

		Products		
PlotID	Length	Product	Plies	Net Qty
J1	10-00-00	9 1/2" NI-40x	1	7
J2	20-00-00	11 7/8" NI-40x	2	2
J3	16-00-00	11 7/8" NI-40x	1	5
J4	10-00-00	11 7/8" NI-40x	1	5
J5	6-00-00	11 7/8" NI-40x	1	2
J6	4-00-00	11 7/8" NI-40x	1	3
J7	2-00-00	11 7/8" NI-40x	1	2
J8	20-00-00	11 7/8" NI-80	1	24
B1A	20-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	, 1
B2	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connecto	r Summary
Qty	Manuf	Product
10	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H2	HUS1.81/10
1	H2	HUS1.81/10

TOWN OF BRADFORD WEST GWILLIMBURY BUILDING DEPARTMENT PLANS EXAMINED ONTARIO BUILDING CODE APPLIES

DATE: 04/23/2024

INSPECTOR: BG

REVIEWED

DATE: 2021-11-19

1st FLOOR



FROM PLAN DATED: 2021/10

BUILDER: BAYVIEW WELLINGTON

SITE: GREEN VALLEY EAST

MODEL: TH-6E ELEVATION: A,B

LOT:

CITY: BRADFORD

SALESMAN: RICK DICIANO

DESIGNER: AJ REVISION:

NOTES:

REFER TO THE **NORDIC INSTALLATION**GUIDE FOR PROPER STORAGE AND
INSTALLATION.

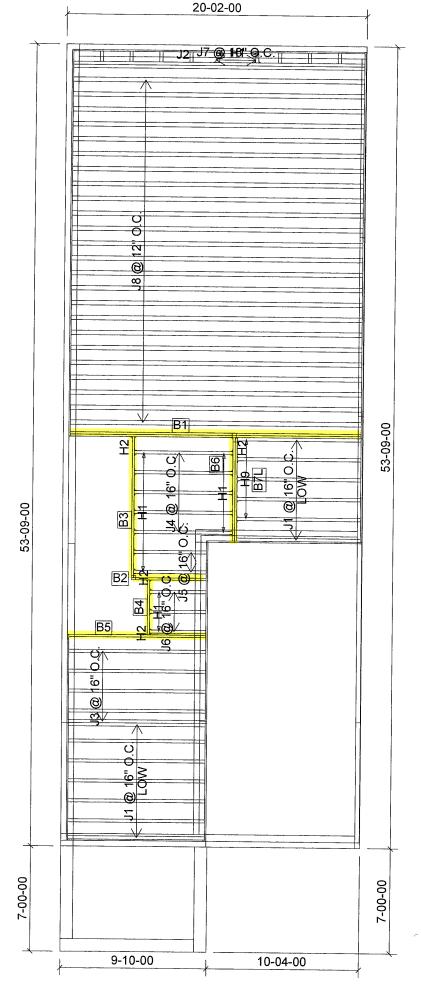
SQUASH BLOCKS OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. MULTIPLE SQUASH BLOCKS REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. CANTILEVERED JOISTS INCLUDING CANT' OVER BRICK REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE

FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD CUT OPENINGS SEE FIGURE 7, TABLES 1 & 2. CERAMIC TILE

APPLICATION AS PER O.B.C 9.30.6.

LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 15.0 lb/ft² TILE LOAD: 20.0 lb/ft²



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	10-00-00	9 1/2" NI-40x	1	13
J2	20-00-00	11 7/8" NI-40x	2	2
J3	10-00-00	11 7/8" NI-40x	1	5
J4	8-00-00	11 7/8" NI-40x	1	5
J5	6-00-00	11 7/8" NI-40x	1	2
J6	4-00-00	11 7/8" NI-40x	1	3
J7	2-00-00	11 7/8" NI-40x	1	2
J8	20-00-00	11 7/8" NI-80	1	24
B7L	8-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1	20-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B6	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B2	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connecto	r Summary
Manuf	Product
H1	IUS2.56/11.88
H1	IUS2.56/11.88
H2	HUS1.81/10
H2	HUS1.81/10
H9	IUS2.56/9.5
	Manuf H1 H1 H2 H2



DATE: 2021-11-19

1st FLOOR SUNKEN



FROM PLAN DATED: 2021/10

BUILDER: BAYVIEW WELLINGTON

SITE: GREEN VALLEY EAST

MODEL: TH-6E ELEVATION: A,B

LOT:

CITY: BRADFORD

SALESMAN: RICK DICIANO

DESIGNER: AJ REVISION:

NOTES:

REFER TO THE NORDIC INSTALLATION
GUIDE FOR PROPER STORAGE AND

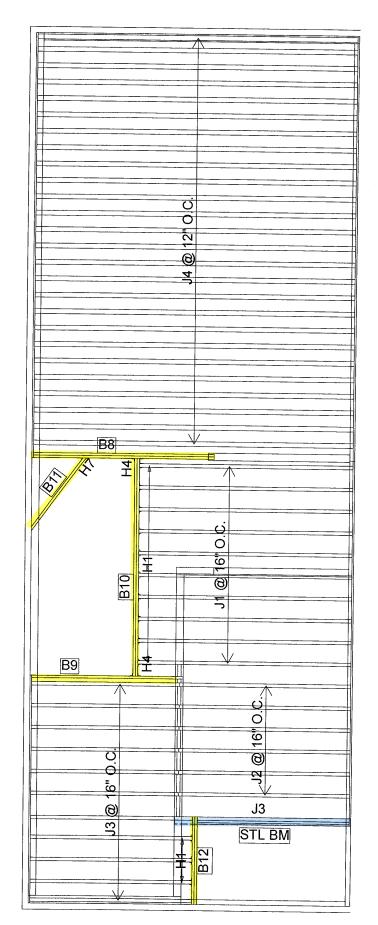
INSTALLATION.

SQUASH BLOCKS OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. MULTIPLE SQUASH BLOCKS REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. CANTILEVERED JOISTS INCLUDING CANT' OVER BRICK REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD CUT OPENINGS SEE FIGURE 7, TABLES 1 & 2. CERAMIC TILE

LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 15.0 lb/ft² TILE LOAD: 20.0 lb/ft²

APPLICATION AS PER O.B.C 9.30.6.



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	14-00-00	11 7/8" NI-40x	1	10
J2	12-00-00	11 7/8" NI-40x	1	6
J3	10-00-00	11 7/8" NI-40x	1	12
J4	20-00-00	11 7/8" NI-80	1	26
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B9	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B11	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B12	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connecto	r Summary
Qty	Manuf	Product
13	H1	IUS2.56/11.88
1	H4	HGUS412
1	H4	HGUS412
1	H7	LSSR1.81Z



DATE: 2021-11-19

2ND FLOOR



FROM PLAN DATED: 2021/10

BUILDER: BAYVIEW WELLINGTON

SITE: GREEN VALLEY EAST

MODEL: TH-6E ELEVATION: A

LOT:

CITY: BRADFORD

SALESMAN: RICK DICIANO

DESIGNER: AJ REVISION:

NOTES:

REFER TO THE NORDIC INSTALLATION
GUIDE FOR PROPER STORAGE AND

INSTALLATION.

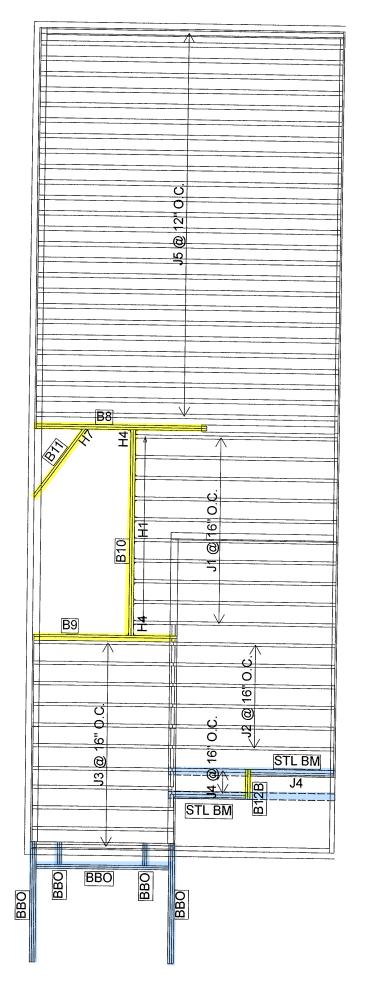
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SEE FIGURE 7, TABLES 1 & 2. CERAMIC TILE

APPLICATION AS PER O.B.C 9.30.6.

LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 15.0 lb/ft² TILE LOAD: 20.0 lb/ft²



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	14-00-00	11 7/8" NI-40x	1	10
J2	12-00-00	11 7/8" NI-40x	1	6
J3	10-00-00	11 7/8" NI-40x	1	11
J4	6-00-00	11 7/8" NI-40x	1	3
J5	20-00-00	11 7/8" NI-80	1	3 26
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	
B8	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	_	2
B9	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B11	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B12B	2-00-00		1	1
	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connecto	r Summary
Qty	Manuf	Product
10	H1	IUS2.56/11.88
1	H4	HGUS412
1	H4	HGUS412
1	H7	LSSR1.81Z



DATE: 2021-11-19

2ND FLOOR



FROM PLAN DATED: 2021/10
BUILDER: BAYVIEW WELLINGTON

SITE: GREEN VALLEY EAST

MODEL: TH-6E ELEVATION: B

LOT:

CITY: BRADFORD

SALESMAN: RICK DICIANO

DESIGNER: AJ REVISION:

NOTES:

REFER TO THE **NORDIC INSTALLATION**GUIDE FOR PROPER STORAGE AND

INSTALLATION.

SQUASH BLOCKS OF 2x4, 2x6, 2x8 #2 S.P.F REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. MULTIPLE SQUASH BLOCKS REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. CANTILEVERED JOISTS INCLUDING CANT' OVER BRICK REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD CUT OPENINGS SEE FIGURE 7, TABLES 1 & 2. CERAMIC TILE

LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 15.0 lb/ft² TILE LOAD: 20.0 lb/ft²

APPLICATION AS PER O.B.C 9.30.6.

