

		Products		
PiotID	Length	Product	Plies	Net Qty
J8	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	42
J8 DJ	20-00-00	11 7/8" NI-40x	2	4
J10	16-00-00	11 7/8" NI-40x	1	1
J4	12-00-00	11 7/8" NI-40x	1	1
J5	10-00-00	11 7/8" NI-40x	1	17
J6	4-00-00	11 7/8" NI-40x	1	2
J7	2-00-00	11 7/8" NI-40x	1	4
J3	20-00-00	11 7/8" NI-80	1	17
J3 DJ	20-00-00	11 7/8" NI-80	2	2 .
J2	18-00-00	11 7/8" NI-80	1	18
J2 DJ	18-00-00	11 7/8" NI-80	2	4
B2 L 🗸	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1 L 🖊	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B3 L 🗸	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B6 /	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H 🔨	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1 .
B7 /	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9 🖊	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5 DR	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary				
Qty	Manuf	Product		
11	H1	IUS2.56/11.88		
2	H1	IUS2.56/11.88		
4	H1	IUS2.56/11.88		
2	H1	IUS2.56/11.88		
11	H2	IUS2.56/9.5		
2	H2	IUS3.56/11.88		
2	H4	HUS1.81/10		
2	H5	HU312-2		

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 FIGURE 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND FIELD CUT OPENINGS SEE FIGURE 7 TABLES 1 & 2 OF THE INSTALLATION GUIDE. 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/ft2 TILED AREAS: 20 lb/ft<sub>2</sub>

SUBFLOOR: 3/4" GLUED AND NAILED



FROM PLAN DATED: **APR 2017** 

**BUILDER:** 

**GREENYORK HOMES** 

SITE:

DEGREY DR

MODEL: YORK 2

**ELEVATION**: A

LOT:

**CITY: BRAMPTON** 

SALESMAN: RD DESIGNER: PL **REVISION:** 

**DATE:** 2017-05-15

1st FLOOR

DATE 52617

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 26572THROUGH DWG# TAM 2657 9-17 INCLUSIVE DATED 5267.7

SEALED STRUCTURAL COMPONENT'S 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 ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORGEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

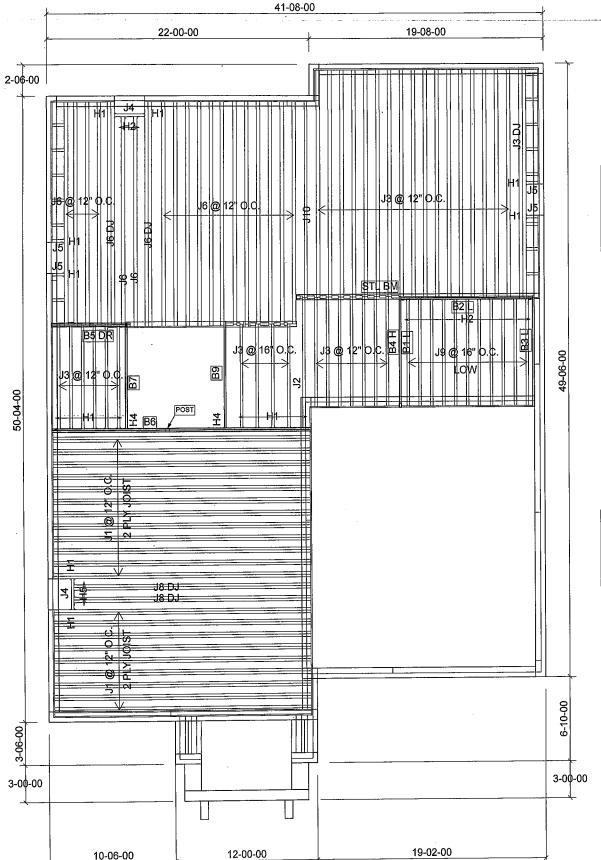
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION 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 B REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING, HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATE

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC

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





		Products		
PlotID	Length	Product	Plies	Net Qty
J9	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	42
J8 DJ	20-00-00	11 7/8" NI-40x	2	4
J10	16-00-00	11 7/8" NI-40x	1	1
J2	12-00-00	11 7/8" NI-40x	1	1
J3	10-00-00	11 7/8" NI-40x	1	17
J4	4-00-00	11 7/8" NI-40x	1	2
J5	2-00-00	11 7/8" NI-40x	1	4
J3	20-00-00	11 7/8" NI-80	1	17
J3 DJ	20-00-00	11 7/8" NI-80	2	2
J6	18-00-00	11 7/8" NI-80	1	18
J6 DJ	18-00-00	11 7/8" NI-80	2	4
B2 L-	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1 L-	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
₿3 L′	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	. 1	1
B6 -	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H 1	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B7 /	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B9 ′	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5 DR	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary				
Qty	Manuf	Product		
11	H1	IUS2.56/11.88		
2	H1	1US2.56/11.88		
4	H1	IUS2.56/11.88		
2	H1	IUS2.56/11.88		
11	H2	IUS2.56/9.5		
2	H2	IUS3.56/11.88		
2	H4	HUS1.81/10		
2	H5	HU312-2		

KEFEK IU INE NUKUIU 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 FIGURE 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD CUT OPENINGS SEE FIGURE 7 TABLES 1 & 2 OF THE INSTALLATION GUIDE. 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/ft2 TILED AREAS: 20 lb/ft2

SUBFLOOR: 3/4" GLUED AND NAILED



FROM PLAN DATED:

APR 2017

**BUILDER:** 

**GREENYORK HOMES** 

SITE:

DEGREY DR

MODEL: YORK 2

**ELEVATION**: B

LOT:

**CITY: BRAMPTON** 

SALESMAN: RD **DESIGNER:** PL **REVISION:** 

**DATE:** 2017-05-15

1st FLOOR

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 BOUNDAKIES 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 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 26572- THROUGH DWG# TAM 26579 1) INCLUSIVE DATED 5267

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

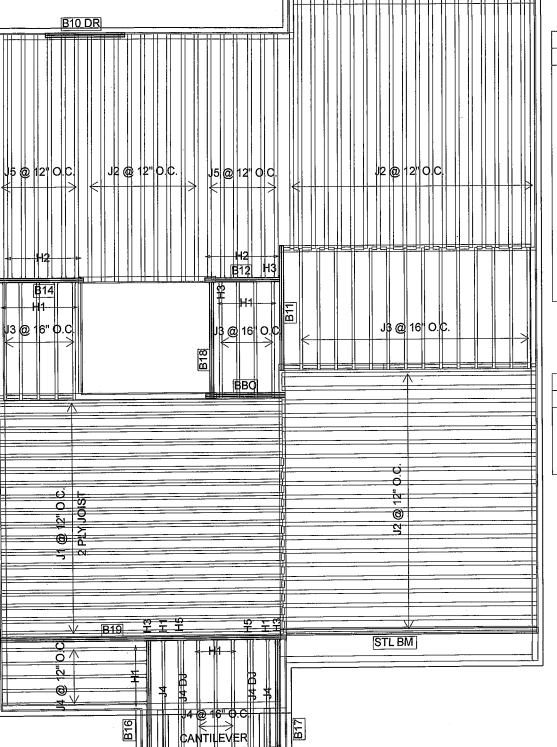
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION 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 1/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT

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

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

26595-17 BCIN: FIRM: 26064 29991 SEALED STRUCTURAL COMPONENTS ONLY





		Products		
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	36
J4	12-00-00	11 7/8" NI-40x	1	10
J4 DJ	12-00-00	11 7/8" NI-40x	2	4
J3	10-00-00	11 7/8" NI-40x	- 1	23
J2	20-00-00	11 7/8" NI-80	1	49
J5	18-00-00	11 7/8" NI-80	1	13
B10 DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B19 -	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B16 ~	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17 *	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B11 ′	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	8-00-00	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	2	2

	Connector Summary				
İ	Qty Manuf Product				
Ī	19	H1	IUS2.56/11.88		
	12	H2	IUS3.56/11.88		
	4	H3	HGUS410		
	2	H5	HUC312-2		

KELEK IO IUE MOUDIO 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. JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURE 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR **HOLES** INCLUDING **DUCT CHASE** AND FIELD CUT OPENINGS SEE FIGURE 7 TABLES 1 &2 OF THE

INSTALLATION GUIDE. 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> TILED AREAS: 20 lb/ft<sub>2</sub>

SUBFLOOR: 3/4" GLUED AND NAILED

LUMBER INC ALPA LUMBER GROUP

FROM PLAN DATED:

APR 2017

**BUILDER:** 

**GREENYORK HOMES** 

SITE:

DEGREY DR

**MODEL:** YORK 2

**ELEVATION:** A

LOT:

**CITY: BRAMPTON** 

SALESMAN: RD DESIGNER: PL **REVISION:** 

**DATE:** 2017-05-15

2nd FLOOR

DATE 52617

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 RIVER 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 26580 THROUGH DWG# TAM 26587-17, INCLUSIVE DATED 5 2617

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 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

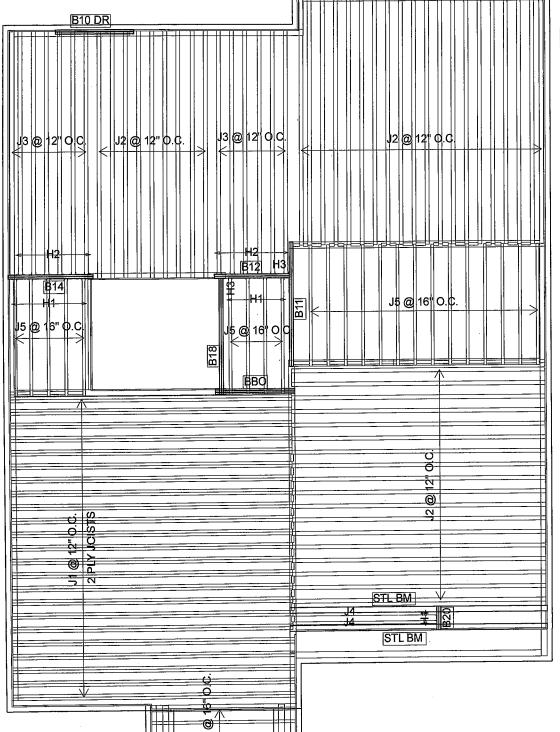
REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION COMPONENTS, FOR PROPER INSTALLATION, SEE NORDIC LITERATURE. PROVIDE 2 X 4 OR 2 X 6 STUD GRADE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

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BE REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEO

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

2659677 BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL





		Products		
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	46
J4	12-00-00	11 7/8" NI-40x	1	6
J5	10-00-00	11 7/8" NI-40x	1	23
J2	20-00-00	11 7/8" NI-80	1	47
J3	18-00-00	11 7/8" NI-80	1	13
B21 DR <	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B10 DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18 /	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14 ~	8-00-00	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	2	2
B20	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connector Summary				
Qty Manuf Product					
11	H1	IUS2.56/11.88			
12	H2	IUS3.56/11.88			
2	H3	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. JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURE 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD CUT OPENINGS SEE FIGURE 7 TABLES 1 &2 OF THE INSTALLATION GUIDE. 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> TILED AREAS: 20 lb/ft<sub>2</sub>

SUBFLOOR: 3/4" GLUED AND NAILED



FROM PLAN DATED: APR 2017

BUILDER:

GREENYORK HOMES

SITE:

**DEGREY DR** 

MODEL: YORK 2

**ELEVATION**: B

LOT:

**CITY: BRAMPTON** 

SALESMAN: R D
DESIGNER: PL
REVISION:

**DATE:** 2017-05-19

2nd FLOOR

DATE 5 2617

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 WORKID 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

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.

+26591-17 +26592-17 + 26593-17 bwg# tam 26586-17 Noclusive dated 5267)

SEALED STRUCTURAL COMPONENTS ONLY: -2658417 -2658577 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 PEP PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

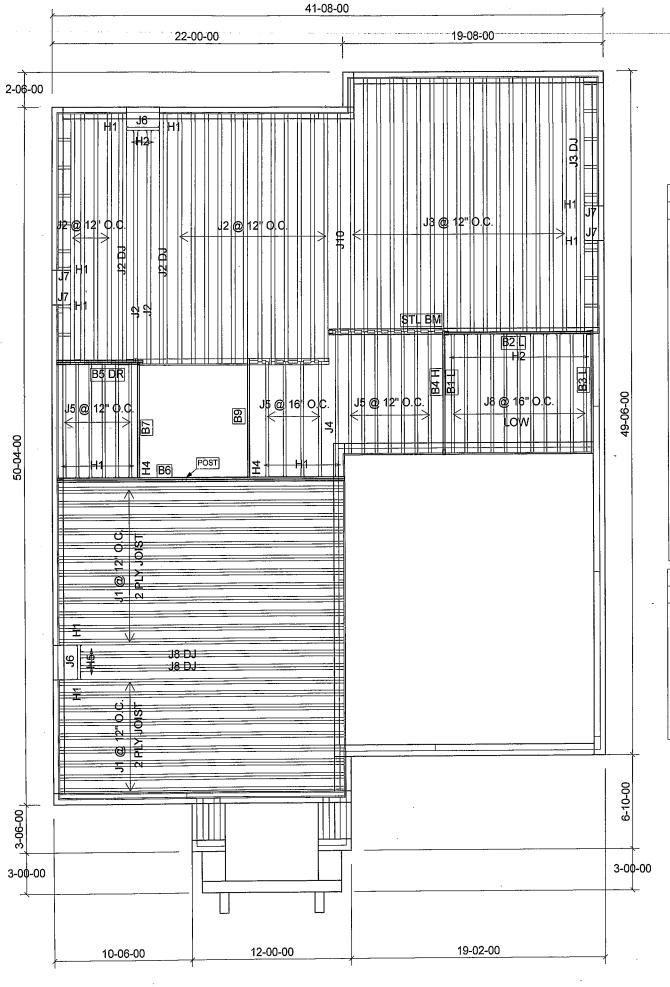
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION 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, INSTALLS 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 BEHALD OF A FIRM.
REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE I AMODALIFIED AND
HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 2-6597-77
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL
COMPONENTS ONLY

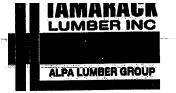




•		Products		
PlotID	Length	Product	Plies	Net Qty
J8	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	42
J8 DJ	20-00-00	11 7/8" NI-40x	2	4
J10	16-00-00	11 7/8" NI-40x	1	1
J4	12-00-00	11 7/8" NI-40x	1	1
J5	10-00-00	11 7/8" NI-40x	1	17
J6	4-00-00	11 7/8" NI-40x	1	2
J7	2-00-00	11 7/8" NI-40x	1	4
J3	20-00-00	11 7/8" NI-80	1	17
J3 DJ	20-00-00	11 7/8" NI-80	2	2
J2	18-00-00	11 7/8" NI-80	1	18
J2 DJ	18-00-00	11 7/8" NI-80	2	4
B2 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1 L	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B3 L	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B6	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B7	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
В9	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5 DR	8-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connector Summary				
Qty	Manuf	Product			
11	H1	IUS2.56/11.88			
2	H1	IUS2.56/11.88			
4	H1	IUS2.56/11.88			
2	H1	IUS2.56/11.88			
11	H2	IUS2.56/9.5			
2	H2	IUS3.56/11.88			
2	H4	HUS1.81/10			
2	H5	HU312-2			

UPDATED



FROM PLAN DATED: APR 2017

**BUILDER: GREENYORK HOMES** 

**SITE:** DEGREY DR

MODEL: YORK 2

ELEVATION: A

LOT:

**CITY: BRAMPTON** 

SALESMAN: R D DESIGNER: PL REVISION:

NOTES:

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

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

LOADING:

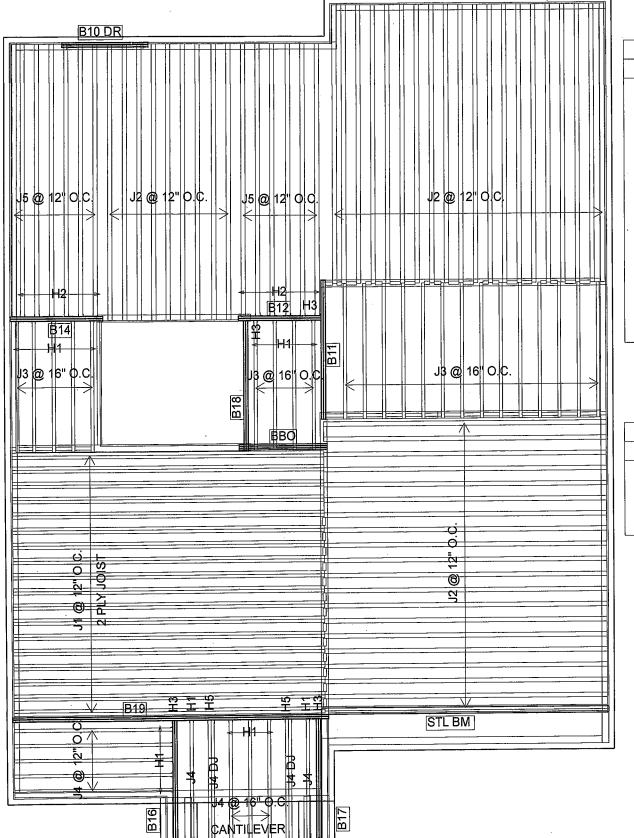
DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup> TILED AREAS: 20 lb/ft

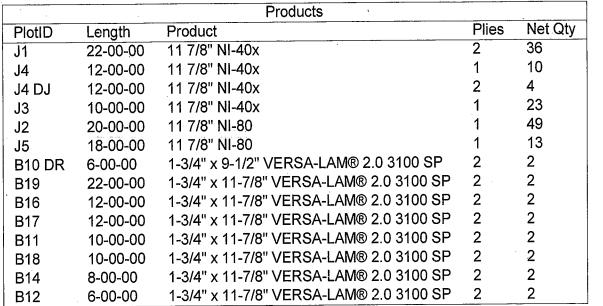
**SUBFLOOR: 3/4" GLUED AND NAILED** 

APPLICATION AS PER O.B.C 9.30.6.

