

T.18071965-T.18071971

T.1505359-T.1505368

JT/PL: 44997/99072

LI: 300550 297316(248621)

Builder: Bayview Wellington Homes

Project: Green Valley Estates East

Location: Bradford

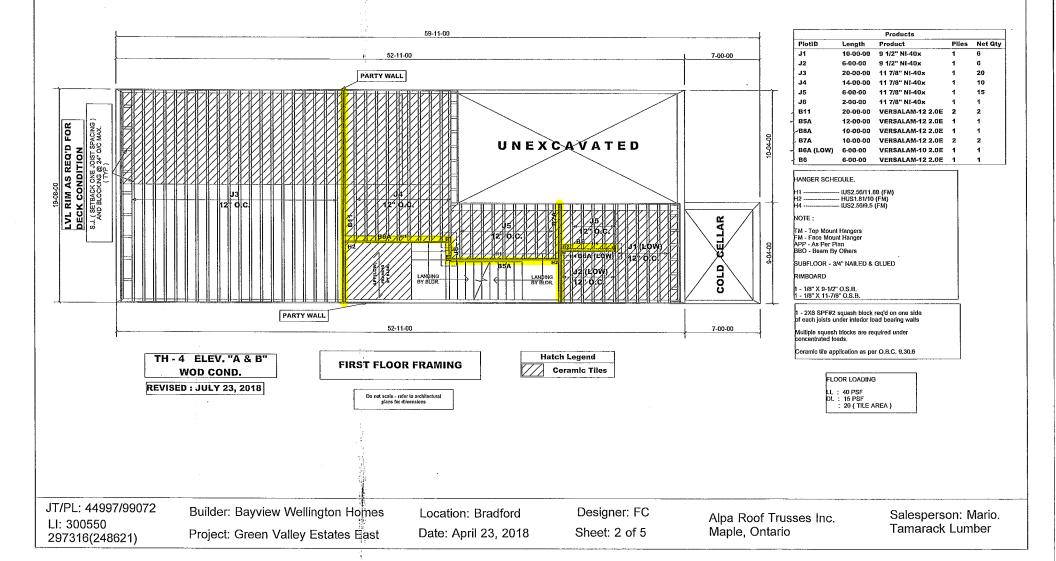
Date: April 23, 2018

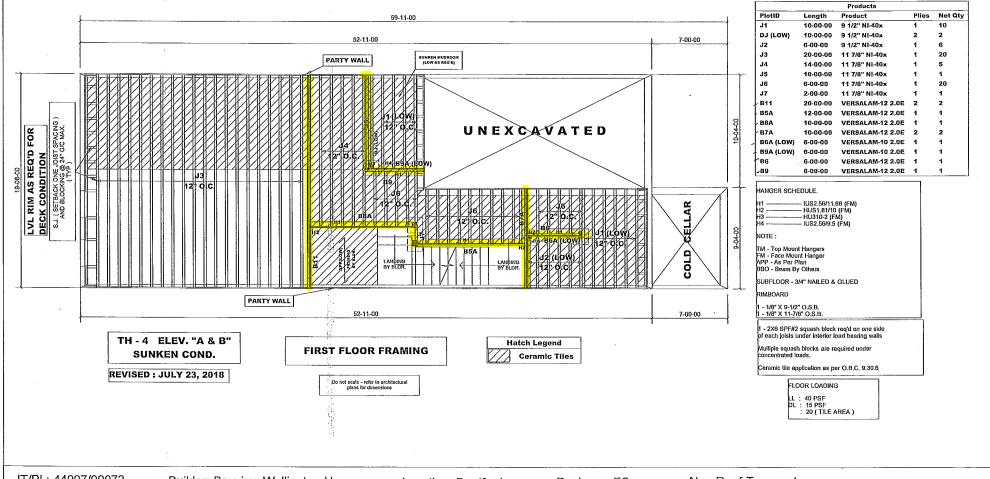
Designer: FC

Sheet: 1 of 5

Alpa Roof Trusses Inc. Maple, Ontario

Salesperson: Mario. Tamarack Lumber





JT/PL: 44997/99072 LI: 300550

297316(248621)

Builder: Bayview Wellington Homes

Project: Green Valley Estates East

Location: Bradford

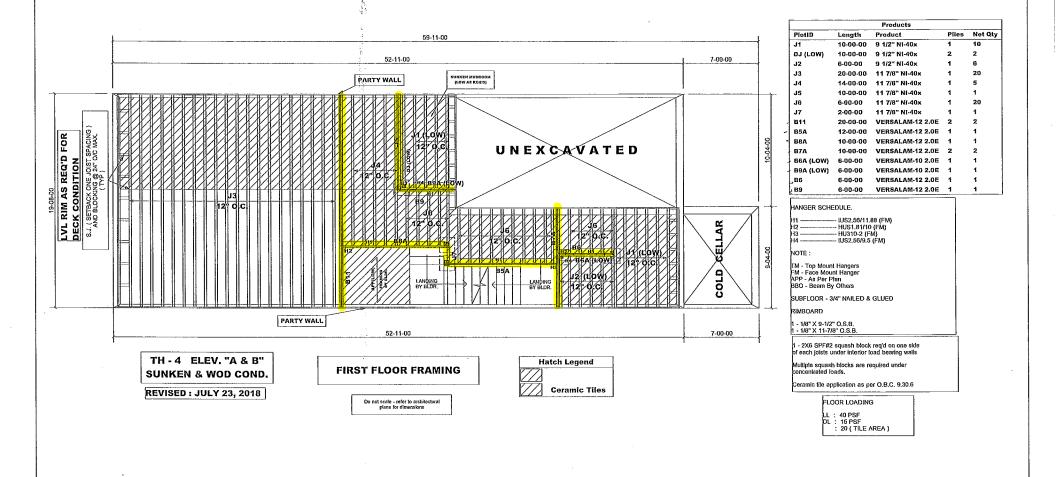
Date: April 23, 2018

Designer: FC

Sheet: 3 of 5

Alpa Roof Trusses Inc. Maple, Ontario

Salesperson: Mario. Tamarack Lumber



JT/PL: 44997/99072

LI: 300550 297316(248621) Builder: Bayview Wellington Homes

Project: Green Valley Estates East

Location: Bradford

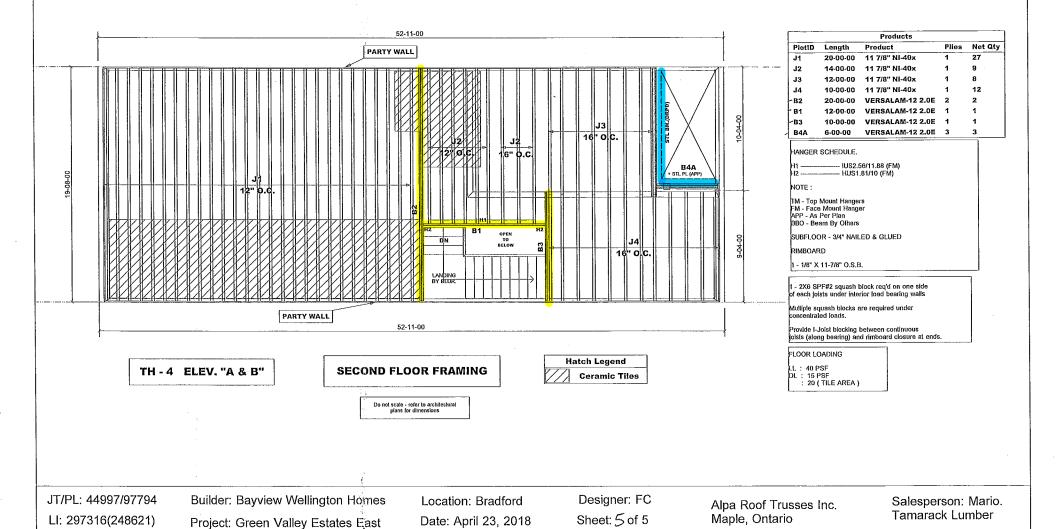
Date: April 23, 2018

Designer: FC

Sheet: 4 of 5

Alpa Roof Trusses Inc. Maple, Ontario

Salesperson: Mario. Tamarack Lumber





Floor Beam\B04

Dry | 1 span | No cantilevers | 0/12 slope (deg)

April 24, 2018 13:44:

BC CALC® Design Report

Build 6536

38514
Job Name: 3R514
Address: GREEN VALLEY ESTATES (TH-4)
City, Province, Postal Code:Bradford, ON
Customer: BAYVIEW WELLINGTON HOMES
Code reports: CCMC 12472-R

Code reports:

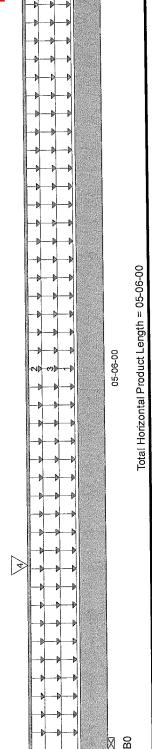
248621.bcc File Name:

Description: Designs/B04A

Specifier: Designer: Company:

F.C. Alps Roof Trusses Inc. Misc.

COP



9

		וטומו ויטוולטווימו ויסמעלי בטוואייי כל כל כל	Louigui oo o				
Reaction Summary (Down	/ Uplift) (Ibs)			7 1 3 4 1			
Bearing	Live	Dead	Snow	WITIO			
B0. 3-1/2"	1,362 / 0	0	3,876 / 0				
B1, 3-1/2"	628 / 0	0/8/6	1,603 / 0				
				Live	Dead	Snow Wind	Trib.
Load Summary	Load Tvne	Ref. Start	End	1.00	0.65	1.00 1.15	
1 ELOOR	Unf. Area (lb/ft^2)		1	40	15		01-00-00
2 WALL	Unf. Lin. (lb/ft)	1	02-06-00		100		n/a
3 ROOF	Unf. Area (lb/ft^2)	_	02-06-00	17	12	32	08-00-00
))))	Conc. Pt. (lbs)		01-04-00 1,308	1,308	1,545	4,049	n/a

									A	See of the least	A ST. T.	81	U:) ist	`	کرکو سید
Location	04-04-00	00-+0-10	01-03-06	02-06-10	02 00 20	02-06-01	02-06-10	, ,	00-00-00				Material	Spruce Pine Fir	Spruce Pine Fir	
Load	2000	C	വ	13	2	17	13	2			Demand/	Resistance	Member	39.3%	17.6%	2
Demand /	Nesistance 40.40	10.4%	36.2%	0/2	<u>=</u>	n/a	6/4	3	n/a		Demand/	Resistance	Support	77.9%	34 9%	2
Factored	Resistance	55,212 II-IDS	21 696 lbs		Z	n/a	2/2	Z = Z	n/a				Demand	8,801 lbs	3 040 lbs	0,040,0
Factored	Demand	9.082 ft-lbs	7,850 lbs	(1200) (000)	(/1.0.0) 666/7	("110 0) 666/1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.0.0	5.1				Dim. (L x W)	3-1/2" x 5-1/4"	3 470" V E 1/4" 3 940 lbc	5-1/2 X 5-1/4
	Controls Summary	Pos Moment	End Shear		Total Load Defl.	Live Load Defi		Max Defl.	Span / Depth				Bearing Supports	Ro Wall/Plate		B1 Wall/Plate

	Ì
	l
S	١
₹	l
ž	I

Total load deflection criteria. Design meets Code minimum (L/240) Total load deflection criteria Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced

Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

086.

Part code: Part 4

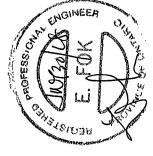
Design based on Dry Service Condition.

Importance Factor: Normal

Nail one ply to another with

o.c, staggered in 2 rows 3 ½" spiral nails @ (≥

User Notes





Floor Beam\B05

Dry | 1 span | No cantilevers | 0/12 slope (deg)

July 23, 2018 14:05.

CALC® Design Report

က္ထ

38514

Job Name: Build 6536

Code reports

248621.bcc File Name:

Designs\B05A

Alps Roof Trusses Inc. Ċ. Description: I Specifier: Designer: F Company: / Misc: Address: GREEN VALLEY ESTATES (TH-4) City, Province, Postal Code:Bradford, ON BAYVIEW WELLINGTON HOMES CCMC 12472-R

COP

	-		<u>₩</u> ₩	
				1
	 >			
	١,			ı
	- P	-		- 1
	-			
	->			
	b			
	"	 ▶		1
	7			
	N	,		
	-			
	<u>_</u>			
		Þ		
	_ F	-		
_				
6	<u></u>			
				0
		*		2
				힏
		"		9
		-		11
				÷
				E)
		-		Ľ
			호	ಕ
				ə
			10-07-00	2
		-		프
		-		Ita
				δ
				Ė
		-		Total Horizontal Product Length = 10-07-00
				ū
				2
		_	, 1	
		"		
		-		
		-		
		.		
		-		
		-		
		"		
		-		
		4		
		[
			×	
		i		

			0					
Reaction Summary (Down / Uplift) (1bs)	/ Uplift) (Ibs)							
Bearing	Live	Dead	Snow	Wind				
B0, 3-1/2"	750 / 0	389 / 0						
B1, 3-1/2"	1,110/0	559 / 0						
Load Summany				Live	Dead	Snow Wind	Wind	Trib
Tag Description	l oad Type	Ref. Start	End	1.00	0.65	1.00 1.15	1.15	
1 FLOOR	Unf. Area (lb/ft [^] 2)	T 00-00-00	10-07-00	40	20			02-01-0
2 LANDING	Unf. Area (lb/ft^2)	L 07-00-00	07-00-00 10-07-00 40	40	22			05-00-0
3 PL LANDING	Conc. Pt. (lbs)	L 07-00-00	00-00-20	480	180			n/a

|00 g

nd accuracy of input must tyone who would rely on the of suitability for

ij.