NORDIC

NORDIC JOIST NS-G|33 **■**◆**■**

Engineered Wood Products **BASIC** INSTALLATION **GUIDE FOR** RESIDENTIAL **FLOORS**

JOIST

NORDIC STRUCTURES

nordic.ca

1 x 2-5/16 Minimum width

19

INSTALLING NORDIC I-JOISTS

- Install I-joists so that top and bottom flanges are within 1/2 inch of true vertical alignment.
- bottom flange with the exception of light loads, such as ceiling fans or light fixtures.
- I-joists must not be used in applications where they will be permanently exposed to weather or will reach a moisture content of 15 percent or greater, such as in swimming pool or hot tub areas. They must not be installed where they will remain in direct contact with
- End bearing length must be at least 1-3/4 inch, For multiple-span joists, intermediate bearing length must be at least 3-1/2 inches
- Ends of floor joists shall be restrained to prevent rollover. Use rim board or I-joist blocking panels I-joists installed beneath bearing walls perpendicular to the joists shall have full-depth blocking panels, rim board, or squash blocks

- . Continuous lateral support of the I-joist's compression flance is required to prevent rotation and buckling. In simple span uses, lateral support of the top flange is normally supplied by the floor sheathing. In multiple-span or cartilever applications, bracing of the Lijoist's ends of all cantilever extensions must be laterally braced as shown in details 3, 4, or 5,

the Nordic Joist Technical Guide (NS-GT3).

- other fastener requirements see the applicable building code
- of temporary construction loads, see APA Technical Note: Temporary Construction Loads over I-Joist Roofs and Floors. Form J735.

All nails shown in the details are assumed to be common nails unless otherwise noted. Nails shall have a diameter not less have 0.128 inch to 2'.12'-and-nails, or 0.144 (inch for 3-inch nails, individual components not shown to scale for clarity.





N1-40x 2×3 1950f MSR

10

1p



of I-joists at the end of the bay.

rim board, or cross-bridging,

and sheathed.



SAFETY AND CONSTRUCTION PRECAUTIONS

. Brace and nail each I-joist as it is installed, using hangers, blocking panels, rim board, and or cross-bridging at joist ends. When I-joists are applied continuous over interior supports

and a load-bearing wall is planned at that location, blocking will be required at the interior

. When the building is completed, the floor sheathing will provide lateral support for the top

or temporary sheathing must be applied to prevent I-joist rollover or buckling.

end of each bay. Lap ends of adjoining bracing over at least two I-joists,

flanges of the I-joists. Until this sheathing is applied, temporary bracing, often called struts.

Temporary bracing or struts must be 1x4 inch minimum, at least 8 feet long and spaced

Or sheathing (temporary or permanent) can be nailed to the top flange of the first 4 feet

For cantilevered I-joists, brace top and bottom flanges, and brace ends with closure panels

. Install and fully nail permanent sheathing to each I-joist before placing loads on the floor

mproper storage or installation, failure to follow applicable building codes, failure to follow

span ratings for Nordic I-joists, failure to follow allowable hole sizes and locations, or failure

use web stiffeners when required can result in serious accidents. Follow these installation

nails fastened to the top surface of each I-joist. Nail the bracing to a lateral restraint at the

Avoid Accidents by Following these Important Guidelines



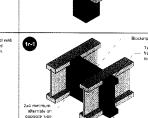
RIM BOARDS Width Length

injuries can result

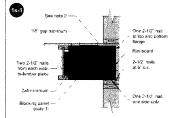
V3

oncentrated loads from building materials





8a

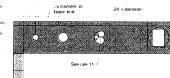


FOR ALL \rightarrow DC3

WEB HOLES IN I-JOISTS

Rules for Cutting Hales in I-Joists

- Hotes measuring 1-1/2 inch or smaller shall be permitted anywhere in a contievered section of a joist. Hotes of greater size male permitted subject to verification.
- A 1-1/2 inch hole or smaller can be slaced anywhere in the web provided that it meets the requirements of rule number 6 above.
- Never stack building materials over unsheathed I-joists, Once sheathed, do no overstress I-joist with
 - Limit three maximum-size holes per spa



DUCT CHASE OPENINGS

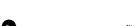
Rules for Cutting Duct Chase Openings in I-joist

All opinings shall be out in accordance with the institutions listed above and as illustrated in detail 5b.

- 2. Igoist for and bottom flanges must never be cut, notched or otherwise modified . The ms dimum depth of a duct chase opening that can be cut into an liptist with shall equal the clair distance between the flanges of the liptist mens. It's end, in a minimum of 18 link should always be maintained between the top or bottom of the opening and the adjacent liptist flange. 2. Holes out into the blocking panels are subject to the following limitations

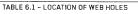
HOLES IN BLOCKING PANELS

- While round holes are preferred rectangle holes may be used provid the corners are not over cut. Slightly rounding corners or pre-drilling with a 5-inch-diameter bit is recommended.





blocking depth (in.)	hate diameter (in.) (5)
9-1/2	6-1/4
11-7/ë	7-3:4
14	9-1/4
16	10-1/2
Maximum allowable hole diameter	in blocking panel, where the blocking penel



libre o	motopi	e span					
nimum	distance	from inside	face of an	y support to	centre of	hole (ft-in.,)
Joist	Joist						
forth	corios		•	4			

Joist	Joist							Round	hole diam	eter (in.)						
dapth	series						5-1/4		8	8-5/8		10	10-3/4	11	12	12-3
	NI-20	0'-7"	1'-6"	2'-10"	4'-3"	5'-8"	6-91	-	P. 10		1	-	3,5		100	-
9-1/2"	NI-40x	9'-7"	1'-6'	30	4'-4"	6'-0"	6'-4".	-	100	-		-	144.282	-	2.0	
5-1/2	NI-60	1'-3"	2'-6"	4'-0"	5'4'	7'-0"	7'-5"						022	-	1 1 1 1 1	
	NI-80	2'-3'	3'-6"	5'-0"	6.6	8'-2"	8'-8"	-	124		100					
	N#-20	0'-7"	0'-8"	11-01	2.4	3'-8"	4'-0"	5'-0"	6'-6"	7'-9"	887-124		Supreme :		10.4	
	NI-40x	0'-7"	0'-8"	11-31	2'-8"	4'-0'	4'-4"	5'-5"	7:0	8'-4"			100			
11-7/8"	NI-80	0'-7"	1'-8'	3:-0	4'-3"	5'-9'	6'-0"	7'-3"	8-10	10'-0"	1300		100			
	NI-80	1'-6"	2-10	4 -2	5-6	7:-0	7.5	8'-6"	10.31	11'-4"	2012			-	0.00	
	NF30	0'-7"	0'-8"	1'-5"	3-2	4'-10"	5-4"	6'-9"	8.9	10"-2"				-	20.00	-
	NI-40x	0'-7"	0'-8"	08.	1'-0"	2'-4"	2.9	36.	5-2	6-0	6'-81'	8'-3"	107-25		212000	-
14"	NI-60	0'-7"	0'-8"	1'-8"	3.0	4'-3"	4'-8"	5.8"	7-2	86	8'-8"	10'-4"	11'-9"		200	
14	NI-80	0'-10"	2'-0'	3'-4"	4'-9"	6'-2"	8'-6"	7'-6"	9-0*	10"-0"	10-8"	12"-4"	13'-9"			
	M-90	0'-7"	08.	0"-10"	2'-5"	4'-0'	4'-5"	5'-9"	7-5	8'-8"	9-4"	11-4	127-117		10000	-
	NI-80	0'-7"	0'-8"	0:-8-	1'-6"	2'-10"	3.2"	4'-2"	5'-6"	6.4.	7'-0"	8'-E'	9'-8"	10'-2"	12-2"	13'-
16"	NI-80	0'-7"	1'-3"	2'-6'	3'-10"	5'-3"	5'-6"	6"-6"	8'-0"	8.*0.	9-5	11"-0"	12-3	12'-9"	14'-5"	16"4
	NI-90	0'-7"	0'-8"	0'-8"	1'-9"	3'-3"	3'-8"	4'-9"	6'-5"	7'-5"	8'-0"	9'-10"	1153	11'-9"	13'49"	15'-4

Joist spacing	Up to 24 inches
Loads	Live load = 40 psf and dead load = 15 psf

TABLE 6.2 - LOCATION OF DUCT CHASE OPENINGS

19-3/4

TABLE G.E - EGGATION OF DOCT CHASE OF EN
Simple span

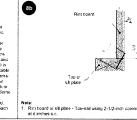
l .	
Simple span	
Minimum distance from i	nside face of any support to centre of opening (ft-
Iniat Iniat	Ount phase to get his

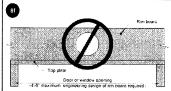
	· · · · · · · · · · · · · · · · · · ·	GIOTALTOC I	TOTAL BION	re lace of a	any supp	on to cent	e o oper	ing (fl-in.)			
	Joist	Joist		Duct chase length (in.)							
12-3/4	depth	series	8	10	12	14	16	18	20	22	
		NJ-20	4"-1"	4'-5"	4'-10"	4		3876	-	14.74	
-	6.400	NI-40x	5'-3"	5'-8'	6'+0"	61-61	6"-10"	7'-3"	7'-8"	100	
	9-1/2	NI-60	5'-4"	67-97	6'-2"	6-7*	7:-11	7-5"	8'-0"		
		NI-80	5'-3"	5'-8"	6'-0"	6'-5"	6-10	7-37	7'-8"	8'-2"	8
		NI-20	5'-9"	6'-2"	6'-6"	1112	-	1 144.11	-	225430	
		NI-40x	6'-8"	7-2	7'-6"	8-11	8'-6"	9-1	9'-6"		
	11-7/8*	NI-80	7'-3"	7'-8"	8:-0"	8'-8"	9:-0"	9-3	9'-9"		
		NI-80	7-2	74	8:-0"	8-5	8'-10"	9-3	9:-8"	107-21	1
-		Ni-90	7'-6"	7-11	8'-4"	8'-9"	9'-2"	9.7	10'-1"	10-7*	1
-		NI-40x	8'-1"	8'-7"	9 -0"	9'-6"	10'-1"	10'-7"	11'-2"	119231	-
		N1-60	8'-9"	9-3"	9"-8"	10-11"	10'-6"	11-1*	115-6"		
	14"	NI-80	9-0"	9'-3"	9-9-	10'-1"	10'-7"	11.37	11'-6"	12'-1"	1:
		NI-90	9"-2"	9'-8"	10'-0"	107-6	10'-11"	11-5	117-91	25 5956 245	1
13'-9"		NI-60	10'-3'	10'-8"	11'-2"	11'-8"	12'-1"		13-2	No.	_
16'-0'	16"	NI-80	10'-4"	10-9*	11'-3"	1150	12'-1"			13'-8"	- 1
15'-4"		NI-90	10'-9"	11'-2"	11'-8"	3/0/00000	12'-6"	2000000		CONTRACTOR A	- 1
	13-9-16-0	12-24 doplh	12-34 dopth series N1-20 9-172 N1-20 -	12-34	12-14	12-3/4	12-34 dsph series 0 10 12 14	17-24	12-34	17-24	12-14

