

41-08-00

		Products		-
PlotID	Length	Product	Plies	Net Qty
J5	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	34
J1 DJ	22-00-00	11 7/8" NI-40x	2	6
J1 DJ	22-00-00	11 7/8" NI-40x	2	2
J2	18-00-00	11 7/8" NI-40x	1	36
J3	14-00-00	11 7/8" NI-40x	·1	1
J4	12-00-00	11 7/8" NI-40x	1	1
J6	8-00-00	11 7/8" NI-40x	1	11
J7	6-00-00	11 7/8" NI-40x	1	6
J8	4-00-00	11 7/8" NI-40x	1	1
J9	2-00-00	11 7/8" NI-40x	1	4
J9	22-00-00	11 7/8" NI-80	1	12
B4 L/	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B5 L -	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1 CANT	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3 ′	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connector Summary					
Qty	Manuf	Product				
2	H1	IUS2.56/11.88				
2	H1	IUS2.56/11.88				
4	H1	IUS2.56/11.88				
11	H2	IUS2.56/9.5				
1	H3C	HUC410				
1	H3	HGUS410				
2	H5	HU312-2				
9	H9	IUS3.56/11.88				

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/ft² 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

DEGREY DR

MODEL: YORK 3 ELEVATION: A

LOT:

SITE:

CITY: BRAMPTON

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

DATE: 2017-05-19

S. KATSOULAKOS

1st FLOOR

DATE 82617

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# TANZ 6605 THROUGH DWG# TAM 26609-17 INCLUSIVE DATED 5264.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM.
REGISTERED UNDER SUBSECTION 3.2.5 OF THE ONTARIO BUILDING CODE: AMAGUAL FIE

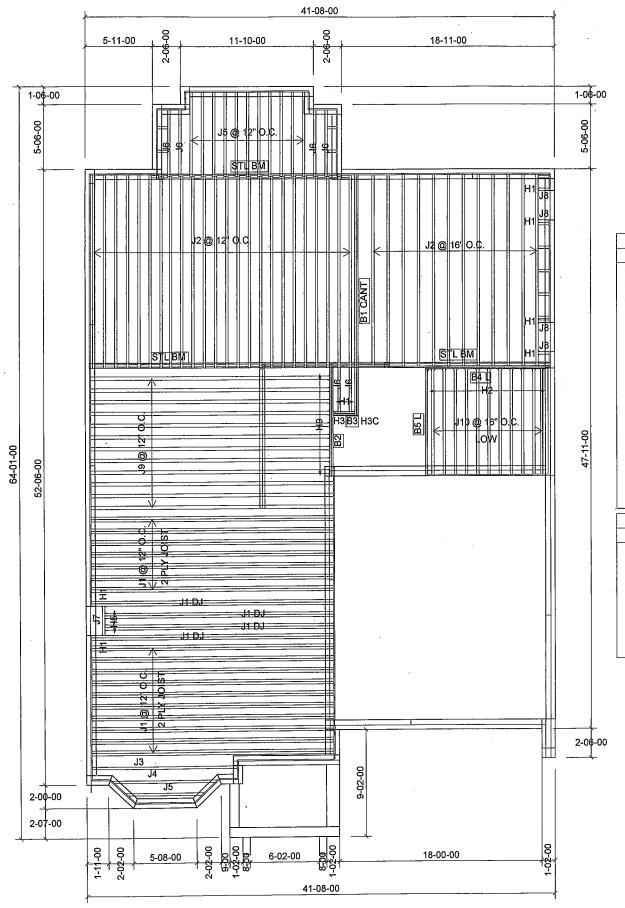
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY, 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER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

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC

26064

SEALED STRUCTURAL COMPONENTS ONLY



		Products		
PlotID	Length	Product	Plies	Net Qty
J10	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	34
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J2	18-00-00	11 7/8" NI-40x	1	36
J3	14-00-00	11 7/8" NI-40x	1	1
J4	10-00-00	11 7/8" NI-40x	1	1
J5	8-00-00	11 7/8" NI-40x	1	12
J6	6-00-00	11 7/8" NI-40x	1	6
J7	4-00-00	11 7/8" NI-40x	1	1
J8	2-00-00	11 7/8" NI-40x	1	4
J9	22-00-00	11 7/8" NI-80	1	12
B4 L 🔨	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B5 L -	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1.
B1 CANT	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3/	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

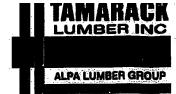
	Connector Summary					
Qty	Manuf	Product				
2	H1	IUS2.56/11.88				
2	H1	IUS2.56/11.88				
4	H1	IUS2.56/11.88				
11	H2	IUS2.56/9.5				
1	H3C	HUC410				
1	H3	HGUS410				
2	H5	HU312-2				
9	H9	IUS3.56/11.88				

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/ft² 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 3

ELEVATION: B

LOT:

CITY: BRAMPTON

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

DATE: 2017-05-19

1st FLOOR

DATE 52677

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 26605 THROUGH DWG# TAM 26609-17, INCLUSIVE DATED 52671

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 EXTREMOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS, WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.

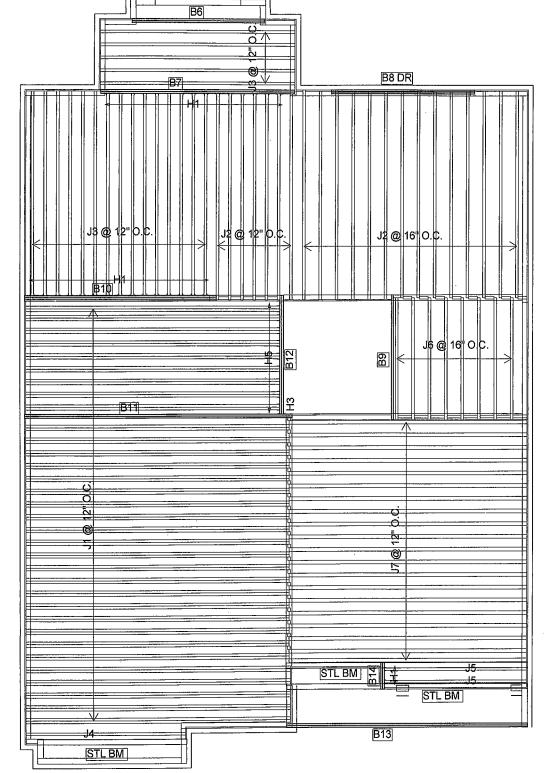
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED. DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION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

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 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	66
J2	18-00-00	11 7/8" NI-40x	1	21
J3	16-00-00	11 7/8" NI-40x	1	20
J4	14-00-00	11 7/8" NI-40x	1	1
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	8
J7	20-00-00	11 7/8" NI-80	1	20
B8 DR ~	- 12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11 ~	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13 ~	20-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B7 ~	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10 ~	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B6 <	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B9 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B12~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14 ~	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connector Summary					
Qty	Manuf	Product				
17	H1	IUS2.56/11.88				
15	H1	IUS2.56/11.88				
1	H3	HGUS410				
9	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. 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/ft² 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 3

ELEVATION: A

LOT:

CITY: BRAMPTON

SALESMAN: R D
DESIGNER: PL
REVISION:

DATE: 2017-05-15

2nd FLOOR

DATE 5 26/7 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 2660 THROUGH DWG# TAM 26618-12 INCLUSIVE DATED 52617

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

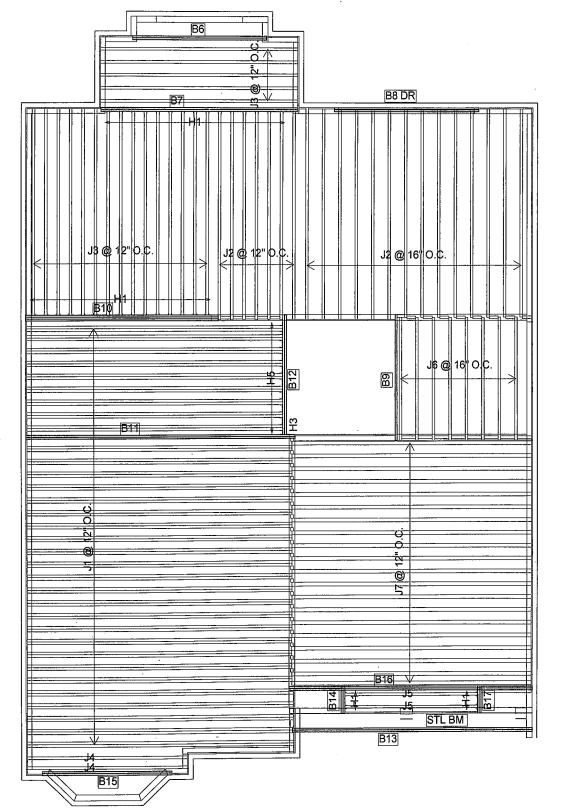
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS AN INTEGRAL PART OF THIS SEALED DOCUMENT. INSTALL SQUASH BLOCKS FOR TRANSFERRING POINT LOADS FROM GIRDER TRUSSES, HEADERS, AND BEAMS DOWN TO FOUNDATION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

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 26628-77
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL

S. KATSOULAKOS



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	66
J2	18-00-00	11 7/8" NI-40x	1	21
J3	16-00-00	11 7/8" NI-40x	1	20
J4	14-00-00	11 7/8" NI-40x	1	2
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	8
J7	20-00-00	11 7/8" NI-80	1	20
B8 DR ←	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11 -	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13-	20-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B7 -	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10 -	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B15 C	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6 ∕	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B9 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B12 ~	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14 ~	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B17 ′	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

	Connector Summary						
Qty	Manuf	Product					
19	H1	IUS2.56/11.88					
15	H1	IUS2.56/11.88					
1	H3	HGUS410					
9	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. 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/ft² 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 3
ELEVATION: B

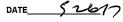
LOT:

CITY: BRAMPTON

SALESMAN: RD
DESIGNER: PL
REVISION:

DATE: 2017-05-15

2nd 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 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

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 26610 THROUGH DWG# TAM 26625 12 INCLUSIVE DATED 52647

SEALED STRUCTURAL COMPONENTS ONLY: — 2.6 624-17

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

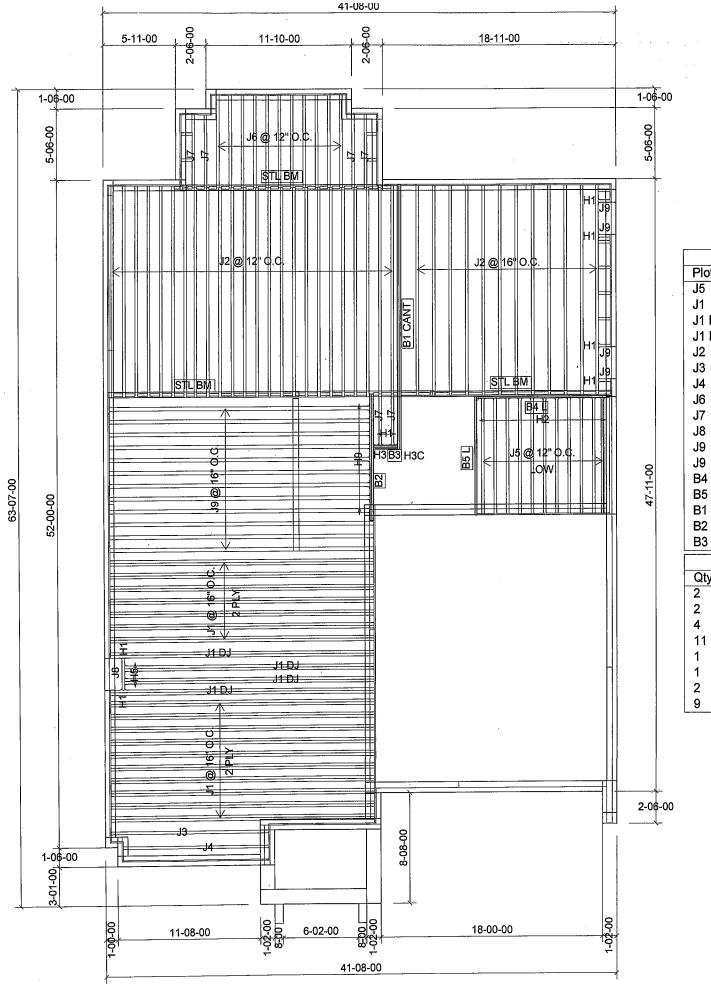
A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE. WHICH INCLUDES INSTALLATION

A COMPLETE FRAMING PLAN REQUIRES THE NORDIC PUBLISHED LITERATURE, WHICH INCLUDES INSTALLATION REQUIREMENTS, HANDLING AND STORAGE GUIDELINES, AND FORMS 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 11/16D DEEPER THAN JOIS DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

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

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.





		Products		
PlotID	Length	Product	Plies	Net Qty
J5	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	34
J1 DJ	22-00-00	11 7/8" NI-40x	2	6
J1 DJ	22-00-00	11 7/8" NI-40x	2	2
J2	18-00-00	11 7/8" NI-40x	1	36
J3	14-00-00	11 7/8" NI-40x	1	1
J4	12-00-00	11 7/8" NI-40x	1	1
J6	8-00-00	11 7/8" NI-40x	1	11
J7	6-00-00	11 7/8" NI-40x	1	6
J8	4-00-00	11 7/8" NI-40x	1	1
J9	2-00-00	11 7/8" NI-40x	1	4
J9	22-00-00	11 7/8" NI-80	1	12
B4 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B5 L	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1 CANT	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary

Manuf Product

IUS2.56/11.88

IUS2.56/11.88

IUS2.56/11.88

IUS3.56/11.88

IUS2.56/9.5

HUC410

HGUS410

HU312-2

H1

H1

H1

H2

Н3

H5

H9

H₃C

UPDATED



FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 3

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
APPLICATION AS PER O.B.C 9.30.6.

