

		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	25
J3DJ	18-00-00	11 7/8" NI-40x	2	4
J4	16-00-00	11 7/8" NI-40x	1	2
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	3
J7	8-00-00	11 7/8" NI-40x	1	4
J8	6-00-00	11 7/8" NI-40x	1	1
J9	4-00-00	11 7/8" NI-40x	1	3
J10	2-00-00	11 7/8" NI-40x	1	4
J11	20-00-00	11 7/8" NI-80	1	27
B1 —	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B2 /	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 -	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3-	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connecto	r Summary
Qty	Manuf	Product
7	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
2	H2	HUS1.81/10
1	H2	HUS1.81/10
1	H4	HGUS410

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505

**ELEVATION:** A

LOT:

**CITY:** BRAMPTON

SALESMAN: RICK DICIANO

**DESIGNER:** AJ REVISION:

**DATE:** 2021-08-31

1st FLOOR

STD

9014

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ff<sup>2</sup>

SNOW LOAD: 24.0 lb/ft2

SUBFLOOR: 3/4" GLUED AND NAILED

LOADING:

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORK! DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PRODES INSTALLATION OF THIS FLOOR SYSTEM MADE TO BE TO BEAD

HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATORS WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SUPPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 18020- THROUGH DWG# TAM 183247 INCLUSIVE DATED 8247

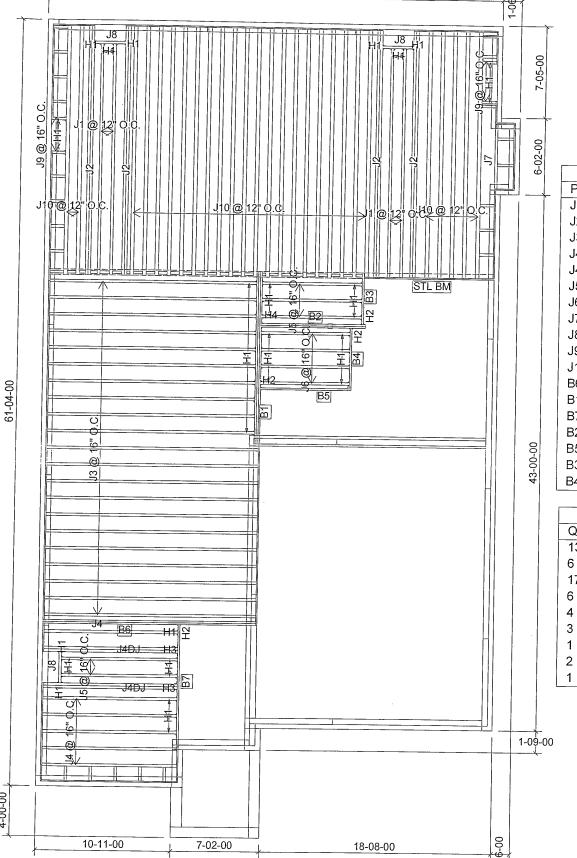
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED
LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEF
PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED
JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION
REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED
DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS,
AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE.
PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/160 DEEPER THAN JOIST DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

9647-2 DWG # TAM FIRM: 29991 SEALED STRUCTURAL COMPONENTS ONLY

900



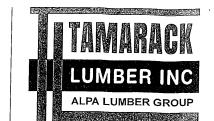
36-09-00

		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	21
J4	12-00-00	11 7/8" NI-40x	1	6
J4DJ	12-00-00	11 7/8" NI-40x	2	4
J5	10-00-00	11 7/8" NI-40x	1	5
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	.1	4
J10	20-00-00	11 7/8" NI-80	1	27
B6 ~	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B1~	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B7 🖊	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B2 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 -	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	_ 1
B3~	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connecto	r Summary
Qty	Manuf	Product
13	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
3	H2	HUS1.81/10
1	H2	HUS1.81/10
2	H3	HU312-2
1	H4	HGUS410

## 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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505

**ELEVATION:** A

LOT:

**CITY: BRAMPTON** 

**SALESMAN: RICK DICIANO** 

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

1st FLOOR

SUNKEN

9014

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft2

SUBFLOOR: 3/4" GLUED AND NAILED

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

LOADING:

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM

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DWG# TAM\_1802074HROUGH DWG# TAM\_1802627, INCLUSIVE DATED\_\$74.7

SEALED STRUCTURAL COMPONENTS ONLY:

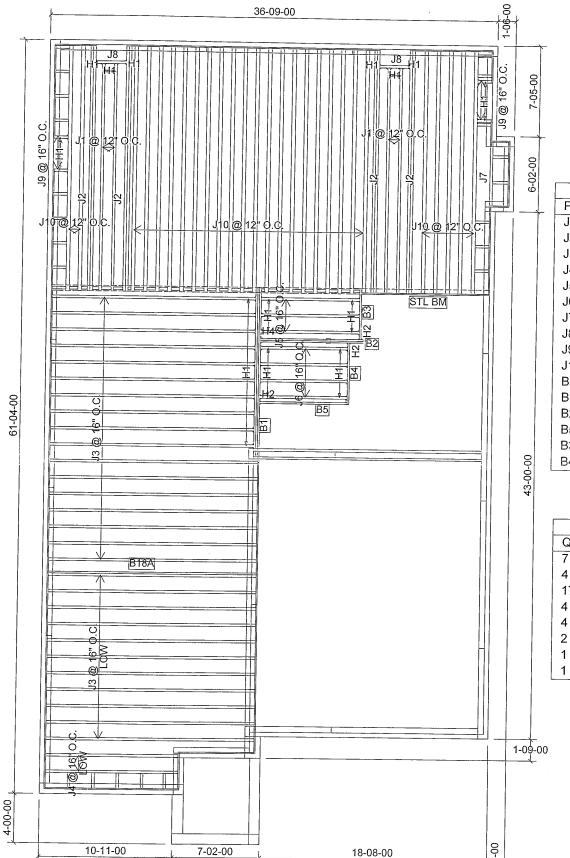
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A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/160 DEEPER THAN JOIS ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

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REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

96482 DWG # TAM BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL COMPONENTS ONLY



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	28
J4	12-00-00	11 7/8" NI-40x	1	2
J5	10-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	2
J9	2-00-00	11 7/8" NI-40x	1	4
J10	20-00-00	11 7/8" NI-80	1	27
B18A	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1 🗂	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B2 🗂	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 ¯	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3 🗖	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4 /	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Qtv	Manuf	r Summary Product
7	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
2	H2	HUS1.81/10
1	H2	HUS1.81/10
1	H4	HGUS410

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

**MODEL**: 4505

**ELEVATION**: A

LOT:

CITY: BRAMPTON

**SALESMAN: RICK DICIANO** 

DESIGNER: AJ REVISION:

DATE: 2021-08-31

1st FLOOR

SUNKEN IN-LAW SUITE

DATE 9014

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

SUBFLOOR: 3/4" GLUED AND NAILED

BCIN: 26064; FIRM: 29991

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION. MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

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DWG# TAM 180201 THROUGH DWG# TAM 180294, INCLUSIVE DATED 8747

SEALED STRUCTURAL COMPONENTS ONLY:

SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-1 JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEF PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

ACOMPLETE SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

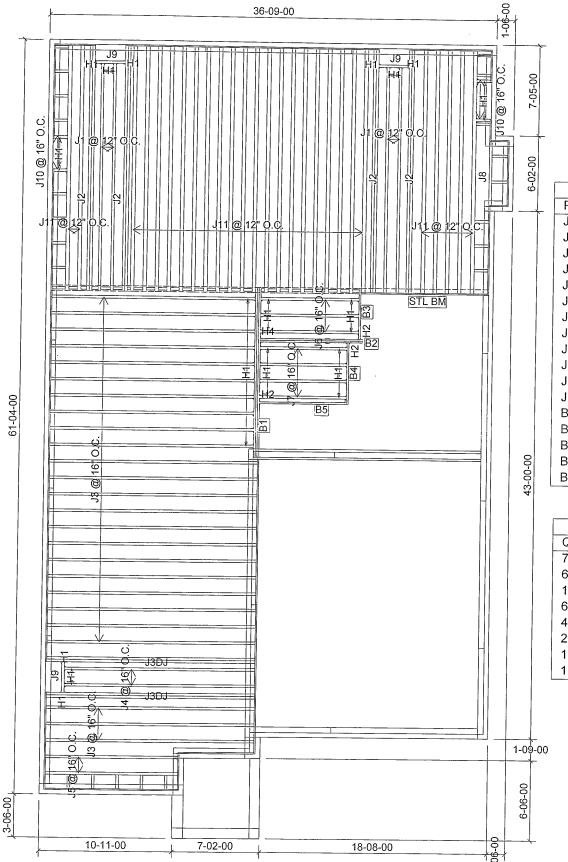
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 19649-W BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL COMPONENTS ONLY





		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	25
J3DJ	18-00-00	11 7/8" NI-40x	2	4
J4	16-00-00	11 7/8" NI-40x	1	2
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	3
J7	8-00-00	11 7/8" NI-40x	1	4
J8	6-00-00	11 7/8" NI-40x	1	1
J9	4-00-00	11 7/8" NI-40x	1	3
J10	2-00-00	11 7/8" NI-40x	1	4
J11	20-00-00	11 7/8" NI-80	1	27
B1 📶	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B2/	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 ~	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3 💆	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connector Summary				
Qty	Manuf	Product			
7	H1	IUS2.56/11.88			
6	H1	IUS2.56/11.88			
17	H1	IUS2.56/11.88			
6	H1	IUS2.56/11.88			
4	H1	IUS2.56/11.88			
2	H2	HUS1.81/10			
1	H2	HUS1.81/10			
1	H4	HGUS410			

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505 **ELEVATION: B** 

LOT:

**CITY: BRAMPTON** 

**SALESMAN: RICK DICIANO** 

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

1st FLOOR

STD

9014

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup>

SUBFLOOR: 3/4" GLUED AND NAILED

DEAD LOAD: 20.0 lb/ff<sup>2</sup> SNOW LOAD: 24.0 lb/ft2

LOADING:

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION. MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY

HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM, INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 18020 THROUGH DWG# TAM 18024-YNCLUSIVE DATED 874

SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-1 JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEF PROJECT ENGINEER'S SPECIFICATIONS, WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION

A COMPLETE PRAVING PLAN REQUIRES THE NORME PUBLISHED LITERATURE, WHICH INCLUDED INC.

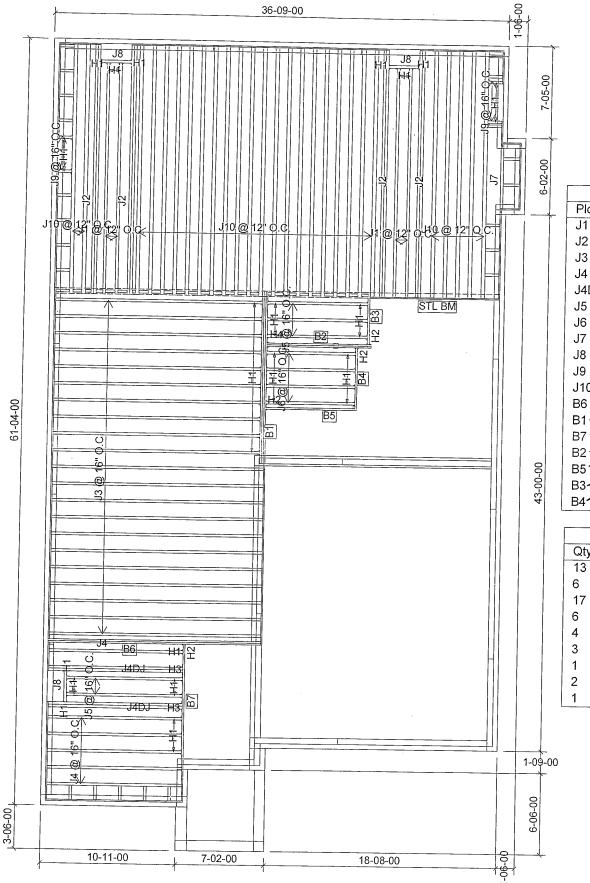
REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS, FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS, INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST, BLOCKING TO BE 1/160 DEEPER THAN JOISTON AND THE PROVIDED OF THE PROVIDED DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

9650-21 DWG # TAM\_ BCIN: 26064 SEALED STRUCTURAL COMPONENTS ONLY

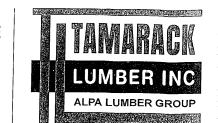




		Products	· · · · · · · · ·	
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	21
J4	12-00-00	11 7/8" NI-40x	1	6
J4DJ	12-00-00	11 7/8" NI-40x	2	4
J5	10-00-00	11 7/8" NI-40x	1	5
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	20-00-00	11 7/8" NI-80	1	27
B6 <b>~</b>	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B1 -	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B7 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B2 -	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 <b>-</b>	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3~	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4′	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connecto	r Summary
Qty	Manuf	Product
13	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
3	H2	HUS1.81/10
1	H2	HUS1.81/10
2	H3	HU312-2
1	H4	HGUS410

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505 **ELEVATION: B** 

LOT:

**CITY: BRAMPTON** 

SALESMAN: RICK DICIANO

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

1st FLOOR

SUNKEN

90121 BCIN: 26064; FIRM: 29991

DESIGN LOADS: L/480.000

LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

SUBFLOOR: 3/4" GLUED AND NAILED

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER, ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION, ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING PESPONSIBILITY FOR THE PROJECT OF THE SCOPE OF THE PROJECT OF THE SCOPE OF THE PROJECT OF THE SCOPE OF THE PROJECT OF THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM
FROM THIS OFFICE BUILD TO BUILDING DEPOSIT ADDRESSED.

FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL. FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
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DWG# TAM 180264

SEALED STRUCTURAL COMPONENTS ONLY:

SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-1 JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEP PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED

JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

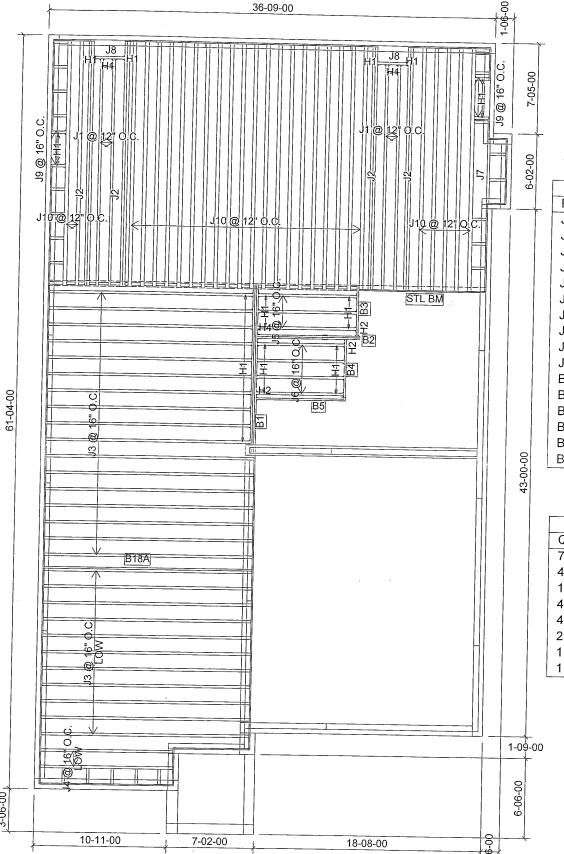
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REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL

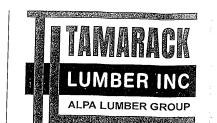




		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	28
J4	12-00-00	11 7/8" NI-40x	1	2
J5	10-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	2
J9	2-00-00	11 7/8" NI-40x	1	4
J10	20-00-00	11 7/8" NI-80	1	27
B18A	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1 🗂	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B2 /	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 -	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3 <b>~</b>	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4 <b>′</b>	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary				
Qty	Manuf	Product		
7	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
17	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
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FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

**MODEL:** 4505

**ELEVATION: B** 

LOT:

**CITY: BRAMPTON** 

SALESMAN: RICK DICIANO

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

1st FLOOR

SUNKEN IN-LAW SUITE

9012

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

SUBFLOOR: 3/4" GLUED AND NAILED

BCIN: 26064; FIRM: 29991

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER, ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION, ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

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DWG# TAM 18024 THROUGH DWG# TAM 18024 Y INCLUSIVE DATED 8741

SEALED, THIRD PARTY LVI. TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEP PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

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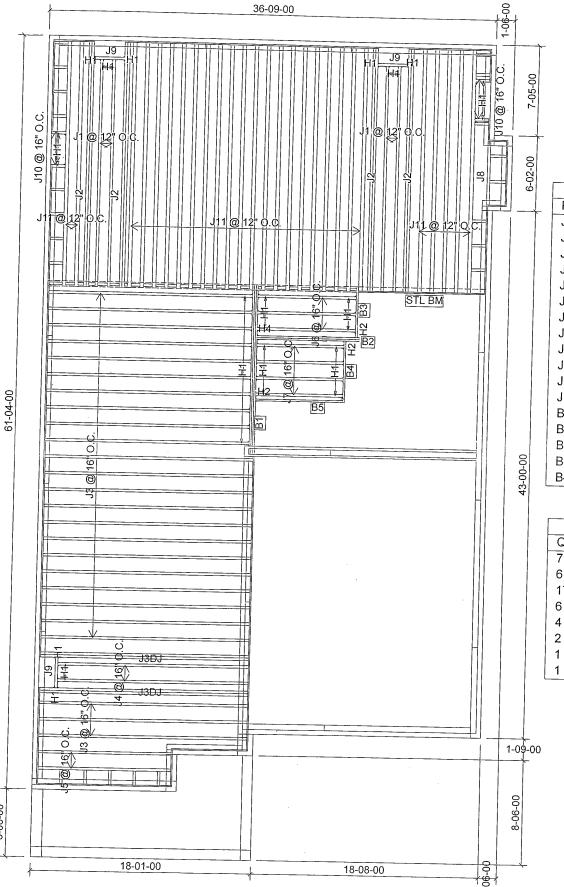
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REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM FIRM: 29991 SEALED STRUCTURAL

COMPONENTS ONLY

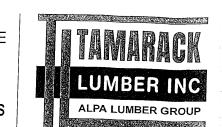




		Products		
PlotID	Length	Product	Plies	Net Qty
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J4	16-00-00	11 7/8" NI-40x	1	2
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	3
J7	8-00-00	11 7/8" NI-40x	1	4
J8	6-00-00	11 7/8" NI-40x	1	1
J9	4-00-00	11 7/8" NI-40x	1	3
J10	2-00-00	11 7/8" NI-40x	1	4
J11	20-00-00	11 7/8" NI-80	1	<del>4</del> 27
B1 ~	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B2 -	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 -	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3 -	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4 _	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connector Summary				
Qty	Manuf	Product			
7	H1	IUS2.56/11.88			
6	H1	IUS2.56/11.88			
17	H1	IUS2.56/11.88			
6	H1	IUS2.56/11.88			
4	H1	IUS2.56/11.88			
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1	H2	HUS1.81/10			
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FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505 **ELEVATION: C** 

LOT:

**CITY: BRAMPTON** 

SALESMAN: RÍCK DICIANO

DESIGNER: A.J. **REVISION:** 

DATE: 2021-08-31

1st FLOOR

STD

90121

DESIGN LOADS: L/480.000

SUBFLOOR: 3/4" GLUED AND NAILED

LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

SNOW LOAD: 24.0 lb/ft2

BCIN: 26064; FIRM: 29991

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKED DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

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DWG# TAM 18020 THROUGH DWG# TAM 180247, INCLUSIVE DATED\_

SEALED STRUCTURAL COMPONENTS ONLY:

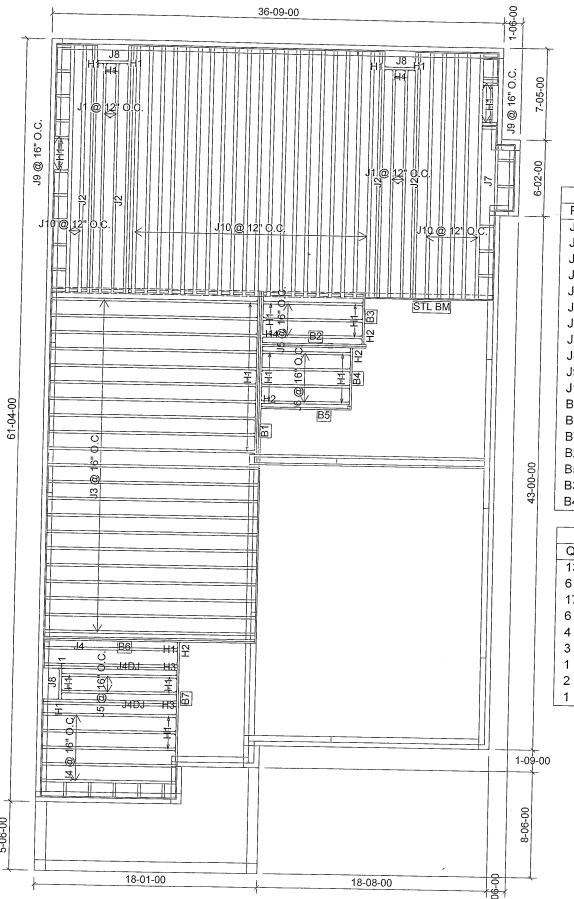
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEPPROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND OVER HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8
J3	18-00-00	11 7/8" NI-40x	1	21
J4	12-00-00	11 7/8" NI-40x	1	6
J4DJ	12-00-00	11 7/8" NI-40x	2	4
J5	10-00-00	11 7/8" NI-40x	1	5
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	3
J9	2-00-00	11 7/8" NI-40x	1	4
J10	20-00-00	11 7/8" NI-80	1	27
B6 ~	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B1 ~	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B7 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B2-	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 -	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3~	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Qty	Manuf	Product
13	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
17	H1	IUS2.56/11.88
6	H1	IUS2.56/11.88
4	H1	IUS2.56/11.88
3	H2	HUS1.81/10
1	H2	HUS1.81/10
2	H3	HU312-2
1	H4	HGUS410

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 | BUILDER: 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/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup> SNOW LOAD: 24.0 lb/ft2

SUBFLOOR: 3/4" GLUED AND NAILED

ALPA LUMBER GROUP

FROM PLAN DATED: 2021/06

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505

**ELEVATION: C** 

LOT:

**CITY: BRAMPTON** 

SALESMAN: RICK DICIANO

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

1st FLOOR

SUNKEN

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION. MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURFLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 180207 THROUGH DWG# TAM 180267 INCLUSIVE DATED 8747

SEALED STRUCTURAL COMPONENTS ONLY:

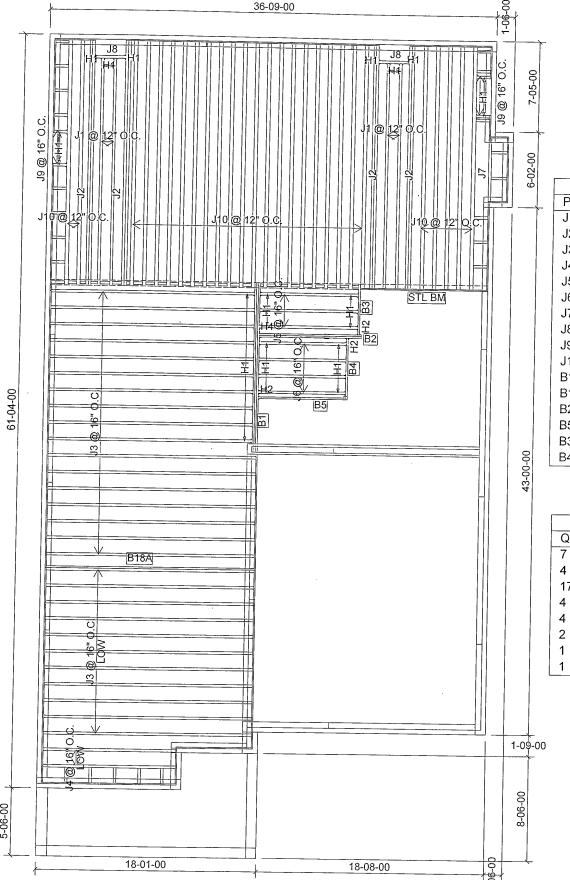
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVI. TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED
LOADED NORDIC WOOD-JOIST ONLY: 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEP
PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED
JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION
REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED
DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS,
AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE.
PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MICHING SUPPORTED WALL WIDTH
ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/160 DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 26064 SEALED STRUCTURAL

COMPONENTS ONLY



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	20-00-00	11 7/8" NI-40x	1	4
J2	20-00-00	11 7/8" NI-40x	2	8 .
J3	18-00-00	11 7/8" NI-40x	1	28
J4	12-00-00	11 7/8" NI-40x	1	2
J5	10-00-00	11 7/8" NI-40x	1	3
J6	8-00-00	11 7/8" NI-40x	1	4
J7	6-00-00	11 7/8" NI-40x	1	1
J8	4-00-00	11 7/8" NI-40x	1	2
J9	2-00-00	11 7/8" NI-40x	1	4
J10	20-00-00	11 7/8" NI-80	1	27
B18A	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B1 🗂	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B2 -	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B5 -	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B3 <b>-</b>	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B4 <b>^</b>	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connector Summary			
Qty	Manuf	Product		
7	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
17	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
2	H2	HUS1.81/10		
1	H2	HUS1.81/10		
_1	H4	HGUS410		

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505

**ELEVATION: C** 

LOT:

CITY: BRAMPTON

**SALESMAN: RICK DICIANO** 

DESIGNER: AJ REVISION:

**DATE:** 2021-08-31

1st FLOOR

SUNKEN IN-LAW SUITE

DATE 9014

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

SUBFLOOR: 3/4" GLUED AND NAILED

BCIN: 26064; FIRM: 29991

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER, ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION. MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 1800 THROUGH DWG# TAM 1802914, INCLUSIVE DATED STYN

SEALED STRUCTURAL COMPONENTS ONLY:

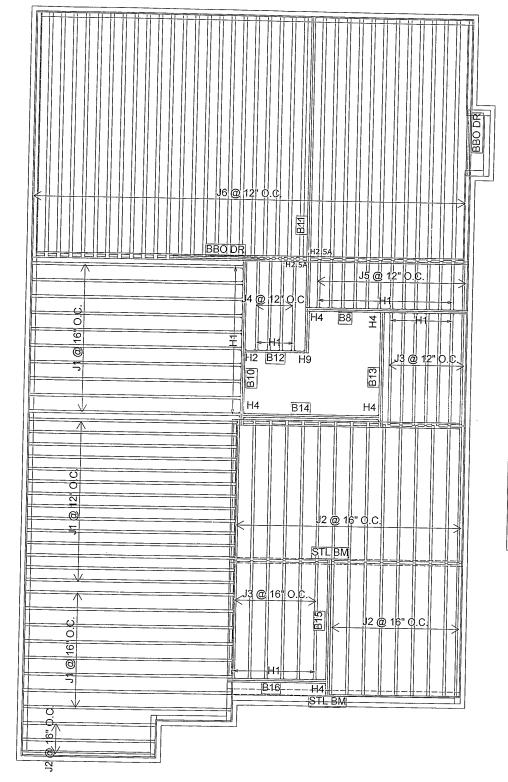
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY, 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEF PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED-SEE DETAILS.

A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALLS QUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

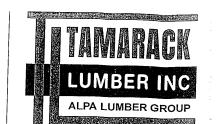
DWG # TAM 19655 - 2 BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL s. (9 012/ 8. IMVS01/50



DI UD		Products		
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	32
J2	12-00-00	11 7/8" NI-40x	1	27
J3	10-00-00	11 7/8" NI-40x	1	13
J4	8-00-00	11 7/8" NI-40x	1	4
J5	4-00-00	11 7/8" NI-40x	1	13
J6	20-00-00	11 7/8" NI-80	1	13 36
B11 📶	28-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	
B10 -	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2 2
B8 /	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	_
B14 /	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	_	2
B15	12-00-00		2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
		1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B16 -	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B12	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summer					
	Connector Summary				
Qty	Manuf	Product			
4	H1	IUS2.56/11.88			
34	H1 -	IUS2.56/11.88			
1	H2	HUS1.81/10			
5	H4	HGUS410			
1	H9	LS90			

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 CONCENTRAȚED LOADS. SEE FIGURE 1. CANTILEVERED JOISTS INCLUDING CANT' OVER BRICK REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT | BUILDER: 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.



FROM PLAN DATED: 2021/06

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

**MODEL:** 4505

**ELEVATION:** A

LOT:

**CITY: BRAMPTON** 

SALESMAN: RICK DICIANO

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

2nd FLOOR

9014

DESIGN LOADS: L/480.000

LIVE LOAD: 40.0 lb/ft<sup>2</sup>

DEAD LOAD: 20.0 lb/ft2

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

SUBFLOOR: 5/8" GLUED AND NAILED

BCIN: 26064; FIRM: 29991

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION. MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY WHICH WILL AID IN THE OVERALL PROPER INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 18012-II THROUGH DWG# TAM 180194, INCLUSIVE DATED STYM

SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVI. TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEF PROJECT ENGINEERS SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/160 DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

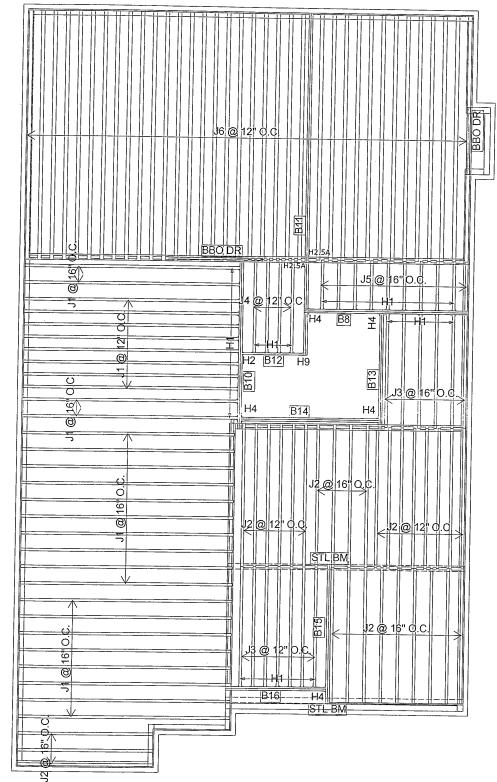
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM BCIN: FIRM: 26064 29991 SEALED STRUCTURAL

COMPONENTS ONLY

9014



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	30
J2	12-00-00	11 7/8" NI-40x	1	30
J3	10-00-00	11 7/8" NI-40x	1	13
J4	8-00-00	11 7/8" NI-40x	1	4
J5	4-00-00	11 7/8" NI-40x	1	10
J6	20-00-00	11 7/8" NI-80	1	36
B11 👕	28-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10 -	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8 🗂	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14 -	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13 🗖	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B16~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B12	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connector Summary				
Qty	Manuf	Product			
4	H1	IUS2.56/11.88			
33	H1	IUS2.56/11.88			
1	H2	HUS1.81/10			
5	H4	HGUS410			
1	H9	LS90			

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505

**ELEVATION:** A

LOT:

**CITY:** BRAMPTON

**SALESMAN: RICK DICIANO** 

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

2nd FLOOR

**OPTION** 

90121 BCIN: 26064; FIRM: 29991

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup>

SUBFLOOR: 5/8" GLUED AND NAILED

DEAD LOAD: 20.0 lb/ft<sup>2</sup> SNOW LOAD: 24.0 lb/ft<sup>2</sup>

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORK! DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE DESIGNATION AND THE SCOPE OF WORK WITHIN THE DESIGNATION. BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.
MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM

FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY
HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLATE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SUPPLUS OR DEFICIT OF PRODUCTS AT PROJECTS END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 18012-THROUGH DWG# TAM 18019-4, INCLUSIVE DATED STYLY

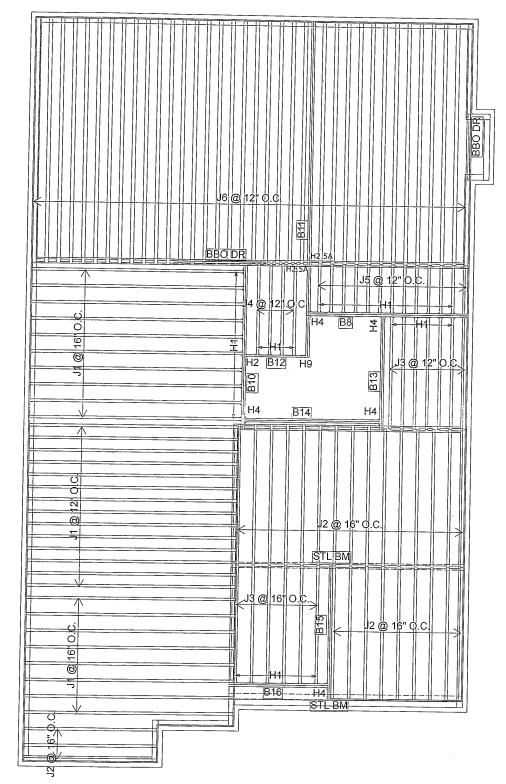
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED
LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PET
PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED
JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION
REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED
DOCUMENT INSTALL SOLIASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS,

DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS, FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL COMPONENTS ONLY



		Products		
PlotID	Length	Product	Plies	Net Qtv
J1	18-00-00	11 7/8" NI-40x	1	32
J2	12-00-00	11 7/8" NI-40x	1	27
J3	10-00-00	11 7/8" NI-40x	1	13
J4	8-00-00	11 7/8" NI-40x	1	4
J5	4-00-00	11 7/8" NI-40x	1	13
J6	20-00-00	11 7/8" NI-80	1	36
B11 ~	28-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10 🛣	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8 <b>-</b>	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14 🖊	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15 ~	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13 🗂	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B16 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	. 2	2
B12 ~	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connector Summary				
Qty					
4	H1	IUS2.56/11.88			
34	H1	IUS2.56/11.88			
1	H2	HUS1.81/10			
5	H4	HGUS410			
1	H9	LS90			

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

**MODEL:** 4505

**ELEVATION: B** 

LOT:

**CITY:** BRAMPTON

SALESMAN: RICK DICIANO

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

2nd FLOOR

SUBFLOOR: 5/8" GLUED AND NAILED

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

9014 BCIN: 26064; FIRM: 29991

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKI DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE POLICIES OF THE SCALAR FOR PRIOR DESIGNED AND BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM
FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY
HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE
MALICIA MILLARY OF THE OVERBALL PROPER INSTALLATION OF THIS FLOOR SYSTEM AND THE OVERBALL PROPERTY. WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM, INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM\_18012-THROUGH DWG# TAM\_180(924, INCLUSIVE DATED\_

SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED
LOADED NORDIC WOOD-J JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PET

LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEP PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

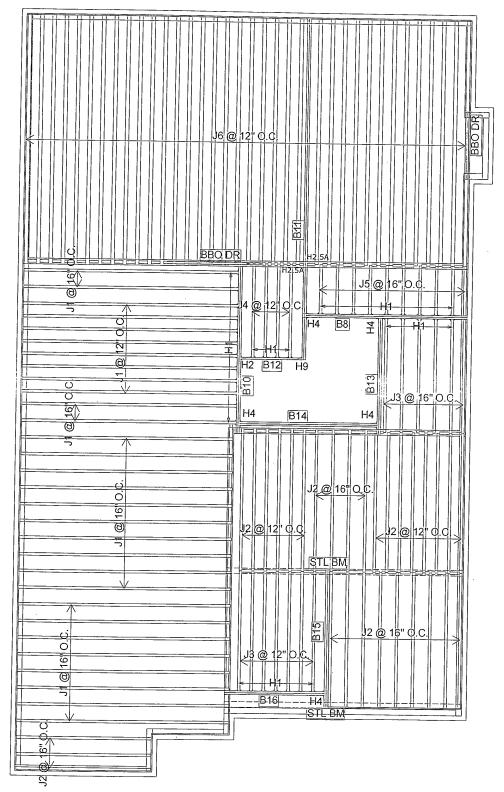
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REOI IRREMENT DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.25 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM SEALED STRUCTURAL COMPONENTS ONLY





		Products		
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	30
J2	12-00-00	11 7/8" NI-40x	1	30
J3	10-00-00	11 7/8" NI-40x	1	13
J4	8-00-00	11 7/8" NI-40x	1	4
J5	4-00-00	11 7/8" NI-40x	1	10
J6	20-00-00	11 7/8" NI-80	1	36
B11 ~	28-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10 /	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8 🖊	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14-	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15 ~	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B16~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B12~	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary					
Qty		Product			
4	H1	IUS2.56/11.88			
33	H1	IUS2.56/11.88			
1	H2	HUS1.81/10			
5	H4	HGUS410			
1	H9	LS90			

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** 

SITE:

VALES OF HUMBER NORTH

MODEL: 4505

**ELEVATION: B** 

LOT:

**CITY: BRAMPTON** 

**SALESMAN: RICK DICIANO** 

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

2nd FLOOR

**OPTION** 

9014

BCIN: 26064: FIRM: 29991

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

SUBFLOOR: 5/8" GLUED AND NAILED

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup>

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.
INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM, INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ROT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY, CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 18012-4HROUGH DWG# TAM 18018-24, INCLUSIVE DATED

SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED
LOADED NORDIC WOOD-I JOIST ONLY, 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PET PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION

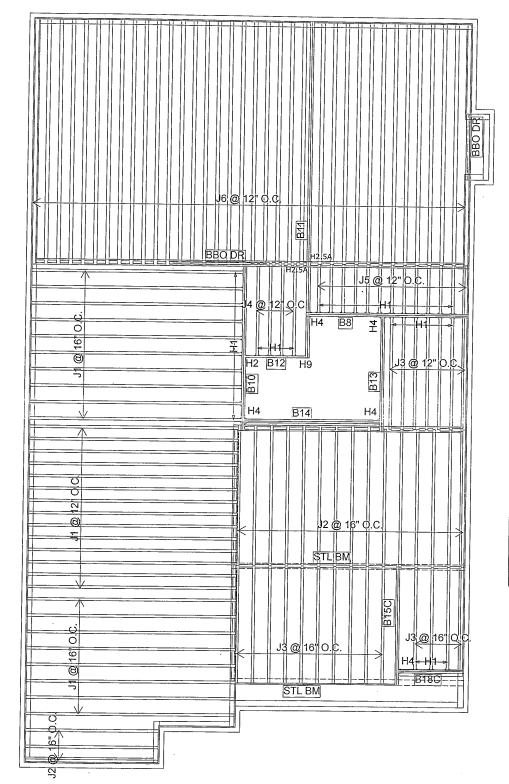
REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM. REGISTERED UNDER SUBSECTION 3.25 OF THE OWNTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM BCIN: 26064 SEALED STRUCTURAL COMPONENTS ONLY





		Products		
PlotID	Length	Product	Dise	N. O.
J1			Plies	Net Qty
1	18-00-00	11 7/8" NI-40x	1	32
J2	12-00-00	11 7/8" NI-40x	1	18
J3	10-00-00	11 7/8" NI-40x	1	21
J4	8-00-00	11 7/8" NI-40x	1	4
J5	4-00-00	11 7/8" NI-40x	1	13
J6	20-00-00	11 7/8" NI-80	1	36
B18C	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11 🗂	28-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10 ~	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8 ~	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14 ~	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13 ·	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15C	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B12	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

	Connector Summary				
Qty	Manuf	Product			
4	H1	IUS2.56/11.88			
3	H1	IUS2.56/11.88			
28	H1	IUS2.56/11.88			
1	H2	HUS1.81/10			
1	H4	HGUS410			
4	H4	HGUS410			
1	H9	LS90			

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.