**DATE:** 2017-05-15

1st FLOOR





Connector Summary				
Qty	Manuf	Product		
19	H1	IUS2.56/11.88		
12	H2	IUS3.56/11.88		
4	H3	HGUS410		
2	H5	HUC312-2		



FROM PLAN DATED: APR 2017

**BUILDER:** GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 2

**ELEVATION:** A

LOT:

**CITY: BRAMPTON** 

SALESMAN: R D DESIGNER: PL REVISION:

### NOTES:

REFER TO THE NORDIC INSTALLATION GUIDE FOR PROPER STORAGE AND INSTALLATION. SQUASH BLOCKS OF 2x4, 2x6, 2x8 #2 S.P.F. REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. MULTIPLE SQUASH BLOCKS REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. CANTILEVERED JOISTS INCLUDING CANT' OVER BRICK REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURE 7 TABLES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD **CUT OPENINGS** SEE FIGURE 7 TABLES 1 & 2 OF THE INSTALLATION GUIDE. CERAMIC TILE APPLICATION AS PER O.B.C. 9.30.6

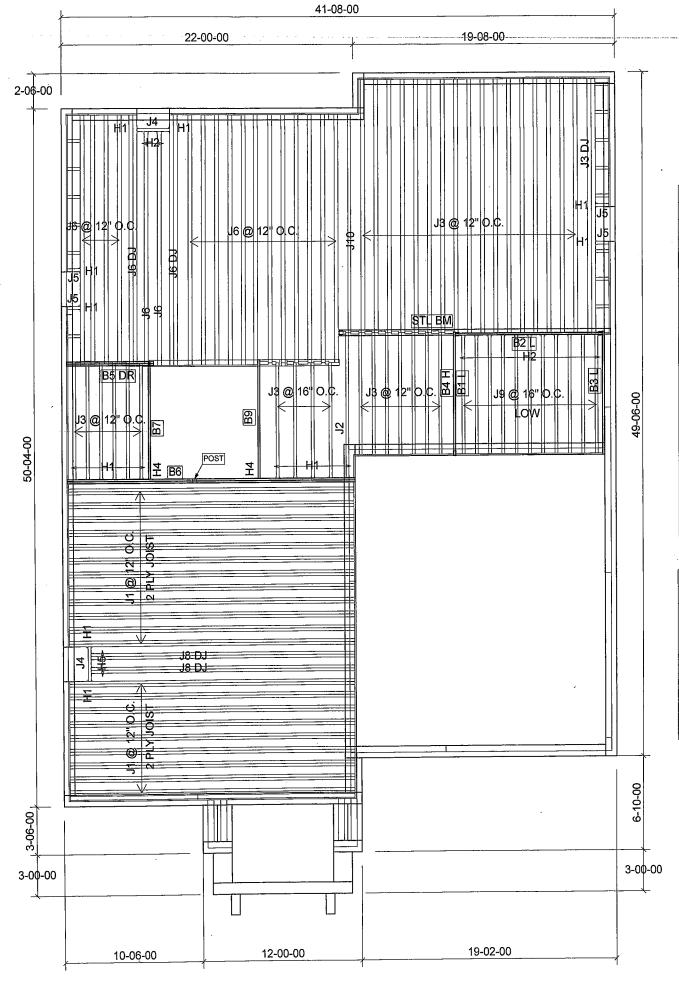
### LOADING:

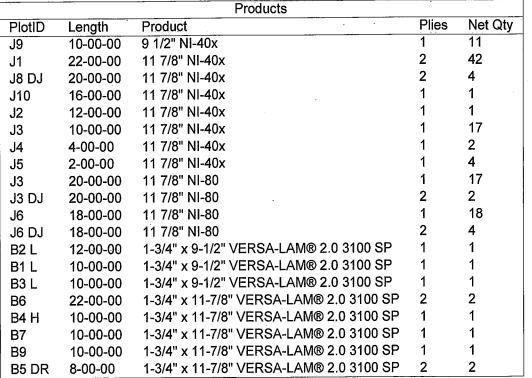
DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup> TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

**DATE:** 2017-05-15

2nd FLOOR





	Connector Summary				
Qty	Manuf	Product			
11	H1	IUS2.56/11.88			
2	H1	IUS2.56/11.88			
4	H1	IUS2.56/11.88			
2	H1	IUS2.56/11.88			
11	H2	IUS2.56/9.5			
2	H2	IUS3.56/11.88			
2	H4	HUS1.81/10			
2	H5	HU312-2			



FROM PLAN DATED: APR 2017

**BUILDER: GREENYORK HOMES** 

SITE: DEGREY DR

MODEL: YORK 2

**ELEVATION:** B

LOT:

**CITY: BRAMPTON** 

SALESMAN: R D DESIGNER: PL REVISION:

NOTES:

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

SQUASH BLOCKS OF 2x4, 2x6, 2x8 #2 S.P.F
REQ'D UNDER INTERIOR UNIFORM LOAD
BEARING WALLS. MULTIPLE SQUASH
BLOCKS REQ'D UNDER CONCENTRATED
LOADS. SEE FIGURE 1. CANTILEVERED
JOISTS INCLUDING CANT' OVER BRICK REQ.
I-JOIST BLOCKING ALONG BEARING AND
RIMBOARD CLOSURE AT ENDS. SEE
FIGURES 4 & 5 FOR REINFORCEMENT
REQUIREMENTS. FOR HOLES INCLUDING
DUCT CHASE AND FIELD CUT OPENINGS
SEE FIGURE 7, TABLES 1 & 2. CERAMIC TILE
APPLICATION AS PER O.B.C 9.30.6.

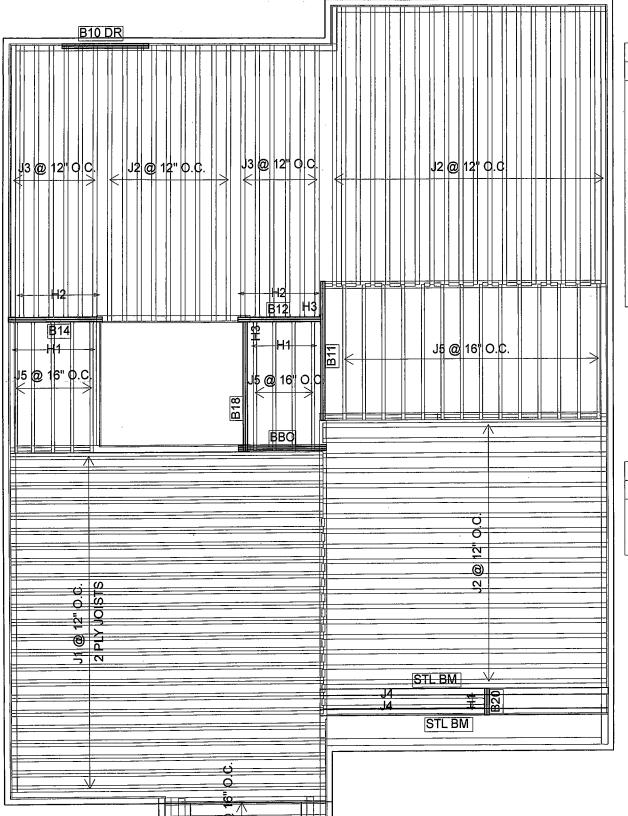
LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft<sup>2</sup> DEAD LOAD: 20.0 lb/ft<sup>2</sup> TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

**DATE:** 2017-05-15

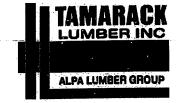
1st FLOOR



B21 DR

		Products		
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	46
J4	12-00-00	11 7/8" NI-40x	1	6
J5	10-00-00	11 7/8" NI-40x	1	23
J2	20-00-00	11 7/8" NI-80	1	47
J3	18-00-00	11 7/8" NI-80	1 ·	13
B21 DR	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	. 2
B10 DR	6-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B18	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	8-00-00	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	2	2
B20	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary						
Qty	Manuf	Product				
11	H1	IUS2.56/11.88				
12	H2	IUS3.56/11.88				
2	H3	HGUS410				



FROM PLAN DATED: APR 2017

**BUILDER:** GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 2

**ELEVATION**: B

LOT:

**CITY: BRAMPTON** 

SALESMAN: R D
DESIGNER: PL
REVISION:

### NOTES:

REFER TO THE NORDIC INSTALLATION GUIDE FOR PROPER STORAGE AND INSTALLATION. SQUASH BLOCKS OF 2x4, 2x6. 2x8 #2 S.P.F. REQ'D UNDER INTERIOR UNIFORM LOAD BEARING WALLS. MULTIPLE SQUASH BLOCKS REQ'D UNDER CONCENTRATED LOADS. SEE FIGURE 1. CANTILEVERED JOISTS INCLUDING CANT' OVER BRICK REQ. I-JOIST BLOCKING ALONG BEARING AND RIMBOARD CLOSURE AT ENDS. SEE FIGURE 7 TABLES 4 & 5 FOR REINFORCEMENT REQUIREMENTS. FOR HOLES INCLUDING DUCT CHASE AND FIELD CUT OPENINGS SEE FIGURE 7 TABLES 1 & 2 OF THE INSTALLATION GUIDE. 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> TILED AREAS: 20 lb/ft

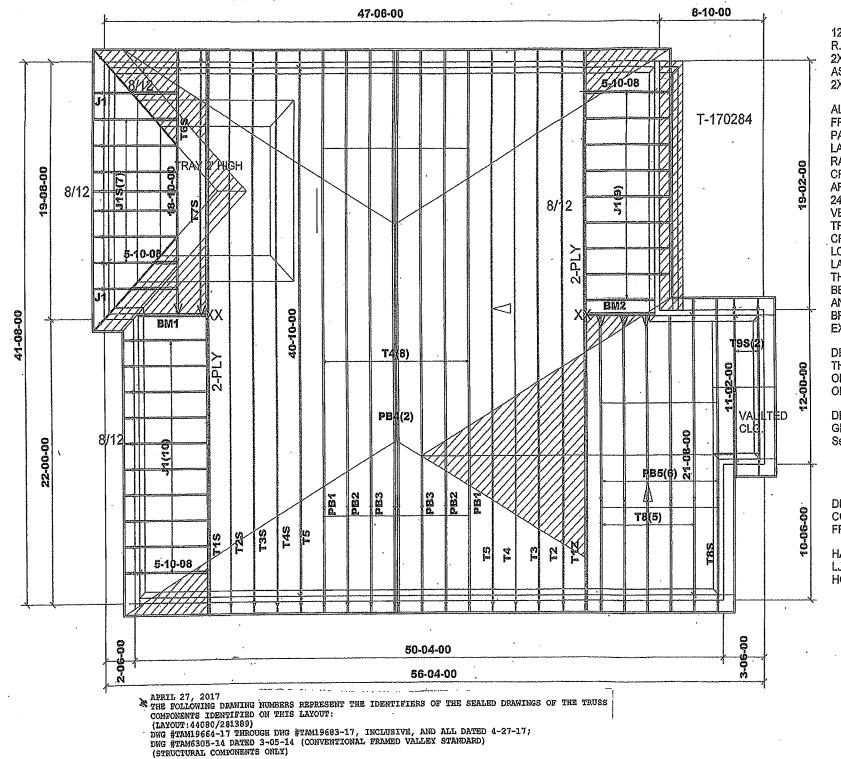
TILED AREAS: 20 ID/IL

**SUBFLOOR:** 3/4" GLUED AND NAILED

**DATE:** 2017-05-19

2nd FLOOR

14/12 ROOF PITCH BEAMS(BM):2-2X10 UNLESS NOTED



12" FINISH O.H R.T.M.C 2X6 EXTERIOR WALLS ASPHALT SHINGLES 2X6 FASCIA BOARD

ALL CONVENTIONAL ROOF FRAMING TO CONFORM TO PART9 OF THE OBC. LATEST EDITION ROOF RAFTERS THAT MEET OR CROSS OVER TRUSSES ARE TO BE 2"X4"SPF@ 24"o.c, WITH A 2"X4"SPF VERTICAL POST TO THE TRUSS UNDER AT EACH CROSS POINT.POSTS LONGER THAN 6' TO BE LATERALLY BRACED SO THAT THE DISTANCE BETWEEN END POINTS AND BETWEEN ROWS OF **BRACING DOES NOT** EXCEED 6'.

DESIGN CONFORMS WITH THE RELEVANT SECTION OF THE LATEST EDITION OF O.B.C. PART.9

**DESIGN LOADS: GROUND SNOW LOAD** Ss= 1.3 kPa

TC DEAD 3 PSF BC LIVE 10.5 PSF BC DEAD 7 PSF

DENOTES CONVENTIONAL FRAMING

**HARDWARE** LJS26DS(V) HGUS26-2(XX) DATE: 42717 BCIN:26064; FIRM:BCIN #29991 ENGINEERING ONLY-DIMENSIONS TO BE VERIFIED ON SITE

SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING

SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING DESIGNER ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO TRUSS INSTALLATION, ALL NOTES DESIGNATING PER PLAN WORK DO NOT REPRESENT A PART OF THE SCOPE OF THIS SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSBILTY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY THE BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNERS PRIOR TO FABRICATION OF ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE ROOF TRUSS COMPONENTS REVIEWED IN THIS SUBMISSION.

LOT SPECIFIC SCHEDULE 1 REQUIRED FOR EACH INDIVIDUAL LOJ.

THROUGH DWG #TAM, F INCLUSIVE, DATED;

STRUCTURAL COMPONENTS ONLY); THIS LAYOUT MUST BE READ TOGETHER WITH REFERENCED TRUSS COMPONENT DRAWINGS ANDSEALED HARDWARE DRAWINGS. HANGERS AND HARDWARE SPECIFIED ON THIS LAYOUT ONLY. REFER TO ATTACHED SEALED REFERENCED DRAWINGS FOR ADDITIONAL BRACING (IF BRACING IS SHOWN TO BE REQUIRED PROVIDE THE FOLLOWING BRACING):

PROVIDE 1 ROW OF 2 X 4#2 SPF CONTINUOUS LATERAL BRACES ALONG WEB MEMBERS SPECIFIED ON REFERENCED SEALED TRUSS COMPONENT DRAWINGS USING 2 - 3-14" COMMON WIRE NAILS PER WEB MEMBER. THEN PROVIDE 2 X 4 #2 SPF "X-BRACING" ALONG THESE SAME WEB MEMBERS AT LOCATIONS INDICATED (\*) USING THE SAME ALONG THESE SAME WEST MEMBERS AT LOCATIONS INDICATED (7) DOING THE SAME
NAILING, PROVIDE BLOCKING IF REQUIRED (DO NOT ARCH BRACING).
PROVIDE 2 X 4 #2 SPF T-BRACE ALONG FULL LENGTH OF LATERALLY BRACED WEB
MEMBERS OF 1 PLY TRUSSES COMPONENTS REQUIRING "T-BRACE" USING 1 ROW OF 314" COMMON WIRE NAILS AT 6" OCC. SIMILARLY PROVIDE 2 X 6 BRACE WITH 2 ROWS OF
NAILING FOR 2 PLY TRUSS COMPONENTS AND 2 X 8 BRACE WITH 3 ROWS OF NAILING FOR 3 PLY TRUSS COMPONENTS.

(1) 2 X 6 #2 SPF ON FLAT OVER PLYWOOD SHEATHING.
(2) 2 X 6 #2 SPF RIDGE BEAM SUPPORTED AT EACH END OVER BASE TRUSS
COMPONENTS AND AT LOCATIONS MARKED BY "X".
(3) 2 X 6 #2 SPF ROOF RAFTERS AT 24" O'GWITH MAXIMUM SUPPORT SPAN 6"0" (ADD 2 X
4 VERTICAL SUPPORTS TO TRUSS BASE BELOW WHERE NECESSARY.

ALL CONVENTIONAL FRAMING TO BE DISTRIBUTED UNIFORMLY ALONG BASE TRUSS COMPONENTS. PROVIDE 2 X 4 KNEE-WALLS WHERE NECESSARY WITH STUDS AT24" CIC.

ALL CONVENTIONAL FRAMING TO CONFORM TO ONTARIO BUILDING CODE (CURRENT EDITION).