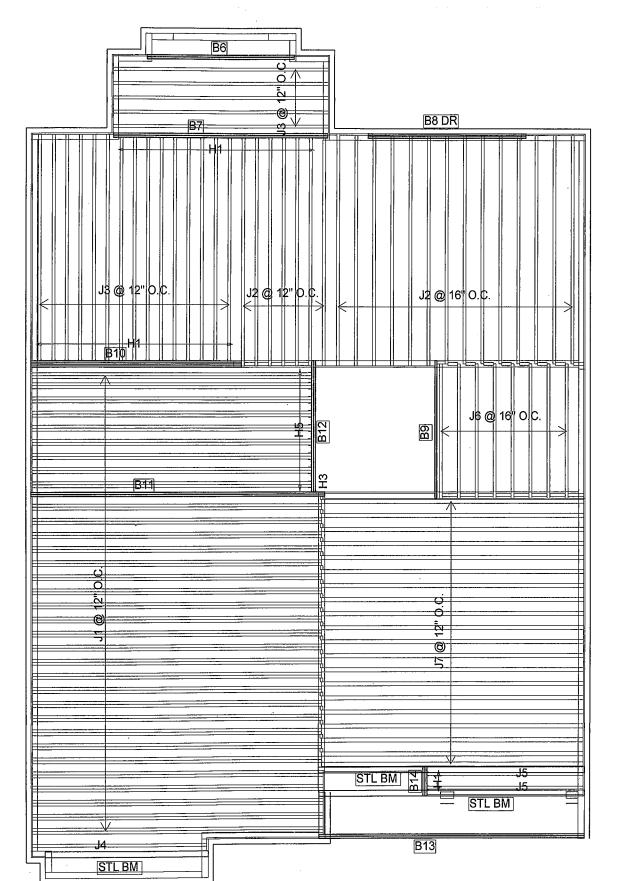
LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 20.0 lb/ft² TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2017-05-19

1st FLOOR



		Products		
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	66
J2	18-00-00	11 7/8" NI-40x	1	21
J3	16-00-00	11 7/8" NI-40x	1	20
J4	14-00-00	11 7/8" NI-40x	1	1
J5	12-00-00	11 7/8" NI-40x	1	2
J6	10-00-00	11 7/8" NI-40x	1	8
J7	20-00-00	11 7/8" NI-80	1	20
B8 DR	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B11	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B13	20-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B7	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B10	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B6	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B9	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B12	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B14	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary					
Qty	Manuf	Product			
17	H1	IUS2.56/11.88			
15	H1	IUS2.56/11.88			
1	H3	HGUS410			
9	H5	HU312-2			



FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 3

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

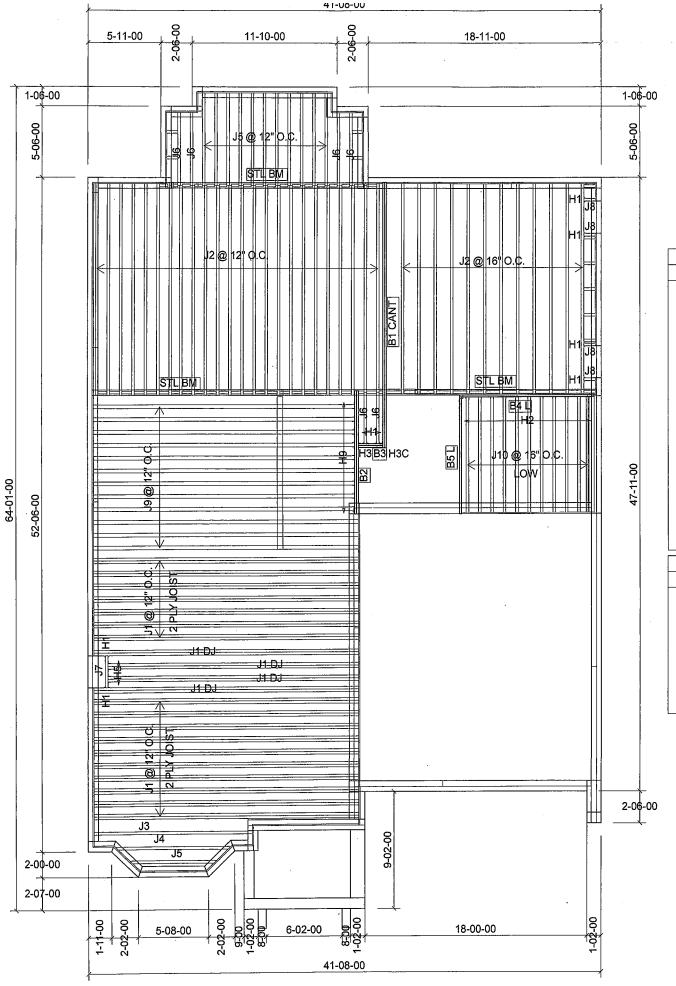
LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 20.0 lb/ft² TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2017-05-15

2nd FLOOR



		Products		
PlotID	Length	Product	Plies	Net Qty
J10	10-00-00	9 1/2" NI-40x	1	11
J1	22-00-00	11 7/8" NI-40x	2	34
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J2	18-00-00	11 7/8" NI-40x	1	36
J3	14-00-00	11 7/8" NI-40x	1	1
J4	10-00-00	11 7/8" NI-40x	1	1
J5	8-00-00	11 7/8" NI-40x	1	12
J6	6-00-00	11 7/8" NI-40x	1	6
J7	4-00-00	11 7/8" NI-40x	1	1
J8	2-00-00	11 7/8" NI-40x	1	4
J9	22-00-00	11 7/8" NI-80	1	12
B4 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B5 L	10-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B1 CANT	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B3	2-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2

Connector Summary							
Qty	Manuf	Product					
2	H1	IUS2.56/11.88					
2	H1	IUS2.56/11.88					
4	H1	IUS2.56/11.88					
11	H2	IUS2.56/9.5					
1	H3C	HUC410					
1	H3	HGUS410					
2	H5	HU312-2					
9	H9	IUS3.56/11.88					



FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 3

ELEVATION: B

LOT:

CITY: BRAMPTON

SALESMAN: RD 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.

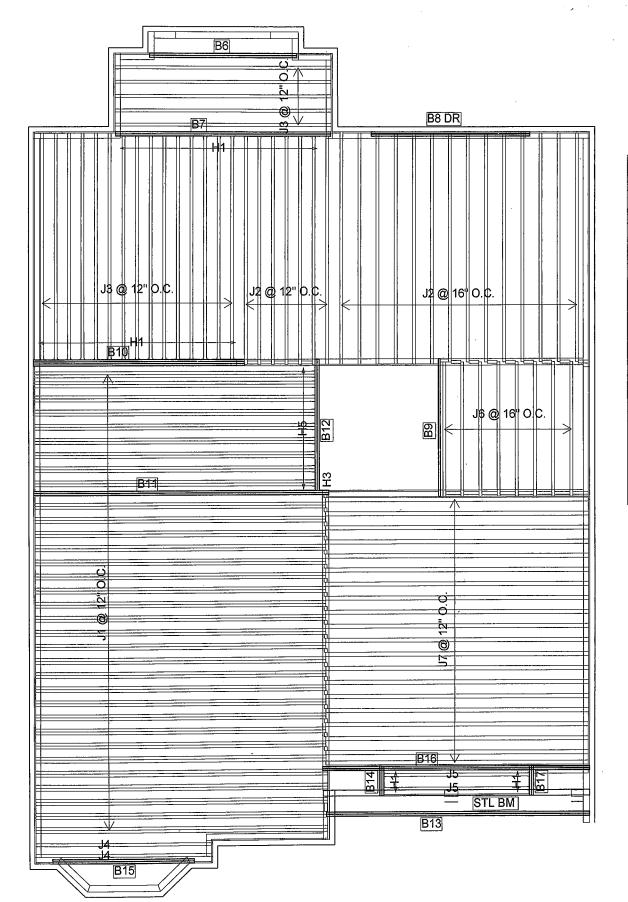
LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 20.0 lb/ft TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2017-05-19

1st FLOOR



Products								
PlotID	Length	Product	Plies	Net Qty				
J1	22-00-00	11 7/8" NI-40x	2	66				
J2	18-00-00	11 7/8" NI-40x	1	21				
J3	16-00-00	11 7/8" NI-40x	1	20				
J4	14-00-00	11 7/8" NI-40x	1	2				
J5	12-00-00	11 7/8" NI-40x	1	2				
J6	10-00-00	11 7/8" NI-40x	1	8				
J7	20-00-00	11 7/8" NI-80	1	20				
B8 DR	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2				
B11	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B13	20-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B7	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B10	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3				
B15	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B6	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B <u>9</u>	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1				
B12	10-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B14	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				
B17	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2				

Connector Summary								
Qty Manuf Product								
H1	IUS2.56/11.88							
H1	IUS2.56/11.88							
H3	HGUS410							
H5	HU312-2							
	Manuf H1 H1 H3							



FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 3

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

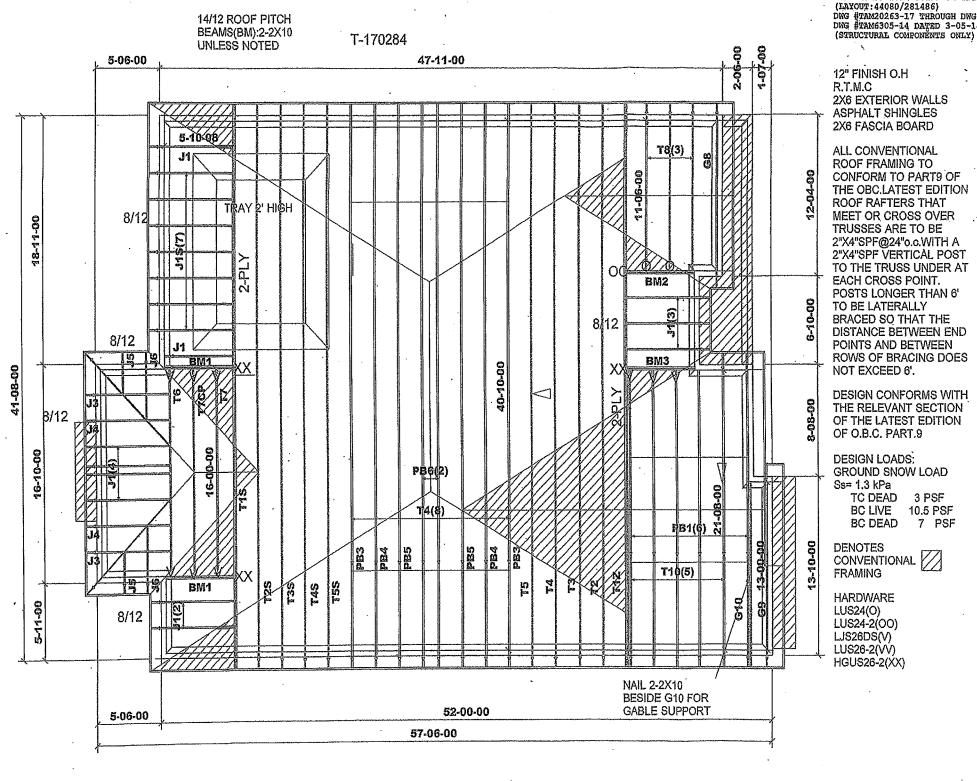
LOADING:

DESIGN LOADS: L/480.000 LIVE LOAD: 40.0 lb/ft² DEAD LOAD: 20.0 lb/ft² TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2017-05-15

2nd FLOOR



MAY 1, 2017
THE FOLLOWING DRAWING NUMBERS REPRESENT THE IDENTIFIERS OF THE SEALED DRAWINGS OF THE TRUSS
THE FOLLOWING DRAWING NUMBERS REPRESENT THE IDENTIFIERS OF THE SEALED DRAWINGS OF THE TRUSS

ONG #TAMA0263-17 THROUGH DWG #TAMA0286-17, INCLUSIVE, AND ALL DATED 5-01-17; DWG #TAM6305-14 DATED 3-05-14 (CONVENTIONAL FRAMED VALLEY STANDARD)

CONFORM TO PART9 OF THE OBC, LATEST EDITION MEET OR CROSS OVER 2"X4"SPF@24"o.c.WITH A 2"X4"SPF VERTICAL POST TO THE TRUSS UNDER AT POSTS LONGER THAN 6' BRACED SO THAT THE DISTANCE BETWEEN END POINTS AND BETWEEN **ROWS OF BRACING DOES**

ekilenia kangana digirangan dinangan dia malah ini mangan dipenerah dipenerah darah darah darah darah kelalah d

DESIGN CONFORMS WITH THE RELEVANT SECTION OF THE LATEST EDITION

GROUND SNOW LOAD BC LIVE 10.5 PSF BC DEAD 7 PSF

DATE: SAD177 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 VERTILED & GOALD ALL DISCONDERS
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 RESPONSIBILITY FOR THIS PROJECT. 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 AND/OR
PROJECT ENGINEER AND ARE TO BE REVIEWED AND CONFIRMED BY THE SAME DESIGNERS
PRIOR TO FABRICATION TO ENSURE A DEGULATE LOAD CAPACITY WITH RESPECT TO THE
ROOF TRUSS COMPONENTS REVIEWED IN THIS SUBMISSION.

LOT SPECIFIC SCHEDULE 1 REQUIRED FOR EACH INDIVIDUAL LOT.

THROUGH DWG #TAM , 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 REQUIREMENTS: (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 - 3-1/4" COMMON WIRE NAILS PER WEB MEMBER. THEN PROVIDE 2 X 4 #2 SPF "X-BRACING" ALONG THESE SAME WEB MEMBERS AT LOCATIONS INDICATED (7) 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 3-1/4" COMMON WIRE NAILS AT 6" OC, 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" OIC 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 STUDS AT24° O/C.

ALL CONVENTIONAL FRAMING TO CONFORM TO ONTARIO BUILDING CODE CURRENT EDITIONS.

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.