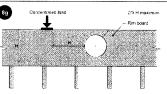
RIM BOARDS

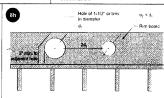












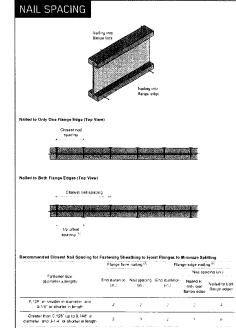
I-JOIST MARKING

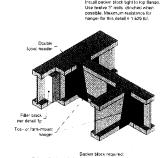


Production

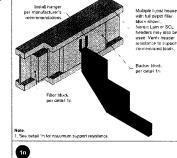
ICC-FS Evaluation

REVIEWED



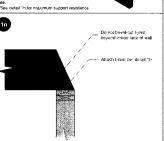


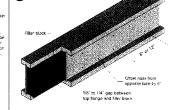
Flange width (in.)	Material thickness required (in.) ^(sc)	Minimum gepth (in.) "
2-1/2	1	5-1/2
3-172	1-1-2	7.1/4



Unless hanger sides laterally support the top flange, bearing stiffeners shall be used. For nailing echedules for multiple Nordic Lam or SCL beams see the manufacturer's recommendations.

100





Supplied balls of the price were usually assumed to prevent startings or reconsultages (Leaves as Lifecular to Merching passed to 90 of this below as a bottom of top lights filtings).

Falls block is required between jorks for full length of scan. The common of Switch (Leaves as Lifecular to 12 of the common of Switch and Switch (Leaves to 12 of the common of Switch and Switch (Leaves to 12 of the common of Switch and Switch (Leaves to 12 of the common of Switch and Switch (Leaves to 12 of the common of Switch (

Flange width (in.) Net depth (in.) Filler block size (in.; 2-1/8 to 2-1/4 x 6 246 + 5/8° or 3'4' sheathing 2-1/8 to 2-1/4 x 6 246 + 5/8° or 3'4' sheathing 2-1/8 to 2-1/4 x 6 24/0 + 5/8° or 3'4' sheathing 3-1/2 2 x 2x12

construction details

NORDIC STRUCTURES

COMPANY Nov. 19, 2021 12:49

PROJECT
J8 1ST FLOOR.wwb

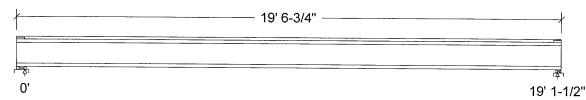
Design Check Calculation Sheet

Nordic Sizer - Canada 8.0

Loads:

Load	Type	Distribution	Pat-	Location	ı [ft]	Magnitu	.de	Unit
			tern	Start	End	Start	End	
Load1	Dead	Full Area				20.00		psf
Load2	Live	Full Area				40.00		psf

Maximum Reactions (lbs) and Support Bearing (in):



Unfactored:		1
Dead	191	191
Live	382	382
Factored:		002
Total	813	813
Bearing:		010
Capacity		
Joist	2336	2188
Support	10829	5573
Des ratio		
Joist	0.35	0.37
Support	0.08	0.15
Load case	#2	#2
Length	4-3/8	2-3/8
Min req'd	1-1/2	1-1/2
Stiffener	No	No
KD	1.00	1.00
KB support	1.00	1.00
fcp sup	769	769
Kzcp sup	1.15	1.09

^{*}Minimum bearing length for joists is 1-1/2" for exterior supports

Nordic 11-7/8" NI-80 Floor joist @ 12" o.c.

Supports: All - Lumber Sill plate, No.1/No.2

Total length: 19' 6-3/4"; Clear span: 19'; 3/4" nailed and glued OSB sheathing

This section PASSES the design code check.

Limit States Design using CSA O86-14 and Vibration Criterion:

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 813	Vr = 2336	lbs	Vf/Vr = 0.35
Moment(+)	Mf = 3886	Mr = 11609	lbs-ft	Mf/Mr = 0.33
Perm. Defl'n	0.11 = < L/999	0.64 = L/360	in 🎢	0.17
Live Defl'n	0.22 = < L/999	0.48 = L/480	in 🎣	0.46
Total Defl'n	0.33 = L/692	0.96 = L/240	in 🖋	NON 0.35
Bare Defl'n	0.25 = L/908	0.64 = L/360	in 🖍 🔭	0.35 KATSOULAKOS 0.40
Vibration	Lmax = 19'-1.5	Lv = 21'-2.7	ft 🕍 S	KATSOULAKUS \$ 0.90
Defl'n	= 0.026	= 0.033	in 🔭	0.77

REVIEW ONLY D

J8 1ST FLOOR.wwb

Nordic Sizer - Canada 8.0

Page 2

```
Additional Data:
FACTORS:
            f/E
                     KD
                             KH
                                     ΚZ
                                              KT.
                                                     KΤ
                                                            KS
                                                                     KN
                                                                           LC#
Vr
            2336
                     1.00
                            1.00
                                                                           #2
Mr+
           11609
                    1.00
                            1.00
                                           1.000
                                                                           #2
ΕI
           547.1 million
                                                                           #2
CRITICAL LOAD COMBINATIONS:
          : LC #2
                    = 1.25D + 1.5L
Shear
Moment(+): LC #2
                    = 1.25D + 1.5L
Deflection: LC #1
                    = 1.0D (permanent)
             LC #2
                    = 1.0D + 1.0L
             LC #2
                    = 1.0D + 1.0L
                                    (total)
             LC #2
                    = 1.0D + 1.0L
                                    (bare joist)
 Bearing
           : Support 1 - LC \# 2 = 1.25D + 1.5L
             Support 2 - LC \# 2 = 1.25D + 1.5L
Load Types:
              D=dead L=live(use,occupancy)
Load Patterns: s=S/2 L=L+Ls =no pattern load in this span
All Load Combinations (LCs) are listed in the Analysis output
CALCULATIONS:
Eleff = 625.37 lb-in<sup>2</sup> K = 6.18e06 lbs GA = 0.77e06 lb
 "Live" deflection is due to all non-dead loads (live, wind, snow...) CONFORMS TO OBC 2012
```

Design Notes: AMENDED 2020

- 1. WoodWorks analysis and design are in accordance with the 2015 National Building Code of Canada (NBC), Division B, Part 4, and the CSA O86-14 Engineering Design in Wood standard, Update No. 2 (June 2017).
- 2. Please verify that the default deflection limits are appropriate for your application.
- 3. Refer to Nordic Structures technical documentation for installation guidelines and construction details.
- 4. Nordic I-joists are listed in CCMC evaluation report 13032-R.
- 5. Joists shall be laterally supported at supports and continuously along the compression edge.
- 6. Allowable vibration-controlled span as per the Concluding Report, Development of Design Procedures for Vibration Controlled Spans using Engineered Wood Members, CWC et al for CCMC, 1997.
- 7. Floor vibration design from the CCMC Concluding Report (1997) on vibration controlled spans for engineered wood products.
- 8. The design assumptions and specifications have been provided by the client. Any damages resulting from faulty or incorrect information, specifications, and/or designs furnished, and the correctness or accuracy of this information is their responsibility. This analysis does not constitute a record of the structural integrity of the building nor suitability of the design assumptions made. Nordic Structures is responsible only for the structural adequacy of this component based on the design criteria and loadings shown.





COMPANY

Nov. 19, 2021 09:35

PROJECT
J4 2ND FLOOR.wwb

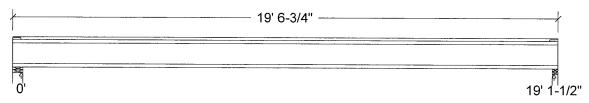
Design Check Calculation Sheet

Nordic Sizer - Canada 8.0

Loads:

Load	Type	Distribution	Pat-	Location	n [ft]	Magnitu	de	Unit
			tern	Start	End	Start	End	
Load1	Dead	Full Area				20.00		psf
Load2	Live	Full Area				40.00		psf

Maximum Reactions (lbs) and Support Bearing (in):



Unfactored:		
Dead	191	191
Live	382	382
Factored:		
Total	813	813
Bearing:		*
Capacity		
Joist	2336	2188
Support	10829	5573
Des ratio		
Joist	0.35	0.37
Support	0.08	0.15
Load case	#2	#2
Length	4-3/8	2-3/8
Min req'd	1-1/2	1-1/2
Stiffener	No	No
KD	1.00	1.00
KB support	-	_
fcp sup	769	769
Kzcp sup	_	-

*Minimum bearing length for joists is 1-1/2" for exterior supports

Bearing for wall supports is perpendicular-to-grain bearing on top plate. No stud design included.

Nordic 11-7/8" NI-80 Floor joist @ 12" o.c.

Supports: All - Lumber Wall, No.1/No.2

Total length: 19' 6-3/4"; Clear span: 19'; 3/4" nailed and glued OSB sheathing with 1/2" gypsum ceiling

This section PASSES the design code check.

