0.65	59 lb/ft		2145 lb/ft	-	Passed - 3%
SPECIF	IED LOAD)S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0;	11'- 5 1/2"	Self Weight	Тор	3 lb/ft	~	-	•
Uniform	0,	11'- 5 1/2"	FC4 Floor Decking (Plan View Fill)	Тор	6 lb/ft	15 lb/ft	•	•
Uniform	1'- 3 1/2"	5'- 1 1/2"	User Load	Тор	69 lb/ft	184 lb/ft	-	•
Uniform	7'- 7 1/2"	11'- 5 1/2"	FC4 Floor Decking (Plan View Fill)	Тор	34 lb/ft	89 lb/ft	-	-
UNFAC	TOREDR	EACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	11'- 5 1/2"			189 lb	487 lb	-	*
++>	0,	1'- 9 1/2"	2(i41666)		8 lb/ft	15 lb/ft	-	•
++>	1'- 3 1/2"	1'- 9 1/2"	2(141666)		69 lb/ft	184 lb/ft	~	*
++>	1'- 9 1/2"	5'- 1 1/2"	5(141694)		69 lb/ft	184 lb/ft	-	-
++>	1'- 9 1/2"	11'- 5 1/2"	5(i41694)		8 lb/ft	15 lb/ft	~	•
++>	7'- 7 1/2"	11'- 5 1/2"	5(i41694)		34 lb/ft	89 lb/ft	-	-

- 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.





Gold Park Homes

City:

Job Address: Pine Valley Ph2 Vaughan

Job Track: 45147

Job Name: 343077 Ground A + Second A (1

Level: Second Floor Label:

B11 (-7R) - i49912 Beam

11 7/8" NI-20

Status:

Design **Passed**

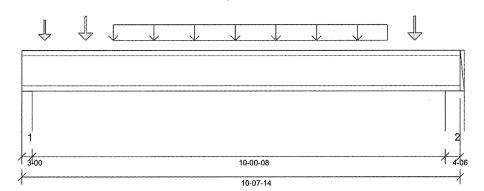
Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Type:

Report Version: 2021.03.26 05/02/2022 17:10

2 Ply Member



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 **Building Code:**

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360,

TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 2"
- 615 psi Wall @ 10'- 4 1/2"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 6 5/8"	1.25D + 1.5L	1.00	5996 lb ft	11160 lb ft	Passed - 54%
Factored Shear:	0'- 3 1/16"	1.25D + 1.5L	1.00	2350 lb	4480 lb	Passed - 52%
Live Load (LL) Pos. Defl.:	5'- 3 1/4"	L		0.133"	L/360	Passed - L/903
Total Load (TL) Pos. Defl.:	5'- 3 1/4"	D+L		0.187"	L/240	Passed - L/645

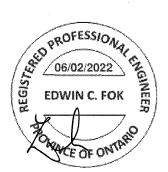
2761949	ORT AND F	reginanti	TVINGAVINI						
ID	Input Bearing Length	Controlling Combine		LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	3-00	1.25D +	1.5L	1.00	2352 lb		4240 lb	9228 lb	Passed - 55%
2	4-06	1.25D +	1.5L	1.00	2198 lb		4480 lb	13457 lb	Passed - 49%
SPEC	IFIED LOAD)S							
Туре	Start Loc	End Loc	Source		Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	10'- 7 7/8"	Self Wei	ght	Тор	6 lb/ft	*	-	*
Uniform	2'- 2 5/8"	8'- 10 5/8"	Smoothed	Load	Front	86 lb/ft	230 lb/ft	•	•
Point	0'- 6 5/8"	0'- 6 5/8"	J3(i5027	78)	Front	78 lb	208 lb	-	-
Point	1'- 6 5/8"	1'- 6 5/8"	J3(i5047	78)	Front	100 lb	267 lb	-	-
Point	9'- 6 5/8"	9'- 6 5/8"	J3(i5050)7)	Front	100 lb	267 lb	-	-
UNFA	CTORED R	EACTIONS							
ID	Start Loc	End Loc	So	urce		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	O,	0'- 3"	2(14	11666)		471 lb	1175 lb	•	•
2	10'- 3 1/2"	10'- 7 7/8"	E24((41700)		442 lb	1097 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION.

Member design assumed proper ply to ply connection by others. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



SEOABBER



Gold Park Homes

City:

Job Address: Pine Valley Ph2 Vaughan

Job Track: 45147

Job Name: 343077 Ground A + Second A (1

Level: **Ground Floor** Label: B12 - i50356

Beam

1 Ply Member

11 7/8" NI-20

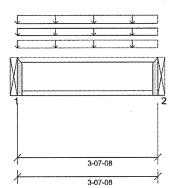
Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Type:

Report Version: 2021.03.26 05/02/2022 17:10



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD

Service Condition: Dry

LL Deflection Limit: L/360.

TL Deflection Limit: L/240,

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:

Bottom: 3'- 7 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 3'- 7 1/2"

ANALYSIS RESULTS					300000000000000000000000000000000000000	
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	1'- 9 3/4"	1.25D + 1.5L	1.00	164 lb ft	5580 lb ft	Passed - 3%
Factored Shear:	3'- 7 7/16"	1.25D + 1.5L	1.00	181 lb	2240 lb	Passed - 8%

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-12	1.25D + 1.5L	1.00	187 lb		1970 lb	аналтева по и <u>р</u> уживни инспец	Passed - 10%
2	1-12	1.25D + 1.5L	1.00	181 lb		1970 lb	-	Passed - 9%

) Part No. Manufa	Naili	ng Requiren	nents	Other Information or Requirement for
) Partino, ivialiula	тор Тор	Face	Member	Reinforcement Accessories
1	LT251188	•	-	-	Connector manually specified by the user.
1 2	LT251188	•			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.

SPECIF	ED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	3'- 7 1/2"	Self Weight	Тор	3 lb/ft	-	-	-
Uniform	0,	3'- 7 1/2"	User Load	Тор	13 lb/ft	34 lb/fi	*	•
Uniform	0,	3'- 7 1/2"	FC2 Floor Decking (Plan View Fill)	Тор	5 lb/ft	14 lb/ft	•	•
Uniform	0,	3'- 7 1/2"	FC2 Floor Decking (Plan View Fill)	Тор	2 lb/ft	•	•	*
UNFAC	TORED RE	EACTIONS						
ın .	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	O,	B15(i50756)		43 lb	89 lb	•	•
2	3'- 7 1/2"	3'- 7 1/2"	B13(i50410)		41 lb	87 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



S604666



Gold Park Homes

Job Address: City: Job Track:

Vaughan 45147

Pine Valley Ph2

Ground Floor Label: Type: Beam

B13 - i50410

Job Name: 343077 Ground A + Second A (1

2 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

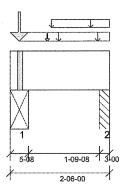
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Level:

05/02/2022 17:10 Report Version: 2021.03.26



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018,

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360. TL Deflection Limit: L/240.

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: 1'- 5 1/2"

Factored Resistance of Support Material:

• 769 psi Beam @ 0'- 4 1/2"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ A O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Neg. Moment:	0'- 4 1/2"	1.25D + 1.5L	1.00	1146 lb ft	25307 lb ft	Passed - 5%
Factored Moment:	0'- 4 1/2"	1.25D + 1.5L	1.00	1146 lb ft	25307 lb ft	Passed - 5%
Factored Moment:				0 lb ft	0 lb ft	
Factored Moment:				0 lb ft	0 lb ft	
Factored Shear:	1'- 5 3/8"	1.25D + 1.5L	1.00	704 lb	14414 lb	Passed - 5%
Live Load (LL) Deflection:	1'- 2 5/16"	L		0.000"	L/360	Passed - L/999
Total Load (TL) Deflection:	1'- 2 1/8"	D+L		0.000"	L/240	Passed - L/999

SU	PPORTAND	REACTION INFOR	MATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D + 1.5L	1.00	8689 lb		25225 lb	14803 lb	Passed - 59%
2	3-00	1,25D + 1.5L	1.00		-361 lb	-	-	

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W
Self Weight	0,	2'- 6"	Self Weight	Тар	13 lb/ft	•	*	•
Uniform	0'- 2 3/4"	2'- 6"	User Load	Top	60 lb/ft	-		-
Uniform	1'- 1/2"	2'- 6"	FC2 Floor Decking (Plan View Fill)	Тор	-	26 lb/ft	~	-
Point	0'- 11 1/4"	0'- 11 1/4"	B12(i50356)	Back	41 lb	87 lb	-	-
Point	0'- 2 3/4"	0'- 2 3/4"	Pt1(i49783)	Тор	2042 lb	3523 lb	-	-

1	rom	U- Z 3/4	0-23/4	F(1(148103)	ιυμ	2042 10	3023 ID	_	-
	UNFAC	TORED R	EACTIONS						
I	aı	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
ĺ	1	0'	0'- 5 1/2"	ST. BEAM (DR.)(i4	1671)	2550 lb	4272 lb	•	•
١	2	2'- 3"	2'- 6"	Pt1(i49863)		-280 lb	-612 lb	-	•

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.
- Bearing capacity of member at support 1, 2 was verified for the effect of concentrated load applied near the support. At support 1. Required Load Area: L=5.500", W=3.499". LDF=1.00, Pf=7837 lb, Q'r=16814 lb, Result=46.61%.

PLY TO PLY CONNECTION.

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

\$2046670



City:

Gold Park Homes Job Address: Pine Valley Ph2

Job Track:

Vaughan 45147

Level:

Label:

Type:

Job Name: 343077 Ground A + Second A (1

Ground Floor B14 - i49988

Beam

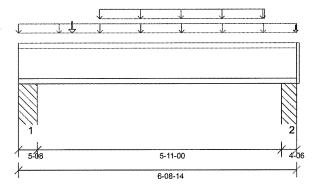
1 Ply Member 11 7/8" NI-20

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/02/2022 17:10



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:** ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry

LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 4 1/2"
- 1334 psi Column @ 6'- 5 1/2"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 6 3/4"	1.25D + 1.5L	0.86	814 lb ft	4780 lb ft	Passed - 17%
Factored Shear:	0'- 5 9/16"	1.25D + 1.5L	0.86	504 lb	1919 lb	Passed - 26%
Live Load (LL) Pos. Defl.:	3'- 5"	L		0.010"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	3'- 5"	D+L		0.025"	L/240	Passed - L/999
CHODOST AND DEAD	TIAN INCADA	ANTION				

ID	Input Bearing Length	Controlling Combine		Factored Downward Reaction		Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D +	1.5L 0.86	540 lb		1919 lb	15718 lb	Passed - 28%
2	4-06	1.25D +	1.5L 0.86	527 lb		1919 lb	12503 lb	Passed - 27%
SPEC	IFIED LOAD	18						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	6'- 8 7/8"	Self Weight	Тор	3 lb/ft	-	-	•
Uniform	0,	6'- 8 7/8"	User Load	Тор	60 lb/ft	•	•	-
Uniform	1'- 11 5/8"	5'- 11 5/8"	Smoothed Load	Front	- 20 lb/ft	51 lb/ft	-	-
Point	1'- 3 5/8"	1'- 3 5/8"	J6(i50551)	Front	24 lb	64 lb	•	•
Point	6'- 8 5/8"	6'- 8 5/8"	FC2 Floor Decking (Plan View Fill)	Тор	-	5 lb	~	
UNFA	CTORED R	EACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	O'	0'- 5 1/2"	Pt1(i49863)	ur serenosal valuenta	267 lb	138 lb		
2	6'- 4 1/2"	6'- 8 7/8"	Pt1(i49963)		260 lb	135 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Gold Park Homes

Job Address: Pine Valley Ph2

City: Job Track:

45147

Vaughan

Label: Type:

Job Name: 343077 Ground A + Second A (1 **Ground Floor**

B15 - i50756

Beam

11 7/8" NI-20

Status: Design Passed

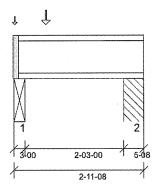
Illustration Not to Scale, Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

1 Ply Member

05/02/2022 17:11



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:**

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD

Service Condition:

Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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: 2'- 1 1/2"

Bottom: 2'- 1 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'- 2"
- 1334 psi Column @ 2'- 7"

ANAL	YSIS RESUL	TS								
D	esign Criteria	Lo	cation	Load	Combinatio	n LDF	Design	Limit	Result	
Factored	l Pos. Moment	: 0'-	8 3/4"	1.2	25D + 1.5L	1.00	82 lb ft	5580 lb ft	Passed - 1%	
Factored	l Shear:	0'-3	3 1/16"	1.2	25D + 1.5L	1.00	148 lb	2240 lb	Passed - 7%	
SUPP	ORT AND RE	EACTION	INFORM	ATION						
COLUMN CONTRACTOR	Input Bearing Length	Controlling Combin		LDF	Factored Downward Reaction	X .	Factored Resistance of Member		Result	
1	3-00	1.25D +	1.5L	1.00	151 lb		2120 lb	5770 lb	Passed - 7%	
2	5-08	1.25D +	1.5L	1.00	49 lb		2240 lb	18348 lb	Passed - 2%	
SPEC	FIED LOAD	3								
Type	Start Loc	End Loc	Sourc	3	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)	
Self Weight	0,	2'- 11 1/2"	Self We	ight	Тор	3 lb/ft	•		•	
Point	0'- 8 3/4"	0'-83/4"	B12(i50	356)	Front	43 lb	89 lb		-	
Point	0'- 1/4"	0'- 1/4"	FC2 Floor I (Plan Vie		Тор	1 ib	1 lb	*	*	
UNFA	CTORED RE	ACTIONS								
ID.	Start Loc	End Loc	9	ource		Dead (D)	Live (L)	Snow (S)	Wind (W)	
1	0'	0'- 3"	ST. BEAN	1 (DR.)(i4	41671)	38 lb	70 lb		•	
2	2'- 6"	2'- 11 1/2"	Pt3	(149948)		15 lb	21 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



Gold Park Homes

City:

Job Address: Pine Valley Ph2 Vaughan

Job Track: 45147 Job Name: **343077 Ground A + Second A (1**

Level: **Ground Floor** B16 - i49929 Label: Beam

1 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

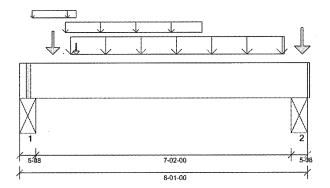
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Type:

Report Version: 2021,03.26 05/02/2022 17:11



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 Building Code:

Amendment)

Design Methodology: LSD Service Condition: Drv LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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'- 9 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'- 4 1/2"
- 769 psi Beam @ 7'- 8 1/2"

ANALYSIS RESULT:	i .					
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 11 1/4"	1.25D + 1.5L	1.00	8725 lb ft	13266 lb ft	Passed - 66%
Factored Neg. Moment:	7'- 8 1/2"	1.25D + 1.5L	1.00	215 lb ft	13266 lb ft	Passed - 2%
Factored Shear:	1'- 5 3/8"	1.25D + 1.5L	1.00	4425 lb	7207 lb	Passed - 61%
Live Load (LL) Pos. Defl.:	3'- 11 7/8"	L		0.096"	L/360	Passed - L/896
Total Load (TL) Pos. Defl	.: 4'	D+L		0.161"	L/240	Passed - L/533
SUPPORT AND REA	CTION INFORM	MATION				
Input C	Controlling Load	Factored LDF Downward	Factored Uplift	Factored Resistance	Factored Resistance	Result

ID	Bearing Length	Combina		Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	5-08	1.25D +	1.5L 1.00	4603 lb		12613 lb	7402 lb	Passed - 62%
2	5-08	1.25D +	1.5L 1.00	5001 lb		12613 lb	7402 lb	Passed - 68%
SPEC	FIED LOAD)\$						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	8'- 1"	Self Weight	Тор	6 lb/ft	•		•
Uniform	0'- 4 1/4"	1'- 7 1/8"	FC2 Floor Decking (Plan View Fill)	Тор	-	45 lb/ft	~	•
Uniform	1'- 3 1/2"	5'- 1 1/2"	User Load	Тор	69 lb/ft	184 lb/ft	•	-
Uniform	1'- 5 1/4"	7'- 5 1/4"	Smoothed Load	Front	315 lb/ft	408 lb/ft	-	-
Point	0'- 11 1/4"	0'- 11 1/4"	J8(i50720)	Front	245 lb	318 lb	•	•
Point	7'- 11 1/4"	7'- 11 1/4"	J8(i50727)	Front	261 lb	407 lb	-	-
Point	1'- 7 1/8"	1'- 7 1/8"	J2(i50533)	Back	42 lb	113 lb	-	-
UNFA	CTORED R	EACTIONS						
- ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'- 5 1/2"	ST. BEAM (DR.)(i4	11668)	1322 lb	1990 lb	•	-
2	7'- 7 1/2"	8'- 1"	ST. BEAM (DR.)(4	(1671)	1466 lb	2088 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Gold Park Homes

City: Job Track:

Job Address: Pine Valley Ph2 Vaughan

45147

Job Name: 343077 Ground A + Second A (1

Level: Label: Type:

Ground Floor B17 (-3R) - i49970

Beam

1 Ply Member 11 7/8" NI-20

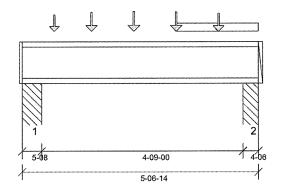
Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

05/02/2022 17:11



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 Building Code:

Amendment)

Design Methodology: LSD Service Condition:

Drv LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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'- 9 1/2"

Factored Resistance of Support Material:

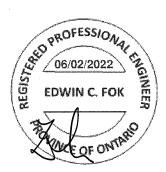
- 1334 psi Column @ 0'- 4 1/2"
- 1334 psi Column @ 5'- 3 1/2"

cation I	oad Combination	LDF	Design	Limit	Result
7 5/8"	1.25D + 1.5L	1.00	1118 lb ft	5580 lb ft	Passed - 20%
5 9/16"	1,25D + 1.5L	1.00	869 lb	2240 lb	Passed - 39%
'- 10"	L		0.017"	L/360	Passed - L/999
'- 10"	D+L		0.026"	L/240	Passed - L/999
	cation L 7 5/8" 5 9/16" '- 10" '- 10"	7 5/8" 1.25D + 1.5L 5 9/16" 1.25D + 1.5L '- 10" L	7 5/8" 1.25D + 1.5L 1.00 5 9/16" 1.25D + 1.5L 1.00 '- 10" L	7 5/8" 1.25D + 1.5L 1.00 1118 lb ft 5 9/16" 1.25D + 1.5L 1.00 869 lb '- 10" L 0.017"	7 5/8" 1.25D + 1.5L 1.00 1118 lb ft 5580 lb ft 59/16" 1.25D + 1.5L 1.00 869 lb 2240 lb '- 10" L 0.017" L/360

SUPPL	JR I AND R	EACHON	INFORMATION					
\$034360436363535634365636363636	Input Bearing Length	Controlling Combine		Factored Downward Reaction	i Uplift	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D +	1.5L 1.00	880 lb		2240 lb	18348 lb	Passed - 39%
2	4-06	1.25D +	1.5L 1.00	826 lb		2240 lb	14595 lb	Passed - 37%
SPECI	FIED LOAD)\$						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	5'- 6 7/8"	Self Weight	Тор	3 lb/ft	±	-	*
Tapered	3'- 7 5/8"	5'- 6 7/8"	FC1 Floor Decking (Plan View Fill)	Тор	4 To 3 lb/ft	11 To 8 lb/ft	*	•
Point	0'- 9 1/8"	0'- 9 1/8"	J3(i49975)	Back	62 lb	123 lb	-	-
Point	1'- 7 5/8"	1'- 7 5/8"	J3(i50443)	Back	80 lb	161 lb	•	
Point	2'- 7 5/8"	2'- 7 5/8"	J3(i49874)	Back	86 lb	172 lb	-	-
Point	3'- 7 5/8"	3'- 7 5/8"	J3(i50377)	Back	83 lb	166 lb	•	•
Point	4'- 7 5/8"	4'- 7 5/8"	J3(i50332)	Back	74 lb	148 lb	~	
UNFAC	TORED R	EACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	0'- 5 1/2"	Pt2(i49962)	213 lb	409 lb	•	•
2	5'- 2 1/2"	5'- 6 7/8"	Pt2(i49898	· }	200 lb	384 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.
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- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





ner: Gold Park Homes

Job Address: City:

Pine Valley Phi Vaughan

Job Track:

45147

Pine Valley Ph2

Level:

Job Name: 343077 Ground A + Second A (1

Label: Type:

Ground Floor B18 (-3R) - i49844

Beam

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL Status:

Design

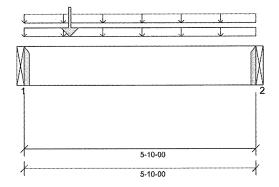
Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

2021.03.26 05/02/2022 17:12



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: Service Condition:

Dry L/360,

LL Deflection Limit: TL Deflection Limit:

L/240.

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: 5'- 10"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 5'- 10"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ **6** "O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS											
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result					
Factored Pos. Moment:	1'- 1 3/4"	1.25D + 1.5L	1.00	6609 lb ft	26531 lb ft	Passed - 25%					
Factored Shear:	0'- 11 7/8"	1.25D + 1.5L	1.00	5694 lb	14414 lb	Passed - 40%					
Live Load (LL) Pos. Defl.:	2'- 6 3/4"	L		0.018"	L/360	Passed - L/999					
Total Load (TL) Pos. Defl.:	2'- 7 1/16"	D + L		0.031"	L/240	Passed - L/999					

SUPPORT AND REACTION INFORMATION										
Inpu	t Controlling Los	.d	Factored	Factored	Factored	Factored				
ID Bear	ng Combination	LDF	Downward	_ Uplift	Resistance		Result			
Leng	th		Reaction	Reaction	of Member	of Support				
1 1-0	3 1.25D + 1.5L	1.00	5891 lb		6880 lb	•	Passed - 86%			
2 1-0	3 1.25D + 1.5L	1.00	1844 lb		6880 lb	-	Passed - 27%			

	NNECTUR INFURI	MATION			
	Part No. Manuf	Naili	ng Requirem	ients	Other Information or Requirement for
l IV	Part No. Manur	acturer Top	Face	Member	Reinforcement Accessories
1	HGUS410	•	•	•	Connector manually specified by the user.
2	HGUS410		-	-	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.

SPECIF	ED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	5'- 10"	Self Weight	Тор	13 lb/ft	*	*	*
Uniform	0,	5'- 10"	User Load	Top	60 lb/ft	-	~	
Uniform	O,	5'- 10"	FC1 Floor Decking (Plan View Fill)	Тор	16 lb/ft	42 lb/ft	*	•
Point	1'- 1 3/4"	1'- 1 3/4"	10(i41708)	Тор	1734 lb	2999 lb		*
UNFAC	OREDRE	ACTIONS	5					
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	Oʻ	B19 (-3R)(i4990	09)	1660 lb	2544 lb	~	-
2	5'- 10"	5'- 10"	B20 (-3R)(i504	35)	607 lb	724 lb	-	-

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
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 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load
 transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

 Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

Gold Park Homes

City:

Vaughan

Job Track:

45147

Job Address: Pine Valley Ph2

Level: Label:

Job Name: 343077 Ground A + Second A (1 **Ground Floor**

B19 (-3R) - i49909 Type:

Beam

2 Ply Member

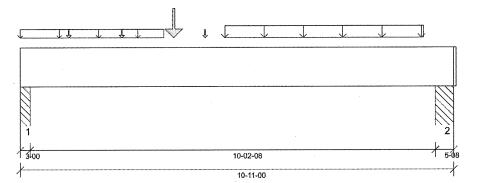
1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/02/2022 17:12 Report Version: 2021.03.26



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:**

ABC 2019, OBC 2012 (2019 Amendment)

LSD Design Methodology: Service Condition: LL Deflection Limit:

Dry L/360, TL Deflection Limit: L/240,

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psì Column @ 0'- 2"
- 1334 psì Column @ 10'- 6 1/2"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ [2" O/C STAGGERED IN 2 ROWS



Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 10 1/2"	1.25D + 1.5L	1.00	17160 lb ft	26531 lb ft	Passed - 65%
Factored Shear:	1'- 2 7/8"	1.25D + 1.5L	1.00	5062 lb	14414 lb	Passed - 35%
ive Load (LL) Pos. Defl.:	5'- 9/16"	L		0.166"	L/360	Passed - L/735
Total Load (TL) Pos. Defl.:	5'- 9/16"	D+L		0.272"	L/240	Passed - L/450

	FURLARIA	REAUTION INFURI	77.5					
ΙD	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	3-00	1.25D + 1.5L	1.00	5191 lb		13759 lb	14011 lb	Passed - 38%
2	5-08	1.25D + 1.5L	1.00	3484 lb		25225 lb	25687 lb	Passed - 14%
SP	EO FIED I.O.	ADS						

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	10'- 11"	Self Weight	Тор	13 lb/ft	*	-	*
Uniform	0,	3'- 7 1/2"	User Load	Top	13 lb/ft	34 lb/ft	-	•
Uniform	5'- 1 15/16"	10'- 1 15/16"	Smoothed Load	Back	63 lb/ft	127 lb/ft	-	-
Point	1'- 2 3/4"	1'- 2 3/4"	J4(i50290)	Back	67 lb	178 lb	•	•
Point	2'- 6 3/4"	2'- 6 3/4"	J4(i50382)	Back	64 lb	170 lb	-	-
Point	3'- 10 1/2"	3'- 10 1/2"	B18 (-3R)(i49844)	Back	1660 lb	2544 lb	=	-
Point	4'- 7 15/16"	4'- 7 15/16"	J4(i50516)	Back	57 lb	115 lb	-	-

	TOREDRE						
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'- 3"	Pt2(i50280)	1416 lb	2281 lb	•	•
2	10'- 5 1/2"	10'- 11"	Pt2(i49934)	961 lb	1522 lb	-	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
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- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

CZD44671

Gold Park Homes

Job Address:

Pine Valley Ph2 Vaughan

City: Job Track:

45147

Job Name: 343077 Ground A + Second A (1

Label:

Ground Floor B20 (-3R) - i50485

Type: Beam 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design Passed

05/02/2022 17:12

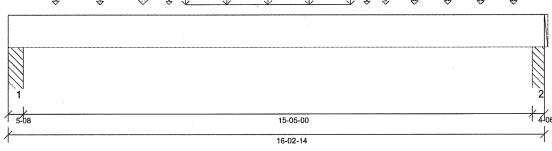
Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

2 Ply Member

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DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition:

Dry

LL Deflection Limit: L/360. TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 4 1/2"
- 1334 psi Column @ 15'- 11 1/2"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @12 " O/C STAGGERED IN 2 ROWS



Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	6'- 10 7/16"	1.25D + 1.5L	1.00	12333 lb ft	26531 lb ft	Passed - 46%
Factored Shear:	1'- 5 3/8"	1.25D + 1.5L	1.00	3348 lb	14414 lb	Passed - 23%
ive Load (LL) Pos. Defl.:	8'- 1/8"	L		0.322"	L/360	Passed - L/574
Total Load (TL) Pos. Defl.:	7'- 11 11/16"	D+L		0.533"	L/240	Passed - L/347
Permanent Deflection:	7'- 11 1/8"			-	L/360	Passed - L/903

		N	<u> </u>					
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D + 1.5L	1.00	3371 lb		25225 lb	25687 lb	Passed - 13%
2	4-06	1.25D + 1.5L	1.00	2929 lb		20065 lb	20433 lb	Passed - 15%
SPE	CIFIED LOA	NDS						
Typ	e Start Loc	End Loc Sou	rce	Face D	ead (D)	Live (L)	Snow (S)	Wind (W)

1	Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
	Self Weight	0'.	16'- 2 7/8"	Self Weight	Тор	13 lb/ft	-		
1	Uniform	5'- 4 7/16"	10'- 4 7/16"	Smoothed Load	Front	64 lb/ft	128 lb/ft	-	•
1	Point	1'- 5 1/4"	1'- 5 1/4"	J4(i50290)	Front	67 lb	178 lb	-	•
	Point	2'- 9 1/4"	2'- 9 1/4"	J4(i50382)	Front	64 lb	170 lb	-	•
	Point	4'- 1"	4'- 1"	B18 (-3R)(i49844)	Front	607 lb	724 lb	-	-
	Point	4'- 10 7/16"	4'- 10 7/16"	J4(i50516)	Front	57 lb	115 lb	-	-
	Point	10'- 10 3/8"	10'- 10 3/8"	J4(i50519)	Front	46 lb	99 lb	-	•
	Point	11'- 5 1/8"	11'- 5 1/8"	J3(i49975)	Front	63 lb	126 lb	•	•
	Point	12'- 3 5/8"	12'- 3 5/8"	J3(i50443)	Front	82 lb	164 lb	-	-
	Point	13'- 3 5/8"	13'- 3 5/8"	J3(i49874)	Front	88 lb	175 lb	-	•
ı	Point	14'- 3 5/8"	14'- 3 5/8"	J3(i50377)	Front	87 lb	174 lb	•	•
	Point	15'- 3 5/8"	15'- 3 5/8"	J3(i50332)	Frant	80 lb	160 lb	-	-
ı									

UNFA	CTORED R	ACTIONS					
ID.	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'- 5 1/2"	Pt2(i50363)	971 lb	1438 lb	-	-
2	15'- 10 1/2"	16'- 2 7/8"	Pt2(i49905)	799 lb	1287 lb	~	-

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
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- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION.

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track: Vaughan 45147

Job Name: 343077 Ground A + Second A (1 Level:

Ground Floor Label:

B21 (-3R) - i50402 Beam

1 Ply Member

11 7/8" NI-20

Status: Design **Passed**

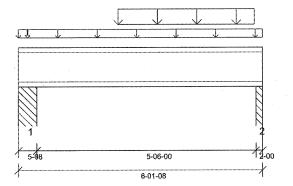
Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233, Update 5.15

Type:

Report Version: 2021.03.26

05/02/2022 17:13



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:**

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry

LL Deflection Limit: L/360, L/240. TL Deflection Limit:

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: 5'- 10"

Factored Resistance of Support Material:

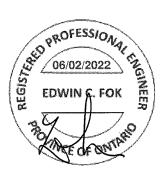
- 1334 psi Column @ 0'- 4 1/2"
- 1334 psi Column @ 6'- 1/2"

Location	Load Combination	LDF	Design	Limit	Result
3'- 6 3/4"	1.25D + 1.5L	1.00	1631 lb ft	5580 lb ft	Passed - 29%
5'- 11 7/16"	1.25D + 1.5L	1.00	1256 lb	2240 lb	Passed - 56%
3'- 3 7/8"	L		0.031"	L/360	Passed - L/999
3'- 3 7/8"	D + L		0.043"	L/240	Passed - L/999
	3'- 6 3/4" 5'- 11 7/16" 3'- 3 7/8"	3'- 6 3/4" 1.25D + 1.5L 5'- 11 7/16" 1.25D + 1.5L 3'- 3 7/8" L	3'- 6 3/4" 1.25D + 1.5L 1.00 5'- 11 7/16" 1.25D + 1.5L 1.00 3'- 3 7/8" L	3'- 6 3/4" 1.25D + 1.5L 1.00 1631 lb ft 5'- 11 7/16" 1.25D + 1.5L 1.00 1256 lb 3'- 3 7/8" L 0.031"	3'- 6 3/4" 1.25D + 1.5L 1.00 1631 lb ft 5580 lb ft 5'- 11 7/16" 1.25D + 1.5L 1.00 1256 lb 2240 lb 3'- 3 7/8" L 0.031" L/360

CONTRACTOR STATE	Input 3earing Length	Controlling Combine		Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D +	1.5L 1.00	751 lb		2240 lb	18349 lb	Passed - 34%
2	2-00	1.25D +	1.5L 1.00	1283 lb		2000 lb	6672 lb	Passed - 64%
SPEC	FIED LOAD)S						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	6'- 1 1/2"	Self Weight	Тор	3 lb/ft		-	**
Uniform	O,	6'- 1 1/2"	FC1 Floor Decking (Plan View Fill)	Тор	11 lb/ft	29 lb/ft	•	-
Uniform	2'- 6"	5'- 11"	User Load	Тор	90 lb/ft	240 lb/ft	-	-
Point	0'- 2 3/4"	0'- 2 3/4"	Pt3(i49948)	Тор	13 lb	12 lb	*	•
UNFA	CTOREDR	EACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'- 5 1/2"	Pt2(i50280)		153 lb	360 lb	•	•
2	5'- 11 1/2"	6'- 1 1/2"	Pt2(i50363)		254 lb	656 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Job Track:

Gold Park Homes

Job Address: Pine Valley Ph2 City:

Vaughan

45147

Job Name: 343077 Second A WO Loft (14)

Level: Second Floor Lahelt B22 - i54142 Type: Beam

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

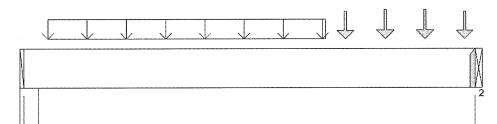
Status: Design Passed

05/03/2022 14:34

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26



11-00-00 11-04-06

DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry

LL Deflection Limit: L/360, TL Deflection Limit: 1/240.

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'- 9 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 3 3/8"
- 769 psi Beam @ 11'- 4 3/8"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 9 " O/C STAGGERED IN 2 ROWS



	ANALYSIS RESULTS										
Π	Design Criteria	Location	Load Combination	LDF	Design	Limit	Result				
F	actored Pos. Moment:	6'- 1 1/4"	1.25D + 1.5L	1.00	13470 lb ft	26531 lb ft	Passed - 51%				
F	actored Shear:	10'- 4 1/2"	1.25D + 1.5L	1.00	4454 lb	14414 lb	Passed - 31%				
L	ive Load (LL) Pos. Defl.:	5'- 10 3/8"	L		0.201"	L/360	Passed - L/658				
T	otal Load (TL) Pos. Defl.:	5'- 10 3/8"	D + L		0.284"	L/240	Passed - L/464				

SUP	SUPPORT AND REACTION INFORMATION											
	Input	Controlling Lood		Factored	Factored	Factored	Factored					
ID	Bearing	Controlling Load Combination	LDF	Downward	Uplift	Resistance	Resistance	Result				
	Length	Combination		Reaction	Reaction	of Member	of Support					
1	4-06	1.25D + 1.5L	1.00	4443 lb		20065 lb	9420 lb	Passed - 47%				
2	1-08	1.25D + 1.5L	1.00	5413 lb		6880 lb	-	Passed - 79%				

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			top i	race	weniber	L/EIIIIOLOGIIIG	in modessor	103	
II.	Pail NO.	ivianuiaciurei	Top I		klambar	Painforceme	nt Arcacent	iae	
II.	Dort No.	Manufacturer							
NAME OF THE OWNER.			Nailing F	<i>leaurement</i>	📞	Other Informa	ation or Rec	uiirement 1	for

* 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.