FROM PLAN DATED: 2021/06

BUILDER:

**ROYAL PINE HOMES** SITE:

VALES OF HUMBER NORTH

MODEL: 4505 **ELEVATION: C** 

LOT:

**CITY: BRAMPTON** 

SALESMAN: RICK DICIANO

**DESIGNER:** AJ **REVISION:** 

**DATE:** 2021-08-31

2nd FLOOR

LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup> SNOW LOAD: 24.0 lb/ft<sup>2</sup>

SUBFLOOR: 5/8" GLUED AND NAILED

DATE 9014

BCIN: 26064; FIRM: 29991

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER. ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION. ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORK! DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE PRIVATE OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM

ROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURERS PRODUCT LITERATURE

AND AND AND AND AND AND AND AND ANY OTHER BOOK OF THE STALLERS ARE TO READ

MAICH WILL AID IN THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SUPPLUS OR DEFICIT OF PRODUCTS AT PROJECTS END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM	THROUGH DWG# TAM,	INCLUSIVE DATED_	8244
SEALED STRUCTURAL	COMPONICATE ONLY		

SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEF PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALLS QUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STILD GRADE OR RETTER SOLIZEN BLOCKS. MATCHING SUPPORTED WALL WIDTH PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/160 DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

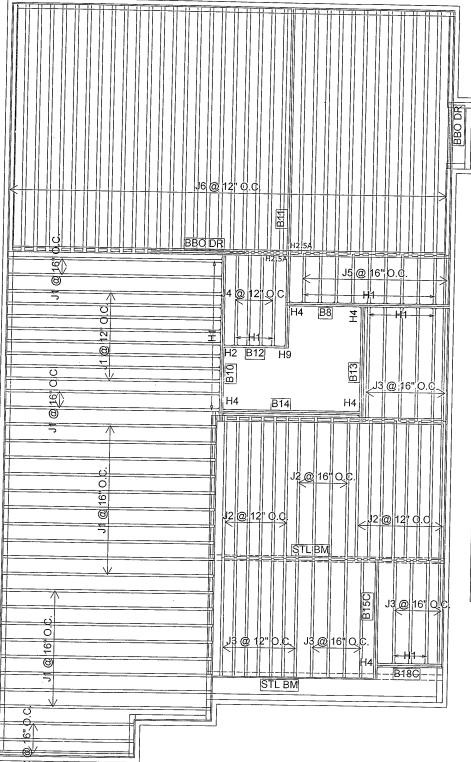
I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM\_ BCIN: 26064

SEALED STRUCTURAL COMPONENTS ONLY





J		Products		_
PlotID	Length	Product	Plies	Net Qty
J1	18-00-00	11 7/8" NI-40x	1	30
J2	12-00-00	11 7/8" NI-40x	1	21
J3	10-00-00	11 7/8" NI-40x	1	21
J4	8-00-00	11 7/8" NI-40x	1	4
J5	4-00-00	11 7/8" NI-40x	1	10
J6	20-00-00	11 7/8" NI-80	1	36
B18C	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11	28-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B8	14-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B15C	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B12	6-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	<u> </u>	4
				<u> </u>

Connector Summary				
Qty	Manuf	Product		
4	H1	IUS2.56/11.88		
3	H1	IUS2.56/11.88		
26	H1	IUS2.56/11.88		
1	H2	HUS1.81/10		
1	H4	HGUS410		
4	H4	HGUS410		
1	H9	LS90		

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 | BUILDER: 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.

**ROYAL PINE HOMES** SITE: VALES OF HUMBER NORTH

FROM PLAN DATED:

**LUMBER INC** 

ALPA LUMBER GROUP

MODEL: 4505 **ELEVATION: C** 

2021/06

LOT:

CITY: BRAMPTON

SALESMAN: RICK DICIANO

DESIGNER: AJ REVISION:

**DATE:** 2021-08-31

2nd FLOOR

**OPTION** 

BCIN: 26064; FIRM: 29991

DESIGN LOADS: L/480.000

SUBFLOOR: 5/8" GLUED AND NAILED

LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ff<sup>2</sup>

SNOW LOAD: 24.0 lb/ft<sup>2</sup>

LOADING:

ENGINEERING ONLY - DIMENSIONS TO BE VERIFIED ON SITE SUPPORTING STRUCTURE TO BE VERIFIED BY QUALIFIED BUILDING DESIGNER, ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO JOIST(S) AND FLOOR BEAM(S) INSTALLATION, ALL NOTES DESIGNATING MORE OR LESS DAS PER PLAN WORKD DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNER(S) PRIOR TO FABRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE FLOOR SYSTEM COMPONENTS REVIEWED IN THIS SUBMISSION.

MUNICIPALITY HAVING JURISDICTION TO OBTAIN LOT SPECIFIC SCHEDULE 1 FORM FROM THIS OFFICE PRIOR TO BUILDING PERMIT APPROVAL.

INSTALLERS OF THIS FLOOR SYSTEM AND THEIR COMPANIES HAVE THE RESPONSIBILITY OF ENSURING THEY HAVE A COPY OF THE NORDIC INSTALLATION GUIDE AND ANY OTHER MANUFACTURER'S PRODUCT LITERATURE WHICH WILL AID IN THE OVERALL PROPER INSTALLATION OF THIS FLOOR SYSTEM. INSTALLERS ARE TO READ ALL PRODUCT LITERATURE AND INSTALLATION GUIDELINES BEFORE PROCEEDING. THE SUPPLIER AND SEALING ENGINEER OF THIS FLOOR SYSTEM ARE NOT RESPONSIBLE FOR SURPLUS OR DEFICIT OF PRODUCTS AT PROJECT'S END. THIS LAYOUT IS A GUIDE ONLY. CONFIRMATION OF ALL QUANTITIES, LENGHTS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAN	THROUGH DWG# TAM	INCLUSIVE DATED_	8742
CEALED OFFICERS			

SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PEPPROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS. FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE OR BETTER SQUASH BLOCKS, MATCHING SUPPORTED WALL WIDTH ABOVE BLOCKS. INSTALL SQUASH BLOCKS ON EACH SIDE OF JOIST. BLOCKING TO BE 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM\_ BCIN: 26064 SEALED STRUCTURAL COMPONENTS ONLY



A. Project Information  Application number:						
Building number, street name:	Building number street name:					
			Unit no.	Lot/con.		
Municipality	Postal code	Plan number/ other de	escription			
CITY OF BRAMPTON			•			
B. Individual who reviews and takes	s responsibili	ty for design activities	8			
Name SAM KATSOULAKOS		Firm				
Street address		MICRO CITY EN	GINEERING SERVI			
R.R #1, PO BOX 61			Unit no.	Lot/con.		
Municipality	Postal code	Province	E-mail mcengr	@xplornet.com		
GLENCOE Telephone number	NOL 1MO	ONTARIO				
(519) 287-2242 Business	Fax number		Cell number			
C. Design activities undertaken by in	ndividual ider	ntified in Section B	Building Code Ta	hle 3 5 2 1 of		
Division Cj		in occion b. [i	Juliumy Code Ta	bie 3.3.2.1. 0j		
☐ House	☐ HVAC -	- House	■ Building S	tructural		
☐ Small Buildings	☐ Building	Services	☐ Plumbing –			
☐ Large Buildings ☐ Complex Buildings	☐ Detection	n, Lighting and Power	Plumbing –			
Description of designer's work:	☐ Fire Pro	tection	☐ On-site Se	wage Systems		
ROYAL PINE HOMES-PROJECT: VALES OF HUM	ABER NORTH-M	ODEL : 4505-ELEV A_191 E	I OOD STD NOT LOT	CDECIEIO		
THE ALEMA I LIFTER CHARGING FLOOD AS A SUB-	-1/1 (.()1/1P()1/1F	$M \cap DRAWWGGVMDIV$	OUT DIACEMENT	DI ANI OLIDOLIED DV		
THE TOTAL CONTROL INC. (SEE DAYS #1AN	119647-21 DAT	ED <u>9-01-21</u> ). SUPPORT	ING STRUCTURE (	S) TO BE REVIEWED		
AND VERIFED BY QUALIFIÈD BUILDING DE	SIGNER.		•	,		
D. Declaration of Designer						
I, <u>SAM KATSOULAKOS</u>	<del></del>		declare that (choose	one as appropriate):		
(print name) 区 I review and take responsibility						
I review and take responsibility C, of the Building Code. I am qu	for the design to	work on behalt of a firm re	gistered under subse	ection 3.2.4.of Division		
s, si and Landing Godd. Fam qu	adinica, and the	min is registered, in the a	ippropriate classes/c	ategories.		
Individual DOIN						
Individual BCIN: <u>26064</u>						
Firm BCIN: <b>29991</b>						
☐ I review and take responsibility i	for the design a	nd am qualified in the app	ropriate category as	an "other designer"		
under subsection 3.2.5.of Division Individual BCIN:	on C, of the Buil	lding Code.		3		
maividuai BOIN.						
Basis for exemption from re	gistration:					
☐ The design work is exempt from the registration and qualification requirements of the Building Code.						
Basis for exemption from re	gistration and q	ualification:	and and and	oodo.		
I certify that:						
1. The information contained in this schedule is true to the best of my knowledge.						
2. I have submitted this application with the knowledge and consent of the firm.						
Date 9	0121	Signature of Designer		_		
	_N_/	oignature of Designer				

NOTE:

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19647-21S DWG #TAM19662-21S 9 w/y

Use one form for each individual who revie	ws and takes re	sponsibility for design acti	ivities with respect to	the project	
Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.  A. Project Information  Application number:					
Building number, street name:		- i-philodion	Unit no.	Lot/con.	
NA				20000	
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other de	escription		
	L				
B. Individual who reviews and takes	s responsibili		3		
Name SAM KATSOULAKOS		Firm		-	
Street address		MICRO CITY EN	GINEERING SERVI		
R.R #1, PO BOX 61		•	Unit no.	Lot/con.	
Municipality	Postal code	Province	E-mail mceng	r@xplornet.com	
GLENCOE	NOL 1MO	ONTARIO	J	. С. ф. с. т. с. шост.	
Telephone number (519) 287-2242 Business	Fax number		Cell number		
		<del></del>			
C. Design activities undertaken by i	ndividual ider	ntified in Section B. [I	Building Code Ta	ble 3.5.2.1. of	
טואופוטוו כן					
☐ House ☐ Small Buildings	☐ HVAC -		■ Building S		
☐ Small Buildings ☐ Large Buildings		Services	☐ Plumbing –	- House	
☐ Complex Buildings	☐ Detection	n, Lighting and Power	☐ Plumbing —	All Buildings	
Description of designer's work:	☐ Fire Pro	tection	☐ On-site Se	wage Systems	
ROYAL PINE HOMES-PROJECT: VALES OF HUI	MBER NORTH-M	ODEL • 4505-ELEV A_49TE	I OOD SUNKEN NOT	I OT SPECIFIC	
WEALTH INT-FINGINEEKED LEOOK 2121	EM COMPONE	NT DRAWINGS AND LAY	$\cap$	DLAN CHIDDLIED DV	
TAMANACK LUMBER INC. (SEE DWG #1A)	//19648-21 DAT	ED <u>9-01-21</u> ). SUPPORT	ING STRUCTURE (	S) TO BE REVIEWED	
AND VERIFED BY QUALIFIÈD BUILDING DE	ESIGNER.		(	-,	
D. Declaration of Designer					
I, <u>SAM KATSOULAKOS</u>			declare that (choose	one as appropriate):	
(print name					
☑ I review and take responsibility	/ for the design \	work on behalf of a firm re	gistered under subs	ection 3.2.4.of Division	
C, of the Building Code. I am q	uaillied, and the	firm is registered, in the a	ippropriate classes/d	categories.	
Individual BCIN: 26064					
F' DOW					
Firm BCIN: <u>29991</u>					
☐ Treview and take responsibility	familia de la cita				
☐ I review and take responsibility under subsection 3.2.5.of Divisi	on C. of the Buil	nd am qualified in the app	ropriate category as	an "other designer"	
Individual BCIN:	on C, or the bull	laing Code.			
		<del></del>			
Basis for exemption from re	egistration:				
The design work is exempt from	the registration	and qualification requirer	ments of the Building	ı Code	
Basis for exemption from re	egistration and q	ualification:		,	
I certify that:					
1. The information contained in this schedule is true to the best of my knowledge.					
2. I have submitted this application with the knowledge and consent of the firm.					
	9 -	The state of the s			
5.	-1-1		1//		
Date 9	10/10	Signature of Designer			

#### NOTE:

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19648-21S DWG #TAM19663-21S Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities.

A. Project Information	ws and takes re	Sponsibility for design active Application r		the project.		
Building number, street name:		Application	Unit no.	Lot/con.		
Municipality				Loucon.		
CITY OF BRAMPTON	Postal code	Plan number/ other des	cription			
B. Individual who reviews and takes	resnonsihili	ty for decign activities				
Name	rooponsibili	Firm				
SAM KATSOULAKOS		MICRO CITY ENG	INEERING SERVI	CES INC.		
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.		
Municipality	Postal code	Province	C mail			
GLENCOE	NOL 1MO	ONTARIO	E-mail incengr	@xplornet.com		
Telephone number (519) 287-2242 Business	Fax number		Cell number			
C. Design activities undertaken by in Division C1	ndividual ider	ntified in Section B. [B	uilding Code Ta	ble 3.5.2.1. of		
☐ House	☐ HVAC -	11				
☐ Small Buildings		Services	☑ Building St			
☐ Large Buildings	☐ Detection	n, Lighting and Power	☐ Plumbing – ☐ Plumbing –			
☐ Complex Buildings Description of designer's work:	☐ Fire Pro	tection	☐ On-site Sev	wage Systems		
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE REVIEW PRE-ENGINEERED FLOOR SYSTE TAMARACK LUMBER INC. (SEE DWG #TAM AND VERIFED BY QUALIFIED BUILDING DE  D. Declaration of Designer	119649-21 DAT					
I, <u>SAM KATSOULAKOS</u> (print name)	·	de	eclare that (choose	one as appropriate):		
I review and take responsibility C, of the Building Code. I am qu	for the design valified, and the	vork on behalf of a firm regi firm is registered, in the ap	istered under subse propriate classes/c	ection 3.2.4.of Division ategories.		
Individual BCIN: 26064						
Firm BCIN: 29991						
☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.  Individual BCIN:						
Basis for exemption from registration:  The design work is exempt from the registration and qualification requirements of the Building Code.  Basis for exemption from registration and qualification:						
I certify that:		-				
<ol> <li>The information contained in this sch</li> <li>I have submitted this application with</li> </ol>	edule is true to t the knowledge	the best of my knowledge. and consent of the firm.				
	- 11 <i>1</i>		D~_			
Date U C	1100	Signature of Designer				

#### NOTE

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19649-21S DWG #TAM19664-21S

Use one form for each individual who revie  A. Project Information	ws and takes re	enoncibility for decision	ation of	
A. Project Information	170 and takes 16	Sponsibility for design a	ctivities with respect to	the project.
Building number, street name:		Application	n number:	
			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other	description	
CITY OF BRAMPTON	]	1	=	
B. Individual who reviews and takes	s responsibili	ty for design activiti	es	
Name	-	Firm		
SAM KATSOULAKOS			NGINEERING SERVI	CES INC
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengr	@xplornet.com
Telephone number	Fax number		Cell number	
(519) 287-2242 Business			1	
C. Design activities undertaken by in Division C]	ndividual ider	ntified in Section B.	[Building Code Tal	ble 3.5.2.1. of
☐ House	☐ HVAC -	House		ructural
☐ Small Buildings	☐ Building	Services	☐ Plumbing –	House
☐ Large Buildings	☐ Detectio	n, Lighting and Power	☐ Plumbing –	All Buildings
☐ Complex Buildings	☐ Fire Prof	tection	☐ On-site Sev	vage Systems
Description of designer's work:  ROYAL PINE HOMES-PROJECT:VALES OF HUMBE REVIEW PRE-FNGINFERED ELOOP SYSTE				
REVIEW PRE-ENGINEERED FLOOR SYSTEM TAMARACK LUMBER INC. (SEE DWG #TAM AND VERIFED BY QUALIFIED BUILDING DE D. Declaration of Designer		ED <u>9-01-21</u> ). SUPPOR	TING STRUCTURE (S	S) TO BE REVIEWED
I, SAM KATSOULAKOS				
			_declare that (choose	one as appropriate):
(print name)  I review and take responsibility C, of the Building Code. I am qu	for the design w	vork on behalf of a firm fifirm is registered, in the	registered under subse appropriate classes/ca	ection 3.2.4.of Division ategories.
Individual BCIN:26064				
Firm BCIN: 29991				
☐ I review and take responsibility funder subsection 3.2.5.of Division Individual BCIN:	or the design ar	nd am qualified in the ap ding Code.	propriate category as	an "other designer"
Basis for exemption from re  The design work is exempt from  Basis for exemption from re	the registration	and qualification require	ements of the Building	Code.
I certify that:				<del></del> _
The information contained in this sch	edule is true to t	he hest of my knowledg	0	
2. I have submitted this application with	the knowledge	and consent of the firm.	<b>.</b>	
Date 9 a	014 8	ignature of Designer		

NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Onta

DWG #TAM19650-21S

DWG #TAM19665-21S

Use one form for each individual who revie	ws and takes re	sponsibility for design ac	tivities with respect to	the project
7th 1 Tojout Information		Application	ı number:	trie project.
Building number, street name:			Unit no.	Lot/con.
Municipality	T			2000011.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other d	escription	
B. Individual who reviews and takes	s responsibili		S	
SAM KATSOULAKOS		Firm	IONETONIO OED «	
Street address		IVIICRO CITY EN	Unit no.	
R.R #1, PO BOX 61			Official.	Lot/con.
Municipality GLENCOE	Postal code	Province	E-mail mcengi	r@xplornet.com
Telephone number	NOL 1MO	ONTARIO		
(519) 287-2242 Business	Fax number		Cell number	
C. Design activities undertaken by i Division C]	ndividual ider	ntified in Section B.	Building Code Ta	ble 3.5.2.1. of
☐ House				
☐ Small Buildings	☐ HVAC -		■ Building S	tructural
☐ Large Buildings	☐ Building ☐ Detection	Services	☐ Plumbing –	- House
☐ Complex Buildings	☐ Fire Pro	n, Lighting and Power	☐ Plumbing –	All Buildings
Description of designer's work:				wage Systems
ROYAL PINE HOMES-PROJECT: VALES OF HUMBI	R NORTH-MODE	L: 4505-FLEV R-1ST FLOOR	P-SIINKEN NOT LOT OF	DECIFIC.
THE ATEN TO THE FINANCIAL FOR LEGICIES OF STATE	-1/1 (.())//P())/F(	バニコトかいかいにん マガロニャ	VOLIT DI VOENIENE	DI 441 OUDDUISED
THE TOTAL POWER INC. (SEE DAYS #1AN	119001-Z1 DA D	ED 9-01-21), SUPPORT	ING STRUCTURE (	S) TO BE REVIEWED
AND VERIFED BY QUALIFIÈD BUILDING DE	SIGNER.			O) TO BE INEVIEWED
D. Doologotion of Design				
D. Declaration of Designer				
I, <u>SAM KATSOULAKOS</u>			declare that (choose	one as appropriate):
(print name)				, , ,
☑ I review and take responsibility	for the design v	work on behalf of a firm re	egistered under subse	action 3.2.4 of Division
C, of the Building Code. I am qu	ualified, and the	firm is registered, in the	appropriate classes/c	ategories
				atogonioo.
Individual BCIN: 26064				
maividual BCM2004				
Firm BCIN: 29991				
		<del></del>		
☐ I review and take responsibility	for the design ar	nd am qualified in the an	propriate category as	an "other designer"
didei subsection 3.2.3.01 Divisi	on C, of the Buil	ding Code.	oropriate eategory as	an other designer
Individual BCIN:	- <del></del>	· · · · · · · · · · · · · · · · · · ·		
Pools for assessed as f	-1-1- 1			
Basis for exemption from re  The design work is exempt from	gistration:			
and an analysis of the morning	the registration	and qualification require	ments of the Building	Code.
Basis for exemption from re	gistration and q	ualification:		
I certify that:				
The information contained in this sch	edule is true to	the best of my knowledge	9.	
<ol><li>I have submitted this application with</li></ol>	the knowledge	and consent of the firm.		
Date	0101	Cianatura of D	/	
NOTE:		Signature of Designer		

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Onlario.