Limit States Design using CSA 086-14 and Vibration Criterion:

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 813	Vr = 2336	lbs	Vf/Vr = 0.35
Moment(+)	Mf = 3886	Mr = 11609	lbs-ft	MI/Mr = 0.33
Perm. Defl'n	0.11 = < L/999	0.64 = L/360	in 🏂	0.17
Live Defl'n	0.22 = < L/999	0.48 = L/480	in 🥒	NOV 0.46
Total Defl'n	0.33 = L/692	0.96 = L/240	in 🎉 🕏	0.35
Bare Defl'n	0.25 = L/908	0.64 = L/360	in 🖔 S	0.46 0.35 0.40
Vibration	Lmax = 19'-1.5	Lv = 21'-8.9	ft 💆 🦠	
Defl'n	= 0.024	= 0.033	in 🐧 🍕	0.88

RIGNO.TAM 2599/-21
STRUCTURAL
COMPONENT ONLY

J4 2ND FLOOR.wwb

Nordic Sizer - Canada 8.0

Page 2

Additiona	l Data:										
FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#		
	2336				_			_	#2		
	11609		1.00	_	1.000	_	_	_	#2		
	547.1 m			-	_	-	-	_	#2		
CRITICAL LO											
Shear	: LC #2	= 1.25	5D + 1.5	L							
) : LC #2										
Deflection	on: LC #1										
			0 + 1.0L								
			0 + 1.0L								
			0 + 1.0L								
Bearing	: Suppo:	rt 1 - I	LC #2 = 1	1.25D +	1.5L						
			LC #2 = 1								
Load Type	es: D=dea	ad L=li	ive(use,	occupano	cy)						
Load Patt	terns: s=:	S/2 L=I	L+Ls _=1	no patte	ern load	in this	s span				
All Load	Combinat	ions (LO	Cs) are	listed i	in the An	alysis	output				
CALCULATION											
Eleff = 6	625.37 lb	-in^2	K = 6.13	Be06 lbs	S = GA = 0	.77e06	lb				
"Live" de	eflection	is due	to all n	non-deac	d loads (live, w	ind, sno	ow)			0010
								CO	NFORMS T	n arc	2012

Design Notes:

AMENDED 2020

- 1. WoodWorks analysis and design are in accordance with the 2015 National Building Code of Canada (NBC), Division B, Part 4, and the CSA O86-14 Engineering Design in Wood standard, Update No. 2 (June 2017).
- 2. Please verify that the default deflection limits are appropriate for your application.
- 3. Refer to Nordic Structures technical documentation for installation guidelines and construction details.
- 4. Nordic I-joists are listed in CCMC evaluation report 13032-R.
- 5. Joists shall be laterally supported at supports and continuously along the compression edge.
- 6. Allowable vibration-controlled span as per the Concluding Report, Development of Design Procedures for Vibration Controlled Spans using Engineered Wood Members, CWC et al for CCMC, 1997.
- 7. Floor vibration design from the CCMC Concluding Report (1997) on vibration controlled spans for engineered wood products.
- 8. The design assumptions and specifications have been provided by the client. Any damages resulting from faulty or incorrect information, specifications, and/or designs furnished, and the correctness or accuracy of this information is their responsibility. This analysis does not constitute a record of the structural integrity of the building nor suitability of the design assumptions made. Nordic Structures is responsible only for the structural adequacy of this component based on the design criteria and loadings shown.





BC CALC® Member Report



Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

2ND FLR FRAMING\Dropped Beams\B11(i472) (Dropped Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

Build 7773

Job name:

Address:

City, Province, Postal Code: Customer: Code reports:

File name:

TH-6E EL A.mmdl

Wind

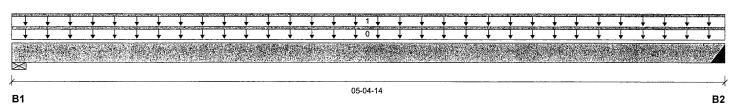
Description:

2ND FLR FRAMING\Dropped Beams\B11(i472)

Specifier:

Designer:

CCMC 12472-R Company:



Total Horizontal Product Length = 05-04-14

Snow

Reaction	Summary (Down I	Uplift) (lbs)	
Bearing	Live	Dead	

B1, 9-1/4' 120 / 0 78/0 96 / 0 62/0 B2, 2'

Load Summary							Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	05-04-14	Тор		6			00-00-00
1	FLOOR	Unf. Lin. (lb/ft)	L	00-00-00	05-04-14	Top	40	20			n\a

		Factored	Demand/			
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location	
Pos. Moment	244 ft-lbs	9387 ft-lbs	2.6%	1	03-00-01	
End Shear	115 lbs	7232 lbs	1.6%	1	01-09-02	
Total Load Deflection	L/999 (0.001")	n\a	n\a	4	03-00-01	
Live Load Deflection	L/999 (0.001")	n\a	n\a	5	03-00-01	
Max Defl.	0.001"	n\a	n\a	4	03-00-01	
Span / Depth	4.6					

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	9-1/4" x 1-3/4"	278 lbs	2.8%	1.4%	Spruce-Pine-Fir
B2	Hanger	2" x 1-3/4"	222 lbs	n\a	5.2%	LSSR1.81Z

OWG NO. TAM 25992-21 STRUCTURAL COMPONENT ONLY

Cautions

Header for the hanger LSSR1.81Z is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model LSSR1.81Z and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

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

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

CONFORMS TO OBC 2012

Hanger Manufacturer: Unassigned

Resistance Factor phi has been applied to all presented results per CSA O86.

AMENDED 2020

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.

Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 05-03-10, Bottom: 04-06-06.

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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





BC CALC® Member Report



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

2ND FLR FRAMING\Flush Beams\B10(i387) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

Build 7773

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

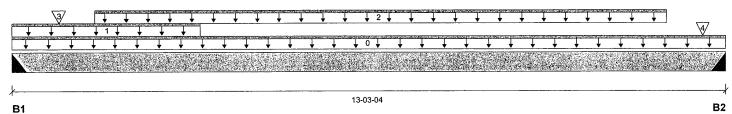
TH-6E EL A.mmdl

File name: Description: 2ND FLR FRAMING\Flush Beams\B10(i387)

Specifier:

Designer:

Company:



Total Horizontal Product Length = 13-03-04

Snow

Reaction Summary (Down / Uplift) (lbs)

2095 / 0 1127 / 0 B1, 4" B2, 4" 1860 / 0 1010 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	13-03-04	Тор		12			00-00-00
1	STAIR	Unf. Lin. (lb/ft)	L	00-00-00	03-05-14	Top	120	60			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	01-06-02	12-02-02	Top	272	136			n\a
3	J1(i278)	Conc. Pt. (lbs)	L	00-10-02	00-10-02	Top	340	170			n∖a
4	J1(i372)	Conc. Pt. (lbs)	L	12-10-02	12-10-02	Top	300	150			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	12655 ft-lbs	35392 ft-lbs	35.8%	1	06-02-02
End Shear	3845 lbs	14464 I bs	26.6%	1	01-03-14
Total Load Deflection	L/571 (0.268")	n\a	42.1%	4	06-06-02
Live Load Deflection	L/880 (0.174")	n\a	40.9%	5	06-06-02
Max Defl.	0.268"	n\a	n\a	4	06-06-02
Span / Depth	12.9				

Bear	ing Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	4552 lbs	n\a	26.6%	HGUS412
B2	Hanger	4" x 3-1/2"	4052 lbs	n∖a	23.7%	HGUS412

Cautions

Header for the hanger HGUS412 is a Single 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS412 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Header for the hanger HGUS412 is a Double 1-3/4" x 11-7/8" LVL Beam.

Notes

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

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

CONFORMS TO OBC 2012

Hanger Manufacturer: Unassigned

Resistance Factor phi has been applied to all presented results per CSA O86.

AMENDED 2020

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.

Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

DWG NO. TAM 25943-21 STRUCTURAL COMPONENT ONLY





2ND FLR FRAMING\Flush Beams\B10(i387) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

Job name:

Address: City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

File name:

TH-6E EL A.mmdl

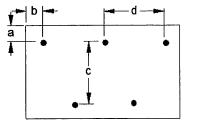
IN-OF EL A.IIIIIGI

Description: 2ND FLR FRAMING\Flush Beams\B10(i387)

Specifier:

Designer: Company:

Connection Diagram: Full Length of Member





a minimum = 2" b minimum = 3" c = 7-7/8'' d = 4266''

31/2" ARDOX SPIRAL



OWG NO.TAM ZS943-21 STRUCTURAL COMPONENT ONLY

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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

REVIEWED





2ND FLR FRAMING\Flush Beams\B12(i449) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

Build 7773

Job name: Address: File name:

name: TH-6E EL A.mmdl

Wind

City, Province, Postal Code:

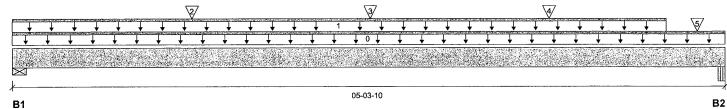
BC CALC® Member Report

Description: 2ND FLR FRAMING\Flush Beams\B12(i449) Specifier:

Customer: Code reports:

CCMC 12472-R

Designer: Company:



Total Horizontal Product Length = 05-03-10

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow
B1, 3-1/2"	376 / 0	644 / 0	510 / 0
B2 5-1/4"	413 / 0	679 / 0	544 / 0

Loa	d Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	05-03-10	Тор		12			00-00-00
1	E14(i423)	Unf. Lin. (lb/ft)	L	00-00-00	04-10-06	Top		165	198		n\a
2	J3(i450)	Conc. Pt. (lbs)	L	01-04-00	01-04-00	Top	253	126			n\a
3	J3(i445)	Conc. Pt. (lbs)	L	02-08-00	02-08-00	Top	273	137			n\a
4	J3(i452)	Conc. Pt. (lbs)	L	04-00-00	04-00-00	Тор	256	128			n\a
5	E15(i422)	Conc. Pt. (lbs)	L	05-01-02	05-01-02	Top		62	91		n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2386 ft-lbs	35392 ft-lbs	6.7%	1	02-08-00
End Shear	1349 lbs	14464 lbs	9.3%	1	03-10-08
Total Load Deflection	L/999 (0.008")	n\a	n\a	35	02-07-00
Live Load Deflection	L/999 (0.004")	n\a	n\a	51	02-07-00
Max Defl.	0.008"	n\a	n\a	35	02-07-00
Span / Depth	47				

Beari	ing Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	3-1/2" x 3-1/2"	1946 l bs	25.8%	13.0%	Spruce-Pine-Fir
B2	Beam	5-1/4" x 3-1/2"	2077 lbs	21.2%	9.3%	Unspecified

Notes

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

CONFORMS TO OBC 2012

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

Resistance Factor phi has been applied to all presented results per CSA O86.