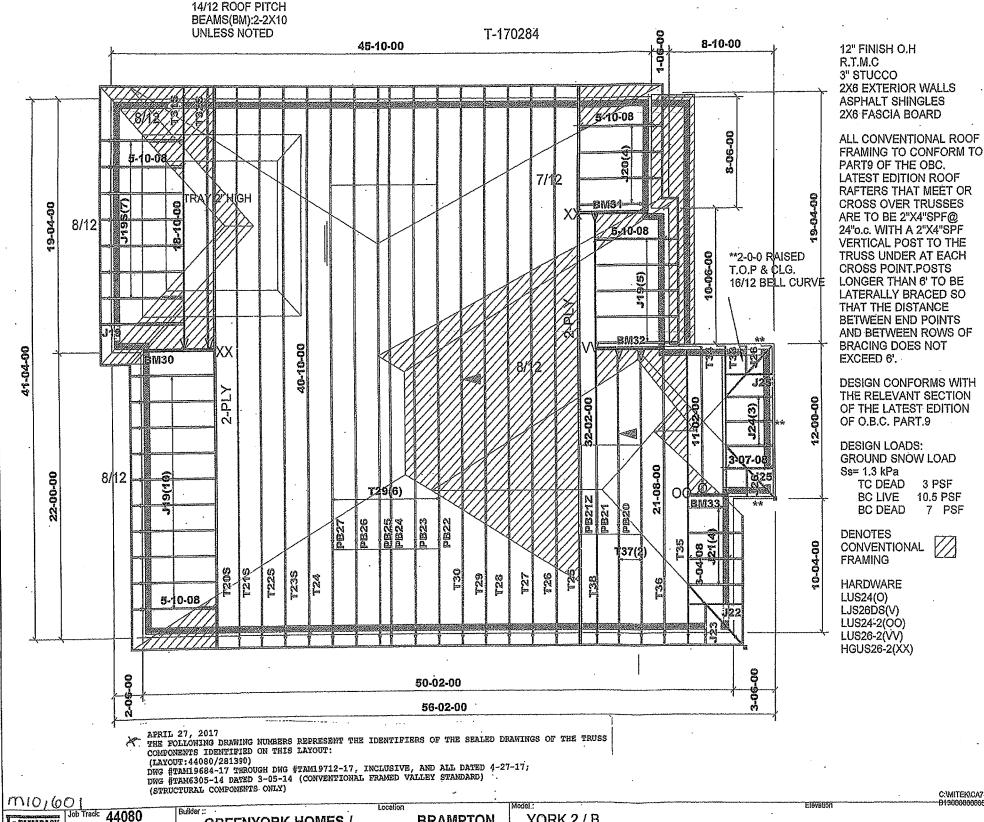
REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE, I AM QUALIFIED AND THE FIRM IS REGISTERED, IN THE APPROPRIATE CLASSES AND/OR CATEGORIES. REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG #TAM 19713-17 BCIN: 26064 FIRM: 29991 SEALED STRUCTURAL COMPONENTS ONLY



C:\MITEKICA742AUOBS\ M10,601 Job Track: 44080 **GREENYORK HOMES** / THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER PURPOSE,

MITEL VIE ayout ID: 281389 Project: DEGREY DRIVE Date: 4/26/2017 Designar: JG Plan Log: . 91851



YORK 2/B

TRUSSES INC IF UTLILZED FOR ANY OTHER PURPOSE,

THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC., SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER OR UTILIZED FOR ANY PURPOSE OTHER THAN THE MANUFACTURE OF TRUSSES BY TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF

BRAMPTON

**GREENYORK HOMES /** 

roject: DEGREY DRIVE

Dale: 4/26/2017 Designer: JG

**TAMARACK** 

Layout ID: 281390

Plan Log: 91851

DATE: 42717 BCIN:26064; FIRM:BCIN #29991 ENGINEERING ONLY-DIMENSIONS TO BE VERIFIED ON SITE

SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING DESIGNER ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING ALL CONVENTIONAL FRAMING TO BE SPECIFIED, REVIEWED, AND CONFIRMED BY BUILDING DESIGNER PRIOR TO TRUSS INSTALLATION. ALL NOTES DESIGNATING PER PLAN WORK DO NOT REPRESENT A PART OF THE SCOPE OF THIS 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 THE BUILDING DESIGNER RANDOR PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNERS PRIOR TO FADRICATION TO ENSURE ADEQUATE LOAD CAPACITY WITH RESPECT TO THE ROOF TRUSS COMPONENTS REVIEWED IN THIS SUBMISSION.

#### LOT SPECIFIC SCHEDULE 1 REQUIRED FOR EACH INDIVIDUAL LOT.

DWG #TAM A THROUGH DWG #TAM,

INCLUSIVE, DATED ; 🙉

STRUCTURAL COMPONENTS ONLY); THIS LAYOUT MUST BE READ TOGETHER WITH REFERENCED TRUSS COMPONENT DRAWINGS ANDSEALED HARDWARE DRAWINGS. HANGERS AND HARDWARE SPECIFIED ON THIS LAYOUT ONLY. REFER TO ATTACHED SEALED REFERENCED DRAWINGS FOR ADDITIONAL BRACING

(IF BRACING IS SHOWN TO BE REQUIRED PROVIDE THE FOLLOWING BRACING):

PROVIDE 1 ROW OF 2 X 4 #2 SPF. CONTINUOUS LATERAL BRACES ALONG WEB MEMBERS SPECIFIED ON REFERENCED SEALED TRUSS COMPONENT DRAWINGS USING 2 - 3-114" COMMON WIRE HALLS PER WEB MEMBER. THEN PROVIDE 2 X 4 #2 SPF "X-BRACING" ALONG THESE SAME WEB MEMBERS AT LOCATIONS INDICATED (\*) USING THE SAME NAILING, PROVIDE BLOCKING IF REQUIRED (DO NOT ARCH BRACING). PROVIDE 2 X 4 #2 SPF "T-BRACE ALONG FULL LENGTH OF LATERALLY BRACED WEB MEMBERS OF 1 PLY TRUSSES COMPONENTS REQUIRING "T-BRACE" USING 1 ROW OF 3-114" COMMON WIRE NAILS AT 5" O/C. SIMILARLY PROVIDE 2 X 6 BRACE WITH 2 ROWS OF NAILING FOR 2 PLY TRUSS COMPONENTS AND 2 X 8 BRACE WITH 3 ROWS OF NAILING FOR 2 PLY TRUSS COMPONENTS. FOR 3 PLY TRUSS COMPONENTS.

(1) 2 X 6 #2 SPF ON FLAT OVER PLYWOOD SHEATHING. (2) 2 X 6 #2 SPF RIDGE BEAM SUPPORTED AT EACH END OVER BASE TRUSS COMPONENTS AND AT LOCATIONS MARKED BY "X". (3) 2 X 6 #2 SPF ROOF RAFTERS AT 24" DIG WITH MAXIMUM SUPPORT SPAN 6"0" (ADD 2 X 4 VERTICAL SUPPORTS TO TRUSS BASE BELOW WHERE NECESSARY.

ALL CONVENTIONAL FRAMING TO BE DISTRIBUTED UNIFORMLY ALONG BASE TRUSS COMPONENTS. PROVIDE 2 X 4 KNEE-WALLS WHERE NECESSARY WITH

ALL CONVENTIONAL FRAMING TO CONFORM TO ONTARIO BUILDING CODE (CURRENT EDITION).

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 THE FIRM IS REGISTERED, IN THE APPROPRIATE CLASSES AND/OR CATEGORIES, REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG #TAM 197147) BCIN: 26064 FIRM: 29991 **SEALED STRUCTURAL** COMPONENTS ONLY



C:\MITEK\CA742AIJOBS\

Use one form for each individual who review	ws and takes re	sponsibility for design activiti	es with respect to th	e project.
A Project Information		Application in	imber:	
Building number, street name			Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other descrip	otion	
B. Individual who reviews and takes	s responsibili	ty for design activities		
Name		Firm		
SAM KATSOULAKOS, P. ENG.		MICRO CITY ENGIN	IEERING SERVICE	SINC.
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail	
Telephone number	Fax number		Cell number	
(519) 287-2242 Business	(519) 287-5750		,	
C. Design activities undertaken by in Division C]			ilding Gode Tabl	e 3:5:2:1, of
House	HVAC -		Building Stru	
☐ Small Buildings☐ Large Buildings		Services	☐ Plumbing – F	
☐ Complex Buildings	☐ Fire Pro	on, Lighting and Power	☐ Plumbing – A☐ On-site Sewa	
Description of designer's work GREENYO	RK HOMES - D	EGREY DR - MODEL · YOR	K 2 - FLEV A	age Systems
1ST FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	IFIC)		"
REVIEW PRE-ENGINEERED FLOOR SYST	TEM COMPON	ENT DRAWINGS AND LAYO	UT PLACEMENT P	LAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE D SUPPORTING STRUCTURE TO BE REVIE	WG#1AM2659	4-17 DATED 5-26-17)	INO DECICIES	
D. Declaration of Designer	WED AND VER	KILED BY MOVILLED BOILD	ING DESIGNER.	
The second secon				
I, SAM KATSOULAKOS, P. ENG		de	clare that (choose o	ne as appropriate):
(print name 区 I review and take responsibilit C, of the Building Code. I am q	v for the desian	work on behalf of a firm regise firm is registered, in the app	stered under subsec propriate classes/ca	ction 3.2.4.of Division tegories.
Individual BCIN:26064	4			
Firm BCIN: 2999	1	<del></del>		
☐ I review and take responsibility under subsection 3.2.5.of Divis	for the design a sion C, of the Bu	and am qualified in the appro uilding Code.	priate category as a	ın "other designer"
Basis for exemption from r  The design work is exempt from	n the registratio		ents of the Building (	Code.
Basis for exemption from r I certify that:	egistration and	qualification:		
The information contained in this sc	hedule is true to	the heet of my knowledge		
I have submitted this application wit				
Date & 2	617	Signature of Designer	l-	

#### 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#TAM26594-17-S

Use one form for each individual who review	ws and takes re			he project.
		Application in	CACH CONTRACTOR AND	
Building number, street name			Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other descri	ption	
B. Individual who reviews and take	s responsibili	ty for design activities		
Name	- Secretary - Secretary	Firm	TANK TERROR BENTALIS VILLENIA SELECTION A	
SAM KATSOULAKOS, P. ENG.		MICRO CITY ENGI		
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality GLENCOE	Postal code N0L 1M0	Province ONTARIO	E-mail	
Telephone number (519) 287-2242 Business	Fax number (519) 287-5750		Cell number	
©. Design activities undertaken by	L		ilding Code Tab	163524 of
Division C]				
☐ House		- House	Building Str     Building Str	
☐ Small Buildings☐ Large Buildings		g Services on, Lighting and Power	☐ Plumbing — ☐ Plumbing — /	
☐ Complex Buildings	☐ Fire Pro		☐ On-site Sev	
Description of designer's work GREENYO				vage dystems
1ST FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	IFIC)		~
REVIEW PRE-ENGINEERED FLOOR SYS	TEM COMPON	ENT DRAWINGS AND LAYO	OUT PLACEMENT	PLAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE D	WG #TAM2659	5-17 DATED 5-26-17).		
SUPPORTING STRUCTURE TO BE REVIE	:WED AND VEH	RIFED BY QUALIFIED BUILI	DING DESIGNER.	Sidadanneum maanamana europapa maasil
D. Declaration of Designer				
I, SAM KATSOULAKOS, P. ENG		de	eclare that (choose	one as appropriate):
(print name	,	and the second section of the second		
☑ I review and take responsibilit C, of the Building Code. I am o	ty for the design qualified, and th	e firm is registered, in the ap	propriate classes/c	ategories.
Individual BCIN: <u>2606</u>	4			
Firm BCIN: 2999	1	_		
☐ I review and take responsibility under subsection 3.2.5.of Divi			opriate category as	an "other designer"
Basis for exemption from	registration:			
☐ The design work is exempt fro		on and qualification requirem	ents of the Building	Code.
Basis for exemption from	registration and	qualification:		
I certify that:	- •			
The information contained in this so	chedule is true t	o the best of my knowledge.		
2. I have submitted this application wi				
			$\sim$	
	2 /22 2			
Date 5	2617	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, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG#TAN26595-17-S DWG#TAN26599-17-S

Use one form for each individual who review	vs and takes re			e project.
A. Project Information		Application nu	Tax disk 1904 William Strong and Strong St. T. Member 1937	
Building number, street name			Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other descrip	tion	
B. Individual who reviews and take	s responsibili	ty for design activities		
Name SAM KATSOULAKOS, P. ENG.		Firm MICRO CITY ENGIN	FERING SERVICE	SINC
Street address	,	MINORO OTT ENGIN	Unit no.	Lot/con.
R.R #1, PO BOX 61  Municipality	Postal code	Dravinas	E-mail	
GLENCOE	NOL 1M0	Province ONTARIO		
Telephone number (519) 287-2242 Business	Fax number (519) 287-5756	)	Cell number	
G. Design activities undertaken by	ndividual ide	ntified in Section B. [Bu	ilding Code Tabl	e 3.5.2.1. of
Division C]				
☐ House		- House	☑ Building Stru	
☐ Small Buildings ☐ Large Buildings		g Services on, Lighting and Power	☐ Plumbing – F☐ Plumbing – A	
☐ Large Buildings☐ Complex Buildings		on, Lighting and Power otection	☐ On-site Sewa	
Description of designer's work GREENYO				290 0 7 0 10 11 10
2ND FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	CIFIC)		
REVIEW PRE-ENGINEERED FLOOR SYS			UT PLACEMENT P	LAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE I SUPPORTING STRUCTURE TO BE REVIE	)WG #TAM2659	96-17 DATED 5-26-17).	ING DESIGNED	
D. Declaration of Designer	VVED AND VEI	VILLO DI QUALIFILO BUILL	MING DEGIGNER.	
- Partition 1942 (1973) Filtrand Set Taleste Sport Section 1945 - Carrier 1947 (1947) Set 1947 (1947)		do	olaro that (abooso o	no as appropriato):
I, SAM KATSOULAKOS, P. ENG (print nam-	<u> </u>	ue	clare that (choose o	ne as appropriate).
☑ I review and take responsibili C, of the Building Code. I am	y for the desigr			
Individual BCIN: <u>2606</u>	34			
Firm BCIN: 2999				
☐ I review and take responsibilit under subsection 3.2.5.of Divi			ppriate category as a	an "other designer"
Basis for exemption from	registration:			
☐ The design work is exempt from		on and qualification requireme	ents of the Building	Code.
Basis for exemption from	registration and	l qualification:	·	
I certify that:				
The information contained in this s	chedule is true t	to the best of my knowledge.		
2. I have submitted this application w	ith the knowled	ge and consent of the firm.		
·			/	
Date	Sibir	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.
- 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#TAM 2659617-S DWG#TAM 26600-17-S gran?

Use one form for each individual who review  A. Project information		Assilostos		e project.
Building number, street name		Application iu	Unit no.	Lot/con.
	Double de	Diameter de la companya de la compan	l'on	
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other descrip	tion	
B. Individual who reviews and takes	s responsibili	ty for design activities		
Name SAM KATSOULAKOS, P. ENG.		Firm MICRO CITY ENGIN	FERING SERVICE	S INC.
Street address		MICICO OTT LITORI	Unit no.	Lot/con.
R.R #1, PO BOX 61  Municipality	Postal code	Province	E-mail	
GLENCOE	NOL 1MO	ONTARIO		
Telephone number (519) 287-2242 Business	Fax number (519) 287-5750	)	Cell number	
G. Design activities undertaken by i			liding Code Tab	e.3:5:2-1::of
Division C]				
☐ House	☐ HVAC -		☑ Building Street ☐ Plumbing – I	
☐ Small Buildings ☐ Large Buildings		g Services on, Lighting and Power		
☐ Complex Buildings	☐ Fire Pro	otection	☐ On-site Sew	
Description of designer's work GREENYO 2ND FLOOR (SCHEDULE IS NOT ISSUED	RK HOMES - [	<u>DEGREY DR - MODEL: YOR</u> PIEIC)	K 2 – ELEV. B	
REVIEW PRE-ENGINEERED FLOOR SYS	TEM COMPON	ENT DRAWINGS AND LAYO	UT PLACEMENT F	PLAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE D	WG #TAM2659	97-17 DATED 5-26-17).	INC DESIGNED	
SUPPORTING STRUCTURE TO BE REVIE D. Declaration of Designer	VED AND VER	RIFED BY QUALIFIED BUILD	ING DESIGNER.	
CSS COMMON CONTROL CON		do	alara that (abassa	ano ao ampropriato):
I, <u>SAM KATSOULAKOS, P. ENG</u>	a)	ue	ciare triat (choose t	one as appropriate):
☑ I review and take responsibilition	y for the design	work on behalf of a firm regi	stered under subse	ection 3.2.4.of Division
C, of the Building Code. I am	qualified, and th	e firm is registered, in the app	oropriate classes/ca	ategories.
Individual BCIN: 2606	<u> </u>			•
Firm BCIN: <u>2999</u>	11			
│ □ I review and take responsibilit	v for the design	and am qualified in the appro	onriate category as	an "other designer"
under subsection 3.2.5.of Divi	sion C, of the B	uilding Code.	p	
Individual BCIN:				
Basis for exemption from	registration:			
☐ The design work is exempt from			ents of the Building	Code.
Basis for exemption from	registration and	d qualification:		
I certify that:  1. The information contained in this s	chedule is true t	to the best of my knowledge.		
I have submitted this application w				,
				`
			//_	
Date	52617	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.
- 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, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

DWG#TAM 26592<sub>17-8</sub> DWG#TAM 266017-8

# NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLIGTON ONTARIO
May 8, 2017 07:29

PROJECT J1 1ST FLOOR

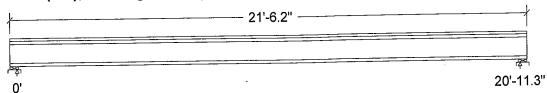
### **Design Check Calculation Sheet**

Nordic Sizer - Canada 6.4

### Loads:

	Load	Type	Distribution	Pat- tern	Location [ft] Start End	Magnitude Start End	Unit
	Load1	Dead	Full Area Full Area			20.00	psi psf
ı	Load2	Live	rull Alea				

# Maximum Reactions (lbs), Bearing Resistances (lbs) and Bearing Lengths (in):



	U	
Unfactored: Dead Live	209 419	209 419
Factored: Total	890	890
Bearing: Resistance Joist Support Des ratio Joist	4672 13452 0.19	4672 13452 0.19 0.07
Support Load case Length Min req'd	0.07 #2 4-3/8 1-3/4	#2 4-3/8 1-3/4 No
Stiffener Kd KB support fcp sup	No 1.00 1.00 769	1.00 1.00 769 1.00
Kzcp sup	1.00	1.00

## Nordic Joist 11-7/8" NI-40x 2-ply Floor joist @ 12" o.c.

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

Total length: 21'-6.2"; 3/4" nailed and glued OSB sheathing

This section PASSES the design code check.