DWG #TAM19651-21S DWG #TAM19666-21S

Use one form for each individual who review	ws and takes re	sponsibility for design acti	ivities with respect to	o the project
A. Project Information		Application	number	o the project.
Building number, street name:  Unit no. Lot/c				
			Ome no.	Loucon.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other de	escription	
B. Individual who reviews and takes	responsibili	ty for design activities	3	
SAM KATSOULAKOS		Firm		
Street address		MICRO CITY EN	GINEERING SERVI	
R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail mceng	r@xplornet.com
GLENCOE	NOL 1MO	ONTARIO	3	- Orpromotioom
Telephone number (519) 287-2242 Business	Fax number		Cell number	
C. Design activities undertaken by in	ndividual ider	ntified in Section B. [E	Building Code Ta	ble 3.5.2.1. of
DIVISION CI				
☐ House☐ Small Buildings	☐ HVAC -		☑ Building S	
☐ Small Buildings ☐ Large Buildings		Services	Plumbing -	
☐ Complex Buildings	☐ Detection ☐ Fire Pro	n, Lighting and Power	☐ Plumbing –	
Description of designer's work:	Ille Fio	tection	☐ On-site Se	wage Systems
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE	R NORTH-MODE	L: 4505-ELEV.B-1ST FLOOR	-SUNKEN IN LAW SUI	TE-NOT LOT SPECIFIC
TEACH INC CHOINEFILED LEOON STOLL	-101 (.(.)016(.)10161		CALL DE VOEMENT	DIAM CHIDDLIED DV
TO WAR TO THE LOWIDEN INC. (SEE DVVG #1AN	119652-21 DAT	ED <u>9-01-21</u> ). SUPPORT	ING STRUCTURE (	(S) TO BE REVIEWED
AND VERIFED BY QUALIFIED BUILDING DE	SIGNER.			
D. Declaration of Designer				
I, <u>SAM KATSOULAKOS</u>		(	declare that (choose	e one as appropriate):
(print name)				,
☐ I review and take responsibility	for the design v	work on behalf of a firm re	gistered under subs	section 3.2.4.of Division
C, of the Building Code. I am qu	ialified, and the	firm is registered, in the a	ppropriate classes/o	categories.
Individual BCIN: 26064				
Firm BCIN:				
☐ I review and take responsibility :	Familia a di co			
☐ I review and take responsibility to under subsection 3.2.5.of Division	for the design a	nd am qualified in the app	ropriate category as	s an "other designer"
Individual BCIN:	on C, or the buil	ding Code.		
Basis for exemption from re	gistration:			
☐ The design work is exempt from	the registration	and qualification requirer	nents of the Building	Code.
Basis for exemption from re	gistration and q	ualification:		
I certify that:				
<ol> <li>The information contained in this sch</li> </ol>	edule is true to	the best of my knowledge		
<ol><li>I have submitted this application with</li></ol>	the knowledge	and consent of the firm.		
Date 2	9 0111	0:		
Date	1014	Signature of Designer		

#### NOTE:

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19652-21S DWG #TAM19667-21S Ontario.

Use one form for each individual who review  A. Project Information	ws and takes re	snonsibility for decima	thatit are to	
A. Project Information	ire and takes re	Sponsibility for design ac	tivities with respect to	the project.
Building number, street name:		Application		
			Unit no.	Lot/con.
Municipality	Postal code	Dlan number offer d		
CITY OF BRAMPTON		Plan number/ other d	=	
B. Individual who reviews and takes	responsibili	ty for docion activitie		
Name	Tooponsibili	Firm	S	
SAM KATSOULAKOS			CNEEDING OFFI	
Street address		INICKO CITY EN	IGINEERING SERVIO	
R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail moonar	Mymla ma a t
GLENCOE	NOL 1MO	ONTARIO	L-mail micengi	@xplornet.com
Telephone number	Fax number		Cell number	
(519) 287-2242 Business			ļ.	
C. Design activities undertaken by in Division Cl	ndividual ider	tified in Section B. I	Puilding Code T-I	-1-0504
Division C]		idined in Occupii B. p	bulluling Code Tar	ole 3.5.2.1. of
☐ House	☐ HVAC -	House		
☐ Small Buildings		Services	■ Building St	ructural
☐ Large Buildings		n, Lighting and Power	☐ Plumbing –	House
☐ Complex Buildings	☐ Fire Prof	or, Lighting and Power	☐ Plumbing –	All Buildings
Description of designer's work			☐ On-site Sev	
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE REVIEW PRE-ENGINEERED ELOOR SYSTE	R NORTH-MODE	1 · 4505-ELEV C_19T ELOOE	CTD NOT LOT OFFICE	
TAMARACK LUMBER INC. (SEE DWG <u>#TAM</u> AND VERIFED BY QUALIFIED BUILDING DE	19653-21 DATE	ED <b>9-01-21</b> ). SUPPORT	ING STRUCTURE (S	STAN SOPPLIED BY
AND VERIFED BY QUALIFIED BUILDING DE	SIGNER.	<u></u> /. 00/11 0/(1	MO OTHOUTONE (3	b) TO BE REVIEWED
D. D. J. C.				
D. Declaration of Designer				
I, SAM KATSOULAKOS			dealers that ( )	
(print name)			declare that (choose	one as appropriate):
☐ I review and take responsibility	for the decian	ronk on habalfat s		
☑ I review and take responsibility C, of the Building Code. I am qu	alified and the	firm is registered in the	gistered under subse	ection 3.2.4.of Division
5 <del></del>	amea, ana me	iiiii is registered, iii the a	ippropriate classes/ca	ategories.
Individual BCIN: 26064				
		<del></del>		
Firm BCIN: <u>29991</u>	V			
☐ I review and take responsibility for under subsection 3.2.5 of Division	or the design ar	d am qualified in the app	ropriate category as	an "other designer"
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n C, of the Build	ding Code.	, and analysis do	an other designer
Individual BCIN:				
Racis for avamatical for				
Basis for exemption from reg	distration:			
- The design work is exempt from	the registration	and qualification requiren	nents of the Building	Code.
basis for exemption from reg	jistration and qu	ıalification:		
certify that:				
The information contained in this sche	dule is true to t	he best of my knowledge		
<ol><li>I have submitted this application with</li></ol>	the knowledae a	and consent of the firm		
• •	5			
_	,			
Date 9 0	2/11 s	ignature of Designer	//	
/			<del>-</del>	1

NOTE

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19653-21S DWG #TAM19668-21S

Use one form for each individual who revie	ws and takes re	sponsibility for decian acti	vities with respect t	o the preject
i i ojoše imorination		Application	number:	o the project.
Building number, street name:		Application	Unit no.	Lot/con.
Marie III			Otherio.	Loucon.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other de	escription	
B. Individual who reviews and takes	s responsibili	ty for design activities	8	
SAM KATSOULAKOS		Firm		
Street address		MICRO CITY EN	GINEERING SERV	
R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality	Postal code	Province	F-mail mceno	r@xplornet.com
GLENCOE	NOL 1MO	ONTARIO	_ mail moong	i @xpiornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number	
C. Design activities undertaken by in	ndividual ider	ntified in Section B. [E	Building Code Ta	ble 3.5.2.1. of
Division of				
☐ House ☐ Small Buildings	☐ HVAC -		☑ Building S	Structural
☐ Large Buildings		Services	Plumbing -	- House
☐ Complex Buildings	☐ Detectio☐ Fire Pro	n, Lighting and Power	☐ Plumbing –	- All Buildings
Description of designer's work:				wage Systems
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE	R NORTH-MODE	L: 4505-ELEV.C~1ST FLOOR	-SIINKEN NOT LOT S	BECIEIO
	-1// ( .( ) //	NT 1167/WINDIG VEILY FAV		D: 44. 0
THE WALL COMPLY INC. (SEE DAYS #1AN	119004-71 DAT	ED <u>9-01-21</u> ). SUPPORTI	NG STRUCTURE (	(S) TO BE REVIEWED
AND VERIFED BY QUALIFIED BUILDING DE	SIGNER.		`	(*)
D. Declaration of Designer				
I, SAM KATSOULAKOS				
		c	leclare that (choose	e one as appropriate):
(print name)  I review and take responsibility	£			
☑ I review and take responsibility     C, of the Building Code. I am qu	ior the design v	vork on behalf of a firm rec	gistered under subs	ection 3.2.4.of Division
e, es are banding bodo. Fam qu	annea, and the	min is registered, in the a	ppropriate classes/o	categories.
Individual BCIN: <u>26064</u>		· · · · · · · · · · · · · · · · · · ·		
Firm BCIN: 29991				
Firm BCIN: <u>29991</u>				
☐ I review and take responsibility t	for the design as	nd am qualified in the annu		,,,,
under subsection 3.2.5.of Division	on C. of the Buil	ding Code	opriate category as	an "other designer"
Individual BCIN:		anig oodo.		
D				
Basis for exemption from re	gistration:			
☐ The design work is exempt from	the registration	and qualification requirem	nents of the Building	g Code.
Basis for exemption from re	gistration and q	ualification:		
I certify that:				
The information contained in this sch	edule is true to	the best of my knowledge.		
<ol><li>I have submitted this application with</li></ol>	the knowledge	and consent of the firm.		
Date	011	Signature of Designer	//	
9	0/1	nghature of Designer		

NOTE:

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DWG #TAM19654-21S DWG #TAM19669-21S of Ontario.

Use one form for each individual who revie	ws and takes re	sponsibility for design acti	vities with respect to	the project
7. Tojout information		Application	number:	The project.
Building number, street name:		7 ipplioation	Unit no.	Lot/con.
Municipality				2000011.
CITY OF BRAMPTON	Postal code	Plan number/ other de	scription	
	l Nachanaihili	4 . 5		
B. Individual who reviews and takes	responsibili			
SAM KATSOULAKOS		Firm MICPO CITY EN	SINEERING SERVI	OFO INO
Street address R.R #1, PO BOX 61		IMICKO CITT EN	Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengi	r@xplornet.com
Telephone number	Fax number	ONTARIO	Cell number	
(519) 287-2242 Business				
C. Design activities undertaken by in Division C]	ndividual ider	ntified in Section B. [E	Building Code Ta	ble 3.5.2.1. of
☐ House	☐ HVAC -	House	☑ Building S	tructural
☐ Small Buildings		Services	☐ Plumbing –	
☐ Large Buildings ☐ Complex Buildings	Detection	n, Lighting and Power	☐ Plumbing –	All Buildings
☐ Complex Buildings Description of designer's work:	☐ Fire Pro	tection	☐ On-site Se	wage Systems
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE REVIEW PRE-ENGINEERED ELOOP SYSTEM	D NODTH MODE	1 - 4505 ELEVA - 400 E		
TAMARACK LUMBER INC. (SEE DWG #TAM AND VERIFED BY QUALIFIED BUILDING DE	119655-21 DATI		(	DI ANI OLIDDI IED DI
D. Declaration of Designer				
I, <u>SAM KATSOULAKOS</u>		0	leclare that (choose	one as appropriate):
(print name)				
☑ I review and take responsibility C, of the Building Code. I am qu	for the design valified, and the	vork on behalf of a firm req firm is registered, in the a	gistered under subse ppropriate classes/c	ection 3.2.4.of Division categories.
Individual BCIN: 26064				
Firm BCIN: 29991		***		
☐ I review and take responsibility to under subsection 3.2.5.of Division Individual BCIN:	or the design ar	nd am qualified in the appriding Code.	opriate category as	an "other designer"
Basis for exemption from re  The design work is exempt from  Basis for exemption from re	the registration	11.57	_	ı Code.
I certify that:	g.sa aasin ana q	admoditori		
1. The information contained in this sch	edule is true to	the hest of my knowledge		
I have submitted this application with	the knowledge	and consent of the firm.		
Date 2	DIM :	Signature of Designer	//	

#### NOTE:

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19655-21S DWG #TAM19670-21S

Use one form for each individual who revie	ws and takes re	sponsibility for design a	ctivities with roonaat to	the project
		Applicatio	n number	trie project.
Building number, street name:		Application	Unit no.	1.4/2.22
NA			Offictio.	Lot/con.
Municipality OF PRAMPTON	Postal code	Plan number/ other	description	
CITY OF BRAMPTON			•	
B. Individual who reviews and takes	s responsibili	ty for design activiti	es	
Ivallie		Firm		
SAM KATSOULAKOS Street address		MICRO CITY E	NGINEERING SERVI	CES INC.
R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality GLENCOE	Postal code	Province	E-mail mcengr	@xplornet.com
Telephone number	NOL 1M0 Fax number	ONTARIO		
(519) 287-2242 Business	i ax number		Cell number	
C. Design activities undertaken by	- alia - alia - alia - alia	4.6.		
C. Design activities undertaken by i Division C]	naiviauai ider	itified in Section B.	[Building Code Tal	ble 3.5.2.1. of
☐ House				
☐ Small Buildings	☐ HVAC -		■ Building St	tructural
☐ Large Buildings	☐ Building	Services	☐ Plumbing —	·House
☐ Complex Buildings	☐ Detectio☐ Fire Pro	n, Lighting and Power	☐ Plumbing –	All Buildings
Description of designer's work:	LI FILE PIO	tection	☐ On-site Sev	wage Systems
TAMARACK LUMBER INC. (SEE DWG #TANAND VERIFED BY QUALIFIED BUILDING DE  D. Declaration of Designer  I, SAM KATSOULAKOS	SIGNER.		_declare that (choose	
(print name) ☑ I review and take responsibility C, of the Building Code. I am qu	for the design v	vork on behalf of a firm r firm is registered, in the	rogistored under a tra	
Individual BCIN: <b>26064</b>				
Firm BCIN: <u>29991</u>				
☐ I review and take responsibility under subsection 3.2.5.of Division Individual BCIN:	for the design ar on C, of the Buil	nd am qualified in the ap ding Code.	propriate category as	an "other designer"
Basis for exemption from re ☐ The design work is exempt from Basis for exemption from re	the registration	and qualification require	ements of the Building	Code.
I certify that:				
<ol> <li>The information contained in this sch</li> <li>I have submitted this application with</li> </ol>	edule is true to t the knowledge	he best of my knowledg and consent of the firm.	e.	
			0	
Date	0 011/	Name to the state of the state	/	
NOTE:	901018	Signature of Designer		

#### NOTE:

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DWG #TAM19656-21S DWG #TAM19671-21S

Use one form for each individual who revie  A. Project Information	ws and takes re	enoneihility for docion and	deside a contra con contra	
	und takee ic	Application	ivilies with respect t	o the project.
Building number, street name:		Application	Unit no.	Lot/con.
Municipality	T			Loucon.
CITY OF BRAMPTON	Postal code	Plan number/ other d	escription	
B. Individual who reviews and taken				
B. Individual who reviews and takes	responsibili	ty for design activitie	S	
SAM KATSOULAKOS		Firm MICPO CITY EN	CINEEDING SERV	
Street address R.R #1, PO BOX 61		MICIOCITY EN	GINEERING SERVI Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mceng	r@xplornet.com
Telephone number (519) 287-2242 Business	Fax number	ONTANO	Cell number	
C. Design activities undertaken by in Division C1	ndividual ider	ntified in Section B. I	Building Code Ta	hla 3 5 2 1 of
		i de como i de la	Januaring Code Ta	Die 3.5.2.1. 01
☐ House ☐ Small Buildings	☐ HVAC –	House Services	☑ Building S	
☐ Large Buildings		n, Lighting and Power	☐ Plumbing – ☐ Plumbing –	
☐ Complex Buildings	☐ Fire Prof	tection	☐ Plumbing	wage Systems
Description of designer's work:				
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE REVIEW PRE-ENGINEERED FLOOR SYSTE	R NORTH-MODE	L: 4505-ELEV.A-2ND FLOOF	R-OPTION-NOT LOT SP	ECIFIC
TAMARACK LUMBER INC. (SEF DWG #TAN	119657-21 DATE			
AND VERIFED BY QUALIFIED BUILDING DE	SIGNER.	-D <u>3-01-21</u> ). SUPPORT	ING STRUCTURE (	S) TO BE REVIEWED
D. Declaration of Designer				
I, SAM KATSOULAKOS				
(print name)			declare that (choose	one as appropriate):
I review and take responsibility C, of the Building Code. I am qu	for the design w	vork on behalf of a firm re firm is registered, in the a	gistered under subso ppropriate classes/c	ection 3.2.4.of Division ategories.
Individual BCIN:26064				
Firm BCIN: <u>29991</u>				
☐ I review and take responsibility f under subsection 3.2.5.of Division Individual BCIN:	or the design ar	nd am qualified in the app ding Code.	ropriate category as	an "other designer"
Basis for exemption from re  The design work is exempt from	the registration	and qualification requiren	nents of the Building	Code.
Basis for exemption from regardle certify that:	gistration and qu	Jaimcation:		
	adula ia terra te t	ha haat af a		
<ol> <li>The information contained in this school</li> <li>I have submitted this application with</li> </ol>	the knowledge	ne best of my knowledge and consent of the firm.		
Date Dr.	0121 -	Samuelous CD :		
	11-1	ignature of Designer		

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DWG #TAM19657-21S DWG #TAM19672-21S rs of Ontario.

Use one form for each individual who revie	ws and takes re	enoncibility for all and	11.10	
Use one form for each individual who revie  A. Project Information	and takes re	Sponsibility for design a	ictivities with respect to	the project.
Building number, street name:		Application	on number: Unit no.	Lot/con.
Municipality	1 =			Loucon.
CITY OF BRAMPTON	Postal code	Plan number/ other	description	
B. Individual who reviews and takes	s responsibili	ty for docion activiti		
Name	o responsibili	Firm	es	
SAM KATSOULAKOS			NGINEERING SERVICE	SEC INC
Street address R.R #1, PO BOX 61		orto orri E	Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengro	@xplornet.com
Telephone number (519) 287-2242 Business	Fax number	011174110	Cell number	
C. Design activities undertaken by in Division C]	ndividual ider	tified in Section B.	[Building Code Tab	ole 3.5.2.1. of
☐ House				
☐ Small Buildings	☐ HVAC -		⊠ Building Str	ructural
☐ Large Buildings	☐ Building ☐ Detection	Services	☐ Plumbing –	House
☐ Complex Buildings	☐ Fire Prof	n, Lighting and Power	☐ Plumbing – A	All Buildings
Description of designer's work:			☐ On-site Sew	/age Systems
ROYAL PINE HOMES-PROJECT: VALES OF HUMBE	R NORTH-MODE	1 · 4505-FLEV R_2ND ELO	OR NOT LOT OPERITOR	
				NAM OURDUIST BY
TAMARACK LUMBER INC. (SEE DWG <u>#TAN</u> AND VERIFED BY QUALIFIED BUILDING DE	119658-21 DATE	ED <b>9-01-21</b> ). SUPPOR	TING STRUCTURE (S	LAN SUPPLIED BY
AND VERIFED BY QUALIFIED BUILDING DE	SIGNER.	<u> </u>	INIO OTROCTORE (S	) TO BE REVIEWED
D. Declaration of Designer				
I, SAM KATSOULAKOS				
(print name)			_declare that (choose o	one as appropriate):
I review and take responsibility C, of the Building Code. I am qu	for the design w	ork on behalf of a firm if registered, in the	registered under subse appropriate classes/ca	ction 3.2.4.of Division tegories.
Individual BCIN:26064				
Firm BCIN: _ <b>29991</b>		<del>.</del>		
☐ I review and take responsibility f under subsection 3.2.5.of Division Individual BCIN:	or the design and on C, of the Build	d am qualified in the ap ling Code.	propriate category as a	an "other designer"
Basis for exemption from re	gistration:	_		
☐ The design work is exempt from	the registration	and qualification require	ements of the Dullation	204-
Basis for exemption from re	gistration and gr	alification:	ments of the building (	Jode.
I certify that:	o	amouton		
The information contained in this school	edule is true to t	ha haet of my knowled		
2. I have submitted this application with	the knowledge	ne nest of tilly knowledg	e.	
will with	ano miowiedge a	and consent of the firm.		
			-4	
Date 90	olu s	ignature of Designer	1	

#### NOTE:

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DWG #TAM19658-21S

DWG #TAM19673-21S

Use one form for each individual who revie  A. Project Information	ws and takes re	enoncibility for designs and	dide	
A. Project Information	THE UNITED THE	Sponsibility for design ad	ivities with respect to	o the project.
Building number, street name:	· · · · · · · · · · · · · · · · · · ·	Application		
			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other d	escription	
CITY OF BRAMPTON			•	
B. Individual who reviews and takes	s responsibili	ty for design activitie	s	
Ivalle		Firm		
SAM KATSOULAKOS			GINEERING SERVI	CES INC.
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mcengi	r@xplornet.com
Telephone number	Fax number	ONTARIO	Cell number	
(519) 287-2242 Business				
C. Design activities undertaken by in Division CI	ndividual ider	tified in Section P. II	Puilding Code Tel	LL 0 F 0 4 4
Division C]		idited in Section B. [i	building Code Ta	ble 3.5.2.1. of
☐ House	□ HVAC –	Harris		
☐ Small Buildings			■ Building State     ■ Building State	
☐ Large Buildings	☐ Duliding	Services	Plumbing –	- House
☐ Complex Buildings	☐ Fire Prof	n, Lighting and Power	☐ Plumbing	All Buildings
Description of designer's work:	LI FILE PIO	tection	☐ On-site Sev	wage Systems
TAMARACK LUMBER INC. (SEE DWG #TAMAND VERIFED BY QUALIFIED BUILDING DE  D. Declaration of Designer  I, SAM KATSOULAKOS	ESIGNER.			
			declare that (choose	one as appropriate):
(print name)  I review and take responsibility C, of the Building Code. I am qu	for the design v	vork on behalf of a firm re firm is registered, in the a	gistered under subse ppropriate classes/c	ection 3.2.4.of Division ategories.
Individual BCIN:26064				
Firm BCIN: 29991				
☐ I review and take responsibility funder subsection 3.2.5.of Division Individual BCIN:	for the design ar	nd am qualified in the app ding Code.	ropriate category as	an "other designer"
Basis for exemption from re  The design work is exempt from  Basis for exemption from re	the registration	and qualification requiren	nents of the Building	Code.
certify that:	•			<del></del>
<ol> <li>The information contained in this sche</li> <li>I have submitted this application with</li> </ol>	edule is true to t	he best of my knowledge		
2. I have submitted this application with	trie knowledge	and consent of the firm.		
				_
Date 90	1M S	Signature of Designer	K	