AMENDED 2020

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.



DWG NO.TAMZ5944-21 STRUCTURAL COMPONENT ONLY







Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B12(i449) (Flush Beam)

PASSED

BC CALC® Member Report

Build 7773

Dry | 1 span | No cant.

November 19, 2021 12:32:24

Job name: Address:

File name: TH-6E EL A.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B12(i449)

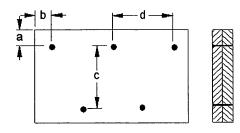
City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

Specifier: Designer: Company:

Connection Diagram: Full Length of Member



a minimum = 2" b minimum = 3"

c = 7-7/8" d = 8 6

Calculated Side Load = 290.4 lb/ft Connectors are: 16d / Nails

31/2" ARDOX SPIRAL

WOE OF CALL DWG NO. FAM 25944=21 STRUCTURAL

Disclosure

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COMPONENT ONLY

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

REVIEW





2ND FLR FRAMING\Flush Beams\B8(i500) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

Build 7773

Job name:

Address:

City, Province, Postal Code:

BC CALC® Member Report

Customer: Code reports:

CCMC 12472-R

File name:

Description:

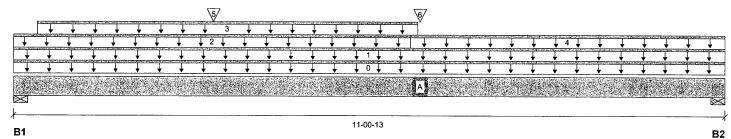
TH-6E EL A.mmdl

Wind

2ND FLR FRAMING\Flush Beams\B8(i500)

Specifier:

Designer: Company:



Total Horizontal Product Length = 11-00-13

Snow

Reaction Summary (Down / Uplift) (Ibs)

Bearing	Live	Dead
B1, 4-3/8"	985 / 0	856 / 0
B2, 4"	1230 / 0	833 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	11-00-13	Тор		12			00-00-00
1	FC4 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	11-00-13	Тор	15	8			n\a
2	FC4 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	06-02-01	Тор	6	3			n∖a
3	WALL	Unf. Lin. (lb/ft)	L	00-04-06	06-03-06	Тор		60			n\a
4	FC4 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	06-02-01	11-00-13	Тор	11	6			n\a
5	B11(i472)	Conc. Pt. (lbs)	L	03-01-04	03-01-04	Top	93	60			n∖a
6	B10(i387)	Conc. Pt. (lbs)	L	06-03-13	06-03-13	Тор	1861	1010			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	12113 ft-lbs	35392 ft-lbs	34.2%	1	06-03-13
End Shear	2791 lbs	14464 lbs	19.3%	1	09-08-15
Total Load Deflection	L/858 (0.147")	n\a	28.0%	4	05-09-07
Live Load Deflection	L/999 (0.086")	n\a	n\a	5	05-09-07
Max Defl.	0.147"	n\a	n\a	4	05-09-07
Span / Depth	10.6				

Ве	aring Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4-3/8" x 3-1/2"	2547 lbs	27.0%	13.6%	Spruce-Pine-Fir
B2	Wall/Plate	4" x 3-1/2"	2886 lbs	33.5%	16.9%	Spruce-Pine-Fir

Notes

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

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

CONFORMS TO OBC 2012

Resistance Factor phi has been applied to all presented results per CSA O86.

AMENDED 2020

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA 086.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 04-07-03.



OWG NO. TAM25945-21 STRUCTURAL COMPONENT ONLY







2ND FLR FRAMING\Flush Beams\B8(i500) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

Job name:

Address:

Customer: Code reports:

City, Province, Postal Code:

CCMC 12472-R

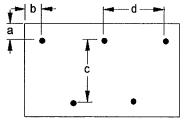
File name: TH-6E EL A.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B8(i500)

Specifier: Designer:

Company:

Connection Diagram: Full Length of Member





a minimum = 2"

c = 7-7/8"

b minimum = 3"

d = 🍅 🔗 🤻

Calculated Side Load = 107.3 lb/ft

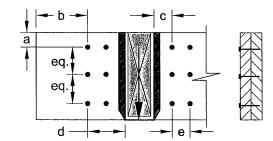
Connectors are:

Nails

ARDOX SPIRAL

Connection Diagrams: Concentrated Side Loads

Connection Tag: A Applies to load tag(s): 6



a minimum = 2"

b minimum = 4"

c minimum = 4"

d maximum = 12"

e minimum = 4"

Connectors are: 16d / Nails

ARDOX SPIRAL



STRUCTURAL COMPONENT ONLY

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REVIEW





2ND FLR FRAMING\Flush Beams\B9(i419) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

City, Province, Postal Code:

Job name: Address:

File name: TH-6E EL A.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B9(i419)

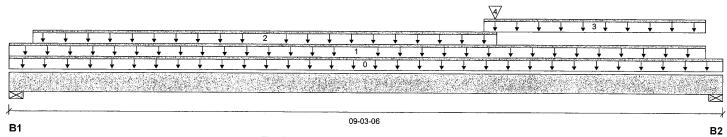
Wind

Specifier:

Customer: Code reports:

CCMC 12472-R

Designer: Company:



Total Horizontal Product Length = 09-03-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead
B1, 4-3/8"	685 / 0	628 / 0
B2, 5-1/2"	1556 / 0	989 / 0

Loa	ad Summary						Live	Dead
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-03-06	Top		6
1	FC4 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	09-00-10	Тор	8	4
2	WALL	Unf. Lin. (lb/ft)	L	00-03-12	06-04-01	Top		60
3	FC4 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	06-02-01	09-00-10	Тор	18	9
4	B10(i387)	Conc. Pt. (lbs)	L	06-03-13	06-03-13	Тор	2094	1127

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	8923 ft-lbs	17696 ft-lbs	50.4%	1	06-03-13
End Shear	3490 lbs	7232 lbs	48.3%	1	07-10-00
Total Load Deflection	L/741 (0.139")	n\a	32.4%	4	04-11-10
Live Load Deflection	L/999 (0.082")	n\a	n\a	5	04-11-10
Max Defl.	0.139"	n\a	n\a	4	04-11-10
Span / Depth	8.7				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4-3/8" x 1-3/4"	1812 lbs	38.5%	19.4%	Spruce-Pine-Fir
B2	Wall/Plate	5-1/2" x 1-3/4"	3570 lbs	60.3%	30.4%	Spruce-Pine-Fir

Notes

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

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

Resistance Factor phi has been applied to all presented results per CSA O86. AMENDED 2020 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA 086. Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 05-09-11.

CONFORMS TO OBC 2012



Disclosure

Snow

1.00

Wind

1.15

Tributary

00-00-00 n∖a

:n\a

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CCMC 12472-R

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

1ST FLR FRAMING\Flush Beams\B1(i486) (Flush Beam)

Dry | 2 spans | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report **Build 7773**

Job name: Address:

City, Province, Postal Code:

Customer:

Code reports:

TH-6E EL A.mmdl

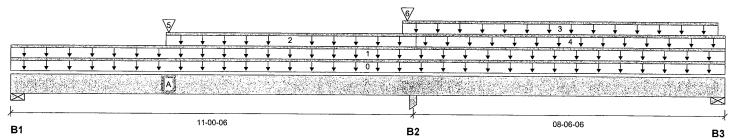
File name: Description: 1ST FLR FRAMING\Flush Beams\B1(i486)

Wind

Specifier:

Designer:

Company:



Total Horizontal Product Length = 19-06-12

Snow

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead
B1, 4-3/8"	458 / 8	269 / 0
B2, 3-1/2"	2303 / 0	1980 / 0
B3, 2-3/8"	84 / 117	309 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	-
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	19-06-12	Тор		12			00-00-00
1	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	19-06-12	Тор	16	8			n\a
2	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	04-02-06	11-01-04	Тор	24	12			n\a
3	6(i154)	Unf. Lin. (lb/ft)	L	10-08-13	19-04-06	qoT		81			n\a
4	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	11-01-04	19-06-12	Тор	6	3			n\a
5	B3(i380)	Conc. Pt. (lbs)	L	04-03-04	04-03-04	Top	576	317			n\a
6	-	Conc. Pt. (lbs)	L	10-10-06	10-10-06	Top	1595	1032			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	3506 ft-lbs	35392 ft-lbs	9.9%	2	04-03-04
Neg. Moment	-2902 ft-lbs	-23969 ft-lbs	12.1%	1	11-00-06
End Shear	940 lbs	14464 lbs	6.5%	2	01-04-04
Cont. Shear	1295 lbs	14464 lbs	9.0%	1	09-10-12
Total Load Deflection	L/999 (0.037")	n\a	n\a	9	04-11-11
Live Load Deflection	L/999 (0.026")	n\a	n\a	12	05-01-13
Total Neg. Defl.	L/999 (-0.005")	n\a	n\a	9	13-04-00
Max Defl.	0.037"	n\a	n∖a	9	04-11-11
Span / Depth	10.8				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4-3/8" x 3-1/2"	1023 lbs	10.9%	5.5%	Spruce-Pine-Fir
B2	Column	3-1/2" x 3-1/2"	5929 lbs	59.6%	39.7%	Unspecified
B3	Wall/Plate	2-3/8" x 3-1/2"	433 lbs	13.0%	6.6%	Spruce-Pine-Fir



444 NO. TAM 25947-21 STRUCTURAL







1ST FLR FRAMING\Flush Beams\B1(i486) (Flush Beam)

Dry | 2 spans | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

Job name:

Address:

City, Province, Postal Code: Customer:

Code reports:

CCMC 12472-R

File name:

TH-6E EL A.mmdl

1ST FLR FRAMING\Flush Beams\B1(i486)

Description: Specifier:

Designer:

Company:

Notes

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

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

Resistance Factor phi has been applied to all presented results per CSA O86.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.

Design based on Dry Service Condition.

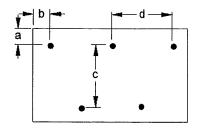
Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 08-03-02.

