

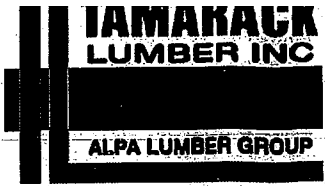
Products				
PlotID	Length	Product	Plies	Net Qty
J5	12-00-00	9 1/2" NI-40x	1	13
J1	22-00-00	11 7/8" NI-40x	2	38
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J2	18-00-00	11 7/8" NI-40x	1	12
J3	16-00-00	11 7/8" NI-40x	1	14
J4	14-00-00	11 7/8" NI-40x	1	1
J5	12-00-00	11 7/8" NI-40x	1	6
J6	4-00-00	11 7/8" NI-40x	1	2
J7	2-00-00	11 7/8" NI-40x	1	4
J8	20-00-00	11 7/8" NI-80	1	18
J8 DJ	20-00-00	11 7/8" NI-80	2	4
J9	18-00-00	11 7/8" NI-80	1	2
B2 L	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B3 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B7	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS3.56/11.88
13	H2	IUS2.56/9.5
1	H4	HUS1.81/10
5	H5	HUC312-2
2	H5	HUC312-2

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

LOADING:
DESIGN LOADS: L/480.000
LIVE LOAD: 40.0 lb/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 1

ELEVATION: A

LOT:

CITY: BRAMPTON

SALESMAN: R D
DESIGNER: PL
REVISION:

DATE: 2017-05-15

1st FLOOR

DATE 5/26/17

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 (AS PER PLAN WORK) DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE 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, LENGTHS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 26545-17 THROUGH DWG# TAM 26551-17, INCLUSIVE DATED 5/26/17

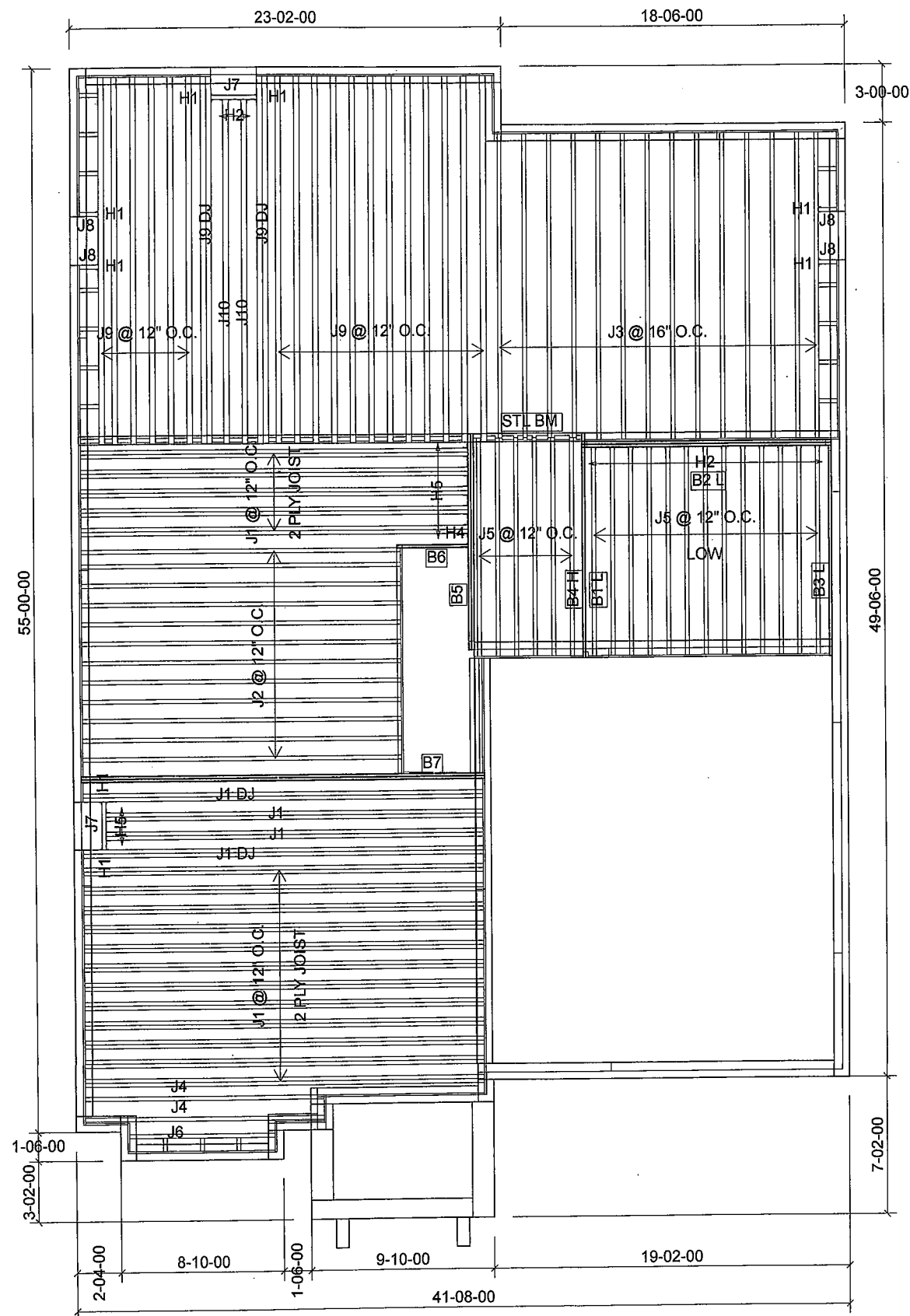
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER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

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 32.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND THE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 26560-17
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL
COMPONENTS ONLY





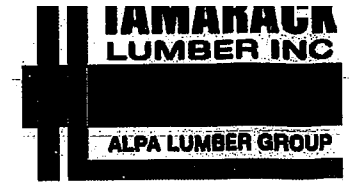
Products				
PlotID	Length	Product	Plies	Net Qty
J5	12-00-00	9 1/2" NI-40x	1	13
J1	22-00-00	11 7/8" NI-40x	2	38
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J2	18-00-00	11 7/8" NI-40x	1	12
J3	16-00-00	11 7/8" NI-40x	1	14
J4	14-00-00	11 7/8" NI-40x	1	2
J5	12-00-00	11 7/8" NI-40x	1	6
J6	8-00-00	11 7/8" NI-40x	1	1
J7	4-00-00	11 7/8" NI-40x	1	2
J8	2-00-00	11 7/8" NI-40x	1	4
J9	20-00-00	11 7/8" NI-80	1	18
J9 DJ	20-00-00	11 7/8" NI-80	2	4
J10	18-00-00	11 7/8" NI-80	1	2
B2 L	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B3 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B7	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
13	H2	IUS2.56/9.5
2	H2	IUS3.56/11.88
1	H4	HUS1.81/10
5	H5	HUC312-2
2	H5	HUC312-2

REFER TO THE NORDIC
INSTALLATION GUIDE FOR PROPER
STORAGE AND INSTALLATION.
SQUASH BLOCKS OF 2x4, 2x6, 2x8 #2
S.P.F. REQ'D UNDER INTERIOR
UNIFORM LOAD BEARING WALLS.
MULTIPLE SQUASH BLOCKS REQ'D
UNDER CONCENTRATED LOADS SEE
FIGURE 1. CANTILEVERED JOISTS
INCLUDING CANT' OVER BRICK REQ.
I-JOIST BLOCKING ALONG BEARING
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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 1

ELEVATION: B

LOT:

CITY: BRAMPTON

SALESMAN: R D

DESIGNER: PL

REVISION:

DATE: 2017-05-19

1st FLOOR

DATE 5/26/17

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 (AS PER PLAN WORK) DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE 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, LENGTHS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

DWG# TAM 26545-17 THROUGH DWG# TAM 26551-17 INCLUSIVE DATED 5/26/17

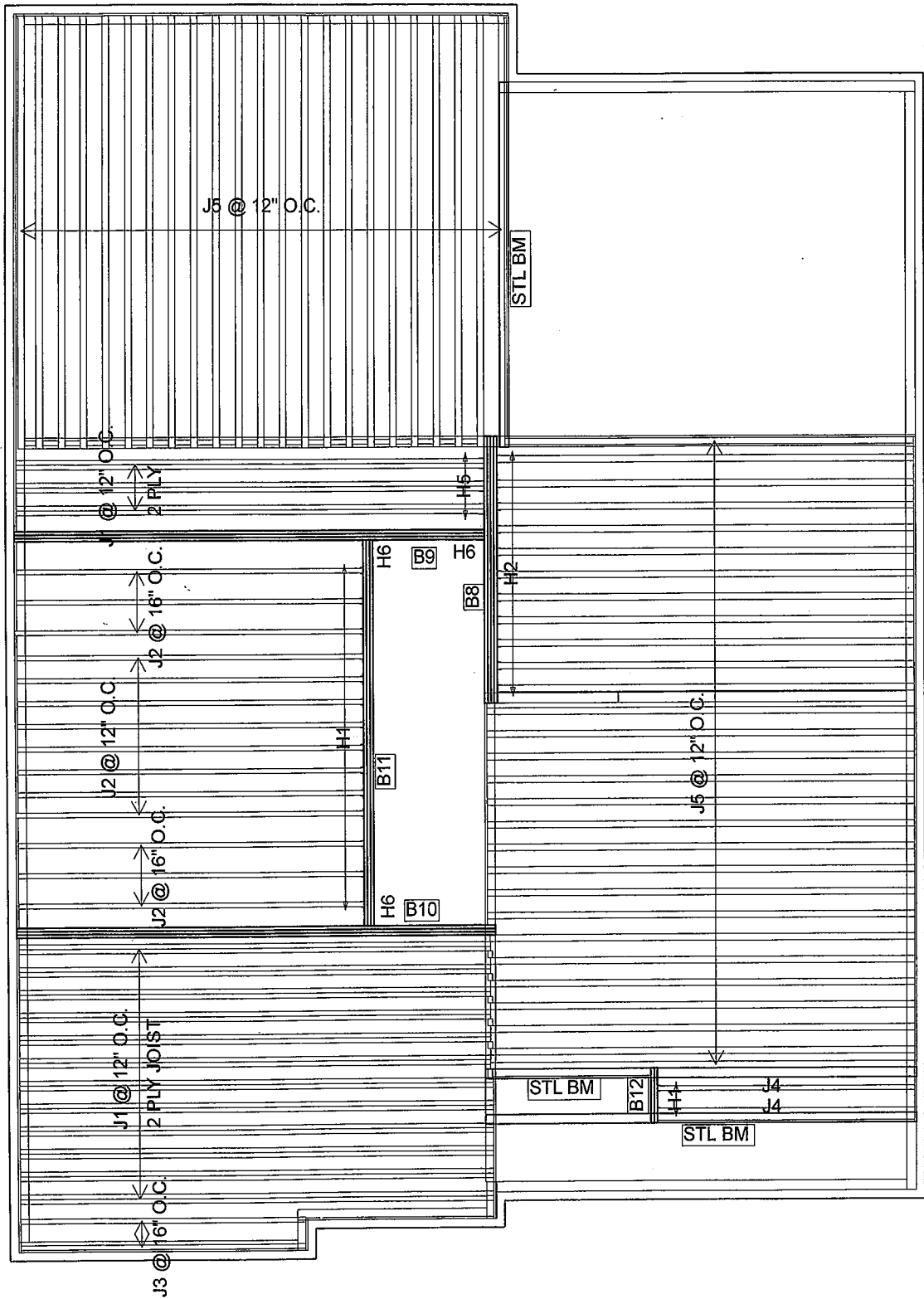
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER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

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 32.5 OF THE ONTARIO BUILDING CODE AS A QUALIFIED AND HE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 26561-17
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL
COMPONENTS ONLY





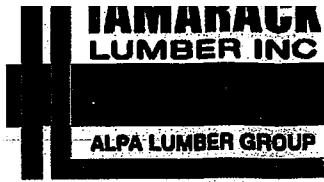
Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	30
J2	16-00-00	11 7/8" NI-40x	1	14
J3	14-00-00	11 7/8" NI-40x	1	2
J4	12-00-00	11 7/8" NI-40x	1	2
J5	20-00-00	11 7/8" NI-80	1	52
B10 ✓	22-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B9 ✓	22-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B11 ✓	18-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B8 ✓	12-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	4	4
B12 ✓	4-00-00	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
14	H1	IUS2.56/11.88
11	H2	IUS3.56/11.88
3	H5	HU312-2
2	H6	HGUS5.50/10
1	H6	HGUS5.50/10

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. 1-
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 1

ELEVATION: A

LOT:

CITY: BRAMPTON

SALESMAN: R D

DESIGNER: PL

REVISION:

DATE: 2017-05-15

2nd FLOOR

DATE 5/26/17

BCIN: 26064; FIRM: 29991

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

DWG# TAM 26552-17 THROUGH DWG# TAM 26558-17 INCLUSIVE DATED 5/26/17

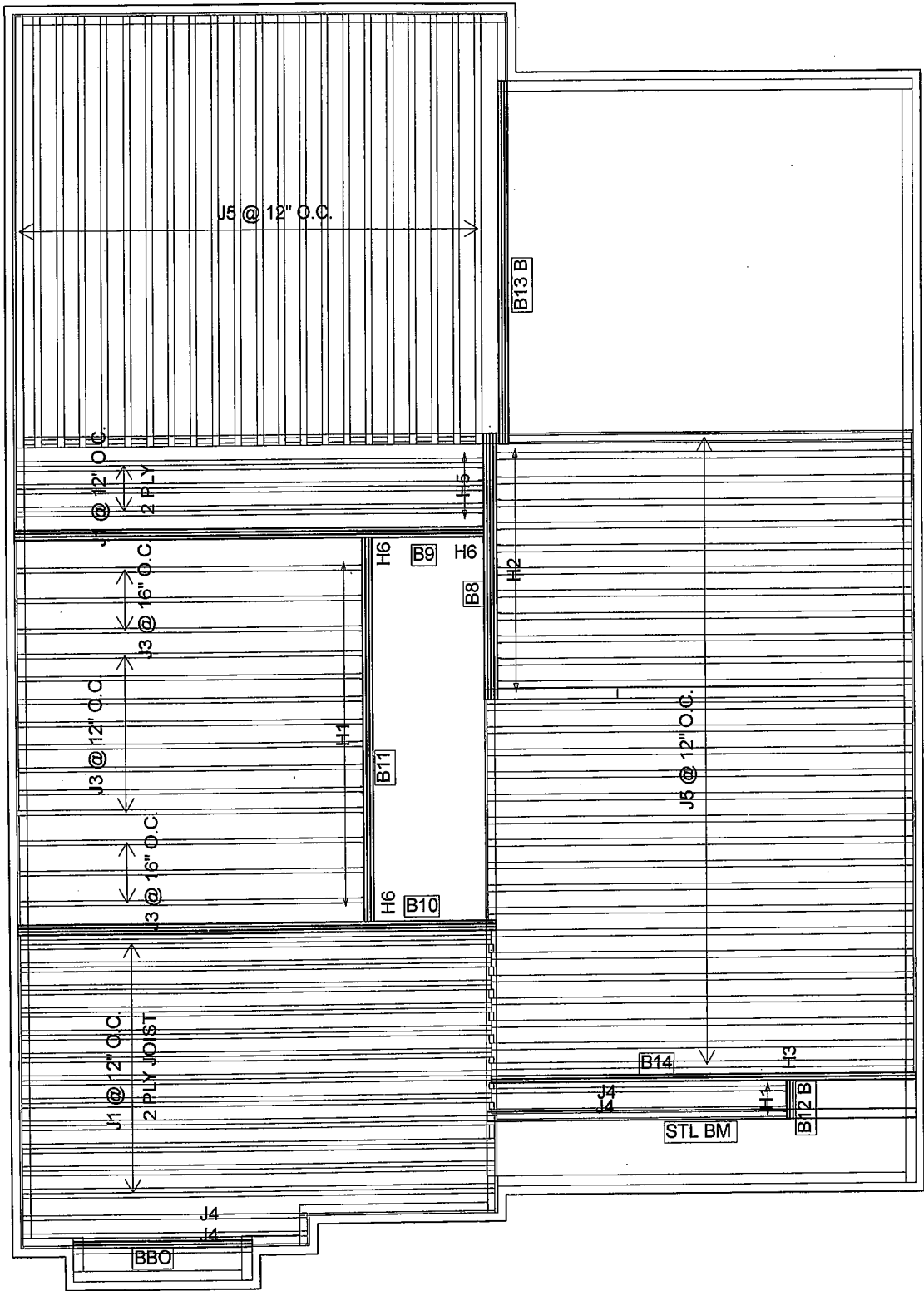
SEALED STRUCTURAL COMPONENTS ONLY: - 26556-17
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER SUPPORTED JOIST EXCEEDING A REACTION OF 1500 LBS (FACTORED)-SEE DETAILS.
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I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF A FIRM REGISTERED UNDER SUBSECTION 32.5 OF THE ONTARIO BUILDING CODE. I AM QUALIFIED AND THE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 26562-17
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL
COMPONENTS ONLY





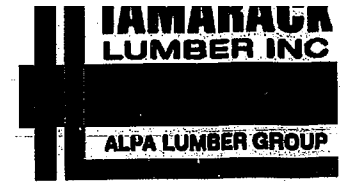
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PlotID	Length	Product	Plies	Net Qty
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J4	14-00-00	11 7/8" NI-40x	1	4
J5	20-00-00	11 7/8" NI-80	1	51
B10 ✓	22-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B9 ✓	22-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B11 ✓	18-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B13 B ✓	16-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	3	3
B8 ✓	12-00-00	1-3/4" x 11-7/8" VERSA-LAM@ 2.0 3100 SP	4	4
B12 B ✓	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
14	H1	IUS2.56/11.88
11	H2	IUS3.56/11.88
1	H3	HGUS410
3	H5	HU312-2
2	H6	HGUS5.50/10
1	H6	HGUS5.50/10

REFER TO THE NORDIC
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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. 1-
JOIST BLOCKING ALONG BEARING
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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 1

ELEVATION: B

LOT:

CITY: BRAMPTON

SALESMAN: R D

DESIGNER: PL

REVISION:

DATE: 2017-05-19

2nd FLOOR

DATE 5/26/17

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 (AS PER PLAN WORK) DO NOT REPRESENT A PART OF THE SCOPE OF WORK WITHIN THE BOUNDARIES OF THE SEAL. THIS WORK IS DELEGATED TO A QUALIFIED BUILDING DESIGNER HAVING RESPONSIBILITY FOR THIS PROJECT. ALL BEAMS NOT ADDRESSED IN THIS DESCRIPTION AND LABELLED ON THIS LAYOUT ARE BEAMS SPECIFIED BY BUILDING DESIGNER AND/OR PROJECT ENGINEER AND ARE TO BE 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, LENGTHS, AND DETAILS, REMAINS THE RESPONSIBILITY OF THE FLOOR SYSTEM INSTALLATION CONTRACTOR.

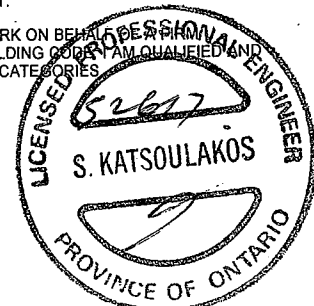
DWG# TAM 2655217 THROUGH DWG# TAM 2655517, INCLUSIVE DATED 5/26/17

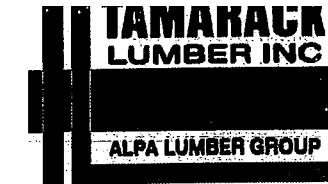
SEALED STRUCTURAL COMPONENTS ONLY:
SEALED, THIRD PARTY LVL TYPE BEAMS, BUILT-UP CONVENTIONAL BEAMS, HEADERS, AND CONCENTRATED LOADED NORDIC WOOD-I JOIST ONLY. 2 X 6 SQUASH BLOCK REQUIRED AT ALL EXTERIOR SUPPORTS OR AS PER PROJECT ENGINEER'S SPECIFICATIONS. WEB FILLER REINFORCEMENT REQUIRED AT ALL HANGER 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 1/16" DEEPER THAN JOIST DEPTH. SEE NORDIC LITERATURE FOR NAILING REQUIREMENT.

I REVIEWED AND TAKE RESPONSIBILITY FOR THE DESIGN WORK ON BEHALF OF THE PROFESSIONAL ENGINEER REGISTERED UNDER SUBSECTION 32.5 OF THE ONTARIO BUILDING CODE. I AM A QUALIFIED PROFESSIONAL ENGINEER. THE FIRM IS REGISTERED, IN APPROPRIATE CLASSES AND/OR CATEGORIES.

REGISTERED FIRM: MICRO CITY ENGINEERING SERVICES INC.

DWG # TAM 2656317
BCIN: 26064
FIRM: 29991
SEALED STRUCTURAL
COMPONENTS ONLY





FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 1

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

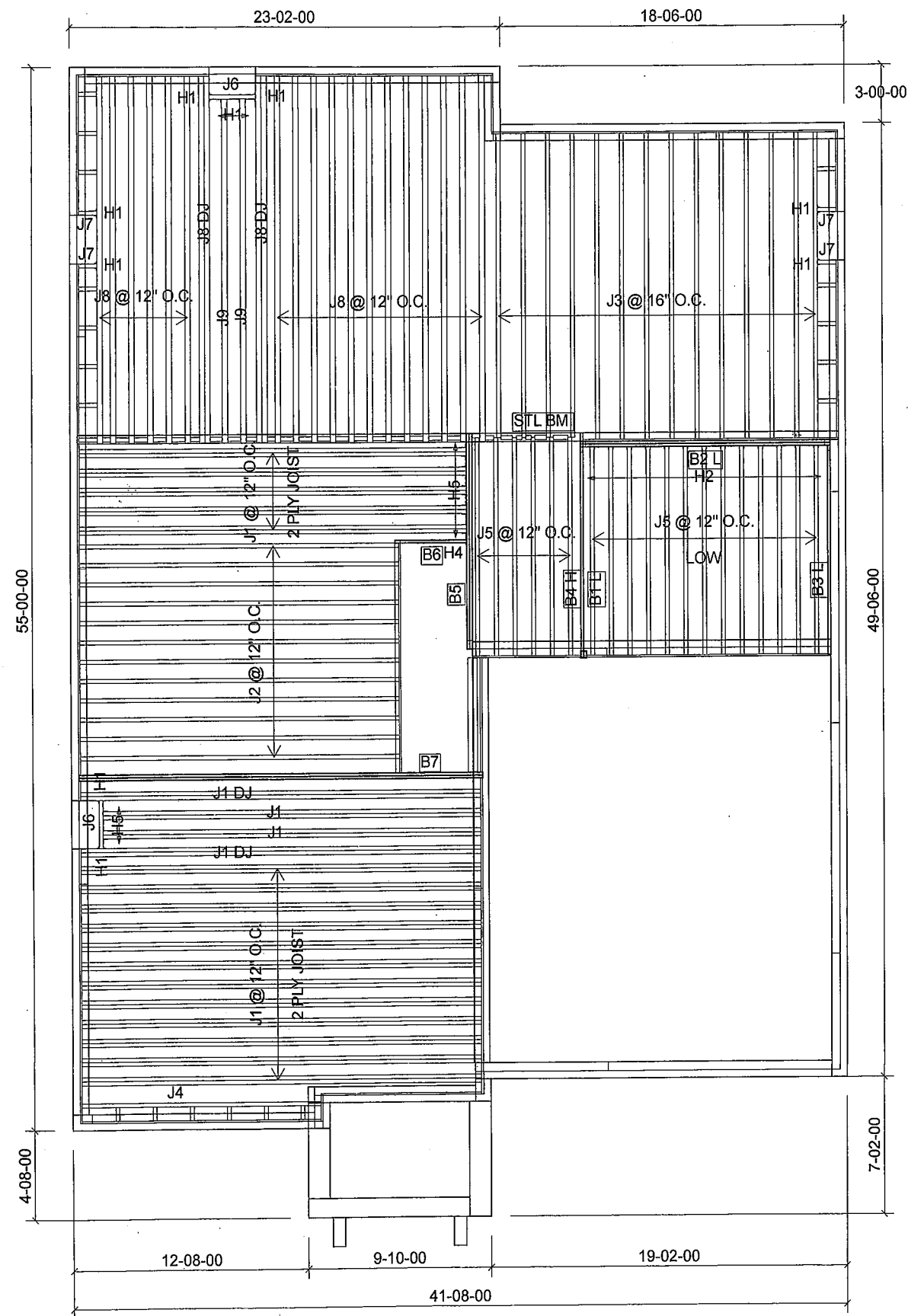
DEAD LOAD: 20.0 lb/ft²

TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2017-05-15

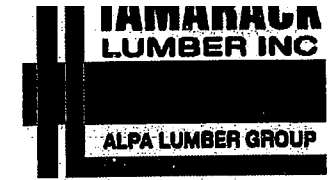
1st FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J5	12-00-00	9 1/2" NI-40x	1	13
J1	22-00-00	11 7/8" NI-40x	2	38
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J2	18-00-00	11 7/8" NI-40x	1	12
J3	16-00-00	11 7/8" NI-40x	1	14
J4	14-00-00	11 7/8" NI-40x	1	1
J5	12-00-00	11 7/8" NI-40x	1	6
J6	4-00-00	11 7/8" NI-40x	1	2
J7	2-00-00	11 7/8" NI-40x	1	4
J8	20-00-00	11 7/8" NI-80	1	18
J8 DJ	20-00-00	11 7/8" NI-80	2	4
J9	18-00-00	11 7/8" NI-80	1	2
B2 L	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B3 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B7	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS3.56/11.88
13	H2	IUS2.56/9.5
1	H4	HUS1.81/10
5	H5	HUC312-2
2	H5	HUC312-2