#### NOTE:

- 1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario

DWG #TAM19659-21S DWG #TAM19674-21S

A. Project Information	ews and takes re	esponsibility for design acti	vities with respect to	the project.		
Building number, street name:  Application number:						
- maning manibol, street manie.			Unit no.	Lot/con.		
Municipality	Postal code	Plan number/ other de	poprintion.			
CITY OF BRAMPTON						
B. Individual who reviews and take	s responsibil	ty for design activities				
Name SAM KATSOULAKOS		Firm				
Street address		MICRO CITY EN	GINEERING SERVI	CES INC.		
R.R #1, PO BOX 61			Unit no.	Lot/con.		
Municipality	Postal code	Province	F-mail mooner	@xplornet.com		
GLENCOE Telephone number	NOL 1MO	ONTARIO	- man meengi	@xpiomet.com		
(519) 287-2242 Business	Fax number		Cell number			
	individed in	4.6.				
C. Design activities undertaken by Division C]	individual idei	itified in Section B. [E	Building Code Tal	ole 3.5.2.1. of		
☐ House	☐ HVAC -	House				
☐ Small Buildings		Services	⊠ Building St	ructural		
☐ Large Buildings	☐ Detection	n, Lighting and Power	☐ Plumbing – ☐ Plumbing –	House		
☐ Complex Buildings Description of designer's work:	☐ Fire Pro	tection	☐ On-site Sev	vage Systems		
ROYAL PINE HOMES—PROJECT: VALUES OF HUMAN	ED NODELL			- go oyotomo		
ROYAL PINE HOMES-PROJECT: VALES OF HUME REVIEW PRE-ENGINEERED FLOOR SYST TAMARACK LUMBER INC. (SEE DWG #TA	EM COMPONE	L: 4505-ELEV.C-2ND FLOOR	-NOT LOT SPECIFIC			
TAMARACK LUMBER INC. (SEE DWG #TA AND VERIFED BY QUALIFIED BUILDING D	W19660-21 DAT	ED <b>9-01-21</b> ). SUPPORTI	NG STRUCTURE (	PLAN SUPPLIED BY		
AND VERIFED BY QUALIFIED BUILDING D	ESIGNER.	, ====,	011.0010112 (0	) IO BE KENIEWED		
D. Declaration of Designer						
I, SAM KATSOULAKOS		d	eclare that (choose	one as appropriate):		
(print name	)			· ·		
	y for the design v	vork on behalf of a firm reg	jistered under subse	ction 3.2.4.of Division		
C, of the Building Code. I am q	uaimed, and the	firm is registered, in the ap	propriate classes/ca	ategories.		
Individual BCIN:26064	<u> </u>					
Firm BCIN: <b>29991</b>						
		<del></del>				
☐ I review and take responsibility under subsection 3.2.5 of Division	for the design ar	nd am qualified in the appr	opriate category as	an "othor do-i"		
	on C, of the Buil	ding Code.	ophiate category as a	an other designer		
Individual BCIN:						
Basis for exemption from re	egistration:					
☐ The design work is exempt from	the registration	and qualification requirem	ents of the Duilding	0-4		
basis for exemption from re	egistration and gr	ualification:	chts of the building	Code.		
certify that:						
1. The information contained in this sch	edule is true to t	he best of my knowledge.				
<ol><li>I have submitted this application with</li></ol>	the knowledge	and consent of the firm.				
Date 9 0 1	u .	signature of Designer				
NOTE:		orginature of Designer				

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
- 2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of authorization, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG #TAM19660-21S DWG #TAM19675-21S

Use one form for each individual who revie	ws and takes re	sponsibility for design acti	vities with respect to	the project
A. Froject information		Application	number:	the project.
Building number, street name:		· · · · · · · · · · · · · · · · · · ·	Unit no.	Lot/con.
Municipality	Postal code	Diam marks 4 (1)		
CITY OF BRAMPTON	Postal code	Plan number/ other de	scription	
B. Individual who reviews and takes	s responsibili	ty for design activities	•	
Name	•	Firm	<u></u>	
SAM KATSOULAKOS		MICRO CITY ENG	GINEERING SERVI	CES INC.
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail mceng	r@xplornet.com
Telephone number (519) 287-2242 Business	Fax number		Cell number	
C. Design activities undertaken by i Division C]	ndividual ider	ntified in Section B. [E	Building Code Ta	ble 3.5.2.1. of
☐ House	☐ HVAC -	- House	⊠ Building S	tructural
☐ Small Buildings		Services	☐ Plumbing –	- House
☐ Large Buildings ☐ Complex Buildings	☐ Detection	n, Lighting and Power	☐ Plumbing –	All Buildings
☐ Complex Buildings  Description of designer's work:	☐ Fire Pro	tection	☐ On-site Se	wage Systems
ROYAL PINE HOMES-PROJECT: VALES OF HUMB REVIEW PRE-ENGINEERED FLOOR SYST TAMARACK LUMBER INC. (SEE DWG #TAN AND VERIFED BY QUALIFIED BUILDING DO D. Declaration of Designer	EM COMPONEI <b>V19661-21</b> DAT	NT DRAWINGS AND LAV	OUT DI ACEMENT	DLAN CHDDLIED DV
I, SAM KATSOULAKOS			dooloro that (abanaa	one as appropriate):
(print name 区 I review and take responsibilit C, of the Building Code. I am q	, v for the desian v	work on behalf of a firm rea	nistered under subs	ection 2.2.4 of Division
Individual BCIN: 26064	1			
Firm BCIN: 29991				
☐ I review and take responsibility under subsection 3.2.5.of Division Individual BCIN:	for the design a ion C, of the Bui	nd am qualified in the appliding Code.	ropriate category as	an "other designer"
Basis for exemption from re  The design work is exempt from Basis for exemption from re	n the registration	and qualification requiren	nents of the Building	) Code.
<ol> <li>I certify that:</li> <li>The information contained in this scl</li> <li>I have submitted this application with</li> </ol>				
	1	,		
Date Cy (	214	Signature of Designer		

#### NOTE:

- For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) d).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
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DWG #TAM19661-21S DWG #TAM19676-21S

# NORDIC STRUCTURES

**COMPANY**July 20, 2021 15:57

PROJECT
J10 1ST FLOOR.wwb

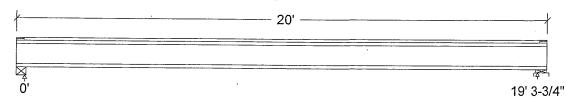
## **Design Check Calculation Sheet**

Nordic Sizer - Canada 8.0

#### Loads:

Load	Type	Distribution I	Distribution Pat- Location [ft]		Magnitude		Unit	
		t	tern	Start	End	Start	End	
Load1	Dead	Full Area				20.00		psf
Load2	Live	Full Area	i			40.00		psf

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



Unfactored:	ĺ	
Dead	193	193
Live	386	386
Factored:		
Total	821	821
Bearing:		
Capacity		i
Joist	2336	2336
Support	-	12995
Des ratio		Í
Joist	0.35	0.35
Support	_	0.06
Load case	#2	#2
Length	4-1/2	5-1/4
Min req'd	1-1/2	1-1/2
Stiffener	No	No
KD	1.00	1.00
KB support	-	1.00
fcp sup	-	769
Kzcp sup		1.15

<sup>\*</sup>Minimum bearing length for joists is 1-1/2" for exterior supports

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

Supports: 1 - Steel Beam, W; 2 - Lumber Sill plate, No.1/No.2; Total length: 20'; Clear span: 19' 2-1/4"; 3/4" nailed and glued OSB sheathing

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 = 821	Vr = 2336	lbs	V = 0.35
Moment(+)	Mf = 3963	Mr = 11609	lbs-ft	0.34
Perm. Defl'n	0.11 = < L/999	0.64 = L/360	in J	0.18
Live Defl'n	0.23 = < L/999	0.48 = L/480	in <i>[]</i>	100.47
Total Defl'n	0.34 = L/674	0.97 = L/240	in /5/	20.36
Bare Defl'n	0.26 = L/884	0.64 = L/360	in 🎉 `	WATSOULAROS 9 41
Vibration	Lmax = 19'-3.7	Lv = 21'-2.7	ft 🔄 🥄	NATSUOLANO 80/91
Defl'n	= 0.026	= 0.033	_in \	0.79

STRUCTURAL

COMPONENT ONLY

## WoodWorks® Sizer

#### for NORDIC STRUCTURES

#### J10 1ST FLOOR.wwb

#### Nordic Sizer - Canada 8.0

Page 2

Additional Data:         FACTORS:       f/E       KD       KH       KZ       KL       KT       KS       KN       LC#         Vr       2336       1.00       1.00       -       -       -       -       -       #2	
FACTORS: f/E KD KH KZ KL KT KS KN LC#	
Vr 2336 1.00 1.00	
vr 2336 1.00 1.00 #2	
Mr+ 11609 1.00 1.00 - 1.000 #2	
EI 547.1 million $\#2$	
CRITICAL LOAD COMBINATIONS:	
Shear : LC $\#2$ = 1.25D + 1.5L	
Moment(+) : LC #2 = 1.25D + 1.5L	
Deflection: LC #1 = 1.0D (permanent)	
LC #2 = 1.0D + 1.0L (live)	
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)	İ
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 = $625.37 \text{ lb-in}^2 \text{ K} = 6.18e06 \text{ lbs} \text{ GA} = 0.77e06 \text{ lb}$	
"Live" deflection is due to all non-dead loads (live, wind, snow) CONFORMS TO	OBC 2012
AMFNOFD	2020

## **Design Notes:**

IMENDED 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.



# NORDIC STRUCTURES

**COMPANY**July 20, 2021 15:57

PROJECT
J3 1ST FLOOR.wwb

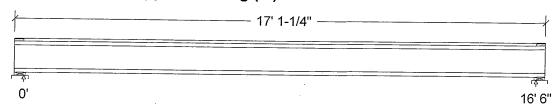
## **Design Check Calculation Sheet**

Nordic Sizer - Canada 8.0

### Loads:

Load	Type	Distribution	Distribution Pat- Location [ft]		Magnitude		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):



Dead Live       220 440       220 440         Factored:       70tal       935         Bearing:       935       935         Capacity       2336       2336         Support       7744       7744         Des ratio       0.40       0.40         Support       0.12       0.12         Load case       #2       #2         Length       4-3/8       4-3/8         Min req'd       1-1/2       1-1/2         Stiffener       No       No         KD       1.00       1.00         KB support       1.00       1.00         ference       760       1.00		1	
Live Factored: Total 935  Bearing: Capacity Joist 2336 Support 7744  Des ratio Joist 0.40 Support 0.12 Load case #2 Length #4-3/8 Min req'd 1-1/2 Stiffener KD 1.00 KB support 1.00	Unfactored:		
Add   Add	l e	220	220
Factored: Total Bearing: Capacity Joist 2336 Support 7744 Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd Stiffener KD No KB support 1.00	Live	440	1
Bearing: Capacity Joist 2336 Support 7744  Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00	Factored:		140
Capacity Joist 2336 Support 7744  Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00	Total	935	935
Joist 2336 Support 7744  Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 KB support 7744  2336 7744  0.40 0.40 0.40 0.12 4-3/8 1-1/2 1-1/2 0.00 1.00 1.00	Bearing:		
Joist 2336 Support 7744  Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 KB support 7744  2336 7744  0.40 0.40 0.40 0.12 4-3/8 1-1/2 1-1/2 0.00 1.00 1.00	Capacity		
Support 7744  Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00  KB support 1.00  For any 7744  7744  0.40  0.40  0.40  0.12  4-3/8  1-1/2  No 1.00 1.00	Joist	2336	2336
Des ratio Joist 0.40 Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 For any 1.00	Support	7744	1
Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 for any 1.00	Des ratio		//44
Support 0.12 Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 For any 1.00	Joist	0.40	0 40
Load case #2 Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00  for any 1.00  1.00  1.00	Support	0.12	
Length 4-3/8 Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 1.00 1.00	Load case	#2	
Min req'd 1-1/2 Stiffener No KD 1.00 KB support 1.00 1.00 1.00	Length		
Stiffener No KD 1.00 1.00 1.00 1.00 1.00	Min req'd		
KD 1.00 KB support 1.00 1.00			
KB support 1.00 1.00	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

## Nordic Joist 11-7/8" NI-40x Floor joist @ 16" o.c.

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

Total length: 17' 1-1/4"; Clear span: 16' 4-1/2"; 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 = 935	Vr = 2336	lbs	Vf/Vr = 0.40
Moment(+)	Mf = 3856	Mr = 6255	lbs-ft	0.62
Perm. Defl'n	0.11 = < L/999	0.55 = L/360	in 🧳	0.20
Live Defl'n	0.22 = L/893	0.41 = L/480	in <i>19</i>	100.54
Total Defl'n	0.33 = L/595	0.82 = L/240	in ///	a Color of Masse
Bare Defl'n	0.27 = L/721	0.55 = L/360	in 🧗	50
Vibration	Lmax = 16'-6	Lv = 18'-1.3	ft 🍇	3. KATSOULATOS 0 91
Defl'n	= 0.029	= 0.039	2 232	0 75

DWG NO. TAM/8008,21 STRUCTURAL

COMPONENT ONLY

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## WoodWorks® Sizer

#### for NORDIC STRUCTURES

#### J3 1ST FLOOR.wwb

#### Nordic Sizer - Canada 8.0

Page 2

					<del></del>						
Additiona											
FACTORS:	f/E	KD	KH	KZ	KL	KТ	KS	KN	LC#		
Vr	2336	1.00	1.00	_	_	-	_	_	#2		
Mr+	6255	1.00	1.00		1.000	_	_		#2		
	371.1 m		_	_	_	-	_	_	#2		
CRITICAL LO	OAD COMBI	NATIONS	) <u>:</u>								
Shear	: LC #2	= 1.25	5D + 1.5	L							
Moment (+)	) : LC #2	= 1.25	5D + 1.5	L							
Deflection	on: LC #1	= 1.00	(perm	anent)							
	LC #2	= 1.00	+1.0L	(live)							
	LC #2	= 1.00	+ 1.0L	(total	.)						
	LC #2	= 1.00	+ 1.0L	(bare	joist)						
Bearing	: Suppor										
	Suppor	ct 2 - L	C #2 = 1	L.25D +	1.5L						
Load Type	es: D≕dea	ad L=li	ve(use,	occupanc	y)						
Load Patt	terns: s=S	5/2 L=L	+Ls =r	no patte	rn load .	in this	s span				
All Load	Combinati	ons (LC	s) are	listed i	n the Ana	alysis	output				
CALCULATIO	ONS:					_	_				
EIeff = 4	159.76 lb-	in^2 K	= 6.18	e06 lbs	GA = 0	.77e06	lb '				ĺ
"Live" de	eflection	is due	to all r	non-dead	loads (	live, w	ind, sno	w) <b>ca</b> t	VEORMS TI	n nrc 201	2
						•	·	. 941	TI GILING I		_

## **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**July 20, 2021 15:55

PROJECT
J6 2ND FLOOR wwb

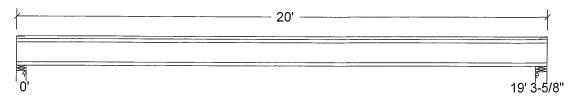
## **Design Check Calculation Sheet**

Nordic Sizer - Canada 8.0

### Loads:

Load	Type	Distribution	Pat-	Location [ft]		Magnitude		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 Live	193 386	193 386
Factored: Total Bearing:	820	820
Capacity		
Joist	2336	2336
Support	10841	13614
Des ratio		
Joist	0.35	0.35
Support	0.08	0.06
Load case	#2	#2
Length	4-3/8	5-1/2
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 Joist 11-7/8" NI-80 Floor joist @ 12" o.c.

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

Total length: 20'; Clear span: 19' 2-1/8"; 5/8" nailed and glued OSB sheathing with 1/2" gypsum ceiling

This section PASSES the design code check.

S. KATSOULANDS

S. KATSOULANDS

SOURCE OF ONTER

p6 4

OWO NO. TAM 1809-21 STRUCTURAL COMPONENT ONLY

## WoodWorks® Sizer

#### for NORDIC STRUCTURES

J6 2ND FLOOR.wwb

Nordic Sizer - Canada 8.0

Page 2

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

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 820	Vr = 2336	lbs	Vf/Vr = 0.35
Moment(+)	Mf = 3958	Mr = 11609	lbs-ft	Mf/Mr = 0.34
Perm. Defl'n	0.12 = < L/999	0.64 = L/360	in	0.18
Live Defl'n	0.23 = L/995	0.48 = L/480	in	0.48
Total Defl'n	0.35 = L/663	0.97 = L/240	in	0.36
Bare Defl'n	0.26 = L/888	0.64 = L/360	in	0.41
Vibration	Lmax = 19'-3.6	Lv = 20'-5.8	ft	0.94
Defl'n	= 0.029	= 0.033	in	0.87

#### **Additional Data:**

FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#
Vr	2336	1.00	1.00	_	_	-	-	-	#2
Mr+	11609	1.00	1.00	-	1.000		-	_	#2
EI	547.1 m	illion	_				-	_	#2