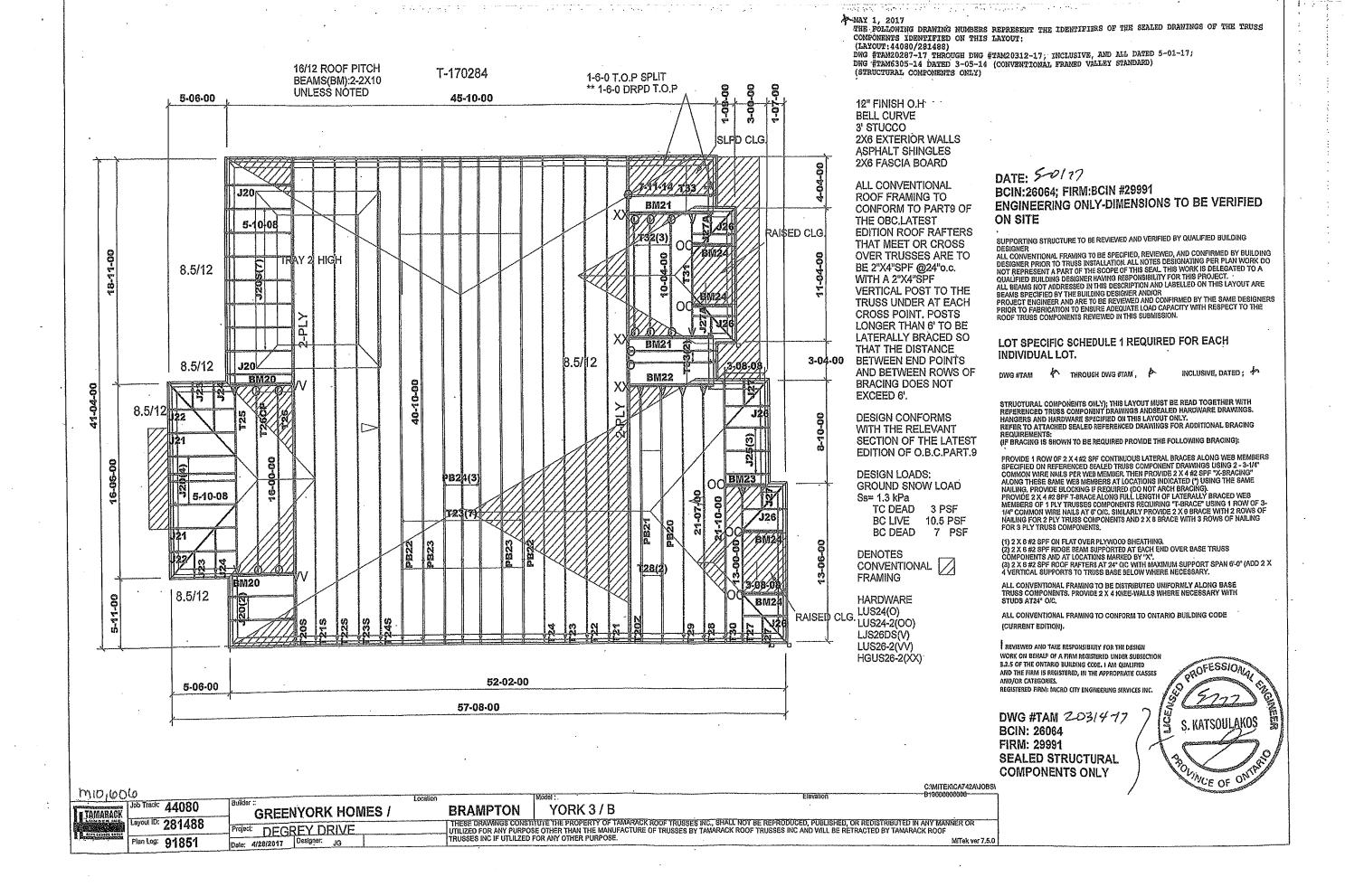
DWG #TAM 2031377 BCIN: 26064 FIRM: 29991 **SEALED STRUCTURAL**

COMPONENTS ONLY



C:\MITEKICA742AUOBS\ M10,606 44080 YORK 3/A **GREENYORK HOMES** BRAMPTON N TAMARACK 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.

MITCH VE 281486 DEGREY DRIVE Plan Log: 91851 Dale: 4/27/2017 Designer:



Use one form for each individual who review	vs and takes res			e project.
A. Project information		Application	ENGINEERING AND LAND AND AND AND AND AND AND AND AND AND	Letteen
Building number, street name			Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other desc	cription	
B. Individual who reviews and take	s responsibili	ty for design activities		
Name	nadapatan anakan Madan, kanakan sara sakala anakan	Firm	30.00	
SAM KATSOULAKOS, P. ENG.		MICRO CITY ENG	SINEERING SERVICE	
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) 287-575	0	Cell number	
G: Design activities undertaken by	ndividual ide	ntified in Section B. II	Building Code Tab	e 3.5.2.1. of
Division Cl				
☐ House	☐ HVAC	– House	☑ Building Str	uctural
☐ Small Buildings		g Services	☐ Plumbing – I	
☐ Large Buildings	□ Detecti	on, Lighting and Power	☐ Plumbing – A	
☐ Complex Buildings	☐ Fire Pr		☐ On-site Sew	age Systems
Description of designer's work GREENYO	RK HOMES - I	<u>DEGREY DR - MODEL: Y</u>	<u>ORK 3 – ELEV. A</u>	
1ST FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	SIFIC)	VOLIT DI AOGRAGNIT E	NAME OF DEPTH OF
REVIEW PRE-ENGINEERED FLOOR SYS	TEM COMPON	ENT DRAWINGS AND LA	YOUT PLACEMENT F	LAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE I SUPPORTING STRUCTURE TO BE REVIE	7440 # 141412002	20-17 DATED 3-20-17). RIFED BY OHALIFIED RIT	ILDING DESIGNER	
D. Declaration of Designer	-VVLD AND VLI	All ED DT QUILLITED BO		
I, <u>SAM KATSOULAKOS, P. ENG</u>			declare that (choose	one as appropriate):
(print nam	e)			
☑ I review and take responsibili C, of the Building Code. I am	ty for the desigr qualified, and th	n work on behalf of a firm re ne firm is registered, in the	egistered under subse appropriate classes/ca	ection 3.2.4.of Division ategories.
		•		
Individual BCIN: <u>2606</u>	34	·		
Firm BCIN: <u>2999</u>	91			
☐ I review and take responsibilit	v for the design	and am qualified in the ap	propriate category as	an "other designer"
under subsection 3.2.5.of Divi	ision C, of the B	uilding Code.		· ·
Individual BCIN:				
Basis for exemption from	registration:			
☐ The design work is exempt from			ements of the Building	Code.
Basis for exemption from	registration and	d qualification:		
I certify that:				
The information contained in this s				
I have submitted this application w	rith the knowled	ge and consent of the firm.		
!				
,		.		
Date &	ren	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#TAM 2662617-\$5-26-77 DWG#TAM 2663017-\$

Use one form for each individual who review	/s and takes res			project:
A. Project Information		Application	WEST-WINDOWS AND MANAGEMENT AND ASSESSMENT OF THE PARTY O	11
Building number, street name			Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other desc	cription	
B. Individual who reviews and takes	responsibili	ty for design activities		
Name		Firm		3.110
SAM KATSOULAKOS, P. ENG.		MICRO CITY ENG	Unit no.	Lot/con.
Street address R.R #1, PO BOX 61			OTHER TIO.	Louden
Municipality	Postal code	Province	E-mail	
GLENCOE	NOL 1MO	ONTARIO	Cell number	
Telephone number (519) 287-2242 Business	Fax number (519) 287-5750	0	Gentiamber	
©: Design activities undertaken by/i			Building Code Table	3.5.2.1. of
Division CI				
☐ House	☐ HVAC	– House	図 Building Stru	
☐ Small Buildings	☐ Building		☐ Plumbing – H	
☐ Large Buildings		on, Lighting and Power	☐ Plumbing – Al☐ On-site Sewa	
☐ Complex Buildings Description of designer's work GREENYO	Fire Property	otection		ige systems
1ST FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	CIFIC)	OINTO - ELLY, D	
REVIEW PRE-ENGINEERED FLOOR SYS	TEM COMPON	ENT DRAWINGS AND LA	YOUT PLACEMENT P	LAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE D	WG #TAM2662	27-17 DATED 5-26-17).	II DINO DEGIONED	
SUPPORTING STRUCTURE TO BE REVIE	:WED AND VEI	RIFED BY QUALIFIED BU	ILDING DESIGNER.	
D. Declaration of Designer				
I, <u>SAM KATSOULAKOS, P. ENG</u>			declare that (choose o	ne as appropriate):
(print name	e)		• f . I day and a a	-ti 0.0 4 of Division
☑ I review and take responsibili C, of the Building Code. I am	ty for the desigr qualified, and th	n work on behalf of a firm r ne firm is registered, in the	egistered under subse appropriate classes/ca	tegories.
, ,				
Individual BCIN:2606	34			
Firm BCIN:2999	91			
☐ I review and take responsibilit under subsection 3.2.5.of Divi	y for the design	i and am qualified in the ap	propriate category as	an "otner designer
Individual BCIN:	ision C, or the D	diffully Code.		
Basis for exemption from	registration:			0.1
☐ The design work is exempt from			ements of the Building	Code.
Basis for exemption from	registration and	d qualification:		
I certify that:	abadula ia two	to the heet of my knowled	70	
1. The information contained in this s				
2. I have submitted this application w	ini nie knowied	ge and consent of the little	•	
			0	
			/	
Date	52607	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#TAM26627-17-8 5 1610 DWG#TAM 26631-17-8

A. Project Information	vs and takes res	Application		ic project.
Building number, street name		Application	Unit no.	Lot/con.
Building number, street name			, OTHE TIO.	Low con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other des	scription	
,				
B. Individual who reviews and takes	s responsibili	ty for design activitie	i S	
Name	2 012 - 144 1523 P 213 40, P 10 10 10 10 10 10 10 10 10 10 10 10 10	Firm		
SAM KATSOULAKOS, P. ENG.		MICRO CITY EN	IGINEERING SERVICE	
Street address R.R #1, PO BOX 61			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail	
GLENCOE	NOL 1MO	ONTARIO		
Telephone number	Fax number	· · · · · · · · · · · · · · · · · · ·	Cell number	,
(519) 287-2242 Business	(519) 287-5750			
C: Design activities undertaken by	ndividual ide	ntified in Section B.	[Building Code Tab	le 3.5.2.1. of
Division Cj				
☐ House		- House	⊠ Building Str	
☐ Small Buildings	☐ Building		☐ Plumbing –	
☐ Large Buildings		on, Lighting and Power	☐ Plumbing – A☐ On-site Sew	
☐ Complex Buildings Description of designer's work GREENYO	Fire Property			vage Systems
2ND FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	CIFIC)	TORK 5 - LLLV. A	
REVIEW PRE-ENGINEERED FLOOR SYS	TEM COMPON	ENT DRAWINGS AND L	AYOUT PLACEMENT I	PLAN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE D	WG #TAM2662	28-17 DATED 5-26-17).	W DIVIO DEGICALED	
SUPPORTING STRUCTURE TO BE REVIE	-WED AND VE	RIFED BY QUALIFIED BI	UILDING DESIGNER.	
D. Declaration of Designer				
I, SAM KATSOULAKOS, P. ENG			_declare that (choose	one as appropriate):
(print name	e)			
☑ I review and take responsibili	ty for the design	n work on behalf of a firm	registered under subse	ection 3.2.4.of Division
C, of the Building Code. I am	qualified, and th	e firm is registered, in the	e appropriate classes/c	ategories.
				,
Individual BCIN: 2606	64			
Firm BCIN: 2999)1			
☐ I review and take responsibilit	forthe declar	and am avalified in the c	unnrantiata aatagan, ga	on "other decignor"
☐ I review and take responsibilit under subsection 3.2.5.of Divi	y for the design sion C. of the B	and am quailled in the a uilding Code	ppropriate category as	an other designer
Individual BCIN:	0,011 0, 01 1110 1			
Basis for exemption from	registration:	1 1100		
☐ The design work is exempt from				J Coae.
Basis for exemption from	registration and	dualification:		
I certify that:	ala adoda te tos	to the boot of !	امم	
1. The information contained in this s				
2. I have submitted this application w	ıtıı the knowled	ge and consent of the firm	H.	
Date	Salan	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#TAM26628-17-S DWG#TAM26632-17-S

A. Project Information	vo ana takeo rek	Application in u		2.0
Building number, street name	CONTRACTOR CHARLES CONTRACTOR CON		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other descrip	tion	
B. Individual who reviews and takes	s responsibili	Sec. alteratives because also also also also also also also also		
Name SAM KATSOULAKOS, P. ENG.		Firm MICRO CITY ENGIN	EERING SERVICES	INC.
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	
C. Design activities undertaken by		•	∣ Ilding Code Table	3.5.2.1. of
Division C]			₩ p. !!.!	4
☐ House	☐ HVAC - ☐ Building		☑ Building Struct ☐ Plumbing – Hope Plumb	
☐ Small Buildings ☐ Large Buildings		on, Lighting and Power	☐ Plumbing – All	
☐ Complex Buildings	☐ Fire Pro	, , ,	☐ On-site Sewa	
Description of designer's work GREENYO	RK HOMES - [DEGREY DR - MODEL: YOR		
2ND FLOOR (SCHEDULE IS NOT ISSUED	AS LOT SPEC	CIFIC)		
REVIEW PRE-ENGINEERED FLOOR SYS			UT PLACEMENT PL	AN SUPPLIED BY
TAMARACK ROOF TRUSSES INC. (SEE DESCRIPTION OF STRUCTURE TO BE REVIED OF TRUSTED OF TRUS)VVG #1AW2662 =\V/ED AND \/EB	29-17 DATED 5-20-17). RIFED BY OLIALIFIED BUILD	ING DESIGNER	
D. Declaration of Designer	TVED7(IVD VE)	William Control		
I, <u>SAM KATSOULAKOS, P. ENG</u>		ded	clare that (choose or	e as appropriate):
(print name) ☑ I review and take responsibili C, of the Building Code. I am e	ty for the design	n work on behalf of a firm regis le firm is registered, in the app	stered under subsectoropriate classes/cat	tion 3.2.4.of Division egories.
Individual BCIN: <u>2606</u>	34			
Firm BCIN: <u>2999</u>	01			
☐ I review and take responsibilit under subsection 3.2.5.of Divi	y for the design sion C, of the B	and am qualified in the approuilding Code.	priate category as a	n "other designer"
Basis for exemption from	registration:			No do
☐ The design work is exempt from Basis for exemption from			ents of the building C	
I certify that:	-			
1. The information contained in this s	chedule is true t	to the best of my knowledge.		
2. I have submitted this application w				
		,		
Date <	-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.
- 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#TAM26629-17-8 5-2617 DWG#TAM 26633-17-8

NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLIGTON ONTARIO
May 8, 2017 11:06

PROJECTJ2 1ST FLOOR

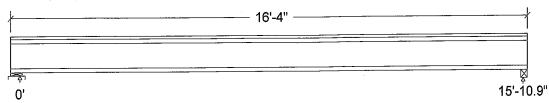
Design Check Calculation Sheet

Nordic Sizer - Canada 6.4

Loads:

Load	Type	Distribution	Pat-	Location [ft]		Magnitu	de	Unit
	11		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):



Unfactored:		010
Dead	212	212
Live	424	424
Factored:		001
Total	901	901
Bearing:		
Resistance		0117
Joist	2336	2117
Support	6726	_
Des ratio		0 42
Joist	0.39	0.43
Support	0.13	# 2
Load case	#2	#2
Length	4-3/8	2-1/2
Min req'd	1-3/4	1-3/4
Stiffener	No	No 1 00
Kd	1.00	1.00
KB support	1.00	-
fcp sup	769	
Kzcp sup	1.00	

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

Supports: 1 - Lumber Sill plate, No.1/No.2; 2 - Steel Beam, W; Total length: 16'-4.0"; 3/4" nailed and glued OSB sheathing

This section PASSES the design code check.