UPDATED



FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 1

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

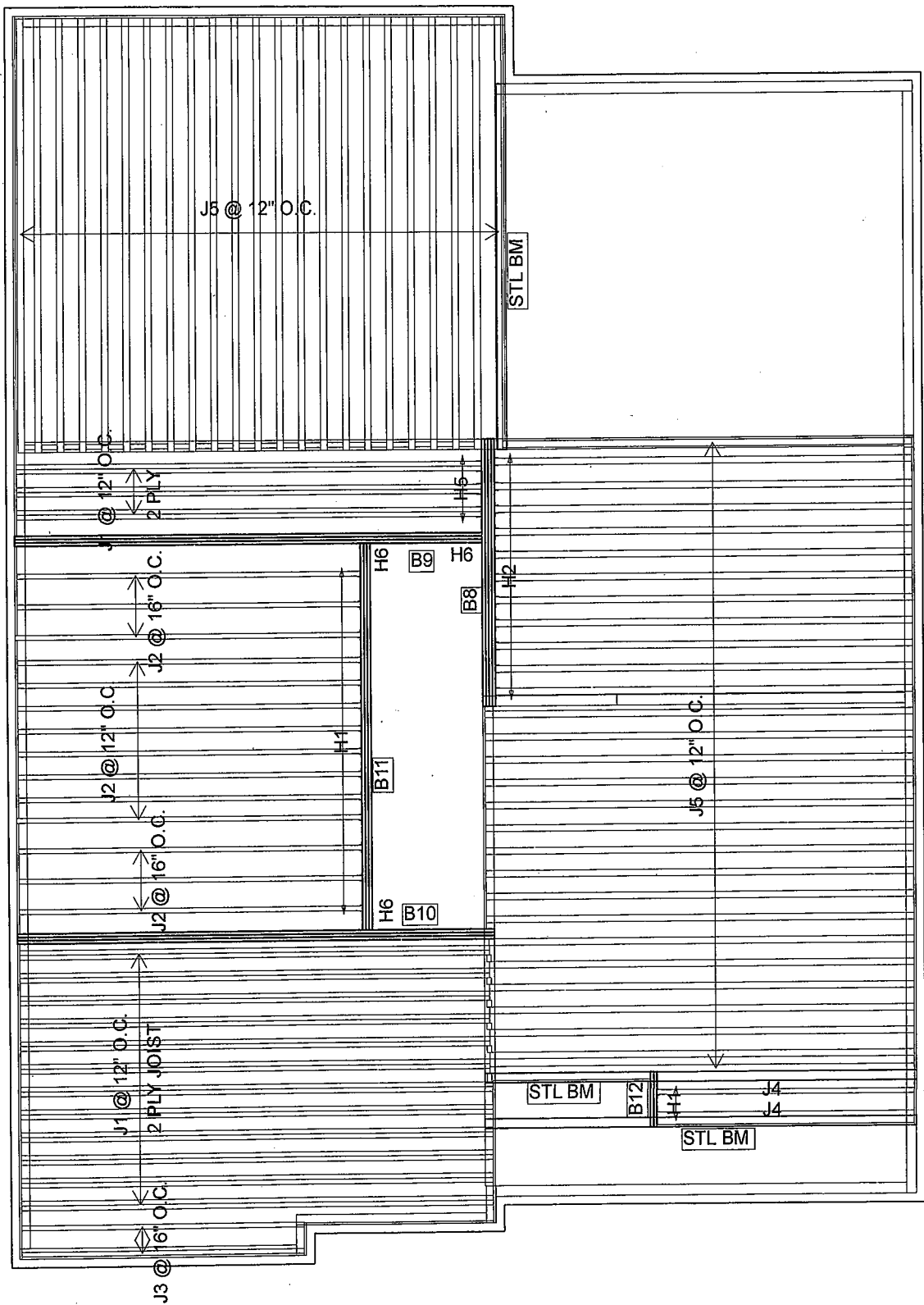
DEAD LOAD: 20.0 lb/ft²

TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

DATE: 2017-05-15

2nd FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	30
J2	16-00-00	11 7/8" NI-40x	1	14
J3	14-00-00	11 7/8" NI-40x	1	2
J4	12-00-00	11 7/8" NI-40x	1	2
J5	20-00-00	11 7/8" NI-80	1	52
B10	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B9	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B11	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B8	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	4	4
B12	4-00-00	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
14	H1	IUS2.56/11.88
11	H2	IUS3.56/11.88
3	H5	HU312-2
2	H6	HGUS5.50/10
1	H6	HGUS5.50/10

FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 1

ELEVATION: B

LOT:

CITY: BRAMPTON

SALESMAN: R D

DESIGNER: PL

REVISION:

NOTES:

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

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

LOADING:

DESIGN LOADS: L/480.000

LIVE LOAD: 40.0 lb/ft²

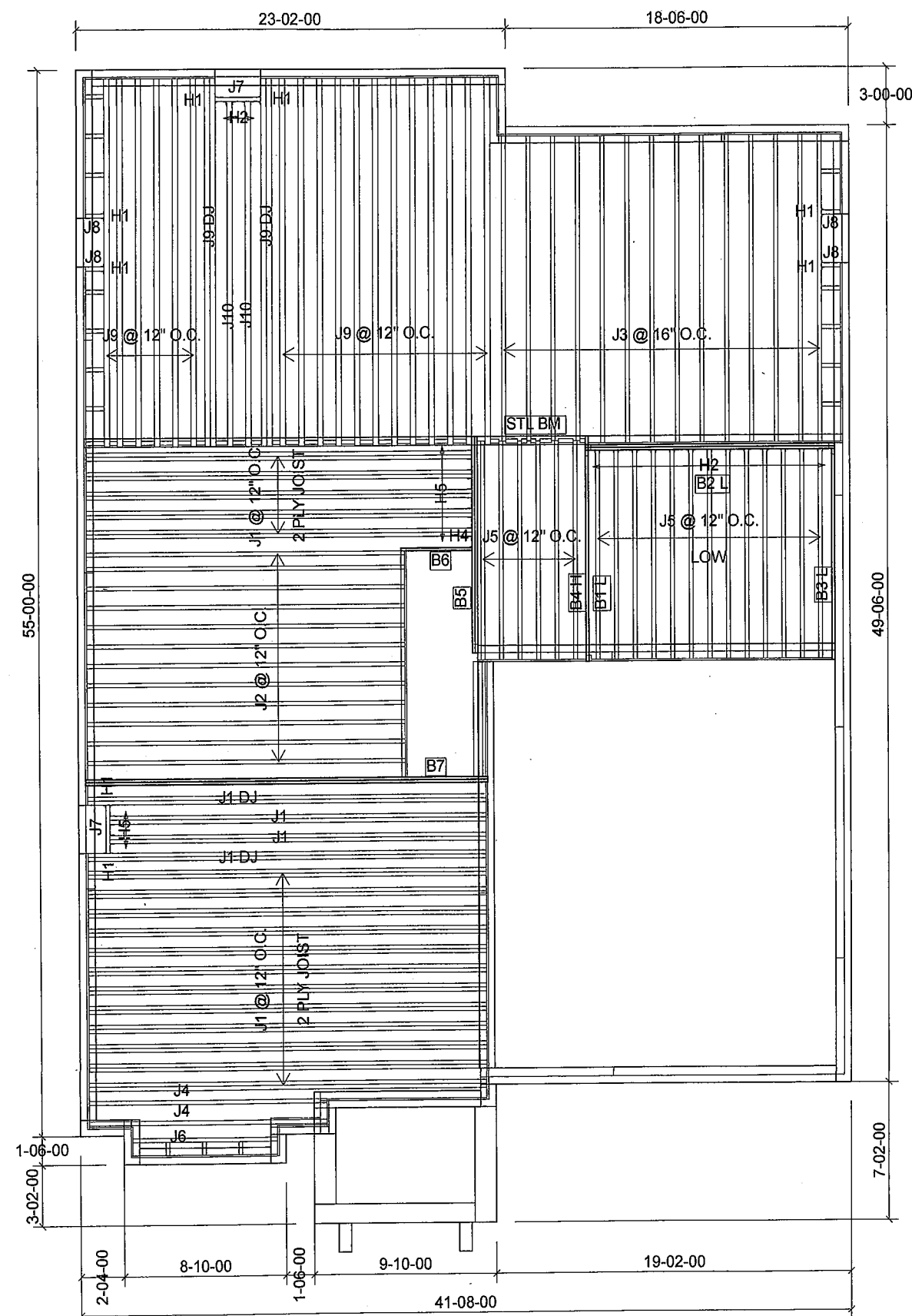
DEAD LOAD: 20.0 lb/ft²

TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

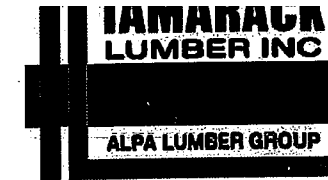
DATE: 2017-05-19

1st FLOOR



Products				
PlotID	Length	Product	Plies	Net Qty
J5	12-00-00	9 1/2" NI-40x	1	13
J1	22-00-00	11 7/8" NI-40x	2	38
J1 DJ	22-00-00	11 7/8" NI-40x	2	4
J2	18-00-00	11 7/8" NI-40x	1	12
J3	16-00-00	11 7/8" NI-40x	1	14
J4	14-00-00	11 7/8" NI-40x	1	2
J5	12-00-00	11 7/8" NI-40x	1	6
J6	8-00-00	11 7/8" NI-40x	1	1
J7	4-00-00	11 7/8" NI-40x	1	2
J8	2-00-00	11 7/8" NI-40x	1	4
J9	20-00-00	11 7/8" NI-80	1	18
J9 DJ	20-00-00	11 7/8" NI-80	2	4
J10	18-00-00	11 7/8" NI-80	1	2
B2 L	14-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	2	2
B1 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B3 L	12-00-00	1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP	1	1
B7	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B4 H	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1
B5	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B6	4-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	1	1

Connector Summary		
Qty	Manuf	Product
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
2	H1	IUS2.56/11.88
13	H2	IUS2.56/9.5
2	H2	IUS3.56/11.88
1	H4	HUS1.81/10
5	H5	HUC312-2
2	H5	HUC312-2



FROM PLAN DATED: APR 2017

BUILDER: GREENYORK HOMES

SITE: DEGREY DR

MODEL: YORK 1

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

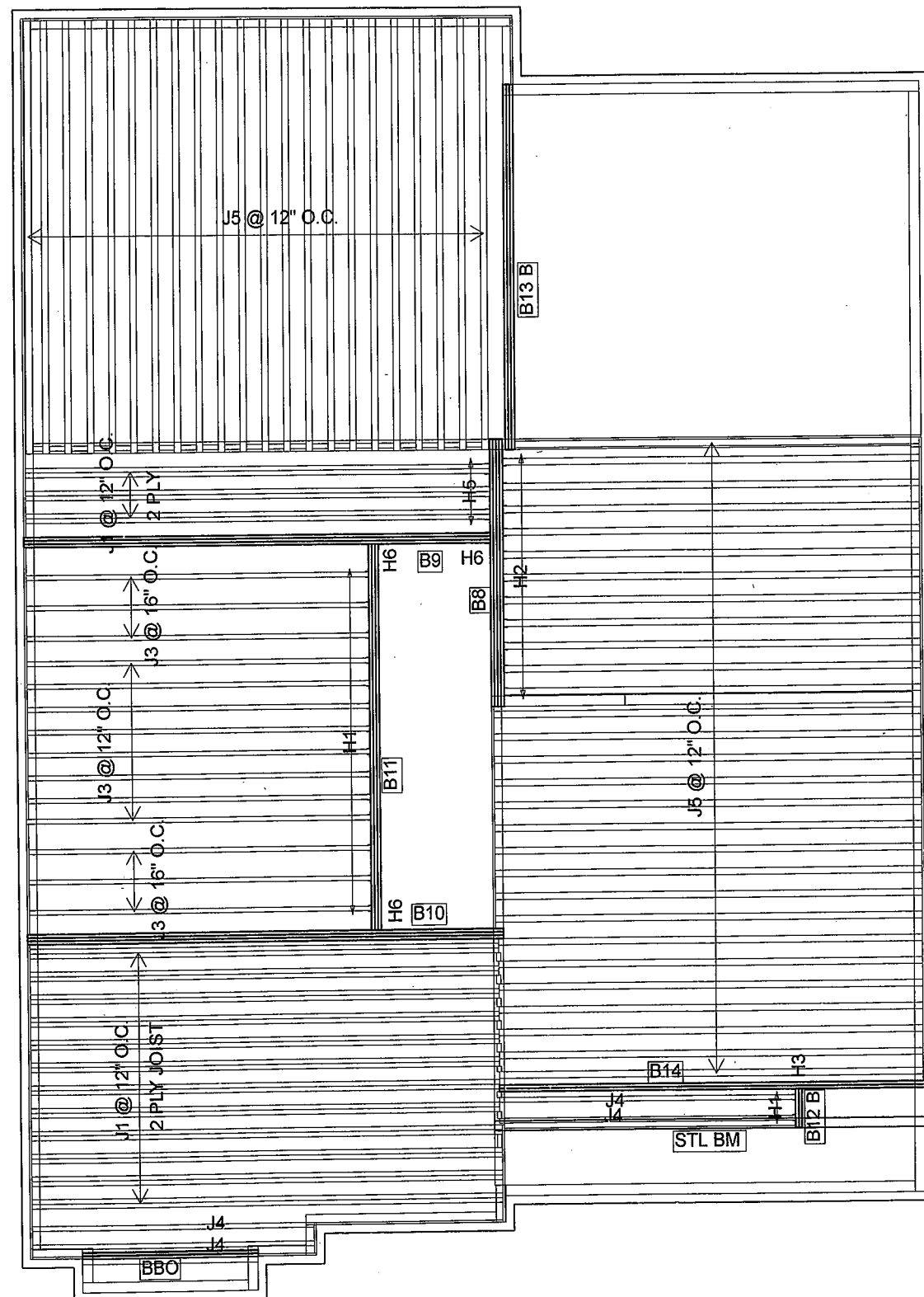
DEAD LOAD: 20.0 lb/ft²

TILED AREAS: 20 lb/ft

SUBFLOOR: 3/4" GLUED AND NAILED

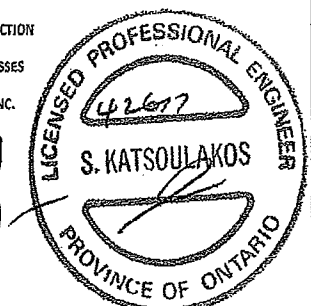
DATE: 2017-05-19


2nd FLOOR

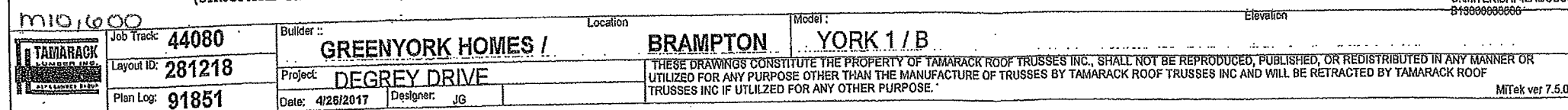


Products				
PlotID	Length	Product	Plies	Net Qty
J1	22-00-00	11 7/8" NI-40x	2	30
J3	16-00-00	11 7/8" NI-40x	1	14
J4	14-00-00	11 7/8" NI-40x	1	4
J5	20-00-00	11 7/8" NI-80	1	51
B10	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B9	22-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B11	18-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B13 B	16-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3
B8	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	4	4
B12 B	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
14	H1	IUS2.56/11.88
11	H2	IUS3.56/11.88
1	H3	HGUS410
3	H5	HU312-2
2	H6	HGUS5.50/10
1	H6	HGUS5.50/10