#### CRITICAL LOAD COMBINATIONS:

```
Shear
         : LC \#2 = 1.25D + 1.5L
Moment(+) : LC #2 = 1.25D + 1.5L
Deflection: LC #1 = 1.0D (permanent)
            LC #2 = 1.0D + 1.0L (live)
            LC #2 = 1.0D + 1.0L \text{ (total)}
            LC #2 = 1.0D + 1.0L (bare joist)
          : Support 1 - LC \# 2 = 1.25D + 1.5L
Bearing
            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 =  $613.27 \text{ lb-in}^2 \text{ K} = 6.18e06 \text{ lbs} \text{ GA} = 0.77e06 \text{ lb}$ "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.



STRUCTURAL COMPONENT ONLY



**COMPANY**July 20, 2021 15:55

PROJECT
J1 2ND FLOOR.wwb

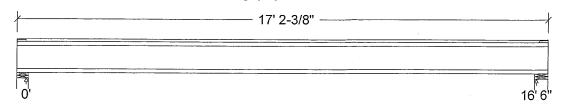
### **Design Check Calculation Sheet**

Nordic Sizer - Canada 8.0

#### Loads:

Load	Type	Distribution	Pat-	Location [ft]		Magnitude		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 Live Factored:	220 440	220 440
Total	935	935
Bearing:		
Capacity		
Joist	2336	2336
Support	7744	9724
Des ratio		
Joist	0.40	0.40
Support	0.12	0.10
Load case	#2	#2
Length	4-3/8	5-1/2
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 Joist 11-7/8" NI-40x Floor joist @ 16" o.c.

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

Total length: 17' 2-3/8"; Clear span: 16' 4-1/2"; 3/4" nailed and glued OSB sheathing

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 = 935	Vr = 2336	lbs	0.40
Moment(+)	Mf = 3857	Mr = 6255	lbs-ft/	MI/Mr = 0.62
Perm. Defl'n	0.11 = < L/999	0.55 = L/360	in 💯	00.20
Live Defl'n	0.22 = L/893	0.41 = L/480	in /// (	0.54
Total Defl'n	0.33 = L/595	0.82 = L/240	in 🎊	[ 10 40
Bare Defl'n	0.27 = L/721	0.55 = L/360	in 🖁	S. KATSOULAXOS 10 40
Vibration	Lmax = 16'-6	Lv = 18'-1.3	ft	0.91
Defl'n	= 0.029	= 0.039	in 🔪	A. 20.75

STRUCTURAL

COMPONENT ONLY

## WoodWorks® Sizer

#### for NORDIC STRUCTURES

#### J1 2ND FLOOR.wwb

#### Nordic Sizer - Canada 8.0

Page 2

Additiona	l Data:										
FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#		
Vr	2336	1.00	1.00			-	_	_	#2		
Mr+	6255 371.1 m	1.00	1.00	-	1.000	_	_	_	#2		
				_	_	_	_		#2		
CRITICAL L	OAD COMBI	INATIONS	<b>3</b> :								
Shear	: LC #2	= 1.25	5D + 1.5	L							
	) : LC #2										
Deflection: LC #1 = 1.0D (permanent)											
	LC #2	= 1.00	+1.0L	(live)							
	LC #2	= 1.00	+ 1.0L	(total	_)						
	LC #2	= 1.00	+ 1.0L	(bare	joist)						
Bearing	: Suppor										
	Suppor	rt 2 - I	$_{1}C #2 = 1$	1.25D +	1.5L						
Load Type	es: D=dea	ad L=li	ve(use,	occupano	:y)						
Load Pati	terns: s=S	5/2 L=L	_=1	no patte	rn load	in this	s span				
All Load	Combinati	ions (LC	cs) are :	listed i	n the An	alysis	output				
CALCULATION							_				
EIeff = 4	459.76 lb-	-in^2 K	c = 6.18	Be06 lbs	GA = 0	.77e06	lb				
"Live" de	eflection	is due	to all r	non-dead	l loads (	live, w	vind, sno	w) <b>CQ</b>	NFORMS T	o obc 2	012
			· · · · · · · · · · · · · · · · · · ·							n 2020	

### **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.







## Triple 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

PASSED

July 20, 2021 14:58:05

2ND FLR FRAMING\Dropped Beams\B9 DR(i2638) (Dropped Beam)

BC CALC® Member Report Build 7773

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports: Dry | 1 span | No cant.

4505 EL A SUNKEN.mmdl

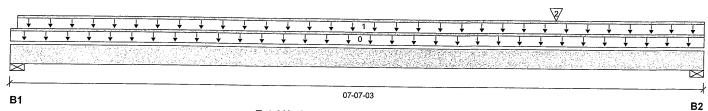
Wind

File name:

Description: 2ND FLR FRAMING\Dropped Beams\B9 DR(i2638)

Specifier:

Designer: Company:



#### Total Horizontal Product Length = 07-07-03

Snow

Reaction Summary (Down / Uplift) (Ibs)

Bearing	Live	Dead
B1, 4"	1973 / 0	1062 / 0
B2. 4"	3933 / 0	2107 / 0

CCMC 12472-R

	ad Summary Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow	Wind	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	07-07-03	Тор		14			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-00-14	07-07-03	Тор	436	218			n\a
2	B10(i2678)	Conc. Pt. (lbs)	L	05-11-06	05-11-06	Top	2622	1418			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	10020 ft-lbs	36222 ft-lbs	27.7%	1	05-06-14
End Shear	7330 lbs	17356 lbs	42.2%	1	06-05-11
Total Load Deflection	L/999 (0.084")	n\a	n\a	4	04-00-14
Live Load Deflection	L/999 (0.054")	n\a	n\a	5	04-00-14
Max Defl.	0.084"	n\a	n\a	4	04-00-14
Span / Depth	8.9			•	2.3017

Bearing	J Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	4" x 5-1/4"	4287 lbs	15.3%	16.7%	Spruce-Pine-Fir
B2	Wall/Plate	4" x 5-1/4"	8533 lbs	30.5%	33.3%	Spruce-Pine-Fir

#### **Notes**

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

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

canforms 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: 00-08-08, Bottom: 07-07-03.

S. KATSOTDAKOS

S. WATSOTDAKOS

SOUNCE OF ON PE 12

DWU NO. YAM 18011-21 STRUCTURAL COMPONENT ONLY



**BC CALC® Member Report** 



## Triple 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP

**PASSED** 

2ND FLR FRAMING\Dropped Beams\B9 DR(i2638) (Dropped Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name:

Address:

Customer: Code reports:

City, Province, Postal Code:

CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

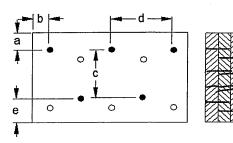
Description: 2ND FLR FRAMING\Dropped Beams\B9 DR(i2638)

Specifier:

Designer:

Company:

### **Connection Diagram: Full Length of Member**



a minimum = ₺" b minimum = 3"

c = 6.1/2" d = 8 4 e minimum = 2"

Nailing applies to both sides of the member Connectors are:

ARDOX SPIRAL

NOTANCE OF OUR 040 NO , TAN 1801/21

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 $^{\mathsf{TM}}$ , 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(i2678) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** Job name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

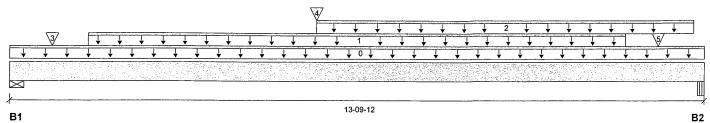
Description: 2ND FLR FRAMING\Flush Beams\B10(i2678)

Wind

Specifier:

Designer:

Company:



#### Total Horizontal Product Length = 13-09-12

#### Reaction Summary (Down / Uplift) (Ibs)

Bearing	Live	Dead	Sno
B1, 5-1/2"	3067 / 0	2014 / 0	
B2, 5-1/4"	2625 / 0	1416 / 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	13-09-12	Top		12			00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	01-06-08	12-02-08	Top	347	174			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	06-00-06	13-07-02	Тор	22	11			n\a
3	-	Conc. Pt. (lbs)	L	00-09-14	00-09-14	Top	836	817			n\a
4	B12(i1146)	Conc. Pt. (lbs)	L	06-00-06	06-00-06	Top	583	307			n\a
5	J1(i2629)	Conc. Pt. (lbs)	L	12-10-08	12-10-08	Top	402	201			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	20729 ft-lbs	35392 ft-lbs	58.6%	1	06-02-08
End Shear	5658 lbs	14464 <b>I</b> bs	39.1% -	1	01-05-06
Total Load Deflection	L/350 (0.447")	n\a	68.5%	_ 4	06-10-08
Live Load Deflection	L/541 (0.29")	n\a	66.6%	5	06-10-08
Max Defl.	0.447"	n\a	n\a	4	06-10-08
Span / Depth	13.2		•		

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	7119 lbs	60.1%	30.3%	Spruce-Pine-Fir
B2	Beam	5-1/4" x 3-1/2"	5708 lbs	25.5%	25.5%	VL 2.0 3100 SP

#### **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 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.



048 NO. TAM 180 P=21 STRUCTURAL COMPONENT ONLY





PASSED

#### 2ND FLR FRAMING\Flush Beams\B10(i2678) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

**BC CALC® Member Report** 

Customer:

Code reports: CCMC 12472-R File name:

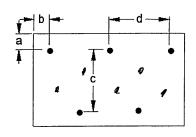
4505 EL A SUNKEN.mmdl

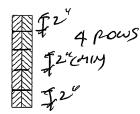
Description: 2ND FLR FRAMING\Flush Beams\B10(i2678)

Specifier: Designer:

Company:

## **Connection Diagram: Full Length of Member**





a minimum = 2" b minimum = 3" c = 7-7/8" d = 🙋 🔞 4

Calculated Side Load = 984.5 lb/ft

Connectors are: \* ...

Nails

ARDOX SPIRAL

KATSOULA OVINCE OF ONLY

198 NO. 74 N 180 N. 21 STRUCTURAL COMPONENT ONLY

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BC CALC® Member Report



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

**PASSED** 

### 2ND FLR FRAMING\Flush Beams\B11(i1119) (Flush Beam)

Dry | 3 spans | L cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

File name:

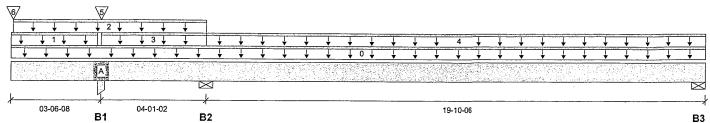
4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B11(i1119)

Specifier:

Designer:

Company:



#### Total Horizontal Product Length = 27-06-00

Snow

#### Reaction Summary (Down / Uplift) (Ibs)

Bearing	Live	Dead
B1, 3-1/2"	3333 / 212	2053 / 0
B2, 5-1/2"	734 / 697	223 / 0
B3, 5-1/2"	260 / 1	228 / 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	27-06-00	Тор		12			00-00-00
1	STAIR	Unf. Lin. (lb/ft)	L	00-00-00	03-04-12	Тор	120	60			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-14	07-07-10	Тор	23	11			n\a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	03-06-08	07-07-10	Тор	18	9			n\a
4	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	07-07-10	27-06-00	Тор	30	15			n\a
5	B8(i1116)	Conc. Pt. (lbs)	L	03-06-08	03-06-08	Top	1417	1240			n\a
6	B12(i1146)	Conc. Pt. (lbs)	L	00-00-14	00-00-14	Тор	581	306			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2594 ft-lbs	35392 ft-lbs	7.3%	2	19-00-13
Neg. Moment	-6332 ft-lbs	-10379 ft-lbs	61.0%	1	03-06-08
End Shear	558 lbs	14464 lbs	3.9%	1	26-00-10
Cont. Shear	2015 lbs	14464 lbs	13.9%	4	02-04-14
Total Load Deflection	L/999 (0.113")	n\a	n\a	13	18-03-02
Live Load Deflection	L/999 (0.062")	n\a	n\a	18	18-03-02
Total Neg. Defl.	L/999 (-0.012")	n\a	n\a	13	05-05-04
Max Defl.	0.113"	n\a	n\a	13	18-03-02
Span / Depth	19.7				

Beari	ing Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	3-1/2" x 3-1/2"	7566 lbs	95.1%	50.6%	Unspecified
B2	Wall/Plate	5-1/2" x 3-1/2"	1380 lbs	11.7%	5.9%	Spruce-Pine-Fir
B2	Uplift		846 lbs			
B3	Wall/Plate	5-1/2" x 3-1/2"	674 lbs	5.7%	2.9%	Spruce-Pine-Fir

## **Cautions**

Uplift of 846 lbs found at bearing B2. (5/MP30N) 2-42-54 CO B2)

Concentrated side load(s) 2 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.



040 NO. TAN 18013-21 STRUCTURAL. COMPONENT ONLY





PASSED

2ND FLR FRAMING\Flush Beams\B11(i1119) (Flush Beam)

Dry | 3 spans | L cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name:

Address:

City, Province, Postal Code:

**BC CALC® Member Report** 

Customer:

Code reports:

CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B11(i1119)

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 086.

Design based on Dry Service Condition.

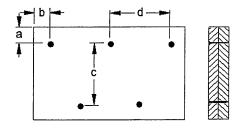
Importance Factor: Normal Part code: Part 9

Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends. CONFORMS TO OBC 2012

Calculations assume unbraced length of Top: 00-00-00. Bottom: 19-02-02.

AMENDED 2020

#### **Connection Diagram: Full Length of Member**



a minimum = 2" b minimum = 3"  $d = \mathcal{B} \mathcal{B}^{\ell/\ell}$ c = 7-7/8"

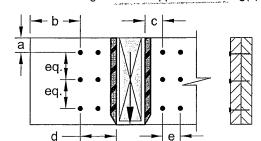
Connectors are:

Nails

ARDOX SPIRAL

### **Connection Diagrams: Concentrated Side Loads**

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



a minimum = 2"

b minimum = 4"

c minimum = 4"

d maximum = 12"

e minimum = 4"

Connectors are: 16d Nails

312" ARDOX SPIRAL



DWS NO. TAM / 8013 STRUCTÚRAL COMPONENT ONLY

#### **Disclosure**

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PASSED

### 2ND FLR FRAMING\Flush Beams\B12(i1146) (Flush Beam)

**BC CALC® Member Report** 

**Build 7773** 

Job name:

Customer:

City, Province, Postal Code:

Address:

Dry | 1 span | No cant.

July 20, 2021 14:58:05

File name:

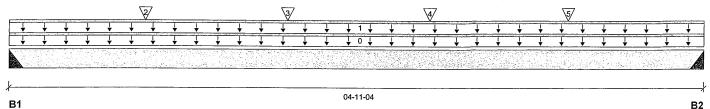
4505 EL A SUNKEN.mmdl Description: 2ND FLR FRAMING\Flush Beams\B12(i1146)

Specifier:

Designer:

Code reports: CCMC 12472-R





#### Total Horizontal Product Length = 04-11-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2"	568 / 0	299 / 0		
B2 2"	566 / 0	298 / 0		

	ad Summary	Load Time	Def	24	E 1		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	04-11-04	Top		6			00-00-00
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	04-11-04	Тор	105	52			n\a
2	J4(i2541)	Conc. Pt. (lbs)	L	00-11-08	00-11-08	Top	158	79			n\a
3	J4(i2526)	Conc. Pt. (lbs)	L	01-11-08	01-11-08	Top	150	75			n\a
4	J4(i2463)	Conc. Pt. (lbs)	L	02-11-08	02-11-08	Тор	150	75			n\a
5	J4(i2455)	Conc. Pt. (lbs)	L	03-11-08	03-11-08	Top	159	80			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1529 ft-lbs	17696 ft-lbs	8.6%	1	02-05-08
End Shear	895 lbs	7232 lbs	12.4%	1	03-09-06
Total Load Deflection	L/999 (0.009")	n\a	n\a	4	02-05-08
Live Load Deflection	L/999 (0.006")	n\a	n\a	5	02-05-08
Max Defl.	0.009"	n\a	n\a	4	02-05-08
Span / Denth	4.8				

Bearing	Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	1226 lbs	n\a	28.7%	HUS1.81/10
B2	Hanger	2" x 1-3/4"	1222 lbs	n\a	28.6%	LS90

#### **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.

Header for the hanger LS90 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model LS90 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

ON NOE OF ONTE OWO NO. TAN 18019

STRUCTURAL COMPONENT ONLY





## Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B12(i1146) (Flush Beam)

Dry | 1 span | No cant.

**PASSED** 

July 20, 2021 14:58:05

**BC CALC® Member Report** 

**Build 7773** 

Job name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B12(i1146)

Specifier:

Designer:

Company:

Notes

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

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

Hanger Manufacturer: Unassigned

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

CCMC 12472-R

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: 00-10-08.

CONFORMS TO 080 2012

AMENDED 2020



### 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.

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PASSED

July 20, 2021 14:58:05

2ND FLR FRAMING\Flush Beams\B13(i1147) (Flush Beam)

BC CALC® Member Report

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

Customer:

Code reports: CCMC 12472-R Dry | 1 span | No cant.

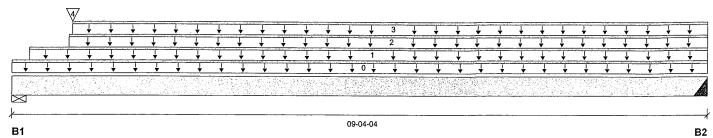
File name: 4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B13(i1147)

Specifier:

Designer:





#### Total Horizontal Product Length = 09-04-04

Reaction Summary (Down / Uplift) (lbs)

	(				
Bearing	Live	Dead	Snow	Wind	
B1, 5-1/2"	1214 / 0	1285 / 0	· · · · · · · · · · · · · · · · · · ·		
B2, 4"	1209 / 0	955 / 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	09-04-04	Тор		12			00-00-00
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-02-12	09-04-04	Тор	14	7			n\a
2	WALL	Unf. Lin. (lb/ft)	L	00-09-00	09-04-04	Top		60			n\a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-09-09	09-04-04	Тор	246	123			n\a
4	B14(i1148)	Conc. Pt. (lbs)	L	00-09-09	00-09-09	Top	185	492			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	6227 ft-lbs	35392 ft-lbs	17.6%	1	04-07-10
End Shear	2781 lbs	14464 lbs	19.2%	1	01-05-06
Total Load Deflection	L/999 (0.063")	n\a	n\a	4	04-08-14
Live Load Deflection	L/999 (0.035")	n\a	n\a	5	04-08-14
Max Defl.	0.063"	n\a	n\a	4	04-08-14
Span / Depth	8.8				

Bearing	y Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	3428 lbs	28.9%	14.6%	Spruce-Pine-Fir
B2	Hanger	4" x 3-1/2"	3006 lbs	n\a	17.6%	HGUS410

#### **Cautions**

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Concentrated side load(s) 3 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

046 NO . TAN 18015 STRUCTURAL COMPONENT ONLY





PASSED

2ND FLR FRAMING\Flush Beams\B13(i1147) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**BC CALC® Member Report Build 7773** 

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B13(i1147)

Specifier: Designer:

Company:

Notes

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

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

Hanger Manufacturer: Unassigned

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.

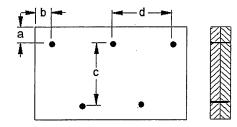
Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 08-04-15.

CONFORMS TO UBC 2012

AMENDED 2020

#### **Connection Diagram: Full Length of Member**



a minimum = 2"

b minimum = 3"

c = 7-7/8" d = 20 6

Connectors are: ...

Nails

312" ARDOX SPIRAL

DANCE OF O 196 HO. TAM /800 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.

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PASSED

B2

July 20, 2021 14:58:05

## 2ND FLR FRAMING\Flush Beams\B14(i1148) (Flush Beam)

BC CALC® Member Report

**Build 7773** 

Job name: Address:

Customer: Code reports:

City, Province, Postal Code:

CCMC 12472-R

Dry | 1 span | No cant.

File name: 4505 EL A SUNKEN.mmdl Description: 2ND FLR FRAMING\Flush Beams\B14(i1148)

Specifier:

Designer: Company:

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											(12/25/3) (a. 2/3)									erangen) Lagend	

В1

Total Horizontal Product Length = 11-01-02

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 4"	480 / 0	640 / 0		
B2, 4"	178 / 0	488 / 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	11-01-02	Тор		12			00-00-00
1	WALL	Unf. Lin. (lb/ft)	L	00-00-00	11-01-02	Top ·		60			n∖a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	11-01-02	Тор	11	6			n\a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	05-01-00	Тор	105	52			n\a

0 1 0		Factored	Demand/		
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location
Pos. Moment	3031 ft-lbs	· 35392 ft-lbs	8.6%	1	04-06-14
End Shear	1098 lbs	14464 lbs	7.6%	1	01-03-14
Total Load Deflection	L/999 (0.045")	n\a	n\a	4	05-04-08
Live Load Deflection	L/999 (0.016")	n\a	n\a	5	05-01-00
Max Defl.	0.045"	n\a	n\a	4	05-04-08
Span / Depth	10.7				

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	1520 lbs	n\a	8.9%	HGUS410
B2	Hanger	4" x 3-1/2"	684 lbs	n\a	6.2%	HGUS410

#### **Cautions**

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

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

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

Hanger Manufacturer: Unassigned

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

CONFORMS TO OBC 2012 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: 11-01-02.

WE OF O

046 NO. TAN 18016.91 STRUCTURAL COMPONENT ONLY





PASSED

July 20, 2021 14:58:05

2ND FLR FRAMING\Flush Beams\B14(i1148) (Flush Beam)
Dry | 1 span | No cant.

BC CALC® Member Report Build 7773

Job name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

4505 EL A SUNKEN.mmdl

File name: 4505 EL A

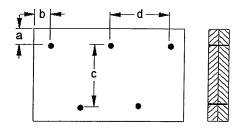