CUNFORMS TO OBC 2012

AMENDED 2020

Connection Diagram: Full Length of Member



a minimum = 2" b minimum = 3"

c = 7-7/8" d = 🍎 🖁 "

Calculated Side Load = 427.6 lb/ft

Connectors are: 16d

⋀ Nails

Connection Diagrams: Concentrated Side Loads

312" ARDOX SPIRAL

Connection Tag: A Applies to load tag(s): 4

а

a minimum = 2"

b minimum = 4"

c minimum = 4"

d maximum = 12"

Connectors are: 16d 🧳 . Nails

ARDOX SPIRAL

DWB NO. FAM 2594)=91 STRUCTURAL

COMPONENT ONLY

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REVIEWEI





1ST FLR FRAMING\Flush Beams\B2(i395) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

Build 7773

Job name:

Address: City, Province, Postal Code:

BC CALC® Member Report

Customer: Code reports: File name:

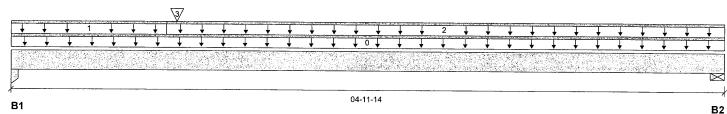
TH-6E EL A.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B2(i395)

Wind

Specifier:

Designer: Company:



Total Horizontal Product Length = 04-11-14

Snow

Reaction Summary (Down / Uplift) (lbs)

CCMC 12472-R

Bearing	Live	Dead
B1, 3-1/2"	309 / 0	178 / 0
B2, 4-3/8"	135 / 0	85 / 0

Loa	ad Summary						Live	Dead	Snow	Wind
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	04-11-14	Тор		6		
1	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	01-01-00	Тор	11	5		
2	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	01-01-00	04-11-14	Тор	27	13	di	10 to 5 5 5 5
3	B4(i377)	Conc. Pt. (lbs)	L	01-01-14	01-01-14	Тор	328	175	10	NOFES

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	618 ft-lbs	17696 ft-lbs	3.5%	1	01-01-14
End Shear	581 lbs	7232 lbs	8.0%	1	01-03-06
Total Load Deflection	L/999 (0.003")	n\a	n\a	4	02-02-14
Live Load Deflection	L/999 (0.002")	n\a	n\a	5	02-02-14
Max Defl.	0.003"	n\a	n\a	4	02-02-14
Span / Depth	4.5				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	3-1/2" x 1-3/4"	687 lbs	13.8%	9.2%	Unspecified
B2	Wall/Plate	4-3/8" x 1-3/4"	308 lbs	6.5%	3.3%	Spruce-Pine-Fir

Notes

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

CONFORMS TO OBC 2012

Resistance Factor phi has been applied to all presented results per CSA 086. AMENDED 2020 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA 086.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 03-04-12.

mu:

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Tributary

00-00-00 n\a

OWG NO. FAM 2599821 STRUCTURAL COMPONENT ONLY

REVIEWED





1ST FLR FRAMING\Flush Beams\B3(i380) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report **Build 7773**

Job name:

TH-6E EL A.mmdl

Wind

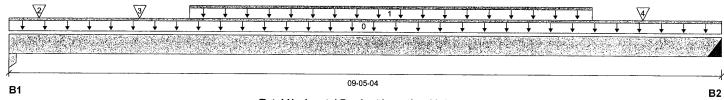
Address: City, Province, Postal Code: Description: 1ST FLR FRAMING\Flush Beams\B3(i380) Specifier:

Customer: Code reports:

CCMC 12472-R

Designer: Company:

File name:



Total Horizontal Product Length = 09-05-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow
B1, 1-3/4"	548 / 0	302 / 0	
B2 2"	577 / 0	317 / 0	

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-05-04	Тор		6			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	02-04-12	07-08-12	Top	137	69			n\a
2	J6(i391)	Conc. Pt. (lbs)	L	00-04-12	00-04-12	Тор	89	44			n\a
3	J6(i382)	Conc. Pt. (lbs)	L	01-08-12	01-08-12	Top	129	65			n\a
4	J5(i99)	Conc. Pt. (lbs)	L	08-04-12	08-04-12	Тор	174	87		and the second second	n/a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	3098 ft-lbs	17696 ft-lbs	17.5%	1	04-04-12
End Shear	1211 lbs	7232 lbs	16.8%	1	08-03-06
Total Load Deflection	L/999 (0.068")	n\a	n\a	4	04-08-12
Live Load Deflection	L/999 (0.044")	n\a	n\a	5	04-08-12
Max Defl.	0.068"	n\a	n\a	4	04-08-12
Span / Depth	9.3				

Bearing	Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	1-3/4" x 1-3/4"	1199 lbs	48.2%	32.1%	Unspecified
B2	Hanger	2" x 1-3/4"	1263 lbs	n\a	29.6%	HUS1.81/10

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

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

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

CONFORMS TO OBC 2012

Hanger Manufacturer: Unassigned

AMENDED 2020 Resistance Factor phi has been applied to all presented results per CSA O86. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.

Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.



OWG NO. TAM 2594991 STRUCTURAL COMPONENT ONLY

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1ST FLR FRAMING\Flush Beams\B4(i377) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

File name:

TH-6E EL A.mmdl

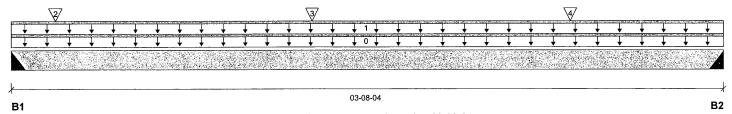
Wind

CONFORMS TO OBC 2012

1ST FLR FRAMING\Flush Beams\B4(i377) Description:

Specifier: Designer:

Company:



Total Horizontal Product Length = 03-08-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead
B1, 2"	354 / 0	189 / 0
B2, 2"	331 / 0	177 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	_	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	03-08-04	Тор		6		·	00-00-00
1	STAIR	Unf. Lin. (lb/ft)	L	00-00-00	03-08-04	Тор	120	60			n\a
2	J7(i411)	Conc. Pt. (lbs)	L	00-02-11	00-02-11	Top	61	31			n\a
3	J7(i413)	Conc. Pt. (lbs)	L	01-06-11	01-06-11	Top	100	50			n\a
4	J7(i383)	Conc. Pt. (lbs)	L	02-10-11	02-10-11	Top	82	41	A THE STREET	Commercial Control	್o n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	626 ft-lbs	17696 ft-lbs	3.5%	1	01-07-07
End Shear	349 lbs	7232 lbs	4.8%	1	02-06-06
Total Load Deflection	L/999 (0.002")	n\a	n\a	4	01-10-00
Live Load Deflection	L/999 (0.001")	n\a	n\a	5	01-10-00
Max Defl.	0.002"	n\a	n\a	4	01-10-00
Span / Depth	3.5				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	768 lbs	n\a	18.0%	HUS1.81/10
B2	Hanger	2" x 1-3/4"	717 lbs	n\a	16.8%	HUS1.81/10

Header for the hanger HUS1.81/10 is a Single 1-3/4" x 11-7/8" LVL Beam.

Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for DLG adequate capacity.

Notes

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

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

Hanger Manufacturer: Unassigned

AMENDED 2020 Resistance Factor phi has been applied to all presented results per CSA O86.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86.

Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

OWG NO. TAM25950-21 STRUCTURAL COMPONENT ONLY **Disclosure**

TO PRINCE OF ONLY

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1ST FLR FRAMING\Flush Beams\B5(i490) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

City, Province, Postal Code:

Job name: Address:

Customer:

Code reports:

File name:

Company:

TH-6E EL A.mmdl

Wind

Description: 1ST FLR FRAMING\Flush Beams\B5(i490)

Specifier: Designer:

09-02-04 **B**1 B2

Total Horizontal Product Length = 09-02-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	
B1, 4-3/8"	258 / 0	161 / 0		_
B2. 4-3/8"	328 / 0	199 / 0		

CCMC 12472-R

Loa	id Summary						Live
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	09-02-04	Тор	
1	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	09-02-04	Тор	21
2	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	05-03-06	Тор	3
3	FC3 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	05-03-06	09-02-04	Тор	6
4	B4(i377)	Conc. Pt. (lbs)	L	05-04-04	05-04-04	Тор	357

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2147 ft-lbs	17696 ft-lbs	12.1%	1	05-04-04
End Shear	654 lbs	7232 lbs	9.0%	1	07-10-00
Total Load Deflection	L/999 (0.035")	n\a	n\a	4	04-09-08
Live Load Deflection	L/999 (0.022")	n\a	n\a	5	04-09-08
Max Defl.	0.035"	n\a	n\a	4	04-09-08
Span / Depth	8 7				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4-3/8" x 1-3/4"	588 lbs	12.5%	6.3%	Spruce-Pine-Fir
B2	Wall/Plate	4-3/8" x 1-3/4"	740 lbs	15.7%	7.9%	Spruce-Pine-Fir

Notes

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

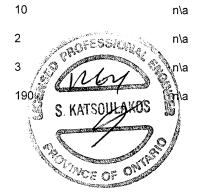
CONFORMS TO OBC 2012

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

Resistance Factor phi has been applied to all presented results per CSA 086. AMENDED 2020 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86. Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 04-11-00.