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

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 901	Vr = 2336	lbs	Vf/Vr = 0.39
Moment(+)	Mf = 3585	Mr = 6255	lbs-ft	$Mf_{\rm M}r = 0.57$
Perm. Defl'n	$0.10 = \langle L/999 \rangle$	0.53 = L/360	in 🧖	OFESSION 0.18
Live Defl'n	0.19 = L/987	0.40 = L/480	in o	0.49
Total Defl'n	0.29 = L/658	0.80 = L/240	in &	(0.36
Bare Defl'n	0.23 = L/818	0.53 = L/360	in / 🕏 📞	20.44
Vibration	Lmax = 15'-11	Lv = 18'-1	ft 💆 e	KATSOULAKOS 📆
Defl'n	= 0.027	= 0.041	in 3 3.	MAISUULANOS 30.67
	L		- A	A STATE OF THE PARTY OF THE PAR

/DW0 NO .TAM 26602-17 Structural Component only Beam7

Nordic Sizer - Canada 6.4

Page 2

Addition				***	TZT	TZM	KS	KN	LC#
FACTORS:	f/E	KD	KH	KZ	KL	KT	Kb	1/1/	#2
Vr	2336	1.00	1.00	-	_	-	_	. –	#2
Mr+	6255	1.00		-	1.000	-	_	-	#2
EI	371.1 m	illion	-	-	_	-	-	-	# 4
CRITICAL	LOAD COMB	INATIONS	S:						
Shear	: LC #2	= 1.2	5D + 1.5						
Moment (+) : LC #2	= 1.2	5D + 1.5	L					
Deflect	ion: LC #1	= 1.01	D (perm	anent)					
	LC #2	= 1.0	D + 1.0L	(live)				
	LC #2	= 1.0	D + 1.0L	(tota	1)				
İ	LC #2	= 1.0	D + 1.0L	(bare	joist)				
Bearing	suppo	rt 1 - :	LC #2 =	1.25D +	1.5L				
	Suppo	rt 2 - 1	LC #2 =	1.25D +	1.5L		_	. 1 1	
Load Tv	pes: D=dea	d W=wi	nd S=sn	ow H=e	arth,grou	undwate	r E=ear	chquake	
_	L=liv	e(use,o	ccupancy) Ls=l	ive(stora	age, equ	ipment)	r=r1re	
Load Pa	tterns s=	S/2 T=	L+Ls =	no patt	ern load	in thi	s span		
All Loa	d Combinat	ions (L	Cs) are	listed	in the Ar	nalysis	output		
CALCULA	TIONS:								
Dofloct	ion. Elef	f =	460e06 l	b-in2	K = 6.186	e06 lbs	1		
"Live"	deflection	= Defl	ection f	rom all	non-dead	d loads	(live,	wind, si	uom…)

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.

POLINICE OF ONTE

DWG NO . TAN 26602-17 STRUCTURAL COMPONENT ONLY

NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLIGTON ONTARIO
May 8, 2017 11:08

PROJECT
J7 ABOVE GARAGE 2ND
FLOOR

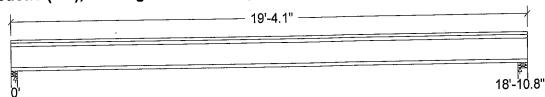
Design Check Calculation Sheet

Nordic Sizer - Canada 6.4

Loads:

Load	Туре	Distribution	Pat- tern	المسات بيسا	Magnitude Start 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):



	U	
Unfactored: Dead Live	189 378	189 378
Factored: Total	803	803
Bearing: 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 1.15
Kzcp sup	1.13	

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
This section PASSES the design code check.

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

.iiiii Otates Beei	3 wom.3				
Criterion	Analysis Value	Design	Value	Unit	Analysis/Design
	Vf = 803	Vr =	2336	lbs	Vf/Vr = 0.34
Shear	\ ***	. –	11.609	lbs-ft	0.33
Moment(+)	Mf = 3794	111			PRO! 17
Perm. Defl'n	$0.11 = \langle L/999$	0.63 =	L/360	in 🥖	
	$0.21 = \langle L/999 \rangle$	0.47 =	L/480	in 🎉	45
Live Defl'n		1	L/240	in <i> \$</i>	2.34
Total Defl'n	0.32 = L/715	0.94 =	,	111 5	
Bare Defl'n	0.24 = L/954	0.63 =	L/360	in ö	S. KATSOULAKOS 21,34
2020	40.11	Lv =	21 1 - 3	in ft	5. KA13002
Vibration			0 033	in \	0 75
Defl'n	= 0.025		0.033	T 111	100
				//-	2

OUNCE OF OND NO. TAM26603 STRUCTURAL COMPONENT ONLY Beam8

Nordic Sizer - Canada 6.4

Page 2

Additional	l Data:								
	f/E					KT	KS		LC#
Vr	2336	1.00	1.00	-	-	-	-		#2
Mr+	11609	1.00	1.00	-	1.000	-	-		#2
	547.1 mi			-	-	_	_	-	#2
CRITICAL LO									
Shear	: LC #2	= 1.25	5D + 1.51	Ĺ					
Moment(+)) : LC #2	= 1.25	5D + 1.51	Ĺ					
Deflection	on: LC #1	= 1.01) (perma	anent)					
			+ 1.0L						
) + 1.0L						
					joist)				
Bearing	: Suppor	rt 1 - 1	C #2 = 1	1.25D +	1.5L				
	Suppoi	ct 2 - 1	LC #2 = 1	1.250 +	1.51		- E-022	+hauake	
Load Type	es: D=dead	d M=wiı	nd S=sn	ow H=e	artn,grou	mawate:	r r=ear	f=fire	
	L=live	e (use, o	ccupancy) LS=1.	ive(stora	ige, equi	Thuenr)	r-rrc	
Load Pati	terns: s=S	3/2 L=1	_+LS _=	no patt	ern load	TH THIS	s span		
	Combinati	cons (L	Js) are .	ııstea	in the AL	татувтв	output		
CALCULATI	ONS:	_	11			06 lba			•
Deflection	on: Eleft	= 1	625e06 II	0-1NZ	K= 0.186	SQT QUE	/1 1 770	wind eno	Ta7 \
"Live" de	eflection	= Defle	ection i	rom all	non-dead	Loads	(TTAG,	wind, sno	vv/

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.

BOWN NO. TAM 26603-17
STRUCTURAL
GOMPONENT ONLY



COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLIGTON ONTARIO
May 8, 2017 11:10

PROJECTJ1 2ND FLOOR

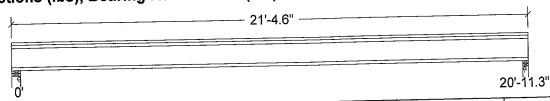
Design Check Calculation Sheet

Nordic Sizer - Canada 6.4

Loads:

Load	Туре	Distribution	Pat- tern	Location Start	[ft] End	20020	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):



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

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 O86-14 and Vibration Criterion:

Criterion Analysis Value Design Value Unit Analysis/Design Shear Vf = 890 Vr = 4672 1bs Vf/Vr = 0.19 Moment(+) Mf = 4659 Mr = 12509 1bs-ft Mf/Mr = 0.37 Perm. Defl'n 0.11 = <l 999<="" td=""> 0.70 = L/360 in 0.16 Live Defl'n 0.23 = <l 999<="" td=""> 0.52 = L/480 in 0.43 Total Defl'n 0.34 = L/739 1.05 = L/240 in 0.32 Bare Defl'n 0.25 = <l 999<="" td=""> 0.70 = L/360 in 0.36 Vibration Lmax = 20'-11 Lv = 23'-7 ft S. KATSOULAKOS 74</l></l></l>	Limit States Desi	gii using can coo-i+	and vibiation cities		
Defl'n = 0.023	Criterion Shear Moment(+) Perm. Defl'n	Vf = 890 Mf = 4659 0.11 = <l 999<br="">0.23 = <l 999<="" td=""><td>Design Value Vr = 4672 Mr = 12509 0.70 = L/360 0.52 = L/480</td><td>lbs lbs-ft in in</td><td>Vf/Vr = 0.19 Mf/Mr = 0.37 0.16 0.43</td></l></l>	Design Value Vr = 4672 Mr = 12509 0.70 = L/360 0.52 = L/480	lbs lbs-ft in in	Vf/Vr = 0.19 Mf/Mr = 0.37 0.16 0.43
	Total Defl'n Bare Defl'n Vibration	$0.25 = \langle L/999 \rangle$ Lmax = 20'-11	0.70 = L/360 Lv = 23'-7	in ft in in	KATSOULAKOS 5 74

POLYNCE OF ONLY

STRUCTURAL

COMPONENT ONLY

WoodWorks® Sizer

for NORDIC STRUCTURES

Beam9

Nordic Sizer - Canada 6.4

Page 2

١	Additional	Doto								
1	Additional I FACTORS:	שמום. + /ד	KD	KH	· K7.	Κī	KT	KS	KN	LC#
١	Vr	7336 T\P	1 00	1 00		_	_	_	-	#2
Į	Mr+	6255	1 00	1 00	_	1.000	_	_	_	#2
1	Mr+ EI	02JJ	illion	_	_	_	_	_	_	#2
١	CRITICAL LO	AD COMBI	NATIONS). - n 1	: т					
	Shear	: LC #2	= 1.23	DD + 1.5) Tr					
	Moment(+)	: LC #2	= 1.25	DD + 1.5	. , Ъ					
Ì	Deflection	n: LC #1	= 1.01) (perm	nanent)					
	ı				[live					
	ı	LC #2	= 1.01	0 + 1.01	」(tota	1)				
ļ	i	LC #2	= 1.01	0 + 1.0I	. (bare	joist)				
	Bearing	: Suppo:	rt 1 - 1	LC #2 =	1.25D +	1.5L				
	_	Suppo	rt 2 - I	LC #2 =	1.25D +	1.5L				
	Load Types	s. D=dead	d W≕win	nd S≕sr	now H=e	arth, grou	indwate	r E=ear	thquake	
	noad ryper	L=liv	e (use. o	coupancy) Ls=1	ive(stora	age, equ	ipment)	f=fire	
	Load Patte	-T-TT	c (25c) t=	[.+T.g =	=no natt	ern load	in thi	s span		
	All Load (STH2: S-	5/2 H	24/ 220	lietad	in the Ar	alvsis	output		
			TOUR (Tr	us, are	TISLEG	TII CIIC III	141,010	2221242		
	CALCULATIO	NS:				1 72 /	10-00	1ha/n1.	7	
	Deflection	n: EIef	f =	413e06 .	lb-in2/p	TÀ K= 6	. Tøenø	TDS\bT	,	nou l
	"Live" de:	flection	= Defl	ection 1	from all	non-dead	l Loads	(llve,	wind, S.	110W)
i	1									

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.



DWG NO . TAN26604-17 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B1 CANT (i4666)

Dry | 2 spans | Left cantil ever | 0/12 slope (deg)

May 15, 2017 14:26:26

BC CALC® Design Report

*

Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

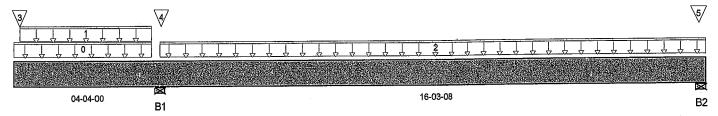
Description: Designs\Flush Beams\Basment\Flush Beams\B1 CANT (

Specifier:

Designer:

Company.

Misc:



Total Horizontal Product Length = 20-07-08

Reaction Summary (Do	wn / Uplift) (lbs)				
Bearing	Live	De ad	Snow	Wind	
B1, 5-1/2"	1,720 / 0	1,053 / 0	-		
B2, 5-1/2"	443/171	279/0	29 / 0		

١٨	ad Summary		Live	Dead	Snow	w Wind	Trib.			
	g Description	Load Type	Ref. Start		En d	1.00	0.65	1.00	1.15	
0	Us er Load	Unf. Lin. (lb/ft)	L	00-00-00	04-01-04	240	120			n/a
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-02-02	04-01-04	14	7			n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	04-04-00	20-07-08	40	20			n/a
3	B3(i4637)	Conc. Pt. (lbs)	L	00-02-02	00-02-02	85	54			n/a
4	6(i304)	Conc. Pt. (lbs)	L	04-04-09	04-04-09	103	75			n/a
5	F9(i219)	Conc. Pt. (lbs)	L	20-04-12	20-04-12	105	105	29		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	2,313 ft-lbs	38,727 ft-lbs	6%	3	13-05-02
Neg. Moment	-5,979 ft-lbs	-38,727 ft-lbs	15.4%	1	04-04-00
End Shear	577 lbs	14,464 lbs	4%	3	19-02-02
Cont. Shear	1.916 lbs	14,464 lbs	13.2%	1	03-01-06
Uplift	6 lbs	n/a	n/a	35	20-07-08
Total Load Defl.	2xL/621 (0.167"	0.433"	38.6%	79	00-00-00
Live Load Defl.	2xL/777 (0.134"		46.4%	11	7 00-00-00
Total Neg. Defl.	L/999 (-0.076")	n/a	n/a	79	10-02-13
Max Defl.	-0.076"	n/a	n/a	79	10-02-13
Span / Depth	16.1	n/a	n/a		00-00-00

Beari	ng Supports	Dim . (L x W)	De man d	De mand/ Re sistance Su pport	De mand/ Resistance Member	Material
B1	Wall/Plate	5-1/2" x 3-1/2"	3,897 lbs	47.4%	16.6%	Unspecified
B2	Wall/Plate	5-1/2" x 3-1/2"	1,027 lbs	12.5%	4.4%	Unspecified

DWG NO. TAM 2660 5-17
STRUCTURAL
COMPONENT ONLY

S. KATSOULAKOS

Page 1 of 2

Notes



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B1 CANT (i4666)

Dry | 2 spans | Left cantilever | 0/12 slope (deg)

May 15, 2017 14:26:26

BC CALC® Design Report

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B1 CAN'

Specifier:

Designer: Company.

City, Province, Postal Code: BRAMPTON, Customer:

Build 5033

Job Name: Address:

Code reports:

CCMC 12472-R

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.

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 O86.

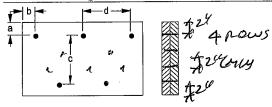
Unbalanced snow loads determined from building geometry were used in selected products verification.