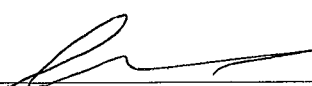


		Job Track: 44080	Builder: GREENYORK HOMES /	Location: BRAMPTON	Model: YORK 1 / A	Elevation:	C:\MITEK\CA742AU0BSV B13000000000
Layout id: 281216		Project: DEGREY DRIVE	THESE DRAWINGS CONSTITUTE THE PROPERTY OF TAMARACK ROOF TRUSSES INC. SHALL NOT BE REPRODUCED, PUBLISHED, OR REDISTRIBUTED IN ANY MANNER 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.				
Plan Log: 91851		Date: 4/26/2017	Designer: JG	Mitek ver 7.5.0			



Schedule 1: Designer Information


Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information		Application number:	
Building number, street name		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name SAM KATSOULAKOS, P. ENG.		Firm MICRO CITY ENGINEERING 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 individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]			
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings </div> <div> <input type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection </div> <div> <input checked="" type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems </div> </div>			
Description of designer's work GREENYORK HOMES – DEGREY DR – MODEL: YORK 1 – ELEV. A 1ST FLOOR (SCHEDULE IS NOT ISSUED AS LOT SPECIFIC) REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK ROOF TRUSSES INC. (SEE DWG #TAM26560-17 DATED 5-26-17). SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING DESIGNER.			
D. Declaration of Designer			
I, <u>SAM KATSOULAKOS, P. ENG</u> declare that (choose one as appropriate): <div style="text-align: center;">(print name)</div>			
<input checked="" type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.			
Individual BCIN: <u>26064</u>			
Firm BCIN: <u>29991</u>			
<input type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.			
Individual BCIN: _____			
Basis for exemption from registration: _____			
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.			
Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge.			
2. I have submitted this application with the knowledge and consent of the firm.			
Date <u>5/26/17</u>		Signature of Designer 	

NOTE:

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

DWG#TAM26560-17-S
DWG#TAM26564-17-S

5/26/17


Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information Application number:

Building number, street name	Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other description

B. Individual who reviews and takes responsibility for design activities

Name SAM KATSOULAKOS, P. ENG.	Firm MICRO CITY ENGINEERING SERVICES INC.
Street address R.R #1, PO BOX 61	Unit no. Lot/con.
Municipality GLENCOE	Postal code Province N0L 1M0 ONTARIO
Telephone number (519) 287-2242 Business	Fax number Cell number (519) 287-5750

C. Design activities undertaken by individual identified in Section B: [Building Code Table 3.5.2.1 of Division C]

- | | | |
|--|--|---|
| <input type="checkbox"/> House | <input type="checkbox"/> HVAC – House | <input checked="" type="checkbox"/> Building Structural |
| <input type="checkbox"/> Small Buildings | <input type="checkbox"/> Building Services | <input type="checkbox"/> Plumbing – House |
| <input type="checkbox"/> Large Buildings | <input type="checkbox"/> Detection, Lighting and Power | <input type="checkbox"/> Plumbing – All Buildings |
| <input type="checkbox"/> Complex Buildings | <input type="checkbox"/> Fire Protection | <input type="checkbox"/> On-site Sewage Systems |

Description of designer's work **GREENYORK HOMES – DEGREY DR – MODEL: YORK 1 – ELEV. B**
1ST FLOOR (SCHEDULE IS NOT ISSUED AS LOT SPECIFIC)
 REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK ROOF TRUSSES INC. (SEE DWG #TAM26561-17 DATED 5-26-17).
 SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING DESIGNER.

D. Declaration of Designer

I, SAM KATSOULAKOS, P. ENG declare that (choose one as appropriate):

(print name)

- ☒ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: 26064

Firm BCIN: 29991

- ☐ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

- ☐ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

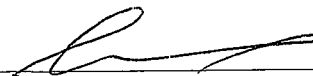
I certify that:

- The information contained in this schedule is true to the best of my knowledge.
- I have submitted this application with the knowledge and consent of the firm.

Date

5/26/17

Signature of Designer



NOTE:

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

DWG#TAM26561-17-S
 DWG#TAM26561-17-S

5/26/17
9

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information		Application number:	
Building number, street name		Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other description	
B. Individual who reviews and takes responsibility for design activities			
Name SAM KATSOULAKOS, P. ENG.		Firm MICRO CITY ENGINEERING 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 individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]			
<input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings		<input type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection	
		<input checked="" type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems	
Description of designer's work GREENYORK HOMES – DEGREY DR – MODEL: YORK 1 – ELEV. A 2ND FLOOR (SCHEDULE IS NOT ISSUED AS LOT SPECIFIC) REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK ROOF TRUSSES INC. (SEE DWG #TAM26562-17 DATED 5-26-17). SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING DESIGNER.			
D. Declaration of Designer			
I, <u>SAM KATSOULAKOS, P. ENG</u> declare that (choose one as appropriate): <div style="text-align: center;">(print name)</div>			
<input checked="" type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.			
Individual BCIN: <u>26064</u>			
Firm BCIN: <u>29991</u>			
<input type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code.			
Individual BCIN: _____			
Basis for exemption from registration: _____			
<input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code.			
Basis for exemption from registration and qualification: _____			
I certify that:			
1. The information contained in this schedule is true to the best of my knowledge.			
2. I have submitted this application with the knowledge and consent of the firm.			
Date		Signature of Designer	

NOTE:

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

DWG#TAM26562-17-S
DWG#TAM 26566 17-S

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information			Application number:	
Building number, street name			Unit no.	Lot/con.
Municipality CITY OF BRAMPTON	Postal code	Plan number/ other description		
B. Individual who reviews and takes responsibility for design activities				
Name SAM KATSOULAKOS, P. ENG.		Firm MICRO CITY ENGINEERING 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 individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]				
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> House <input type="checkbox"/> Small Buildings <input type="checkbox"/> Large Buildings <input type="checkbox"/> Complex Buildings </div> <div style="width: 33%;"> <input type="checkbox"/> HVAC – House <input type="checkbox"/> Building Services <input type="checkbox"/> Detection, Lighting and Power <input type="checkbox"/> Fire Protection </div> <div style="width: 33%;"> <input checked="" type="checkbox"/> Building Structural <input type="checkbox"/> Plumbing – House <input type="checkbox"/> Plumbing – All Buildings <input type="checkbox"/> On-site Sewage Systems </div> </div>				
Description of designer's work GREENYORK HOMES – DEGREY DR – MODEL: YORK 1 – ELEV. B 2ND FLOOR (SCHEDULE IS NOT ISSUED AS LOT SPECIFIC) REVIEW PRE-ENGINEERED FLOOR SYSTEM COMPONENT DRAWINGS AND LAYOUT PLACEMENT PLAN SUPPLIED BY TAMARACK ROOF TRUSSES INC. (SEE DWG #TAM26563-17 DATED 5-26-17). SUPPORTING STRUCTURE TO BE REVIEWED AND VERIFIED BY QUALIFIED BUILDING DESIGNER.				
D. Declaration of Designer				
I, <u>SAM KATSOULAKOS, P. ENG</u> declare that (choose one as appropriate): <div style="text-align: center;">(print name)</div> <div style="margin-left: 40px;"> <input checked="" type="checkbox"/> I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4. of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories. </div> <div style="margin-left: 40px;"> Individual BCIN: <u>26064</u> Firm BCIN: <u>29991</u> </div> <div style="margin-left: 40px;"> <input type="checkbox"/> I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5. of Division C, of the Building Code. Individual BCIN: _____ Basis for exemption from registration: _____ </div> <div style="margin-left: 40px;"> <input type="checkbox"/> The design work is exempt from the registration and qualification requirements of the Building Code. Basis for exemption from registration and qualification: _____ </div>				
I certify that: <ol style="list-style-type: none"> The information contained in this schedule is true to the best of my knowledge. I have submitted this application with the knowledge and consent of the firm. 				
Date		Signature of Designer		

NOTE:

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

DWG#TAM 2656317-S *52611*
 DWG#TAM 2656317-S

NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLINGTON ONTARIO
May 4, 2017 14:53

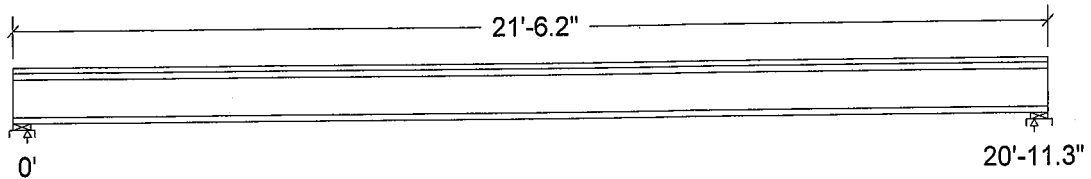
PROJECT
J1 1ST FLOOR
GREENYORK HOMES
DEGREY DR
YORK 1

Design Check Calculation Sheet Nordic Sizer – Canada 6.4

Loads:

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

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



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

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

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

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

This section PASSES the design code check.

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

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 890	Vr = 4672	lbs	Vf/Vr = 0.19
Moment(+)	Mf = 4659	Mr = 12509	lbs-ft	Mf/Mr = 0.37
Perm. Defl'n	0.11 = <L/999	0.70 = L/360	in	0.16
Live Defl'n	0.23 = <L/999	0.52 = L/480	in	0.44
Total Defl'n	0.34 = L/739	1.05 = L/240	in	0.44
Bare Defl'n	0.25 = <L/999	0.70 = L/360	in	0.36
Vibration	Lmax = 20'-11	Lv = 23'-1	ft	0.78
Defl'n	= 0.024	= 0.031	in	



NO. TAM 26541-1
**STRUCTURAL
COMPONENT ONLY**

J6 1ST FLOOR

Nordic Sizer – Canada 6.4

Page 2

Additional Data:

FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#
Vr	2336	1.00	1.00	-	-	-	-	-	#2
Mr+	6255	1.00	1.00	-	1.000	-	-	-	#2
EI	371.1 million	-	-	-	-	-	-	-	#2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = 1.25D + 1.5L

Moment(+) : LC #2 = 1.25D + 1.5L

Deflection: LC #1 = 1.0D (permanent)

LC #2 = 1.0D + 1.0L (live)

LC #2 = 1.0D + 1.0L (total)

LC #2 = 1.0D + 1.0L (bare joist)

Bearing : Support 1 - LC #2 = 1.25D + 1.5L

Support 2 - LC #2 = 1.25D + 1.5L

Load Types: D=dead W=wind S=snow H=earth,groundwater E=earthquake
L=live(use,occupancy) Ls=live(storage,equipment) f=fire

Load Patterns: s=S/2 L=L+Ls _=no pattern load in this span

All Load Combinations (LCs) are listed in the Analysis output

CALCULATIONS:Deflection: E_{IEff} = 413e06 lb-in²/ply K= 6.18e06 lbs/ply

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

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.



1622
 DWG NO. FAM 26541-17
 STRUCTURAL
 COMPONENT ONLY

NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLINGTON ONTARIO
May 4, 2017 14:59

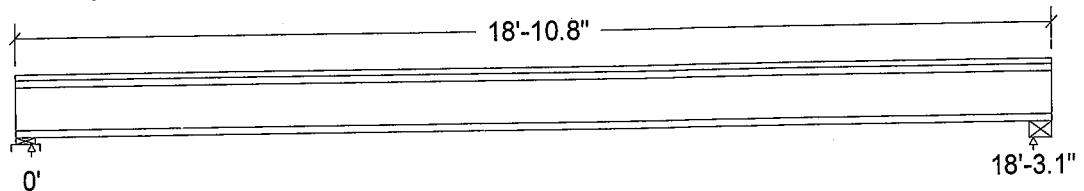
PROJECT
J8 1ST FLOOR
GREEN YORK HOMES
DEGREY DR
YORK 1

Design Check Calculation Sheet Nordic Sizer – Canada 6.4

Loads:

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

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



Unfactored:			
Dead	183		183
Live	365		365
Factored:			
Total	776		776
Bearing:			
Resistance			
Joist	2336		2336
Support	9417		-
Des ratio			
Joist	0.33		0.33
Support	0.08		-
Load case	#2		#2
Length	4-3/8		5
Min req'd	1-3/4		1-3/4
Stiffener	No		No
Kd	1.00		1.00
KB support	1.00		-
fcp sup	769		-
Kzcp sup	1.00		-

Nordic Joist 11-7/8" NI-80 Floor joist @ 12" o.c.
Supports: 1 - Lumber Sill plate, No.1/No.2; 2 - Steel Beam, W;
Total length: 18'-10.8"; 3/4" nailed and glued OSB sheathing
This section PASSES the design code check.