Wind

1.15

Tributary

00-00-00

Dead

0.65

6

Snow

1.00

JWG NO. TAM 2545/- 11 STRUCTURAL COMPONENT ONLY Disclosure

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REVIEWE





1ST FLR FRAMING\Flush Beams\B6(i280) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 12:32:24

PASSED

BC CALC® Member Report Build 7773

Job name:

Address:

City, Province, Postal Code: Customer:

Code reports:

CCMC 12472-R

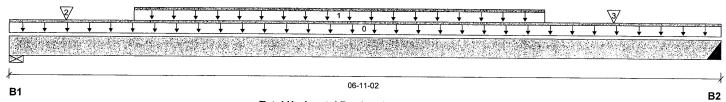
File name: Description: TH-6E EL A.mmdl

Wind

1ST FLR FRAMING\Flush Beams\B6(i280)

Specifier: Designer:

Company:



Total Horizontal Product Length = 06-11-02

Snow

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead
B1, 4-3/8"	486 / 0	264 / 0
B2, 2"	402 / 0	221 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	06-11-02	Тор		6			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	01-02-10	05-02-10	Top	138	69			n\a
2	J5(i115)	Conc. Pt. (lbs)	L	00-06-10	00-06-10	Top	162	81			n\a
3	J5(i99)	Conc. Pt. (lbs)	L	05-10-10	05-10-10	Тор	174	87		Million	n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1611 ft-lbs	17696 ft-lbs	9.1%	1	03-02-09
End Shear	828 lbs	7232 lbs	11.4%	1	05-09-04
Total Load Deflection	L/999 (0.018")	n\a	n\a	4	03-06-10
Live Load Deflection	L/999 (0.011")	n\a	n\a	5	03-06-10
Max Defl.	0.018"	n\a	n\a	4	03-06-10
Span / Depth	6.6				

В	earing Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
В1	Wall/Plate	4-3/8" x 1-3/4"	1060 lbs	22.5%	11.3%	Spruce-Pine-Fir
B2	? Hanger	2" x 1-3/4"	879 I bs	n\a	20.6%	HUS1.81/10

STRUCTURAL COMPONENT ONLY

PORCE OF

349 NO. TAM 25952-21

Cautions

Header for the hanger HUS1.81/10 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HUS1.81/10 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Notes

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

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

CONFORMS TO OBC 2012

Hanger Manufacturer: Unassigned

Resistance Factor phi has been applied to all presented results per CSA O86.

AMENDED 2020

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA 086.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

Disclosure

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







Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1ST FLR FRAMING\Flush Beams\B7L(i460) (Flush Beam)

PASSED

BC CALC® Member Report

Build 7773

Job name: Address:

Code reports:

Customer:

City, Province, Postal Code:

CCMC 12472-R

Dry | 1 span | No cant.

November 19, 2021 12:32:24

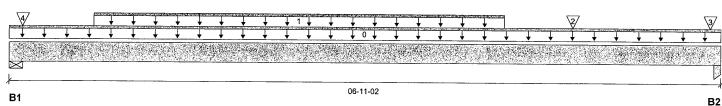
File name: TH-6E EL A.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B7L(i460)

Wind

Specifier: Designer:

Company:



Total Horizontal Product Length = 06-11-02

Snow

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	
B1, 4-3/8"	459 / 0	261 / 0	
B2, 3-1/2"	581 / 0	307 / 0	

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	06-11-02	Тор		5			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-09-14	04-09-14	Тор	171	85			n\a
2	J1(i438)	Conc. Pt. (lbs)	L	05-05-14	05-05-14	Top	235	118			n\a
3	J1(i458)	Conc. Pt. (lbs)	L	06-09-14	06-09-14	Top	122	61		Carlotta a service de la company	. n∖a
4	1(i147)	Conc. Pt. (lbs)	L	00-01-10	00-01-10	Тор		15	100	OFESS	^{lO} , ∖h\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1841 ft-lbs	11610 ft-lbs	15.9%	1	04-01-14
End Shear	990 lbs	5785 lbs	17.1%	1	01-01-14
Total Load Deflection	L/999 (0.039")	n\a	n\a	4	03-05-14
Live Load Deflection	L/999 (0.025")	n\a	n\a	5	03-05-14
Max Defl.	0.039"	n\a	n\a	4	03-05-14
Span / Depth	8.1				

Bearing	Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4-3/8" x 1-3/4"	1016 lbs	21.6%	10.9%	Spruce-Pine-Fir
B2	Column	3-1/2" x 1-3/4"	1255 lbs	25.2%	16.8%	Unspecified

Notes

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

CONFORMS TO OBC 2012

Resistance Factor phi has been applied to all presented results per CSA O86. AMENDED 2020 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA O86. Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-01-08.

DWG NO. TAM 2595321 STRUCTURAL COMPONENT ONLY

DOWNER OF

Disclosure

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PASSED

2ND FLR FRAMING\Flush Beams\B12B(i771) (Flush Beam)

Dry | 1 span | No cant.

November 19, 2021 14:48:15

Build 7773

BC CALC® Member Report

Job name:

Address:

City, Province, Postal Code: BRADFORD

Customer:

Specifier:

Designer: Company:

File name:

Description:

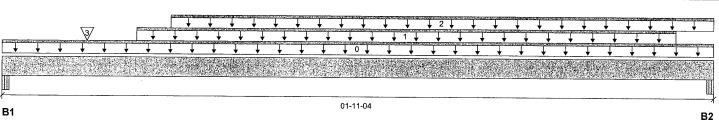
TH-6E EL B.mmdl

ΑJ

2ND FLR FRAMING\Flush Beams\B12B(i771)

Code reports:

CCMC 12472-R



Total Horizontal Product Length = 01-11-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/4"	4/0	106 / 0	64 / 0	
B2, 5-1/4"	5/0	119 / 0	64 / 0	

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	01-11-04	Top		12			00-00-00
1	FC4 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-04-06	01-10-00	Тор	6	3			n\a
2	E18(i805)	Unf. Lin. (lb/ft)	L	00-05-08	01-11-04	Top		109	66		n\a
3	E15(i422)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Тор		36	30		n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	30 ft-lbs	23005 ft-lbs	0.1%	0	00-11-10
End Shear	80 lbs	9401 lbs	0.8%	0	00-06-02
Span / Depth	1.2				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 3-1/2"	231 lbs	2.4%	1.0%	Unspecified
B2	Beam	5-1/4" x 3-1/2"	167 lbs	2.6%	1.1%	Unspecified

Notes

Resistance Factor phi has been applied to all presented results per CSA O86.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2015 and CSA 086. CQNFORMS TO 0BC 2012 Unbalanced snow loads determined from building geometry were used in selected product's AMENDED 2020 verification.

Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 01-00-06.



ONO NO. TAM 2595421 STRUCTURAL COMPONENT ONLY







Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B12B(i771) (Flush Beam)

PASSED

BC CALC® Member Report

Build 7773

Dry | 1 span | No cant.

November 19, 2021 14:48:15

Job name:

Address:

Customer:

City, Province, Postal Code: BRADFORD

Code reports:

CCMC 12472-R

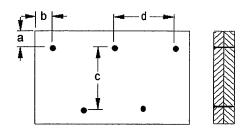
File name: TH-6E EL B.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B12B(i771)

Specifier:

Designer: ΑJ Company:

Connection Diagram: Full Length of Member



a minimum = 2"

c = 7-7/8"

b minimum = 3"

d = 200 4

Connectors are:

Nails

3%" ARDOX SPIRAL

PONCE OF OWG NO. TAM 25953421 STRUCTURAL

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COMPONENT ONLY

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





Maximum Floor Spans - S2.1

Design Criteria

Spans: Simple span

Live load = 40 psf and dead load = 15 psf

Deflection limits: L/480 under live load and L/240 under total load

Sheathing: 5/8 in. nailed-glued oriented strand board (OSB) sheathing

Maximum Floor Spans

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

		Mi	d-span blocking	with 1x4 inch st	trap	Mid-sp	an blocking an	d 1/2 in. gypsum	ceiling	
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-3"	14'-5"	-	16'-8"	15'-3"	14'-5"	-	
9-1/2"	NI-40x	17'-11"	17'-0"	16'-1"	-	18'-5"	17'-1"	16'-1"	-	
9-1/2	NI-60	18'-2"	17'-1"	16'-4"	-	18'-8"	17'-4"	16'-4"	-	
	NI-80	19'-5"	18'-0"	17'-5"	-	19'-10"	18'-5"	17'-8"	-	
	NI-20	19'-7"	18'-2"	17'-3"	-	19'-11"	18'-3"	17'-3"	-	
	NI-40x	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-2"	-	
11-7/8"	NI-60	21'-4"	19'-9"	18'-11"	-	21'-11"	20'-5"	19'-6"	-	
	NI-80	22'-9"	21'-1"	20'-2"	-	23'-3"	21'-8"	20'-8"	-	
	NI-90	23'-3"	21'-6"	20'-6"	-	23'-9"	22'-0"	21'-0"	-	
	NI-40x	23'-8"	21'-11"	20'-11"	-	24'-4"	22'-8"	21'-8"	-	
14"	NI-60	24'-0"	22'-3"	21'-3"	-	24'-8"	22'-11"	21'-11"	-	
14	NI-80	25'-7"	23'-9"	22'-7"	-	26'-2"	24'-4"	23'-3"	=	
	NI-90	26'-1"	24'-2"	23'-0"	-	26'-8"	24'-9"	23'-7"	-	
	NI-60	26'-5"	24'-6"	23'-5"	-	27'-2"	25'-3"	24'-2"	-	
16"	NI-80	28'-2"	26'-1"	24'-10"	-	28'-10"	26'-9"	25'-6"	-	
	NI-90	28'-8"	26'-6"	25'-3"	-	29'-3"	27'-2"	25'-11"	_	

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.





Maximum Floor Spans - S4.1

Design Criteria

Spans: Simple span

Loads: Live load = 40 psf and dead load = 15 psf
Deflection limits: L/480 under live load and L/240 under total load

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

Maximum Floor Spans

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

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

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.