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

Lilling States Desi	gir daing out out		<del></del>	
Criterion	Analysis Value	Design Value	Unit	Analysis/Design
	Vf = 890	Vr = 4672	lbs	Vf/Vr = 0.19
Shear	Mf = 4659	Mr = 12509	lbs-ft	Mf/Mr = 0.37
Moment(+) Perm. Defl'n	$0.11 = \langle L/999$	0.70 = L/360	in	0.16
Live Defl'n	$0.23 = \langle L/999 \rangle$	0.52 = L/480	in 🎉	ROFESSION 0.43
Total Defl'n	0.34 = L/739	1.05 = L/240	in o	0.32
Bare Defl'n	$0.25 = \langle L/999 \rangle$	0.70 = L/360	in 🔗	0.36
Vibration	Lmax = 20'-11	$L_{v} = 23'-1$	ft   🔊	The state of the s
Defl'n	= 0.024	= 0.031	in S	KATSOULAKOS 30.78
DCII II				

WO NO .TAM 265681' Structural Component only

#### Nordic Sizer - Canada 6.4

Page 2

Additional	Data:				,					
FACTORS:	f/E	KD	KH	KZ	KL .	KT		KN		
Vr	2336	1.00	1.00	-	_	-	_	-	#2	
Mr+	6255	1.00	1.00	-	1.000	-	-	-	#2	
1	O / I . I			-	-	-	_	-	#2	
CRITICAL LO	DAD COMBI	NATIONS	3:							
Shear										
Moment(+)										
Deflection										
			0 + 1.0L		•					
			) + 1.0L							
	LC #2									
Bearing										
			LC #2 = 1			, ,		<u>+ 1 1</u>		
Load Type					arth,grou					
					ive(stora			r-rrre		
					ern load :					
		ions (L	us) are	listed :	in the Ana	атуѕтѕ	output			
CALCULATION		<b>c</b>	412.06.11		1 E C	10-06	1ha/n1			
Deilectio	on: Llef:	I = 4	413eU6 I	o-in2/p.	ly K= 6	. Taene	TDS/bra	raind o	now \	
"Tive" de	errection	= Deile	ection I	rom all	non-dead	Toads	(TTAG,	WILLIA, S.	110w)	

### **Design Notes:**

CONFORMS TO UBC 2012

- 1. WoodWorks analysis and design are in accordance with the 2010 National Building Code of Canada (NBC Part 4) and the CSA O86-14 Engineering Design in Wood standard (May 2014 edition).
- 2. Please verify that the default deflection limits are appropriate for your application.
- 3. Refer to 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. 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.

DWB NO. TAM26568-17.
STRUCTURAL

COMPONENT ONLY

# NORDIC STRUCTURES

COMPANY TAMARACK LUMBER INC. 3269 NORTH SERVICE ROAD BURLIGTON ONTARIO May 8, 2017 07:34 **PROJECT** J1 2ND FLOOR

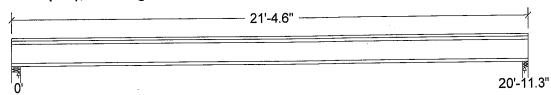
### **Design Check Calculation Sheet**

Nordic Sizer - Canada 6.4

### Loads:

Load	Туре	Distribution	Pat-	Location	[ft]	Magnitud	de	Unit
Load	1150		tern	Start	End	Start	End	
Load1	Dead	Full Area				20.00		psf
Load2	Live	Full Area				40.00		psf

## Maximum Reactions (lbs), Bearing Resistances (lbs) and Bearing Lengths (in):



	0'	·	20'-11.3"
Unfactored: Dead Live	209 419		209 419
Factored: Total	890		890
Bearing: Resistance Joist Support Des ratio	4672 15470		4306 9513
Joist Support Load case	0.19 0.06 #2		0.21 0.09 #2
Length Min req'd Stiffener	4-3/8 1-3/4 No		2-3/4 1-3/4 No
Kd KB support	1.00 1.00 769		1.00 1.00 769
fcp sup Kzcp sup	1.15		1.13

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

### Nordic Joist 11-7/8" NI-40x 2-ply Floor joist @ 12" o.c.

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

Total length: 21'-4.6"; 3/4" nailed and glued OSB sheathing with 1/2" gypsum ceiling

This section PASSES the design code check.

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

Criterion	Analysis Value	Design	Value	Unit	Analysis/Design
Shear	Vf = 890	Vr =	4672	lbs	Vf/Vr = 0.19
Moment (+)	Mf = 4659	Mr =	12509	lbs-ft 🚜	OFENSION = 0.37
Perm. Defl'n	$0.11 = \langle L/999$	0.70 =	L/360	in 🧖	0.16
Live Defl'n	$0.23 = \langle L/999$	0.52 =	L/480	in 🔑	0.43
Total Defl'n	0.34 = L/739	1.05 =	L/240	in /3 (	5 0 32 go.32
Bare Defl'n	$0.25 = \langle L/999 \rangle$	0.70 =	L/360	in W	mu.36
Vibration	Lmax = 20'-11	Lv =	23 <b>'</b> -7	ft S	KATSOULAKOS 5
Defl'n	= 0.023	=	0.031	in \	<b>9.</b> 74
BCII II		L		12	

DOO NO.TAM 265691 Structural Component only

#### Nordic Sizer - Canada 6.4

Page 2

```
Additional Data:
                                                                        LC#
                                                                  KN
FACTORS:
            f/E
                     KD
                            KΗ
                                    ΚZ
                                            KL
                                                                        #2
                    1.00
۷r
            2336
                           1.00
                                                                        #2
                                          1.000
           6255
                    1.00
                           1.00
Mr+
                                                                        #2
          371.1 million
EI
CRITICAL LOAD COMBINATIONS:
          : 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 W=wind S=snow H=earth, groundwater E=earthquake
             L=live(use,occupancy) Ls=live(storage,equipment)
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:
                         413e06 lb-in2/ply K= 6.18e06 lbs/ply
Deflection: Eleff =
 "Live" deflection = Deflection from all non-dead loads (live, wind, snow...)
```

### **Design Notes:**

CONFORMS TO OBG 2012

- 1. WoodWorks analysis and design are in accordance with the 2010 National Building Code of Canada (NBC Part 4) and the CSA O86-14 Engineering Design in Wood standard (May 2014 edition).
- 2. Please verify that the default deflection limits are appropriate for your application.
- 3. Refer to 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. 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.



DWO NO. TAM26569 -17 STRUCTURAL COMPONENT ONLY



COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLIGTON ONTARIO
May 8, 2017 07:36

PROJECT
J2 2ND FLOOR

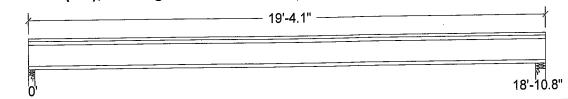
### **Design Check Calculation Sheet**

Nordic Sizer - Canada 6.4

### Loads:

Load	Туре	Distribution	Pat- tern	Location Start	[ft] End	Magnitud Start	le End	Unit
Load1 Load2	Dead Live	Full Area Full Area				20.00		psf psf

# Maximum Reactions (Ibs), Bearing Resistances (Ibs) and Bearing Lengths (in):



	0'	
Unfactored: Dead Live	189 378	189 378
Factored: Total Bearing:	803	803
Resistance Joist Support	2220 6659	2336 10829
Des ratio Joist Support Load case	0.36 0.12 #2	0.34 0.07 #2
Length Min req'd Stiffener	2-3/4 1-3/4 No	4-3/8 1-3/4 No
Kd KB support fcp sup	1.00 1.00 769	1.00 1.00 769
Kzcp sup	1.13	1.15

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: 19'-4.1"; 3/4" nailed and glued OSB sheathing with 1/2" gypsum ceiling

This section PASSES the design code check.

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

Shear  Moment(+) Perm. Defl'n Live Defl'n Total Defl'n Bare Defl'n Vibration  VI = 003 Mr = 11609 0.63 = L/360 0.47 = L/480 0.94 = L/240 0.63 = L/360 In	
Shear	
Moment (+) Perm. Defl'n Live Defl'n Total Defl'n Bare Defl'n Vibration  Mf = 3794 0.11 = <l 0.47="L/480" 0.63="L/360&lt;/td" 0.94="L/240" 999=""><td>.34</td></l>	.34
Perm. Defl'n Live Defl'n Total Defl'n Bare Defl'n Vibration  0.11 = <l 0.47="L/480" 0.63="L/360" 0.75="" 0.94="L/240" 999="" in="" katsoulakos<="" s="" td=""><td>.33</td></l>	.33
Live Defl'n Total Defl'n Bare Defl'n Vibration	.17
Total Defl'n Bare Defl'n Vibration    0.32 = L/715	.45
Bare Defl'n Vibration $0.24 = L/954$ $0.63 = L/360$ in ft $2$ S KATSOULAKOS $2$	.34
Vibration Lmax = 18 -11   Lv - 21 3   10	.38
	ļ
Defl'n = $0.024$ = $0.033$ in	.71
Dell'II	

POLINCE OF ONTE STRUCTURAL COMPONENT ONLY

Beam4

### Nordic Sizer - Canada 6.4

Page 2

Additiona	l Data:									
FACTORS:			KH			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	_	-	<b>-</b> '	-	-	-	#2	
CRITICAL L	OAD COMB	INATIONS	<b>S</b> :							
Shear	: LC #2	= 1.25	5D + 1.5	L						
	) : LC #2				•					
Deflecti	on: LC #1									
			) + 1.0L							
			+ 1.0L							
	LC #2	= 1.01	+ 1.0L	(bare	joist)					
Bearing	: Suppo	rt 1 - 1	LC #2 = 1	1.25D +	1.5L					
	Suppo	rt 2 - 1	LC #2 = 1	1.25D +	1.5L		-	t-1 1		
Load Typ	es: D=dea	d W=win	nd S=sn	ow H=e	arth,grou	ndwate:	r E=ear	tnquake		
	L=liv	e(use,o	ccupancy	) Ls=1	ive(stora	ge, equ	(pment	r=rre		
Load Pat	terns: s=	S/2 L=1	L+Ls _=	no patt	ern load	in thi	s span			
All Load	Combinat	ions (L	Cs) are .	listed	in the An	alysis	output			
CALCULATI						00 31				
Deflecti	on: EIef	f =	625e06 l	b-in2 [	K= 6.18e	06 lbs			\	
"Live" d	eflection	= Defle	ection f	rom all	non-dead	Loads	(live,	wind, sr	10W)	
-				•						

- Uesign Notes:

  1. WoodWorks analysis and design are in accordance with the 2010 National Building Code of Canada (NBC Part 4) and the CSA O86-14 Engineering Design in Wood standard (May 2014 edition).
- 2. Please verify that the default deflection limits are appropriate for your application.
- 3. Refer to 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. 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.



DWO NO . TAM26570-17 STRUCTURAL COMPONENT ONLY

# NORDIC **STRUCTURES**

COMPANY TAMARACK LUMBER INC. 3269 NORTH SERVICE ROAD **BURLIGTON ONTARIO** May 8, 2017 07:31

**PROJECT** J3 1ST FLOOR

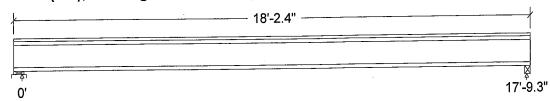
### **Design Check Calculation Sheet**

Nordic Sizer - Canada 6.4

### Loads:

Load	Туре	Distribution Pat	1	[ft] End	Magnitud Start	e End	Unit
Load1 Load2	Dead Live	Full Area Full Area			20.00 40.00		psf psf

Maximum Reactions (lbs), Bearing Resistances (lbs) and Bearing Lengths (in):



Unfactored: Dead Live	178 355	178 355
Factored: Total	755	755
Bearing:		
Resistance		2198
Joist	2336	2198
Support	9417	
Des ratio		0.34
Joist	0.32	0.54
Support	0.08	#2
Load case	#2	2-1/2
Length	4-3/8	1-3/4
Min req'd	1-3/4	No No
Stiffener	No	1.00
Kd	1.00	1.00
KB support	1.00	] []
fcp sup	769	1 [ ]
Kzcp sup	1.00	

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

Supports: 1 - Lumber Sill plate, No.1/No.2; 2 - Steel Beam, W; Total length: 18'-2.4"; 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 = 755	Vr = 2336	l.bs	Vf/Vr = 0.32
Moment (+)	Mf = 3356	Mr = 11609	lbs-ft	Mf/Mr = 0.29
Perm. Defl'n	$0.08 = \langle L/999 \rangle$	0.59 = L/360	in 🚜	OFESSION 0.14
Live Defl'n	$0.17 = \langle L/999 \rangle$	0.44 = L/480	in 🚜	0.38
Total Defl'n	0.25 = L/845	0.89 = L/240	in 🐼	20.28
Bare Defl'n	$0.19 = \langle L/999$	0.59 = L/360	in /3'	KATSOULAKOS 64
Vibration	Lmax = 17'-9	Lv = 21'-3	ft 🖟	KATSOULAKOS 100
Defl'n	= 0.022	= 0.035	in   3 5	KAISUULANUS 20.64
				A STATE OF THE PARTY OF THE PAR

POLINICE OF ON THE

COMPONENT ONLY

#### Beam2

### Nordic Sizer - Canada 6.4

Page 2

Additional									- ~ "	
FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN		
Vr	2336	1.00	1.00	_	_	-	-	-	#2	
				_	1.000	_	-	_	#2	
EI	547.1 m	illion	-	_	_	-	-	_	#2	
CRITICAL LO	DAD COMBI									
Shear	: LC #2		5D + 1.5			•				
Moment (+)	) : LC #2	= 1.2	5D + 1.5	L						
Deflection	on: LC #1									•
			D + 1.0L							
			D + 1.0L							
			D + 1.0L							
Bearing	: Suppo	rt 1 - I	LC #2 =	1.25D +	1.5L					
	Suppo	rt 2 - 1	LC #2 =	1.25D +	1.5L		<del></del>	<u> </u>		
Load Type	es: D=dea	d W=wi	nd S=sn	ow H=e	arth,grou	ındwate:	r E=ear	tnquake		
	L=liv	e(use,o	ccupancy	) Ls=l	ive(stora	ige, equi	ipment)	r=rre		
Load Patt	terns: s=	S/2 L=	L+Ls _=:	no patt	ern load	in thi	s span			
		ions (L	Cs) are	listed	in the An	alysis	output			
CALCULATI	ONS:				440					
Deflection	on: Elef	f =	625e06 l	b-in2	K= 6.18e	06 Lbs	(7.	م دساسی	mar. \	
"Live" de	eflection	= Defl	ection f	rom all	non-dead	l Loads	(live,	wind, s	now)	

### **Design Notes:**

CONFORMS TO OBC 2012

- 1. WoodWorks analysis and design are in accordance with the 2010 National Building Code of Canada (NBC Part 4) and the CSA O86-14 Engineering Design in Wood standard (May 2014 edition).
- 2. Please verify that the default deflection limits are appropriate for your application.
- 3. Refer to 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. 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.



DW8 NO . TAN 2657/-17 STRUCTURAL COMPONENT ONLY



## Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basment\...\B1 L(i4224)

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

May 15, 2017 13:27:52

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B1 L(i4224

Specifier: Designer: Company.

Misc:

2/		
<b>⊠</b> B0	· 08-11-00	B1

Total Horizontal	Product	Length =	08-11-00
------------------	---------	----------	----------

Reaction Summary (D	own / Uplift) (lbs)				
Bearing	Live	De ad	Snow	Wind	
B0, 5-1/2"	1,615/0	881/0			
B1 3-1/2"	301/0	172/0			

۱.	ad Cumman				Live	Dead	Snow Wind	Trib.
	oad Summary g Description	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
n	FC2 Floor Material	Unf. Lin. (lb/ft)	L 00-00-00	08-09-04	15	7		n/a
1	Us er Load	Unf. Lin. (lb/ft)	L 00-05-08	04-05-08	240	120		n/a
2	PBO4(i61)	Conc. Pt. (lbs)	L 00-01-12	00-01-12	827	465		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	2,699 ft-lbs	12,704 ft-lbs	21.2%	1	03-06-11
End Shear	1,251 lbs	5,785 lbs	21.6%	1	01-03-00
Total Load Defl.	L/999 (0.086")	n/a	n/a	4	04-03-01
Live Load Defl.	L/999 (0.056")	n/a	n/a	5	04-03-01
Max Defl.	0.086"	n/a	n/a	4	04-03-01
Span / Depth	10.5	n/a	n/a		00-00-00

				De mand/ Resistance	Demand/ Resistance	
Bear	ing Supports	Dim. (L x W)	Demand	Support	Member	Material
B0	Wall/Plate	5-1/2" x 1-3/4"	3,524 lbs	68.6%	30%	Unspecified
B1	Post	3-1/2" x 1-3/4"	666 lbs	13.4%	8.9%	Unspecified

#### Notes

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

Calculations assume member is fully braced.

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO QBC 2012

- · · ·

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

### Disclosure

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance w ith current Installation Guide and applicable building codes. To obtain installation Guide or ask questions, please call 1-800-964-6999 before installation.