IED LOAD	S						
Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
O,	11'- 4 3/8"	Self Weight	Тор	13 lb/ft	*	-	
0'- 7 1/4"	7'- 7 1/4"	Smoothed Load	Front	151 lb/ft	403 lb/ft	•	*
8'- 1 1/4"	8'- 1 1/4"	J6(i54036)	Front	190 lb	476 lb	-	-
9'- 1 1/4"	9'- 1 1/4"	J6(i54037)	Front	217 lb	508 lb	-	•
10'- 1 1/4"	10'- 1 1/4"	J6(i54084)	Front	217 lb	508 lb	•	
11'- 1 1/4"	11'- 1 1/4"	J6(154039)	Front	201 lb	461 lb	-	
	0' 0'-71/4" 8'-11/4" 9'-11/4" 10'-11/4"	Start Loc End Loc 0' 11'- 4 3/8" 0'- 7 1/4" 7'- 7 1/4" 8'- 1 1/4" 9'- 1 1/4" 9'- 1 1/4" 10'- 1 1/4" 10'- 1 1/4"	Start Loc End Loc Source 0' 11'- 4 3/8" Self Weight 0'- 7 1/4" 7'- 7 1/4" Smoothed Load 8'- 1 1/4" 36(i54036) 3'- 1 1/4" 9'- 1 1/4" 9'- 1 1/4" 36(i54037) 10'- 1 1/4" 10'- 1 1/4" 36(i54084)	Start Loc End Loc Source Face 0' 11'-4 3/8" Self Weight Top 0'-7 1/4" 7'-7 1/4" Smoothed Load Front 8'-1 1/4" 8'-1 1/4" J6(i54036) Front 9'-1 1/4" 9'-1 1/4" J6(i54037) Front 10'-1 1/4" 10'-1 1/4" J6(i54084) Front	Start Loc End Loc Source Face Dead (D) 0' 11'- 4 3/8" Self Weight Top 13 lb/ft 0'- 7 1/4" 7'- 7 1/4" Smoothed Load Front 151 lb/ft 8'- 1 1/4" 8'- 1 1/4" J6(i54036) Front 190 lb 9'- 1 1/4" 9'- 1 1/4" J6(i54037) Front 217 lb 10'- 1 1/4" 10'- 1 1/4" J6(i54084) Front 217 lb	Start Loc End Loc Source Face Dead (D) Live (L) 0' 11'-4 3/8" Self Weight Top 13 lb/ft - 0'- 7 1/4" 7'- 7 1/4" Smoothed Load Front 151 lb/ft 403 lb/ft 8'- 1 1/4" 8'- 1 1/4" J6(i54036) Front 190 lb 476 lb 9'- 1 1/4" 9'- 1 1/4" J6(i54037) Front 217 lb 508 lb 10'- 1 1/4" 10'- 1 1/4" J6(i54084) Front 217 lb 508 lb	Start Loc End Loc Source Face Dead (D) Live (L) Snow (S) 0' 11'-4 3/8" Self Weight Top 13 lb/ft - - 0'-7 1/4" 7'-7 1/4" Smoothed Load Front 151 lb/ft 403 lb/ft - 8'-1 1/4" 8'-1 1/4" J6(i54036) Front 190 lb 476 lb - 9'-1 1/4" 9'-1 1/4" J6(i54037) Front 217 lb 508 lb - 10'-1 1/4" 10'-1 1/4" J6(i54084) Front 217 lb 508 lb -

١	ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
١	1	0'	0'- 4 3/8"	12(i51771)	909 lb	2189 lb	*	
1	2	11'- 4 3/8"	11'- 4 3/8"	D22((62621)	1152 lb	2663 lb	_	_

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

S604607



Gold Park Homes

City:

Job Address: Pine Valley Ph2

Job Track: 45147

Vaughan

Type:

Job Name: 343077 Second A WO Loft (14)

Level: Second Floor Lahel: B23 - i53621

Beam

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

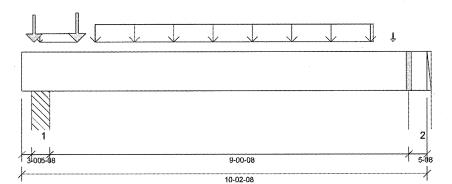
Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

SUPPORT AND REACTION INFORMATION

Report Version: 2021.03.26 05/03/2022 14:35



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: LL Deflection Limit:

Dry L/360.

TL Deflection Limit: L/240,

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'- 9 1/2"

Factored Resistance of Support Material:

- 1334 psì Column @ 0'- 5 3/4"
- 615 psi Wall @ 9'- 10"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 12" O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						Principle (1)
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	4'- 4 1/4"	1.25D + 1.5L	1.00	8884 lb ft	26531 lb ft	Passed - 33%
Factored Neg. Moment:	0'- 5 3/4"	1.25D + 1.5L	1.00	923 lb ft	26531 lb ft	Passed - 3%
Factored Shear:	1'- 8 3/8"	1.25D + 1.5L	1.00	7523 lb	14414 lb	Passed - 52%
Live Load (LL) Pos. Defl.:	4'- 11 5/8"	L		0.086"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 11 13/16"	D + L		0.138"	L/240	Passed - L/786

Factored Factored Factored Factored

D	Bearing Length	Controllin Combin		Downward Reaction		Resistance of Member	Resistance of Support	Result
1	5-08	1.25D +	1.5L 1.00	13135 lb		25225 lb	25687 lb	Passed - 52%
2	5-08	1.25D +	1.5L 1.00	3183 lb		25226 lb	11843 lb	Passed - 27%
SPEC	IFIED LOAD)S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	10'- 2 1/2"	Self Weight	Тор	13 lb/ft	•	-	•
Uniform	0'- 5 1/2"	1'- 4 3/4"	FC3 Floor Decking (Plan View Fill)	Тор	51 lb/ft	-	~	-
Uniform	1'- 10 1/4"	8'- 10 1/4"	Smoothed Load	Front	159 lb/ft	264 lb/ft	•	*
Point	1'- 4 3/4"	1'- 4 3/4"	B6(i54076)	Front	1344 lb	2840 lb	-	•
Point	9'- 4 1/4"	9'- 4 1/4"	J2(i54010)	Front	104 lb	197 lb	•	•
Point	0'- 3 3/4"	0'- 3 3/4"	B22 (154142)	Back	1152 lb	2663 lb	~	-
UNFA	CTORED R	EACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'- 3"	0'- 8 1/2"	Pt1(i50787)		3054 lb	6148 lb	*	•
2	9'- 9"	10'- 2 1/2"	9(i41702)		903 lb	1433 lb	-	-

DESIGN NOTES

- · The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- The deflection at the cantilever for either live and/or total loads is less than 3/8" and therefore has been excluded from the deflection ratio considerations.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.
- Bearing capacity of member at support 1, 2 was verified for the effect of concentrated load applied near the support. At support 1. Required Load Area: L=3.500", W=3.500". LDF=1.00, Pf=5940 lb, Q'r=13759 lb, Result=43.17%.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

< 604KHO



City: Job Track

Gold Park Homes Job Address: Pine Valley Ph2 Vaughan

45147

Level:

Job Name: 343077 Ground A + Second A...

Second Floor Label: B24 - i54731 Type: Beam

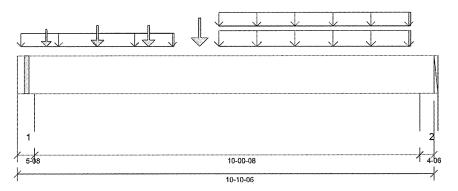
2 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/03/2022 19:44 Report Version: 2021.03.26



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018. ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 4 1/2"
- 615 psi Wall @ 10'- 7"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ (2_" O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						-
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 9 1/8"	1.25D + 1.5L	1.00	11938 lb ft	26531 lb ft	Passed - 45%
Factored Shear:	1'- 5 3/8"	1,25D + 1.5L	1.00	4649 lb	14414 lb	Passed - 32%
Live Load (LL) Pos. Defl.:	5'- 5 13/16"	L		0.148"	L/360	Passed - L/816
Total Load (TL) Pos. Defl.:	5'- 5 15/16"	D+L		0.213"	L/240	Passed - L/566
SUPPORT AND REAC	TION INFORM	IATION				

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D + 1.5L	1.00	4673 lb		25225 lb	11842 lb	Passed - 39%
2	4-06	1.25D + 1.5L	1.00	4410 lb		20065 lb	9420 lb	Passed - 47%

SPECIF	IED LUAL	JS						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	10'- 10 3/8"	Self Weight	Тор	13 lb/ft	#	•	*
Uniform	0'- 1 1/8"	4'- 1 1/8"	Smoothed Load	Front	70 lb/ft	187 lb/ft	-	-
Uniform	5'- 3 1/8"	10'- 3 1/8"	Smoothed Load	Back	104 lb/ft	258 lb/ft	•	•
Uniform	5'- 3 1/8"	10'- 3 1/8"	Smoothed Load	Front	91 lb/ft	187 lb/ft	•	•
Point	4'- 9 1/8"	4'- 9 1/8"	•	Front	200 lb	519 lb	-	-
Point	0'- 9 1/8"	0'- 9 1/8"	J2(i54765)	Back	94 lb	252 lb	-	•
Point	2'- 1 1/8"	2'- 1 1/8"	J2(i54839)	Back	129 lb	344 lb	-	-
Point	3'- 5 1/8"	3'- 5 1/8"	J2(i54852)	Back	129 lb	344 lb	•	-
UNFAC	TOREDR	EACTIONS						
ın	Start Loc	Endloc	Source		Dead (D)	Live (L)	Snow (8)	Wind (W)

975 lb

974 lb

2302 lb

2129 lb

DESIGNNOTES

O'

10'- 6"

0'- 5 1/2"

10'- 10 3/8'

CHEMIER AND

- The dead loads used in the design of this member were applied to the structure as projected dead loads
- Lateral stability factor (KL) was based on user preference to use the width of one ply.

24(i51833)

E25(i41701)

- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track:

45147

Vaughan

Job Name: 343077 Ground A + Second A..

Level: Second Floor Label: B25 - i54388 Type: Beam

2 Ply Member

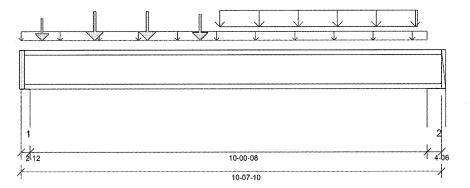
11 7/8" NI-20

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/03/2022 19:44



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 1 3/4"
- 615 psi Wall @ 10'- 4 1/4"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 6 3/8"	1.25D + 1.5L	1.00	7975 lb ft	11160 lb ft	Passed - 71%
Factored Shear:	0'- 2 13/16"	1.25D + 1.5L	1.00	3054 lb	4480 lb	Passed - 68%
Live Load (LL) Pos. Defl.:	5'- 3 1/16"	L		0.156"	L/360	Passed - L/769
Total Load (TL) Pos. Defl.:	5'- 3 1/16"	D+L		0.254"	L/240	Passed - L/475
SUPPORT AND REAC	TION INFORM	IATION				

aı	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	2-12	1.25D + 1.5L	1.00	3073 lb		4180 lb	8459 lb	Passed - 74%
2	4-06	1.25D + 1.5L	1.00	2946 lb		4480 lb	13457 lb	Passed - 66%
SPE	CIFIED LOS	.DS						
Тур	a Start Loc	End Loc Sou	rce	Face De	ead (D)	Live (L)	Snow (S)	Wind (W)

Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
0'	10'- 7 5/8"	Self Weight	Тор	6 lb/ft	*	-	**
O,	10'- 3 1/4"	User Load	Top	60 lb/ft	-	-	•
5'- 3/8"	10'- 3/8"	Smoothed Load	Front	101 lb/ft	269 lb/ft	-	-
0'- 6 3/8"	0'- 6 3/8"	J2(i54765)	Front	94 lb	249 lb	-	-
1'- 10 3/8"	1'- 10 3/8"	J2(i54839)	Front	135 lb	359 lb	-	-
3'- 2 3/8"	3'- 2 3/8"	J2(i54852)	Front	135 lb	359 lb	-	-
4'- 6 3/8"	4'- 6 3/8"	J2(i54657)	Front	118 lb	314 lb	-	-
	0' 0' 5'- 3/8" 0'- 6 3/8" 1'- 10 3/8" 3'- 2 3/8"	0' 10'- 7 5/8" 0' 10'- 3 1/4" 5'- 3/8" 10'- 3/8" 0'- 6 3/8" 0'- 6 3/8" 1'- 10 3/8" 1'- 10 3/8" 3'- 2 3/8" 3'- 2 3/8"	0' 10'- 7 5/8" Self Weight 0' 10'- 3 1/4" User Load 5'- 3/8" 10'- 3/8" Smoothed Load 0'- 6 3/8" 0'- 6 3/8" J2(154765) 1'- 10 3/8" 1'- 10 3/8" J2(154839) 3'- 2 3/8" 3'- 2 3/8" J2(154852)	0' 10'- 7 5/8" Self Weight Top 0' 10'- 3 1/4" User Load Top 5'- 3/8" 10'- 3/8" Smoothed Load Front 0'- 6 3/8" 0'- 6 3/8" J2(154765) Front 1'- 10 3/8" 1'- 10 3/8" J2(154839) Front 3'- 2 3/8" 3'- 2 3/8" J2(154852) Front	0' 10'- 7 5/8" Self Weight Top 6 lb/ft 0' 10'- 3 1/4" User Load Top 60 lb/ft 5'- 3/8" 10'- 3/8" Smoothed Load Front 101 lb/ft 0'- 6 3/8" 0'- 6 3/8" J2(154765) Front 94 lb 1'- 10 3/8" 1'- 10 3/8" J2(154839) Front 135 lb 3'- 2 3/8" 3'- 2 3/8" J2(154852) Front 135 lb	0' 10'- 7 5/8" Self Weight Top 6 lb/ft - 0' 10'- 3 1/4" User Load Top 60 lb/ft - 5'- 3/8" 10'- 3/8" Smoothed Load Front 101 lb/ft 269 lb/ft 0'- 6 3/8" 0'- 6 3/8" J2(154765) Front 94 lb 249 lb 1'- 10 3/8" 1'- 10 3/8" J2(154839) Front 135 lb 359 lb 3'- 2 3/8" 3'- 2 3/8" J2(154852) Front 135 lb 359 lb	0' 10'- 7 5/8" Self Weight Top 6 lb/ft 0' 10'- 3 1/4" User Load Top 60 lb/ft 5'- 3/8" 10'- 3/8" Smoothed Load Front 101 lb/ft 269 lb/ft - 0'- 6 3/8" 0'- 6 3/8" J2(i54765) Front 94 lb 249 lb - 1'- 10 3/8" 1'- 10 3/8" J2(i54839) Front 135 lb 359 lb - 3'- 2 3/8" 3'- 2 3/8" J2(i54852) Front 135 lb 359 lb -

Point	4'- 6 3/8"	4'- b 3/6"	J2(154657)	Front 116 ID	31410	-	-
UNFAC	TORED RE	ACTIONS					
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0'- 2 3/4"	9(i41702)	849 lb	1341 lb	-	-
2	10'- 3 1/4"	10'- 7 5/8"	E25(i41701)	815 lb	1285 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply



SZOSAHOGZ



Job Track:

Gold Park Homes Job Address: Pine Valley Ph2 City: Vaughan

45147

Job Name: 343077 Ground A + Second A... **Second Floor** Label:

B26 - i54803 Beam

1 Ply Member 11 7/8" NI-20

Status: Design Passed

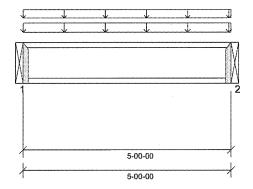
Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Type:

Report Version: 2021.03.26

05/03/2022 19:44



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019)

Amendment) Design Methodology: LSD

Service Condition: LL Deflection Limit: TL Deflection Limit:

Dry L/360. L/240,

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:

Bottom: 5'

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 5'

ANALYSIS RESULTS		ACCOUNT OF THE				
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	2'- 6"	1.25D + 1.5L	0.72	369 lb ft	4021 lb ft	Passed - 9%
Factored Shear:	0'- 1/16"	1.25D + 1.5L	0.72	294 lb	1614 lb	Passed - 18%
SUPPORT AND REAC	TION INFOR	MATION				
Input 0-		Factored	Factore	d Factore	d Factored	

	Input	Controlling Load		Factored	Factored	Factored	Factored	
ID	Bearing	Controlling Load Combination	LDF	Downward	Uplift	Resistance	Resistance	Result
	Length	Combination		Reaction	Reaction	of Member	of Support	
1	1-12	1.25D + 1.5L	0.72	295 lb		1970 lb	*	Passed - 15%
2	1-12	1.25D + 1.5L	0.72	295 lb		1970 lb	-	Passed - 15%
0.00	NEATABLE	NE OF BATION						

100	Part No.	a deservice of the second seco	lailing Requirem		Other Information or Requirement for
שויין	Part NO.	мапинасцитет Тор	Face	Member	Reinforcement Accessories
1	LT251188	•	-	-	Connector manually specified by the user.
2	LT251188	*	*	-	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.