	Factored	Factored	Demand /	Load	Location	Disclosure
Controls Summary	Demand	Resistance	Resistance	Case		Completeness an
Pos. Moment	5.356 ft-lbs	17,696 ft-lbs	30.3%	1	00-00-20	be verified by any
End Shear	1.848 lbs	7,232 lbs	25.6%	~	09-03-10	output as evidence
Total Load Defl.	∪/895 (0.136")	0.506"	26.8%	4	05-06-13	particular application building code-
Live Load Defl.	(1999 (0.091")	n/a	n/a	5	05-06-13	properties and an
Max Defi	0.136"	=	13.6%	4	05-06-13	installation of Boi
Span / Depth	10.2	n/a	n/a		00-00-00	wood products m
						building codes. To
			Demand/	Demand/		or ask guestions.
			Resistance	Resistance		1-800-964-6999
Bearing Supports	Dim. (L x W) Demand	Demand	Support	Member	Material	
B0 Wall/Plate	3-1/2" x 1-3/4" 1,612 lbs	1,612 lbs	42.8%	21.6%	Spruce Pine Fil	Spruce Pine Fir BC CALC®, BC F
B1 Wall/Plate	3-1/2" × 1-3/4" 2,364 lbs	2,364 lbs	62.7%	31.6%	Spruce Pine Fil	Spruce Pine Fir ALLJOIST®, BC

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA Resistance Factor phi has been applied to all presented results per CSA 086.

Design based on Dry Service Condition. 086.

Part code: Part 4 Importance Factor: Normal

User Notes

NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS

© O.C., STAGGERED IN TWO ROWS

ication. Output here based de-accepted design lanalysis methods.
Boise Cascade engineered st must be in accordance with ation Guide and applicable is. To obtain Installation Guide ns, please call 39 before installation. " BC CALC®, BC FRAMER®, AJS™,
Fir ALLJOIST®, BC RIM BOARD™, BCI®,
BOISE GLULAM™, SIMPLE FRAMING
SYSTEM®, VERSA-LAM®, VERSA-RIM
PLUS®, VERSA-RIM®,
VERSA-STRAND®, VERSA-STUD® are
trademarks of Boise Cascade Wood
Products L **ENGINEER** PROFESS, ONLY SHEALSTERN SHEALS Spruce Pine Fir

OG



Floor Beam\B06

April 23, 2018 15:30.

Dry | 1 span | No cantilevers | 0/12 slope (deg)

BC CALC® Design Report

Build 6536

38514
Job Name: 38514
Address: GREEN VALLEY ESTATES (TH-4)
City, Province, Postal Code:Bradford, ON
Customer: BAYVIEW WELLINGTON HOMES

CCMC 12472-R

Code reports:

248621.bcc File Name:

Description: Designs\B06A Specifier: Designer: F.C. Company: Alps Roof Truss

Misc.

Alps Roof Trusses Inc.

8 05-02-00

Total Horizontal Product Length = 05-02-00

Reaction Summary (Down	wn / Uplift) (Ibs)						
Bearing		Dead	Snow	ΙŇ	Wind		
B0, 3-1/2"	258 / 0	142 / 0					
B1, 3-1/2"	258 / 0	142 / 0					
				Live	Dead	Snow Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	End	1.00	0.65	1.00 1.15	
1 FLOOR	Unf. Area (lb/ff^2)	8	L 00-00-00 05-02-00 40	0 40	20		02-06-00

整次 本語 養情不過	Factored	Factored	Demand /	Load	Location	Disclosure
Controls Summary	Demand	Resistance	Resistance	Case		Completeness and accuracy of input must
Pos Moment	906 ft-lbs	11,610 ft-lbs	5.2%	1	02-07-00	be verified by anyone who would rely on
Fnd Shear	328 lbs	5,785 lbs	5.7%	~	01-01-00	coutput as evidence of suitability for
Total Load Defl.	L/999 (0.007")	n/a	n/a	4	02-01-00	on building code-accepted design
Live Load Defl.	L/999 (0.004")	n/a	n/a	5	02-01-00	properties and analysis methods.
Max Defi	0.007"	n/a	n/a	4	02-04-00	Installation of Boise Cascade engineered
Span / Depth		e/u	e/u		00-00-00	wood products must be in accordance with
opail Depui	9	3	5			current Installation Guide and applicable
			Domand/	Damand/		building codes. To obtain Installation Guide
				Dorietanea		or ask questions, piease cail
			Pesisiance	Nesistanies.		1-800-804-0888 Deloid IIIstalialion.
Bearing Supports	Dim. $(L \times W)$	Demand	Support	Member	Material	
B0 Wall/Plate	3-1/2" × 1-3/4"	565 lbs	15%	%9.7	Spruce Pine Fil	Spruce Pine Fir BC CALC®, BC FRAMER®, AJS™,
B1 Wall/Plate	3-1/2" × 1-3/4"	565 lbs	15%	7.6%	Spruce Pine Fi	Spruce Pine Fir ALLJOIST®, BC KIM BOAKD ", BCI®,
					-	BOIDE GLOLAW "", SIMPLE FRAMING
						SYSTEM®, VERSA-LAIMS, VERSA-RIM
Notes		1.55				PLUS®, VERSA-RIM®,
Design meets Code minimum (L/240) Total load deflection criteria.	num (L/240) Tota	load deflection	criteria.			VERSA-STRAND®, VERSA-STUD® are
Design meets Code minimum (L/360) Live load deflection criteria.	num (L/360) Live	load deflection	criteria.			trademarks of boise dascade wood

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum Total load deflection criteria.

Products L.L.

Calculations assume member is fully braced.

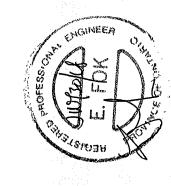
Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

Design based on Dry Service Condition.

Part code: Part 4 Importance Factor: Normal

User Notes

TO ANOTHER WITH 3 1/2" SPIRAL NAIL: 0.C., STAGGERED IN TWO ROWS NAIL ONE PLY -



Floor Beam\B07

BC CALC® Design Report

Dry | 1 span | No cantilevers | 0/12 slope (deg)

July 23, 2018 14:05:

Е

38514 GREEN VALLEY ESTATES (TH-4

Job Name: **Build 6536**

Address:

City, Province, Postal Code:Bradford, ON Customer: BAYVIEW WELLINGTON HOMES Code reports: CCMC 12472-R

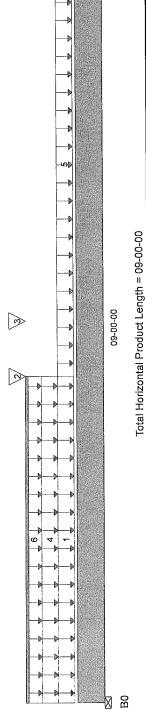
Code reports:

248621.bcc File Name:

Description: Designs\B07A Specifier: Designer: F.C. Company: Alps Roof Truss Misc.

Alps Roof Trusses Inc.

COP



B.

		lotal H	iotai Horizontai Product Lengtri = 09-00-00	Lengin - us-u	00-00		1
Reaction Summary (Down	Jown / Uplift) (lbs)	S)		Spow	Wind		
B0, 1-3/4"	1,224 / 0						1
B1, 3-1/2"	1,014 / 0		694 / 0				
Load Summary					Live Dead	Snow Wind Trib.	Ö.
Tag Description	Load Type	O.	Ref. Start	End	1.00 0.65	1.00 1.15	1
1 LANDING	Unf. Are	Unf. Area (lb/ft^2)	T 00-00-00	03-11-00		02-00-00	2
2 PL B5A	Conc. Pi	: (sql)	L 03-11-00	03-11-00		n/a	ø
3 PLB6	Conc. Pt. (lbs)	: (lbs)	L 04-07-00	04-07-00 465	465 403		Ŋ,
4 FI OOR	Unf. Are	Unf. Area (Ib/ft^2)	L 00-00-00				2
_	Unf. Are	a (lb/ft^2)	L 03-11-00			01-04-00	2
6 WALL	Unf. Lin.	Unf. Lin. (Ib/ft)	L 00-00-00		09	n/a	ø
	Factored	Factored	Demand /	Load	Location		
Controls Summary	Demand	Resistance	Resistance	Case			
Pos. Moment	9,139 ft-lbs	ı		-	03-11-00		
End Shear	2,635 lbs		18.2%	_	01-01-10		
Total Load Defl.	L/999 (0.079")		a n/a	4	04-03-00		
Live Load Defl.	L/999 (0.047")		a n/a	Ω.	04-03-00		
Max Defl.	0.079"		ı n/a	4	04-03-00		
Span / Depth	8.8				00-00-00		
			Demand/	Demand/		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
Bearing Supports	Dim. (L x W)	Demand	Resistance Support	Resistance Member	Material	The state of the s	
B0 Wall/Plate	1-3/4" × 3-1/2"	2,965 lbs	78.7%	39.7%	Spruce Pine Fir	20 TE	
B1 Wall/Plate	3-1/2" x 3-1/2"		31.7%	16%	Spruce Pine Fir) //U3	
						EEA	
Notes						The second secon	

Total load deflection criteria Design meets Code minimum (L/240) Total load deflection criteria Design meets Code minimum (L/360) Live load deflection criteria

OKE

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced

Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

086.

Part code: Part 4 Design based on Dry Service Condition. Importance Factor: Normal

User Notes

Nail one ply to another with 3%" spiral nails @ (\mathbb{Z}^{1})

o.c, staggered in 2 rows





Dry | 1 span | No cantilevers | 0/12 slope (deg)

Floor Beam\B08

BC CALC® Design Report

Job Name: **Build 6536**

38514 GREEN VALLEY ESTATES (TH-4)

Address:

City, Province, Postal Code:Bradford, ON Customer: BAYVIEW WELLINGTON HOMES CCMC 12472-R

Code reports:

248621.bcc File Name:

Description:

Designs\B08A

Alps Roof Trusses Inc. Щ. О. Specifier: Designer: Company: Misc.

April 23, 2018 16:31

ا. ا	▶		Ω	L
				ı
				ı
—▶				. 1
	-			- 1
n	- 1			ı
l J				
m	1			
				- 1
- P	ı İ			
	Ы			
١.,١	b			
P	1			1
	₽			
w.	1			
١.	_b			
M	- 1			1
l ,i	>			1
	Ė			
-0	1			
١.,١				
<u></u>	-			
ا. ا	—b			
1 1				
				- 1
	_	2.40		
 ▶	- 1			
	b			Total Horizontal Product Length = 09-10-00
	- 3			Õ
	- Ro			Ó
				<u></u>
	h	1000		ള
	r			~
				- "
		4		吉
	b			Ę,
			_	စျ
			8	ᇴ
,	"		9	읔
-			7	ਰ
			09-10-00	2
	h			Ф.
	100			ä
				Ħ
				8
				Ë
	. "			꾸
	_			=
	ľ			5
-	a			$rac{1}{2}$
S	"			
-				
	. 5			
fl_a	ł			
10				
2	-			
2				
2		27		
	!			
	- D			
	!			
	!			
	!			
			0	
			BO	

)				l
Reaction Summary (Down	own / Uplift) (lbs))sc						
Bearing	Live	Δ	Dead	Snow	Wind			
B0, 3-1/2"	1,402 / 0		0 / 586					
B1, 3-1/2"	1,498 / 0		0/9/8					
				Í	Live Dead	d Snow Wind		Trib.
Load Summary Tag Description	Load Type	Q.	Ref. Start	End 1.0	1.00 0.65	1.00 1.15	1.15	
1 FLOOR	Unf. Are	Unf. Area (lb/ft^2)	T 00-00-00	00-00-00 09-10-00 40	20		00-00-20	9
2 WALL	Unf. Lin. (lb/ft)	(lb/ft)	T 00-00-00	00-00-00 06-02-00	09			n/a
3 STAIRS	Unf. Are	Unf. Area (lb/ft^2)	L 06-02-00	09-10-00 40	15		01-00-00	8
	Factored	Factored	Demand /	Load	Location	Disclosure		
Controls Summary	Demand	Resistance	Resistance	Case		Completeness ar	Completeness and accuracy of input must	nsţ
Pos. Moment	7,454 ft-lbs	17,696 ft-lbs	bs 42.1%	÷	04-11-05	be verified by any	be verified by anyone who would rely on	=
End Shear	2,470 lbs	7,232 lbs	bs 34.1%	4	08-06-10	output as eviden	output as evidence of suitability for	7
			2000		10 FF FO	particular applica	particular application. Output into pasco	2

		ractored	במרוחובת	ביושווה	Load	Location	5
Contro	Controls Summary	Demand	Resistance	Resistance	Case		S
Pos Moment	oment	7.454 ft-lbs	17,696 ft-lbs	42.1%	1	04-11-05	
Fnd Shear	ביים	2,470 lbs	7.232 lbs	34.1%	_	08-06-10	
Total Lo	ad Defl.	L/652 (0.172")		36.8%	4	04-11-05	ם פיים
l ive lo	l ive Load Defl	1/999 (0.104")	n/a	n/a	5	04-11-05	
Max Defl		0.172"	-	17.2%	4	04-11-05	
Span / Depth	Depth	9.5	n/a	n/a		00-00-00	Ŏ Š
-							be.
				Demand/	Demand/		ö
				Resistance	Resistance		ν
Bearin	Bearing Supports	Dim. (L x W) Demand	Demand		Member	Material	
80	Post	3-1/2" x 1-3/4"	3,334 lbs	25.8%	44.6%	Douglas Fir	8
18	Post	3-1/2" x 1-3/4" 3,343 lbs	3,343 lbs	25.8%	44.7%	Douglas Fir	A S
							ì

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum Total load deflection criteria. Calculations assume member is fully braced

Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

086

Part code: Part 4 Design based on Dry Service Condition. Importance Factor: Normal

User Notes

NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS

© O.C., STAGGERED IN TWO ROWS

properties and analysis methods.
Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation. ust n Ö n building code-accepted design

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIMØ, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.





Floor Beam\B09

Dry | 1 span | No cantilevers | 0/12 slope (deg)

April 23, 2018 15:47

BC CALC® Design Report

Build 6536

Job Name: Address:

City, Province, Postal Code:Bradford, ON Customer: BAYVIEW WELLINGTON HOMES CCMC 12472-R

Code reports:

GREEN VALLEY ESTATES (TH-4)

Designs\B09A 248621.bcc Description: File Name:

Щ. Specifier: Designer: Company: Misc:

Alps Roof Trusses Inc.