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





### Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basment\...\B2 L(i4410)

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

May 15, 2017 13:34:10

BC CALC® Design Report



**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

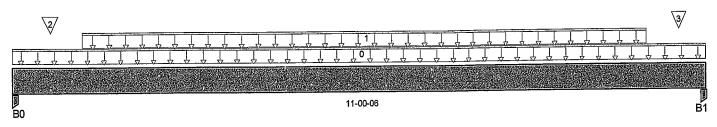
File Name: YORK 2.mmdl

Description: Designs \Flush Beams \Basment\Flush Beams \B2 L(i4410

Specifier: Designer:

Company.

Misc:



### Total Horizontal Product Length = 11-00-06

Reaction Summary (Down / Uplift) ( lbs )									
Bearing	Live	De ad	Snow	Wind					
B0, 3-1/2"	926/0	492/0			·				
B1.3-1/2"	940/0	499/0							

ء ا	ad Summan					Live	Dead	Snow	Wind	Trib.
Load Summary Tag Description		Load Type	Ret	f. Start	En d	1.00	0.65	1.00	1.15	<u> </u>
0	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	11-00-06	6	3			n/a
1	Smoothed Load	Unf, Lin. (lb/ft)	L	01-01-02	10-01-02	169	85			n/a
2	J5(i4364)	Conc. Pt. (lbs)	L	00-07-02	00-07-02	147	74			n/a
3	J5(i4355)	Conc. Pt. (lbs)	L	10-07-02	10-07-02	134	67			n/a

	Factore d	Factored	Demand /	Load	Location
Controls Summary	Dem and	Resistance	Resistance	Case	<del></del>
Pos. Moment	5,302 ft-lbs	12,704 ft-lbs	41.7%	1	05-07-02
End Shear	1,791 lbs	5,785 lbs	31%	1	01-01-00
Total Load Defl.	L∕423 (0.3")	0.529"	56.8%	4	05-05-10
Live Load Defl.	Ľ/647 (0.196")	0.352"	55.6%	5	05-05-10
Max Defl.	0.3" ` ´	n/a	n/a	4	05-05-10
Span / Depth	13.4	n/a	n/a		00-00-00

				De man d/ Resistance		Material
Beari	ng Supports	Dim . (L x W)	Demand	Support	Member	
B0	Post	3-1/2" x 1-3/4"	2,004 lbs	40.3%	26.8%	Unspecified
B1	Post	3-1/2" x 1-3/4"	2,034 lbs	40.9%	27.2%	Unspecified

#### Notes

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

Calculations assume member is fully braced.

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA FORMS TO OBG 2012 O86.

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

POVINCE OF

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST® , BC RIM BOARD $^{\mathsf{TM}}$  , BCk® , BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood



### Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basment\...\B3 L(i4358)

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

May 15, 2017 13:27:52

BC CALC® Design Report

Build 5033 Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B3 L(i4358

Specifier: Designer: Company:

Misc:

1		<del>,</del>
		<del>\</del>
	08-11-00	B1
B0		ום

Total Horizontal Product Length = 08-11-00

Reaction Summary (Down / Uplift) ( lbs )									
Bearing	Live	De ad	Snow	Wind					
B0, 5-1/2"	84 / 0	79 / 0							
B1 3-1/2"	49 / 0	46 / 0							

Load Summary			Live	Dead	Snow Wind	Trib.
Tag Description	Load Type	Ref. Start	End 1.00	0.65	1.00 1.15	
0 FC2 Floor Material	Unf. Lin. (lb/ft)	L 00-00-00	08-09-04 12	6		n/a
1 3(i1080)	Conc. Pt. (lbs)	L 00-02-12	00-02-12 31	31		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	265 ft-1bs	12,704 ft-lbs	2.1%	1	04-06-08
End Shear	101 lbs	5,785 lbs	1.8%	1	01-03-00
Total Load Defl.	L/999 (0.009")	n/a	n/a	4	04-06-08
Live Load Defl.	L/999 (0.005")	n/a	n/a	5	04-06-08
Max Defl.	0.009"	n/a	n/a	4	04-06-08
Span / Depth	10.5	n/a	n/a		00-00-00

					De mand/ Resistance	
Beari	ng Supports	Dim.(L x W)	Demand	Support	Member	Material
B0	Wall/Plate	5-1/2" x 1-3/4"	225 lbs	4.4%	1.9%	Unspecified
B1	Post	3-1/2" x 1-3/4"	131 lbs	2.6%	1.8%	Unspecified

#### Notes

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

Calculations assume member is fully braced.

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA O86. CONFORMS TO OBG 2012

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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 1-800-964-6999 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD $^{\mathrm{TM}}$ , BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.





## Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B4 H(i4257)

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

May 15, 2017 13:27:52

BC CALC® Design Report

**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

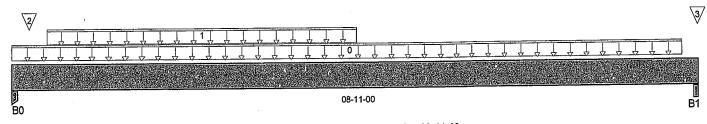
File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B4 H(i425

Specifier: Designer:

Company:

Misc:



Total Horizonta	Product	Length	= 08-	11-00
-----------------	---------	--------	-------	-------

			<del></del>		
Reaction Summary (	Down / Uplift) (lbs)				•
Bearing	Live	Dead	Snow	Wind	
B0, 3-1/2"	814/0	446/0			
B1 2-1 <i>/2</i> "	429/0	253/0			

Land Summans					Live	Dead	Snow	Wind	Trib.
	ad Summary g Description	Load Type	Ref. Start	End	1.00	0.65	1.00	1.15	
0	FC1 Floor Material	Unf. Lin. (lb/ft)	L 00-00-00	08-08-08	23	11			n/a
1	User Load	Unf. Lin. (lb/ft)	L 00-05-08	04-05-08	240	120			n/a
2	8(i2454)	Conc. Pt. (lbs)	L 00-02-12	00-02-12		13			n/a
3	2(i 1078)	Conc. Pt. (lbs)	L 08-10-12	08-10-12	79	52			n/a

	Factored	Factored	Demand/	Load	Location
Controls Summary	Demand	Resistance	Resistance	Case	
Pos. Moment	3,056 ft-lbs	19,364 ft-lbs	15.8%	1	03-06-12
End Shear	1.688 lbs	7,232 lbs	23.3%	. 1	01-03-06
Total Load Defl.	L/999 (0.053")	n/a	n/a	4	04-03-02
Live Load Defl.	L/999 (0.035")	n/a	n/a	5	04-01-15
Max Defl.	0.053"	n/a	n/a	4	04-03-02
Span / Depth	8.6	n/a	n/a		00-00-00

				Demand/ Resistance	Demand/ Resistance	
Bearing	Supports	Dim . (L x W)	Demand	Support	Member	Material
BO Po	ost	3-1/2" x,1-3/4"	1,780 lbs	35.8%	23.8%	Unspecified
B1 Be	eam	2-1/2" x 1-3/4"	960 lbs	41.1%	18%	Unspecified

#### Notes

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

Calculations assume member is fully braced.

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 2010 and CSA POFESSION CONFORMS TO OBC 2012

O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

#### Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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 1-800-964-6999 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD $^{\text{TM}}$ , BCk $^{\text{RD}}$ , BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.





### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B6(i3030)

Dry | 2 spans | No cantilevers | 0/12 slope (deg)

May 5, 2017 15:41:47

BC CALC® Design Report

**Build 5033** 

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

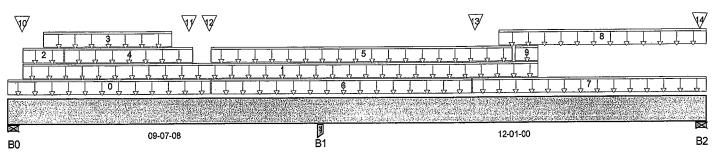
CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B6(i3030)

Specifier: Designer: Company:

Misc:



Total Horizontal Product Length = 21-08-08

Reaction Summary (Down / Uplift) (lbs)							
Be aring	` Live`	De ad	Sn ow	Wind			
B0, 5-1/2"	1,424 / 418	903/0					
B1, 3-1/2"	3,380 / 0	3,115/0					
B2, 5-1/2"	2,046 / 98	1,186/0					

اما	ad Summary					Live	Dead	Snow	Wind	Trib.
	Description	Load Type	Ref	. Start	End	1.00	0.65	1.00	1.15	
0	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	06-03-06	15				n/a
1	6(i1148)	Unf. Lin. (lb/ft)	L	00-05-08	16-05-08		81			n/a
2	6(i1148)	Unf. Lin. (lb/ft)	L	00-05-08	01-08-12	158	79			n/a
3	Smoothed Load	Unf. Lin. (lb/ft)	L	01-01-00	05-01-00	172	86			n/a
4	-	Unf. Lin. (lb/ft)	L	01-08-12	05-08-12	168	84			n/a
5	6(i1148)	Unf. Lin. (lb/ft)	L	06-03-04	15-07-12	14	7			n/a
6	FC1 Floor Material	Unf. Lin. (lb/ft)	L	06-03-06	14-04-10	18	9			n/a
7	FC1 Floor Material	Unf. Lin. (lb/ft)	L	14-04-10	21-08-08	15	7			n/a
8	Smoothed Load	Unf. Lin. (lb/ft)	L	15-02-06	21-08-08	174	87			n/a
9	6(i1148)	Unf. Lin. (lb/ft)	L	15-08-08	16-05-08	1,658	948			. n/a
10	-	Conc. Pt. (lbs)	L	00-05-05	00-05-05	212	130			n/a
11	J8(i3037)	Conc. Pt. (lbs)	L	05-07-00	05-07-00	142	71			n/a
12	B7(i3006)	Conc. Pt. (lbs)	L	06-02-08	06-02-08	156	364			n/a
13	B9(i3106)	Conc. Pt. (lbs)	L	14-05-08	14-05-08	1,105	602			n/a
14	4(i 1079)	Conc. Pt. (lbs)	L	21-05-12	21-05-12	249	156			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	13,926 ft-lbs	38,727 ft-lbs	36%	3	16-00-03
Neg. Moment	-12,470 ft-lbs	-38,727 ft-lbs	32.2%	1	09-07-08
End Shear	3,490 lbs	14,464 lbs	24.1%	3	20-03-02
Cont. Shear	5,014 lbs	14,464 lbs	34.7%	1	10-09-02
Total Load Defl.	L/720 (0.195")	0.584"	33.3%	10	15-10-06
Live Load Defl.	L/1,106 (0.127")	0.39"	32.5%	13	15-10-06
Total Neg. Defl.	L/999 (-0.034")	n/a	n/a	10	06-10-00
Max Defl.	0.195"	n/a	n/a	10	15-10-06
Span / Depth	11.8	n/a	n/a		00-00-00



DWO NO . TAM26576-17 STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B6(i3030)

Dry | 2 spans | No cantile vers | 0/12 slope (deg)

May 5, 2017 15:41:47

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code: BRAMPTON, Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B6(i303-

Specifier:

Designer: Company.

Misc:

Bear	ing Supports	Dim . (L x W)	De man d	Resistance Support	Resistance Member	Material
BO	Wall/Plate	5-1/2" x 3-1/2"	3,265 lbs	31.8%	13.9%	Unspecified
B1	Post	3-1/2" x 3-1/2"	8,965 lbs	90.1%	60%	Unspecified
B2	Wall/Plate	5-1/2" x 3-1/2"	4,551 lbs	44.3%	19.4%	Unspecified

### Notes

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

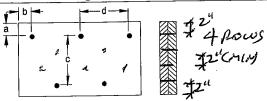
Calculations assume member is fully braced.

Resistance Factor phi has been applied to all presented results per CSA 086. BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBG 2012 O86.

Design based on Dry Service Condition.

importance Factor : Normal Part code : Part 9

Connection Diagram



c = 7-7/8" a minimum = 2" d=**48** 64 b minimum = 3"

Calculated Side Load = 348.3 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are: 16d A Nails

ARDOX SPIRAL

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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 1-800-964-6999 before installation.

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STRUCTURAL COMPONENT ONLY



# Boise Cascade Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\Flush Beams\B7(i3006)

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

May 5, 2017 15:41:48

**BC CALC® Design Report** 

**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B7(i3006)

Specifier: Designer:

Company: Misc:

\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
08-06-00 BY	1

Total Horizontal Product Length = 08-06-00

Reaction Summary (Down /	Uplift) (lbs)	De ad	Snow	Wind	
B0 B1, 3-1/2"	161/0 1,690/0	377/0 1,185/0			

			Live	Dead	Snow Wind	ırıb.
Load Summary Tag Description	Load Type	Ref. Start	End 1.00	0.65	1.00 1.15	
		L 00-00-00	08-01-08 14	7		n/a
<ol><li>FC 1 Floor Material</li></ol>	Unf. Lin. (lb/ft)			70		n/a
1 7(i1385)	Unf. Lin. (lb/ft)	∟ 00-00-00	08-00-12 25	78		
2 5(1110)	Conc. Pt. (lbs)	L 08-03-08	08-03-08 1,536	831		n/a

1 4010.04		Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	1,053 ft-lbs	12,586 ft-lbs	8.4%	0	04-02-04
End Shear	489 lbs	4.701 lbs	10. <del>4</del> %	0	01-01-14
Total Load Defl.	L/999 (0.026")	n/a	n/a	4	04-02-04
Live Load Defl.	L/999 (0.008")	n/a	n/a	5	04-02-04
	0.026"	n/a	n/a	4	04-02-04
MaxDefl. Span / Depth	8.3	n/a	n/a		00-00-00

					De mand/ Resistance		
Beari	ng Supports	Dim. (L x W)	De man d	Support	Member	Material	
B0	Hanger	2" x 1-3/4" 3-1/2" x 1-3/4"	714 lbs 4.016 lbs	n/a 60.1%	19% 53.7%	HUS1.81/10 Unspecified	
B1	Beam	3-1/2 X 1-3/4	4,0 10 103	00.170	001170		

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

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBC 2012

O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

#### Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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 1-800-964-6999 before installation.

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### Boise Cascade Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\Flush Beams\B9(i4599)

BC CALC® Design Report



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

May 15, 2017 13:59:55

Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

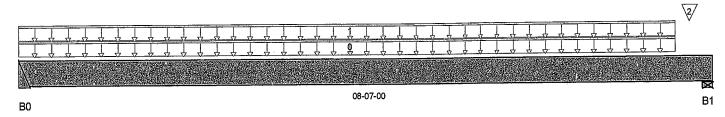
File Name: YORK 2.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B9(i4599)

Specifier: Designer:

Company:

Misc:



Total Horizontal Product Length = 08-07-00

Reaction Summary (Do Bearing	wn / Uplift) (Ibs) Live	De ad	Snow	Wind	
B0	1,118/0	584/0			
B1,5-1/2"	1,155 / 0	616/0			

Load Summan				Live	Dead	Snow Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
0 UserLoad	Unf. Lin. (lb/ft)	L 00-00-00	08-01-08	240	120		n/a
1 FC1 Floor Material	Unf. Lin. (lb/ft)	L 00-00-00	08-01-08	30	15		n/a
2 5(i1110)	Conc. Pt. (lbs)	L 08-03-08	08-03-08	81	52		n/a

CONFORMS TO OBG 2012

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	4,740 ft-lbs	19,364 ft-lbs	24.5%	1	04-01-12
End Shear	1,736 lbs	7,232 lbs	24%	1	07-01-10
Total Load Defl.	L/999 (0.081")	n/a	n/a	4	04-01-12
Live Load Defl.	L/999 (0.053")	n/a	n/a	5	04-01-12
Max Defl.	0.081" ·	n/a	n/a	4	04-01-12
Span / Depth	8.2	n/a	n/a		00-00-00

				De mand/ Resistance	Demand/ Resistance	
Bear	ring Supports	Dim.(LxW)	De man d	Support	Member	Material
B0	Hanger	2" x 1-3/4"	2,406 lbs	n/a	56.3%	HUS1.81/10
B1	Wall/Plate	5-1/2" x 1-3/4"	2,502 lbs	48.7%	21.3%	Unspecified

### Notes

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

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

#### Disclosure

POVINCE OF

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance w ith current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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# Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B5 DR(i3100)

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

May 5, 2017 15:41:48

BC CALC® Design Report

Build 5033 Job Name: Ad dress:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

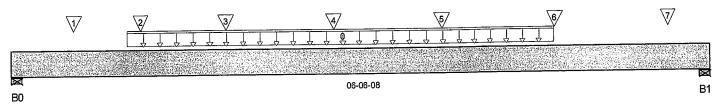
File Name: YORK 2.mmdl

Description: Designs\Dropped Beams\Basment\Dropped Beams\B5 [

Specifier:

Designer: Company:

Misc:



Total Horizontal Product Length = 06-06-08

Reaction Summary (E	own / Uplift) (lbs)	<u> </u>			
Bearing	Live	De ad	Snow	Wind	
B0, 5-1/2"	1,523 / 0	806/0			
B1 4"	3,241/0	2,007 / 0			

						Live	Dead	Snow	Wind	irib.
	ad Summary Description	Load Type	Re	f. Start	En d	1.00	0.65	1.00	1.15	
0	Smoothed Load	Unf. Lin. (lb/ft)	L	01-01-00	05-01-00	168	84			n/a
1	J8(i3102)	Conc. Pt. (lbs)	L	00-07-00	00-07-00	133	67			n/a
3	J4(i3047)	Conc. Pt. (lbs)	L	01-02-08	01-02-08	392	196			n/a
2	J4(i3056)	Conc. Pt. (lbs)	Ĺ	02-00-00	02-00-00	316	158			n/a
4	J4(i3031)	Conc. Pt. (lbs)	L	03-00-00	03-00-00	352	176			n/a
5	J4(i3105)	Conc. Pt. (lbs)	Ĺ	04-00-00	04-00-00	367	184			n/a
6	J4 DJ (i3119)	Conc. Pt. (lbs)	Ĺ	05-01-00	05-01-00	370	185			n/a
7	- (IOTTO)	Conc. Pt. (lbs)	L	06-01-11	06-01-11	2,161	1,432			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	5,003 ft-lbs	38,727 ft-lbs	12.9%	1	03-00-00
End Shear	2,820 lbs	14,464 lbs	19.5%	1	01-05-06
Total Load Defl.	L/999 (0.023")	n/a	n/a	4	03-04-06
Live Load Defl.	L/999 (0.015")	n/a	n/a	5	03-04-06
Max Defl.	0.023"	n/a	n/a	4	03-04-06
Span / Depth	5.9	. n/a	n/a		00-00-00

Boari	ing Supports	Dim . (L x W)	De man d	De mand/ Resistance Support	De mand/ Resistance Member	Material
B0	Wall/Plate	5-1/2" x 3-1/2"	3,291 lbs	12.1%	14%	Unspecified
B1	Wall/Plate	4" x3-1/2"	7,371 lbs	64.8%	43.2%	Unspecified

Notes



DWG NO. TAM 26579-17 STRUCTURAL COMPONENT ONLY



# Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B5 DR(i3100)

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

May 5, 2017 15:41:48

BC CALC® Design Report

**Build 5033** 

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Dropped Beams\Basment\Dropped Beams\B!