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

Connection Diagram



a minimum = 2" c = 7-7/8" d = 200 6 b minimum = 3"

Calculated Side Load = 9.5 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

ARDOX SPIRAL

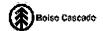
Disclosure

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 CALO®, 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.



STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B2(i4687)

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

May 15, 2017 14:26:27

BC CALC® Design Report Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

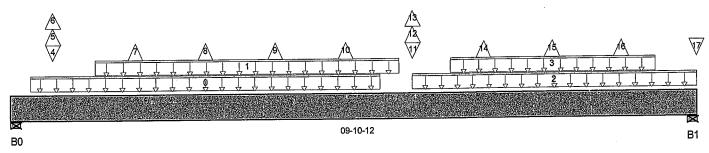
Description: Designs\Flush Beams\Basment\Flush Beams\B2(i4687)

Specifier:

Designer:

Company.

Misc:



Total Horizontal Product Length = 09-10-12

Reaction Summary (Dow	n / Uplift) (lbs)							
Bearing	Live	De ad	Snow	Wind	<u> </u>			
B0, 10-1/4"	4,059 / 652	2,006/0						
B1, 2-3/4"	950/534	293/0						
				Live	Dead	Snow	Wind	Trib.
Load Summary	I I	Ref. Start	En d	1.00	0.65	1.00	1.15	
Tag Description	Load Type				0.00			n/a
 Smoothed Load 	Unf. Lin. (lb/ft)	L 00-03-0			400			n/a
1 User Load	Unf. Lin. (lb/ft)	L 01-02-1			120			
2 FC1 Floor Material	Unf. Lin. (lb/ft)	L 05-08-1			7			n/a
3 Smoothed Load	Unf. Lin. (lb/ft)	L 06-03-0	09-03-08	3 118				n/a
4 -	Conc. Pt. (lbs)	L 00-07-0	6 00-07-0	3 2,667	1,568			n/a
5 -	Conc. Pt. (lbs)	L 00-07-0	6 00-07-06	3	-5			n/a
	Conc. Pt. (lbs)	L 00-07-0		3 -131				n/a
6 -	• •	L 01-09-0			-4			n/a
7 J1(i4533)	Conc. Pt. (lbs)	L 02-09-0			-4			n/a
8 J1 (i4533)	Conc. Pt. (lbs)				-4			n/a
9 J1 (i4533)	Conc. Pt. (lbs)	L 03-09-0						n/a
10 J1 (i4570)	Conc. Pt. (lbs)	L 04-09-0			-5 17			n/a
11 -	Conc. Pt. (lbs)	L 05-08-1			4 7			
12 -	Conc. Pt. (lbs)	L 05-08-1	15 05-08-1	5	-7			n/a
13 -	Conc. Pt. (lbs)	L 05-08-1						n/a
14 J1(i4564)	Conc. Pt. (lbs)	L 06-09-0	08 06-09-0	8 -131	-7			n/a
15 J1 (i4564)	Conc. Pt. (lbs)	L 07-09-0	08 07-09-0	8 -131	-7	*		n/a
,	Conc. Pt. (lbs)	L 08-09-6	08-09-0	8 -138	-10			n/a
; V /		L 09-10-0			63			n/a
17 6(i304)	Conc. Pt. (lbs)	£ 09-10-0	JU 00-10-0					



Page 1 of 2

STRUCTURAL COMPONENT ONLY



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

Basment\...\B2(i4687)

BC CALC® Design Report



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

May 15, 2017 14:26:27

Build 5033

Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B2(i468'

Disclosure

Specifier:

Designer: Company:

Misc:

oodo ropo.w.						
Controls Summary	Factored Factored Demand Resistance		Demand / Resistance	Load Case	Location	
Pos. Moment	5,320 ft-lbs	38,727 ft-lbs	13.7%	1	04-09-08	
Neg. Moment	-1,227 ft-lbs	-38,727 ft-lbs	3.2%	4	05-09-08	
End Shear	2,413 lbs	14,464 lbs	16.7%	1	01-10-02	
Uplift	537 lbs	n/a	n/a	4	09-10-12	
Total Load Defl.	L/999 (0.052")	n/a	n/a	6	05-02-02	
Live Load Defl.	L/999 (0.04")	n/a	n/a	8	05-02-02	
Total Neg. Defl.	L/999 (-0.007")	n/a	n/a	7	05-08-14	
Max Defl.	0.052"	n/a	n/a	6	05-02-02	
Span / Depth	9	n/a	n/a		00-00-00	

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.

De mand/ Demand/ Resistance Resistance Support Material De mand Member Dim. (LxW) **Bearing Supports** 19.6% **Unspecified** 10-1/4" x 3-1/2" 8,596 lbs 56.1% B0 Wall/Plate 15.3% Unspecified 43.6% **B**1 Wall/Plate 2-3/4" x 3-1/2" 1,791 lbs

BC CALO®, 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.

Cautions

Uplift of 537 lbs found at span 1 - Right. (SIMPSON 1-42-54@0.31)

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

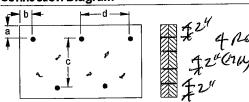
O86.

CONFORMS TO OBC 2012

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Connection Diagram



a minimum = 2" c = 7-7/8" d = 4

Calculated Side Load = 39.2 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:

31/2 ARDOX SPIRAL

S. KATSOULAKOS ED

DWO NO. TAM 26606-17

STRUCTURAL COMPONENT ONLY

Page 2 of 2



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basment\...\B3(i4637)

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

May 15, 2017 14:26:27

BC CALC® Design Report

t 🔼

Build 5033 Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

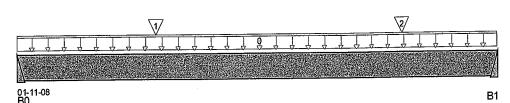
File Name: YORK 3.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B3(i4637)

Specifier:

Designer:

Company: Misc:



Total Horizontal Product Length = 01-11-08

		·			
Reaction Summary (Dow Bearing	n / Uplift) (lbs) Live	De ad	Snow	Wind	
B0	71 / 0	47 / 0			•
B1	84 / 0	54 / 0			

Lood Summon			L	Live	Dead	Snow Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	End 1	1.00	0.65	1.00 1.15	
0 FC1 Floor Material	Unf. Lin. (lb/ft)	L 00-00-00	01-11-08 7	7	4		n/a
1 J7(i4624)	Conc. Pt. (lbs)	L 00-06-12	00-06-12	71	35		n/a
2 J7(i4652)	Conc. Pt. (lbs)	L 01-06-12	01-06-12	70	35		n/a

Controls Summary	Factored Demand			Load Case	Location	
Pos. Moment	71 ft-lbs	38,727 ft-lbs	0.2%	1	00-06-15	
End Shear	44 lbs	14,464 lbs	0.3%	1	00-09-10	
Span / Depth	1.8	n/a	n/a		00-00-00	

Beari	ng Supports	Dim . (L x W)	Demand	Resistance Support	Resistance Member	Material
B0	Hanger	2" x3-1/2"	165 lbs	n/a	1.9%	HGUS410
B1	Hanger	2" x3-1/2"	193 lbs	n/a	2.3%	HUC410

Notes

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

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

O86.

CONFORMS TO OBC 2012

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DWO NO. TAM 26607.19 STRUCTURAL COMPONENT ONLY



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

P Basment\...\B3(i4637)

BC CALC® Design Report

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

May 15, 2017 14:26:27

Build 5033

Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

File Name: YORK 3.mmdl

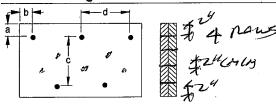
Description: Designs\Flush Beams\Basment\Flush Beams\B3(i463'

Specifier: Designer:

Company:

Misc:

Connection Diagram



CCMC 12472-R

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

Calculated Side Load = 152.7 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: 3½" 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.

BC CALO®, 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.



DWO NO . TAM 26607-17 STRUCTURAL COMPONENT ONLY



Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basment\...\B4 L(i5197)

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

May 19, 2017 08:58:53

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

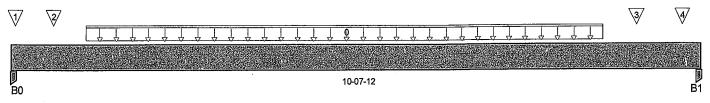
CCMC 12472-R

File Name: YORK 3 ELEVB.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B4 L(i5197

Specifier:
Designer:
Company:

Misc:



Total Horizontal Product Length = 10-07-12

Reaction Summary (Down / Uplift) (lbs)									
Be aring	Live	De ad	Snow	Wind					
B0, 3-1/4"	935/0	491/0							
R1 3_1/2"	965/0	506 / 0							

١n	ad Summary					Live	Dead	Snow	Wind	Trib.
Tag Description		Load Type Ref. Start En		En d	1.00	0.65	1.00	1.15		
0	Smoothed Load	Unf. Lin. (lb/ft)	L.	01-01-12	09-01-12	181	90			n/a
1	Us er Load	Conc. Pt. (lbs)	L	00-00-12	00-00-12	32	16			n/a
2	J10(i5204)	Conc. Pt. (lbs)	L	00-07-12	00-07-12	149	74			n/a
3	J10(i5196)	Conc. Pt. (lbs)	L	09-07-12	09-07-12	154	77			n/a
4	J10(i5192)	Conc. Pt. (lbs)	L	10-04-04	10-04-04	117	58			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location	
Pos. Moment	5,070 ft-lbs	12,704 ft-lbs	39.9%	1	05-07-12	
End Shear	1,792 lbs	5,785 lbs	31%	1	09-06-12	
Total Load Defl.	L/457 (0.268")	0.51"	52.5%	4	05-03-04	
Live Load Defl.	L/696 (0.176")	0.34"	51.7%	5	05-03-04	
Max Defl.	0.268"`	n/a	n/a	4	05-03-04	
Span / Depth	12.9	n/a	n/a		00-00-00	

				De mand/	De mand/		
				Resistance	Resistance		
Bear	ing Supports	Dim. (L x W)	Demand	Support	Member	Material	
B0	Post	3-1/4" x 1-3/4"	2,016 lbs	43.7%	29.1%	Unspecified	
B1	Post	3-1/2" x 1-3/4"	2,081 lbs	41.8%	27.8%	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 O86.

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

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.

S. KATSOULAKOS

BANG NO TAMPLOOF 15
STRUCTURAL
COMPONENT ONLY



Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basment\...\B5 L(i5203)

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

May 19, 2017 08:58:53

BC CALC® Design Report

*

Build 5033 Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

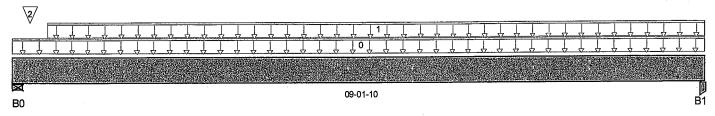
File Name: YORK3 ELEVB.mmdl

Description: Designs\Flush Beams\Basment\Flush Beams\B5 L(i5203

Specifier: Designer:

Company.

Misc:



Total Horizontal Pr	duct Lenath	= 09-01-10
---------------------	-------------	------------

Reaction Summary (Down / Uplift) (lbs)								
Bearing	Live	De ad	Snow	Wind				
B0, 5-1/2"	1,112/0	651/0						
B1, 1-7/8"	1,117/0	580/0						

Lo	ad Summary					Live	Dead	Snow	Wind	Trib.
	Description	Load Type	Re	f. Start	En d	1.00	0.65	1.00	1.15	
0	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	09-01-10	13	6			n/a
1	Us er Load	Unf. Lin. (lb/ft)	L	00-05-08	09-01-10	240	120			n/a
2	3(i253)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	28	87			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	5,078 ft-lbs	12,704 ft-lbs	40%	1	04-08-10
End Shear	1,885 lbs	5,785 lbs	32.6%	1	01-03-00
Total Load Defl.	L/537 (0.193")	0.432"	44.7%	4	04-08-10
Live Load Defl.	L/816 (0.127")	0.288"	44.1%	5	04-08-10
Max Defl.	0.193"	n/a	n/a	4	04-08-10
Span / Depth	10.9	n/a	n/a		00-00-00

				Demand/ Resistance	Demand/ Resistance	
Bear	ing Supports	Dim.(LxW)	Demand	Support	Member	Material
B0	Wall/Plate	5-1/2" x 1-3/4"	2,482 lbs	48.3%	21.1%	Unspecified
B1	Post	1-7/8" x 1-3/4"	2,400 lbs	90.1%	60%	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 OBC 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.





Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B6(i4030)

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

May 15, 2017 14:26:27

BC CALC® Design Report



Build 5033 Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

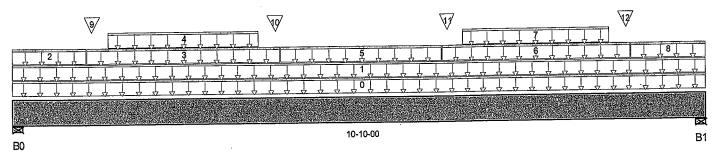
CCMC 12472-R

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\86(i4030)

Specifier: Designer: Company:

Misc:



Total Horizontal Product Length = 10-10-00

Reaction Summary (Down	/n / Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 4"	387/0	781/0	677/0		
B1.4"	388/0	782/0	680/0		

	10			•		Live	Dead	Snow	Wind	Trib.
	ad Summary Description	Load Type	Ref	. Start	End	1.00	0.65	1.00	1.15	
0	Us er Load	Unf. Lin. (lb/ft)	L	00-00-00	10-10-00	22	20	48		n/a
1	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	10-10-00	20	10			n/a
2	E40(i3788)	Unf. Lin. (lb/ft)	L	00-00-00	01-02-00		41			n/a
3	E41(i3789)	Unf. Lin. (lb/ft)	ī	01-02-00	04-02-00		81			n/a
-		Unf. Lin. (lb/ft)	ī	01-06-00	03-10-00	29	30	76		n/a
4	E41(i3789)	Unf. Lin. (lb/ft)	ī	04-02-00	06-08-00		41			n/a
5	E39(i3787)	Unf. Lin. (lb/ft)	ī	06-08-00	09-08-00		81			n/a
6	E38(i3786)			07-00-00	09-04-00		30	76		n/a
7	E38(i3786)	Unf. Lin. (lb/ft)	L .	09-08-00	10-10-00		41			n/a
8	E36(i3784)	Unf. Lin. (lb/ft)		01-03-00	01-03-00		70	118		n/a
9	E41(i3789)	Conc. Pt. (lbs)	L.	• ,			70 72	123		n/a
10	E41(i3789)	Conc. Pt. (lbs)	L	04-01-00	04-01-00			118		n/a
11	E38(i3786)	Conc. Pt. (lbs)	L	06-09-00	06-09-00		70			n/a
12	E38(i3786)	Conc. Pt. (lbs)	L	09-07-00	09-07-00	4/	72	123		11/4

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	5,293 ft-lbs	38,727 ft-lbs	13.7%	13	05-05-00
End Shear	1.959 lbs	14.464 lbs	13.5%	13	09-06-02
Total Load Defl.	L/999 (0.08")	n/a	n/a	45	05-05-00
Live Load Defl.	L/999 (0.042")	n/a	n/a	61	05-05-00
Max Defl.	0.08"	n/a	n/a	45	05-05-00
Span / Depth	10.4	n/a	n/a		00-00-00

Bearing Supports		Dim.(L x W)	Dim.(LxW) Demand		Demand/ Resistance Member	Material	
B0	Wall/Plate Wall/Plate	4" x3-1/2"	2,184 lbs	36.5%	12.8%	Unspecified	
B1		4" x3-1/2"	2,191 lbs	36.6%	12.8%	Unspecified	

Notes

Page 1 of 2



STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B6(i4030)

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

May 15, 2017 14:26:27

BC CALC® Design Report

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B6(i403(

Specifier:

Designer: Company.