Description: 2ND FLR FRAMING\Flush Beams\B14(i1148)

Specifier: Designer:

Company:

### Connection Diagram: Full Length of Member

CCMC 12472-R



a minimum = 2" b minimum = 3" c = 7-7/8" d = 189" 8

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Connectors are:

ARDOX SPIRAL

S. KATSOULDY BS SO ON PER OWG NO. FAM / BO16 11

OWG NO. TAM/601621 STRUCTURAL COMPONENT ONLY

#### Disclosure

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PASSED

2ND FLR FRAMING\Flush Beams\B15(i2770) (Flush Beam)

**BC CALC® Member Report Build 7773** 

Dry | 1 span | No cant.

July 20, 2021 14:58:05

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

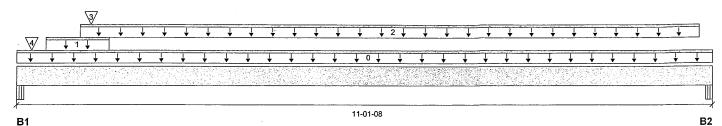
File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B15(i2770)

Specifier: Designer:

Company:



Total Horizontal Product Length = 11-01-08

Reaction Summary (Down / Unlift) (lbs)

		P(~~)			
Bearing	Live	Dead	Snow	Wind	
B1, 5-1/4"	756 / 0	1271 / 0	735 / 0		
B2, 5-1/4"	192 / 0	228 / 0	63 / 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)	Ĺ	00-00-00	11-01-08	Тор		12			00-00-00
1	E30(i2586)	Unf. Lin. (lb/ft)	L	00-05-08	01-05-08	Top		81			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	01-00-00	10-10-14	Тор	27	13			n\a
3	-	Conc. Pt. (lbs)	L	01-02-01	01-02-01	Top	676	1124	798		n\a
4	E31(i2591)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Тор		24			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2703 ft-lbs	35392 ft-lbs	7.6%	1	02-01-04
End Shear	2555 lbs	14464 lbs	17.7%	1	01-05-02
Total Load Deflection	L/999 (0.039")	n\a	n\a	35	05-00-12
Live Load Deflection	L/999 (0.021")	n\a	n\a	51	05-00-12
Max Defl.	0.039"	n\a	n\a	35	05-00-12
Span / Depth	10.5				

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 3-1/2"	3458 lbs	44.0%	15.4%	Unspecified
B2	Beam	5-1/4" x 3-1/2"	637 lbs	8.1%	2.8%	Unspecified

#### **Cautions**

Concentrated side load(s) 5 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

#### **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

CONFORMS TO OBC 2012

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: 09-04-12.



DWG NO. TAM/BOT STRUCTURAL COMPONENT ONLY





## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B15(i2770) (Flush Beam)

**PASSED** 

**BC CALC® Member Report** 

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

Customer:

Code reports:

Dry | 1 span | No cant.

July 20, 2021 14:58:05

File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B15(i2770)

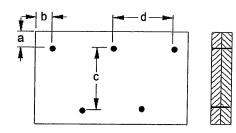
Specifier:

Designer:

Company:

## **Connection Diagram: Full Length of Member**

CCMC 12472-R



a minimum = 2" b minimum = 3"

c = 7-7/8" d = 🍩 8

Connectors are: 1

ARDOX SPIRAL

OVANCE OF OTHER DWG NO. TAM 18017-21

STRUCTURAL COMPONENT ONLY Disclosure

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**PASSED** 

2ND FLR FRAMING\Flush Beams\B16(i2752) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

Build 7773 Job name:

Address:

City, Province, Postal Code:

BC CALC® Member Report

Customer: Code reports:

CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B16(i2752)

Specifier: Designer:

Company:

\$\frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$   \frac{1}{4}\$  \frac{1}{4}\$  \frac{1}{4}\$   \frac{1}{4}\$   \frac{1}{4}\$  \qq         \qq    \qua

## Total Horizontal Product Length = 08-01-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 5-1/2"	759 / 0	934 / 0	321 / 0	VVIIId
B2, 4"	717 / 0	895 / 0	309 / 0	

	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	insulary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	08-01-00		1.00	12	1.00	1.15	00.00.00
1	E29(i2587)	Unf. Lin. (lb/ft)	. L	00-00-00	03-03-00	Top		81			00-00-00
2	E29(i2587)	Unf. Lin. (lb/ft)	1	00-00-00	02-11-00	· - p-			70		n\a
3	Smoothed Load	Unf. Lin. (lb/ft)	ī	01-02-00		(-	004	42	78		n\a
4	E32(i2593)	Unf. Lin. (lb/ft)			05-02-00	_ '	201	101			n\a
5	E33(i2594)		L .	03-03-00	05-03-00	Тор		61			n\a
6	,	Unf. Lin. (lb/ft)	L	05-03-00	08-01-00	Тор		81			n\a
~	E33(i2594)	Unf. Lin. (lb/ft)	L	05-07-00	08-01-00	Top		42	78		n\a
1	J3(i2759)	Conc. Pt. (lbs)	L	00-06-00	00-06-00	Top	160	80			n\a
8	-	Conc. Pt. (lbs)	L	05-08-03	05-08-03	Top	268	208	101		
9	J3(i1214)	Conc. Pt. (lbs)	L	07-02-00	07-02-00	Top	241	121	101		n\a
10	E29(i2587)	Conc. Pt. (lbs)	ī	03-02-00	03-02-00		241				n\a
	` /	3 3.13. 1 t. (103)	_	03-02-00	03-02-00	Тор		78	107		n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	4515 ft-lbs	35392 ft-lbs	12.8%	1	04-06-00
End Shear	1967 lbs	14464 lbs	13.6%	1	06-09-02
Total Load Deflection	L/999 (0.035")	n\a	n\a	35	04-01-05
Live Load Deflection	L/999 (0.019")	n\a	n\a	51	04-01-05
Max Defl.	0.035"	n\a	n\a	35	04-01-05
Span / Depth	7.5				0101-00

Ве	earing Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
В1	Wall/Plate	5-1/2" x 3-1/2"	2626 lbs	22.2%	11.2%	Spruce-Pine-Fir
B2	Hanger	4" x 3-1/2"	2504 lbs	n\a	14.7%	HGUS410

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.







## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B16(i2752) (Flush Beam)

**PASSED** 

**BC CALC® Member Report** 

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

Customer:

Code reports:

Dry | 1 span | No cant.

July 20, 2021 14:58:05

File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B16(i2752)

Specifier:

Designer:

Company:

#### Notes

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

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

Hanger Manufacturer: Unassigned

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

CCMC 12472-R

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.

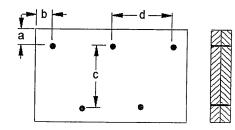
Importance Factor: Normal Part code: Part 9

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

CONFORMS TO OBC 2012

AMENDED 2020

### Connection Diagram: Full Length of Member



a minimum = 2" b minimum = 3" c = 7-7/8" d = 1008"

Calculated Side Load = 569.5 lb/ft Connectors are: 16d / Nails

ARDOX SPIRAL

OWG NO. TAM 180 STRUCTURAL COMPONENT ONLY

#### **Disclosure**

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CCMC 12472-R

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

**PASSED** 

## 2ND FLR FRAMING\Flush Beams\B8(i1116) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** Job name:

Address:

City, Province, Postal Code:

BC CALC® Member Report

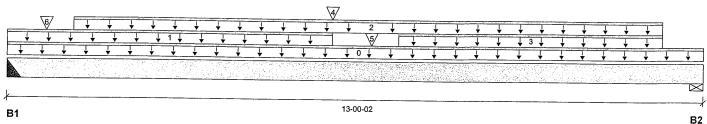
Customer: Code reports: File name:

4505 EL A SUNKEN.mmdl

Description: 2ND FLR FRAMING\Flush Beams\B8(i1116)

Specifier: Designer:

Company:



#### Total Horizontal Product Length = 13-00-02

Reaction Summary (Down / Unlift) (lbs)

Bearing	Live	Dead	Snow	Wind	
B1, 4"	1447 / 0	1265 / 0	Cilow	VVIIIU	
B2, 5-1/2"	1841 / 0	1242 / 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	13-00-02	Top		12			00-00-00
1	WALL	Unf. Lin. (lb/ft)	L	00-00-00	06-00-02	Top		60			n\a
2	-	Unf. Lin. (lb/ft)	L	01-02-12	12-02-12	•	82	41			n\a
3	Smoothed Load	Unf. Lin. (lb/ft)	L	07-02-12	12-02-12	Top	187	94			n\a
4	B13(i1147)	Conc. Pt. (lbs)	L	06-00-02	06-00-02	•	1214	950			n\a
5	J3(i2068)	Conc. Pt. (lbs)	Ĺ.	06-08-12	06-08-12	-	159	80			
6	J5(i1847)	Conc. Pt. (lbs)	Ĺ	00-08-12	00-08-12	1-	77	38			n∖a n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	17058 ft-lbs	35392 ft-lbs	48.2%	1	06-00-02
End Shear	4193 lbs	14464 lbs	29.0%	1	11-06-12
Total Load Deflection	L/476 (0.311")	n\a	50.4%	4	06-06-09
Live Load Deflection	L/833 (0.178")	n\a	43.2%	5	06-06-09
Max Defl.	0.311"	n\a	n\a	4	06-06-09
Span / Depth	12.5			•	00 00 00

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	3752 lbs	n\a	22.0%	HGUS410
B2	Wall/Plate	5-1/2" x 3-1/2"	4314 lbs	36.4%	18.4%	Spruce-Pine-Fir

#### **Cautions**

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

STRUCTURAL COMPONENT ONLY





**PASSED** 

## 2ND FLR FRAMING\Flush Beams\B8(i1116) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

BC CALC® Member Report

Customer: Code reports: File name:

4505 EL A SUNKEN.mmdl

Description:

2ND FLR FRAMING\Flush Beams\B8(i1116)

Specifier:

Designer:

CCMC 12472-R

Company:

#### **Notes**

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

Hanger Manufacturer: Unassigned

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.

4

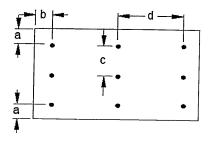
Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-00-00, Bottom: 00-09-08.

CONFORMS TO OBC 2012

AMENDED 2020

## **Connection Diagram: Full Length of Member**





a minimum = 2" b minimum = 3"

c = 4"d = 💇

Calculated Side Load = 1870.4 lb/ft Connectors are: 16d . Nails

ARDOX SPIRAL

WEE OF OWG NO. TAM 1801721

STRUCTURAL Disclosure COMPONENT ONLY

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





**PASSED** 

1ST FLR FRAMING\Flush Beams\B1(i2823) (Flush Beam)

BC CALC® Member Report Dry | 1 span | No cant. **Build 7773** 

CCMC 12472-R

July 20, 2021 14:58:05

Job name:

Address:

City, Province, Postal Code:

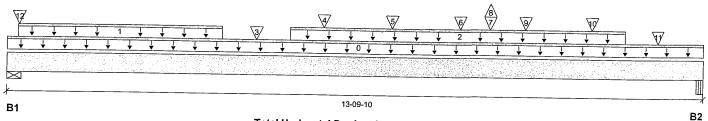
Customer: Code reports: File name:

4505 EL A SUNKEN.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B1(i2823)

Specifier:

Designer: Company:



#### Total Horizontal Product Length = 13-09-10

Reaction Summary (Down / Unlift) (lbs)

		milly (IDS)			
Bearing	Live	Dead	Snow	Wind	
B1, 5-1/2"	4176 / 21	2340 / 0		VVIII	· · · · · · · · · · · · · · · · · · ·
B2, 5-1/4"	4018 / 48	2313 / 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	moduly
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	13-09-10	Top		18	1.00	1.13	00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-02-08	04-02-08	Тор	575	288			n\a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	05-06-08	12-02-08	Top	338	169			
3	-	Conc. Pt. (lbs)	L	04-10-08	04-10-08	Top	767	384			n\a
4	J6(i956)	Conc. Pt. (lbs)	L	06-02-08	06-02-08	Top	203	101			n\a \
5	J6(i956)	Conc. Pt. (lbs)	Ĺ	07-06-08	07-06-08	Top	203	101			n\a
6	J6(i1025)	Conc. Pt. (lbs)	L	08-10-08	08-10-08	Top	149				n\a
7	B2(i2719)	Conc. Pt. (lbs)	Ē	09-06-00	09-06-00	Тор		74			n\a
8	B2(i2719)	Conc. Pt. (lbs)	1	09-06-00	09-06-00		1168	833			n\a
9	J5(i983)	Conc. Pt. (lbs)	-			Тор	-69				n\a
10	J5(i1006)	Conc. Pt. (lbs)	L	10-02-08	10-02-08	Тор	174	87			n\a
11	-	` '	L .	11-06-08	11-06-08	Тор	228	114			n\a
12		Conc. Pt. (lbs)	L	12-10-08	12-10-08	Тор	505	253			n∖a
12	2(i1113)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Тор	162	118			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	29501 ft-lbs	55211 ft-lbs	53.4%	1	07-06-08
End Shear	8325 lbs	21696 lbs	38.4%	1	12-04-08
Total Load Deflection	L/357 (0.438")	n\a	67.2%	6	06-10-08
Live Load Deflection	L/560 (0.279")	n\a	64.2%	8	06-10-08
Max Defl.	0.438"	n\a	n\a	6	06-10-08
Span / Depth	13.2				00 10-00

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 5-1/4"	9188 lbs	51.7%	26.1%	Spruce-Pine-Fir
B2	Beam	5-1/4" x 5-1/4"	8918 lbs	75.7%	26.5%	Unspecified







## Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1ST FLR FRAMING\Flush Beams\B1(i2823) (Flush Beam)

**PASSED** 

**BC CALC® Member Report** 

**Build 7773** 

Dry | 1 span | No cant.

July 20, 2021 14:58:05

Job name:

Address:

City, Province, Postal Code:

Customer:

Code reports: CCMC 12472-R File name:

4505 EL A SUNKEN.mmdl

1ST FLR FRAMING\Flush Beams\B1(i2823)

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.

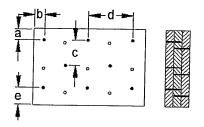
Importance Factor: Normal Part code: Part 9

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

CANFORMS TO OBC 2012

AMENDED 2020

## Connection Diagram: Full Length of Member



a minimum = 2" b minimum = 3" c = 4"d = 6"

e minimum = 3"

Calculated Side Load = 1770.0 lb/ft Nailing applies to both sides of the member Connectors are: 16d Nails

31/2" ARDOX SPIRAL

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OWO NO. FAN 18020 PL STRUCTURAL COMPONENT ONLY

#### **Disclosure**

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. Co . .





#### PASSED

## 1ST FLR FRAMING\Flush Beams\B2(i2719) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

BC CALC® Member Report

Customer: Code reports:

CCMC 12472-R

File name:

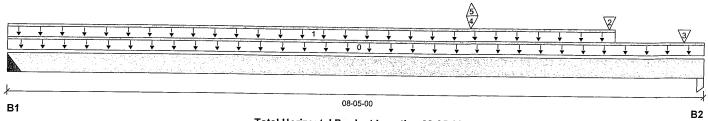
4505 EL A SUNKEN.mmdl

Description:

1ST FLR FRAMING\Flush Beams\B2(i2719)

Specifier: Designer:

Company:



### Total Horizontal Product Length = 08-05-00

Reaction Sur	illiary (Down / Op	iiit) (ibS)			
Bearing	Live	Dead	Snow	Wind	
B1, 4"	1200 / 71	857 / 0			
B2, 3-1/2"	2953 / 142	2074 / 0			

Lo	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	08-05-00	Top		12			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	07-03-13	Тор	27	13			n\a
2	B4(i925)	Conc. Pt. (lbs)	L	07-02-15	07-02-15	Top	621	324			n\a
3	B3(i2708)	Conc. Pt. (lbs)	L	08-02-00	08-02-00	Top	275	263			n\a
4	PBO3(i1153)	Conc. Pt. (lbs)	L	05-06-10	05-06-10	Тор	3046	2137			n\a
5	PBO3(i1153)	Conc. Pt. (lbs)	L	05-06-10	05-06-10	Тор	-213				n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	14062 ft-lbs	35392 ft-lbs	39.7%	1	05-06-10
End Shear	6111 lbs	14464 lbs	42.3%	1	07-01-10
Total Load Deflection	L/999 (0.092")	n\a	n\a	6	04-07-08
Live Load Deflection	L/999 (0.054")	n\a	n\a	8	04-07-08
Max Defl.	0.092"	n\a	n\a	6	04-07-08
Span / Depth	8.0			-	

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	2871 lbs	n\a	16.8%	HGUS410
B2	Column	3-1/2" x 3-1/2"	7022 lbs	88.2%	47.0%	Unspecified

#### **Cautions**

Header for the hanger HGUS410 is a Triple 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 and seat length were input by the user. Hanger has not been analyzed for adequate capacity.

Concentrated side load(s) 4 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

OVE NO. TAM/8021 - 21 STRUCTURAL COMPONENT ONLY

Paul 21 21 213





PASSED

## 1ST FLR FRAMING\Flush Beams\B2(i2719) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** Job name:

Address:

City, Province, Postal Code:

BC CALC® Member Report

Customer:

Code reports:

File name:

4505 EL A SUNKEN.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B2(i2719)

Specifier: Designer:

Company:

#### **Notes**

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

Hanger Manufacturer: Unassigned

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

CCMC 12472-R

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

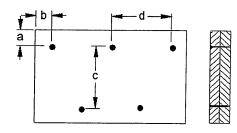
Design based on Dry Service Condition. Importance Factor: Normal Part code: Part 9

Calculations assume unbraced length of Top: 00-02-02, Bottom: 07-02-01.

CONFORMS TO OBC 2012

AMENDED 2020

## Connection Diagram: Full Length of Member



a minimum = 2" b minimum = 3"

ికర్వాణ ఉన్

c = 7-7/8" d = 20 8 "

Calculated Side Load = 370.6 lb/ft Connectors are: 16d 🐪 🗚 Nails

ARDOX SPIRAL



DWS NO. TAN 1802121 STRUCTURAL COMPONENT ONLY

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**PASSED** 

Tributary

00-00-00 n∖a n\a n\a

1ST FLR FRAMING\Flush Beams\B3(i2708) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** Job name:

Address:

City, Province, Postal Code:

**BC CALC® Member Report** 

Customer: Code reports:

CCMC 12472-R

File name:

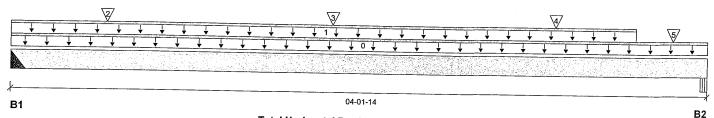
4505 EL A SUNKEN.mmdl

1ST FLR FRAMING\Flush Beams\B3(i2708) Description:

Wind

Specifier: Designer:

Company:



Total Horizontal Product Length = 04-01-14

Snow

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead
B1, 2"	293 / 0	275 / 0
B2, 5-1/4"	346 / 0	304 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tribu
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65			11100
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	04-01-14		1.00	6	1.00	1.15	-00.00
1	WALL	Unf. Lin. (lb/ft)	L	00-00-00	03-08-10	•		60			00-00
2	J5(i983)	Conc. Pt. (lbs)	L	00-06-12	00-06-12		174	87			
3	J5(i1006)	Conc. Pt. (lbs)	ī		01-10-12	-					
4	J5(i1024)	Conc. Pt. (lbs)	ī	03-02-12	03-02-12	•	224	112	10.00		DE LOS
5	3(i1114)	Conc. Pt. (lbs)					170	85		3.FESS1	Jilli
•	0(1111)	Conc. Ft. (ibs)	L	03-11-06	03-11-06	Top	69	46	35 mg		- A

<b>Controls Summary</b>	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	761 ft-lbs	17696 ft-lbs	4.3%	1	01-10-12
End Shear	471 lbs	7232 lbs	6.5%	1	02-08-12
Total Load Deflection	L/999 (0.003")	n\a	n\a	1	· <b>-</b>
Live Load Deflection	L/999 (0.001")			4	01-11-06
	( ,	n\a	n\a	5	01-11-06
Max Defl.	0.003"	n\a	n\a	4	01-11-06
Span / Depth	37				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	782 lbs	n\a	18.3%	HUS1.81/10
B2	Beam	5-1/4" x 1-3/4"	899 lbs	22.9%	8.0%	Unspecified

#### **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.

COMPORMS 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.

040 NO. TAM /B02201 STRUCTURAL COMPONENT ONLY **Disclosure** 

SONNEE OF

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





**PASSED** 

1ST FLR FRAMING\Flush Beams\B4(i925) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** Job name:

Address:

City, Province, Postal Code:

**BC CALC® Member Report** 

Customer: Code reports:

CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

Description:

1ST FLR FRAMING\Flush Beams\B4(i925)

Specifier: Designer:

Company:

<del>*                                    </del>	<del>                                     </del>
)2	
	02

Total Horizontal Product Length = 05-00-02

Reaction Summary (Down / Unlift) (lbs)

	ary (Domiti C	pinit/ (ib5)		
Bearing	Live	Dead	Snow	Wind
B1, 3-1/2"	652 / 0	341 / 0	01.011	VVIIIG
B2, 2"	632 / 0	330 / 0		

Lo	ad Summary						Live	Dead	Snow	Wind
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	05-00-02		1.00	6	1.00	1.15
1	STAIR	Unf. Lin. (lb/ft)	L	00-00-00	05-00-02	1-	120	-		
2	J6(i916)	Conc. Pt. (lbs)	ī	00-06-06	00-06-06	1-		60		
3	J6(i956)	Conc. Pt. (lbs)				Тор	139	70		
1	J6(i1027)	` ,		01-10-06	01-10-06	Тор	199	99		
-	( /	Conc. Pt. (lbs)	Ĺ,	03-02-06	03-02-06	Top	199	99		CSESS.
5	J6(i1025)	Conc. Pt. (lbs)	L	04-06-06	04-06-06	Top	146	73		
						•			- 37 A39 .c	e de la companya della companya de la companya della companya dell

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1527 ft-lbs	17696 ft-lbs	8.6%	1	02-07-06
End Shear	845 lbs	7232 lbs	11.7%	1	02-07-00
Total Load Deflection	L/999 (0.009")	n\a	n\a	4	02-06-14
Live Load Deflection	L/999 (0.006")	n\a	n\a	5	02-06-14
Max Defl.	0.009"	n\a	n\a	4	02-06-14
Span / Depth	47			•	02-00-14