Disclosure

Specifier:

Designer:

Company.

Misc:

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

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

Calculations assume unbraced length of Top: 00-04-02, Bottom: 00-04-02.

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBG 2012

O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

be verified by anyone who would rely on output as evidence of suitability for

particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered

w ood products must be in accordance with current Installation Guide and applicable building codes. To obtain

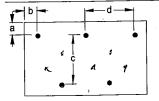
Completeness and accuracy of input must

Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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**Connection Diagram** 



a minimum = 2" b minimum = 3"

c = 7-7/8" d= 64

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record. Member has no side loads.

Connectors are: 16d 🛴 🛴 Nails

'ARDOX SPIRAL

OVINCE OF ON THE

COMPONENT ONLY



# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B10 DR(i3159)

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

May 5, 2017 15:41:48

BC CALC® Design Report

**Build 5033** 

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

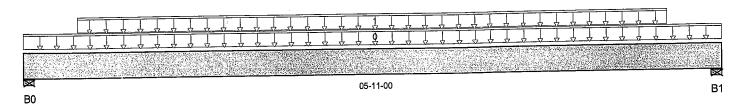
CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B10

Specifier: Designer: Company:

Misc:



Total Horizontal Product Length = 05-11-00

Reaction Summary (Dow	n / Uplift) ( lbs ) Live	De ad	Snow	Wind	
B0, 4"	988/0	826/0	299/0		
B1 4"	988/0	827/0	299/0		

				Live	Dead	Snow Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	End	1.00	0.65	1.00 1.15	
0 R1(i3171)	Unf. Lin. (lb/ft)	L 00-00-00	05-11-00	29	117	101	n/a
1 Smoothed Load	Unf. Lin. (lb/ft)	L 00-05-08	05-05-08	361	181		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	3,765 ft-lbs	25,408 ft-lbs	14.8%	1	02-11-08
End Shear	2.219 lbs	11,571 lbs	19.2%	1	01-01-08
Total Load Defl.	L/999 (0.028")	n/a	n/a	35	02-11-08
Live Load Defl.	L/999 (0.017")	n/a	n/a	51	02-11-08
Max Defl.	0.028"	n/a	n/a	35	02-11-08
Span / Depth	6.8	n/a	n/a		00-00-00

<b>-</b> 1 <b>0</b>		Dim.(L x W)	De man d	De mand/ Re sistance Support	De mand/ Resistance Member	Material	
	all/Plate	4" x3-1/2"	2,665 lbs	23.4%	15.6%	Unspecified	
	all/Plate	4" x3-1/2"	2,665 lbs	23.4%	15.6%	Unspecified	

#### Notes

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

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

Calculations assume unbraced length of Top: 00-00-00, Bottom: 00-00-00. Resistance Factor phi has been applied to all presented results per CSA 086.

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

CONFORMS TO OBC 2012 Unbalanced snow loads determined from building geometry were used in selected product's

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DWG NO . TANZ658017 STRUCTURAL COMPONENT ONLY



**Build 5033** 

Job Name:

Customer:

Code reports:

Address:

# Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B10 DR(i3159)

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

May 5, 2017 15:41:48

BC CALC® Design Report



File Name: YORK 2.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B1

Specifier:

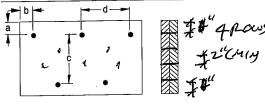
Designer:

Company.

City, Province, Postal Code:BRAMPTON; CCMC 12472-R

Misc:

**Connection Diagram** 



c = 3 - 1/2" a minimum = 2" d= 2 6" b minimum = 3"

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record. Member has no side loads.

Connectors are: 16d \ Nails

ARDOX SPIRAL

#### Disclosure

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DWB NO . TAM 26580-17 STRUCTURAL COMPONENT ONLY



# Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B11(i3152)

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

May 5, 2017 15:41:48

BC CALC® Design Report

**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

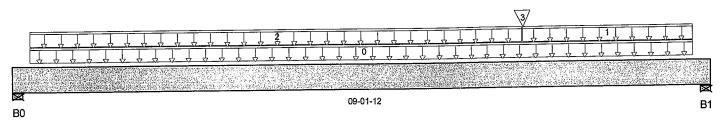
File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B11(i3152)

Specifier:

Designer: Company:

Misc:



Total Horizontal Product Length = 09-01-12

Reaction Summary (Down / Uplift) ( lbs )							
Bearing	Live	De ad	Snow	Wind			
B0, 5-1/2"	516/0	320/0					
B1 5-1/2"	1,216 / 0	685/0					

	1.0			i	Live	Dead	Snow Wind	irib.
	Load Summary Fag Description	Load Type	Ref. Start	End 1	1.00	0.65	1.00 1.15	
7	FC3 Floor Material	Unf. Lin. (lb/ft)	I. 00-02-12	08-11-00	30	15		n/a
٠,	1 FC3 Floor Material	Unf. Lin. (lb/ft)	L 06-08-00	08-11-00	10	5		n/a
		Unf. Lin. (lb/ft)	1 00-02-12			2		n/a
4	2 FC3 Floor Material	• •	L 06-08-00	••••	-	719		n/a
:	3 B12(i3153)	Conc. Pt. (lbs)	F 00-08-00	00-00-00	1,300	110		

<b></b>	Factored	Factored Resistance	Demand / Resistance	Load Case	Location
Controls Summary	Demand			Case	
Pos. Moment	5,328 ft-lbs	38,727 ft-lbs	13.8%	1	06-08-00
End Shear	2.555 lbs	14,464 lbs	17.7%	1	07-08-06
Total Load Defl.	L/999 (0.04")	n/a	n/a	4	04-11-07
Live Load Defl.	L/999 (0.025")	n/a	n/a	5	04-11-07
Max Defl.	0.04"	n/a	n/a	4	04-11-07
Span / Depth	8.4	n/a	n/a		00-00-00

Reari	ng Supports	Dim . (L x W)	Demand	Resistance Support	Resistance Member	Material
B0	Wall/Plate	5-1/2" x 3-1/2"	1,174 lbs	11.4%	5%	Unspecified
B1	Wall/Plate	5-1/2" x 3-1/2"	2,679 lbs	26.1%	11.4%	Unspecified

### Notes

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

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

Calculations assume member is fully braced.

Resistance Factor phi has been applied to all presented results per CSA O86. CONFORMS TO OBC 2012 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



COMPONENT



# Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B11(i3152)

May 5, 2017 15:41:48

BC CALC® Design Report



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

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B11(i31

Specifier:

Misc:

Designer: Company.

**Build 5033** Job Name:

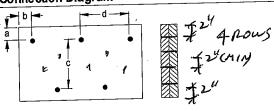
Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

**Connection Diagram** 



c = 7-7/8" a minimum = 2" d=9964 b minimum = 3"

Calculated Side Load = 324.6 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are: 16d 🦙 er Nails

312" ARDOX SPIRAL

#### Di sclosure

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DWO NO . TANZ6581-19 STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B12(i3153)

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

May 5, 2017 15:41:48

BC CALC® Design Report

Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B12(i3153)

Specifier:

Designer: Company.

Misc:

\ <u>1</u> /	2/	3	4	5
· · · · · · · · · · · · · · · · · · ·		, , , , , , , , , , , , , , , , , , , ,		
	100 and 100 an			
<b>X</b>		05-06-08		B1

Total Horizontal Product Length = 05-06-08

Reaction Summary (Down	Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 8"	1,602 / 0	885/0			
B1	1,376 / 0	717/0			

			Live	Dead	Snow Wind	ırıb.
Load Summary	Load Type	Ref. Start ⊾End	1.00	0.65	1.00 1.15	
Tag Description	Unf. Lin. (lb/ft)	1 00-06-04 04-06-0	4 356	178		n/a
0 Smoothed Load		L 00-04-00 00-04-0		204		n/a
1 B18(i3155)	Conc. Pt. (lbs)	1 01-00-04 01-00-0		92		n/a
2 J5(i3327)	Conc. Pt. (lbs)	L 02-04-04 02-04-0		113		n/a
3 J5(i3341)	Conc. Pt. (lbs)	<b>—</b> —		113		n/a
4 J5(i3251)	Conc. Pt. (lbs)			303		n/a
5 -	Conc. Pt. (lbs)	L 05-01-10 05-01-1	10 607	303		

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	3,289 ft-lbs	38,727 ft-lbs	8.5%	1	02-06-04
	2,035 lbs	14.464 lbs	14.1%	1	01-07-14
End Shear	∠,0331b3 L/999 (0.01")	n/a	n/a	4	03-00-06
Total Load Defl.	L/999 (0.007")		n/a	5	03-00-06
Live Load Defl.	0.01"	n/a	n/a	4	03-00-06
Max Defl. Span / Depth	4.9	n/a	n/a		00-00-00

n I o Occurrente		Disc. (1 x 14/)	Dim.(LxW) Demand		Resistance Member	Material	
Beari	ng Supports	Dim. (L X VV)		Support	40.00/	Unanacifod	
B0	Wall/Plate	8" x 3-1/2"	3,509 lbs	23.5%	10.3%	Unspecified	
טם		011 0 4 (01)	2.961 lbs	n/a	34.7%	HGUS410	
B1	Hanger	2" x3-1/2"	2,901108	IIIa	01.770		

### Notes

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

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

O86.

CONFORMS TO OBC 2012

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DW8 NO. TAM 2656217 STRUCTURAL COMPONENT ONLY



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B12(i3153)

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

May 5, 2017 15:41:48

BC CALC® Design Report

Build 5033

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

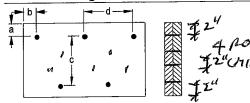
Description: Designs\Flush Beams\1st Floor\Flush Beams\B12(i31

Specifier: Designer:

Company.

Misc:

### **Connection Diagram**



a minimum = 2"

c = 7-7/8"

b minimum = 3"

Calculated Side Load = 708.7 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are: 16d per Nails

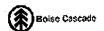
3½ <sup>11</sup> ARDOX SPIRAL

#### Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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 1-800-964-6999 before installation.

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





## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B14(i3158)

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

May 5, 2017 15:41:49

BC CALC® Design Report



**Build 5033** 

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

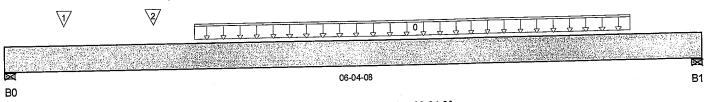
Description: Designs\Flush Beams\1st Floor\Flush Beams\B14(i3158)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 06-04-08

Reaction Summary (Down /	Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 5-1/2" B1, 4-3/4"	1,522 / 0 1,435 / 0	801/0 756/0			

			Live	Dead	Snow Wind	Trib.
Load Summary	Load Type	Ref. Start	En d 1.00	0.65	1.00 1.15	
Tag Description		1 01-08-12	05-08-12 530	265		n/a
<ol><li>Sm oothed Load</li></ol>	Unf. Lin. (lb/ft)	<b>-</b> • • • • • •		137	•	n/a
1 J3(i3174)	Conc. Pt. (lbs)	L 00-06-08	00-06-08 274			n/a
2 -	Conc. Pt. (lbs)	L 01-04-06	01-04-06 563	282		

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
	4,564 ft-lbs	38,727 ft-lbs	11.8%	1	03-06-08
Pos. Moment	2,616 lbs	14,464 lbs	18.1%	1	04-11-14
End Shear	L/999 (0.019")	n/a	n/a	4	03-02-12
Total Load Defl. Live Load Defl.	L/999 (0.012")	n/a	n/a	5	03-02-12
Max Defl.	0.019"	n/a	n/a	4	03-02-12
Span / Depth	5.7	n/a	n/a		00-00-00

D	· Cumporto	Dim . (L x W)	De man d	De man d/ Re sistance Support	Resistance Member	Material
B0 V	<b>Supports</b>  Vall/Plate  Vall/Plate	5-1/2" x 3-1/2" 4-3/4" x 3-1/2"	3,283 lbs 3,098 lbs	31.9% 34.9%	14% 15.3%	Unspecified Unspecified

### Notes

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

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

Calculations assume member is fully braced.

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBC 2012 O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DWB NO . TAM2658317 STRUCTURAL COMPONENT ONLY



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B14(i3158)

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

May 5, 2017 15:41:49

BC CALC® Design Report

Build 5033 Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

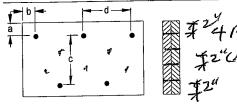
Description: Designs\Flush Beams\1st Floor\Flush Beams\B14(i31t

Specifier: Designer:

Company:

Misc:

### **Connection Diagram**



a minimum = 2" b minimum = 3"

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

Calculated Side Load = 685.8 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are: 16d ( Nails

312" ARDOX SPIRAL

#### Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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DWG NO . TAM2-6583" STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B16(i3191)

Dry | 3 spans | Left cantilever | 0/12 slope (deg)

May 5, 2017 15:41:49

BC CALC® Design Report

**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

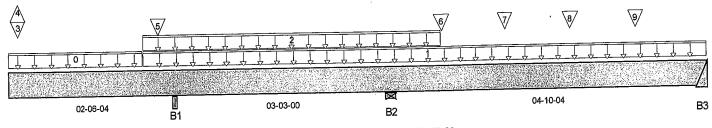
File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B16(i3191)

Specifier: Designer:

Company:

Misc:



Total Horizontal Product Length = 10-07-08

Reaction Summary (Down / Uplift) (lbs)								
Be aring	Live	De ad	Snow	- Willia				
B1, 3-1/2"	681/225	479/0	967/0					
B2, 5-1/2"	824/311	231/0	0/474					
B2, 5-172 B3	439/9	249/0	49 / 0					

l o	ad Summary	·				Live	Dead	Snow		Trib.
	Description	Load Type	Re	f. Start	End	1.00	0.65	1.00	1.15	
	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	02-00-08	26	13	47		n/a
0		Unf. Lin. (lb/ft)	ī	02-00-08	10-07-08	23	11			n/a
1	FC3 Floor Material		1	02-00-08	06-06-08		3			n/a
2	FC3 Floor Material	Unf. Lin. (lb/ft)	Ŀ		•• ••		180	420		n/a
3	B15(i3187)	Conc. Pt. (lbs)	L	00-01-12	00-01-12		100	720		n/a
4	B15(i3187)	Conc. Pt. (lbs)	L	00-01-12	00-01-12	-54				
-	= ' ( '	Conc. Pt. (lbs)	L	02-03-04	02-03-04		71	27		n/a
5	E25(i3195)	* * *	Ī	06-06-08	06-06-08	205	103			n/a
6	J4(i3221)	Conc. Pt. (lbs)	1	07-06-08	07-06-08		109			n/a
7	J4(i3347)	Conc. Pt. (lbs)	L	•			109			n/a
8	J4(i3339)	Conc. Pt. (lbs)	L	08-06-08	08-06-08					n/a
9	J4(i3298)	Conc. Pt. (lbs)	L	09-06-08	09-06-08	243	122			11/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment Neg. Moment End Shear Cont. Shear Uplift Total Load Defl. Live Load Defl. Total Neg. Defl. Max Defl.	1,314 ft-lbs -2,754 ft-lbs 883 lbs 1,243 lbs 658 lbs 2xL/1,998 (0.01 2xL/1,998 (0.01 L/999 (-0.002") 0.004"	38,727 ft-lbs -38,727 ft-lbs 14,464 lbs 14,464 lbs n/a 7") n/a 2") n/a n/a	3.4% 7.1% 6.1% 8.6% n/a n/a n/a n/a	3 9 3 9 1 2 2 3	09-05-10
Span / Depth	4.8	n/a	n/a		00-00-00

De man d/ De mand/ Resistance Resistance Material Member Support Dim. (LxW) Demand



COMPONENT

**Bearing Supports** 



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B16(i3191)

Dry | 3 spans | Left cantilever | 0/12 slope (deg)

May 5, 2017 15:41:49

BC CALC® Design Report



File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B16(i31

Specifier:

Designer:

City, Province, Postal Code:BRAMPTON,

Customer:

Build 5033 Job Name:

Address:

CCMC 12472-R

Company. Misc:

Code reports:		CONO 124121	COMO 1247 Zark							
B1 B2	Beam Wall/Plate	3-1/2" x 3-1/2" 5-1/2" x 3-1/2"	2,390 lbs 1,525 lbs	36.5% 14.8%	16% 6.5% 11.7%	Unspecified Unspecified HGUS410				
B3	Hanger	2" x·3-1/2"	995 lbs	n/a	11.770	11000+10				

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance w ith current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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#### Cautions

Uplift of 658 lbs found at span 2 - Right. Uplift of 658 lbs found at span 3 - Left.