Misc:

City, Province, Postal Code: BRAMPTON, Customer:

Build 5033

Job Name:

Address:

Code reports:

CCMC 12472-R

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.

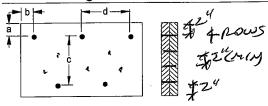
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA CONFORMS TO OBC 2012

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



c = 7-7/8" a minimum = 2" d= 64 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.

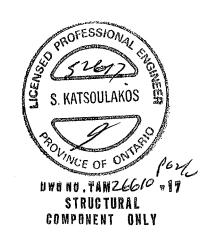
Connectors are: 16d 1

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 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 CALO®, 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.





Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B7(i4152)

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

May 15, 2017 14:26:27

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

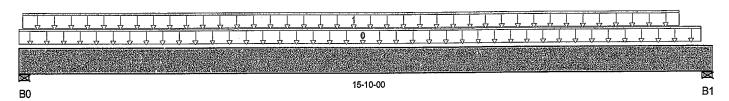
File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\87(i4152)

Specifier: Designer:

Company:

Misc:



Total Horizontal Product Length = 15-10-00

Reaction Summary (Down / Uplift) (lbs)										
Bearing	Live	De ad	Snow	Wind						
B0, 4"	2,564 / 0	1,374 / 0								
B1, 4"	2,355/0	1,272 / 0	•							

Load Summary						Live	Dead	Snow	Wind	Trib.
Ta	g Description	Load Type	Re f.	Start	End	1.00	0.65	1.00	1.15	
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L 00	0-00-00	15-07-00	6	3			n/a
1	Smoothed Load	Unf. Lin. (lb/ft)	L 00	0-01-00	15-01-00	321	160			n/a

	Factored	Factored	Demand /	Load	Location
Controls Summary	Dem and	Resistance	Resistance	Case	
Pos. Moment	20,784 ft-lbs	38,727 ft-lbs	53.7%	1	07-07-00
End Shear	5,038 lbs	14,464 lbs	34.8%	1	14-06-02
Total Load Defl.	L/290 (0.633")	0.765"	82.8%	4	07-10-00
Live Load Defl.	L/445 (0.412")	0.51"	80.9%	5	07-10-00
Max Defl.	0.633"	n/a	n/a	4	07-10-00
Span / Depth	15.5	n/a	n/a		00-00-00

				Demand/ Resistance	Demand/ Resistance	
Bear	ing Supports	Dim . (L x W)	Demand	Support	Member	Material
B0	Wall/Plate	4" x 3-1/2"	5,564 lbs	93%	32.6%	Unspecified
B1	Wall/Plate	4" x 3-1/2"	5,123 lbs	85.7%	30%	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 O86.

CONFORMS TO OBG 2012

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DWG NO. TAM 26611 -17 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B7(i4152)

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

May 15, 2017 14:26:27

BC CALC® Design Report

Build 5033

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B7(i4152

Specifier: Designer:

Company: Misc:

CCMC 12472-R

Connection Diagram

a minimum = 2"

c = 3-15/16"

b minimum = 3" Calculated Side Load = 646.6 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 🧽 🔏 Nails

314" 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.

BC CALO®, 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.

> POVINCE OF ON DWEND, TAM 26611 = 17

STRUCTURAL CUMDUNERA UNIA



Boise Cascade Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\Flush Beams\B9(i4133)

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

May 15, 2017 14:26:28

BC CALC® Design Report Build 5033

Job Name:

Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdi

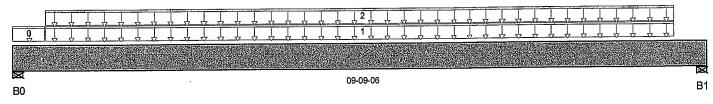
Description: Designs\Flush Beams\1st Floor\Flush Beams\B9(i4133)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 09-09-06

Reaction Summary (Down / Uplift) (lbs)									
Bearing	Live	De ad	Snow	Wind					
B0, 5-1/2"	15 / 0	303/0							
B1.5-1/2"	13 / 0	302/0							

١.	ad Summary			I	Live	Dead	Snow Wind	Trib.
	g Description	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L 00-00-00	00-05-08	4			n/a
1	Us er Load	Unf. Lin. (lb/ft)	L 00-05-08	09-03-14		60		n/a
2	FC3 Floor Material	Unf. Lin. (lb/ft)	L 00-05-08	09-03-14	3	1		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	954 ft-l bs	12,586 ft-lbs	7.6%	0	04-10-11
End Shear	325 lbs	4,701 lbs	6.9%	. 0	01-05-06
Total Load Defl.	L/999 (0.021")	n/a	n/a	4	04-10-11
Live Load Defl.	Ľ/999 (0.001")	n/a	n/a	5	04-10-11
Max Defl.	0.021"	n/a	n/a	4	04-10-11
Span / Depth	9.1	n/a	n/a		00-00-00

				De mand/ Resistance	De mand/ Resistance	
Bear	ing Supports	Dim. (L x W)	De man d	Support	Member	Material
B0	Wall/Plate	5-1/2" x 1-3/4"	424 lbs	15.9%	5.6%	Unspecified
B1	Wall/Plate	5-1/2" x 1-3/4"	423 lbs	15.8%	5.5%	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 CONFORMS TO OBC 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®, BCRIMBOARD™, 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.



COMPONENT

Page 1 of 1



Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B10(i4082)

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

May 15, 2017 14:26:28

BC CALC® Design Report

*

Build 5033 Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

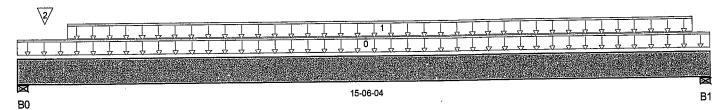
Description: Designs\Flush Beams\1st Floor\Flush Beams\B10(i4082)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 15-06-04

 Reaction Summary (Down / Uplift) (lbs)

 Be aring
 Live
 De ad
 Snow
 Wind

 B0, 5-1/2"
 2,514 / 0
 1,398 / 0

 B1, 6-3/4"
 2,523 / 0
 1,406 / 0

Land Comorana				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 00-00-00	15-06-04	17	8		n/a
1 Smoothed Load	Unf. Lin. (lb/ft)	L 01-01-08	15-01-08	322	162		n/a
2 J3(i3824)	Conc. Pt. (lbs)	L 00-07-08	00-07-08	261	131		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	19,953 ft-lbs	60,415 ft-lbs	33%	1	07-07-08
End Shear	4,997 lbs	21,696 lbs	23%	1	13-11-10
Total Load Defl.	Ľ474 (0.37")	0.731"	50.7%	4	07-07-08
Live Load Defl.		0.488"	48.9%	5	07-07-08
Max Defl.	0.37"	n/a	n/a	4	07-07-08
Span / Depth	14.8	n/a	n/a		00-00-00

Bearin	ng Supports	Dim. (L x W)	De man d	Resistance Support	Resistance Member	Material
B0	Wall/Plate	5-1/2" x 5-1/4"	5,519 lbs	44.7%	15.7%	Unspecified
B1	Wall/Plate	6-3/4" x 5-1/4"	5,542 lbs	36.6%	12.8%	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 O86.

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



DWO NO.TAM 26613-17 STRUCTURAL COMPONENT ONLY



Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B10(i4082)

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

May 15, 2017 14:26:28

BC CALC® Design Report

Build 5033 Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

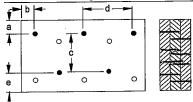
Description: Designs\Flush Beams\1stFloor\Flush Beams\B10(i408

Specifier:

Designer: Company.

Misc:

Connection Diagram



4 rows

a minimum = 2" b minimum = 3"

c = 49 - 7/8" d= 8 8"

e minimum = 2"

Calculated Side Load = 654.6 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. Nailing schedule applies to both sides of the member.

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.

BC CALO®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD $^{\mathsf{TM}}$, 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.



BWB HO . TAM26613 = 17 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B11(i4214)

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

May 15, 2017 14:26:28

BC CALC® Design Report

Build 5033 Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

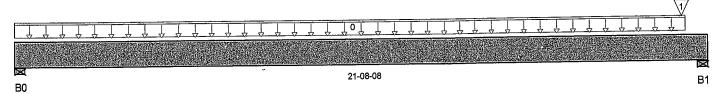
CCMC 12472-R

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B11(i4214)

Specifier: Designer:

Company: Misc:



Total Horizontal Product Length = 21-08-08

Reaction Summary (Down / Uplift) (lbs)						
Bearing	Live	De ad	Snow	Wind		
B0, 5-1/2"	386/0	325/0				
B1 5-1/2"	2,293/0	1,328 / 0				

l 1 O				Live	e Dead	Snow Wind	Trib.
Load Sun		Load Type	Ref. Start	End 1.00	0.65	1.00 1.15	
	oor Material	Unf. Lin. (lb/ft)	L 00-00-00	21-00-04 32	16		n/a
1 B12(i4		Conc. Pt. (lbs)	L 20-10-08	20-10-08 2,0	13 1,059		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	5,502 ft-lbs	38,727 ft-lbs	14.2%	1	12-00-06
End Shear	2,381 lbs	14,464 lbs	16.5%	1	20-03-02
Total Load Defl.	L/766 (0.328")	1.046"	31.3%	4	11-01-12
Live Load Defl.	L/1,376 (0.182"	0.697"	26.2%	5	11-01-12
Max Defl.	0.328"	n/a	n/a	4	11-01-12
Span / Depth	21.1	n/a	n/a		00-00-00

Reari	ing Supports	Dim . (L x W)	Demand	Resistance Support	Resistance Member	Material
B0	Wall/Plate	5-1/2" x 3-1/2"	984 lbs	12%	4.2%	Unspecified
B1	Wall/Plate	5-1/2" x 3-1/2"	5,100 lbs	62%	21.7%	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



COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B11(i4214)

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

May 15, 2017 14:26:28

BC CALC® Design Report

Build 5033 Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B11(i42*

Specifier:

Designer: Company.

Misc:

Connection Diagram

Concentrated side-load exceeds allowable magnitude for connection design. Please consult a technical representative or Professional Engineer for the design of the connection.

PROVIDE TROWS OF 31/2" ARDOX SPIRAL NAILS @ 6 "O/C FOR MULTI-PLY NAILING, MAINTAIN A MIN. 2 LUMBER EDGE/END DISTANCE, BOHOT USE AIR NAILS

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.

BC CALO®, 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.



STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B12(i4198)

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

May 15, 2017 14:26:28

BC CALC® Design Report



Build 5033 Job Name:

Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

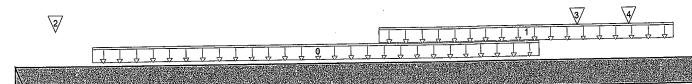
Description: Designs\Flush Beams\1st Floor\Flush Beams\B12(i4198)

Specifier:

Designer:

Company.

Misc:



B0

09-03-12

В1

Total Horizontal Product Length = 09-03-12

		101211111111111111			
Reaction Summary (Down I	Uplift) (lbs) Live	De ad-	Snow	Wind	
B0 B1, 5-1/2"	2,031 / 0 2,478 / 0	1,069 / 0 1,295 / 0			

					Live	Dead	Snow Wind	Trib.
	oad Summary g Description	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
7	Smoothed Load	Unf. Lin. (lb/ft)	L 01-00-08	07-00-08	419	209		n/a
4	User Load	Unf. Lin. (lb/ft)	L 04-10-04	08-10-04	240	120		n/a
1		Conc. Pt. (lbs)	L 00-06-08	00-06-08	353	177		. n/a
2	J1(i3878)	Conc. Pt. (lbs)	1 07-06-08	07-06-08	358	179		n/a
ى 1	J1 (i3878) J1 (i4001)	Conc. Pt. (lbs)	L 08-03-00	08-03-00	317	158		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	10,952 ft-lbs	38,727 ft-lbs	28.3%	1	04-10-04
End Shear	4.541 lbs	14.464 lbs	31.4%	1	07-10-06
Total Load Defl.	⊥/999 (0.111")	n/a	n/a	4	04-06-08
Live Load Defl.	L/999 (0.073")		n/a	5	04-06-08
	0.111"	n/a	n/a	4	04-06-08
Max Defl. Span / Depth	8.9	n/a	n/a		00-00-00

Bearing Supports		Dim. (L x W)	Dim.(LxW) Demand		Resistance Member	Material	
B0	Hanger	2" x 3-1/2"	4,383 lbs	n/a	51.3%	HGUS4 10	
B1	Wall/Plate	5-1/2" x 3-1/2"	5,335 lbs	64.9%	22.7%	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.

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

POLINCE OF ONTO STRUCTURAL

COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B12(i4198)

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

May 15, 2017 14:26:28

BC CALC® Design Report

CCMC 12472-R

Build 5033 Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

File Name: YORK 3.mmdl

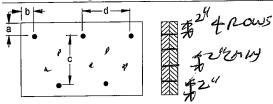
Description: Designs\Flush Beams\1st Floor\Flush Beams\B12(i419)

Specifier: Designer:

Company.

Misc:

Connection Diagram



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

Calculated Side Load = 807.6 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 🐎 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 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 CALO®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM $^{\rm TM}$, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.