	122/500	ĮX	ì	Δ	
₽					
_					
	HOR				
_	1				
1	1000				
. "	- 2002				
	Nette				
Þ					
١.	2000				
-	1020				
	288				
	West				
	2000				
-	188				
	31808				
-	2400				
	25050				
-0	Chater				
_ h	SACTO				
- 10	2259400				
	307703				
70	200000				
	SHEET SHEET				
	SERVE				_
-	No.				5
•	CEONING				c
-	September 1				_
	OCCUS.				č
1	and the				ī
	27////2				ې
	Servine .				ζ
	1000				č
-8	9		8		_
	l B		Y		3
	18		Ċ		
~ D	and or other		-02		7
—) —)	NAME OF TAXABLE PARTY.		05-02-00		1000
~ D	STOCKED CONTRACTOR		05-02		0,00
~P P	N N N		05-02		to Drodi
~₽ —₽	STOCKET TO SECURITION OF THE PARTY OF THE PA		05-02		Joseph Droper
			05-02		Josef Lotacei
			05-02		Joseph Droginal
			05-02		Loring Drogin
			05-02		to Droping
→ → →	× × ×		05-02		Total Display
→ → →	× × ×		05-02		Total Hearington Disaginat castle - 05 02 00
→ → →	× × ×		05-02		Total Drawing Drawl
→ → →	× × ×		05-02		Total House Discol
→ → →	× × ×		05-02		Local Lota Oning III
→ → →	× × ×		05-02		Total Latachia
→ → →	× × ×		05-02		ion Distriction
→ → →	× × ×		05-02		ipox Clotaceiro Diotot
→ → →	× × ×		05-02		ipox Clota or in old loto F
→ → →	× × ×		05-02		Post Lateration Later
	*		05-02		ional Charles I Coto F
→ → →	*		05-02		Poto Distance Distance
	*		05-02		inor Classical later
	*		05-02		ion Clateration later
	*		05-02		ion Character Cate
	*		05-02		Joseph Drop-
	*		05-02		Joseph District
	*		05-02		Joseph Control Control
			05-02		Low Classic Class
			05-02		Joseph Control Control
			05-02		Joseph Contract Contract
			05-02		Joseph Contract Contract
			05-02		ikoy □ lotachia □ lotaT
			05-02		ilog Clotaceiro ClotoT
			05-02		Joseph Contracting
			05-02		Section 1
			05-02		ikoy O otao ois o foto T
			05-02		ikoy O otao oii o U oto T
			05-02	30	ikoy O otao oniso O oto T

		יסימו ויסייבסיוימו : יסממכי בסייפיי			Charles and Trans.		
Reaction Summary (Down	(Down / Uplift) (lbs)						
Bearing		Dead	Snow	Wind			
B0, 3-1/2"	439 / 0	232 / 0					
B1, 3-1/2"	439 / 0	232 / 0					
				Live	Dead Sr	Snow Wind	ind Trib.
Load Summary		,				,	1
Tag Description	Load Type	Ref. Start	End	1.00	0.65	1.00	
1 FLOOR	Unf. Area (lb/ft^2)	2) L 00-00-00 05-02-00 40	05-02-00		20		04-03-00
	Factored Factored	ed Demand / Load Location	Load	Location	Disclosure	<u>l</u>	

	Factored	Factored	Demand /	Load	Location	Disclosure
Controls Summary	Demand	Resistance	Resistance	Case		Completeness and accuracy
Pos Moment	1.018 ft-lbs	11,610 ft-lbs	8.8%	1	02-07-00	be verified by anyone who wo
End Shear	551 lbs	5,785 lbs	9.5%	_	01-01-00	output as evidence of suitabil
Total Load Defl.	L/999 (0.011")	n/a	n/a	4	02-01-00	on building code-accepted de
Live Load Defl.	L/999 (0.008")	n/a	n/a	ວ	02-01-00	properties and analysis methor
Max Defi	0.011"	n/a	n/a	4	02-01-00	Installation of Boise Cascade
Span / Depth	5.9	n/a	n/a		00-00-00	wood products must be in acc
				,		building codes. To obtain Inst
			Demand/	Demand/		or ask guestions, please call
			Resistance	Resistance		1-800-964-6999 before instal
Bearing Supports Dim. (L x W) Demand	Dim. (L x W)	Demand	Support	Member	Material	
B0 Wall/Plate	3-1/2" x 1-3/4"	949 lbs	25.2%	12.7%	Spruce Pine Fi	Spruce Pine Fir BC CALC®, BC FRAMER®,
B1 Wall/Plate	3-1/2" x 1-3/4"	949 lbs	25.2%	12.7%	Spruce Pine Fi	Spruce Pine Fir ALLJOISI®, BC KIM BOAKI

Notes

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA Resistance Factor phi has been applied to all presented results per CSA 086.

Design based on Dry Service Condition. 086

Part code: Part 4 Importance Factor: Normal

User Notes
NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS
O.C., STAGGERED IN TWO ROWS

nd applicable stallation Guide ccordance with of input must e engineered there based vould rely on allation. ility for lesign nods.

Spruce Pine Fir BC CALC®, BC FRAMER®, AJS™,
Spruce Pine Fir ALLJOIST®, BC RIM BOARD™, BCI®,
BOISE GLULAM™, SIMPLE FRAMING
SYSTEM®, VERSA-LAM®, VERSA-RIM
PLUS®, VERSA-RIM®,
VERSA-STRAND®, VERSA-STUD® are
trademarks of Boise Cascade Wood





Floor Beam\B'

April 23, 2018 16:30

Dry | 1 span | No cantilevers | 0/12 slope (deg)

BC CALC® Design Report

38514 GREEN VALLEY ESTATES (TH-4)

Job Name: Build 6536

Address:

City, Province, Postal Code:Bradford, ON Customer: BAYVIEW WELLINGTON HOMES CCMC 12472-R

Code reports:

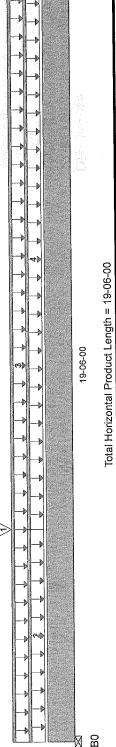
Customer:

Designs\B11 248621.bcc File Name:

E.C. Description: E Specifier: Designer: F Company: A

Alps Roof Trusses Inc.

B1



Reaction Summary (Down	own / Uplift) (lbs)		Dead	Snow	Wind				
B0, 1-3/4" B1, 1-3/4"	1,304 / 0 768 / 0	Y							
- Committee					Live	Dead	Snow Wind	Wind	Trib.
Load Summary Tag Description	Load Type		Ref. Start	End	1.00	0.65	1.00	1.15	
1 B8A	Conc. Pt. (lbs)	(lbs)	L 05-06-00	05-06-00 1,402		985			n/a
	Unf. Lin.	(lb/ft)	T 00-00-00	02-06-00		90			n/a
1 m	Unf. Lin.	(lb/ft)	L 00-00-00	19-06-00		10			n/a
0 4	Unf, Lin. (lb/ft)	(lb/ft)	L 05-06-00	19-06-00	20	10			n/a
	Factored	Factored	Demand /	Load	Location				
Controls Summary	Demand	Resistance	Resistance	Case		ĺ			
Pos Moment	17,114 ft-lbs	35,392 ft-lbs	48.4%	-	02-06-00	8			
End Shear	3.379 lbs	14,464 lbs	23.4%	~	01-01-10	10			
Total Load Defl.	L/317 (0.732")		75.7%	4	09-01-07	27			
I ive Load Defi	L/579 (0.401")	0.644"	62.2%	2	09-01-07	27			
Max Defl.	0.732"	n/a	n/a	4	09-01-07	27			
Span / Depth	19.5	e/u	n/a		00-00-00	. 00			
			Domand/	Domend					
			ø	Resistance			**	THE WAR AND THE	
Bearing Supports	Dim. (L x W)	Demand		Member	Material	1	6	PROFESSIO	
B0 Wall/Plate	1-3/4" x 3-1/2"	3,530 lbs	93.7%	47.2%	Spruce Pine Fir	i Li	J. T.		
	1-3/4" x 3-1/2"	1,934 lbs	51.3%	25.9%	Spruce Pine Fir	FF	0	Wash a	

Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria. Code minimum (L/240) Design meets

Calculations assume member is fully braced

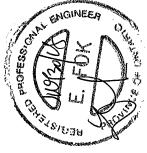
Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA 086

Service Condition. Design based on Dry Servic Importance Factor: Normal

Part code : Part 4

User Notes

NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS (2) 0.C., STAGGERED IN TWO ROWS





Floor Beam\B0

Dry | 1 span | No cantilevers | 0/12 slope (deg)

BC CALC® Design Report

38514
GREEN VALLEY ESTATES (TH-4)
Postal Code:Bradford, ON
BAYVIEW WELLINGTON HOMES
CCMC 12472-R

Address: City, Province, F Customer: Code reports:

ame: Buil-3272

Description: 248621
Description: Designs\B01
Specifier:
Designer: F.C.
Company: Alps Roof True

F.C. Alps Roof Trusses Inc.

December-01-14

-N 1	
	. I
	ğ
_	ဝို
	Total Horizontal Product Length = 10-04-00
	<u>"</u>
	g
	e P
1 6	걸
10-04-00	8
	<u>-</u>
	Ę.
	ij
	운
	亞
	ပ
	- [
-	- [
	I
1 C+3 (Sin Cott)	
	- [
	- 1
	ı

B

Reaction Summary (Down /	Down / Uplift) (lbs)	(S)				
Bearing		Dead		Snow	Wind	1 to
B0. 3-1/2"	1,733 / 0		0 /			
B1, 3-1/2"	1,443 / 0	0 615/0	0 /			
lood Summany					Live Dead	Snow Wind Trib.
Tag Description	Load Type	m	Ref. Start	End	1.00 0.65	1.00 1.15
1 FLOOR	Unf. Area	Unf. Area (lb/ft^2)	00-00-00 T	05-03-00 40		00-80-90
2 FLOOR	Unf. Area	Unf. Area (lb/ft^2)	L 05-03-00	10-04-00 40	40 15	00-80-90
3 STAIRS	Unf. Area	Jnf. Area (lb/ft^2)	T 00-00-00	03-06-00	40	03-00-00
an de	Factored	Factored	Demand /	Load	Location	Disclosure
Controls Summary	Demand	Resistance	Resistance	Case		Completeness and accuracy of input must
Pos Moment	7.412 ft-lbs	19.364 ft-lbs	0.38	~	04-09-12	be verified by anyone who would rely on
Find Shear	2.577 lbs	7.232 lbs		~	01-03-06	output as evidence of suitability for
Total Load Defi	L/629 (0.188")	0.494		4	05-01-11	particular application. Output nere based
live Load Defl.	[/914 (0.13")	0.329"		2	05-01-11	on building code-accepted design properties and analysis methods.
Max Defl.	0.188"	1.	0.19	4	05-01-11	Installation of BOISE engineered wood
Span / Depth	10	n/a	n/a		00-00-00	products must be in accordance with
-				/Puc mo		current Installation Guide and applicable hillding codes. To obtain Installation Guide
			Demand/ Resistance	Delitanu/ Resistance		or ask questions, please call
Bearing Supports	Dim. (L x W)	Demand		Member	Material	1-800-964-6999 before installation.\n\nBC
B0 Wall/Plate	3-1/2" x 1-3/4"	3,616 lbs	96.0	0.48	Spruce Pine Fir	OALCO, BO LINITING, ASS., ALLIOIST® BCIR. BOARD™, BCIR.
	3-1/2" x 1-3/4"	2,933 lbs	0.78	0.39	Spruce Pine Fir	Spruce Pine Fir BOISE GLULAM™, SIMPLE FRAMING

Notes

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

Design meets Code minimum (L/360) Live load deflection criteria.

Design meets User specified (1") Maximum total load deflection criteria.

Calculations assume Member is Fully Braced.

Resistance Factor phi has been applied to all presented results per CSA 086.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 4

Deflections less than 1/8" were ignored in the results.

User Notes
NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS

0.C., STAGGERED IN TWO ROWS





Floor Beam\Boz

December-01-14

Dry | 1 span | No cantilevers | 0/12 slope (deg)

BC CALC® Design Report

~ild 3272

Address: GREEN VALLEY ESTATES (TH-4)
City, Province, Postal Code:Bradford, ON
Customer: BAYVIEW WELLINGTON HOMES
Code reports: CCMC 12472-R

File Name: 248621 Description: Designs\B02 Specifier: Designer: F.C. Company: Alps Roof Trus Misc:

F.C. Alps Roof Trusses Inc.

Ε

	-		
	>		
	1 1		
	>		
	>		
	1 1		
	 		
	1 1		
	`		
	>		
	1		
	>		
	1 1		
	>		
	" [
	"		_
			č
	-		
			Č
			C
			۲
			ı
			4
	->		3
			ċ
			-
		19-06-00	3
		P	i
		6	Ì
	₽	· ·	Ċ
	.		7
			÷
			3
	· · · · Þ		ļ.
			(
			J
	, ,		
			ï
			1040
	>		Totol
			Total Landing Control Control Late 1 to 100 OC OC
			1040
_	>		T-40F
2			1040
2			1040 <u>F</u>
1	•		10+0 <u>+</u>
1	•		TotoL
1	•		LotoF
1	•		1040
1	•		1°4°E
1	•		1040 <u>F</u>
1	•		10+cT
1			10+cF
			10+0L
			10+0L
			19401
			1940
\$			1.44°F
\$			I c 4 c F
\$			
\$			[-+-]
4			
4			10+0 <u>H</u>
4			1040 <u>T</u>
4			1040 <u>F</u>
4			1040 <u>F</u>
4			1-4-2
4			1-4-cH
4			1-4-6H
4		N/ O	1-4-2-H
4		BO ⊠	I v t v T

<u>B</u>

		١	Total Horizontal Product Length = 19-06-00	t Length = 19-	00-90		
Reaction Summary (Down	/ Up				7		
Bearing	LIVe			Show	Wind		
), 1-3/4"	1,474 / 0		1,144/0				
B1, 1-3/4"	916 / 0		0 / :				
Load Summary					Live Dead	Snow Wind	Trib.
Tag Description	Load Type	Φ	Ref. Start	End	1.00 0.65	1.00 1.15	
FLOOR	Unf. Are	Unf. Area (lb/ft^2)	00-00-00	ì			00-90-00
PL B1	Conc. Pt	(sql) :	L 06-02-00				n/a
FLOOR	Unf. Are	a (Ib/ft^2)	L 06-02-00		40 20		01-00-00
WALL	Unf. Lin.	Unf. Lin. (lb/ft)	T 00-00-00	00-90-90			n/a
	Factored	Factored	Demand /	Load	Location		
Controls Summary	Demand	Resistance	Resistance	Case			
s. Moment	19,623 ft-lbs	ı		1	06-02-00		
d Shear	3,489 lbs			_	01-01-10		
tal Load Defl.	L/284 (0.818")			4	09-01-03		
e Load Defl.	L/468 (0.496")		0.77	5	09-01-03		
ıx Defl.	0.818"	-	0.82	4	09-01-03		
Span / Depth	19.5	n/a	ı n/a		00-00-00		
			Demand/	Demand/			
Bearing Supports	Dim. $(L \times W)$	Demand	Resistance Support	Resistance Member	Material		
B0 Wall/Plate	1-3/4" × 3-1/2" 1-3/4" × 3-1/2"	3,640 lbs	0.97	0.49	Spruce Pine Fir		
	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10.10		1)		

Notes

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria. Design meets User specified (1") Maximum total load deflection criteria. Calculations assume Member is Fully Braced.

Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.

Design based on Dry Service Condition. Importance Factor : Normal Part code : Part 4 Deflections less than 1/8" were ignored in the results.

IL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS O.C., STAGGERED IN TWO ROWS **User Notes**



T-12053/20



Dry | 1 span | No cantilevers | 0/12 slope (deg)

Floor Beam\bos

December-01-14

Ε

BC CALC® Design Report

Name: **Pulld 3272** Andress:

248621 Designs\B03

3 F.C. Alps Roof Trusses Inc. 3 File Name: 2 Description: I Specifier: Designer: F Company: # 38514 GREEN VALLEY ESTATES (TH-4) Postal Code:Bradford, ON BAYVIEW WELLINGTON HOMES CCMC 12472-R City, Province, F Customer: Code reports:

-	и ш					
N						
100						
Þ						
-10			İ	ı		
d(ŀ	ĺ		
* * * * * * * * * * * *						
-						
Þ						
Þ						
4				_		
-				Wind		
- 30		0		>		
		2-0				
		9-0				
		= 0				
		Total Horizontal Product Length = 09-02-00		>		
-14	2	en		Snow		
-3	09-02-00	ij		S		
-Þ	-60	.odt				
-		I.P.				
-		nta				
٨		rizc			514 / 0	0 /
		웃		Dead	14	\$
P		otal		۵	5	Ó
-						
Þ			ŝ			0
			g E		0	4
			£	ķ	584 / 0	<u> </u>
			ΙË	ニ	25	۳.
			5			
			Jown / Uplift) (Ibs)			
H			≥			
+			ĬĞ			
A			ح			
			าลเ			
اد			ı۳			
			ĬΪ			
M			2		Ē.	Ę.
			Reaction Summary (Dov	D	3/4	B1, 3-1/2"
N	L _		ac	searing	<u> </u>	ယှ
			Re	Bea	8	<u>B</u> ,
		,	. –		. —	_

<u>8</u>

		Total H	Total Horizontal Product Length = 09-02-00	Length = 09-(2-00	
Reaction Summary (Down	Down / Uplift) (lbs)	ps)				
Bearing	Live	Dead		Snow	Wind	
B0, 1-3/4" B1, 3-1/2"	584 / 0 1,184 / 0	0	514 / 0 648 / 0			
Load Summary					Live Dead	Snow Wind Trib.
Tag Description	Load Type	Ð	Ref. Start	End	1.00 0.65	1.00 1.15
1 FLOOR	Unf. Are	Unf. Area (lb/ft^2)	T 00-00-00	06-02-00	40	00-80-00
2 PL B1	Conc. Pt. (lbs)	t. (lbs)	L 06-02-00	06-02-00 1,443	1,443 615	n/a
FLOOR	Unf. Are	Unf. Area (Ib/ft^2)	L 06-02-00	09-05-00		01-04-00
WALL	Unf. Lin. (lb/ft)	(lb/ft)	T 00-00-00	06-02-00	09	n/a
	Factored	Factored	Demand /	Load	Location	Disclosure
Controls Summary	Demand	Resistance	Resistance	Case		Completeness and accuracy of input must
Pos. Moment	6,663 ft-lbs	19,364 ft-lbs	0.34	-	06-02-00	be verified by anyone who would rely on
End Shear	2,442 lbs	7,232 lbs		_	07-10-10	output as evidence of suitability for
Total Load Defl.	L/999 (0.114")			4	04-09-15	particular application. Output here based
Live Load Defl.	[/899 (0.07")			5	04-10-14	on building code-accepted design
Max Defl.	0.114"			4	04-09-15	Installation of BOISE engineered wood
Span / Depth	8.9	n/a	n/a		00-00-00	products must be in accordance with
			Demand/	Demand/		current Installation Guide and applicable building codes. To obtain Installation Guide
			ė	Resistance		or ask questions, please call
Bearing Supports	Dim. (L x W)	Demand		Member	Material	1-800-964-6999 before installation.\n\nBC
B0 Wall/Plate	1-3/4" x 1-3/4"	1,517 lbs	0.81	0.41	Spruce Pine Fir	
B1 Wall/Plate	3-1/2" x 1-3/4"	2,586 lbs	0.69	0.35	Spruce Pine Fir	BOISE GLULAM™, SIMPLE FRAMING
`						SYSTEM®, VERSA-LAM®, VERSA-RIM
Notes						PLOS®, VERSA-RIME,
Design meets Code minimum Design meets Code minimum		(L/240) Total load deflection criteria.	n criteria. criteria			VERSA-STRAND®, VERSA-STOD® are trademarks of Boise Cascade Wood

Notes

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria.

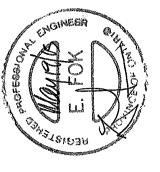
Products L.L.C

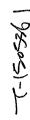
Design meets User specified (1") Maximum total load deflection criteria. Calculations assume Member is Fully Braced.

Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.

Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes
IL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS
O.C., STAGGERED IN TWO ROWS







Floor Beam\B0

December-01-14

Dry | 1 span | No cantilevers | 0/12 slope (deg)

BC CALC® Design Report

Build 3272

File Name:

38514
Address:
GREEN VALLEY ESTATES (TH-4)
City, Province, Postal Code:Bradford, ON
Customer:
BAYVIEW WELLINGTON HOMES
Code reports:
CCMC 12472-R

Code reports:

F.C. Alps Roof Trusses Inc. 248621 Designs\B06 Description: I Specifier: Designer: F Company: /

	T X	-			١		
•	Λ	<u>8</u>					
ъ							
->					1		
->							
->					1		
-1					-		
->							
-Þ			Ī				
* * * * * * * * * *							
þ							
->							
-							
- 24					ᇹ		
					Wind		
-			8				
- >			-02				
-			= 05	ŀ			
-b			gth:		>		
-		0	Total Horizontal Product Length = 05-02-00		Snow		
>		05-02-00	īc		0)		
		05-(20	1			
4			Ital				
			izor	l		0	0
			훈		Dead	403 / 0	33 /
			otal		۵	4	4
-			_				
				_			
				bs)		0	0
					ø	465 / 0	5/1
				/ Uplift) (lbs)	בׁ.	46	46
				5			
js				تًا			
- h				I §			
b				9			
				ary			
				ĮĔ		İ	
				H			
····p				S		=	Ξ.
				[타	0	12	1/2
				Reaction Summary (Down	Searing	<u>က</u>	B1, 3-1/2"
 		ĭ 6	3	S.	Be	8	<u>m</u>

						Trib
Load Summary						
Tag Description	Load Type	Ð	Ref. Start	End	1.00 0.65	1.00 1.15
1 FLOOR	Unf. Are	Unf. Area (lb/ft^2)	00-00-00	05-02-00 40		04-06-00
2 WALL	Unf. Lin. (lb/ft)	(lb/ft)	00-00-00 T	05-02-00	09	n/a
None and the state of the state	Factored	Factored	Demand /	Load	Location	Disclosure
C rols Summary	Demand	Resistance	Resistance	Case		Completeness and accuracy of input must
Pos Moment	1.289 ft-lbs	19,364 ft-lbs	0.07	1	02-02-00	be verified by anyone who would rely on
Fnd Shear	605 lbs	7,232 lbs	0.08	τ-	01-03-06	output as evidence of surfability for
Total Load Defl.	(,800.0) 666/7			4	02-01-00	particular application. Output field based
Live Load Defl.	L/999 (0.004")	n/a	n/a	2	02-02-00	on bunding cooc-accepted design properties and analysis methods.
Max Defl.	0.008"	n/a	n/a	4	02-01-00	Installation of BOISE engineered wood
Span / Depth	4.8	n/a	n/a		00-00-00	products must be in accordance with
						current Installation Guide and applicable
			Demand/	Demand/		building codes. To obtain Installation Guide
			Resistance	Resistance		or ask questions, please call
Bearing Supports	Dim. (L x W)	Demand	Support	Member	Material	
B0 Wall/Plate	3-1/2" x 1-3/4"	1,201 lbs	0.32	0.16	Spruce Pine Fir	ALLIOIST® BC RIM BOARD™, BCI®.
	3-1/2" × 1-3/4"	1.201 lbs	0.32	0.16	Spruce Pine Fir	
	•	•				SYSTEM®, VERSA-LAM®, VERSA-RIM
Notes						PLUS®, VERSA-RIM®,
Design meets Gode minimum		(1/240) Total load deflection criteria.	n criteria.			VERSA-STRANDS, VERSA-STODS are
Design meets Code minimum		(L/360) Live load deflection criteria.	deflection criteria.			products L.L.C.

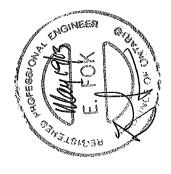
Notes

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria. Design meets User specified (1") Maximum total load deflection criteria. Calculations assume Member is Fully Braced.

Resistance Factor phi has been applied to all presented results per CSA 086.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes
NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS

© 0.C., STAGGERED IN TWO ROWS



下であるかか



Floor Beam\Bus

December-01-14

Dry | 1 span | No cantilevers | 0/12 slope (deg)

BC CALC® Design Report

38514 GREEN VALLEY ESTATES (TH-4) Postal Code:Bradford, ON BAYVIEW WELLINGTON HOMES

Name: **Puild 3272**

Audress:

CCMC 12472-R

City, Province, F Customer: Code reports:

248621 Designs\B09 File Name:

F.C. Alps Roof Trusses Inc. Description: Capedian Pesigner: Footbank: Application Pesigner: Footbank: Application Pesigner: Application Pe

Misc.

05-02-00

• 1						
		Total Horizontal F	Total Horizontal Product Length = 05-02-00	-02-00		
Reaction Summary (Down / Uplift) (lbs	wn / Uplift) (lbs)					
Bearing	Live	Dead	Snow	Wind		
B0, 3-1/2"	439 / 0	390 / 0				
B1, 3-1/2"	439 / 0	390 / 0				
				Live	Snow Wind	j

Load Summary					Live	Dead	Snow Wind	Wind	Trib.
Tag Description	Load Type	lype	Ref. Start	End		0.65	1.00 1.15		
1 FLOOR	Unf. A	Unf. Area (lb/ft^2)	00-00-00 T	05-02-00	40	20		04-(04-03-00
2 WALL	Unf. L	Unf. Lin. (lb/ft)	L 00-00-00 05-02-00	05-02-00		09			n/a
ntrols Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Location Case	Location	Disclo Comple	Disclosure Completeness at	Disclosure Completeness and accuracy of input must	must
				,	0 00				

<u>B</u>

	ומרוחובת	מכוכונים	בשוומו	Logo	Location	Discionale
ntrols Summary	Demand	Resistance	Resistance	Case		Completeness and accuracy of input must
Pos. Moment	1,230 ft-lbs	19,364 ft-lbs	90.0	_	02-07-00	be verified by anyone who would rely on
End Shear	578 lbs	7,232 lbs	0.08	~	01-03-06	output as evidence of suitability for
Total Load Defl.	("/00.0) 666/7		n/a	4	02-01-00	particular application. Output here based
Live Load Defl.	L/999 (0.004")		n/a	5	02-01-00	on building code-accepted design
Max Defl.	0.007"	n/a	n/a	4	02-01-00	Installation of BOISE engineered wood
Span / Depth	4.8	n/a	n/a		00-00-00	products must be in accordance with
			Demand/	Demand/		current Installation Guide and applicable building codes. To obtain Installation Guide
			Resistance	Resistance		or ask questions, please call
Bearing Supports	Dim. (L x W) Demand	Demand	Support	Member	Material	1-800-964-6999 before installation.\n\nBC
B0 Wall/Plate	3-1/2" x 1-3/4"	1,146 lbs	0.3	0.15	Spruce Pine Fir	Spruce Pine Fir CALC®, BC FRAMER®, AJS "", Spruce Pine Fir All IOIST® BC RIM BOARD™ BCI®
B1 Wall/Plate	3-1/2" x 1-3/4"	1,146 lbs	0.3	0.15	Spruce Pine Fir	BOISE GLULAM™, SIMPLE FRAMING
						SYSTEM®, VERSA-LAM®, VERSA-RIM
Notes						PLUS®, VERSA-RIM®,
Design meets Code minimum (L/240) Total load deflection criteria.	imum (L/240) Tota	load deflection	criteria.			VERSA-STRAND®, VERSA-STUD® are trademarks of Roise Cascade Mood
Design meets Code minimum (L/360) Live load deflection criteria.	imum (L/360) Live	load deflection	criteria.			Products L.L.C.
Design mosts Hear specified (1") Maximum total load deflection criteria	ified /1"\ Maximun	n total load defle	scriton critorization			

Notes

Design meets Code minimum (L/240) Total load deflection criteria. Design meets Code minimum (L/360) Live load deflection criteria. Design meets User specified (1") Maximum total load deflection criteria.

Calculations assume Member is Fully Braced.
Resistance Factor phi has been applied to all presented results per CSA 086.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC and CSA 086.
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 4
Deflections less than 1/8" were ignored in the results.