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

Criterion	Analysis Value	Design Value	Unit	Analysis/Design
Shear	Vf = 776	Vr = 2336	lbs	Vf/Vr = 0.33
Moment(+)	Mf = 3544	Mr = 11609	lbs-ft	Mf/Mr = 0.31
Perm. Defl'n	0.09 = <L/999	0.61 = L/360	in	0.15
Live Defl'n	0.19 = <L/999	0.46 = L/480	in	0.41
Total Defl'n	0.28 = L/785	0.91 = L/240	in	0.31
Bare Defl'n	0.21 = <L/999	0.61 = L/360	in	0.34
Vibration	Lmax = 18'-3	Lv = 21'-3	ft	
Defl'n	= 0.024	= 0.034	in	0.69



NO. 26542-17
**STRUCTURAL
COMPONENT ONLY**

Beam1

Nordic Sizer – Canada 6.4

Page 2

Additional Data:

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

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = 1.25D + 1.5L

Moment (+) : LC #2 = 1.25D + 1.5L

Deflection: LC #1 = 1.0D (permanent)

LC #2 = 1.0D + 1.0L (live)

LC #2 = 1.0D + 1.0L (total)

LC #2 = 1.0D + 1.0L (bare joist)

Bearing : Support 1 - LC #2 = 1.25D + 1.5L

Support 2 - LC #2 = 1.25D + 1.5L

Load Types: D=dead W=wind S=snow H=earth, groundwater E=earthquake
L=live (use, occupancy) Ls=live (storage, equipment) f=fire

Load Patterns: s=S/2 L=L+Ls _=no pattern load in this span

All Load Combinations (LCs) are listed in the Analysis output

CALCULATIONS:Deflection: $EI_{eff} = 625e06 \text{ lb-in}^2$ $K = 6.18e06 \text{ lbs}$

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

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. YAW26542-17
 STRUCTURAL
 COMPONENT ONLY

NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLINGTON ONTARIO
May 5, 2017 07:40

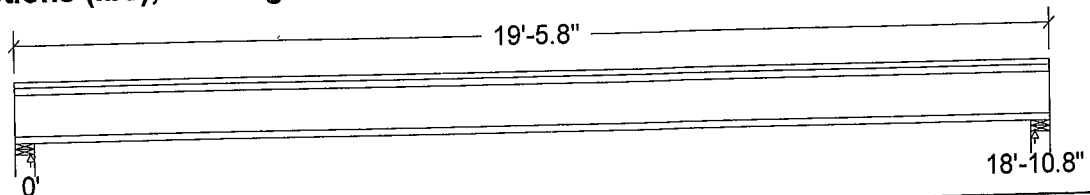
PROJECT
J5 2ND FLOOR
GREENYORK HOMES
DEGREY DR
YORK 1

Design Check Calculation Sheet Nordic Sizer – Canada 6.4

Loads:

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

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



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

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

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

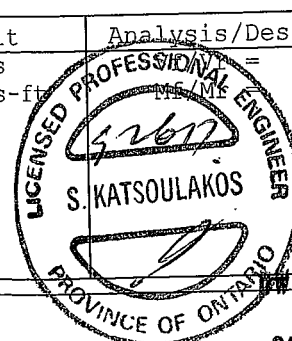
Supports: All - Lumber Wall, No.1/No.2

Total length: 19'-5.8"; 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 = 803	Vr = 2336	lbs	0.34
Moment (+)	Mf = 3794	Mr = 11609	lbs-ft	0.33
Perm. Defl'n	0.11 = <L/999	0.63 = L/360	in	0.17
Live Defl'n	0.21 = <L/999	0.47 = L/480	in	0.45
Total Defl'n	0.32 = L/715	0.94 = L/240	in	0.34
Bare Defl'n	0.24 = L/954	0.63 = L/360	in	0.38
Vibration	Lmax = 18'-11"	Lv = 21'-9"	ft	0.71
Defl'n	= 0.024	= 0.033	in	



STRUCTURAL
COMPONENT ONLY

Beam1

Nordic Sizer – Canada 6.4

Page 2

Additional Data:

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

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = 1.25D + 1.5L

Moment(+) : LC #2 = 1.25D + 1.5L

Deflection: LC #1 = 1.0D (permanent)

LC #2 = 1.0D + 1.0L (live)

LC #2 = 1.0D + 1.0L (total)

LC #2 = 1.0D + 1.0L (bare joist)

Bearing : Support 1 - LC #2 = 1.25D + 1.5L

Support 2 - LC #2 = 1.25D + 1.5L

Load Types: D=dead W=wind S=snow H=earth, groundwater E=earthquake
L=live(use, occupancy) Ls=live(storage, equipment) f=fire

Load Patterns: s=S/2 L=L+Ls _=no pattern load in this span

All Load Combinations (LCs) are listed in the Analysis output

CALCULATIONS:Deflection: E_{eff} = 625e06 lb-in² K= 6.18e06 lbs

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

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. YAM 26543-17
STRUCTURAL
COMPONENT ONLY

NORDIC STRUCTURES

COMPANY
TAMARACK LUMBER INC.
3269 NORTH SERVICE ROAD
BURLINGTON ONTARIO
May 5, 2017 07:44

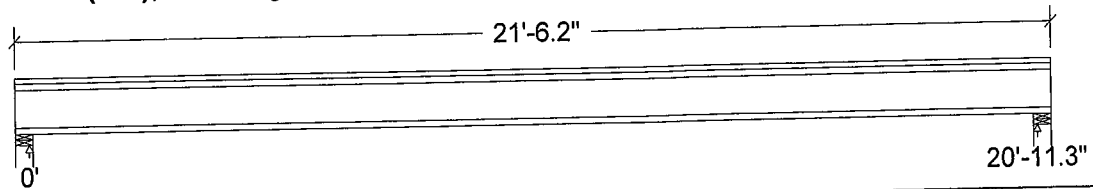
PROJECT
J1 2ND FLOOR
GREENYORK HOMES
DEGREY DR
YORK 1

Design Check Calculation Sheet Nordic Sizer – Canada 6.4

Loads:

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

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



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

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'-6.2"; 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	lbs	Vf/Vr = 0.19
Moment (+)	Mf = 4659	Mr = 12509	lbs-ft	Mf/Mr = 0.37
Perm. Defl'n	0.11 = <L/999	0.70 = L/360	in	0.16
Live Defl'n	0.23 = <L/999	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	0.70 = L/360	in	0.36
Vibration	Lmax = 20'-11	Lv = 23'-7	ft	
Defl'n	= 0.023	= 0.031	in	0.74



STRUCTURAL
COMPONENT ONLY

Beam2

Nordic Sizer – Canada 6.4

Page 2

Additional Data:

FACTORS:	f/E	KD	KH	KZ	KL	KT	KS	KN	LC#
Vr	2336	1.00	1.00	-	-	-	-	-	#2
Mr+	6255	1.00	1.00	-	1.000	-	-	-	#2
EI	371.1 million	-	-	-	-	-	-	-	#2

CRITICAL LOAD COMBINATIONS:

Shear : LC #2 = 1.25D + 1.5L

Moment(+) : LC #2 = 1.25D + 1.5L

Deflection: LC #1 = 1.0D (permanent)

LC #2 = 1.0D + 1.0L (live)

LC #2 = 1.0D + 1.0L (total)

LC #2 = 1.0D + 1.0L (bare joist)

Bearing : Support 1 - LC #2 = 1.25D + 1.5L

Support 2 - LC #2 = 1.25D + 1.5L

Load Types: D=dead W=wind S=snow H=earth,groundwater E=earthquake

L=live(use,occupancy) Ls=live(storage,equipment) f=fire

Load Patterns: s=S/2 L=L+Ls _no pattern load in this span

All Load Combinations (LCs) are listed in the Analysis output

CALCULATIONS:Deflection: $EI_{eff} = 413e06 \text{ lb-in}^2/\text{ply}$ $K = 6.18e06 \text{ lbs/ply}$

"Live" deflection = Deflection from all non-dead loads (live, wind, snow...)

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.



WOODWORK, TAM 2654417
STRUCTURAL
COMPONENT ONLY



Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basement...B1 L(i8100)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

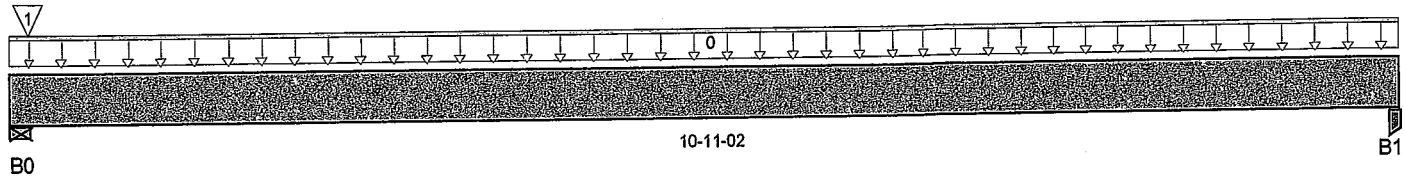
Description: Designs\Flush Beams\Basement\Flush Beams\B1 L(i8100

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 10-11-02

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/2"	133 / 0	148 / 0		
B1, 3-1/2"	69 / 0	61 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	10-11-02	13	6			n/a
1	PBO3(i69)	Conc. Pt. (lbs)	L	00-01-12	00-01-12	61	85			n/a

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	444 ft-lbs	12,704 ft-lbs	3.5%	1	05-06-09
End Shear	144 lbs	5,785 lbs	2.5%	1	01-03-00
Total Load Defl.	L/999 (0.025")	n/a	n/a	4	05-06-09
Live Load Defl.	L/999 (0.013")	n/a	n/a	5	05-06-09
Max Defl.	0.025"	n/a	n/a	4	05-06-09
Span / Depth	13	n/a	n/a		00-00-00

Bearing Supports

	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	5-1/2" x 1-3/4"	383 lbs	9.3%	3.3%	Unspecified
B1 Post	3-1/2" x 1-3/4"	180 lbs	4.5%	2.4%	Unspecified

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Calculations assume member is fully braced.
 Resistance Factor phi has been applied to all presented results per CSA O86.
 BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA O86.
 Design based on Dry Service Condition.
 Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012

Disclosure

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

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NO. 26545-17
STRUCTURAL
COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basement\...\B2 L(i7968)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

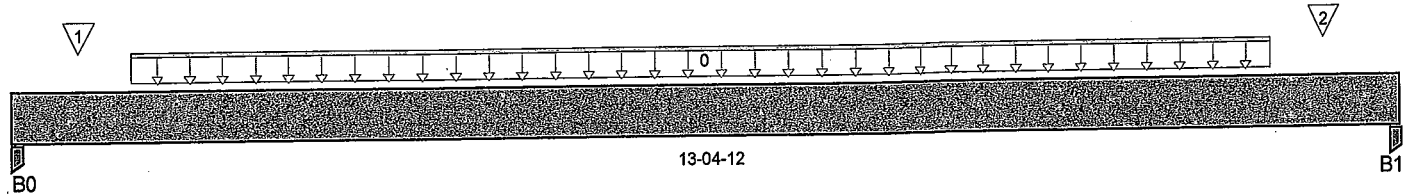
Description: Designs\Flush Beams\Basement\Flush Beams\B2 L(i7968

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 13-04-12

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	1,416 / 0	772 / 0		
B1, 3-1/2"	1,403 / 0	766 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	Smoothed Load	Unf. Lin. (lb/ft)	L	01-01-12	12-01-12	222	111			n/a
1	J5(i7978)	Conc. Pt. (lbs)	L	00-07-12	00-07-12	183	91			n/a
2	J5(i7970)	Conc. Pt. (lbs)	L	12-07-12	12-07-12	194	97			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	10,146 ft-lbs	25,408 ft-lbs	39.9%	1	06-07-12
End Shear	2,876 lbs	11,571 lbs	24.9%	1	12-03-12
Total Load Defl.	L/360 (0.431")	0.647"	66.6%	4	06-07-12
Live Load Defl.	L/556 (0.279")	0.431"	64.8%	5	06-07-12
Max Defl.	0.431"	n/a	n/a	4	06-07-12
Span / Depth	16.3	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Post	3-1/2" x 3-1/2"	3,088 lbs	38.8%	20.7%	Unspecified
B1 Post	3-1/2" x 3-1/2"	3,063 lbs	38.5%	20.5%	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 O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012



DWG NO. YAM 2654617
STRUCTURAL
COMPONENT ONLY



Double 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basement...B2 L(i7968)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

Description: Designs\Flush Beams\Basement\Flush Beams\B2 L(i79

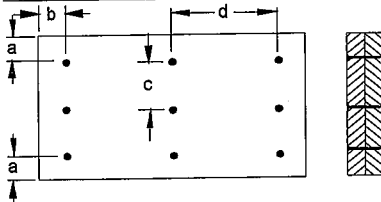
Specifier:

Designer:

Company:

Misc:

Connection Diagram



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

Calculated Side Load = 447.1 lb/ft

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

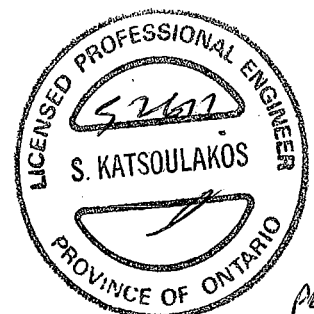
Connectors are: 16d Nails

3 1/2" ARDOX SPIRAL

Disclosure

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

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DWG NO. TAM 26546-17
STRUCTURAL
COMPONENT ONLY



Single 1-3/4" x 9-1/2" VERSA-LAM® 2.0 3100 SP Basement\...\B3 L(i7967)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

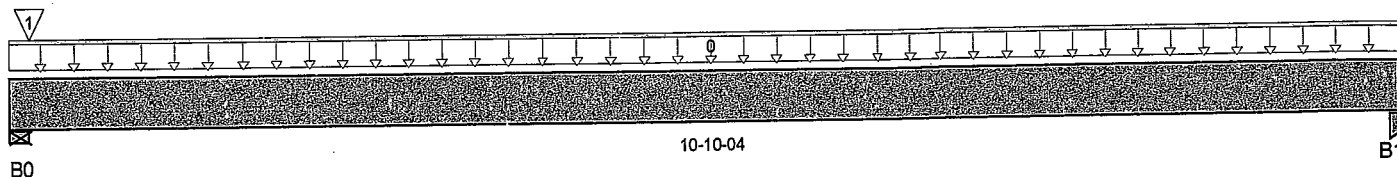
Description: Designs\Flush Beams\Basement\Flush Beams\B3 L(i7967

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 10-10-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 4-5/8"	82 / 0	82 / 0		
B1, 3-1/2"	81 / 0	66 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	10-10-04	15	8			n/a
1	4(i1101)	Conc. Pt. (lbs)	L	00-01-14	00-01-14		15			n/a

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	503 ft-lbs	12,704 ft-lbs	4%	1	05-05-11
End Shear	163 lbs	5,785 lbs	2.8%	1	01-02-02
Total Load Defl.	L/999 (0.028")	n/a	n/a	4	05-05-11
Live Load Defl.	L/999 (0.015")	n/a	n/a	5	05-05-11
Max Defl.	0.028"	n/a	n/a	4	05-05-11
Span / Depth	13	n/a	n/a		00-00-00

Disclosure

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

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Bearing Supports

B0	Wall/Plate	4-5/8" x 1-3/4"	226 lbs	6.5%	2.3%	Unspecified
B1	Post	3-1/2" x 1-3/4"	204 lbs	5.1%	2.7%	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 O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA O86.
Design based on Dry Service Condition.
Importance Factor : Normal Part code : Part 9

CONFORMS TO OBC 2012



DWG NO. TAM 26547-17
STRUCTURAL
COMPONENT ONLY



Single 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basement\...\B4 H(i8105)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

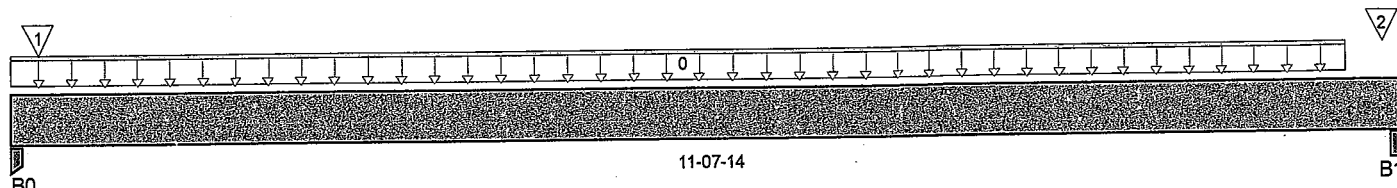
Description: Designs\Flush Beams\Basement\Flush Beams\B4 H(i8105)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 11-07-14

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	82 / 0	99 / 0		
B1, 5-1/4"	98 / 0	138 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	11-02-08	14	7			n/a
1	3(i1100)	Conc. Pt. (lbs)	L	00-02-12	00-02-12		24			n/a
2	-	Conc. Pt. (lbs)	L	11-05-15	11-05-15	21	61			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	575 ft-lbs	19,364 ft-lbs	3%	1	05-09-01
End Shear	198 lbs	7,232 lbs	2.7%	1	10-02-12
Total Load Defl.	L/999 (0.019")	n/a	n/a	4	05-09-01
Live Load Defl.	L/999 (0.01")	n/a	n/a	5	05-09-01
Max Defl.	0.019"	n/a	n/a	4	05-09-01
Span / Depth	11.2	n/a	n/a		00-00-00

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.

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Post	3-1/2" x 1-3/4"	247 lbs	6.2%	3.3%	Unspecified
B1 Beam	5-1/4" x 1-3/4"	319 lbs	8.1%	2.8%	Unspecified

Notes

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

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

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

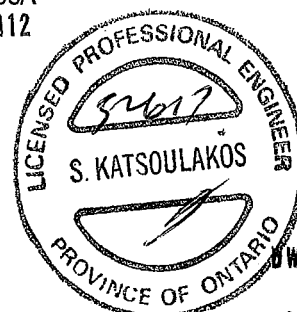
Resistance Factor phi has been applied to all presented results per CSA O86.

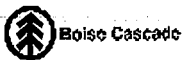
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012





Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basmentl...B5(i8069)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

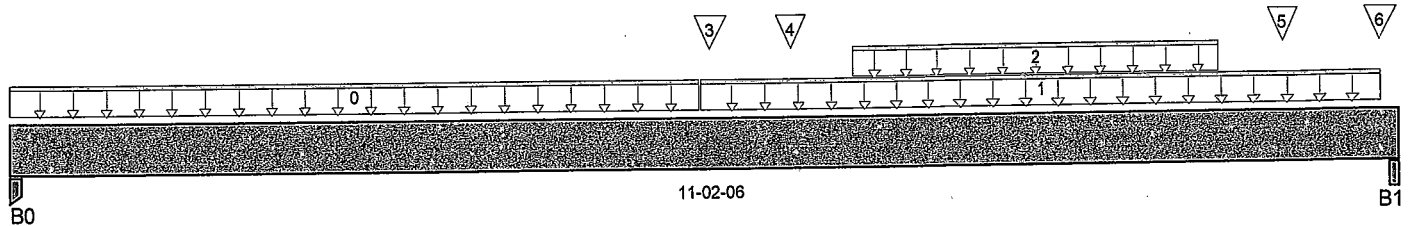
Description: Designs\Flush Beams\Basment\Flush Beams\B5(i8069)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 11-02-06

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/4"	566 / 0	355 / 0		
B1, 5-1/4"	1,628 / 0	909 / 0		

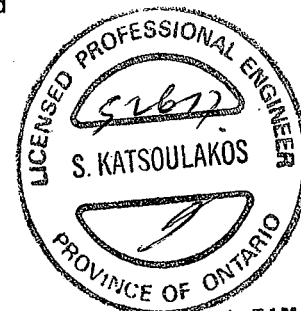
Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	05-06-06	12	6			n/a
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	05-06-06	11-00-12	9	4			n/a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	06-09-00	09-09-00	417	208			n/a
3	B6(i7738)	Conc. Pt. (lbs)	L	05-07-04	05-07-04	25	24			n/a
4	J1(i8126)	Conc. Pt. (lbs)	L	06-03-00	06-03-00	371	185			n/a
5	J1(i8141)	Conc. Pt. (lbs)	L	10-03-00	10-03-00	352	176			n/a
6	5(i1182)	Conc. Pt. (lbs)	L	11-00-08	11-00-08	77	62			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	6,941 ft-lbs	38,727 ft-lbs	17.9%	1	07-03-00
End Shear	2,977 lbs	14,464 lbs	20.6%	1	09-09-04
Total Load Defl.	L/999 (0.089")	n/a	n/a	4	05-11-02
Live Load Defl.	L/999 (0.057")	n/a	n/a	5	06-01-01
Max Defl.	0.089"	n/a	n/a	4	05-11-02
Span / Depth	10.6	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Post	5-1/4" x 3-1/2"	1,293 lbs	10.8%	5.8%	Unspecified
B1 Beam	5-1/4" x 3-1/2"	3,578 lbs	45.6%	16%	Unspecified

Notes



DWG NO. TAM 26548-17
STRUCTURAL
COMPONENT ONLY



BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

Description: Designs\Flush Beams\Basement\Flush Beams\B5(i8069

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 O86.

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

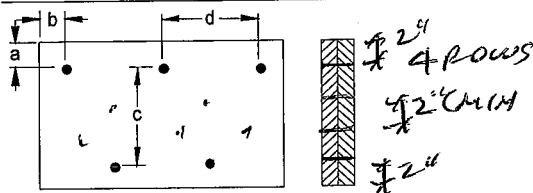
O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO CBC 2012

Connection Diagram



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

Calculated Side Load = 380.4 lb/ft

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

Connectors are: 16d Nails

3 1/2" ARDOX SPIRAL

Disclosure

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DWG NO. TAM 26549-17
STRUCTURAL
COMPONENT ONLY

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

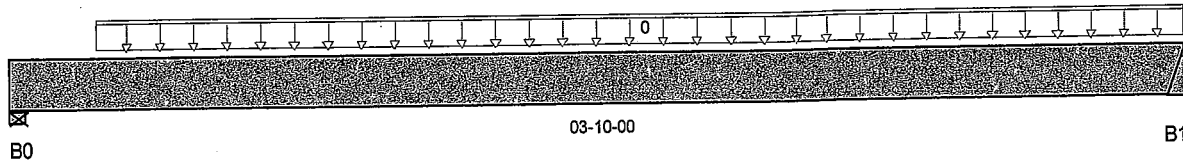
Description: Designs\Flush Beams\Basement\Flush Beams\B6(i7738)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 03-10-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 3-1/2"	24 / 0	24 / 0		
B1	27 / 0	24 / 0		

Load Summary

Tag Description	Load Type	Ref.	Start	End	Live	Dead	Snow	Wind	Trib.
0 FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-03-08	03-10-00	14	7	1.00	1.15	n/a

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	58 ft-lbs	19,364 ft-lbs	0.3%	1	01-11-12
End Shear	27 lbs	7,232 lbs	0.4%	1	01-03-06
Total Load Defl.	L/999 (0")	n/a	n/a	4	01-11-12
Live Load Defl.	L/999 (0")	n/a	n/a	5	01-11-12
Max Defl.	0"	n/a	n/a	4	01-11-12
Span / Depth	3.5	n/a	n/a		00-00-00

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.

Bearing Supports

	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	3-1/2" x 1-3/4"	66 lbs	2.5%	0.9%	Unspecified
B1 Hanger	2" x 1-3/4"	71 lbs	n/a	1.7%	HUS1.81/10

Notes

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

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

Calculations assume member is fully braced.

Hanger Manufacturer: Unassigned

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

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012



1
DWO NO. FAM 26550-17
STRUCTURAL
COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP Basmentl... \B7(i8021)

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

May 15, 2017 12:56:09

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

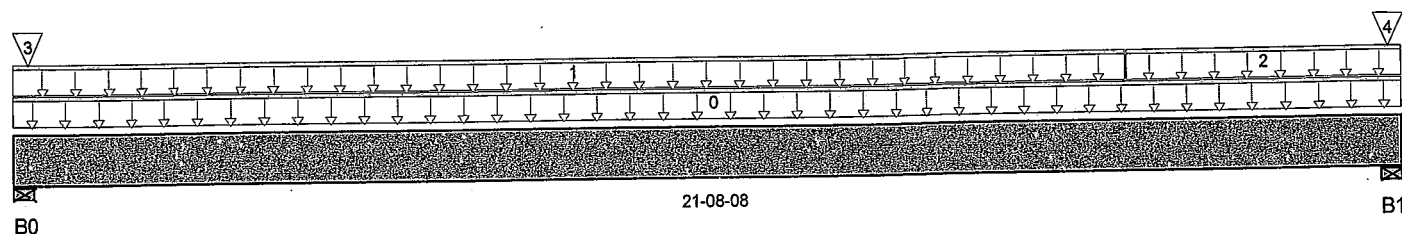
Description: Designs\Flush Beams\Basment\Flush Beams\B7(i8021)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 21-08-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/2"	514 / 0	412 / 0		
B1, 5-1/2"	488 / 0	398 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	21-08-08	19	10			n/a
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	17-04-08	20	10			n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	17-04-08	21-08-08	6	3			n/a
3	E10(i851)	Conc. Pt. (lbs)	L	00-02-12	00-02-12	94	71			n/a
4	2(i1099)	Conc. Pt. (lbs)	L	21-05-12	21-05-12	119	83			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	5,258 ft-lbs	38,727 ft-lbs	13.6%	1	10-07-14
End Shear	913 lbs	14,464 lbs	6.3%	1	01-05-06
Total Load Defl.	L/825 (0.304")	1.046"	29.1%	4	10-10-14
Live Load Defl.	L/1,499 (0.167")	0.697"	24%	5	10-10-14
Max Defl.	0.304"	n/a	n/a	4	10-10-14
Span / Depth	21.1	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	5-1/2" x 3-1/2"	1,285 lbs	15.6%	5.5%	Unspecified
B1 Wall/Plate	5-1/2" x 3-1/2"	1,230 lbs	15%	5.2%	Unspecified

Notes

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

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

Calculations assume member is fully braced.