DWO NO . TAM 26615 -17 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B13(i4051)

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

May 15, 2017 14:26:28

BC CALC® Design Report



Build 5033 Job Name:

Address: City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

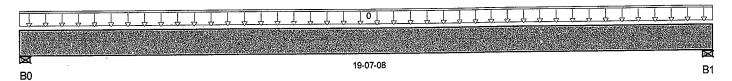
File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B13(i4051)

Specifier: Designer:

Company.

Misc:



Total Horizontal Product Length = 19-07-08

Bearing	(Down / Uplift) (lbs)	De ad	Snow	Wind		
B0, 5-1/2"	324/0	412/0	707/0			
B1, 5-1/2"	324/0	412/0	707/0			

Land Cummons	·		Live	Dead	Snow Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	End 1.00	0.65	1.00 1.15	
0 User Load	Unf. Lin. (lb/ft)	L 00-00-00	19-07-08 33	30	72	n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	7,850 ft-lbs	10,954 ft-lbs	71.7%	13	09-09-12
End Shear	1,481 lbs	14,464 lbs	10.2%	13	01-05-06
Total Load Defl.	L/597 (0.378")	0.942"	40.2%	45	09-09-12
Live Load Defl.	L/881 (0.256")	0.628"	40.9%	61	09-09-12
Max Defl.	0.378"	n/a	n/a	45	09-09-12
Span / Depth	19	n/a	n/a		00-00-00

Doori	ing Supports	Dim . (L × W)	Demand	Resistance Support	Resistance Member	Material
B0 B1	Wall/Plate Wall/Plate	5-1/2" x 3-1/2" 5-1/2" x 3-1/2"	1,737 lbs 1,737 lbs	21.1% 21.1%	7.4% 7.4%	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 unbraced length of Top: 18-08-08, Bottom: 18-08-08.

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 086. 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

S. KATSOULAKOS ET

DWG NO. TAM26616-17 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B13(i4051)

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

May 15, 2017 14:26:28

BC CALC® Design Report

Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

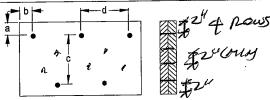
Description: Designs\Flush Beams\1st Floor\Flush Beams\B13(i40t

Specifier:

Designer: Company.

Misc:

Connection Diagram



c = 7-7/8" a minimum = 2" d=# 12" b minimum = 3"

Member has no side loads.

Nails Connectors are: 16d

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.

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

ROVINCE OF ONTHE

DWB NO . TAM 26616.19 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B14(i3887)

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

May 15, 2017 14:26:28

BC CALC® Design Report



Build 5033 Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

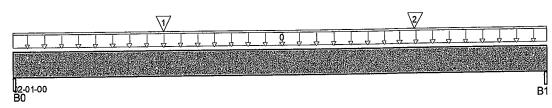
File Name: YORK 3.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B14(i3887)

Specifier: Designer:

Company.

Misc:



Total Horizontal Product Length = 02-01-00

Reaction Summary (Down / Uplift) (Ibs)								
Bearing	Live	De ad	Snow	Wina				
B0, 5"	242/0	251/0	174/0					
B1.5"	273/0	266/0	174/0					

L 1 O				Live	Dead	Snow Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
0 E27(i424)	Unf. Lin. (lb/ft)	L 00-00-00	02-01-00	61	143	167	n/a
1 J5(i3935)	Conc. Pt. (lbs)	L 00-07-00	00-07-00	185	93		n/a
2 .15(i3958)	Conc. Pt. (ibs)	L 01-06-12	01-06-12	199	99		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location	
Pos. Moment	168 ft-lbs	38,727 ft-lbs	0.4%	1	01-00-01	
End Shear	146 lbs	14,464 lbs	1%	13	01-04-14	
Total Load Defl.	1./999 (0")	n/a	n/a	35	01-00-08	
Max Defl.	0"	n/a	n/a	35	01-00-08	
Span / Denth	1.4	n/a	n/a		00-00-00	

Rearin	ng Supports	Dim . (L x W)	Demand	Resistance Support	Resistance Member	Material
B0	Beam	5" x 3-1/2"	764 lbs	10.2%	3.6%	Unspecified
B1	Beam	5" x 3-1/2"	828 lbs	11.1%	3.9%	Unspecified

Notes

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

Calculations assume member is fully braced.

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

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



OWOND. TAM26617 279 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B14(i3887)

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

May 15, 2017 14:26:28

BC CALC® Design Report

*

CCMC 12472-R

DC CALCO Design Nepo

Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

span | No cartilevers | 0/12 slope (deg

File Name: YORK 3.mmdl

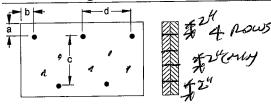
Description: Designs\Flush Beams\1st Floor\Flush Beams\B14(i38

Specifier: Designer:

Company.

Misc:

Connection Diagram



a minimum = 2" c = 7-7/8" b minimum = 3" d = 20" 6"

Calculated Side Load = 391.7 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 ARDOX SPIRAL

Disclosure

Completeness and accuracy of input must be verified by anyone who 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 CALO®, 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.

S. KATSOULAKOS ST.

STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B8 DR(i4141)

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

May 15, 2017 14:26:29

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3.mmdl

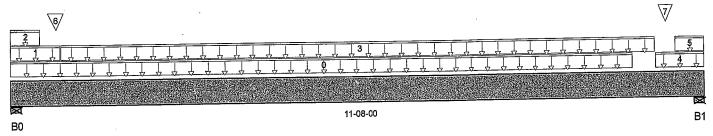
Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B8 D

Specifier:

Designer:

Company:

Misc:



Total Horizonta	l Product	Length	= 1	1-08-00
-----------------	-----------	--------	-----	---------

	y (Down / Uplift) (Ibs) Live	De ad	Snow	Wind			
Be aring B0, 4" B1, 4"	2,154/0 2,123/0	1,592 / 0 1,576 / 0	589/0 589/0				
51,4	•			Livo	Dead	Snow Wind	Trib

					Live	Dead	Snow Wind	Trib.
	ad Summary Description	Load Type	Ref. Start	En d	1.00	0.65	1.00 1.15	
0	Smoothed Load	Unf. Lin. (lb/ft)	L 00-00-00	10-05-08	349	166		n/a n/a
1	R1(i4173)	Unf. Lin. (lb/ft)	L 00-00-00	00-10-00		81	101	n/a
2	R1 (i4173)	Unf. Lin. (lb/ft)	L 00-00-00 L 00-10-00	00-06-00 10-10-00		41	101	n/a
3	R1(i4173)	Unf. Lin. (lb <i>l</i> ft) Unf. Lin. (lb <i>l</i> ft)	L 10-10-00	11-08-00		81	·	n/a
4 5	R1(i4173) R1(i4173)	Unf. Lin. (lb/ft)	L 11-02-00	11-08-00			101	n/a
6	R1(i4173)	Conc. Pt. (lbs)	L 00-09-00	00-09-00		262	539	n/a
7	-	Conc. Pt. (lbs)	L 11-00-00	11-00-00	600	478	538	n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	12,204 ft-lbs	25,408 ft-lbs	48%	1	05-09-08
End Shear	4.276 lbs	11,571 lbs	37%	1	10-06-08
	L/343 (0.39")	0.556"	70.1%	35	05-09-08
Total Load Defl.	L/567 (0.236")		63.5%	51	05-09-08
Live Load Defl.	•	n/a	n/a	35	05-09-08
Max Defl.	0.39"				00-00-00
Span / Depth	14.1	n/a	n/a		00-00-00

Rear	ing Supports	Dim . (L. x W)	De man d	Resistance Support	Resistance Member	Material
B0	Wall/Plate	4" x3-1/2"	5,515 lbs	60.6%	32.3%	Unspecified
B1	Wall/Plate	4" x3-1/2"	5,450 lbs	59.9%	31.9%	Unspecified

Notes



DWO NO . TAN 26618-19 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B8 DR(i4141)

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

May 15, 2017 14:26:29

BC CALC® Design Report

File Name: YORK 3.mmdl

Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B8

Specifier:

Designer: Company.

Misc:

Build 5033 Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

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.

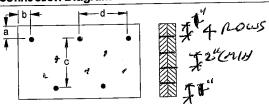
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

CONFORMS TO DBC, 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

Connection Diagram



a minimum = 2" 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 Amer 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.

BC CALO®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD $^{\mathsf{TM}}$, 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.



STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B15(i4537)

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

May 8, 2017 13:21:20

BC CALC® Design Report

Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

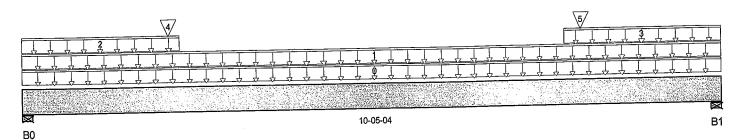
File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B15(i4537)

Specifier: Designer:

Company:

Misc:



Total Horizontal Product Length = 10-05-04

Reaction Summary (Down	/ Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 11" B1, 10-3/16"	201/0 200/0	649/0 643/0	290/0 289/0	•	

Load Sum	•	Load Type	Ref	. Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0 E50(i4	551) oor Material 551) 551) 551)	Unf. Lin. (lb/ft) Unf. Lin. (lb/ft) Unf. Lin. (lb/ft) Unf. Lin. (lb/ft) Conc. Pt. (lbs) Conc. Pt. (lbs)	L L L L	00-00-00 00-00-00 00-00-00 08-01-00 02-02-00 08-04-00	10-05-04 10-05-04 02-04-02 10-05-04 02-02-00 08-04-00	11 32 32 67	81 - 6 - 28 - 28 - 66 - 66	53 53 165 165		n/a n/a n/a n/a n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
	1,502 ft-lbs	25,173 ft-lbs	6%	0	05-02-09
Pos. Moment	574 lbs	9.401 lbs	6.1%	0	08-07-02
End Shear	L/999 (0.022")	-,	n/a	45	05-02-09
Total Load Defl.	•	n/a	n/a	61	05-02-09
Live Load Defl.	L/999 (0.006")	n/a	n/a	45	05-02-09
Max Defl.	0.022"	n/a	n/a		00-00-00
Span / Depth	8.9	Illa	11/4		00 00 00

D. avin	. Cumanta	Dim . (L x W)	De man d	De man d <i>i</i> Re sistance Su pport	Demand/ Resistance Member	Material
B0	g Supports Wall/Plate Wall/Plate	11"x3-1/2" 10-3/16"x3-1/2"	909 lbs 900 lbs	6.8% 7.3%	3% 3.2%	Unspecified Unspecified

Notes

S. KATSOULAKOS POVINCE OF ONTR

DWO NO . TAN 26619. 19 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B15(i4537)

May 8, 2017 13:21:20

BC CALC® Design Report



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

Build 5033

Job Name:

Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B15(i45%

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.

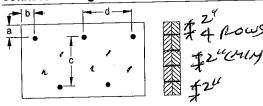
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA

O86. 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

Connection Diagram



a minimum = 2" c = 7-7/8" d= 64 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 ' Fer 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.

BC CALO®, BC FRAMER® , AJS $^{\mathsf{TM}}$, 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.



DWAND, TAN 26619 . 99 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B13(i5046)

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

May 8, 2017 13:21:20

BC CALC® Design Report



Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

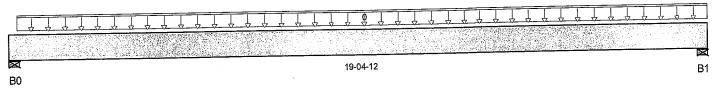
Description: Designs\Flush Beams\1st Floor\Flush Beams\B13(i5046)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 19-04-12

Reaction Summary (Down / L	Jplift) (lbs) Live	De ad	Snow	Wind	
B0, 2-3/4" B1, 5-1/2"	262/0 275/0	349/0 363/0	561/0 589/0		

				Live	Dead	Snow Wind	Trib.
Load Summary	Land Time	Ref. Start	End	1.00	0.65	1.00 1.15	
Tag Description	Load Type	L 00-02-12	19-04-12		25	60	n/a
0 UserLoad	Unf. Lin. (lb/ft)	L 00-02-12	13-0-1-12	20			

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	6,663 ft-lbs	10,954 ft-lbs	60.8%	13	09-07-00
	1,257 lbs	14,464 lbs	8.7%	13	01-02-10
End Shear	L/702 (0.322")	0.942"	34.2%	45	09-07-00
Total Load Defl	L/1,054 (0.214")	0.628"	34.2%	61	09-07-00
Live Load Defl.	0.322"	, 0.6 <u>1</u> 6 n/a	n/a	45	09-07-00
Max Defl. Span / Depth	19	n/a	n/a		00-00-00

7					
Bearing Supports B0 Wall/Plate B1 Wall/Plate	Dim. (L x W) 2-3/4" x 3-1/2" 5-1/2" x 3-1/2"	1,409 lbs 1,475 lbs	27.4% 14.3%	12% 6.3%	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 unbraced length of Top: 18-08-08, Bottom: 18-08-08.

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

verification. Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

ROUNCE OF ONTAR

DWG NO . TAM 26620, 19 COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B13(i5046)

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

May 8, 2017 13:21:20

BC CALC® Design Report

Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

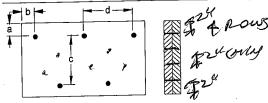
Description: Designs\Flush Beams\1st Floor\Flush Beams\B13(i504

Specifier: Designer:

Company.

Misc:

Connection Diagram



a minimum = 2"

c = 7-7/8" d=0 12"

b minimum = 3"

Member has no side loads. 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.

BC CALC®, BC FRAMER® , AJS $^{\text{TM}}$, ALLJOIST® , BC RIM BOARD $^{\text{TM}}$, BCk® , 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.