SPECIF	IED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Líve (L)	Snow (S)	Wind (W)
Self Weight	O'	5'	Self Weight	Тор	3 lb/ft	-	-	•
Uniform	-0'	5'	19(i51781)	Top	61 lb/ft	-	-	-
Uniform	0,	5'	FC3 Floor Decking (Plan View Fill)	Тор	7 lb/ft	20 lb/ft	•	٠
UNFAC	TORED RE	ACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	O'	B29(i54286)	100000000000000000000000000000000000000	177 lb	49 lb	•	•
2	5'	5'	B27(i54263)		177 lb	49 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



STO 4Kbd2

Gold Park Homes

City: Job Track:

Job Address: Pine Valley Ph2 Vaughan

45147

Job Name: 343077 Ground A + Second A.

l evel **Second Floor** Label: B27 - 154263 Type: Beam

1 Ply Member

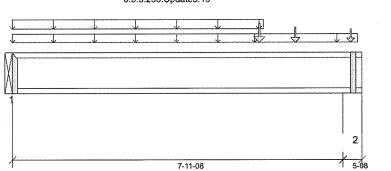
11 7/8" NI-20

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/03/2022 19:45 Report Version: 2021.03.26



8-05-00

DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 **Building Code:**

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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: 5'- 10"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 615 psi Wall @ 8'- 1/2"

	MONE CONTRACTOR	Design	Limit	Result
4 40				
1,40	0.65 1	1062 lb ft 3	3627 lb ft	Passed - 29%
5D + 1.5L	0.89	786 lb	1991 lb	Passed - 40%
L		0.019"	L/360	Passed - L/999
D+L		0.066"	L/240	Passed - L/999
	L D+L	L D+L	L 0.019" D+L 0.066"	L 0.019" L/360

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-12	1.4D	0.65	463 lb		1970 lb	*	Passed - 23%
2	5-08	1.25D + 1.5L	0.89	974 lb		1991 lb	7519 lb	Passed - 49%

		Nailin	a Requirer	nents	Other Information of	r Requirement for
ID.	Part No. Manuf	facturer	Second to the second			
		Тор	Face	Member	Reinforcement Acce	ssories
1	I T251188		•	•	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

SPECIF	FIED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	8'- 5"	Self Weight	Тор	3 lb/ft	-	-	•
Uniform	O,	6'- 1/2"	22(i51778)	Top	61 lb/ft	-	•	*
Uniform	0,	5'- 10"	FC3 Floor Decking (Plan View Fill)	Тор	8 lb/ft	22 lb/ft	•	•
Uniform	5'- 10"	8'- 3 3/4"	FC3 Floor Decking (Plan View Fill)	Тор	8 lb/ft	20 lb/ft	*	-
Point	5'- 11 5/16"	5'- 11 5/16"		Back	190 lb	49 lb	-	-
Point	6'- 9 3/4"	6'- 9 3/4"	J7(i54649)	Back	44 lb	118 lb	4	-
Point	8'- 1 3/4"	8'- 1.3/4"	J7(i54650)	Back	33 lb	87 lb	-	-
UNFAC	TOREDRI	ACTIONS						
םו	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	o,	O,	B30(i54763)		338 lb	120 lb	-	-
2	7'- 11 1/2"	8'~ 5"	24(i51833)		390 lb	316 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



SZ04684



Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track:

45147

Vaughan

Label: B28 (CANT.) - 154890

Type: Beam

Job Name: 343077 Ground A + Second A...

Second Floor

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

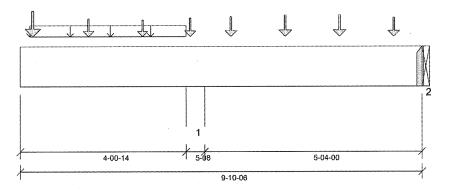
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Level:

Report Version: 2021.03.26 05/03/2022 19:45



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 Building Code:

Amendment) LSD

Design Methodology: Service Condition: LL Deflection Limit: TL Deflection Limit:

Dry L/360, L/240.

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'- 2 7/8"

Bottom: 1'- 2 1/4"

Factored Resistance of Support Material:

- 615 psi Wall @ 4'- 3 5/8"
- 769 psi Beam @ 9'- 10 3/8"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 12." O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	7'- 10 1/8"	0.9D + 1.5L	0.96	760 lb ft	25348 lb ft	Passed - 3%
Factored Neg. Moment:	4'- 3 5/8"	1.25D + 1.5L	1.00	5317 lb ft	25719 lb ft	Passed - 21%
Factored Shear:	3'- 1"	1.25D + 1.5L	1.00	1795 lb	14414 lb	Passed - 12%
Live Load (LL) Neg. Defl.:	6'- 7 13/16"	L		0.012"	L/360	Passed - L/999
Total Load (TL) Neg. Defl.:	6'- 7 1/16"	D + L		0.015"	L/240	Passed - L/999

SU	IPPORT AND REACTION INFORMATION								
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result	
1	5-08	1.25D + 1.5L	1.00	4143 lb		25225 lb	11843 lb	Passed - 35%	
2	1-08	1.25D + 1.5L	0.96	603 lb		603 lb	•	Passed - 100%	
2	1-08	0.9D + 1.5L	1.00		-705 lb	-	-		

	FORMATION

٠	2	HU410	-	+	-	Connector manually specified by the user.	
	ID	Part No.	Manufacturer Top	Face	Member	Other Information or Requirement for Reinforcement Accessories	
300			Nailin	a Requirem	ante	Other Information or Descriptment for	

* 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.

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	-0'	9'- 10 3/8"	Self Weight	Тор	13 lb/ft	~	*	*
Uniform	0'- 2 7/8"	4'- 7/8"	User Load	Top	38 lb/ft	100 lb/ft	•	*
Point	0'- 3 3/4"	0'- 3 3/4"	B5(i54715)	Front	132 lb	270 lb	-	•
Point	1'- 8 1/8"	1'- 8 1/8"	J6(i54899)	Front	61 lb	163 lb	•	•
Point	3'~ 1/8"	3'- 1/8"	J6(i54447)	Front	56 lb	148 lb	•	-
Point	5'- 2 1/8"	5'- 2 1/8"	-	Front	74 lb	197 lb	-	-
Point	6'- 6 1/8"	6'- 6 1/8"	•	Front	83 lb	222 lb	•	-
Point	7'- 10 1/8"	7'- 10 1/8"	-	Front	83 lb	222 lb	•	•
Point	9'- 2 1/8"	9'- 2 1/8"	-	Front	69 lb	184 lb	-	-
Point	4'- 2 1/8"	4'- 2 1/8"	B2(i54372)	Back	183 lb	57 lb	•	•

UNFAC	CTOREDR	EACTIONS					
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
1	4'- 7/8"	4'- 6 3/8"	10(i41708)	1039 lb	1887 lb	•	•
2	9'- 10 3/8"	9'- 10 3/8"	B29(i54286)	-19 lb	422/-450 lb	-	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- The deflection at the cantilever for either live and/or total loads is less than 3/8" and therefore has been excluded from the deflection ratio considerations.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



Customer: Job Address:

Gold Park Homes Pine Valley Ph2 City: Vaughan Job Track:

45147

Job Name: 343077 Ground A + Second A...

Second Floor Label: B29 - i54286 Type: Beam

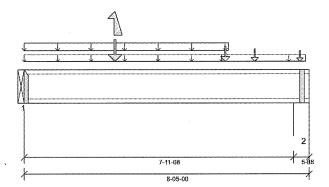
1 Ply Member 11 7/8" NI-20

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/03/2022 19:45



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019) Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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:

Bottom: 3'

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 615 psi Wall @ 8'- 1/2"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 1"	1.25D + 1.5L	1.00	2183 lb ft	5580 lb ft	Passed - 39%
Factored Neg. Moment:	2'- 8 1/4"	0.9D + 1.5L	0.91	684 lb ft	5053 lb ft	Passed - 14%
Factored Shear:	0'- 1/16"	1.25D + 1.5L	1.00	962 lb	2240 lb	Passed - 43%
Live Load (LL) Pos. Defl.:	3'- 10 3/16"	L		0.055"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	3'- 11 13/16"	D+L		0.097"	L/240	Passed - L/984
SUPPORT AND REAC	TION INFORM	ATION				

នហា	PPORTAND	REACTION INFORT	MATION					
ID.	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-12	1.25D + 1.5L	1.00	963 lb		1970 lb	-	Passed - 49%
1	1-12	0.9D + 1.5L	0.91		-170 lb		•	
2	5-08	1.25D + 1.5L	1.00	1142 lb		2240 lb	8459 lb	Passed - 51%
66	NNECTORI	NEORMATION						

į	V-V-1111	~			
	ID Part No. M	Nailir Nailir	ng Requirer	nents	Other Information or Requirement for
	ID FAILING. W	апиласкител Тор	Face	Member	Reinforcement Accessories
	1 LT251188	•	-	-	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.

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	Oʻ	8'- 5"	Self Weight	Тор	3 lb/ft	-	*	
Uniform	O,	6'- 1/2"	20(i51780)	Top	61 lb/ft	-	•	*
Uniform	O,	5'- 10"	FC3 Floor Decking (Plan View Fill)	Тор	7 lb/ft	18 lb/ft	•	-
Uniform	5'- 10"	8'- 3 3/4"	FC3 Floor Decking (Plan View Fill)	Тор	6 lb/ft	16 lb/ft	*	
Point	5'- 11 5/16"	5'- 11 5/16"	•	Front	191 lb	49 lb	•	
Point	6'- 9 3/4"	6'- 9 3/4"	J7(i54649)	Front	44 lb	118 lb	-	-
Point	8'- 1 3/4"	8'- 1 3/4"	J7(i54650)	Front	33 lb	87 lb	-	-
Point	2'- 8 1/4"	2'- 8 1/4"	B28 (CANT.) (i54890)	Back	-19 lb	422/-450 lb	-	-

1	UNFAG	TORED RE	ACTIONS					
Ш	10	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
П	1	0'	0,	B30(i54763)	317 lb	385/-300 lb	•	•
Ш	2	7'- 11 1/2"	8'- 5"	25(i51910)	379 lb	439/-150 lb	-	•

- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track: Vaughan

45147

Job Name: 343077 Ground A + Second A.

Level: Second Floor Label: B30 - i54763 Type: Beam

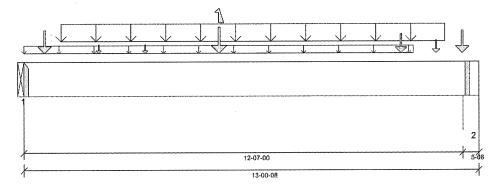
3 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/03/2022 19:46 Report Version: 2021.03.26



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment) Design Methodology: LSD

Service Condition: Dry LL Deflection Limit: L/360. TL Deflection Limit: L/240,

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:

Bottom: 0'- 9 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 615 psi Wall @ 12'-8"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 6 "O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 7 1/4"	1.25D + 1.5L	1.00	24190 lb ft	39797 lb ft	Passed - 61%
Factored Shear:	11'- 7 1/8"	1.25D + 1.5L	1.00	7828 lb	21621 lb	Passed - 36%
Live Load (LL) Pos. Defl.:	6'- 3 5/8"	L		0.270"	L/360	Passed - L/559
Total Load (TL) Pos. Defl.:	6'- 3 13/16"	D+L		0.447"	L/240	Passed - L/337
Permanent Deflection:	6'- 4"			-	L/360	Passed - L/877

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-08	1.25D + 1.5L	1.00	7153 lb	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10319 lb	-	Passed - 69%
2	5-08	1,25D + 1.5L	1.00	7937 lb		37838 lb	17764 lb	Passed - 45%
CO	NNECTOR I	NFORMATION						
ID	Part No.	Manufacturer — To	······································	Requirements		Other Information	**************************************	ent for

* 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

me i le or le or le le							
Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
0'	13'- 1/2"	Self Weight	Тор	19 lb/ft	*	*	•
0,	11'- 2"		Top	60 lb/ft	-	-	•
1'- 3/4"	12'- 3/4"	Smoothed Load	Front	187 lb/ft	432 lb/ft	•	
0'-71/8"	0'- 7 1/8"	-	Front	159 lb	434 lb	-	•
2'- 6 3/4"	12'- 6 3/4"	J11(i54564)	Front	164 lb	411 lb	-	-
2'- 1 3/4"	2'- 1 3/4"	J9(i54678)	Back	•	79 lb	*	•
3'- 5 3/4"	3'- 5 3/4"	J9(i54856)	Back	-	79 lb	-	-
5'- 7 1/4"	5'- 7 1/4"	B29(i54286)	Back	317 lb	385/-300 lb	-	•
0'- 9 3/4"	10'- 9 3/4"	B27(i54263)	Back	338 lb	120 lb	•	•
11'- 9 3/4"	11'- 9 3/4"	J5(i54672)	Back	72 lb	156 lb	-	~
	0' 1'- 3/4" 0'- 7 1/8" 12'- 6 3/4" 2'- 1 3/4" 3'- 5 3/4" 5'- 7 1/4" 0'- 9 3/4" 11'- 9 3/4"	0' 11'- 2" 1'- 3/4" 12'- 3/4" 0'- 7 1/8" 0'- 7 1/8" 2'- 6 3/4" 12'- 6 3/4" 2'- 1 3/4" 2'- 1 3/4" 3'- 5 3/4" 3'- 5 3/4" 5'- 7 1/4" 5'- 7 1/4" 10'- 9 3/4" 10'- 9 3/4"	0' 11'- 2" - 1'- 3/4" 12'- 3/4" Smoothed Load 0'- 7 1/8" 0'- 7 1/8" - 2'- 6 3/4" 12'- 6 3/4" J11(54564) 2'- 1 3/4" 2'- 1 3/4" J9(54678) 3'- 5 3/4" 3'- 5 3/4" J9(54856) 5'- 7 1/4" 5'- 7 1/4" B29(54286) 10'- 9 3/4" 10'- 9 3/4" B27(54263) 11'- 9 3/4" J5(154672)	0' 11'- 2" - Top 1'- 3/4" 12'- 3/4" Smoothed Load Front 0'- 7 1/8" 0'- 7 1/8" - Front 2'- 6 3/4" 12'- 6 3/4" J11(54564) Front 2'- 1 3/4" 2'- 1 3/4" J9(54678) Back 3'- 5 3/4" 3'- 5 3/4" J9(54856) Back 5'- 7 1/4" 5'- 7 1/4" B29(54286) Back 10'- 9 3/4" 10'- 9 3/4" B27(154263) Back 11'- 9 3/4" 11'- 9 3/4" J5(154672) Back	0' 11'- 2" - Top 60 lb/ft 1'- 3/4" 12'- 3/4" Smoothed Load Front 187 lb/ft 0'- 7 1/8" - Front 159 lb 2'- 6 3/4" 12'- 6 3/4" J11(i54564) Front 164 lb 2'- 1 3/4" 2'- 1 3/4" J9(i54678) Back - 3'- 5 3/4" 3'- 5 3/4" J9(i54856) Back - 5'- 7 1/4" 5'- 7 1/4" B29(i54286) Back 317 lb 10'- 9 3/4" 10'- 9 3/4" B27(i54263) Back 338 lb 11'- 9 3/4" 11'- 9 3/4" J5(i54672) Back 72 lb	0' 11'- 2" - Top 60 lb/ft - 1'- 3/4" 12'- 3/4" Smoothed Load Front 187 lb/ft 432 lb/ft 0'- 7 1/8" - Front 159 lb 434 lb 2'- 6 3/4" 12'- 6 3/4" J11(j54564) Front 164 lb 411 lb 2'- 1 3/4" 2'- 1 3/4" J9(j54678) Back - 79 lb 3'- 5 3/4" 3'- 5 3/4" J9(j54856) Back - 79 lb 5'- 7 1/4" 5'- 7 1/4" B29(j54286) Back 317 lb 385/-300 lb 10'- 9 3/4" 10'- 9 3/4" B27(j54672) Back 72 lb 156 lb	0' 11'- 2" - Top 60 lb/ft 1

UNFACTORED REACTIONS													
ľ	ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)					
	1	O'	0,	B31(i54841)	1967 lb	3077/-165 lb	=	-					
1	2	12'- 7"	13'- 1/2"	-	2258 lb	3462/-135 lb	-	•					
	++>	12'- 10 1/4"	12'- 10 1/4"	4(i41664)	1828 lb	2803/-109 lb	-	•					
١	++>	13'	13'	3(141663)	430 lb	659/-26 lb	-	*					

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall study, or beveled plates are required to transfer the loads to this beam.



City: Job Track: 45147

Gold Park Homes Job Address: Pine Valley Ph2 Vaughan

Level: Label: Type:

Job Name: 343077 Ground A + Second A.. Second Floor

B31 - i54841

Beam

2 Ply Member

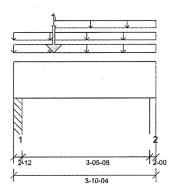
1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/03/2022 19:46 Report Version: 2021.03.26



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018,

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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:

Bottom: 2'- 6 1/2"

Factored Resistance of Support Material:

- 1334 psì Column @ 0'- 1 3/4"
- 615 psi Wall @ 3'- 9 1/4"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ 6" O/C STAGGERED IN 2 ROWS



Design Criteria Factored Pos. Momer Factored Shear: SUPPORT AND R Input ID Bearing Length	nt: 1'- '	1 1/8" 2 5/8" INFORMATI J Load	Fact	1.5L 1.00 1.5L 1.00	Design 5171 lb ft 4462 lb	Limit 26531 lb ft 14414 lb	Result Passed - 19% Passed - 31%
Factored Shear: SUPPORT AND R Input ID Bearing	1'- : REACTION Controlling	2 5/8" INFORMATI I Load	1.25D +) \\ Fact	1.5L 1.00	4462 lb	14414 lb	
SUPPORT AND F Input ID Bearing	(⊒A©∏(©N Controlling	INFORMATI	≋). Fact				Passed - 31%
Input ID Bearing	Controlling	Load L	Fact	ored Factore	nd Eactored		
ID Bearing				ored Factore	d Eactored		
				iward Uplift ction Reactio	Resistance		Result
1 2-12	1.25D +	1.5L 1.	00 556	1 lb	12613 lb	12844 lb	Passed - 44%
2 2-00	1.25D +	1.5L 1.	00 219	6 lb	9171 lb	4306 lb	Passed - 51%
SPECIFIED LOAD	08						
Type Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight 0'	3'- 10 1/4"	Self Weight	Тор	13 lb/ft	•	-	•
Uniform 0'	3'- 10 1/4"	User Load	Top	60 lb/ft	•	-	~
Uniform 0'	3'- 10 1/4"	FC3 Floor Deck (Plan View Fil) 10p	9 lb/ft	24 lb/ft	~	•
Uniform 1'- 1 1/8"	3'- 10 1/4"	FC3 Floor Deck (Plan View Fil		-	19 lb/ft	•	-
Point 1'- 1 1/8"	1'~ 1 1/8"	B30(i54763)	Front	1967 lb	3077/-165 lb	~	~
UNFACTOREDR	EACTIONS						
ID Start Loc	End Loc	Sourc	0	Dead (D)	Live (L)	Snow (S)	Wind (W)
1 0'	0'- 2 3/4"	Pt1(i542	208)	1620 lb	2343/-121 lb	*	*
2 3'- 8 1/4"	3'- 10 1/4"	10(i417	08)	692 lb	902/-44 lb	•	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
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- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.
- User loads assume a bearing length of 3.5" in determining member capacity for loads near supports.
- Bearing capacity of member at support 1, 2 was verified for the effect of concentrated load applied near the support. At support 1. Required Load Area: L=3.500", W=3.500". LDF=1.00, Pf=6827 lb, Q'r=9555 lb, Result=71.45%.