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

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012



BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

Description: Designs\Flush Beams\Basement\Flush Beams\B7(i802

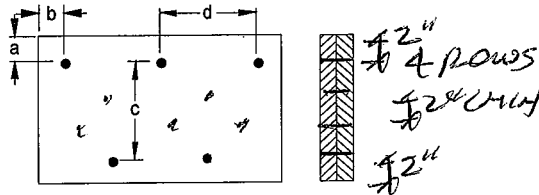
Specifier:

Designer:

Company:

Misc:

Connection Diagram



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

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

3 1/2" ARDOX SPIRAL

Disclosure

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8026
DWG NO. TAM 26551-17
STRUCTURAL
COMPONENT ONLY



Quadruple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor...B8(i8058)

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

May 15, 2017 12:56:10

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

CCMC 12472-R

File Name:

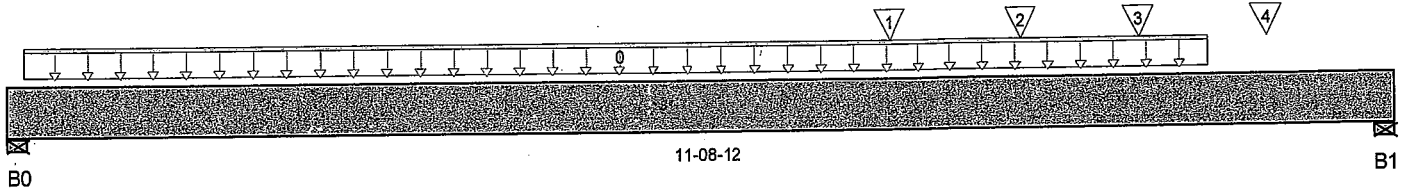
Description: Designs\Flush Beams\1st Floor\Flush Beams\B8(i8058)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 11-08-12

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/2"	3,641 / 0	2,074 / 0		
B1, 5-1/2"	5,257 / 0	2,967 / 0		

Load Summary

Tag Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0 Smoothed Load	Unf. Lin. (lb/ft)	L	00-01-12	10-01-12	395	198			n/a
1 B9(i8067)	Conc. Pt. (lbs)	L	07-04-14	07-04-14	3,153	1,881			n/a
2 J1(i8027)	Conc. Pt. (lbs)	L	08-06-08	08-06-08	564	282			n/a
3 J1(i8163)	Conc. Pt. (lbs)	L	09-06-08	09-06-08	429	215			n/a
4 -	Conc. Pt. (lbs)	L	10-07-09	10-07-09	760	381			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	33,417 ft-lbs	80,553 ft-lbs	41.5%	1	07-04-14
End Shear	10,966 lbs	28,927 lbs	37.9%	1	10-03-06
Total Load Defl.	L/557 (0.236")	0.547"	43.1%	4	06-01-12
Live Load Defl.	L/875 (0.15")	0.365"	41.1%	5	06-01-12
Max Defl.	0.236"	n/a	n/a	4	06-01-12
Span / Depth	11.1	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	5-1/2" x 7"	8,054 lbs	49%	17.1%	Unspecified
B1 Wall/Plate	5-1/2" x 7"	11,593 lbs	70.5%	24.7%	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 O86.

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO CBC 2012



DWG NO. FAW 26552-17
STRUCTURAL
COMPONENT ONLY



Boise Cascade

Quadruple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B8(i8058)

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

May 15, 2017 12:56:10

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code:

Customer:

Code reports:

CCMC 12472-R

File Name:

Description: Designs\Flush Beams\1st Floor\Flush Beams\B8(i8058

Specifier:

Designer:

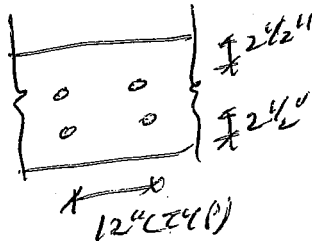
Company:

Misc:

Connection Diagram

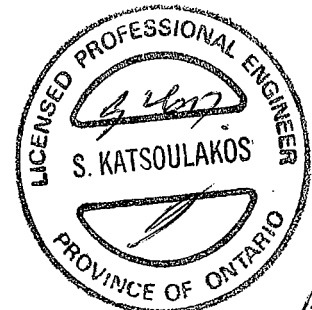
Concentrated side-load exceeds allowable magnitude for connection design. Please consult a technical representative or Professional Engineer for the design of the connection.

PROVIDE 2 ROWS 1/2" @ A307 BOLTS
CLW WASHERS (NOTS @ 12" O.C.

**Disclosure**

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1622
DWG NO. FAN 26552-17
STRUCTURAL
COMPONENT ONLY

BC CALC® Design Report

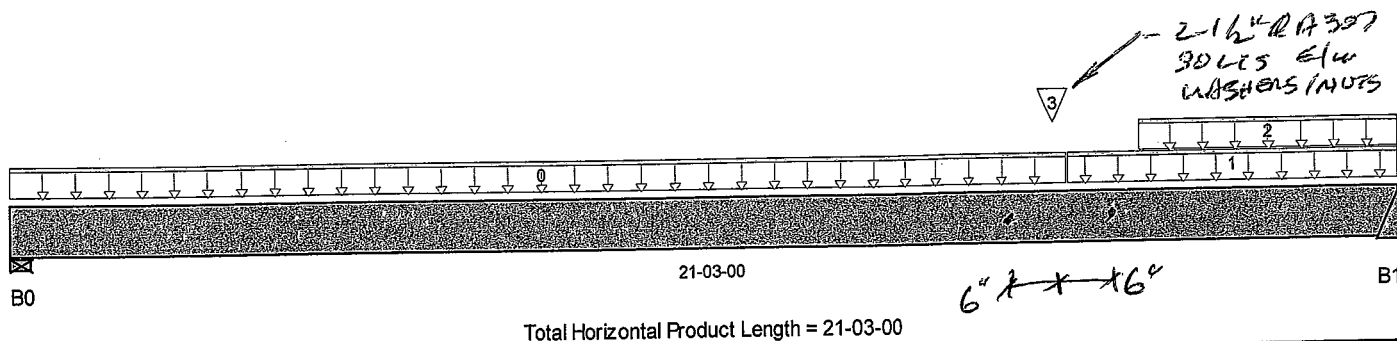


Dry | 1 span | No cantilevers | 0/12 slope (deg)

May 15, 2017 12:56:10

Build 5033
Job Name:
Address:
City, Province, Postal Code: BRAMPTON,
Customer:
Code reports: CCMC 12472-R

File Name: YORK 1.mmdl
Description: Designs\Flush Beams\1st Floor\Flush Beams\B9(i8067)
Specifier:
Designer:
Company:
Misc:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/2"	1,286 / 0	876 / 0		
B1	3,141 / 0	1,874 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-01-12	54	27			n/a
1	FC3 Floor Material	Unf. Lin. (lb/ft)	L	16-01-12	21-03-00	27	14			n/a
2	FC3 Floor Material	Unf. Lin. (lb/ft)	L	17-03-00	21-03-00	214	107			n/a
3	B11(i8060)	Conc. Pt. (lbs)	L	15-11-02	15-11-02	2,566	1,436			n/a

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	29,640 ft-lbs	60,415 ft-lbs	49.1%	1	15-11-02
End Shear	6,436 lbs	21,696 lbs	29.7%	1	20-01-02
Total Load Defl.	L/261 (0.956")	1.037"	92.1%	4	11-07-09
Live Load Defl.	L/424 (0.588")	0.692"	84.9%	5	11-07-09
Max Defl.	0.956"	n/a	n/a	4	11-07-09
Span / Depth	21	n/a	n/a		00-00-00

Bearing Supports

	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	5-1/2" x 5-1/4"	3,025 lbs	24.5%	8.6%	Unspecified
B1 Hanger	2" x 5-1/4"	7,055 lbs	n/a	55.1%	HGUS5.50/10

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
Design meets Code minimum (L/360) Live load deflection criteria.
Calculations assume member is fully braced.
Hanger Manufacturer: Unassigned
Resistance Factor phi has been applied to all presented results per CSA O86.
BC CALC® analysis is based on Canadian Limit States Design, as per NBCC 2010 and CSA O86.
Design based on Dry Service Condition.
Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012



DWG NO. TAM 26553-17
STRUCTURAL
COMPONENT ONLY



Boise Cascade

Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\Flush Beams\B9(i8067)

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

May 15, 2017 12:56:10

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B9(i8067

Specifier:

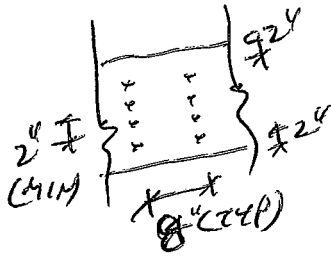
Designer:

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 4 ROWS OF 3 1/2" ARDOX SPIRAL NAILS @ 8" O/C FOR MULTI-PLY NAILING, MAINTAIN A MIN. 2" LUMBER EDGE/END DISTANCE. DO NOT USE AIR NAILS STAGGER NAILS 4" BETWEEN PLYS.

+
BOLT 5

OK with
NAILING
&
BOLTING

Disclosure

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DWNO, YAM 26553-17
STRUCTURAL
COMPONENT ONLY



Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor...B10(i8138)

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

May 15, 2017 12:56:10

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

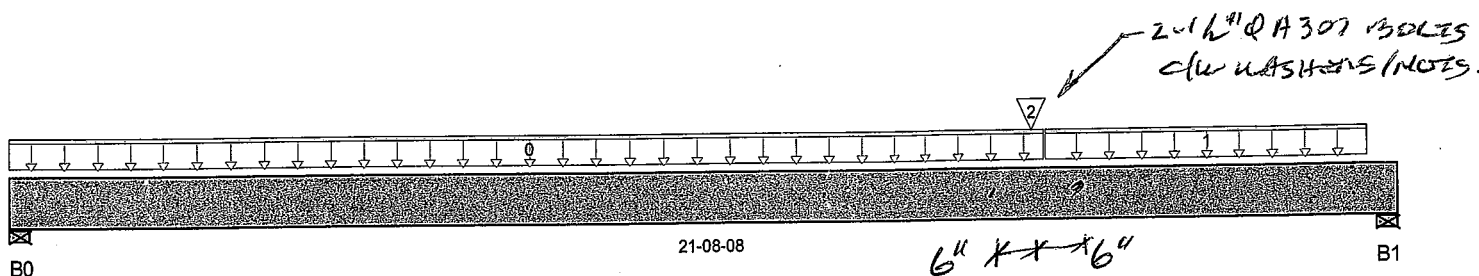
Description: Designs\Flush Beams\1st Floor\Flush Beams\B10(i8138)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 21-08-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/2"	1,076 / 0	773 / 0		
B1, 5-1/2"	2,265 / 0	1,442 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	16-01-12	38	19			n/a
1	FC3 Floor Material	Unf. Lin. (lb/ft)	L	16-01-12	21-03-00	19	9			n/a
2	B11(i8060)	Conc. Pt. (lbs)	L	15-11-02	15-11-02	2,628	1,467			n/a

Controls Summary

	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	27,005 ft-lbs	60,415 ft-lbs	44.7%	1	15-11-02
End Shear	5,117 lbs	21,696 lbs	23.6%	1	20-03-02
Total Load Defl.	L/291 (0.864")	1.046"	82.6%	4	11-10-04
Live Load Defl.	L/478 (0.525")	0.697"	75.2%	5	11-10-04
Max Defl.	0.864"	n/a	n/a	4	11-10-04
Span / Depth	21.1	n/a	n/a		00-00-00

Bearing Supports

	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	5-1/2" x 5-1/4"	2,581 lbs	20.9%	7.3%	Unspecified
B1 Wall/Plate	5-1/2" x 5-1/4"	5,200 lbs	42.2%	14.8%	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.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

CONFORMS TO OBC 2012



DWG NO. TAM 26554-19
STRUCTURAL
COMPONENT ONLY



BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK1.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B10(i8138)

Specifier:

Designer:

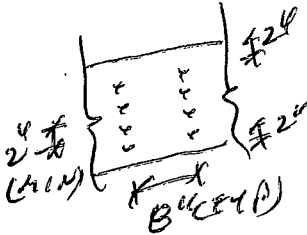
Company:

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.