Maximum Floor Spans - S6.1

Design Criteria

Spans: Simple span

Loads: Live load = 40 psf and dead load = 15 psf

Deflection limits: L/480 under live load and L/240 under total load

Sheathing: 5/8 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

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

		Mi	d-span blocking	with 1x4 inch st	trap	Mid-sp	an blocking an	d 1/2 in. gypsum	ceiling
Joist depth	Joist series		On centi	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	16'-6"	15'-1"	14'-3"	-	16'-6"	15'-1"	14'-3"	-
9-1/2"	NI-40x	17'-9"	16'-10"	15'-11"	-	18'-2"	16'-11"	15'-11"	-
9-1/2	NI-60	17'-11"	16'-11"	16'-2"	-	18'-5"	17'-2"	16'-2"	-
	NI-80	19'-3"	17'-10"	17'-3"	-	19'-8"	18'-3"	17'-7"	-
	NI-20	19'-4"	18'-0"	17'-1"	-	19'-9"	18'-1"	17'-1"	-
	NI-40x	20'-10"	19'-4"	18'-6"	-	21'-5"	19'-11"	19'-0"	-
11-7/8"	NI-60	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-3"	-
	N1-80	22'-6"	20'-10"	19'-11"	-	23'-1"	21'-5"	20'-5"	-
	NI-90	23'-0"	21'-3"	20'-4"	-	23'-6"	21'-10"	20'-10"	-
	NI-40x	23'-5"	21'-8"	20'-9"	-	24'-0"	22'-5"	21'-5"	-
14"	NI-60	23'-9"	22'-0"	21'-0"	-	24'-5"	22'-8"	21'-8"	-
14	NI-80	25'-4"	23'-6"	22'-5"	-	25'-11"	24'-1"	23'-0"	-
	NI-90	25'-10"	23'-11"	22'-9"	-	26'-5"	24'-6"	23'-4"	-
	NI-60	26'-2"	24'-3"	23'-2"	-	26'-11"	25'-0"	23'-11"	-
16"	NI-80	27'-11"	25'-10"	24'-7"	-	28'-7"	26'-6"	25'-3"	-
	NI-90	28'-5"	26'-3"	25'-0"	-	29'-0"	26'-11"	25'-8"	-

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



NORDIC STRUCTURES

Maximum Floor Spans - S7.1

Design Criteria

Spans:

Simple span

Loads: Deflection limits: Live load = 40 psf and dead load = 15 psf

Sheathing:

L/480 under live load and L/240 under total load 3/4 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

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

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

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.





Maximum Floor Spans - M2.1

Design Criteria

Spans: Simple span

Loads: Live load = 40 psf and dead load = 20 psf
Deflection limits: L/480 under live load and L/240 under total load

Sheathing: 5/8 in. nailed-glued oriented strand board (OSB) sheathing

Maximum Floor Spans

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

		Mi	d-span blocking	with 1x4 inch st	trap	Mid-sp	an blocking an	d 1/2 in. gypsum	ceiling	
Joist depth	Joist series		On cent	re spacing		On centre spacing				
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-8"	15'-3"	14'-5"	-	16'-8"	15'-3"	14'-5"	-	
9-1/2"	NI-40x	17'-11"	17'-0"	16'-1"	-	18'-5"	17'-1"	16'-1"	-	
9-1/2	NI-60	18'-2"	17'-1"	16'-4"	-	18'-8"	17'-4"	16'-4"	-	
	NI-80	19'-5"	18'-0"	17'-5"	-	19'-10"	18'-5"	17'-8"	-	
	NI-20	19'-7"	18'-2"	17'-3"	-	19'-11"	18'-3"	17'-3"	-	
	NI-40x	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-0"	-	
11-7/8"	NI-60	21'-4"	19'-9"	18'-11"	-	21'-11"	20'-5"	19'-6"	-	
	NI-80	22'-9"	21'-1"	20'-2"	-	23'-3"	21'-8"	20'-8"	-	
	NI-90	23'-3"	21'-6"	20'-6"	-	23'-9"	22'-0"	21'-0"	~	
	NI-40x	23'-8"	21'-11"	20'-11"	-	24'-4"	22'-8"	20'-11"	-	
14"	NI-60	24'-0"	22'-3"	21'-3"	-	24'-8"	22'-11"	21'-11"	-	
14	NI-80	25'-7"	23'-9"	22'-7"	-	26'-2"	24'-4"	23'-3"	=	
	NI-90	26'-1"	24'-2"	23'-0"	-	26'-8"	24'-9"	23'-7"	-	
	NI-60	26'-5"	24'-6"	23'-5"	-	27'-2"	25'-3"	24'-2"	-	
16"	NI-80	28'-2"	26'-1"	24'-10"	-	28'-10"	26'-9"	25'-6"	-	
	NI-90	28'-8"	26'-6"	25'-3"	-	29'-3"	27'-2"	25'-11"	-	

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.





Maximum Floor Spans - M4.1

Design Criteria

Spans: Simple span

Loads: Live load = 40 psf and dead load = 20 psf
Deflection limits: L/480 under live load and L/240 under total load

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

Maximum Floor Spans

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

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

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C.





Maximum Floor Spans - M6.1

Design Criteria

Spans:

Simple span

Loads:

Live load = 40 psf and dead load = 20 psf

Deflection limits:

L/480 under live load and L/240 under total load

Sheathing:

5/8 in. nailed-glued Canadian softwood plywood

Maximum Floor Spans

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

	Joist series	Mie	d-span blocking	with 1x4 inch s	rap	Mid-span blocking and 1/2 in. gypsum ceiling On centre spacing				
Joist depth			On centi	re spacing						
		12"	16"	19.2"	24"	12"	16"	19.2"	24"	
	NI-20	16'-6"	15'-1"	14'-3"	-	16'-6"	15'-1"	14'-3"	-	
9-1/2"	NI-40x	17'-9"	16'-10"	15'-11"	-	18'-2"	16'-11"	15'-11"	-	
9-1/2	NI-60	17'-11"	16'-11"	16'-2"	-	18'-5"	17'-2"	16'-2"	_	
	NI-80	19'-3"	17'-10"	17'-3"	-	19'-8"	18'-3"	17'-7"	-	
	NI-20	19'-4"	18'-0"	17'-1"	-	19'-9"	18'-1" .	17'-1"	-	
	NI-40x	20'-10"	19'-4"	18'-6"	-	21'-5"	19'-11"	19'-0"	-	
11-7/8"	NI-60	21'-1"	19'-7"	18'-8"	-	21'-8"	20'-2"	19'-3"	-	
	NI-80	22'-6"	20'-10"	19'-11"	-	23'-1"	21'-5"	20'-5"	-	
	NI-90	23'-0"	21'-3"	20'-4"	-	23'-6"	21'-10"	20'-10"	-	
	NI-40x	23'-5"	21'-8"	20'-9"	-	24'-0"	22'-5"	20'-11"	-	
14"	NI-60	23'-9"	22'-0"	21'-0"	-	24'-5"	22'-8"	21'-8"	-	
14	NI-80	25'-4"	23'-6"	22'-5"	-	25'-11"	24'-1"	23'-0"	-	
	NI-90	25'-10"	23'-11"	22'-9"	-	26'-5"	24'-6"	23'-4"	-	
	NI-60	26'-2"	24'-3"	23'-2"	~	26'-11"	25'-0"	23'-11"	-	
16"	NI-80	27'-11"	25'-10"	24'-7"	-	28'-7"	26'-6"	25'-3"	-	
	NI-90	28'-5"	26'-3"	25'-0"	-	29'-0"	26'-11"	25'-8"	_	

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria.
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C



NORDIC STRUCTURES

Maximum Floor Spans - M7.1

Design Criteria

Spans:

Simple span

Loads:

Live load = 40 psf and dead load = 20 psf

Deflection limits:

L/480 under live load and L/240 under total load

Sheathing:

3/4 in. nailed-glued Canadian softwood plywood

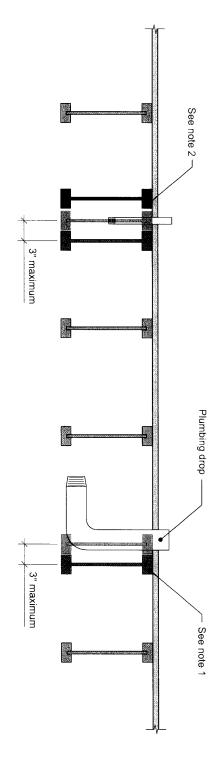
Maximum Floor Spans

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

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

- 1. The tabulated clear spans are based on CSA 086-14 and NBC 2015, and are applicable to residential floor construction meeting the above design criteria
- 2. For multiple-span applications, the end spans shall be 40% or more of the adjacent span.
- 3. Minimum bearing length shall be 1-3/4 inch for end bearings, and 3-1/2 inches for intermediate bearings.
- 4. Bearing stiffeners are not required when I-joists are used in accordance with this table, except as required for hangers.
- 5. Nordic I-joists are listed in CCMC Evaluation Report 13032-R and APA Product Report PR-L274C





Notes:

- and the span rating is not exceeded.

 2. In all other cases, an additional joist is required. 1. To prevent interference with plumbing, a joist may be shifted up to 3 inches if the edge of the floor panel is supported

NORDIC STRUCTURES NS-DC3 + DETAILS NORDIC JOIST CATEGORY Allowance for Piping SCALE 2020-10-01 7с DRAWING

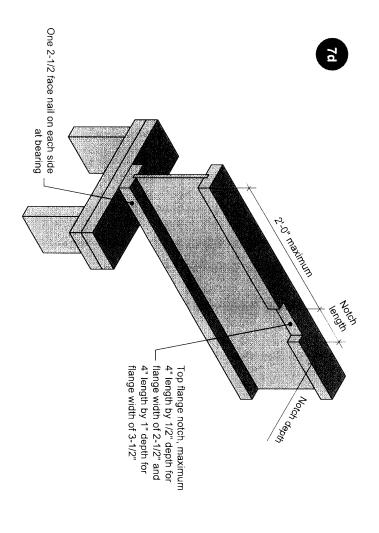
Openings for Vertical Elements

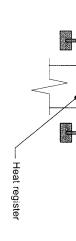
3.10

All nails shown in the details are assumed to be common nails unless otherwise noted. Nails shall have a diameter not less than 0.128 inch for 2-1/2-inch nails, or 0.144 inch for 3-inch nails, Individual components not shown to scale for clarity.

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REVIEWED





2-1/2" and 1" depth for flange width of 3-1/2" Maximum 1/2" depth for flange width of

Notes:

- Blocking required at bearing for lateral support, not shown for clarity.
- The maximum dimensions for a notch on the side of the top flange are 4-inch length by 1/2-inch depth for flange width of 2-1/2 inches, and 4-inch length by 1-inch depth for flange width of 3-1/2 inches.
- This detail applies to simple-span joists and multiple-span joists where the notch is located at the end half-span.
- For other applications, contact Nordic Structures.

NORDIC NS-DC3 NORDIC JOIST CATEGORY

All nails shown in the details are assumed to be common nails unless otherwise noted. Nails shall have a diameter not less than 0.128 inch for 2-1/2-inch nails, or 0.144 inch for 3-inch nails, Individual components not shown to scale for clarify

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Notch in I-joist for Heat Register Openings for Vertical Elements SCALE DATE 7d 2020-10-01 DRAWING 3.11 PAGE

REVIEWED