PLY TO PLY CONNECTION:

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

SEDAKISA



Gold Park Homes

Job Address: Pine Valley Ph2

City: Job Track:

Vaughan 45147

Job Name: 343077 Ground A + Second A..

Level:

Label:

Type:

Ground Floor

B32 - i54376 Beam

1 Ply Member 11 7/8" NI-20

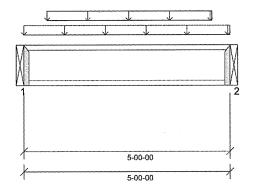
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

05/03/2022 19:46



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 **Building Code:**

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360. TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 5'

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	2'- 6 3/4"	1.25D + 1.5L	0.84	605 lb ft	4679 lb ft	Passed - 13%
Factored Shear:	4'- 11 15/16"	1.25D + 1.5L	0.84	427 lb	1878 lb	Passed - 23%
Total Load (TL) Pos. Defl.:	2'- 6"	D+L		0.015"	L/240	Passed - L/999
SUPPORT AND REAC	TION INFORM	ATION				

lD.	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-12	1.25D + 1.5L	0.84	423 lb		1970 lb	•	Passed - 21%
2	1-12	1.25D + 1.5L	0.84	428 lb		1970 lb	-	Passed - 22%

I			Manufacturer	tailing Requirem	ents	Other Information or Requirement for
l	IU	Рап No.	мапитаскитет <u>Тор</u>	Face	Member	Reinforcement Accessories
l	1	LT251188	•	-		Connector manually specified by the user.
l	2	LT251188	_	•		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.

SPECIFI	ED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	5'	Self Weight	Тор	3 lb/ft	-	-	-
Uniform	-0'	5'	15(i51774)	Top	68 lb/ft	-	-	-
Tapered	0'- 6 3/4"	4'-6 3/4"	Smoothed Load	Back	21 To 18 lb/ft	54 To 49 lb/ft	*	
UNFACT	OREDRE	ACTIONS						
ID.	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	0'	B36(i54820)		216 lb	102 lb	*	•
2	5'	5'	B34(i54292)		217 lb	104 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Gold Park Homes

City: Job Track:

Job Address: Pine Valley Ph2

Vaughan 45147

Job Name: 343077 Ground A + Second A...

Level: **Ground Floor** B33 - i54203 Label: Type: Beam

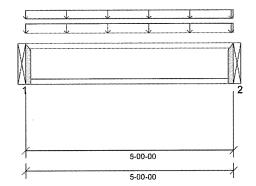
1 Ply Member 11 7/8" NI-20

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3,233.Update5.15

Report Version: 2021.03.26 05/03/2022 19:46



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019 Building Code:

Amendment)

LSD Design Methodology: Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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: 5'

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 769 psi Beam @ 5'

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	2'- 6"	1.25D + 1.5L	0.74	424 lb ft	4109 lb ft	Passed - 10%
Factored Shear:	4'- 11 15/16"	1.25D + 1.5L	0.74	338 lb	1650 lb	Passed - 21%
Total Load (TL) Pos. Defl.:	2'- 6"	D+L		0.011"	L/240	Passed - L/999

SUF	PPORT AND	REACTION INFORM	AATION					
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	1-12	1.25D + 1.5L	0.74	339 lb		1970 lb	•	Passed - 17%
2	1-12	1.25D + 1.5L	0.74	339 lb		1970 lb	-	Passed - 17%
0.0	NNECTORI	MEGRMATION						

	111-01-01	MUMATION			
	Part No. Ma	Nailing Nailing	Require	ments	Other Information or Requirement for
IU	Part No. Ma	nuracturer Top	Face	Member	Reinforcement Accessories
1	LT251188	ingo ingo indonesia, angangkangkangkangkangkangkangkangkangka	**************************************	•	Connector manually specified by the user.
2	LT251188	<u>-</u>		•	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.

SPEUR	IED LUAU	3						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	5'	Self Weight	Тор	3 lb/ft	-	-	-
Uniform	-0'	5'	17(i51776)	Top	68 lb/ft		-	•
Uniform	0,	5'	FC2 Floor Decking (Plan View Fill)	Тор	9 lb/ft	24 lb/ft	•	•
UNFAC	TORED RE	ACTIONS						
OI OI	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	Oʻ	B36(i54820)		200 lb	60 lb		-
2	5'	5'	B34(i54292)		200 lb	59 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.
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- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



SENAKOGO



Job Address: City: Job Track:

Gold Park Homes
Pine Valley Ph2
Vaughan

45147

Job Na

Type:

Job Name: 343077 Ground A + Second A..

Level: Ground Floo Label: B34 - i54292

Ground Floor

Beam

1 Ply Member 11 7/8" NI-20 Status:

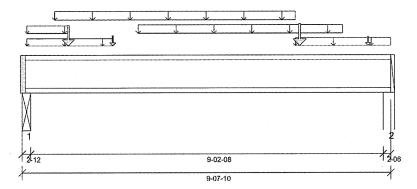
Design

Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MITek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/03/2022 19:47



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment) gn Methodology: LSD

Design Methodology: Service Condition:

Dry L/360,

LL Deflection Limit: TL Deflection Limit:

L/240,

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:

Ton: O'

Bottom: 1'- 1 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'- 1 3/4"
- 615 psì Wall @ 9'- 6 1/4"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	5'- 1/2"	1,25D + 1.5L	0.88	2621 lb ft	4927 lb ft	Passed - 53%
Factored Shear:	0'- 2 13/16"	1.25D + 1.5L	88.0	1156 lb	1978 lb	Passed - 58%
Live Load (LL) Pos. Defl.:	4'- 11 1/8"	L		0.055"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 10 5/8"	D+L		0.155"	L/240	Passed - L/711
SUPPORT AND REAC	TION INFORM	IATION				

*****	8-718-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-		<u> </u>					
	Input	Cantaille a Land		Factored	Factored	Factored	Factored	
ID.	Bearing	Controlling Load Combination	LDF	Downward	Uplift	Resistance	Resistance	Result
	Length	Combination		Reaction	Reaction	of Member	of Support	
1	2-12	1.25D + 1.5L	0.88	1161 lb		1845 lb	4669 lb	Passed - 63%
2	2-06	1.25D + 1.5L	0.88	1130 lb		1806 lb	3225 lb	Passed - 63%

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	9'- 7 5/8"	Self Weight	Тор	3 lb/ft	*	-	*
Uniform	0'- 1 1/2"	2'- 4 1/2"	FC2 Floor Decking (Plan View Fill)	Тор	-	4 lb/ft	~	*
Uniform	0'- 1 1/2"	1'- 2 7/8"	FC2 Floor Decking (Plan View Fill)	Тор	-	15 lb/ft	-	•
Uniform	0'- 10 1/4"	7'- 1 3/4"	18(i51777)	Top	68 lb/ft	~	-	•
Uniform	7'- 1 3/4"	9'- 7 5/8"	FC2 Floor Decking (Plan View Fill)	Тор	9 lb/ft	24 lb/ft	•	*
Tapered	3'- 1/2"	8'- 4 1/2"	Smoothed Load	Front	18 To 16 lb/ft	48 To 42 lb/ft	-	-
Point	1'- 2 9/16"	1'- 2 9/16"	-	Front	215 lb	100 lb	-	•
Point	2'- 4 1/2"	2'- 4 1/2"	J5(i55176)	Front	21 lb	55 lb	-	-
Point	9'- 1/2"	9'- 1/2"	J5(i55181)	Front	14 lb	39 lb	-	*
	7'- 3 1/8"	7'~ 3 1/8"		Back	248 lb	104 lb		_

	UNFAC	TOREDRE	EACTIONS					
ı	ID.	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
	1	0'	0'- 2 3/4"	ST. BEAM (DR.)(i41671)	583 lb	289 lb	-	•
1	2	9'- 5 1/4"	9'- 7 5/8"	W41(i51905)	495 lb	340 lb	~	-

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
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 default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
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- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load
 transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track:

Vaughan 45147

Job Name: 343077 Ground A + Second A.. Level:

Ground Floor Label: B35 - i54409 Type: Beam

1 Ply Member

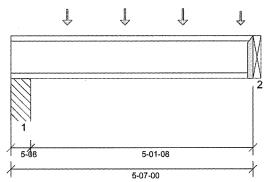
11 7/8" NI-20

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/03/2022 19:47 Report Version: 2021.03.26



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, Building Code:

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 4 1/2"
- 769 psì Beam @ 5'- 7"

•						
ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	2'- 7 5/8"	1.25D + 1.5L	0.90	614 lb ft	5002 lb ft	Passed - 12%
Factored Shear:	5'- 6 15/16"	1.25D + 1.5L	0.90	469 lb	2008 lb	Passed - 23%
Total Load (TL) Pos. Defl.:	2'- 11 5/8"	D+L		0.016"	L/240	Passed - L/999

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D + 1.5L	0.90	410 lb		2008 lb	16447 lb	Passed - 20%
2	1-12	1.25D + 1.5L	0.90	469 lb		1970 lb	-	Passed - 24%
co	INECTOR I	NFORMATION						
			Nailing	Requirements		Other Information	on or Requirem	ent for

I Nailing Requirements (Other Information or Requirement for
I ID Part No. Manufacturer	
	Reinforcement Accessories
Top Face Member F	

LT251188 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.

SPECI	FED LOAD)S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O,	5'- 7"	Self Weight	Тор	3 lb/ft	-	*	*
Point	1'- 3 5/8"	1'- 3 5/8"	J5(i54973)	Front	103 lb	64 lb	-	•
Point	2'- 7 5/8"	2'- 7 5/8"	J5(154974)	Front	106 lb	68 lb	-	-
Point	3'- 11 5/8"	3'- 11 5/8"	J5(154975)	Front	106 lb	68 lb	-	•
Point	5'- 3 5/8"	5'- 3 5/8"	J5(i54976)	Front	72 lb	50 lb	-	-
UNFAC	TOREDR	EACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	0'- 5 1/2"	Pt1(i54293)		186 lb	112 lb	*	*
2	5'- 7"	5'- 7"	B36(i54820)	217 lb	138 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track: Vaughan 45147

Level: Label: Type:

Job Name: 343077 Ground A + Second A..

Ground Floor B36 - i54820

Beam

2 Ply Member 11 7/8" NI-20

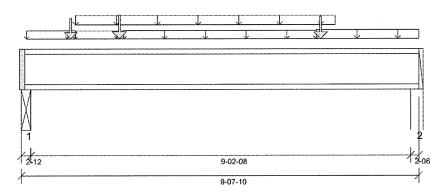
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

05/03/2022 19:47



Controlling Load

Combination

DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment) Design Methodology: LSD

Service Condition:

Dry L/360,

LL Deflection Limit: TL Deflection Limit:

L/240,

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: 4'- 8"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'- 1 3/4"
- 615 psi Wall @ 9'- 6 1/4"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	4'- 5 1/4"	1.25D + 1.5L	0.81	2576 lb ft	9086 lb ft	Passed - 28%
Factored Shear:	0'- 2 13/16"	1.25D + 1.5L	0.81	1295 lb	3647 lb	Passed - 36%
Live Load (LL) Pos. Defl.:	4'- 9 7/16"	L		0.022"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 9 3/16"	D+L		0.079"	L/240	Passed - L/999
SUPPORT AND REAC	TION INFORM	IATION				

Factored

Uplift

Reaction

Factored

Resistance

of Member

270 lb

253 lb

Factored

Resistance

of Support

Result

Factored

Downward

Reaction

1 2	2-12 2-06	1.25D + 1.25D +		1301 lb 1025 lb		3403 lb 3330 lb	8610 lb 5948 lb	Passed - 38% Passed - 31%
_	FIED LOAD		1.02 0.01	1020 11		333312		
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	9'- 7 5/8"	Self Weight	Тор	6 lb/ft	-	-	*
Uniform	0'- 1 1/2"	1'- 3 3/4"	FC2 Floor Decking (Plan View Fill)	Тор		18 lb/ft	-	•
Uniform	1'- 3 3/4"	7'- 7 1/4"	16(i51775)	Top	68 lb/ft	w.	-	-
Uniform	1'- 3 3/4"	2'- 5 3/4"	FC2 Floor Decking (Plan View Fill)	Тор		14 lb/ft	-	-
Uniform	2'- 5 3/4"	7'- 1 3/4"	FC2 Floor Decking (Plan View Fill)	Тор	7 lb/ft	18 lb/ft	-	*
Uniform	7'- 1 3/4"	9'- 7 5/8"	FC2 Floor Decking (Plan View Fill)	Тор	15 lb/ft	39 lb/ft	-	-
Point	1'- 2 3/8"	1'- 2 3/8"	*	Front	228 lb	60 lb	-	•
Point	7'- 3"	7'- 3"	B32(i54376)	Front	216 lb	102 lb	-	-
Point	2'- 4 1/2"	2'- 4 1/2"	B35(i54409)	Back	217 lb	138 lb	-	·.
UNFA	CTORED R	EACTIONS						
מו	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)

712 lb

520 lb

DESIGN NOTES

O,

9'- 5 1/4"

0'- 2 3/4"

9'- 7 5/8'

Input

Bearing

Length

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

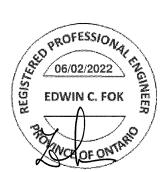
ST. BEAM (DR.)(I41671)

W41(i51905)

- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.



 Member design assumed proper ply to ply connection by others. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



SZ-046693



Gold Park Homes

Job Address: Pine Valley Ph2

City: Job Track:

45147

Vaughan

Job Name: 343077 Ground A + Second A...

Level: **Ground Floor** Label:

B37 (-3R) - i54321

Beam

2 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

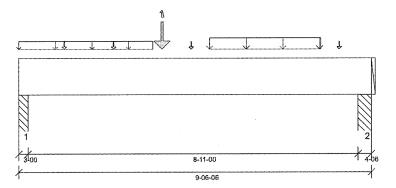
Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Type:

Report Version: 2021.03.26 05/03/2022 19:48



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition:

Drv

LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 2"
- 1334 psi Column @ 9'- 3"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ (2." O/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 10 1/2"	1.25D + 1.5L	1.00	14921 lb ft	26531 lb ft	Passed - 56%
Factored Shear:	1'- 2 7/8"	1.25D + 1.5L	1.00	4458 lb	14414 lb	Passed - 31%
Live Load (LL) Pos. Defl.:	4'- 6 3/16"	L		0.108"	L/360	Passed - L/993
Total Load (TL) Pos. Defl.:	4'- 6 3/16"	D + L		0.181"	L/240	Passed - L/592
SUPPORT AND REAC	TION INFORM	ATION				

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	3-00	1.25D + 1.5L	1.00	4587 lb		13759 lb	14011 lb	Passed - 33%
2	4-06	1.25D + 1.5L	1.00	3496 lb		20065 lb	20432 lb	Passed - 17%

SPECI	FIED LOAL	18						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	9'- 6 3/8"	Self Weight	Тор	13 lb/ft	*	*	*
Uniform	O,	3'- 7 1/2"	User Load	Top	13 lb/ft	34 lb/ft	w.	•
Uniform	5'- 1 15/16"	8'- 1 15/16"	Smoothed Load	Back	64 lb/ft	128 lb/ft	-	-
Point	1'- 2 3/4"	1'- 2 3/4"	J3(i54701)	Back	67 lb	178 lb		•
Point	2'- 6 3/4"	2'- 6 3/4"	J3(i54792)	Back	64 lb	170 lb	-	•
Point	3'- 10 1/2"	3'- 10 1/2"	B18 (-3R)(i54371)	Back	1688 lb	2376/-35 lb	-	-
Point	4'- 7 15/16"	4'- 7 15/16"	J3(i54929)	Back	57 lb	115 lb	-	-
Point	8'- 7 15/16"	8'- 7 15/16"	J3(i54829)	Back	56 lb	113 lb	+	-

	UNFAC	TORED R	EACTIONS					
	ID.	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
l	1	O'	0'~ 3"	Pt2(i54691)	1302 lb	1973/-21 lb	•	•
ı	2	9'- 2"	9'- 6 3/8"	Pt2(i54221)	1003 lb	1495/-14 lb	-	-

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

82046694



Gold Park Homes

Job Address: Pine Valley Ph2 City: Job Track:

Vaughan

45147

Job Name: 343077 Ground A + Second A...