(SIMPSON 1-4254 @ 57- BZ)

#### Notes

Design meets User specified (2xL/240) Total load deflection criteria. Design meets User specified (2xL/360) Live load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBG 2012

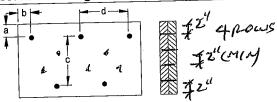
Unbalanced snow loads determined from building geometry were used in selected product's verification.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.

### Connection Diagram



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

Calculated Side Load = 176.9 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are:

Nails A'RDOX SPIRAL

> KATSOULAKOS ROVINCE OF ONTRE



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B17(i3186)

Dry | 3 spans | Left cantilever | 0/12 slope (deg)

May 5, 2017 15:41:49

BC CALC® Design Report

**Build 5033** 

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

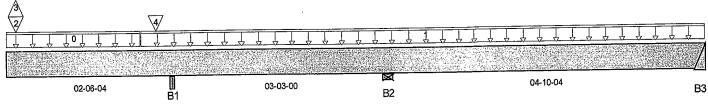
File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B17(i3186)

Specifier: Designer:

Company:

Misc:



Total Horizontal Product Length = 10-07-08

Reaction Summary (Down / Uplift) (lbs)									
Be aring	Live	De ad	Snow	Wind					
B1, 3-1/2"	678/122	508/0	955/0						
B2, 5-1/2"	202/315	0 / 80	0 / 478						
B3	93 / 9	75 / 0	49 / 0						

	ad Summary	Lo ad Type	Re f	. Start	End	Live 1.00	Dead 0.65	Snow Wind 1.00 1.15	Trib.
<u>~</u>	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	02-00-08	17	9	31	n/a
1	FC3 Floor Material	Unf. Lin. (lb/ft)	Ĺ	02-00-08	10-07-08	28	14		n/a
2	B15(i3187)	Conc. Pt. (lbs)	L	00-01-12	00-01-12	296	185	444	n/a
3	B15(i3187)	Conc. Pt. (lbs)	L	00-01-12	00-01-12	-57			n/a
4	E20(i1323)	Conc. Pt. (lbs)	L	02-03-04	02-03-04	9	51	19	n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	489 ft-lbs	38,727 ft-lbs	1.3%	10	05-09-04
Neg. Moment	-2,765 ft-lbs	-38,727 ft-lbs	7.1%	97	7 02-06-04
End Shear	171 lbs	14,464 lbs	1.2%	3	09-05-10
Cont. Shear	1,224 lbs	14,464 lbs	8.5%	97	7 01-04-10
Uplift	973 lbs	n/a	n/a	10	05-09-04
Total Load Defl.	2xL/1,998 (0.01	6") n/a	n/a	24	43 00-00-00
Live Load Defl.	2xL/1,998 (0.01)		n/a	33	36 00-00-00
Total Neg. Defl.	L/999 (-0.002")	n/a	n/a	24	43 03-09-10
Max Defl.	-0.002"	n/a	n/a	24	43 03-09-10
Span / Depth	4.8	n/a	n/a		00-00-00

Rearii	ng Supports	Dim . (L x W)	Demand	Resistance Support	Resistance Member	Material
B1	Beam	3-1/2" x 3-1/2"	2,407 lbs	36.8%	16.1%	Unspecified
B2	Wall/Plate	5-1/2" x 3-1/2"	973 lbs	9.5%	4.1%	Unspecified
B3	Hanger	2" x 3-1/2"	258 lbs	n/a	3%	HGUS410

- (SIMPSON 2-42-5A @ 0. BZ) Uplift of 973 lbs found at span 2 - Right.) Uplift of 973 lbs found at span 3 - Left.

#### Notes

Page 1 of 2



DWO NO . TAM 26585.17 STRUCTURAL COMPONENT ONLY



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B17(i3186)

Dry | 3 spans | Left cantilever | 0/12 slope (deg)

May 5, 2017 15:41:49

BC CALC® Design Report

\*

Dry | 3 spans | Leπ çanτilever | υ/

Build 5033

Job Name:

Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

·Description: Designs\Flush Beams\1st Floor\Flush Beams\B17(i318

Specifier:

Designer: Company:

Misc:

Design meets User specified (2xL/240) Total load deflection criteria. Design meets User specified (2xL/360) Live load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA 086. CONFORMS TO OBC 2012

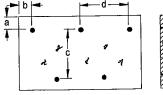
Unbalanced snow loads determined from building geometry were used in selected products verification.

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.

**Connection Diagram** 



\$2"4 ROWS

Calculated Side Load = 90.3 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are: 3-1 44 is

n Nails

34" ARDOX SPIRAL

#### Disclosure

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance w ith current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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DWB NO.TAM 26563 STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B18(i3155)

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

May 5, 2017 15:41:50



BC CALC® Design Report

**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

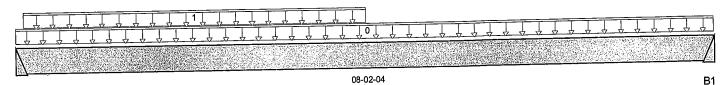
Description: Designs\Flush Beams\1st Floor\Flush Beams\B18(i3155)

Specifier:

Designer:

Company:

Misc:



B0

Total Horizontal Product Length = 08-02-04

Reaction Summary (D	own / Uplift) (lbs)		Snow	Wind	
Be aring	Live	De ad	SHOW	***************************************	
B0	790/0	444/0			
-R1	306/0	202/0			

			Live	Dead	Snow wind	HID.
Load Summary Tag Description	Load Type	Ref. Start	End 1.00	0.65	1.00 1.15	
	Unf. Lin. (lb/ft)	1 00-00-00	08-02-04 17	8		n/a
0 FC3 Floor Material	• •		04-01-00 240	120		n/a
1 User Load	Unf. Lin. (lb/ft)	L 00-01-00	04-01-00 240	120		

CONFORMS TO OBC 2012

Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
	38 727 ft-lbs	6.9%	1	03-02-00
	•	7.8%	1	01-01-14
		n/a	4	03-09-11
		n/a	5	03-09-11
		n/a	4	03-09-11
	n/a	n/a		00-00-00
	Factored Demand  2,654 ft-lbs 1,135 lbs L/999 (0.02") L/999 (0.013") 0.02" 8.1	Dem and         Resistance           2,654 ft-lbs         38,727 ft-lbs           1,135 lbs         14,464 lbs           L/999 (0.02")         n/a           L/999 (0.013")         n/a           0.02"         n/a	Dem and         Resistance         Resistance           2,654 ft-lbs         38,727 ft-lbs         6.9%           1,135 lbs         14,464 lbs         7.8%           L/999 (0.02")         n/a         n/a           L/999 (0.013")         n/a         n/a           0.02"         n/a         n/a	Dem and         Resistance         Resistance         Case           2,654 ft-lbs         38,727 ft-lbs         6.9%         1           1,135 lbs         14,464 lbs         7.8%         1           L/999 (0.02")         n/a         n/a         4           L/999 (0.013")         n/a         n/a         5           0.02"         n/a         n/a         4

D. J. C.	Dim. (L x W).	Dim (IxW) Demand		Resistance Member	Material	
Be aring Supports B0 Hanger B1 Hanger	2" x3-1/2"	1,741 lbs	n/a	20.4%	HGUS410	
	2" x3-1/2"	713 lbs	n/a	8.3%	HGUS410	

#### Notes

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

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

PROVINCE OF

COMPONENT ONLY



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B18(i3155)

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

May 5, 2017 15:41:50

BC CALC® Design Report

**Build 5033** 

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2.mmdl

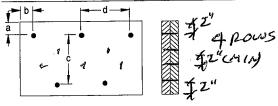
Description: Designs\Flush Beams\1st Floor\Flush Beams\B18(i31t

Specifier: Designer:

Company.

Msc:

### **Connection Diagram**



a minimum = 2" c = 7-7/8" d=# 6" b minimum = 3"

Member has no side loads. Connectors are: 16d & for Nails

312" ARDOX SPIRAL

#### Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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BOUNCE OF OMITE

DWO NO . TAM 26586. 17 STRUGTURAL COMPONENT ONLY



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B19(i3188)

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

May 5, 2017 15:41:50

BC CALC® Design Report

**Build 5033** Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

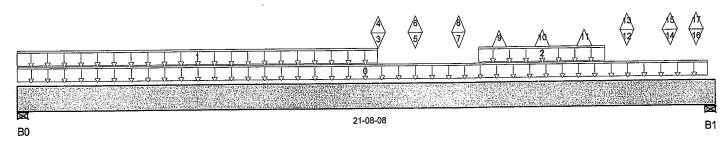
File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B19(i3188)

Specifier: Designer:

Company:

Misc:



Total Harizantal Product Length = 21-08-08

			Total Horizontal Produ	ict Length = 21	-00-00				
	eaction Summary (Dow	n / Uplift) (lbs) Live	De ad	Snow	Win	d			
BC	), 5-1/2"	704/47	493/0	2/75					
В1	, 5-1/2"	1,037 / 142	721/0	7 / 226					
	10				Live	Dead	Snow	Wind	Trib.
Load Summary Tag Description		Load Type	Ref. Start	En d	1.00	0.65	1.00	1.15	
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L 00-00-0	0 21-05-12	2 9	4			n/a
1	FC3 Floor Material	Unf. Lin. (lb/ft)	L 00-00-0	0 11-01-12	2 25	12			n/a
·	Cm asthad Laad	Unflin (lh/ff)	I 14-03-0	18-03-08	3 88	42	1		n/a

1	d Cummon					Live	Deau	SHOW WING	
	id Summary Description	Load Type	Ref	f. Start	En d	1.00	0.65	1.00 1.15	
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	21-05-12	9	4		n/a
1	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	11-01-12	25	12		n/a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	14-03-08	18-03-08	88	42	1	n/a
3	B16(i3191)	Conc. Pt. (lbs)	L	11-01-12	11-01-12	431	245	-150	n/a
4	B16(i3191)	Conc. Pt. (lbs)	L	11-01-12	11-01-12	-80			n/a
	J4(i3189)	Conc. Pt. (lbs)	L	12-03-08	12-03-08	109	53	1	n/a
6	J4(i3189)	Conc. Pt. (lbs)	L	12-03-08	12-03-08	-4			n/a
7	J4(i3185)	Conc. Pt. (lbs)	L	13-07-08	13-07-08	118	56	2	n/a
8	J4(i3185)	Conc. Pt. (lbs)	L	13-07-08	13-07-08	-4			n/a
9	J4(i3190)	Conc. Pt. (lbs)	L	14-11-08	14-11-08	-4			n/a
10	J4(i3192)	Conc. Pt. (lbs)	L	16-03-08	16-03-08	-4			n/a
11	J4(i3194)	Conc. Pt. (lbs)	L	17-07-08	17-07-08	-4			n/a
12	J4(i3181)	Conc. Pt. (lbs)	L	18-11-08	18-11-08	118	56	2	n/a
13	J4(i3181)	Conc. Pt. (lbs)	L	18-11-08	18-11-08	-4			n/a
	J4(i3184)	Conc. Pt. (lbs)	L	20-03-08	20-03-08	90	43	1	n/a
15	J4(i3184)	Conc. Pt. (lbs)	L	20-03-08	20-03-08	-4			n/a
16	, ,	Conc. Pt. (lbs)	L	21-01-06	21-01-06	60	100	-151	n/a
17		Conc. Pt. (lbs)	L	21-01-06	21-01-06	-81			n/a
• • •		,							

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	12,664 ft-lbs	38,727 ft-lbs	32.7%	9	11-01-12
End Shear	2.233 lbs	14,464 lbs	15.4%	9	20-03-02
Total Load Defl.	L/372 (0.674")	1.046"	64.5%	110	6 11-01-12
Live Load Defl.	L/613 (0.41")	0.697"	58.8%	168	8 11-01-12
Max Defl.	0.674"	n/a	n/a	110	6 11-01-12
Span / Depth	21.1	n/a	n/a		00-00-00

Demand

Dim. (L x W)

De mand/ De mand/ Resistance Resistance Material Member Support

PROLINICE OF ON THE DWG NO . TAN 2658217 STRUCTURAL COMPONENT ONLY

ROFESSION

Page 1 of 2

Bearing Supports



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B19(i3188)

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

May 5, 2017 15:41:50

BC CALC® Design Report



File Name: YORK 2.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B19(i318

Specifier:

Designer: Company.

City, Province, Postal Code:BRAMPTON,

Customer: Code reports:

Build 5033 Job Name:

Address:

CCMC 12472-R

1,673 lbs

2.459 lbs

Misc:

Wall/Plate BO Wall/Plate **B**1

5-1/2" x 3-1/2" 5-1/2" x 3-1/2"

16.3% 23.9%

Unspecified 7.1% Unspecified 10.5%

Disclosure

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance w ith current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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#### Notes

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

Calculations assume member is fully braced.

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

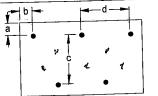
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBC 2012

Unbalanced snow loads determined from building geometry were used in selected products

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Connection Diagram



a minimum = 2" c = 7-7/8" d= 6" b minimum = 3"

Calculated Side Load = 102.1 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are:

Nails - " Nails ARDOX SPIRAL

ROUNCE OF ONTRE

DWO NO . TAN 26567\_17 STRUCTURAL COMPONENT ONLY



# Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B16(i4355)

Dry | 3 spans | Left cantil ever | 0/12 slope (deg)

May 8, 2017 08:12:11

BC CALC® Design Report

**Build 5033** Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

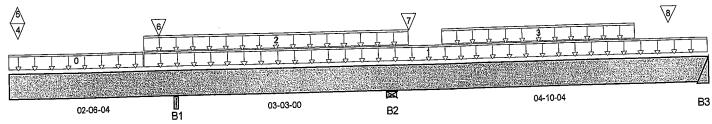
File Name: YORK 2 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B16(i4355)

Specifier: Designer:

Company:

Misc:



Total Horizontal	Product Length	= 10-07-08

		TOTALITIES			
Reaction Summary (Dov	vn / Uplift) (lbs) Live	De ad	Snow	Wind	
B1, 3-1/2"	723/220	510/0	1,066 / 0		
B2, 5-1/2"	875/326	249/0	0/510		
B3	499/9	278/0	53 / 0		

				Live	Dead	Snow Wind	i rib.
Load Summary	Load Type	Ref. Start	End	1.00	0.65	1.00 1.15	
Tag Description  O FC3 Floor Materia  1 FC3 Floor Materia  2 FC3 Floor Materia  3 Smoothed Load  4 B15(i4354)  5 B15(i4354)	al Unf. Lin. (lb/ft) al Unf. Lin. (lb/ft)	L 00-00-00 L 02-00-08 L 02-00-08 L 06-06-08 L 00-01-12 L 00-01-12	02-00-08 10-07-08 06-00-08 09-06-08 00-01-12 00-01-12 02-03-04	26 23 6 218 295 -52	13 11 3 109 187	47 453 61	n/a n/a n/a n/a n/a n/a n/a
6 E25(i3195) 7 J4(i4448) 8 J4(i4543)	Conc. Pt. (lbs) Conc. Pt. (lbs) Conc. Pt. (lbs)	L 02-03-04 L 06-00-08 L 10-00-08	06-00-08 10-00-08	157	79 94		n/a n/a

O tura la Ocumenta III	Factored	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment Neg. Moment End Shear Cont. Shear Uplift Total Load Defl.	Demand 1,304 ft-lbs -2,928 ft-lbs 816 lbs 1,317 lbs 703 lbs 2xL/1,998 (0.0°	38,727 ft-lbs -38,727 ft-lbs 14,464 lbs 14,464 lbs n/a 18") n/a	3.4% 7.6% 5.6% 9.1% n/a n/a	3 97 3 97 144 24;	3 00-00-00
Live Load Defl. Total Neg. Defl. Max Defl. Span / Depth	2xL/1,998 (0.0° L/999 (-0.003") 0.004" 4.8	13") n/a	n/a n/a n/a n/a	33( 24) 19	3 03-10-05

Demand

Dim. (LxW)

De mand/ Resistance		Materia I
Support	Member	Wateria



DWO NO . TAM 265EC. 17 STRUCTURAL COMPONENT ONLY

**Bearing Supports** 



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B16(i4355)

May 8, 2017 08:12:11

BC CALC® Design Report



Dry | 3 spans | Left cantil ever | 0/12 slope (deg)

File Name: YORK 2 ELEV B.mmdl Description: Designs\Flush Beams\1st Floor\Flush Beams\B16(i43\)

Specifier:

Designer: Company.

City, Province, Postal Code: BRAMPTON,

Customer: Code reports:

Build 5033 Job Name:

Address:

CCMC 12472-R

Misc: Unspecified 17.4% Unspecified 6.9%

39.7% 2,598 lbs 3-1/2" x 3-1/2" **B**1 Beam 15.8% 1,624 lbs 5-1/2" x 3-1/2" B2 Wall/Plate HGUS410 13.1% n/a 1,122 lbs 2" x3-1/2" ВЗ Hanger

Cautions

- (SIMPSON 1-42-54 @07.82) Uplift of 703 lbs found at span 2 - Right. Uplift of 703 lbs found at span 3 - Left.

Design meets User specified (2xL/240) Total load deflection criteria. Design meets User specified (2xL/360) Live load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

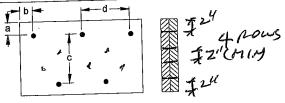
CONFORMS TO OBC 2012 Unbalanced snow loads determined from building geometry were used in selected products verification. verification.