User Notes

NAIL ONE PLY TO ANOTHER WITH 3 1/2" SPIRAL NAILS © 0.C., STAGGERED IN TWO ROWS





Limit States Design (CAN) Maximum Spans - A7

ENSINE PRED WOOD

SITE COPY







Maximum Floor Spans Live Load = 40 psf, Dead Load = 15 psf	n Floo! osf, Dead L	r Sp. Load	ans =15 psf		副	IL ST		T.	10922		
Simple Spans, L/360 Deflection Limit 3/4" OSB G&N Sheathing	/360 Defle Sheathing	ectior	ıLimit	7	図						
				Bare	·			1/2" Gyr	1/2" Gypsum Ceiling		
Depth	Series	(,-		On Centre Spacing	Spacing			On Cen	tre Spacing		
		l	12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20		15'-10"	15'-0"	14'-5"	13'-5"	16'-4"	15'-5"	14'-6"	13'-5"	
	NI-40x		17'-0"	16'-0"	15'-5"	14'-9"	17'-5"	16'-5"	15'-10"	15'-2"	
9-1/2"	09-IN	die.	17:-2"	16'-2"	15'-7"	14'-11"	17'-6"	16'-7"	15'-11"	15'-3"	
	NI-70		18'-0"	16'-11"	16'-3"	15'-7"	18'-5"	17:-3"	18'-5" 17'-3" 16'-7"	15'-11"	
	NI-80	i.	18'-3"	17'-1"	16'-5"	15'-9"	18'-8"	17'-5"	16-9"	16'-1"	
	NI-20	1	17:-10"	16'-10"	16'-2"	15'-6"	18'-6"	17'-4"	16-9"	16'-1"	
	NI-40x		19'-4"	17'-11"	17'-3"	16'-6"	19'-11"	18'-6"	17'-9"	17,-0,,	
10,7	NI-60		19'-7"	18'-2"	17:-5"	16'-9"	20,-2"	18,-9"	17'-11"	17'-2"	
8//-11	NI-70		20,-9"	19'-2"	18'-3"	17'-5"	21'-4"	19'-9"	18'-10"	17'-10"	
	08-IN		21'-1"	19'-5"	18'-6"	17'-7"	21'-7"	20'-0"	19'-0"	18,-0,,	
	NI-90x		21,-8"	20,-0"	19'-1"	18'-0"	22'-2"	20'-6"	19'-6"	18'-6"	
	NI-40x	5.75	21'-5"	19'-10"	18'-11"	17'-11"	22'-1"	.9-,07	19'-7"	18'-7"	
	NI-60		21,-10"	20'-2"	19'-3"	18'-2"	22:-5"	20'-10"	19'-11"	18'-10"	
14"	NI-70		230"	21'-3"	20,-3"	19'-2"	23'-8"	21'-11"	20'-10"	19:-9"	
	NI-80		23'-5"	21'-7"	20,-7"	19'-5"	24'-0"	22'-3"	21'-2"	20,-0,,	
	NI-90x		24'-1"	22'-3"	21'-2"	20'-0"	24'-8"	22'-10"	21'-9"	20'-7"	
	09-IN		23'-9"	22:-0"	20'-11"	19'-10"	24'-6"	22'-9"	21'-8"	20'-6"	
=	NI-70		25'-1"	23'-2"	22'-0"	20'-10"	25'-9"	23'-10"	22'-9"	21'-6"	
q	NI-80		25'-6"	23'-6"	22'-4"	21'-2"	26'-1"	24'-2"	23'-1"	21'-10"	
	NI-90x		26'-4"	24'-3"	23'-1"	21'-10"	26'-11"	24'-11"	23'-8"	22'-5"	

								-	
			Mid. Snar	Mid-Snan Blocking		Mid	Mid-Snan Blocking and 1/2" Gynstim Ceiling	id:1/2" Gynsiim	Ceiling
Depth	Series		On Centr	On Centre Spacing			On Centr	re Spacing	0
		12"	16"	19.2"	24"	12"	12" 16" 19.2"	19.2"	24"
	NI-20	17:-1"	15'-5"	14'-6"	13'-5"	17'-1"	15'-5"	14'-6"	13'-5"
	NI-40x	18'-8"	17'-6"	16'-7"	15'-3"	19'-2"	17'-8"	16'-7"	15'-3"
9-1/2"	09-IN	18'-11"	17'-8"	16'-10"	15'-7"	19'-4"	18'-0"	16'-10"	15'-7"
	NI-70	200"	18'-7"	17'-9"	17'-0"	20'-5"	19'-0"	18'-2"	17'-0"
	NI-80	20'-3"	18'-10"	17'-11"	17'-2"	201-8"	19'-3"	18'-4"	17'-5"
	NI-20	20'-2"	18'-8"	17'-6"	16'-2"	20'-7"	18'-8"	17'-6"	162"
	NI-40x	21'-10"	20'-4"	19'-5"	17'-8"	22'-5"	20'-11"	19'-9"	17'-8"
0,1	NI-60	22'-1"	20,-7"	19'-7"	18'-7"	22,-8"	21'-2"	20,-3"	18'-8"
11-1/8	NI-70	. 23'-4"	21'-8"	20'-8"	197"	23'-10"	22'-3"	21'-3"	20'-1"
	NI-80	23'-7"	21'-11"	20'-11"	19'-9"	24'-1"	22'-6"	21'-5"	20'-4"
	x06-IN	24'-3"	22'-6"	21'-6"	20'-4"	24'-8"	23'-0"	22'-0"	20'-9"
	NI-40x	24'-5"	22'-9"	21'-8"	19'-5"	25'-1"	23'-6"	21'-9"	19'-5"
	09-IN	24'-10"	23'-1"	22'-0"	20'-10"	25'-6"	23'-10"	22'-9"	21'-4"
14"	NI-70	26'-1"	24'-3"	23'-2"	21'-10"	26'-8"	24'-11"	23'-9"	22'-6"
	NI-80	26'-6"	24'-7"	23'-5"	22'-2"	27'-1"	25'-3"	24'-1"	25,-9"
	NI-90x	27'-3"	25'-4"	24'-1"	22'-9"	27'-9"	25'-11"	24'-8"	23'-4"
	09-IN	27'-3"	25'-5"	24'-2"	22'-10"	28,-0"	26'-2"	25'-0"	23'-8"
ر. ۲	NI-70	28'-8"	26'-8"	25:-4"	23'-11"	29'-3"	27'-4"	26'-1"	24'-8"
70	NI-80	29'-1"	27'-0"	25,-9"	24'-4"	29'-8"	27'-9"	26'-5"	25'-0"
	NI-90x	29'-11"	27'-10"	.56'-6"	25'-0"	.9-,08	28,-5"	27'-2"	25'-8"

^{1.} Maximum clear span applicable to simple-span residential floor construction with a design live load of 40 psf and dead load of 15 psf. The

ultimate limit states are based on the factored loads of 1.50! + 1.25D. The serviceability limit states include the consideration for floor vibration, a live load deflection limit of L/360 and a total load deflection limit of L/240.

2. Spans are based on a composite floor with glued-nailed oriented strand board (OSB) sheathing with a minimum thickness of 3/4 inch for a joist spacing of 24 inches or less. The composite floor may include 1/2 inch gypsum ceiling and/or one row of blocking at mid-span with strapping. Strapping shall be minimum 1x4 inch strap applied to underside of joists at blocking line or 1/2 inch gypsum ceiling attached to joists.

3. Minimum bearing length shall be 1-3/4 inches for the end bearings.

^{4.} Beaming stiffences are not required when I-joists are used with the spans and spacings given in this table, except as required for hangers.

5. This span chart is based on uniform loads. For applications with other than uniformly distributed loads, an engineering analysis may be required based on the use of the design properties. Tables are based on Limit States Design per CSA 086-09, NBC 2010, and OBC 2012.

6. Joists shall be laterally supported at supports and continuously along the compression edge. Refer to technical documentation for installation guidelines and construction details. Nordic I-joists are listed in CCMC evaluation report 13032-R and APA Product Report PR-1274C.



SAFETY AND CONSTRUCTION PRECAUTIONS



WARNING

1. Brace and roll seath Lioist as it is installed, using hongers, blacking one firm board, andfor crass-bridging at lies and a. When Lioists are applied with use over interior supports and a load-bearing wall is planned at that loo linon, blocking that is required the interior apport.

2. When the building accompleted, the Boot shearthing will provide leaved support for the top lines and the lines. The top lines all the constant is being leaved to be present if the lines in the support for the top lines all the lines.

l'emporany bracing or struts must be 134 inch minimum, ut least and spaced on none than 18 feat or entert, our must be secured minimum of the 2.1/2* noils instead to this tops surface of each!
 the bracing to a leated restraint or the end of each box, Lap ends, bracing over of least the or joints.
 Q. speathing (temporary or permanent) can be railed to the top the first 4 leat of I-joins of the end of the box.

4. Instell and fully nail permanent sheathing to each I-joist before placing it is on the floor system. Then, stack building materials over beams or walls o

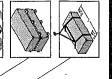
5. Never install a damaged Lioist.

improper storage or installation, failure to follow applicable building codes, failure to follow span rainas for Nordic Ligisti, failure to follow ellowable hole sizes and outoristos, or failure is use web stiffeners who aren reath it surious occidents. Follow these installation guidelines carefully.

STORAGE AND HANDLING GUIDELINES

- Bundle wrap can be slippery when wet. Avoid walking an wrapped bundles.
- Store, stack, and handle t-joists vertically and level only.
- Always stack and handle 1-joists in the upright position only.
- Do not store Ljoists in direct contact with the ground and/or flatwise
 - weather, and use spacers to separate bu Protect 1-joists from
 - 6. Bundled units should be kept intact until time of installation.
 - When handling Lioists with a crane on the job site, take a few simple precautions to prevent damage to the Lioists and injury to your work crew.
- Fick Ljoists in bundles as shipped by the supplier.
- Orient the bundles so that the webs of the !-joists are vertical. Fick the bundles at the 5th points, using a spreader bar if nec
- NEVER USE OR TRY TO REPAIR A DAMAGED 1-JOIST.

Gall

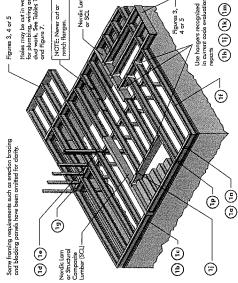


- 1. Betore laying out floor system components, verify that k-joist flange widths match has supplier.
 - 2. Except for cutting to length, I-joist flanges should never be cut, drilled, or notched
 - 3. Install 1-joists so that top and battom flanges are within 1/2 inch of true vertical alig
- 4. I-joists must be anchored securely to supports before flacs sheathing is attached, and be level. 5. Minimum bearing lengths: 1-3/4 inches for end bearings and 3-1/2 inches for inter

ထ

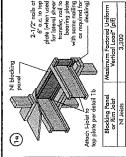
- 6. When using hangers, seal Hoists firmly in hanger battoms to minimize settlement. 7. Leave a 1/16-inch gap between the Hoist end and a header.
- reantated loads greater than those that can normally be expected in residential construction should only be applied to the special construction should only be applied to the special configuration and security the surface of the open part of should concentrated loads include the Collegian Brance, where support unused or heavy loads from the Light's befrom floringe. Whenever possible, suspend all centrated loads from the top of the Liois. Or, attach the load to blocking that has been securely tastened to the
 - ed to weather, or where they will remain in direct Never install I-joists where they will be per concrete or masonry.
- For Hoists installed over and beneath bearing walls, use full depth blocking panels, rim board, or members) to transfer gravity loads through the floor system to the wall or foundation below. rain ends of floor joists to prevent rollover. Use rim board, rim joists or 1-joist blocking panels Ď. Ξ.
- Due to shrinkago, common framing lunber set on edge may never be used as blocking or rim boards. I-jost blocking panels or free regineered wood products such as rim board must be out to iti between the I-joists, and an I-joist-competitie depit subsected.
 - Provide permanent lateral support of the bathom flange of all k-joists at interior supports at multiple-span joists. Similarly, support the bothom flange of all confilewered I-joists at the end support next to the confilewer extension. In the completed structure, the bothom flange of all confilered restrictives are prepared to the completed structure, and prepared to the confilered confilered confilered confilered support. Until the final finished ceiling is applied, temporary bracing or structs must be used. 13,
 - 14. If square-edge panels are used, edges must be supported between Lipists with 2A4 blocking. Glue panels to blocking to minimize useds. Blocking is not required under structural finish flooring, such as wood strip flooring, or if a separate underingers theyer instelled.
- dance with the applicable building code requirements 15. Nail spacing: Space nails installed to the flange's top face in accor approved building plans.

FIGURE 1 TYPICAL NORDIC I-JOIST FLOOR FRAMING AND CONSTRUCTION DETAILS



All nails shown in the above details are assumed to be common vive and a unless otherwise noted 3° ground to 22 data) common vive notes. Framing lumper assume to be 5 years when the frame to such that the the first (0.20×10^{-2}) for (0.120×10^{-2}) consistent to see the first frame to such that the first (0.2×10^{-2}) for the first (0.2×10^{-2}) for

To avoid splitting flange, start nails at least 1-1/2" from end of Ljoist. Nails may be driven at an angle to avoid splitting of bearing plate.



One 2-1/2" face r at each side at be	Blocking	or Rim	1-1/8" Rim Bo	The uniform vertic	or less and is base	used in the design
decking)	Maximum Factored Uniform Vertical Load" (pH)	3,300	oad is limited to a joist depth of 16	ased on standard term load duration.	the design of a bending member,	or ratter. For concentrated vertical

4	4
8,090	enfical load is limited to a rim board depth of 16 inches cased on standard term load duration. It shall not be sign of a bending member, such as joist, header, or centrated vertical load transfer, see detail 1d.
Board Plus	ertical load is lim acsed on standi sign of a bendin centrated vertica

NI or rim board blocking pamel per detrail 10—	Squash	Poir of Squash Blocks	2x Lumber 1-1/8* Rim Board Plus	Provide lateral bracing per d
Altoch rim joist to floor joist with one end it of you can be with the man and provide 1 rich minimum perentration into floor joist. Too-notling may be used.			Attach I-joist per top lost to detail 1b detail 1a	Minimum 1-3/4" — bearing required

Minimum bearing length shall be 1-3/4" for the end bearings, and 3-1/2" for the intermediate bearings when applicable.