Level: Label:

Ground Floor B38 (-3R) - i54892

Type:

Beam

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

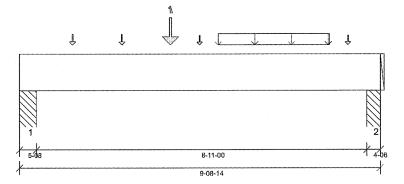
Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26

05/03/2022 19:48



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition:

Dry

LL Deflection Limit: TL Deflection Limit: L/360. L/240,

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:

Bottom: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 4 1/2"
- 1334 psi Column @ 9'- 5 1/2"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ (7 0/C STAGGERED IN 2 ROWS



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	4'- 1"	1.25D + 1.5L	1.00	6165 lb ft	26531 lb ft	Passed - 23%
Factored Shear:	1'- 5 3/8"	1.25D + 1.5L	1.00	2044 lb	14414 lb	Passed - 14%
Live Load (LL) Pos. Defl.:	4'- 9 11/16"	L		0.046"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 9 9/16"	D+L		0.080"	L/240	Passed - L/999

ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	5-08	1.25D + 1.5L	1.00	2068 lb		25225 lb	25687 lb	Passed - 8%
2	4-06	1.25D + 1.5L	1.00	1867 lb		20065 lb	20432 lb	Passed - 9%

SPECI	FIED LOAD	38						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	9'- 8 7/8"	Self Weight	Тор	13 lb/ft	*	-	*
Uniform	5'- 4 7/16"	8'- 4 7/16"	Smoothed Load	Front	64 lb/ft	128 lb/ft	•	-
Point	1'- 5 1/4"	1'- 5 1/4"	J3(i54701)	Front	67 lb	178 lb	•	-
Point	2'- 9 1/4"	2'- 9 1/4"	J3(i54792)	Front	64 lb	170 lb	•	-
Point	4'- 1"	4'- 1"	B18 (-3R)(i54371)	Front	614 lb	683/-9 lb	-	-
Point	4'- 10 7/16"	4'- 10 7/16"	J3(i54929)	Front	57 lb	115 lb	-	-
Point	8'- 10 7/16"	8'- 10 7/16"	J3(i54829)	Front	56 lb	113 lb	-	+

UNFA	CTORED R	EACTIONS					
ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
1	O'	0'- 5 1/2"	Pt2(i54771)	621 lb	861/-5 lb	-	-
2	9'~ 4 1/2"	9'~ 8 7/8"	Pt2(i54318)	556 lb	782/-4 lb	~	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

87-040669



Job Track:

Gold Park Homes

City:

Vaughan

45147

Job Address: Pine Valley Ph2

Level: Label: Type:

Job Name: 343077 Second A W Elevator WD

Second Floor B39 - i55302

Beam

1 Ply Member 11 7/8" NI-20

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/04/2022 11:16

2 7-11-08

8-05-00

DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:**

ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 769 psi Beam @ 0'
- 615 psi Wall @ 8'- 1/2"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	4'- 4 5/8"	1.25D + 1.5L	1.00	2925 lb ft	5580 lb ft	Passed - 52%
Factored Shear:	7'- 11 7/16"	1,25D + 1.5L	1.00	1436 lb	2240 lb	Passed - 64%
Live Load (LL) Pos. Defl.:	4'- 15/16"	L		0.066"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 1 1/16"	D + L		0.130"	L/240	Passed - L/732

1	SUP	PORTAND	REACTION INFORM	JATION					
		Input	Controlling Load		Factored	Factored	Factored	Factored	
	ID	Bearing	Controlling Load Combination	LDF	Downward	Uplift	Resistance	Resistance	Result
	***************************************	Length	Combination		Reaction	Reaction	of Member	of Support	
	1	1-12	1.25D + 1.5L	1.00	1290 lb		1970 lb	-	Passed - 65%
	2	5-08	1.25D + 1.5L	1.00	1702 lb		2240 lb	8459 lb	Passed - 76%

	RMATION

1 1T251199	_	Connector manually specified by the user
ID Part No. Manufacturer Top Face	Member	Reinforcement Accessories
I Nailing Requiremen	its	Other Information or Requirement for

* 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

SPECI	FIED LOAD	S						
Туре	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	O'	8'- 5"	Self Weight	Тор	3 lb/ft	-	=	•
Uniform	0,	6'- 1/2"	20(i51780)	Тор	61 lb/ft	~	•	•
Uniform	2'- 4 5/8"	6'- 4 5/8"	Smoothed Load	Back	44 lb/ft	118 lb/ft	-	-
Point	5'- 11 5/16"	5'- 11 5/16"	-	Front	191 lb	49 lb	-	•
Point	6'- 11 1/4"	6'- 11 1/4"	•	Front	94 lb	251 lb	•	*
Point	8'- 1 3/4"	8'- 1 3/4"	J7(i55666)	Front	50 lb	134 lb	F	-
Point	0'- 8 5/8"	0'- 8 5/8"	J6(i57067)	Back	43 lb	115 lb	-	-
Point	1'- 8 5/8"	1'- 8 5/8"	J6(i56330)	Back	52 lb	138 lb	•	
UNFAC	TOREDR	EACTIONS						
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0,	0,	B30(i55779)	465 lb	471 lb	•	44.

533 lb

692 lb

DESIGN NOTES

7'- 11 1/2"

8'- 5"

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

25(i51910)

- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.





Gold Park Homes Job Address: Pine Valley Ph2

City: Job Track:

Vaughan

45147

Job Name: 343077 Second A W Elevator WD Level: Second Floor

Label: B40 - i56220 Type: Beam

2 Ply Member

1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Report Version: 2021.03.26

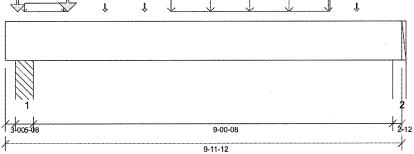
Status: Design **Passed**

05/04/2022 11:17

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version

8.5.3.233.Update5.15



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:** ABC 2019, OBC 2012 (2019 Amendment)

Design Methodology: LSD Dry Service Condition: LL Deflection Limit: L/360.

TL Deflection Limit: L/240.

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 1334 psi Column @ 0'- 5 3/4"
- 615 psi Wall @ 9'- 10"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @ \$\frac{1}{2}\$" O/C STAGGERED IN 2 ROWS



Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	2'- 6 1/8"	1.25D + 1.5L	1.00	7777 lb ft	26531 lb ft	Passed - 29%
Factored Neg. Moment:	0'- 5 3/4"	1.25D + 1.5L	1.00	914 lb ft	25803 lb ft	Passed - 4%
Factored Shear:	1'- 8 3/8"	1.25D + 1.5L	1.00	7628 lb	14414 lb	Passed - 53%
Live Load (LL) Pos. Defl.:	4'- 9 3/8"	L		0.064"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 9 11/16"	D+L		0.118"	L/240	Passed - L/923

2.7.7.7	PONT PARTE		724 15-71					
	Input	Carrelles Lass		Factored	Factored	Factored	Factored	
ID	Bearing	Controlling Load	LDF	Downward	Uplift	Resistance	Resistance	Result
	Length	Combination		Reaction	Reaction	of Member	of Support	
1	5-08	1.25D + 1.5L	1.00	13211 lb		25225 lb	25687 lb	Passed - 52%
2	2-12	1.25D + 1.5L	1.00	2144 lb		12613 lb	5921 lb	Passed - 36%

SPECIF	FIED LOAD)\$						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	9'- 11 3/4"	Self Weight	Тор	13 lb/ft	-	*	*
Uniform	0'- 5 3/4"	1'- 6 7/8"	FC3 Floor Decking (Plan View Fill)	Тор	47 lb/ft		*	•
Uniform	4'- 2 1/8"	8'- 2 1/8"	Smoothed Load	Front	106 lb/ft	122 lb/ft	•	-
Point	1'- 6 7/8"	1'- 6 7/8"	B30(i55779)	Front	2098 lb	3131 lb	-	-
Point	2'- 6 1/8"	2'- 6 1/8"	J6(i57067)	Front	102 lb	118 lb	•	•
Point	3'- 6 1/8"	3'- 6 1/8"	J6(i56330)	Front	123 lb	142 lb	-	-
Point	8'- 10 1/8"	8'- 10 1/8"	J6(i56332)	Front	107 lb	139 lb	•	-
Point	0'- 3 3/4"	0'- 3 3/4"	B22(i56221)	Back	1152 lb	2669 lb	-	-

-	UNFAC	TORED R	EACTIONS					
	ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
	1	0'- 3"	0'- 8 1/2"	Pt1(i55224)	3470 lb	5851 lb	•	•
	2	9'- 9"	9'- 11 3/4"	9(i41702)	757 lb	864 lb	-	•

DESIGN NOTES

- · The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- The deflection at the cantilever for either live and/or total loads is less than 3/8" and therefore has been excluded from the deflection ratio considerations.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.
- Bearing capacity of member at support 1, 2 was verified for the effect of concentrated load applied near the support. At support 1. Required Load Area: L=3.500", W=3.500". LDF=1.00, Pf=5444 lb, Q'r=13759 lb, Result=39.56%.

PLY TO PLY CONNECTION.

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

SE046697



Gold Park Homes

Job Address: Pine Valley Ph2

Vaughan

City: Job Track:

45147

Level: Label: Type:

Job Name: 343077 Ground B + Second B (3,

Second Floor

Beam

B41 - i51809

2 Ply Member

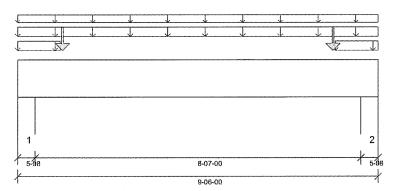
1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design Passed

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/05/2022 13:45



DESIGN INFORMATION

Building Code:

NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: LL Deflection Limit:

Dry L/360.

TL Deflection Limit: L/240.

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: 8'- 7"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 4 1/2"
- 615 psì Wall @ 9'- 1 1/2"

NAIL ONE PLY TO ANOTHER WITH 3-1/2" SPIRAL NAILS @(2" O/C STAGGERED IN 2 ROWS



					200			
Design	n Criteria	Location	Load	Combination	LDF	Design	Limit	Result
Factored Pos	. Moment:	4'- 9"		1.4D	0.65	1828 lb ft	17245 lb ft	Passed - 11%
Factored She	ear:	8'- 5/8"	1.2	25D + 1.5L	0.86	1020 lb	12332 lb	Passed - 8%
Total Load (T	L) Pos. Defl.	: 4'-9"		D+L		0.033"	L/240	Passed - L/999
SUPPORT	AND REA	CTION INFORM	MATION					
Inpu JD Beari Leng	ing C	ontrolling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member		Result
1 5-0	R	1 250 + 1 51	0.86	1599 lh		21583 lb	10133 lb	Passed - 16%

1	5-08	1.25D +	1.5L 0.86	1599 lb		21583 lb	10133 lb	Passed - 16%
2	5-08	1.25D +	1.5L 0.86	1599 lb		21583 lb	10133 lb	Passed - 16%
SPECI	FIEDLOAD	8						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	9'- 6"	Self Weight	Тор	13 lb/ft	*	•	•
Uniform	O,	9'- 6"	E19(i41624)	Top	101 lb/ft	•	-	•
Uniform	0,	9'- 6"	FC3 Floor Decking (Plan View Fill)	Тор	8 lb/ft	23 lb/ft	-	•
Uniform	0,	1'- 1 1/2"	E19(i41624)	Тор	41 lb/ft	63 lb/ft	-	-
Uniform	8'- 4 1/2"	9'- 6"	E19(i41624)	Тор	41 lb/ft	63 lb/ft	-	-
Point	1'- 2 1/4"	1'- 2 1/4"	E19(i41624)	Тор	162 lb	228 lb	•	•
Point	8'- 3 3/4"	8'- 3 3/4"	E19(i41624)	Тор	162 lb	228 lb	-	-
UNFA	CTORED RI	EACTIONS						
ID:	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)
1	0'	0'- 5 1/2"	E33(i51784)		790 lb	405 lb	•	
2	9'- 1/2"	9'- 6"	E31(i51783)		792 lb	409 lb	•	

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

SEOAKHIR



Gold Park Homes Job Address: Pine Valley Ph2

Vaughan Job Track: 45147

Job Name: 343077 Ground C + Second C (5,

Level: Label:

Type:

Second Floor B42 - i54253

Beam

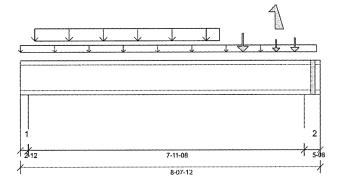
2 Ply Member 11 7/8" NI-20

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

05/06/2022 16:53 Report Version: 2021.03.26



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360,

L/240. TL Deflection Limit:

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 1 3/4"
- 615 psi Wall @ 8'- 3 1/4"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	3'- 9"	1.25D + 1.5L	1.00	3568 lb ft	11160 lb ft	Passed - 32%
Factored Neg. Moment:	7'- 4 1/2"	0.9D + 1.5L + S	0.85	228 lb ft	9531 lb ft	Passed - 2%
Factored Shear:	8'- 2 3/16"	1.25D + 1.5L	1.00	1669 lb	4480 lb	Passed - 37%
Live Load (LL) Pos. Defl.:	4'- 2 7/16"	L		0.057"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	4'- 2 1/4"	D+L		0.077"	L/240	Passed - L/999
SUBBORTANDREAC	TION INFORM	TATION				

W*****	L CIVI WILE	NEAD HOLLING	7.61					
ID	Input Bearing	Controlling Load	ın⊏	Factored Downward	Factored Unlift	Factored Resistance	Factored Resistance	Result
10	Length	Combination	LUI	Reaction	Reaction	of Member	of Support	, reduit
1	2-12	1.25D + 1.5L	1.00	1661 lb		4180 lb	8459 lb	Passed - 40%
2	5-08	1.25D + 1.5L + S	1.00	1531 lb		4480 lb	16918 lb	Passed - 34%
2	5-08	0.9D + 1.5L + S	0.85		-199 lb	-	-	

SPECIF	IED LOAD	S						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0,	8'- 7 3/4"	Self Weight	Тор	6 lb/ft	*	•	*
Uniform	0'	8'- 6 1/2"	FC3 Floor Decking (Plan View Fill)	Тор	7 lb/ft	19 lb/ft		
Uniform	0'- 5"	5'- 9"	Smoothed Load	Front	75 lb/ft	201 lb/ft	•	-
Point	6'- 5"	6'- 5"	J4(i54292)	Front	86 lb	230 lb	•	•
Point	7'- 4 1/2"	7'- 4 1/2"	APP (CANT.) (i54354)	Front	-80 lb	153/-219 lb	-175 lb	-
Point	7'- 11"	7'- 11"	J4(i54311)	Front	83 lb	116 lb	~	•
UNFAC	TORED R	EACTION	5					
ID	Start Loc	End Loc	Source		Dead (D)	Live (L)	Snow (S)	Wind (W)

1	0'	0'- 2 3/4"	23(i51824)	325 lb	840/-24 lb
2	8'- 2 1/4"	8'-7 3/4"	4(i41664)	275 lb	891/-195 lb

- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



SE0466

-19 lb

-156 lb



Job Track:

City:

Gold Park Homes

45147

Job Address: Pine Valley Ph2 Vaughan

Level: Label:

Type:

Job Name: 343077 Ground C + Second C (\$,

Second Floor B43 - 154260

Beam

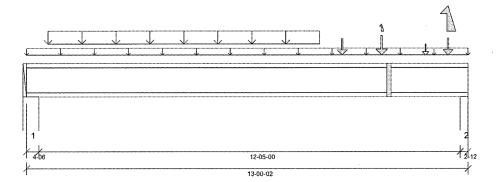
2 Ply Member 11 7/8" NI-20

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/06/2022 16:53



DESIGN INFORMATION

NBCC 2015, Part9, BCBC 2018, **Building Code:** ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240,

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: 1'- 1 1/2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 3 3/8"
- 615 psi Wall @ 12'- 10 3/8"

ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	6'- 7 5/8"	1.25D + 1.5L	1.00	9712 lb ft	11160 lb ft	Passed - 87%
Factored Neg. Moment:	12'- 3 1/8"	0.9D + 1.5L + S	0.79	165 lb ft	8764 lb ft	Passed - 2%
Factored Shear:	0'- 4 7/16"	1.25D + 1.5L	1.00	2910 lb	4480 lb	Passed - 65%
Live Load (LL) Pos. Defl.:	6'- 6 13/16"	L		0.313"	L/360	Passed - L/476
Total Load (TL) Pos. Defl.:	6'- 6 5/8"	D+L		0.431"	L/240	Passed - L/345

SUI	PPURLAND	REAUTION INFORT	MAHUN					
ID	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1	4-06	1.25D + 1.5L	1.00	2929 lb		4480 lb	13457 lb	Passed - 65%
2	2-12	1.25D + 1.5L + S	1.00	2691 lb		4180 lb	8459 lb	Passed - 64%
2	2-12	0.9D + 1.5L + S	0.79		-212 lb	-	-	

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	13'- 1/8"	Self Weight	Тор	6 lb/ft	*	*	•
Uniform	0'	13'- 1/8"	FC3 Floor Decking (Plan View Fill)	Тор	7 lb/ft	19 lb/ft	~	•
Uniform	0'- 7 5/8"	8'- 7 5/8"	Smoothed Load	Front	86 lb/ft	229 lb/ft	•	•
Point	9'- 3 5/8"	9'- 3 5/8"	J2(i54041)	Front	97 lb	260 lb	•	•
Point	10'- 5 1/2"	10'- 5 1/2"	•	Front	130 lb	334/-20 lb	-14 lb	~
Point	11'- 9 1/8"	11'~ 9 1/8"	J2(i54013)	Front	44 lb	119 lb		~
Point	12'- 5 1/16"	12'- 5 1/16"		Front	74/-257 lb	301/-228 lb	-188 lb	-

		, <u> </u>	12 0 1110	170116	7 17 2207 183	0011 22010	10070	
l	UNFAC	TORED RE	ACTIONS					
l	ID .	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Wind (W)
l	1	0,	0'- 4 3/8"	E12(i41614)	573 lb	1470/-15 lb	-12 lb	•
ı	2	12'- 9 3/8"	13'- 1/8"	23(i51824)	365 lb	1622/-233 lb	-190 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.