STRUCTURAL enmonneut anly



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B17(i4942)

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

May 8, 2017 13:21:20

BC CALC® Design Report



Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

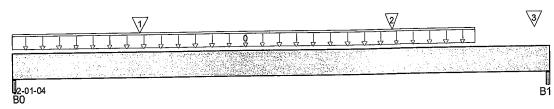
File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B17(i4942)

Specifier:

Designer: Company:

Misc:



Total Horizontal Product Length = 02-01-04

Reaction Summary (Do	wn / Uplift) (lbs)				
Bearing	Live	De ad	Snow	Wind	
B0, 5"	228/0	231/0	86 / 0		
B1 3-1/2"	487/0	507/0	926/0		

				Live	Dead	Snow	Wind	Trib.
Load Summary Tag Description	Load Type	Ref. Start	End	1.00	0.65	1.00	1.15	
	Unf. Lin. (lb/ft)	I 00-00-00	01-09-12	19	103	77		n/a
0 E49(i4550)	• •		00-06-00		84			n/a
1 J5(i4967)	Conc. Pt. (lbs)							n/a
2 J5(i5017)	Conc. Pt. (lbs)	L 01-05-12	01-05-12	210	105			
'	Conc. Pt. (lbs)	L 02-00-08	02-00-08	302	337	872		n/a
3 F52(i4553)	COHC, Pt. (IDS)	L 02-00 00	02 00 00					

Controls Summary	Factore d Demand	Factored Resistance	Demand / Resistance	Load Case	Location	
Pos. Moment	191 ft-lbs	38,727 ft-lbs	0.5%	1	01-05-12	
	64 lbs	14.464 lbs	0.4%	12	01-04-14	
End Shear Total Load Defl.	L/999 (0")	n/a	n/a	35	01-01-09	
Max Defl.	0"	n/a	n/a	35	01-01-09	
Span / Depth	1.5	n/a	n/a		00-00-00	

Po orin	g Supports	Dim.(L x W)	Demand	De man d/ Re sistance Su pport	De man d/ Re sistance Me mbe r	Material
B0	Beam	5" x3-1/2"	674 lbs	7.2%	3.2%	Unspecified
B1	Beam	3-1/2" x 3-1/2"	2,266 lbs	17%	15.2%	Unspecified

Notes

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

Calculations assume member is fully braced.

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

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



STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B17(i4942)

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

May 8, 2017 13:21:20

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

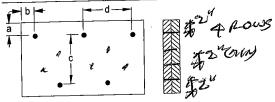
File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1stFloor\Flush Beams\B17(i494

Specifier: Designer: Company.

Misc:

Connection Diagram



a minimum = 2" $b \min = 3$ "

c = 7-7/8"

d = 🐲

Calculated Side Load = 381.7 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 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 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 $^{\text{TM}}$, 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.

TOVINCE OF ON THE

STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B14(i4899)

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

May 8, 2017 13:21:20

BC CALC® Design Report



Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

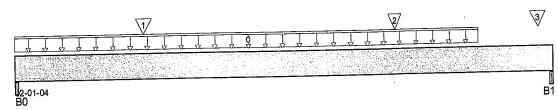
File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B14(i4899)

Specifier:

Designer:

Company: Misc:



Total Horizontal Product Length = 02-01-04

Reaction Summary (Dow	/n / Uplift) (Ibs) Live	De ad	Snow	Wind	
B0, 5"	228/0	231/0	86 / 0		
B1 3-1/2"	487/0	507/0	926/0		

			L	_ive	Dead	Snow Win	d Trib.
Load Summary	Load Type	Ref. Start	End 1	1.00	0.65	1.00 1.15	5
Tag Description			01-09-12 1	19	103	77	n/a
0 E27(i424)	Unf. Lin. (lb/ft)	L 00 00 0-			84		n/a
1 J5(i4967)	Conc. Pt. (lbs)		00-06-00 1				n/a
(/	Conc. Pt. (lbs)	L 01-05-12	01-05-12 2	210	105		
2 J5(i5017)	Conc. Pt. (lbs)	1 02-00-08	02-00-08 3	302	337	872	n/a
3 F51(i4552)	COHC. Ft. (IDS)	L 02 00 00	V				*

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location	
		38,727 ft-lbs	0.5%	1	01-05-12	
Pos. Moment	191 ft-lbs 64 lbs	14.464 lbs	0.4%	12	01-04-14	
End Shear	L/999 (0")	n/a	n/a	35	01-01-09	
Total Load Defl.	0" Daga (0)	n/a	ˈ n/a	35	01-01-09	
Max Defl. Span / Depth	1.5	n/a	n/a		00-00-00	

D	Summanta	Dim . (L x W)	Demand	De mand/ Resistance Support	De mand/ Re sistance Me mbe r	Material
Be arii	n g Supports Beam	5" x3-1/2"	674 lbs	7.2%	3.2% 15.2%	Unspecified Unspecified
B1	Beam	3-1/2" x 3-1/2"	2,266 lbs	17%	15.2%	Olishecilled

Notes

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

Calculations assume member is fully braced.

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

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

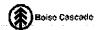
Unbalanced snow loads determined from building geometry were used in selected product's

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



DWH NO . TAM 26622-17 STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B14(i4899)

May 8, 2017 13:21:20

BC CALC® Design Report



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

Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

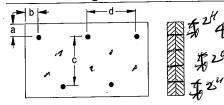
File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1stFloor\Flush Beams\B14(i48§

Specifier: Designer: Company.

Misc:

Connection Diagram



a minimum = 2" b minimum = 3" c=7-7/8" d= 6 4

Calculated Side Load = 381.7 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 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.

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.





Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B6(i4863)

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

May 8, 2017 13:21:20

BC CALC® Design Report



Build 5033

Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

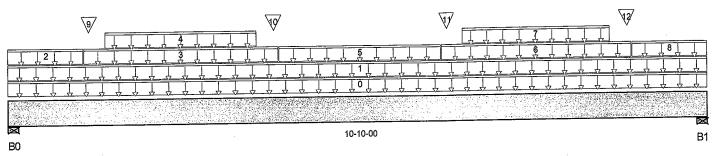
File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\86(i4863)

Specifier:

Designer: Company:

Misc:



Total Horizontal Product Length = 10-10-00

Reaction Summary (Dov	vn / Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 4"	544/0	932/0	1,007 / 0		
B1. 4"	545/0	933/0	1,010/0		

						Live	Dead	Snow	Wind	ırıb.
	ad Summary Description	Load Type	Re f	. Start	En d	1.00	0.65	1.00	1.15	
0	Us er Load	Unf. Lin. (lb/ft)	Ī.	00-00-00	10-10-00	51	48	109		n/a
4	FC3 Floor Material	Unf. Lin. (lb/ft)	Ī	00-00-00	10-10-00	20	10			n/a
1		Unf. Lin. (lb/ft)	ī	00-00-00	01-02-00		41			n/a
2	E40(i3788)	Unf. Lin. (lb/ft)	Ī	01-02-00	04-02-00		81			n/a
3	E41(i3789)	- '	ī	01-06-00	03-10-00		30	76		n/a
4	E41(i3789)	Unf. Lin. (lb/ft)	ı	04-02-00	06-08-00		41			n/a
5	E39(i3787)	Unf. Lin. (lb/ft)		06-08-00	09-08-00		81			n/a
6	E38(i3786)	Unf. Lin. (lb/ft)	L 1	07-00-00	09-04-00		30	76		n/a
7	E38(i3786)	Unf. Lin. (lb/ft)	<u> </u>	• • • • • •	10-10-00		41			n/a
8	E36(i3784)	Unf. Lin. (lb/ft)	Ļ	09-08-00			70	118		n/a
9	E41(i3789)	Conc. Pt. (lbs)	L	01-03-00	01-03-00			123		n/a
10	E41(i3789)	Conc. Pt. (lbs)	L	04-01-00	04-01-00		72			n/a
11	E38(i3786)	Conc. Pt. (lbs)	L	06-09-00	06-09-00		70	118		
12	E38(i3786)	Conc. Pt. (lbs)	L	09-07-00	09-07-00	47	72	123	•	n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	7,160 ft-lbs	38,727 ft-lbs	18.5%	13	05-05-00
End Shear	2,536 lbs	14,464 lbs	17.5%	13	09-06-02
Total Load Defl.	<u>L/</u> 999 (0.107")	n/a	n/a	45	05-05-00
Live Load Defl.	L/999 (0.062")	n/a	n/a	61	05-05-00
Max Defl.	0.107"	n/a	n/a	45	05-05-00
Span / Depth	10.4	n/a	n/a		00-00-00

		(A NAC)	Damand	De mand/ Resistance Support	Demand/ Resistance Member	Material
Beari	ng Supports	Dim. (L x W)	Demand			
B0	Wall/Plate	4" x3-1/2"	2,948 lbs	39.4%	17.3%	Unspecified
B1	Wall/Plate	4" x3-1/2"	2,954 lbs	39.5%	17.3%	Unspecified

Notes

Page 1 of 2



DWG NO.TAM 26623217 STRUCTURAL COMPONENT ONLY



1st Floor\...\B6(i4863) Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

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

May 8, 2017 13:21:20

BC CALC® Design Report

Build 5033 Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B6(i486(

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.

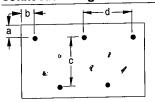
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA DONFURMS TO OBG 2012 O86.

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

Connection Diagram





a minimum = 2" c = 7-7/8" d= 6"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 Are 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.

BC CALC®, BC FRAMER® , A JS $^{\text{TM}}$, 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\...\B16(i5049)

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

May 8, 2017 13:23:49

B1

BC CALC® Design Report



Build 5033 Job Name:

Address: City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

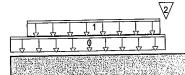
Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B16(

Specifier:

Designer:

Company:

Misc:



19-08-00

во

Total Horizontal Product Length = 19-08-00

Reaction Summary (Down / Bearing	Uplift) (lbs)	De ad	Snow	Wind		
B0, 5-1/2" B1, 5-1/2"	752/0 503/0	1,148/0 677/0	1,496 / 0 993 / 0		- -	

				Live	Dead	Snow Wind	irib.
Load Summary	Load Type	Ref. Start	End	1.00	0.65	1.00 1.15	
Tag Description		1 00-00-00	04-04-04	28	25	60	n/a
0 UserLoad	Unf. Lin. (lb/ft)		-		130	101	n/a
1 R1 (i4840)	Unf. Lin. (lb/ft)	L 00-05-08	04-02-08				
,	Conc. Pt. (lbs)	I. 04-04-04	04-04-04	469	495	924	n/a
2 B14(i5050)	•	L 15-04-12	15-04-12	470	496	925	n/a
2 P17/i5051)	Conc. Pt. (lbs)	L 10-U4-12	10-04-12	710	.50	 -	

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	12,058 ft-lbs	19.063 ft-lbs	63.3%	13	04-04-04
End Shear	3.500 lbs	14.464 lbs	24.2%	13	01-05-06
Total Load Defl.	L/367 (0.618")	0.944"	65.5%	45	09-06-06
	L/574 (0.395")	0.629"	62.7%	61	09-08-07
Live Load Defl.	0.618"	n/a	n/a	. 45	09-06-06
Max Defl. Span / Depth	19.1	n/a	n/a		00-00-00

Bearing Supports		Dim . (L x W)	De man d	Resistance Support	Resistance Member	Material	
		<u> </u>			17.3%	Unspecified	
B0	Wall/Plate	5-1/2" x 3-1/2"	4,055 lbs	25.9%			
		5-1/2" x 3-1/2"	2.586 lbs	16.5%	11%	Unspecified	
B1	Wall/Plate	5-1/2 X 3-1/2	2,000 100	10.070		'	

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: 10-09-00, Bottom: 10-09-00.

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 DBC 2012

O86. 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

BOWNEE OF ON TH

COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B16(i5049)

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

May 8, 2017 13:23:49

BC CALC® Design Report

Build 5033

Job Name: Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

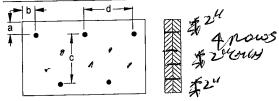
Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B1

Specifier: Designer:

Company.

Misc:

Connection Diagram



a minimum = 2"

c = 7-7/8"

d=@ 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

31/2" 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 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 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B8 DR(i4566)

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

May 8, 2017 13:21:21

BC CALC® Design Report

Build 5033 Job Name: Address:

City, Province, Postal Code:BRAMPTON,

Customer:

Code reports:

CCMC 12472-R

File Name: YORK 3 ELEV B.mmdl

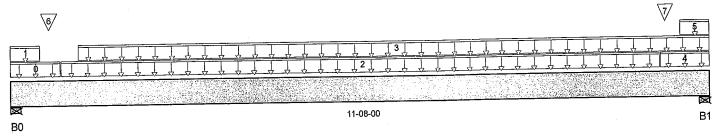
Description: Designs\Dropped Beams\1st Floor\Dropped Beams\B8 D

Specifier:

Designer:

Company:

Misc:



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

Reaction Summary (Down /	Uplift) (lbs) Live	De ad	Snow	Wind	
B0, 4"	2,224/0	1,632 / 0	554/0		
B1, 4"	2,193/0	1,617/0	554/0		

Load Summary	Lo ad Type	Ref. Start		Live 1.00	Dead 0.65	Snow Wind 1.00 1.15	Trib.
Tag Description 0 R1 (i4860) 1 R1 (i4860) 2 R1 (i4860) 3 Smoothed Load 4 R1 (i4860) 5 R1 (i4860) 6 - 7 R1 (i4860)	Unf. Lin. (lb/ft) Conc. Pt. (lbs) Conc. Pt. (lbs)	L 00-00-00 L 00-00-00 L 00-10-00 L 01-01-08 L 10-10-00 L 11-02-00 L 00-07-10 L 10-11-00	00-10-00 00-06-00 10-10-00 11-08-00 11-08-00 00-07-10 10-11-00		81 41 165 81 516 298	95 95 507 506	n/a n/a n/a n/a n/a n/a n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	12,265 ft-lbs	25,408 ft-lbs	48.3%	1	05-09-08
End Shear	4,346 lbs	11,571 lbs	37.6%	1	10-06-08
Total Load Defl.	L/341 (0.392")	0.556"	70.4%	35	05-09-08
	L/564 (0.237")	0.371"	63.9%	51	05-09-08
Live Load Defl.	0.392"	n/a	n/a	35	05-09-08
Max Defl. Span / Depth	14.1	n/a	n/a		00-00-00

		D and	De mand/ Re sistance Support	De mand/ Resistance Member	Material
Bearing Supports B0 Wall/Plate B1 Wall/Plate	Dim. (L x W) 4" x3-1/2" 4" x3-1/2"	5,653 lbs 5,588 lbs	49.7% 49.2%	33.1% 32.7%	Unspecified Unspecified

Notes



STRUCTURAL COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B8 DR(i4566)

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

May 8, 2017 13:21:21

BC CALC® Design Report

File Name: YORK 3 ELEV B.mmdl

Description: Designs \Dropped Beams\1st Floor\Dropped Beams\B8

Specifier:

Designer: Company.

Misc:

City, Province, Postal Code:BRAMPTON,

Customer:

Build 5033 Job Name:

Address:

Code reports:

CCMC 12472-R

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 C CONFORMS TO 684

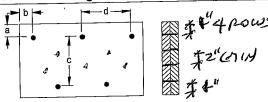
O86.

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

Connection Diagram



c = 5-1/2" a minimum = 2" d= 🎯 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

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.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD $^{\text{TM}}$, 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.

> S. KATSOULAKOS PACE OF ONE STRUCTURAL COMPONENT ONLY