Maximum Factored Uniform Vertical Load* (plf)

	red Vertical	8,500	6,600	or 1c
<i>+</i>	Moximum Factored Vertical Pair of Squash Blocks (lbs	3-1/2" wide 5,500	4,300	detail 1a, 1b,
squesh	Pair of Squash Blocks	2x lumber	1-1/8" Kim Board Plus	Provide lateral bracing per detail 1a, 1b, or 1c

FLOORS



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

2100f MSR 23 pieces per unit 1950f MSR 23 pieces per unit 2100f MSR 33 pieces per unit 1950f MSR 33 pieces per unit 5-P-F No.2 33 pieces per unit

WEB HOLE SPECIFICATIONS RULES FOR CUTTING HOLES AND DUCT CHASE

- 1. The distance between the inside edge of the support and the centreline of any hole or duct chase opening shall be in compliance with the requirements of Table 1 or 2, respectively.

 2. Lioist top and battom flanges must NEVER be cut, notched, or otherwise madified.

 3. Whenever possible, field-cut holes should be centred on the middle of the web.

 4. The maximum size hole or the maximum depth of a duct chase opening that can be cut into a I-joist may shall equal the clear distance between the flanges of the Lioist minus 1/4 mich. A minimum of 1/8 inch should always be maintidined between the top or bottom of the hole or opening and the adjacent I-joist flange.
- The sides of square holes or longest sides of rectangular holes should not exceed 3/4 of the diameter of the maximum round hole permitted at that location.
- Where more than one hole is necessary, the distance between adjacent hole edges shall exceed which the distance has stated in exceed with the distance has round hole or twice the length of the longest round hole or twice the length of the longest side of the longest recturajular hole or duct chase opening) and each hole and chase opening shall be sized and located in compliance with the requirements of Tables 1 and 2, respectively.
 A knackour is not considered a hole, may be utilized anywhere it occurs, and may be ignated for purposes of calculating minimum distances between holes and/or duct 6. Where more than
 - chase openings. Holes measuring 1-1/2 inches or smaller are permitted anywhere in a caniilevered section of a joist. Holes of greater size may be permitted subject to verification.
 - ထဲ

er unit

2400f MSR 23 pieces per unit

- 9. A 1-1/2 inch hole or smaller can be placed anywhere in every provided that it meast he requirements of fulle number 1-1.

 10. All holes and dud chase openings shall be cut in a workhown manner in accordance with the restrictions listed above and illustrated in Figure 7.

 11. Limit three maximum size holes per span, of which one in a dud chase opening.

 12. A group of round holes at approximately the same location shall be permitted if floy meet the requirements for a single round hole circumscribed around them.

TARIF 1

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

			12-3/4		i	ł	ļ	ì	:	i	1	1	;	i	1	,	!	į	i	;	1	13-9	156	16-0	15-4"	1
			12	,	ţ	ļ	ı	I		ļ	!	!	Į	į		1	į	į	ŀ	ı	1	ı–		-	13.9	
	- in.)		=	1	!	,	ļ	I	ı	1	ļ	ŀ	ŧ	į	ł	ŀ		ì	ì	ŀ	ì	10-2	12,4	12-9	119"	2
js.	Minimum Distance from Inside Face of Any Support to Centre of Hole (ft - in.)		10-3/4	,	ļ	1	;	ł	1		}	ı	i	ì	ł	10'-2"	6,1	13,-5	13:-9	12-11	i		2.0	12-3	11.3	11,6
9	itre of		은	l	1	١	ı	ı		i	ì	ļ	j	1	ļ	بر 20									9:-10	
2.	to Cer		٥	1	į	ļ	•	1	Į	ļ	ļ	ì	ì	}		.9-9	ω	10.4	10-8	9-4	6-7	0-i./	7 -7	10.6	0	
1000	Support	Round Hole Diameter (in.)	8-5/8	1		ı	!	ı	1.5	8 7	10-0	11.2	4	10,-2	i	6-0"	- Ö-	ۇ. ق	0-0-	& &	ξο O	6'-4"		-0 6	, 13	4
ום בי	of Any	Diame	œ	}	ţ	}	ł	;	.9-9	-0 -/-	9-10	10-0	10-3	6	ļ	5.2	7.5	0-100	٥ 6	 	7.3	2,-6"	7	6	6-5	0.5
וא וצק	Face	nd Hole	7	1	j	ļ	;	į	5.0"	5.5	<u>ئ</u>	<u>\$</u>	.9-B	6,-9	 6.3	3-5	γ	ڙې در	٠ <u>٩</u>	5,9	֓֞֝֞֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓	4'-2"	o O	6-6	4,0	ē,
2	ı Inside	Rour	6-1/4	9-0"	-t-9	7-5	8-4	8-3 8-	4.0.	4-4"	.0 <u>.</u> 9	7-2	7.5	5.4	49	5.5	4- 6-	6-2	6-5	4.5 .5	4-2	3-2"	5.3	5-6	3 3	1-0-F
ישה	ce fron		9	5'-8"	0-9	-0 -/-	 8-0 8	8-2	3-4g	4.0	5.0	-6-9	'-0 '-1	4-10"	4'-4"	2'-4"	4 .9	5-10	6-2	4.0"	3,0	2'-10"	4-10	ή-Ω ₁	3,3	37.70
בסממ	Distan		2	4,-3"	4-4	5-4	6-3	·9-9	2'-4"	2 2 2	4.3	5-4"	5-6"	3-2"	2.5	1. Q.	آم ج	4.5 10	4-9"	2-5	2-0°	1,-6"	3-6	3-10	1:-9"	, o
פסמ	пітуш		4													.e. 0-8						8-0	2.3	5-63	ģ	ō,
5	×		ю			5-6"										0-8										
200			2	07"	2,7	٠ م	2-0.												_		-				0-7s	
411016	1	Series		N-20	N-40x	09- <u>1</u> Z	N-70	08-IV	N-20	Z-40×	09-Z	02 <u>-</u> Z	08-JZ	-06-IN	×06-12	N-40x	29-IZ	2 <u>-7</u> 2	08 <u>-1</u> Z	06-Z	X06-IN	09-IX	N-70	08 <u>-1</u> Z	06 <u>-1</u> Z	200
simple of maniple spain to be cours up to 13 psi and live todas up to 40 psi	Į.	Deoth				9-1/2"						11-7/8"		-				14.						16"		

- Above table may be used for I-joist spacing of 24 inches on centre or less.
 Hole location distance is measured from inside face of supports to centre of hole.
 Distances in hirs tend rea based on uniformly loaded joists.
 The above table is based on the I-joist being used at their maximum spans. The minimum distance as given above may be reduced for shorter spans; contact your local distributor.

DUCT CHASE OPENING SIZES AND LOCATIONS

11.11	11,1	Minim	um distan	Minimum distance from inside face of supports to centre of opening (ft - in.)	side face	of suppo	orts to ce	intre of o	pening (ft - in.)
Depth	Series			7	Just Che	Duct Chase Length (in.)	th (in.)			
-		ю	10	12	14	16	18	20	22	74
	N-20	4:-1"	4-5"	4-10"	5-4"	5.8			"l-1/	7.5"
	<u>×</u> 40×	5.3	ģ	,.o.	6-5	6,-10			8 <u>-7</u> 3	9
9-1/2"	N-60	5-4	5-0	6-2	6-7	7-1			დ	<u>6</u> ,
	Z-70	5-1	ίς Ž	5-10	6.3 6.3	6:-7	7.1"		% -1-	<u>∞</u>
	08-Z	 	ကို ကိ		6-5	.DI-;9			5	0
	N-20	5-0	6-2"	6-63	7-1"	1,5		g-3	ار وي وي	9.4 4.
	N-40×	9	7-2"		 	9			10 1-01	9-9
	09-IX	7	.√ √1		.9 - 18	ō 6	ű ő		10.3	11-0
11-7/8"	02-Z	7-1	7		ري م	8-7			 	0.4
	08-JZ	7-2"	7-7		ري 60	5-10			10-2	10-8
	06-Z	7-6	7-11		-6 -8	5			10.7	0
	×06-10	7-7	 &o		8-10 8-10	9-4			ီ ဝ	11-2
	N-40x		8-7"		5-6	10-1	10'-7"		12'-0"	12'-8
	09-IN	6-9	9-3	-8 -8	 10:1	10.	_	12.0	33.3	13-0
	DZ-1Z	8-7	.i.	9.5	9.70	10,4	_	11,-2"	11,-7	12.3
4	28-12 28-12	6	5	6-6	<u>-</u>	10-7	_	1.9	12-1	12-6
	06-N	.Z6	8-6	0-0	10.6	10-1	-	11.9	12.4"	12-1
	N-90x	9.4"	.6 -6	10-3"	10-7"	11.7	11.7"	"ר"בנ	12:-7"	13-2
	09-IN	10,-3	10.8	11:-2"	11.6"	12-1	-	13-2"	14'-1"	14-10
	N-70	10,-1	10'-5"	11-0	17.4	11.10	12.3	72	3,4	14.0
16"	08-K	10'-4"	10-0	1.3	6-11	12-1	,	13-1	3	14.4
	06-IX	10-0	11-2	 	12.0	12-6	_	3	14'-2"	14'-10
	S N	11,11	ייני.	201	10,0	בייים בייים	•	ő	1 41 61	Ü

- 1. Above table may be used for I-joist spacing of 24 inches on centre or less.

 2. Duct chase peopling location distance is measured from inside face of supports to centre of opening
 3. The above table is based on simple-span joists only. For other applications, contact your local distribute
 4. Distances are based on uniformly located floor joists that meet the span requirements for a design li local of 40 pg fand dead local of 15 pg, and a live local editection link of I/480.

 5. The above table is based on the Lioists being used at their maximum spans. The minimum distance given above may be reduced for shorter spans; contact your local distributor.

FIGURE 7

Maintain minimum 1/8" space between top and bottom flange — all duct chase openings and holes 2x duct chase length or hole diameter, whichever is larger 3/4x diameter FIELD-CUT HOLE LOCATOR 2x diameter of larger hale See rule 12 8 See Table 1 for minimum distance from bearing



Knockouts are prescared holes provided for the contractor's convenience to install electrical or small plumbing fines. They are 11-12 Truches in diameter, and are spaced 15 inches on centre along the length of the Lioist. Where possible, it is preferable to use knockouts instead of field-cut holes.

Never drill, cut or notch the flange, or over-cut the web

Holes in webs should be cut with a sharp saw.

For rectangular holes, avoid over-cutting the corners, as this can cause unnecessary stress concentrations. Slightly rounding the corners is recommended. Storting the rectangular hole by drilling a 1-inch diameter 1 in each of the four corners and then making the cuts between the holes is another good method to minimize damage to the 1-joist.

SAFETY AND CONSTRUCTION PRECAUTIONS



WARNING: Lioists are not stable until completely installed, and will not carry any load until fully braced and sheathed

- AVOID ACCIDENTS BY FOLLOWING THESE IMPORTANT GUIDELINES:

 1. Broce and noil each Lioist as it is installed, using hangers, blacking panels, rim board, and/or aross-bridging at joist ends. When Ljoist are applied continuous over interior supports and a load-bearing will is planned all that localion, blacking will be required at the interior support.

 2. When the building is completed, the floor sheathing will provide lateral support for the top flanges of the Ljoists. Until this sheathing is applied, lemporary bracing, often called struts, or temporary sheathing must be applied to prevent Ljoist rollover or buckling.

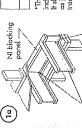
- Emporary bracing or struts must be 1x4 inch minimum, at least 8 feet long and spaced no more than 8 feet on centre, and must be secured with a minimum of two 2·1/2* nails fastened to the tops surface of each -ligist. Nail the bracing to a larger larger larger and of each boy, Lap ends of adjoining bracing over at least two I-joists.
 Or, sheathing (temporary or parament) and no be nailed to the top flange of the first 4 feet of I-joists at the end of the boy.
 For carnilevered I-joists, brace top and bottom flanges, and brace ends with closure ponels, rim board, or cross-bridging.
 A install and fully and permanent sheathing to each I-joist before placing loads on the floor system. Then, stack building materials over beams or wells only.

 - Never stack building materials over unsheathed I-joists. Once sheathed, do not over-stress loists with concentrated loads from building materials.





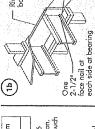
CHARTIERS
CHARDIERS
Affects in material and tworbendanching
defects in material and tworbendanching
Turthermore, Chantiers Chibongamau wommuns that our products,
when utilized in uccordence with our benedling and installation hieractions,
will meet or exceed our specifications for the lifetime of the structure.



The uniform vertical load is limited to a joist depth of 16 inches or less and is based on standard ferm load duration, its fall not be used in the design of a bending member, sud as joist, header, or rafter. For concentrated vertical load transfer, see detail 14. Maximum Factored Uniform Vertical Load* (plf)

2-1/2" nails at 6" o.c. to top plate (when used for lateral shear transfer, nail to bearing plate with same nailing as required for decking)

1-joist to top plate per detail 1.b



ies or less and is based on bending member, such as i "The uniform vertical load is limited to a rim board death of 16 inches standard term load duration. It shall not be used in the design of a ber header, or rafter. For concentrated vertical load transfer, see detail 1d.

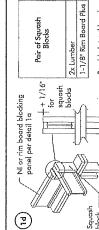
Maximum Factored Uniform Vertical Load* (plf)

1-1/8" Rim Board Plus

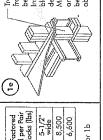
One 2-1/2" wire or spiral nail at top and bottom flange

Minimum bearing length shall be 1-3/4" for the end bearings, and 3-1/2" for the intermediate bearings when applicable

Attach rim board to top plate using 2-1/2" wire or spiral toe-nails at 6" To avoid splitting flange, start nails at least $1-1/2^{\circ}$ from end of 1-joist. Nails may be driven at an angle to avoid splitting of bearing plate.



ad per Blocks	5-1, biw	8,5	9,6(ı or 1b	
Vertical Load per of Squash Blocks	3-1/2" wide	5,500	4,300	per detail 1a	
Pair of Squash Blocks		2x Lumber	1-1/8" Rim Board Plus	Provide lateral bracing per detail 1a or 1b	
a 	squash	blocks	<u>1</u> :		



(19) pe pe 2-1/2" nc ct 6" o.c. ct to top pla	
Transfer load from above to home above to hardle squarh hardle squarh becaril 1d. March bearing are of blocks from the bearing are of blocks from the bearing are of blocks from the blow in page 1.	