(ZOA6700)



Gold Park Homes City:

Job Address: Pine Valley Ph2 Vaughan Job Track: 45147

Job Name: 343077 Ground C + Second C (\$,

Level: Label:

Type:

Ground Floor B44 - 154757 Beam

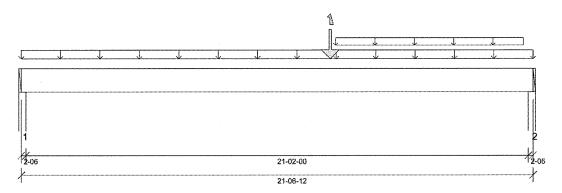
4 Ply Member 1 3/4" x 11 7/8" 1.55E TimberStrand® LSL

Status: Design **Passed**

Illustration Not to Scale. Pitch: 0/12

Designed by Single Member Design Engine in MiTek® Structure Version 8.5.3.233.Update5.15

Report Version: 2021.03.26 05/06/2022 16:54



DESIGN INFORMATION

Building Code: NBCC 2015, Part9, BCBC 2018, ABC 2019, OBC 2012 (2019

Amendment)

Design Methodology: LSD Service Condition: Dry LL Deflection Limit: L/360, TL Deflection Limit: L/240.

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: 21'- 2"

Factored Resistance of Support Material:

- 615 psi Wall @ 0'- 1 3/8"
- 615 psi Wall @ 21'- 5 3/8"

CONNECT A PUT MEMBERS WITH SIMPEONS SDIJZZGRY WOOD SUPENS @ 24 0. (.) STACKERED IN ZROWS (TOP WADED)



ANALYSIS RESULTS						
Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Factored Pos. Moment:	13'- 1/8"	1.25D + 1.5L	1.00	29608 lb ft	53063 lb ft	Passed - 56%
Factored Shear:	20'- 4 1/2"	1.25D + 1.5L	1.00	3879 lb	28828 lb	Passed - 13%
Live Load (LL) Pos. Defl.:	11'- 3 13/16"	L		0.679"	L/360	Passed - L/374
Total Load (TL) Pos. Defl.:	11'- 3 1/4"	D + L		0.975"	L/240	Passed - L/260
Permanent Deflection:	11'- 2"			-	L/360	Passed - L/883

SU	PPORTAND	REACTION INFORM	ATION					
ΙD	Input Bearing Length	Controlling Load Combination	LDF	Factored Downward Reaction	Factored Uplift Reaction	Factored Resistance of Member	Factored Resistance of Support	Result
1 2	2-06 2-06	1.25D + 1.5L 1.25D + 1.5L	1.00 1.00	3033 lb 4023 lb	000000000000000000000000000000000000000	21785 lb 21785 lb	10228 lb 10228 lb	Passed - 30% Passed - 39%

SPECIF	IED LOAL)8						
Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Wind (W)
Self Weight	0'	21'- 6 3/4"	Self Weight	Тор	26 lb/ft	+		•
Uniform	0,	21'- 6 3/4"	FC2 Floor Decking (Plan View Fill)	Тор	15 lb/ft	40 lb/ft	-	-
Uniform	13'- 2 7/8"	21'- 1 7/8"	FC2 Floor Decking (Plan View Fill)	Тор	5 lb/ft	-	~	•
Point	13'- 1/8"	13'- 1/8"	23(151824)	Тор	721 lb	2462/-257 lb	-209 lb	-
TIMEAC	TOPENE	FACTIONS						

	Start Loc	End Loc	Source	ndvn	Live (L)	6(6)	200-4 (200
ID	Start Loc					organie in the partie (No.25 des) by S	Aviin (AA)
1	0,	0'- 2 3/8"	W12(i41590)	728 lb	1382/-99 lb	-80 lb	*
2	21'- 4 3/8"	21'- 6 3/4"	W17(i41595)	919 lb	1950/-158 lb	-129 lb	•

DESIGN NOTES

- The dead loads used in the design of this member were applied to the structure as projected dead loads.
- · Lateral stability factor (KL) was based on user preference to use the width of one ply.
- 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.
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- 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.
- When the applied loads are coming from a member/post/wall above that does not sit directly on this beam, adequate load transfer elements, such as squash blocks, wall studs, or beveled plates are required to transfer the loads to this beam.

PLY TO PLY CONNECTION

Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

LEO4670



Maximum Floor Spans - M4.1, L/360

Design Criteria

Spans:

Simple span

Loads:

Live load = 40 psf and dead load = 20 psf

Deflection limits: L/360 under li

L/360 under live load and L/240 under total load

Sheathing: 3/4 in. nailed-glued oriented strand board (OSB) sheathing



			В	are			1/2 in. gyr	sum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
·		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	15'-11"	15'-0"	14'-6"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"
	NI-40x	17'-0"	16'-0"	15'-5"	14'-10"	17'-5"	16'-5"	15'-10"	14'-11'
9-1/2"	NI-60	17'-2"	16'-2"	15'-7"	14'-11"	17'-7"	16'-7"	16'-0"	15'-4"
	NI-80	18'-3"	17'-1"	16'-5"	15'-9"	18'-8"	17'-5"	16'-9"	16'-1"
	NI-20	17'-11"	16'-11"	16'-3"	15'-8"	18'-7"	17'-5"	16'-10"	16'-1"
	NI-40x	19'-4"	17'-11"	17'-3"	16'-7"	19'-11"	18'-6"	17'-9"	17'-0"
11-7/8"	NI-60	19'-7"	18'-2"	17'-6"	16'-9"	20'-2"	18'-9"	17'-11"	17'-2"
	NI-80	21'-1"	19'-6"	18'-6"	17'-7"	21'-7"	20'-0"	19'-0"	18'-0"
	NI-90	21'-6"	19'-10"	18'-11"	17'-11"	22'-0"	20'-4"	19'-5"	18'-4"
	NI-40x	21'-5"	19'-11"	18'-11"	18'-0"	22'-1"	20'-7"	19'-7"	18'-7"
	NI-60	21'-10"	20'-2"	19'-3"	18'-3"	22'-6"	20'-10"	19'-11"	18'-10'
14"	NI-80	23'-5"	21'-7"	20'-7"	19'-5"	24'-0"	22'-3"	21'-2"	20'-0"
	NI-90	23'-10"	22'-1"	21'-0"	19'-10"	24'-5"	22'-7"	21'-6"	20'-4"
	NI-60	23'-9"	22'-0"	21'-0"	19'-10"	24'-6"	22'-9"	21'-8"	20'-7"
16"	NI-80	25'-6"	23'-7"	22'-5"	21'-2"	26'-2"	24'-3"	23'-1"	21'-10'
	NI-90	26'-0"	24'-0"	22'-10"	21'-6"	26'-7"	24'-8"	23'-5"	22'-2"

		Mi	d-span blocking	with 1x4 inch	strap	Mid-s	oan blocking an	d 1/2 in. gypsur	n ceiling
Joist depth	Joist series		On cent	re spacing			On centr	re spacing	
·		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	17'-1"	15'-5"	14'-6"	13'-5"	17'-1"	15'-5"	14'-6"	13'-5"
0.4100	NI-40x	18'-8"	17'-6"	16'-7"	14'-11"	19'-2"	17'-8"	16'-7"	14'-11'
9-1/2"	NI-60	18'-11"	17'-8"	16'-10"	15'-7"	19'-5"	18'-0"	16'-10"	15'-7"
	NI-80	20'-3"	18'-10"	17'-11"	17'-2"	20'-8"	19'-3"	18'-4"	17'-5"
	NI-20	20'-3"	18'-8"	17'-6"	16'-1"	20'-7"	18'-8"	17'-6"	16'-1"
. 4 7/0"	NI-40x	21'-10"	20'-4"	19'-0"	17'-0"	22'-5"	20'-10"	19'-0"	17'-0"
11-7/8"	NI-60	22'-1"	20'-7"	19'-8"	18'-7"	22'-8"	21'-2"	20'-3"	18'-8"
•	NI-80	23'-8"	22'-0"	20'-11"	19'-10"	24'-1"	22'-6"	21'-6"	20'-4"
	NI-90	24'-1"	22'-5"	21'-4"	20'-2"	24'-7"	22'-11"	19'-0" 20'-3" 21'-6" 21'-10" 20'-11"	20'-8"
	NI-40x	24'-5"	22'-9"	20'-11"	18'-8"	25'-1"	22'-11"	20'-11"	18'-8"
	NI-60	24'-10"	23'-2"	22'-1"	20'-10"	25'-6"	23'-10"	22'-9"	21'-4"
14"	NI-80	26'-6"	24'-8"	23'-6"	22'-2"	27'-1"	25'-3"	24'-1"	22'-9"
	NI-90	27'-0"	25'-1"	23'-11"	22'-7"	27'-6"	25'-8"	24'-6"	23'-2"
	NI-60	27'-3"	25'-5"	24'-3"	22'-11"	28'-0"	26'-2"	25'-0"	23'-1"
16"	N1-80	29'-1"	27'-1"	25'-9"	24'-4"	29'-8"	27'-9"	26'-5"	25'-0"
	NI-90	29'-7"	27'-6"	26'-2"	24'-9"	30'-2"	28'-2"	26'-10"	25'-5"

Notes:

- 1. The tabulated clear spans are based on CSA O86-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.

The construction details for residential designs are prone to changes.

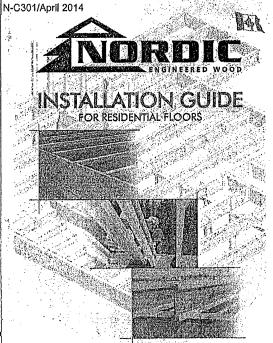
Details released after April 2014 supersedes N-C301

Installation must comply with latest documentation on I-Joist and other Nordic products from the http://nordic.ca/

This document does not constitute a record of the structural integrity of the building nor suitability of the design assumptions made. Nordic Structures Is responsible only for the structural adequacy of its component based on the design criteria and loadings shown on the calculation sheets.

Document prepared for the use of Stephanie Gon from Alpa, Ontario. (Nordic Request 1810-095)





SAFETY AND CONSTRUCTION PRECAUTIONS





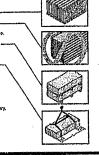
- Atacs and noticech i-joint as it is installed, using hangers, beard, and/or cross-bridging at joint ends. When I-joint are over interior supports and a lead-bearing wall is planned a
- When the building is completed, the floor streathing will pro support for the top floages of the Lights. Until this sheathing temporary bracking, often called strats, or temporary sheaths to provent highst reference or building.
- a provent injest reserver or bucking.

 Temporary bracking or struct must be 1x4 lock while and spaced no more than 8 feet on centre, and making an electric structure of the 2x1/2" nails factored to the top to be bracket in a latest authorized the centre of the server.
- Or, shouthing (temporary or permanent) can the lirst 4 loot of Hoists at the and of the bay
- For carethyored f-joins, brace top and bottom fla clasure panels, run board, or cross-linkiging.
- install and fully nall permanent manifing to each on the floor system. Then, stack building muterial 5. Never install a damaged is alst.

STORAGE AND HANDLING GUIDELINES

- 3. Always suck and handle I-juists in the upright position only.

- 6. Bundled units should be kept inract until time of installation.
- When handling Lights with a crone on the lob tile, take a tay simple procautions to prevent demogra to the Lights and Infort to your work crew.
- * Pick I-joists in bundles as shipped by the supplier.
- · Origin the bundles so that the webs of the I-lokes are vertical.
- Fick the bundles at the 5th points, using a spreader bar if necessary
- it. Do not handle taleists in a harizonial orientation.
- 9. NEVER USE OR TRY TO REPAIR A DAMAGED I-JOIST.

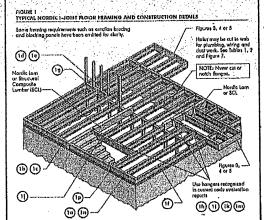


INSTALLING NORDICI-JOISTS

Distributed by:

- 1. Below trying out their system compensation, with that I John Runge wildles a setch temper widths. If not, contact your
- 2. Except for civiling to lungity, it just stanges should nover be cut, ciribut, or natched. 3. install Molets so that top and bottom flanger are within 1/2 truth of two vertical alignment.
- 4. Helsts must be anchored securely to supports before floor steading in cleached, and supports for multiple-span joint must be level.
- 6. When using hungers, reast-losis Findy is langur bottoms to distincted cathoriesis. A. Leave a 1/16-sich gap between the Hohst end und a header.

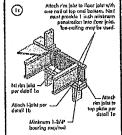
- clure, the gypsens welloom cleg or strus must be used,
- 15. Natl specing: Space nails installed to the florge's top face in accordance with the applicable building code requirements or approved building plans.

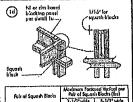






To evoid splitting frange, start noils of least 1-1/2* from end of I-lold, Noils





The construction details for residential designs are prone to changes.

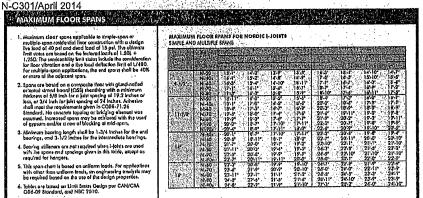
Details released after April 2014 supersedes N-C301

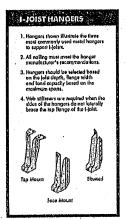
Installation must comply with latest documentation on I-Joist and other Nordic products from the http://nordic.ca/

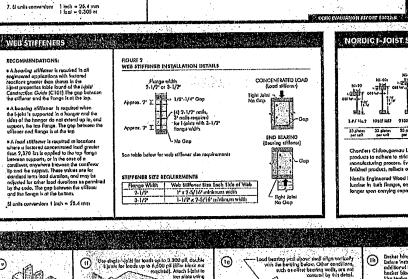
This document does not constitute a record of the structural integrity of the building nor suitability of the design assumptions made, Nordic Structures is responsible only for the structural adequacy of its component based on the design criteria and loadings shown on the calculation sheets.

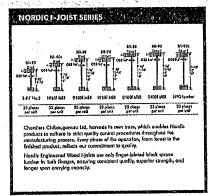
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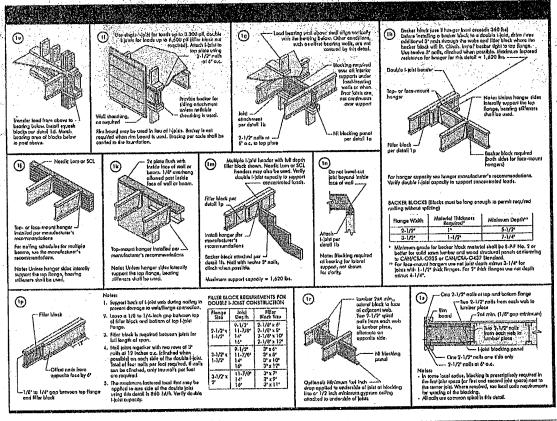












The construction details for residential designs are prone to changes.

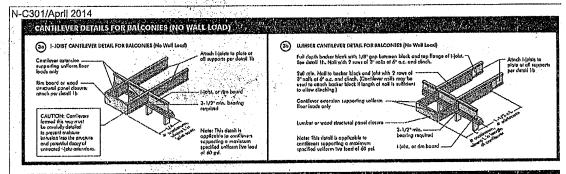
Details released after April 2014, supersedes N-C301

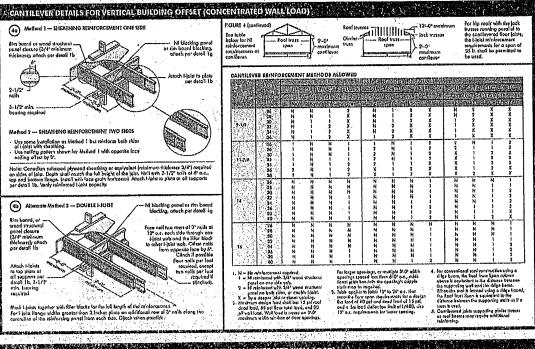
Installation must comply with latest documentation on I-Joist and other Nordic products from the http://nordic.ca/

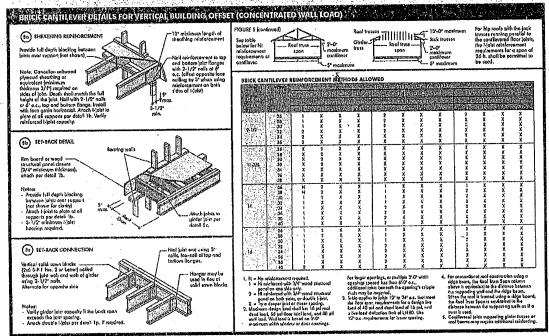
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N-C301/April 2014

' WEB HOLES BULES FOR CUTTING HOLES AND DUCT CHASE OPENINGS:

- The distance between the halds edge of the support and the centroline hale or duct chase opening shall be in compliance with the requirementable 1 or 2, respectively.
- t-jots top and battom tinges must NEVER be cut, notched, or other Whonever possible, field-cut holes should be centred on the middle of the web.
- The marking has habe or the marking displayed by that classes opening flat can be set into an i-feit was that the great the clar distance between the flanger of 1.2 het i-feit value the flat of the i-feit value of 1.2 het should interest the markings of 1.2 het markings of 1.2 het into the flat of the i-feit value of 1.2 het into the i-feit value of 1.2 het int
- The sides of square holes or longest sides of restongular holes, should not exceed 3/4 of the diameter of the maximum round hole partnilled at that tocalion.
- or a time autitizing or the intercentary, the districts believed and the other wholes of the control of the con
- tables 1 and 2, respectively.

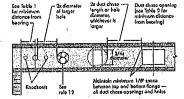
 A knockout is not condidated a hole, may be silized anywhere it occurs and way be ignared for europease of calculating minimum distances between holes and/or duct distance painting.