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Column	3-1/2" x 1-3/4"	1404 lbs	35.3%	18.8%	Unspecified
B2	Hanger	2" x 1-3/4"	1362 lbs	n\a	31.9%	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

12 472

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

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

CONFORMS TO OBC 2012 AMENDED 2020

Hanger Manufacturer: Unassigned

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. 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.



Tributary

00-00-00 n\a

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 $^{\text{TM}}$ ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®



**BC CALC® Member Report** 



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

**PASSED** 

1ST FLR FRAMING\Flush Beams\B5(i952) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

File name:

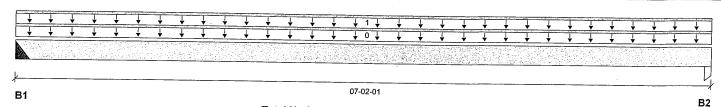
4505 EL A SUNKEN.mmdl

Description:

1ST FLR FRAMING\Flush Beams\B5(i952)

Specifier: Designer:

Company:



Total Horizontal Product Length = 07-02-01

	ilinary (Down / C	ıpıiπ) (ibs)			
Bearing	Live	Dead	Snow	Wind	
B1, 2"	38 / 0	41 / 0		• • • • • • • • • • • • • • • • • • •	
B2, 1-3/4"	38 / 0	41 / 0			

	ad Summary Description	Load Type	Ref.	Start	End	Loc.	Live 1.00	Dead 0.65	Snow	Wind	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00			1.00	6	1.00	1.15	00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00		•	11	5			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	184 ft-lbs	17696 ft-lbs	1.0%	1	03-07-02
End Shear	73 lbs	7232 lbs	1.0%	1	01-01-14
Total Load Deflection	L/999 (0.002")	n\a	n\a	4	03-07-02
Live Load Deflection	L/999 (0.001")	n\a	n\a	5	03-07-02
Max Defl.	0.002"	n\a	n\a	4	03-07-02
Span / Depth	7.1	•		•	00 07 02

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 1-3/4"	108 lbs	n\a	2.5%	HUS1.81/10
B2	Column	1-3/4" x 1-3/4"	108 lbs	5.4%	2.9%	Unspecified

#### **Cautions**

Header for the hanger HUS1.81/10 is a Triple 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 086.

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: 07-02-01.



## DWG NO. TAM 1802/21 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.

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Carlo Barrellian





PASSED

1ST FLR FRAMING\Flush Beams\B6(i2788) (Flush Beam)

**BC CALC® Member Report Build 7773** 

Dry | 1 span | No cant.

July 20, 2021 14:58:05

Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

CCMC 12472-R

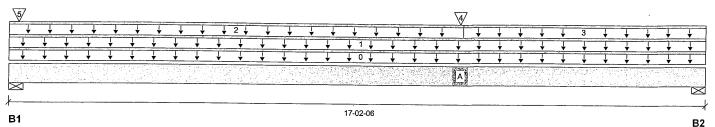
File name:

4505 EL A SUNKEN.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B6(i2788)

Specifier: Designer:

Company:



#### Total Horizontal Product Length = 17-02-06

Reaction Summary (Down / Uplift) (lbs)

		PIII () (1857)			
Bearing	Live	Dead	Snow	Wind	
B1, 5-1/2"	753 / 0	514 / 0		***	
B2, 4-3/8"	794 / 0	516 / 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	17-02-06	Тор		12			00-00-00
1	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	17-02-06	Тор	11	6			n\a
2	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	11-01-00	Тор	15	8			n\a
3	FC1 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	11-01-00	17-02-06	Тор	6	3			n\a
4	B7(i2746)	Conc. Pt. (lbs)	L	11-00-02	11-00-02	Тор	955	502			n\a
5	E13(i1101)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Top	192	120			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	9819 ft-lbs	35392 ft-lbs	27.7%	1	11-00-02
End Shear	1765 lbs	14464 lbs	12.2%	1	15-10-02
Total Load Deflection	L/665 (0.298")	n\a	36.1%	4	09-00-13
Live Load Deflection	L/1086 (0.182")	n\a	33.2%	5	09-00-13
Max Defl.	0.298"	n\a	n\a	4	09-00-13
Span / Depth	16.7				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	1772 lbs	15.0%	7.5%	Spruce-Pine-Fir
B2	Wall/Plate	4-3/8" x 3-1/2"	1835 lbs	19.5%	9.8%	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 OBG 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: 10-05-12.



OWG NO. TAM/8025 -21 STRUCTURAL COMPONENT ONLY





## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1ST FLR FRAMING\Flush Beams\B6(i2788) (Flush Beam)

PASSED

July 20, 2021 14:58:05

**BC CALC® Member Report** 

**Build 7773** 

Job name: Address:

City, Province, Postal Code:

Customer:

Code reports:

CCMC 12472-R

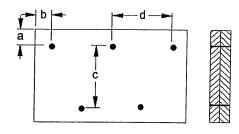
Dry | 1 span | No cant.

File name: 4505 EL A SUNKEN.mmdl Description: 1ST FLR FRAMING\Flush Beams\B6(i2788)

Specifier:

Designer: Company:

## Connection Diagram: Full Length of Member



a minimum = 2"

b minimum = 3"

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

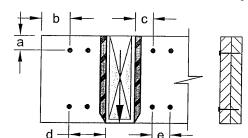
Connectors are.

1 Nails

312" ARDOX SPIRAL

#### Connection Diagrams: Concentrated Side Loads

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



a minimum = 2"

b minimum = 4"

c minimum = 4"

d maximum = 12"

e minimum = 4"

Connectors are:

Nails

31/2" ARDOX SPIRAL



196 NO. TAN 1802 STRUCTURAL COMPONENT ONLY

## Disclosure

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**PASSED** 

1ST FLR FRAMING\Flush Beams\B7(i2746) (Flush Beam)

Dry | 1 span | No cant.

July 20, 2021 14:58:05

**Build 7773** Job name:

Address:

Code reports:

City, Province, Postal Code: Customer:

**BC CALC® Member Report** 

CCMC 12472-R

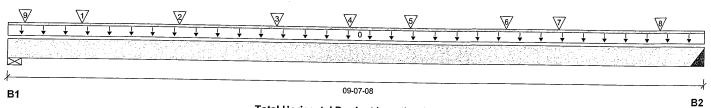
File name:

4505 EL A SUNKEN.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B7(i2746)

Specifier:

Designer: Company:



#### Total Horizontal Product Length = 09-07-08

Reaction Summary (Down / Uplift) (lbs)

	, , , , , , , , , , , , , , , , , , ,	Jiii (100)			
Bearing	Live	Dead	Snow	Wind	
B1, 5-1/2"	1102 / 0	635 / 0			
B2, 2"	968 / 0	511 / 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	09-07-08			6	1.00	1.10	00-00-00
1	J4(i2774)	Conc. Pt. (lbs)	L	01-00-00	01-00-00	Top	289	145			
2	J4(i2787)	Conc. Pt. (lbs)	1	02-04-00	02-04-00		289	145			n\a `
3	J4(i2807)	Conc. Pt. (lbs)	Ī	03-08-00	03-08-00		253				n\a
4	J4DJ(i2793)	Conc. Pt. (lbs)	ī	04-08-00	04-08-00	- 1-		126			n\a
5	J5(i935)	Conc. Pt. (lbs)		05-06-00		Тор	226	113			n\a
6	J5(i933)	` '	L		05-06-00	Тор	210	105			n\a
7	· · · /	Conc. Pt. (lbs)	L.	06-10-00		Top	201	100			n\a
,	J4DJ(i2824)	Conc. Pt. (lbs)	L	07-06-14	07-06-14	Тор	263	131			n\a
8	J4(i2800)	Conc. Pt. (lbs)	L	09-00-00	09-00-00	Top	238	119			n\a
9	E23(i1103)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	Тор	101	104			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	4942 ft-lbs	17696 ft-lbs	27.9%	1	04-08-00
End Shear	1876 lbs	7232 lbs	25.9%	1	01-05-06
Total Load Deflection	L/999 (0.106")	n\a	n\a	4	04-11-12
Live Load Deflection	L/999 (0.07")	n\a	n\a	5	04-11-12
Max Defl.	0.106"	n\a	n\a	4	04-11-12
Span / Depth	9.2			•	04-11-12

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 1-3/4"	2447 lbs	41.3%	20.8%	Spruce-Pine-Fir
B2	Hanger	2" x 1-3/4"	2090 lbs	n\a	49.0%	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.

076 NO. TAM/BONG=21 STRUCTURAL COMPONENT ONLY





# Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1ST FLR FRAMING\Flush Beams\B7(i2746) (Flush Beam)

Dry | 1 span | No cant.

PASSED

July 20, 2021 14:58:05

**BC CALC® Member Report** 

Build 7773 Job name:

Address:

City, Province, Postal Code:

Customer: Code reports:

le reports: CCMC 12472-R

File name:

4505 EL A SUNKEN.mmdl

Description: 1ST FLR FRAMING\Flush Beams\B7(i2746)

Specifier:

Designer:

Company:

#### **Notes**

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

Hanger Manufacturer: Unassigned

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.

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.

CONFORMS TO OBC 2012

AMENDED 2020



#### **Disclosure**

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PASSED

July 20, 2021 15:44:03

2ND FLR FRAMING\Flush Beams\B15C(i2959) (Flush Beam)

**BC CALC® Member Report Build 7773** 

Job name:

Address:

City, Province, Postal Code: BRAMPTON

Customer: Code reports:

CCMC 12472-R

Dry | 1 span | No cant.

File name:

4505 EL C STD.mmdl

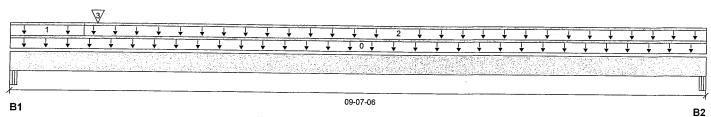
Description: 2ND FLR FRAMING\Flush Beams\B15C(i2959)

Wind

Specifier:

Designer: ΑJ

Company:



Total Horizontal Product Length = 09-07-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow
B1, 5-1/4"	512 / 0	979 / 0	638 / 0
B2, 2-5/8"	277 / 0	255 / 0	65 / 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	09-07-06	Top		12			00-00-00
1	E35(i3272)	Unf. Lin. (lb/ft)	L	00-00-00	01-00-00	Top		81			n\a
2	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	01-00-00	09-07-06	Тор	53	27			n\a
3	-	Conc. Pt. (lbs)	L	01-02-04	01-02-04	Тор	330	807	703		n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	2366 ft-lbs	35392 ft-lbs	6.7%	1	03-04-11
End Shear	2057 lbs	14464 lbs	14.2%	13	01-05-02
Total Load Deflection	L/999 (0.028")	n\a	n\a	35	04-07-01
Live Load Deflection	L/999 (0.016")	n\a	n\a	51	04-07-01
Max Defl.	0.028"	n\a	n\a	35	04-07-01
Span / Depth	9.2				

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Beam	5-1/4" x 3-1/2"	2693 lbs	27.4%	12.0%	Unspecified
B2	Beam	2-5/8" x 3-1/2"	800 lbs	16.3%	7.1%	Unspecified

### **Cautions**

Concentrated side load(s) 3 are closer than 18" from end of member. Please consult a technical representative or Professional of Record.

#### **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.

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: 08-01-04.

ove no , tan 1902 STRUCTURAL COMPONENT ONLY





## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B15C(i2959) (Flush Beam)

PASSED

**BC CALC® Member Report** 

**Build 7773** 

Dry | 1 span | No cant.

July 20, 2021 15:44:03

Job name:

Address:

City, Province, Postal Code: BRAMPTON

Customer: Code reports:

CCMC 12472-R

File name:

4505 EL C STD.mmdl

2ND FLR FRAMING\Flush Beams\B15C(i2959) Description:

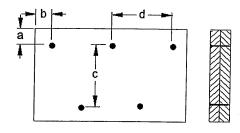
Specifier:

Designer:

AJ

Company:

## Connection Diagram: Full Length of Member



en material const

a minimum = 2"

b minimum = 3"

c = 7-7/8" d = 8 6 4

Connectors are:

312" ARDÓX SPIRAL

POMOE OF ONLY

OWE NO. TAN /BOZZZI STRUCTURAL COMPONENT ONLY

## **Disclosure**

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





## Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B18C(i3223) (Flush Beam)

PASSED

**BC CALC® Member Report** 

**Build 7773** 

Dry | 1 span | No cant.

July 20, 2021 15:44:03

Job name:

Address:

Customer:

Code reports:

City, Province, Postal Code: BRAMPTON

CCMC 12472-R

File name:

4505 EL C STD.mmdl

Description:

2ND FLR FRAMING\Flush Beams\B18C(i3223)

Specifier:

Designer:

Company:

AJ

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31																		05-02-1	4																	
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#### Total Horizontal Product Length = 05-02-14

Reaction Summary (Down / Unlift) (Ibs)

	(20111170	pint) (iba)			
Bearing	Live	Dead	Snow	Wind	
B1, 4"	348 / 0	446 / 0	160 / 0		
B2, 4-3/8"	349 / 0	440 / 0	148 / 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	05-02-14	Top		10		10	00-00-00
1	J3(i2977)	Conc. Pt. (lbs)	L	01-04-00	01-04-00	Top	247	346	171		n\a
2	J3(i3150)	Conc. Pt. (lbs)	L	02-08-00	02-08-00	-	234	194	17.1		
3	J3(i3082)	Conc. Pt. (lbs)	L	04-00-00	04-00-00	-	216	295	137		n∖a n∖a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1627 ft-lbs	23219 ft-lbs	7.0%	1	02-08-00
End Shear	1225 lbs	11571 lbs	10.6%	1	01-01-08
Total Load Deflection	L/999 (0.01")	n\a	n\a	35	02-07-00
Live Load Deflection	L/999 (0.005")	n\a	n\a	51	02-07-00
Max Defl.	0.01" `	n\a	n\a	35	02-07-00
Span / Depth	5.0			•	02 07 00

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	4" x 3-1/2"	1239 lbs	n\a	7.3%	HGUS410
B2	Wall/Plate	4-3/8" x 3-1/2"	1221 lbs	13.0%	6.5%	Spruce-Pine-Fir

#### Cautions

Header for the hanger HGUS410 is a Double 1-3/4" x 11-7/8" LVL Beam.

Hanger model HGUS410 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. 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: 01-02-12, Bottom: 01-02-12.

OWE NO. TAM/BOLB.21 STRUCTURAL COMPONENT ONLY





## Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 2ND FLR FRAMING\Flush Beams\B18C(i3223) (Flush Beam)

PASSED

July 20, 2021 15:44:03

**BC CALC® Member Report** 

**Build 7773** 

Job name:

Address:

City, Province, Postal Code: BRAMPTON

Customer: Code reports:

CCMC 12472-R

Dry | 1 span | No cant.

File name:

4505 EL C STD.mmdl

AJ

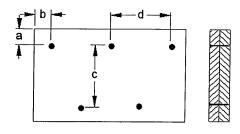
Description: 2ND FLR FRAMING\Flush Beams\B18C(i3223)

Specifier:

Designer:

Company:

## Connection Diagram: Full Length of Member



a minimum = 2"

b minimum = 3"

c = 5-1/2"

Calculated Side Load = 487.0 lb/ft

Connectors are:

Gan Nails

.3%" ARDOX SPIRAL



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®.

## Maximum Floor Spans - S2.1

#### 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 oriented strand board (OSB) sheathing

#### **Maximum Floor Spans**

			E	Bare			1/2 in. gy	sum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24'
	NI-20	15'-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"	-
5-1/2	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	g with 1x4 inch st	trap	Mid-sp	oan blocking an	d 1/2 in. gypsum	ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"	-
5-1/2	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"	_

#### Notes:

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



## 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. gy	osum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	15'-11"	15'-0"	14'-6"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"
9-1/2"	NI-40x	17'-0"	16'-0"	15'-5"	14'-10"	17'-5"	16'-5"	15'-10"	15'-2"
3-1/2	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	m ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"
J-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'
1-7	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"

#### Notes

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

## 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. gyr	sum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"	-
	N1-80	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 blockinç	with 1x4 inch st	rap	Mid-sp	an blocking an	d 1/2 in. gypsum	ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"	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"	N1-80	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"	

#### Notes

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

## Maximum Floor Spans - S7.1

#### 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 Canadian softwood plywood

#### **Maximum Floor Spans**

			В	are			1/2 in. gy	osum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	15'-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"
3-1/2	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 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"	15'-2"	18'-10"	17'-2"	16'-3"	15'-2"
3-1/2	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"

#### Notes:

- 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. gyr	osum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	15'-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"	_
5-1/2	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	id-span blocking	g with 1x4 inch s	trap	Mid-sp	an blocking an	d 1/2 in. gypsum	ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"	_
3-1/2	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"	-
1-7	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"	_

#### Notes:

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

## 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**

			E	Bare			1/2 in. gy	osum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	15'-11"	15'-0"	14'-6"	13'-5"	16'-5"	15'-5"	14'-6"	13'-5"
9-1/2"	NI-40x	17'-0"	16'-0"	15'-5"	14'-10"	17'-5"	16'-5"	15'-10"	14'-11'
0 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-sr	an blocking an	d 1/2 in. gypsur	m ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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'
5-172	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'
1-7	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"

#### Notes

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

## 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**

			E	Bare			1/2 in. gyr	sum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"	-
3-1/2	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"	N1-60	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"	_
17	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 s	trap	Mid-sp	an blocking an	d 1/2 in. gypsum	ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"	_

#### Notes:

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

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

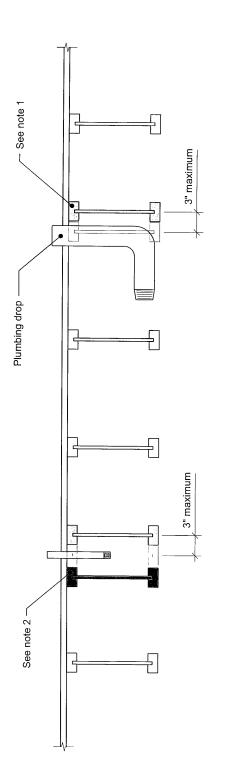
#### **Maximum Floor Spans**

			Е	are			1/2 in. gy <sub>l</sub>	sum ceiling	
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	15'-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
5-1/2	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-sp	oan blocking an	d 1/2 in. gypsui	m ceiling
Joist depth	Joist series		On cent	re spacing			On cent	re spacing	
		12"	16"	19.2"	24"	12"	16"	19.2"	24"
	NI-20	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"
	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"

#### Notes:

- 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.



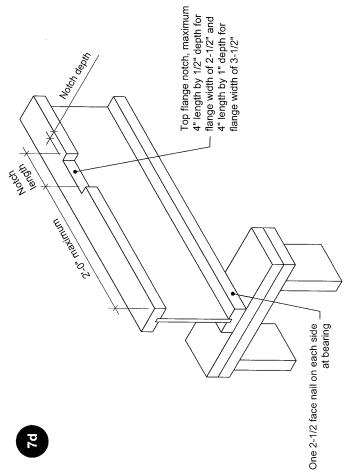
- To prevent interference with plumbing, a joist may be shifted up to 3 inches if the edge of the floor panel is supported
  and the span rating is not exceeded.
   In all other cases, an additional joist is required.

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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nor

TITLE		DRAWING
Allowance for Piping		7c
CATEGORY	SCALE	DATE
Openings for Vertical Elements		2020-10-01

PAGE 3.10



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

# 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.
    4. For other applications, contact Nordic Structures.

		TITLE		DRAWING	
RORDIC		Notch in I-joist for Heat Register		p2	
STRUCTURES	N3-DC3 BT	CATEGORY	SCALE	DATE	PAGE
nordic.ca	NORDIC JOIST	Openings for Vertical Elements	1	2020-10-01	3 11