→ 3 4 中 の	26 ∠
1	
100	
The The	
Joist aftochment per detail 1b	si gis
(B)	t-1/2" nails it 6" o.c. o top plate



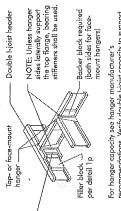
	J	0	0		0
Blocks (1	5-1/2" wide	8,500	6,600	a or 1b	r block to
of Squash Blocks (lbs)	3-1/2" wide	5,500	4,300	per detail 1	ng a backe
Pair of Squash Blocks		2x Lumber	1-1/8" Rim Board Plus	Provide lateral bracing per detail 1a or 1b	if hanger load exceeds 360 lbs). Before installing a backer block to a
1/16"	tor) H blocks			if hanger load exceed

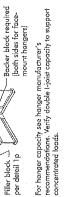


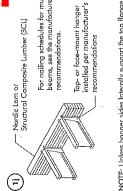
(±)

			Ē
Minimum Depth**	5-1/2"	7-1/4"	No. 2 or better for solid saw
Material Thickness Required*	1"	1-1/2"	Minimum grade for backer block material shall be S-P-F No. 2 or better for solid sawn
Flange Width	2-1/2"	3-1/2"	Minimum grade fo

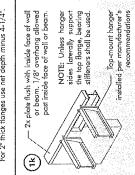
umber and wood structural panels conforming to CAN/CSA-0325 or CAN/CSA-0437 Standard.
•• For face-mount hangers use net joist depth minus 3-1/4" for joists with 1-1/2" thick flanges. For 2" thick flanges use net depth minus 4-1/4".

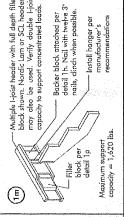


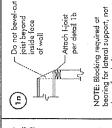


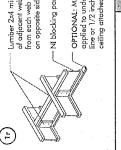


NOTE: Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.









Lumber 2x4 min., of adjacent web. F from each web to I on opposite side.	- NI blocking panel	OPTIONAL: Minir applied to undersi line or 1/2 inch m ceiling affached to	
		(/ /	

_	
(In) Do not bewel-cut joist beyond inside face of wall Affach Ljoist per detail 1b	NOTE: Blacking required at bearing for lateral support, not
ist	

		¥)
inside face	Attach I-joist	ocking required at
of wall	per detail 1b	ar lateral support, not

Lumber 2x4 min., extend block to face of odicaren web. Iwo 2-1/2' spiral nails from each web to lumber piece, alternate on opposite side.	M blocking panel	OPTIONAL: Minimum 1x4 inch strop applied to underside of joist at blocking line or 1/2 inch minimum gypsum ceiling attached to underside of joists.

side of	-1/8" to 1/4" gap between top flange
5. The m	· · · · · · · · · · · · · · · · · · ·
dinche	"And early effection
150	Catagoris from
o.c. (d	
4. Nail io	
of spai	block / ///
3. Filler b	Filer
and br	
2. Leave	
odding 1	CONSTRUCTION
NOTES:	(1p) FILLER BLOCK REQUIREMENTS

* Carto actor	-	i. Support De
CONSTRUCTION		damage to
	N	2. Leave a 1/
		and bottor
	က်	Filler block
		of span.
	र्च	Nail joists t
		o.c. (dind
The sell-free		Hoist. Tota
Cuser Horis Horis		clinched, o
Opposite total of	ιų	The maxin
1/8" to 1/4" gap between top flange		side of the
no filler block		Verify doub

The state of the s	ź	
OIST.	-	1. Support back of Lioist web during nailing to prevent
NSTRUCTION		damage to web/flange connection.
7	N	2. Leave a 1/8 to 1/4-inch gap between top of filler bloc
	c	and bottom of top I-joist flange.
	;	of soon
	यं	or span 4. Nail joists together with two rows of 3" nails at 12 inches
		o.c. (dinched when possible) on each side of the doub
		Hoist. Total of four nails per foot required. If nails can
		clinched, only two nails per foot are required.
Opposite ione of	Ŋ	The maximum factored load that may be applied to or
14" and the fact that Same		side of the double joint using this detail is 860 lbf/ft

<u> </u>	m	3. Filler block is required between joists
		of span.
	4	 Nail joists together with two rows of 3" r
<i>y</i>		o.c. (dinched when possible) on each
The second		Hoist. Total of four nails per foot requ
Cuser Hous in Other		clinched, only two nails per foot are re
opposite total of	ιŲ	The maximum factored load that may
between top flange		side of the double joist using this detail
		Verify double I-joist capacity.

alling to prevent	Flange Size	Net Depth	Filler Block Size	
n top of filler block	2-1/2"×	9-1/2"	2-1/8"×6" 2-1/8"×8"	
s for full length	1-1/2*	16"	2-1/8" × 10" 2-1/8" × 12"	
" nails at 12 inches	3-1/2"x	9-1/2"	ಹಿಳಿ * × ಗೆ ಸೆ	
h side of the double uired. If nails can be	1-1/2"	4 %	3"×10" 3"×12"	
required. 1y be applied to one all is 860 lbf/ft.	3-1/2"× 2"	11-7/8"	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
	_	2		

Cone 2-1/2" nail at top and bottom flang	1.5° (c) India each web to lumber piece to loumber piece to lumber piece to loumber piece to loist blocking panel	—One 2-1/2" nail one side only
(2) is	board board 2-1/2" nails at 6" o.c	NOTES:

In some local codes, blocking is prescriptively required in the first loist space (or first and second joist space) most or the sander joist. Where required, see local code requirements for spacing of the blocking. All nails are common spiral in this detail.

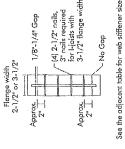
WEB STIFFENERS

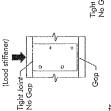
RECOMMENDATIONS:

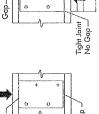
- A bearing stiffener is required in all engineered applications with factored reactions greater than shown in the Lioist properties table found of the Lioist Construction Guide (C101). The gap between the stiffener and the flange is at Construct the tap.
 - A bearing stiffener is required when the I-loist is supported in a hange and the sides of the hanger do not extend up to, and support, the top flange. The gap between the stiffener and flange is at the top.
- A foad sriffener (signations and locations where a factored concentrated to do greater Hardway (2014). It is applied to the top of fange between supports, or in the case est-signating-lever, anywhere between the carnilever it pand the support. These values are for condand term local duration, and may be odjusted for other local durations as permitted by the cade. The gap between the shared may be settifiered and the flange is all the boltom.

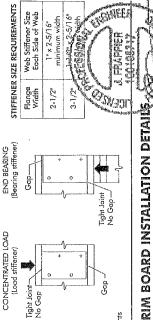
MEB STIFFENER INSTALLATION DETAILS

CONCENTRATED LOAD









Cantilever details for vertical Building offset

(4a) Method 1 — SHEATHING REINFORCEMENT ONE SIDE

NI blocking panel or rim board blocking, attach per detail 1g Rim board or wood structural – panel closure (3/4" minimum thickness); attach per detail 1b



Method 2 — SHEATHING REINFORCEMENT TWO SIDES

5" o.c. (typical)

(8a) ATTACHMENT DETAILS WHERE RIM BOARDS ABUT

Rim Board Joint Between Floor Joists

Use same installation as Method 1 but reinforce both sides of Lioist with sheathing.

Use nailing partern shown for Method 1 with opposite face nailing offset by 3".

- 2-1/2" toe-nails o 6" a.c. (typical) 1-1/2 Rim Board Joint at Corner (1) 2-1/2" nail top and — bottom (typical) Rim board jaint Rim board joint

Top or sole plate

NOTE: Canadian softwaod plywood sheathing or equivalent (minimum thickness 3,44) required on sides of joist. Depth shall match the full height of the joist. Natil with 2-1,72" natis of 8° a.c., top and bottom flange. Install with face grain harizontal. Attach I-joist to plate at all supports per detail 1b. Verify reinforced I-joist copacity.

4. For conventional and controlled nation of a figure beam, the Roaf Troat Span column above to equivalent the distance between the supporting will and the ridge beam. When the roof it frames from find the beam. When the soof troat Span in sequedient to the soof troat Span in sequedient to the soof troat Span in sequedient to the soof troat Span in sequedient to the first of the soof troat Span in sequedient to the first of the soof troat Span in sequedient to the soof troat Span in sequential span in the soof troat Span in sequential span in the soof troat Span in th For hip roofs with the jack trusses running parallel to the camile-seved floor joists, the i-joist reinforcement requirements for a span of 26 ft. stall be permitted to be used. when previous or manighe 3.0° with the grand hard from 6.0° or, adds of the transfer from 6.0° or, adds of the required his opating 3.0° or 2^{10} LUMBER CANTILEVER DETAIL FOR BALCONIES (No Wall Load) Full depth backer block with 1/8° gap between block and top See detail 1h. Nail with 2 rows of 3° nails at 6° o.c. and clinch 2x8 min. Nail to backer block and joist with 2 rows 3° ratis at 6° o.c. and dinch. (Cartilever nails may used to attach backer block if length of nail is suffit to allow directings.) For larger open openings space from losists the stude into be to stude into be to meet the floor live load of 40 and a five load of 50 and a five load of 50 and a five load of 12° o.c. requit Cantilever extension supporting uniform floor loads only Note: This detail is applicable to cantilevers supporting a maximum specified uniform live load of 60 pst. 2'-0" 1 maximum 1 contilever 2-0" C-maximum contilever BRICK CANTILEVER DETAILS FOR VERTICAL BUILDING OFFSET (CONCENTRATED WALL LOAD) Lumber or wood str CENTRATED WALL LOAD) FIGURE 5 (confinued) HGURE 4 (confined) (%) See table below for NI reinforcement requirements at contilever. See fable below for NI reinforcement requirements a Note: This detail is applicable to cantilevers supporting a maximum specified uniform live load of 60 psf. CANTILEVER DETAILS FOR VERTICAL BUILDING OFFSET (CON Nt blocking panel or rim board blocking, attach per detail 1g -Nail joist end using 3" nails, toe-nail at top and bottom flanges. Attach I-joist to plate per detail 15 Attach joists to girder joist per detail 5c. Note: Canadian softwood plwood sheathing ar equivalent (initinum thickness 3147) required on sides of circl. Dept sheat and much the full height of the joist. Nail with 2-1/2" rails at 6° c.c., by and befrom floogs. Install with face grain horizontal. Attach I-joist to plate at all supports per detail 1b. Verify reinforced I-joist capacity. Ní blocking panel or rim board blocking, attach per detail 1g CANTILEVER DETAILS FOR BALCONIES (NO WALL LOAD) Block Ligists together with filler blocks for the full length of the reinforcoment. For Ligist flange withing greater than 3 inches place an additional row of 3° nails along the centreline of the reinforcing panel from each side. Clinch when possible. (3a) IJOIST CANTILEVER DETAIL FOR BALCONIES (No Wall Load) 4a) Method 1 — SHEATHING REINFORCEMENT ONE SIDE Method 2 — SHEATHING REINFORCEMENT TWO SIDES - Use same institution as Method 1 but reinforce both sides of i-jeans with sheathing. - Use nating patient shown for Method 1 with opposite froe nating offset by 3. 4b Alternate Method 2 — DOUBLE 1-JOIST Note: Canadian softwood physical attacks of a standard and a sequenced frainting or equivalent (failtimum thickness 34/4) required (with the full sides of icist. Doth thell match the full sides of icist. Doth thell match the full on the full standard and better flores and better flores lested with face grain horizontal. Alach Liciat to pier a call supports are ideal 1b. Verify entiremed Lidia capacity. 50 SHEATHING REINFORCEMENT Vertical solid sown blocks (2x6 S-P-F No. 2 or better) natiled through piosis web and web of girder using 2.1/2* mais. Alternate for opposite side. Provide full depth blocking between joists over support (not shown) (5c) SET-BACK CONNECTION Rim board or wood structural — panel closure (3/4" minimum thickness); attach per detail 15 CAUTION: Cantilevers formed this way must be carefully detailed by operant moisture intrusion into the structure and potential decay of untrecited I-joist extensions. Kim board or wood structural panel closure (3/4" minimum thickness), attach per detail 1b. Contilever extension supporting uniform floor loads only 5b SET-BACK DETAIL Rim board or wood – structural panel closus attach per detail 1 b

For larger openings, or rathfalls 9.5°0 width openings or rathfalls of 70°0 c.c. and additional passed learned 16.7°0 c.c. and additional passed beneath the opening's cropped such may be required. To 24°0 c.c. first meet the floor such may always the requirement for or design fee load of 4.0°0 c.c. and additional final 14.20°0, but and a fee and delegated intered 14.20°0, but and 12°0. To c.c. requirements for leases specified.

wood structural r double l-joist. ser spacing. be: 15 psf roof il lood, and 80 plf d on 3-0

1. N = No reinforcem 1 = Ni reinforced w panel on one si 2 = Ni reinforced w panel on bath s x = Ty a deeper job Z. Maximum design loc deed locd. S5 paff wull locd. Wall locd.

detail 1p, if required.

Notes:

- Verify girder joist capacity if the back span exceeds the joist spacing.