 Holes more sample: 1/2 inches or smaller shall be permitted anywhere in a conflored scale of a lost; Moles of greater to may be permitted anywhere in a conflored section of a lost; Moles of greater too may be permitted anywhere in the conflored section.
- A 1-1/2 inch halo or smaller can be placed arounded in the web provided that is make the requirements of rule number 6 above.
- 10. All holes and duct chare openings shall be cut in a workman-like manner is accordance with the restrictions fixed above and as Whistiated in Figure 7.
- Umit three maximum the listes per strain, of which are may be a duct chase opening.
- 12. A group of round holes of approximately the same location shall be permitted if they ment the resultanguals for a shall round hots discussibled around them.

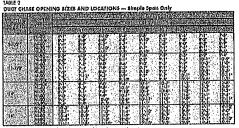


The above highe is based on the highes send at their maximum speek if the highest are placed at feet than their full maximum speek the number distance from the editors are placed as follows:

FIGURE 7 FIELD-CUT HOLE LOCATOR







INSTALLING THE GLUED FLOOR SYSTEM

- Wipe any med, dat, weren or les from faint langes before gluing.
- 2. Stop a close law access the legisless four less in from the wall has parel edge originment boundary for spreading glue.
- 3. Surent only enough the lo by one or two populs or a fave, or follow specific recommendations from the files monotable ve.
- 4. Lay its first panel with rangue side to the wall, and nell in piece. This protects the tangue of the next count from langue when tapped late with a black and stadge names.
- 6. Apply a continuous kns of give fabout 1/4 inch d'arneten to the top franço at a single I joint. Apply give to a whether porton on wide crous, such as with aboutle I joint.
- 6. Apply the films of light an injuist show panel ends but to excure proper giving of each end.

 7. Also it has list any of provide in in place, speed glies in the groups of one or the possible in a fine boles to lying the cost mar. Other list may be constituted an expected, but evok
- A ling the second over a possible flow, using a blook to protect groove edges.

 9. Stopper and laist in sects sectionize (or or in possible, 1/3-inch space between all end laist and 1/6-inch set all udges, including 120 depts, it recommended, (bits a spacer test or or 3-1/2 commen and to serve oversities and considered species).
- num to estate accounts and consistent specing.)

 10. Complete oil mailing of each panel helders give solt. Chock the manufacturer's recommendation for curs time, fifthm meables accolerated piece sorting.) Use T day or strengthesh has be pencils 3/4 toch hick or lars, and 3/1/T day or steem thank so is for theker pencils. Space and per sold per habit so the control per consist per the subbe balon. Course oil panels grow be required by towns codes, or for deplayagem controlection. He finished dack can be walked on right toway and will compress recommendation that shall some codes, or the sold sold some codes of the pencils.

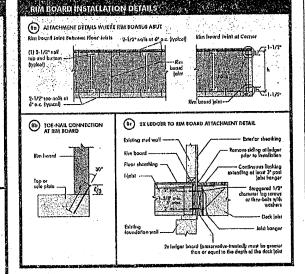
FASTENERS FOR SHEATHING AND SUBFLOORING(1)

		10.5	to place	9.1		
. 16	5/6	2	1-3/4'	2'	ę.	12*
20	6/0	2"	1-3/4"	21	٤,	12'
21	WI-	3'	1-3/4"	21	6'	12'

- 1. Fasteress of shouthing and subflooting shall conform to the above talke.
- 2. Sixolas shall not be loss than Widelach in diameter or electross, who not less than a 3/0-inch crown diven with the course parallel to learning.
- 2. Figurian screws shall not be less than 1/6-lack in clumater
- Special conditions may impose heavy traffic and concontrated loads that require construction in excess
 of the minimum strawn.
- 5. Use only collusives containing to CANTCISS IT 1.26 Bandard, Adhesives for Field-Olutry Pyricod to Turchyr Franking for Floor System, applied in accordance with the recondensive's recommendation of COSB process with model persons and sulger rule to be used, one only solven-bound gloss; check with point may addictive.

Rate NRC-CNRC, National Building Code of Carrida 2010, Table 9.23.3.5

IMPORTANT NOTE: floor shauking must be field gived be fire i-loist Ranges in order to udileve the meadment spans shown in this document. If shouthing is pulled only, i-loist spans must be verified will your food distributor.





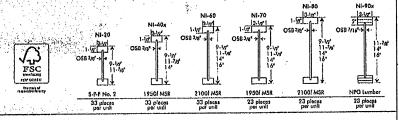


CONSTRUCTION DETAILS FOR RESIDENTIAL FLOORS



www.nordicewp.com

Refer to the Installation Guide for Residential Floors for additional information. CCMC EVALUATION REPORT 13032-R



WEB HOLE SPECIFICATIONS

DUCT CHASE OPENINGS:

- The distance bowsen the inside adge at the support and the centralise of any hole or duct chase operating shall be in compliance with the requirements of Tab's 1 or 2, respectively.

 I foliate part of bottom Rengies must NEVER be cut, noticited, or otherwise modified. Whenever possible, Ridd-cut holes should be control on the middle of the web. The machinism take hole in the nandment depth of a duct chase operangly had can be cut into on I-jobs web shall equal the dies of bottenes between the storage of the 19th into VI / I should have more I / I fall a thorous of I fall a thorous of I fall a fall
- 5. The sides of square holes or longest tides of rectangular holes should not exceed 3/4 of the domaster of the meahmum round had parmitted at that location.
 5. When the most hole is necessary, the distance between adlicant hole adject may be a supplied to the first of the formation of the first state of the formation of the first square hole (or locate the distance) of the formation of the first side of the longest rectangular hole or locate the size of the formation of the first side of the songer rectangular hole to state of the songer rectangular hole to compliance with the requirements of fidable 1 and 2, respectively.
 7. A knocked is not contidened a hole, may be willised enywhere it occurs, and may be ignorial for purposes of calculating minimum distances between holes and/or duct chase openings.
 8. Holes measuring 1.1/2 inches or emaillar one permitted anywhere in a contilierered section of a folia, tholes of graceler tise may be permitted explosit to varification.

- 9. A 1-1/2 Inch hole or smaller can be placed anywhere in the web provided that it mest the requirements of rule number 6 doors.

 All holes and dust chape apentage shall be us in a westran-like manner in occardance with the restrictions listed obove and as standards in Figure 7.

 11. Until these machinum size holes per span, of which one may be a stud charse apening.

 12. A group of round holes at approximately the surra location shall be persulated if they need the requirements for a single round holes directly the surra location shall be persulated account them.

LOCATION OF CIRCULAR HOLES IN JOIST WEBS

Simple or Multiple Span for Dead Loads up to 15 psf and Live Loads up to 40 psf

		Minimum Olstonce from Inside Face of Any Support to Centre of Hole (ft - in.) Round Hole Diameter (in.)														
Joist Dopth	Joist Saries						Rou	nd Hol	Dlam	oler (in.)	120-					
μορψ	adries.	7	3	4	5	6	6-1/4	7	8	8-5/8	9	10	10-3/4	11	12	12-3/4
	NI-20	0-7*	1.9.	2'.10"	4'-3'	5'-8'	9.0.	144	***	***	***	***	***	•••		•••
9.1/2*	NI-404	0'-7"	1'-6'	3.0.	4.4	6.0	6-4	•••	***	. •••	•••	***	***	•••	•••	here
A-1/2	NI-60	11:3"	2'-6"	4.0.	5'-4"	7.0	7'-5"			***	***	***	•••	***	•••	
	NI-70	3,-0,	3'-4'	41.9*	6.3,	8.0	8'-4'	***	***	•••	***	***	•••	***	***	
	NI-80	2:-3:	31.61	5'-0'	6.5	93,	8,-8,	***	***	***	***		***		***	
	NI-20	0.7	0'-8'	1'-0"	2.4	3.8	4'-0"	5'-0"	6.6	7'.9"	***	***	•••		***	***
	NI-40x	0.7	0'-8"	11.31	2,18,	4'-0"	4.4	5'-5"	ブ・0"	8 4	***	***	***	***	***	***
11-7/0"	NI-60	0.7	1.8.	3.0	4'-3'	5'-9'	6'-0"	7'-3"	9-10	10.0	***	***	***	***	***	***
	NI-70	11.31	2'-6"	4.0	5.4	6.5	7'-2"	0'-4"	10-0	11/2	***	•••	•••	***	. ***	***
	NI-BO	1'-6"	2'-10'	4.2	5'-6'	7'-0'	7:-5	8'-6"	10-3	11'-4'.	***	***		***		***
4.00	NI-90#	0'-7"	0.0	0.9	2.5	4-4	4-9	61.3"	***	***		***	***	***	***	
***************************************	NR-40s	0.7	0.84	0.81	1.0	2'-4"	2.9	3'-9"	5'-2"	6.0	6'-6"	8.3,	10.3	***	***	***
	N:-60	C'-7"	0.0	11.81	3'.0"	4.3	4.8	5'-8'	7'.2"	8,-0,	8. 6,	10-4		. ***	***	***
14"	N-70	0.8	1110	3'-0'	41.51	5'-10'	6.2	7.3	8.9	9.9"	10'-4"			***	***	***
	NI-80	0.10	2'-0"	3'-4"	4.9"	6.2'	6'-5'	7'-6"	9.0	10,-0,	10.8	12-4	13'-9'	***	•••	•••
	N1.90x	0.7	0.8.	0'-8'	2'-0"	3.9	4.2	5'-5'	7'-3'	8'-5"	8.2			***	***	
	NI-60	0.7	0'-8'	0.8'	1'-6"	2.10	3.2	4'-2"	5'-6'	6'-4"	7-0"	8'-5"	9'-8"		12:-2	13.9
16	141-70	0.7	140	2.3	3'-6"	4.10		6'-3"	7.8	81.61	9.2	10.0			14.0	15'-6"
	NI-00	0.7	153*	2-6"	3'-10'	5'.3"	51.6	5.6	8.0,	9'-0"	9.5	11'-0'		17.9		16:0
	NI-904	0'-7'	0.8	0'-9"	7.0	3.6.	4'-0"	5'-0"	69.	7'-9"	8.4	10.2	11.6"	15.0.		***

- Advantable may be used for U-falst specing of 24 Inches an contra or lots.
 Hole focation distance in invasived from invite tace of supports to contra of hole.
 Distances in this chart are bosted on uniformly fooded falsts.
 The subject follow is bread on the judge stanging used at their maximum spans. The intelligence as given obove may be reduced for sharter spicits; contract your local distributor.

DUCT CHASE OPENING SIZES AND LOCATIONS

Joist Depth	Joist Series	Minimum	Minimum Distance from Inside Face of Supports to Contro of Opening (ft - in.) Duct Chase Longth (in.)										
Cehin	261142	В	10	12	14	16	18	20	22	24			
9-1/2*	NI-20 NI-40x NI-60 NI-70 NI-80	4'-1' 5'-3' 5'-4' 5'-1' 5'-3'	4'-5' 5'-8' 5'-9' 5'-5' 5'-6"	4'-10' 6'-0' 6'-2' 5'-10' 6'-0'	5'-4' 6'-5' 6'-7' 6'-3' 6'-5'	5-8* 6-10* 7-1* 6-10*	6'-1" 7'-3" 7'-5" 7'-1" 7'-3"	6'-6" 7'-0" 8'-0" 7'-6" 7'-8"	8'-2' 8'-3' 8'-1' 8'-2'	7'-5" 0'-6" 8'-9" 8'-4" 8'-6"			
11-7/8*	NI-20 NI-40x NI-60 NI-70 NI-80 NI-90x	5'.9" 6'.8' 7'.3' 7'.1' 7'-2' 7'-7'	6'-2' 7'-2' 7'-8" 7'-4" 7'-7" 8'-1"	6'-6' 7'-6' 8'-0' 8'-0' 8'-5'	7'-1" 8'-1' 8'-6' 8'-3' 8'-5' 8'-10'	7.5° 8.6° 9.0° 8.7° 8.10° 9.4°	7.9' 9.1' 9.3' 9.1' 9.3' 9.8'	9-3 9-6 9-6 9-6 9-3	8'-9' 10'-1' 10'-3' 10'-1' 10'-2' 10'-8'	9'-4' 10'-9' 11'-0' 10'-4' 10'-8' 11'-2'			
14'	NI-40x NI-60 NI-70 NI-80 NI-90x	8'-1' 8'-9' 8'-7' 9'-0' 9'-4'	8'-7' 9'-3' 9'-1' 9'-3'	9'.0' 9'.8' 9'.5' 9'.9'	9'-6" 10'-1" 9'-10' 10'-1" 10'-7"	10-1* 10-6* 10-4* 10-7* 11-1*	10-7* 11-1* 10-8* 11-1* 11-7*	11'-2' 11'-6' 11'-2' 11'-6' 12'-1'	12'-0" 13'-3" 11'-7" 12'-1" 12'-7"	12'-8' 13'-0' 12'-3' 12'-6' 13'-2'			
16'	NI-60 NI-70 NI-80 NI-90x	10-3' 10-4' 11-1'	10'-8' 10'-5' 10'-9' 11'-5'	11'-2' 11'-0' 11'-3' 11'-10'	11'-6' 11'-4" 11'-9' 12'-4'	12'-1' 11'-10' 12'-1' 12'-10	12-7	13'-2* 12'-8* 13'-1' 13'-9"	14'-1' 13'-3' 13'-8' 14'-4'	14.10 14.4 14.4 15.7			

- Above iable may be used for I-joist specing of 74 inches on contre or less.

 Due those opening lecetion distance is incustated from inside face of supports to centre of opening. The above table is based on simple-sonn joint ones, For other opplications, contact your lecel distribute.

 Distances are been an experiment of the state of the state of the properties of the state of the

FIELD-CUT HOLE LOCATOR

See Table 1 for (8) minimum 1/8' space between top and holes See rule 12



Knockouts are prescored hales provided for the contractor's convenience to install electrical or small plumbing lines. They are 1-1/2 laches in diameter, and are spaced 15 laches on contract olong the langing of the 1-jobs. Where possible, it is preferable to une knockouts instead of field-cut holes.

Never drill, cut or noich the flonge, or ever-cut the web.

Holos in webs should be cut with a sharp saw.

For rectangular hales, would conceuting the content, as this can course unnecestary sites concentrations. Slightly rounding the corners is recommended. Starling the rectangular hale by drilling a 1-inch allowable hale in such all the larve corners and then making the cust between the hales is enabler good method to minimize domage to the Upits.

SAFETY AND CONSTRUCTION PRECAUTIONS



Novar stack building materials over unshanhed l-joists. Once sheathed, do not over-stress l-joists with concentrated loads

WARNING: I-joists are not stable until completely installed, and will not corry any load until fully braced and sheathed.

AVOID ACCIDENTS BY FOLLOWING THESE IMPORTANT GUIDELINES:

- OID ACCIDENTS BY FOLLOWING INTEGE INVOLVED CONTENESS: A bright bright, and the study areas bridging at loid ands. Breas and raff such I float as it brailled, using bengus, blacking panals, the braild, entitor areas bridging at loid ands. When I floats are applied confined over Inharies supports and a load-bearing well it planned at that location, blacking will be required at the lateral support.

- be required at the interfact support.

 When the building is completed, the literature and the support of the Lipids and Lipids and Lipids and the Lipids and Lipids and
- 5. Never Install a damaged I-laist.

Improper starage or installation, to lure to lallow applicable building codes, failure to failow apon ratings for Nordic Lights, failure to failow allowable hole state and locations, or failure to use web stilleners when required can result in serious excidents. Failow these installation guidelines corefully.



PRODUCT WARRANTY

Chantlers Chibongamus guareusen that, in accordance with our specification, Novilic products are free from manufacturing defects in material and workmambip.

Furthermore, Chambers Colbongamon waveauts that our products, n) will seed in accordance with our handling and installation instruct will incer or excess our specifications for the lifetime of the structure. and the second s

The construction details for residential designs are prone to changes.

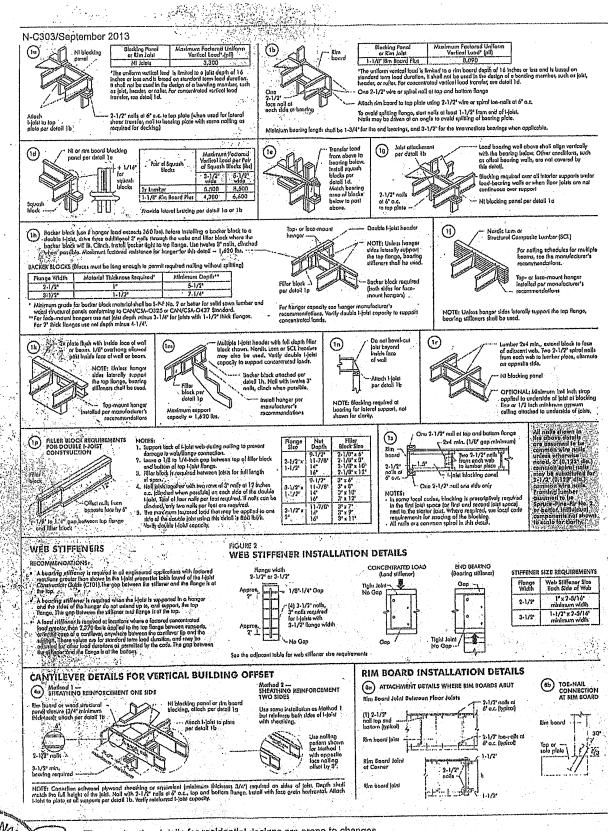
Details released after September 2013 supersedes N-303

installation must comply with latest documentation on I-Joist and other Nordic products from the http://nordic.ca/

This document does not constitute a record of the structural integrity of the building nor sultability of the design assumptions made. Nordic Structures is responsible only for the structural adequacy of its component based on the design criteria and loadings shown on the calculation sheets.

Document prepared for the use of Stephanle Gon from Alpa, Ontario. (Nordic Request 1810-095)

PROFESSIONAL PROFE L. RAYMOND 100501723 CofA # 100504746 Oct. 17 2018 OCE OF ONTARIO





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1