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

**Connection Diagram** 



a minimum = 2" b minimum = 3"

Calculated Side Load = 200.0 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

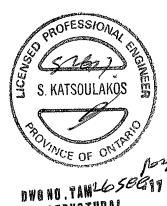
Connectors are: 3

31/2 "ARDOX SPIRAL

Disclosure

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## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B17(i4353)

Dry | 3 spans | Left cantil ever | 0/12 slope (deg)

May 8, 2017 08:12:12

BC CALC® Design Report

Build 5033 Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2 ELEV B.mmdl

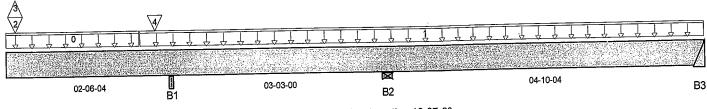
Description: Designs\Flush Beams\1st Floor\Flush Beams\B17(i4353)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 10-07-08

Reaction Summary (Do	own / Uplift) (lbs) Live	De ad	Snow	Wind	
B1, 3-1/2"	720/118	531/0	1,048 / 0 0 / 514		
B2, 5-1/2" B3	200/332 95/9	0/87 76/0	53 / 0		

					Live	Dead .	Snow Wind	Trib.
	ad Summary	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
ı a	g Description	Unf. Lin. (lb/ft)	L 00-00-0	02-00-08	17	9	31	n/a
0	FC3 Floor Material	, ,	1 02-00-0		3 28	14		n/a
.1	FC3 Floor Material	Unf. Lin. (lb/ft)	I 00-01-1			191	479	n/a
2	B15(i4354)	Conc. Pt. (lbs)	I 00-01-12					n/a
3	B15(i4354)	Conc. Pt. (lbs)				62	44	n/a
4	F20(i1323)	Conc. Pt. (lbs)	L 02-03-0	4 02-03-04	+ 20	02	• •	

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	525 ft-lbs	38,727 ft-lbs	1.4%	10	
Neg. Moment	-2,940 ft-lbs	-38,727 ft-lbs	7.6%	97	
End Shear	176 lbs	14,464 lbs	1.2%	3	09-05-10
Cont. Shear	1.298 lbs	14,464 lbs	9%	97	
Uplift	1.046 lbs	n/a	n/a	10	05-09-04
Total Load Defl.	2xL/1,998 (0.01	7") n/a	n/a	24	13 00-00-00
Live Load Defl.	2xL/1,998 (0.01		n/a	33	36 00-00-00
Total Neg. Defl.	L/999 (-0.002")	n/a	n/a	24	43 03-09-10
Max Defl.	-0.002"	n/a	n/a	24	43 03-09-10
Span / Depth	4.8	n/a	n/a		00-00-00

Poprir	ng Supports	Dim . (L x W)	Demand	De mand/ Re sistance Su pport	De man d/ Re sistance Me mbe r	Material
B1	Beam	3-1/2" x 3-1/2"	2,597 lbs	39.7%	17.4%	Unspecified
B2	Wall/Plate	5-1/2" x 3-1/2"	1,046 lbs	10.2%	4.5%	Unspecified
B3	Hanger	2" x 3-1/2"	263 lbs	n/a	3.1%	HGUS410

Cautions

Uplift of 1,046 lbs found at span 2 - Right. Uplift of 1,046 lbs found at span 3 - Left.

Notes

Page 1 of 2



### Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B17(i4353)

May 8, 2017 08:12:12

BC CALC® Design Report



Dry | 3 spans | Left cantilever | 0/12 slope (deg)

**Build 5033** 

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B17(i43

Specifier: Designer: Company.

Misc:

Design meets User specified (2xL/240) Total load deflection criteria.

Design meets User specified (2xL/360) Live load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA 2012 086.

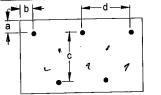
Unbalanced snow loads determined from building geometry were used in selected products verification.

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.

Connection Diagram



c = 7-7/8" a minimum = 2" b minimum = 3" d = 2008

Calculated Side Load = 97.0 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

312" ARDOX SPIRAL

Disclosure

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COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B19(i4352)

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

May 8, 2017 08:12:12

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

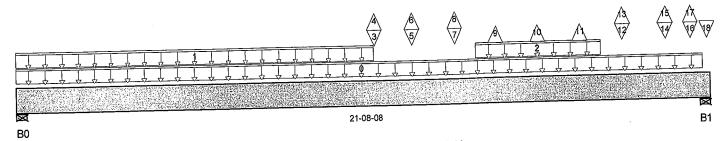
File Name: YORK 2 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B19(i4352)

Specifier:

Designer: Company:

Misc:



Total Horizontal Product Length = 21-08-08

Reaction Summary (Down	/ Uplift) ( lbs ) Live	De ad	Snow	Wind			
B0, 5-1/2" B1, 5-1/2"	646/49 1,039/150	464/0 692/0	3 / 81 8 / 245			Snow Mind	Trib.
					Da - 4	Snow Wind	I FID.

						Live	Dead	Snow	Wind	irib.
	Summary	Load Type	Ref	. Start	End	1.00	0.65	1.00	1.15	
	scription			00-00-00	21-05-12	9	4			n/a
	3 Floor Material	Unf. Lin. (lb/ft)		00-00-00	11-01-12		7			n/a
	3 Floor Material	Unf. Lin. (lb/ft)	L	14-03-08	18-03-08		42	1		n/a
2 Sm	noothed Load	Unf. Lin. (lb/ft)	Ŀ		11-01-12		271	-162		n/a
3 B1	6(i4355)	Conc. Pt. (lbs)	L	11-01-12	11-01-12		2			n/a
4 B1	6(i4355)	Conc. Pt. (lbs)	L	11-01-12			53	1		n/a
	(i4358)	Conc. Pt. (lbs)	L	12-03-08	12-03-08		55			n/a
	(i4358)	Conc. Pt. (lbs)	L	12-03-08	12-03-08		56	3		n/a
	DJ (i4357)	Conc. Pt. (lbs)	L	13-07-08	13-07-08		90	3		n/a
	DJ (i4357)	Conc. Pt. (lbs)	L	13-07-08	13-07-08					n/a
	(i4555)	Conc. Pt. (lbs)	L	14-11-08	14-11-08					n/a
	(i4412)	Conc. Pt. (lbs)	L	16-03-08	16-03-08					n/a
•	,	Conc. Pt. (lbs)	L	17-07-08	17-07-08			•		n/a
	·(i4486) · D. (:4302)	Conc. Pt. (lbs)	L	18-11-08	18-11-08		56	3		n/a
	DJ (i4392)	Conc. Pt. (lbs)	L	18-11-08	18-11-08	3 -4				
	DJ (i4392)	Conc. Pt. (lbs)	L	20-03-08	20-03-08	91	44	1		n/a
	(i4356)	Conc. Pt. (lbs)	1.	20-03-08	20-03-08	3 -3				n/a
	ł (i4356)		Ī	21-01-00	21-01-00		61	-164		n/a
16 -	•	Conc. Pt. (lbs)	ī	21-01-00	21-01-00					n/a
17 -		Conc. Pt. (lbs)	L 1	21-07-02	21-07-02		10	•		n/a
18 FC	C3 Floor Material	Conc. Pt. (lbs)	L	21-01-02	_, 0, 0-	-			The state of the s	

Controls Summary	Factored	Factored	Demand /	Load Location	
	Demand	Resistance	Resistance	Case	
Pos. Moment End Shear Total Load Defl. Live Load Defl. Max Defl. Span / Depth	12,656 ft-lbs 2,226 lbs L/377 (0.667") L/619 (0.405") 0.667" 21.1	38,727 ft-lbs 14,464 lbs 1.046" 0.697" n/a n/a	32.7% 15.4% 63.7% 58.1% n/a n/a	1	11-01-12 20-03-02 16 11-01-12 68 11-01-12 16 11-01-12 00-00-00



DWO NO . TAM 26590=17 STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B19(i4352)

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

May 8, 2017 08:12:12

BC CALC® Design Report

Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2 ELEVB.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B19(i43t

Specifier:

Designer: Company.

Misc:

	Dim . (L × W)	De man d	De mand/ Resistance Support	De mand/ Resistance Member	Material
Bearing Supports  BO Wall/Plate  B1 Wall/Plate	5-1/2" x 3-1/2"	1,550 lbs	15.1%	6.6%	Unspecified
	5-1/2" x 3-1/2"	2,428 lbs	23.6%	10.3%	Unspecified

#### Notes

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

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

Calculations assume member is fully braced.

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

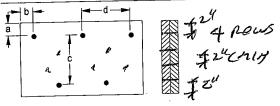
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CS CONFORMS TO OBC 2012

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

#### **Connection Diagram**



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

Calculated Side Load = 103.4 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

Connectors are: இத்திக்க சிக்காவில் பொ Nails

312" ARDOX SPIRAL

Disclosure

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here 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 1-800-964-6999 before installation.

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## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B20(i4568)

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

May 8, 2017 08:12:12

BC CALC® Design Report



**Build 5033** 

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

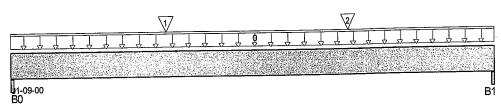
File Name: YORK 2 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B20(i4568)

Specifier:

Designer: Company:

Misc:



Total Horizontal Product Length = 01-09-00

Reaction Summary (Down Bearing	/ <b>Uplift)</b> (lbs) Live	De ad	Snow	Wind	
B0, 5"	169/0	368/0	63 / 0		
<u>B</u> 1,5"	208/0	243/0	63 / 0		

				Live	Dead	Snow Wind	Trib.
Load Summary	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
Tag Description		L 00-00-00	01-09-00	34	115	72	n/a
0 UserLoad	Unf. Lin. (lb/ft)	L 00-00-00	•				n/a
4	Conc. Pt. (lbs)	I. 00-06-11	00-06-11	134	298		IIIa
1 -	• •	. 04 00 00	04 00 00	183	91		n/a
2 .14(i4365)	Conc. Pt. (lbs)	L 01-02-08	01-02-08	103	91		

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location —
Pos. Moment	88 ft-lbs	25.173 ft-lbs	0.3%	0	00-07-00
End Shear	110 lbs	14,464 lbs	0.8%	13	
Span / Depth	1.1	n/a	n/a		00-00-00

		Dim.(LxW)	Demand	De man d/ Re sistance Support	Resistance Member	Material	
Be arir	ng Supports Beam	5" x3-1/2"	515 lbs	8.5%	3.7%	Unspecified	
B1	Beam	5" x3-1/2"	648 lbs	6.9%	3%	Unspecified	

Notes

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

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBG 2012 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

S. KATSOULAKOS

COMPONENT ONLY



## Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B20(i4568)

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

May 8, 2017 08:12:12

BC CALC® Design Report

File Name: YORK 2 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\820(i456

Specifier: Designer:

Company.

Misc:

Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

**Connection Diagram** 

c = 3-15/16" a minimum = 2" d = 🥙 💪 🗥 b minimum = 3"

Calculated Side Load = 532.4 lb/ft

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record.

### Disclosure

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance w ith current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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DWO NO . TAM 2659/19 STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B10 DR(i4459)

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

May 8, 2017 08:12:12

BC CALC® Design Report

Build 5033 Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2 ELEV B.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B10

Designer: Company:

Misc:

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Ø 05-11-00	B1
B0	

Total Horizontal Product Length = 05-11-00

Reaction Summary (Down /	Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 4" B1, 4"	1,257 / 0 1,122 / 0	968/0 901/0	337/0 337/0		

				L	ive Dea	ad Snow	Wind	irib.
	oad Summary	Load Type	Ref. Start	End 1.	0.6	1.00	1.15	
18	g Description			05-11-00 3	6 123	3 114		n/a
$\overline{a}$	R1 (i4419)	Unf. Lin. (lb/ft)	L 00-00-00					n/a
U	· · · · · · · · · · · · · · · · · · ·	• •	L 00-00-00	05-09-08 3	74 188	8		II/a
- 1	Smoothed Load	Unf. Lin. (lb/ft)	L 00-00-00	00 00 00 0	•			

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	3,765 ft-lbs	25,408 ft-lbs	14.8%	1	03-03-08
	2,185 lbs	11,571 lbs	18.9%	1	01-01-08
End Shear	L/999 (0.029")	n/a	n/a	35	02-11-12
Total Load Defl.	<u>∟</u> /999 (0.017")	n/a	n/a	51	02-11-12
Live Load Defl.	0.029"	n/a	n/a	35	02-11-12
Max Defl.		n/a	n/a		00-00-00
Span / Depth	6.8	IVa	TII C		

Bearing Supports		Dim . (L x W)	De man d	De mand/ Resistance Support	De mand/ Re sistance Me mbe r	Material .	
	upports il/Plate	4" x3-1/2"	3.264 lbs	28.7%	19.1%	Unspecified	
	all/Plate	4" x3-1/2"	2,979 lbs	26.2%	17.4%	Unspecified	

#### Notes

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

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

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

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

BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

Unbalanced snow loads determined from building geometry were used in selected products verification.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DWO NO. TAN 26592-17 STRUCTURAL COMPONENT ONLY



## Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B10 DR(i4459)

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

May 8, 2017 08:12:12

BC CALC® Design Report

Build 5033

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

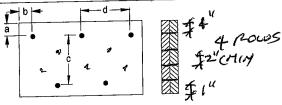
File Name: YORK 2 ELEV B.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B1

Specifier: Designer: Company.

Misc:

### **Connection Diagram**



a minimum = 🗗 d=00"6" b minimum = 3"

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record. Member has no side loads.

Connectors are: 16d 🗧 📖 Nails

34" TARDOX SPIRAL

### Disclosure

Completeness and accuracy of input must be verified by anyone w ho w ould rely on output as evidence of suitability for particular application. Output here based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered w ood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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### Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B21 DR (i5517)

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

May 19, 2017 08:35:51

BC CALC® Design Report

\*

Build 5033 Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

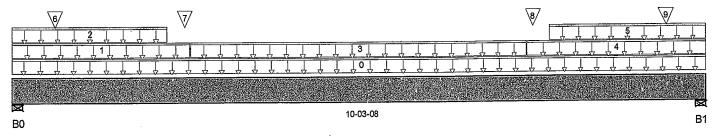
CCMC 12472-R

File Name: YORK 2 ELEVB.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B21

Specifier: Designer: Company.

Misc:



Total Horizontal	Product	Length =	10-03-08
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Reaction Summary (	Down / Uplift) ( lbs )		· · · · · · · · · · · · · · · · · · ·		
Bearing	Live	De ad	Snow	Wind	
B0, 11-1/2"	364/0	677/0	430/0		
B1. 11"	364/0	674/0	425/0		

Load Summary					Live	Dead	Snow	Wind	Trib.	
Tag Description		Load Type	Re	f. Start	En d	1.00	0.65	1.00	1.15	
0	R3(i5510)	Unf. Lin. (lb/ft)	L	00-00-00	10-03-08	6	3			n/a
1	R3(i5510)	Unf. Lin. (lb/ft)	L	00-00-00	02-07-08		81			n/a
2	R3(i5510)	Unf. Lin. (lb/ft)	L	00-00-00	02-03-08	37	35	83		n/a
3	R3(i5510)	Unf. Lin. (lb/ft)	L	02-07-08	07-07-08		41			n/a
4	R3(i5510)	Unf. Lin. (lb/ft)	L	07-07-08	10-03-08		81			n/a
5	R3(i5510)	Unf. Lin. (lb/ft)	L	07-11-08	10-03-08	37	35	83		n/a
6	J4(i5509)	Conc. Pt. (lbs)	L	00-07-08	00-07-08	140	70			n/a
7	R3(i5510)	Conc. Pt. (lbs)	L	02-06-08	02-06-08	105	142	237		n/a
8	R3(i5510)	Conc. Pt. (lbs)	L	07-08-08	07-08-08	104	141	234		n/a
9	J4(i5509)	Conc. Pt. (lbs)	L	09-08-04	09-08-04	143	72			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	1,896 ft-lbs	25,408 ft-lbs	7.5%	13	05-03-06
End Shear	978 lbs	11,571 lbs	8.5%	13	01-09-00
Total Load Defl.	L/999 (0.042")	n/a	n/a	45	05-01-08
Live Load Defl.	L/999 (0.019")	n/a	n/a	61	05-01-08
Max Defl.	0.042"	n/a	n/a	45	05-01-08
Span / Depth	10.8	n/a	n/a		00-00-00

				De mand/ Resistance	De mand/ Resistance		
Bearing Supports		Dim.(LxW)	Demand	Support	Member	Material	
B0	Wall/Plate	11-1/2" x3-1/2"	1,673 lbs	5.1%	3.4%	Unspecified	
B1	Wall/Plate	11"x3-1/2"	1,661 lbs	5.3%	3.5%	Unspecified	

Notes



BWB NO TAM 2659317 STRUCTURAL COMPONENT ONLY



### Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B21 DR (i5517)

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

May 19, 2017 08:35:51

BC CALC® Design Report

**Build 5033** 

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 2 ELEV B.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B2

Specifier: Designer:

Company:

Misc:

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

Calculations assume member is fully braced.

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

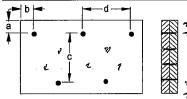
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

CONFORMS TO OBC 2012 Unbalanced snow loads determined from building geometry were used in selected products verification verification.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

### Connection Diagram



a minimum = #" b minimum = 3"

c = 76 - 1/2"

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record. Member has no side loads.

Connectors are: 16d Sale: Nails

314" ARDOX SPIRAL

#### Disclosure

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OWE NO. TAM 26593.17 STRUCTURAL COMPONENT ONLY