- Attach doubte I-joist per detail 1p, if requir

Hanger may be used in lieu of solid sawn blocks

RULES FOR CUTTING HOLES AND DUCT CHASE OPENINGS:

- The distance between the inside edge of the support and the centreline of on hole or duct chase opening shall be in compliance with the requirements of Table 1 or 2, respectively.
- Whenever possible, field-out holes should be centred on the middle of the vet. The mount makes to the medium begin of a did not not not on the medium begin of a did not see best to the begin the begin of the Light makes the finance between the finance of the Light mins. It is not A minimum of MB and house downs be mentioned between the top of begins of the Light per operation and the ope
- The sides of square holes or longest sides of rectangular holes should not ex 3/4 of the diameter of the maximum round hole permitted at that location.
 - Where more than one hole is necessary, the distance between adjacent hole edges state of the distance has been asset to the target of the langual of the where the size of the languas equate hole of ravice the lessified of the languals also where languals rectangular has one of cat datase opening) and each hole and dust cha opening shall be sized and located in compliance with the requirements of labbes 1 and 2, respectively.
 - A knockout is not considered a hole, may be utilized anywhere it occurs, and may be ignored for purposes of calculating minimum distances between holes analor duct chase openings.
- Holes measuring 1-1/2 inches or smaller shall be permitted anywhere in a conflevered section of a joist. Holes of greater size may be permitted subject verification.
- - 9. A 1-1/2 inch hole or smaller can be placed anywhere in the web provided that meets the recoluteristic for the number 6 above.
 10. All holes and duct chase openings shall be cut in a workman-like monner in accordance with the restrictors fisted above and as illustrated in Figure 7.
 11. Limit three manimum size holes per span, of which one may be a clust chase opening.
 - T.2. A group of round holes at approximately the same location shall be permitted if they meet the requirements for a single round hole circumscribed around them.

7/ABLE 1 LOCATION OF CIRCULAR HOLES IN JOIST WEBS Simple or Multiple Span for Dead Loads up to 15 psf and Live

		1		
	2076	1112151	22223	100
지근무				- Green
		-		200
	11111	1111111	11111	66.66
				5.5.6.A
	11111	111111	11111	4446
F				Lake.
	11:11	111111	111111	onn-i
			40.60	o mm
	11111	111111	ರಕ್ಷಕ್ರಮ (700=
			. 4844	
	11111	1111111	26552	20-7
2			46	
		111111	25,00%	6.5.6
		0040		
	1,1,1,1	218518	566°Z	0.50 8.7.1
	.	.,000,		
A Pile	1, , , ,	121112	AK 66 K K	nr. moto
	1	5571355		LAGA.
88	11111	3566666	enink Kinir	4004
203		2122212	5-m/Nm 6-5	NA SE
	400.00	##&KK6#	*****	က်ဆက်က
	*6866	22222	460466	55,,,
ž į	in a rubit	5466K46	*****	A GOOD
	harms	222222	غوا فراول	
	99068	MNAMMAN	-64466	-66=I
	ိုဗုဗုနှင့	9799999	9697 ² 4	والإنجاجة
海 藤原				
	79975	222222	* ***	9999
100				2000
	55995	5682766	batia	2222
	očec	0000000	Joqqod	0000
	23333	917777	[]	327 3
	2	- 5		
12	, d	1 5	7	"
u-devices.	**************	100000000000000000000000000000000000000	***************************************	A CONTRACTOR

OPTIONAL:

To consider the board on the lipides used of their movinum spen. If the lipide are placed at less then their full movinum spen. If the lipide are given to see their full movinum spen in the control of the

	Duct cha (see Tabl minimum from bec	\mathbb{H}	1 1/8" spa sottom flar nings and	herever it
	2x dud chase ingition in the property whichever is careful in the property in	3/4x	Maintain minimum 1/8" spa between top and bottom flar all duct chase openings and	knockour is NOT considered a hole, may be utilized wherever it
LE LOCATOR	Zx diameter of larger hote	8	See rule 12	O. Daradered .o
FIELD-CUT HOLE LOCATOR	iee Table 1 or minimum iistance from rearing —		Knockouts	knockout is NK

and may be ignored for purposes of adjaulating minin between holes.



INSTALLING THE GLUED FLOOR SYSTEM

- Wipe any mud, dirt, water, or ice from Ljoist flanges before gluing. Snap a chalk line across the Ljoists four feet in from the wall for par boundary for spreading glue.

- 4. Lay the first panel with tongue side to the wall, and nail in place. This protects the tongue of the nex panel from damage when tapped into place with a block and sledgehammer.
- Apply a continuous line of glue (about 1/4-inch diameter) to the top flange of a single l-joist. Apply glue in a winding pattern on wide areas, such as with double Ljoists.
 - Apply two lines of glue on 1-joists where panel ends butt to assure proper gluing of each end.
- After the first ow of panels is in place, spread glue in the groove of one or two panels at a time before before byte in sent or would be member of the line may be confined as a packed, but avoid squeeze-out by applying the lime line (178 inch) from used on I lojad flanges.
- 8. Tap the second row of panels into place, using a block to protect groove edges
- Stagger and joints in each aucraseding row of panels. A 1/8-inch space between all end joints and 1/8-inch end logges, including 13.6 degles, is recommended. (Use a spacer fool or an 2-1/2" control nail to seave accurate and consistent spacing.)

FASTENERS FOR SHEATHING AND SUBFLOORING(1)

Species	Mers Intern Success	12.	12"	12.
Presenter	of Free Edges	.9	.9	. 6*
ŧ.	Stuples	2"	2"	2"
		1-3/4"	1-3/4"	1-3/4"
Ž	Colling	2"	2.	2-
Minimum		5/8	8/9	3/4
The state of		91	20	24

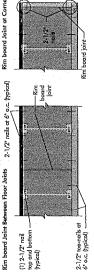
- 2. Staples shall not be less than 1/16-inch in diameter or thickness, with not less than a 3/8-inch driven with the crown parallel to framing.
- 3. Flooring screws shall not be less than 1/8-inch in diameter.
- Special conditions may impose heavy traffic and concentrated loads that
 of the minimums shown.
- Use only adhesives conforming to CAN/CCSB-71.26 Standard, Adhesives for Field-Gluing Plywood I Lumber Franting for Floot System, applied in accordance with the manufacturer's recommendations. Ost panies Vink sealed surfaces and edges are to be used, use only solvent-based glues; check with panies manufactures.

Ref.: NRC-CNRC, National Building Cade of Canada 2010, Table 9.23.3.5.

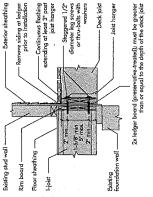
IMPORTANT NOTE:
Floor sheetings must be field glued to the I-joist flonges in order to achieve the maximum spans shown in this document. If sheathing is nailed only, I-joist spans must be verified with your local distributor.

RIM BOARD INSTALLATION DETAILS

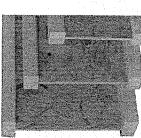
(89) ATTACHMENT DETAILS WHERE RIM BOARDS ABUT Rim board Joint Behween Floor Joists 2-1/2" nails at 6" o



(8c) 2X LEDGER TO RIM BOARD ATTACHMENT DETAIL (8b) TOE-NAIL CONNECTION AT RIM BOARD







TE COPY

monitories care nesidential fores constructor was a useas. The load of 40 ps and dead food of 13 ps; The ultimate limit states are beared not the factored board of 1.50; The serviceability limit states includes the consideration for floor whostling initial states includes the consideration for floor whostling initial states include the consideration for floor whostling initial states and called the 14.80. For multiple-span applications, the end approach all be 40% or more of the todicant span.

- 2. Spons we based on a composite floor with glued-radiled retrieved transle back (1058) shortfly with a radiminum histories of \$50 flued first of joins sponsing of 192, inches or less, or \$24 thin for lost sponsing of \$25 thindes. Althorism should be shortfly than the requirements given in CGBS-71.26 Shardfact. No concept ropping or bridging element was resumed, Increased spons may be achieved with the used of gypsum and/or a row of blocking at mid-sponsing of gypsum and/or a row of blocking at mid-spons.
- Minimum bearing length shall be 1-3/4 inches for the end bearings, and 3-1/2 inches for the intermediate bearings.
 - Bearing siffeners are not required when I-joists are used with the spans and spacings given in this table, except as required for hangers.
- 5. This spon chart is based on uniform loads. For applications with other than uniform loads, on engineering analysis may be required based on the use of the design properties. Tables are based on Limit State Design per CANVCSA O86-05 Standard, and NBC 2010.
- 7. Sl units conversion: 1 inch = 25.4 mm 1 foot = 0.305 m

MAXIMUM FLOOR SPANS FOR NORDIC I-JOISTS SIMPLE AND MULTIPLE SPANS

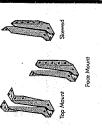
		14.7 15.5 16.1	0.02 1.02 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03	10.6	15.6 15.6	20.1	, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6,	222	23.5
sund.	ŀ	14.10 10.00	4. i b. i 9.0 0	. t. t.	, 6 d	20.0 20.0 20.0	işêt indl	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	23.7
		454	22/23	86 E	4.4.6 6.6.6	20.61 20.11"	, 6. 1888	8 9 9 8 8 8	24.10°
	Ē	75. 25.	7 5 4 6 7 5 4 6	(5.5) (5.5)	100 100 100	27.22 27.22	17.7.5 17.4.5 17.4.5	28:0 28:0 28:3	27.3
1	į,	2.5.4.4 2.9.4.	15.7	122	17:11	17.11.	19 6 10 6 10 6 10 6	20.10	21.6
		9.4.4	\$0.10 (5.10 \$0.10 (5.10 \$0.10 (5.10)	122	17.7 19.5 19.5	19:10	44.	6.6.2 6.6.2 7.6.2	5178 5178
		18.2 18.2 18.4	- in o i	100 100 100	7 1. b.	18.7° 18.11°	, , , i Rži	22.58	9.6 9.6
	ž.	7.91 1.90 16.91		4.9	20.5 20.5	20.5	1881	1. 23.63 23.63 23.63	24.5
feith	Section	253 252	P	32 2 2	2 Z Z Z	338 222	828 222	828 ŽŽŽ	N.90 N.90x
1.00	į	9.172		11.778			÷	.91	

1. Hangers shown illustrate the three most commonly used metal hang to support I-joists.

I-JOIST HAN

- All nailing must meet the hanger manufacturer's recommendations
- 3. Hongers should be selected based on the joist depth, flange width and load capacity based on the maximum spans.





WEB STIFFENERS

NORDIC I-JOIST SERIES

RECOMMENDATIONS:

FIGURE 2 WEB STIFFENER INSTALLATION DETAILS

A bearing stiffener is required in all
enginence opplications with fractured
reactions greater than shown in the
light properties table found of the i-joist
Christies of the i-joist
Christies of the i-joist
Christies of the i-joist
stifferer and the fange is all the top.

CONCENTRATED LOAD

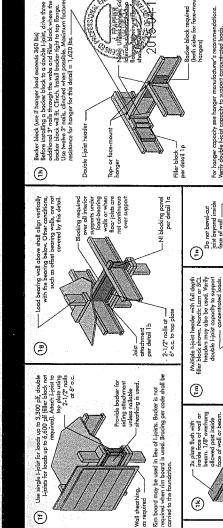
- * A bearing stiffener is required when the Lioist is supported in a hanger and the size of the hanger do not award up to, and support, the top flange. The gap between the siffener and flange is at the top.

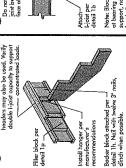
 - *A load stiffener is required at locations where is chacked constrained hold greater than 2,570 lbs is applied to the rob fitness between supports, or in the case of a conflictor, anywhere between the conflictor, anywhere between the conflictor, anywhere between the conflictor, anywhere between the conflictor, anywhere between the conflictor is secondard twen load duration, and may be colleged for other load duration as permitted by this code. The goal between the sifferent by though a cut its bottom.

Slivinits conversion: 1 inch = 25.4 mm

Approx. 2. T. (3. 2-1/2" rolls, (3. 2-1/2" rolls, (4. 2-1/2" rolls, (5. 4-1/2" rolls, See table below for web stiffener size STIFFENER SIZE REQUIREMENTS -No Gap Flange width 2-1/2" or 3-1/2"

2400f MSR NPG Lumbs Chantiers Chilouganou Ltd. harvest its own trees, which enables Modelli, menducto to adhers a taid qualified mental proceedions from programs and an advantage of the operations from programs from the proceeding and the pro 2100f MSR 1950f MSR 2100f MSR 23 pieces per unit Nordic Engineered Wood I-joists use only finger-joir lumber in their flanges, ensuring consistent quality, longer span carrying capacity. S-P-F No.2 1950FMSR 33 pieces per unit





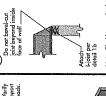
Filler block per detail 1p

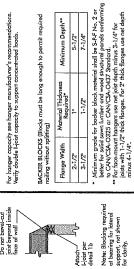
(3)

Nordic Lam or SCL

€

Transfer load from above to bearing below. Install squash blocks per detail 1d. March bearing area of blocks below to post above.





Minimom Depth**

– Backer błock required (both sides for face-mou hangers)

(-

Maximum support capacity = 1,620 lbs

Note: Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.

Note: Unless hanger sides laterally support the top flange, bearing stiffeners shall be used.

Filler block

For nailing schedules for multiple beams, see the manufacturer's recommendations.

Top- or face-mount hanger – installed per manufacturer's recommendations

In same local codes, blocking is prescriptively required in
the first joist space for first and second joist space) met to
the starter joist. When evalued, see local code requiremen
for spacing of the blocking.
 All nails one common spiral in this detail.

FILLER BLOCK REQUIREMENTS FOR DOUBLE ILJOIST CONSTRUCTION 2-1/8*× 6*
2-1/8*× 8*
2-1/8*× 8*
3*× 12*
3*× 6*
3*× 10*
3*× 10*
3*× 10*
3*× 10*
3*× 10* Filler Block Size Flange Joist Size Death 2-1/2 × 1-1/2 3-1/2'× 1-1/2' 3-1/2'× Support back of Ligits web during nations to prevent durings to web/flange connection.
 Leave a 1/8 to 1/4-inch gap between top of filler black and battom of top Ligist flange. 4. Nall joists together with two rows of 3" moles of 1" further of wilchingt when moles of 1" further or, clinicated when possible on each side of the double l-joist. Dolo of four mails per foot required. If fails can be dinctired, only two nails per foot are required, only two nails per foot on remainum footbard load that may be opplied to one side of the double load on each great load for the load on the footbard of the light copacity. Filler block is required between joists for full length of span,

een top flange

1/8" to 1/4" gap betw and filler block

Offset nails from opposite face by 6"

opional: Minimum 1.54 inch Opional: Minimum 1.54 inch Strap applied to underside of joint or blocking ing or V.72 can minimum gpsum entiring mutchef to underside of joint or blocking ing or V.72 can minimum gpsum entiring mutchef to underside of joint or blocking ing or V.72 can minimum gpsum entiring mutchef to underside of joint or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocking mutchef to underside or blocki
--