*OK WITH
NAILING
+
BOLTING*



*PROVIDE 4 ROWS OF 3 1/2" ARDOX
SPIRAL NAILS @ 8" O/C FOR
MULTI-PLY NAILING. MAINTAIN
A MIN. 2" LUMBER EDGE/END
DISTANCE. DO NOT USE AIR NAILS
STAGGER NAILS 4" BETWEEN PLYS.*

*+
BOLTS*

Disclosure

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1624
DWG NO. TAM 26554-17
STRUCTURAL
COMPONENT ONLY



Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...B11(i8060)

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

May 15, 2017 12:56:10

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

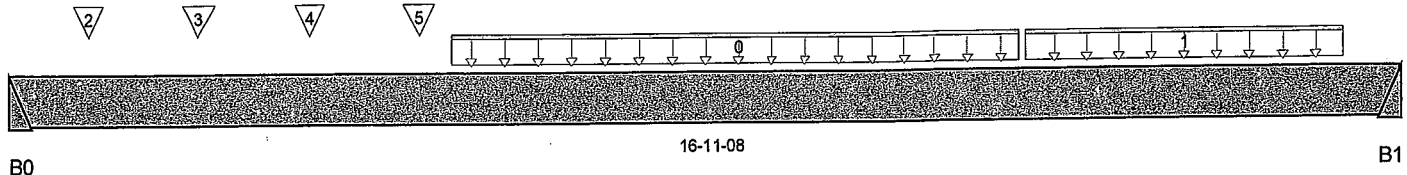
Description: Designs\Flush Beams\1st Floor\Flush Beams\B11(i8060)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 16-11-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0	2,629 / 0	1,467 / 0		
B1	2,565 / 0	1,436 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	Smoothed Load	Unf. Lin. (lb/ft)	L	05-04-04	12-03-08	307	154			n/a
1	Smoothed Load	Unf. Lin. (lb/ft)	L	12-04-04	16-03-08	289	144			n/a
2	J2(i8104)	Conc. Pt. (lbs)	L	00-11-08	00-11-08	407	203			n/a
3	J2(i8029)	Conc. Pt. (lbs)	L	02-03-08	02-03-08	432	216			n/a
4	J2(i8093)	Conc. Pt. (lbs)	L	03-07-08	03-07-08	432	216			n/a
5	J2(i8049)	Conc. Pt. (lbs)	L	04-11-08	04-11-08	361	181			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	25,004 ft-lbs	60,415 ft-lbs	41.4%	1	08-10-04
End Shear	5,616 lbs	21,696 lbs	25.9%	1	15-09-10
Total Load Defl.	L/329 (0.61")	0.837"	72.9%	4	08-07-04
Live Load Defl.	L/512 (0.392")	0.558"	70.3%	5	08-07-04
Max Defl.	0.61"	n/a	n/a	4	08-07-04
Span / Depth	16.9	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Hanger	2" x 5-1/4"	5,778 lbs	n/a	45.1%	HGUS5.50/10
B1 Hanger	2" x 5-1/4"	5,643 lbs	n/a	44%	HGUS5.50/10

Notes

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

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

Calculations assume member is fully braced.

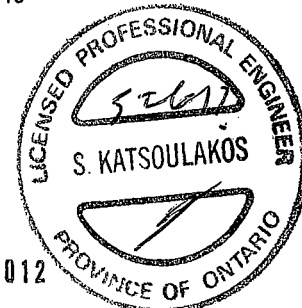
Hanger Manufacturer: Unassigned

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

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



CONFORMS TO OBC 2012

DW000.TAM 265557 17
STRUCTURAL
COMPONENT ONLY



BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B11(i8060)

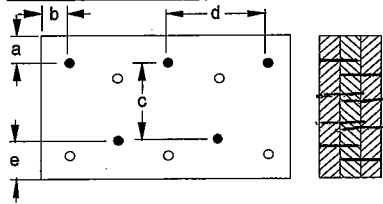
Specifier:

Designer:

Company:

Misc:

Connection Diagram



4 Rows

a minimum = 2"

c = 8-7/8"

b minimum = 3"

d = 6"

e minimum = 2"

Calculated Side Load = 650.8 lb/ft

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

Nailing schedule applies to both sides of the member.

Connectors are: 16d Nails

3 1/2" ARDOX SPIRAL

Disclosure

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Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call 1-800-964-6999 before installation.

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DWNO, TAM 26555-17
STRUCTURAL
COMPONENT ONLY

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

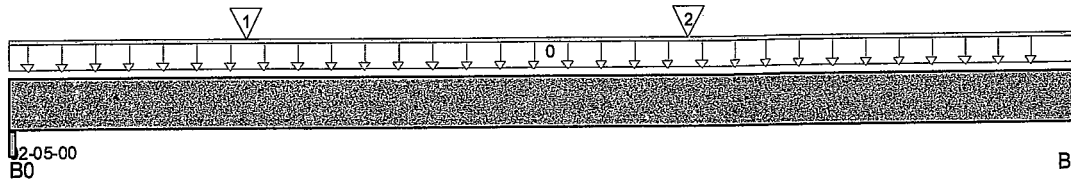
Description: Designs\Flush Beams\1st Floor\Flush Beams\B12(i7533)

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 02-05-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5"	319 / 0	336 / 0	213 / 0	
B1, 5"	267 / 0	310 / 0	213 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	User Load	Unf. Lin. (lb/ft)	L	00-00-00	02-05-00	65	166	176		n/a
1	J4(i7552)	Conc. Pt. (lbs)	L	00-06-06	00-06-06	183	92			n/a
2	J4(i7538)	Conc. Pt. (lbs)	L	01-06-04	01-06-04	241	121			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	341 ft-lbs	38,727 ft-lbs	0.9%	1	01-06-04
End Shear	105 lbs	14,464 lbs	0.7%	11	01-04-14
Total Load Defl.	L/999 (0")	n/a	n/a	35	01-02-13
Live Load Defl.	L/999 (0")	n/a	n/a	51	01-02-13
Max Defl.	0"	n/a	n/a	35	01-02-13
Span / Depth	1.7	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Beam	5" x 3-1/2"	1,005 lbs	13.4%	4.7%	Unspecified
B1 Beam	5" x 3-1/2"	894 lbs	12%	4.2%	Unspecified

Notes

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

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

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

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.

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

CONFORMS TO OBC 2012



DWG NO. TAN 26556-17
STRUCTURAL
COMPONENT ONLY

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1.mmdl

Description: Designs\Flush Beams\1st Floor\Flush Beams\B12(i7533)

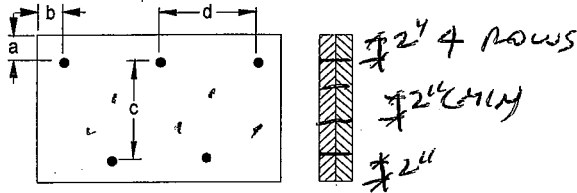
Specifier:

Designer:

Company:

Misc:

Connection Diagram



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

Calculated Side Load = 373.3 lb/ft

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

Connectors are: 16d Nails

3 1/2" ARDOX SPIRAL

Disclosure

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DWG NO. TAM 26556-17
STRUCTURAL
COMPONENT ONLY



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B12 B(i8755)

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

May 19, 2017 08:14:32

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1 ELEVB.mmdl

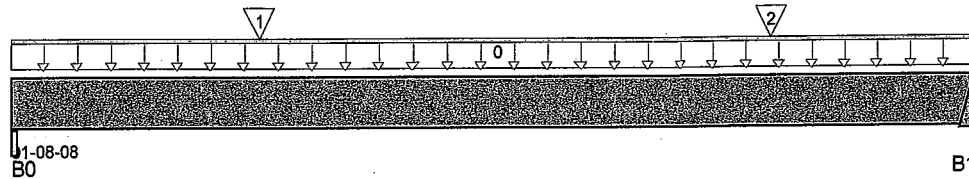
Description: Designs\Flush Beams\1st Floor\Flush Beams\B12 B(i875

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 01-08-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5"	232 / 0	214 / 0	35 / 0	
B1	182 / 0	163 / 0	26 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	E18(i8934)	Unf. Lin. (lb/ft)	L	00-00-00	01-08-08	17	96	36		n/a
1	J4(i8806)	Conc. Pt. (lbs)	L	00-05-04	00-05-04	187	94			n/a
2	J4(i8757)	Conc. Pt. (lbs)	L	01-04-02	01-04-02	198	99			n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	116 ft-lbs	38,727 ft-lbs	0.3%	1	01-03-13
End Shear	57 lbs	9,401 lbs	0.6%	0	00-06-10
Span / Depth	1.3	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Beam	5" x 3-1/2"	634 lbs	6.8%	3%	Unspecified
B1 Hanger	2" x 3-1/2"	490 lbs	n/a	5.7%	HGUS410

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

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



DWG NO. TAM26557-17
STRUCTURAL
COMPONENT ONLY



Boise Cascade

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\...\B12 B(i8755)

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

May 19, 2017 08:14:32

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1 ELEV B.mmdl

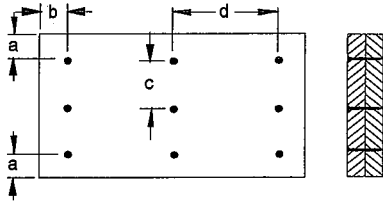
Description: Designs\Flush Beams\1st Floor\Flush Beams\B12 B(i8

Specifier:

Designer:

Company:

Msc:

Connection Diagram

a minimum = 2" c = 3-15/16"
 b minimum = 3" d = 4"

Calculated Side Load = 479.3 lb/ft

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

Connectors are: 16d ~~Box~~ Nails**3 1/2" ARDOX SPIRAL****Disclosure**

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DWG NO. TAM 26557-17
 STRUCTURAL
 COMPONENT ONLY



Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\Flush Beams\B13 B()

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

May 19, 2017 08:14:31

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1 ELEVB.mmdl

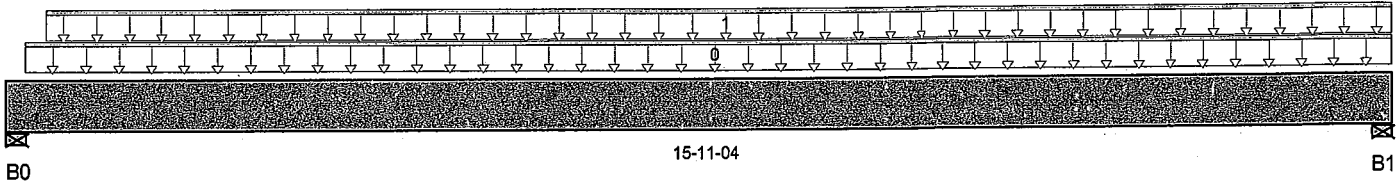
Description: Designs\Flush Beams\1st Floor\Flush Beams\B13 B()

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 15-11-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 5-1/2"	1,205 / 0	1,782 / 0	2,171 / 0	
B1, 5-1/2"	1,268 / 0	1,877 / 0	2,303 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-02-10	15-11-04	41	21			n/a
1	E20(18936)	Unf. Lin. (lb/ft)	L	00-05-08	15-11-04	118	197	289		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	23,155 ft-lbs	60,415 ft-lbs	38.3%	13	07-11-10
End Shear	5,264 lbs	21,696 lbs	24.3%	13	01-05-06
Total Load Defl.	L/372 (0.488")	0.757"	64.5%	45	07-11-10
Live Load Defl.	L/610 (0.298")	0.505"	59%	61	07-11-10
Max Defl.	0.488"	n/a	n/a	45	07-11-10
Span / Depth	15.3	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	5-1/2" x 5-1/4"	6,086 lbs	39.5%	17.3%	Unspecified
B1 Wall/Plate	5-1/2" x 5-1/4"	6,435 lbs	41.7%	18.3%	Unspecified

Notes

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

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

Calculations assume member is fully braced.

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

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

CONFORMS TO OBC 2012



DWG NO. TAM 26558-17
STRUCTURAL
COMPONENT ONLY



Boise Cascade

Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP 1st Floor\Flush Beams\B13 B()

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

May 19, 2017 08:14:31

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1 ELEVB.mmdl

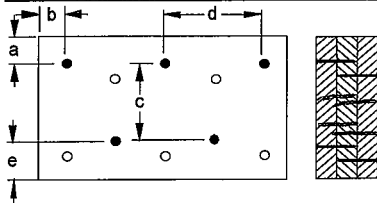
Description: Designs\Flush Beams\1st Floor\Flush Beams\B13 B()

Specifier:

Designer:

Company:

Misc:

Connection Diagram

4 Rows

a minimum = 1"
 b minimum = 3"
 c = 6-7/8"
 d = 8"
 e minimum = 2"

Nailing schedule applies to both sides of the member.

Member has no side loads.

Connectors are: 16d Nails

3 1/2" ARDOX SPIRAL

Disclosure

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DWG NO. TAM2655B-17
 STRUCTURAL
 COMPONENT ONLY



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

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

May 19, 2017 08:14:32

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1 ELEV.B.mmdl

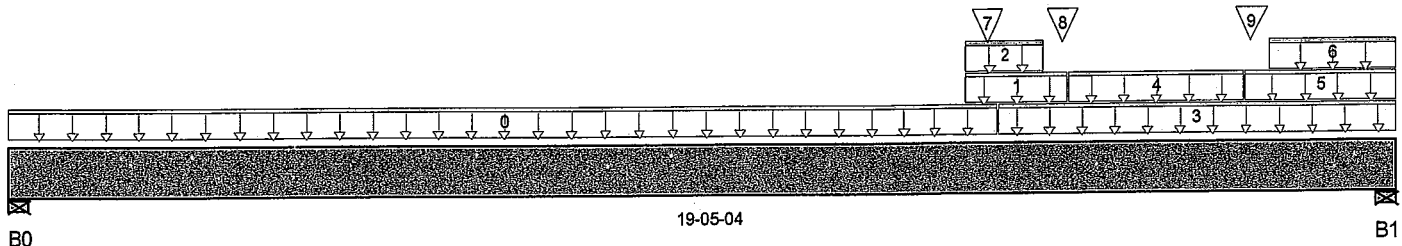
Description: Designs\Flush Beams\1st Floor\Flush Beams\B14()

Specifier:

Designer:

Company:

Misc:



Total Horizontal Product Length = 19-05-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B0, 2-3/4"	281 / 0	355 / 0	106 / 0	
B1, 5-1/2"	482 / 0	896 / 0	616 / 0	

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Live 1.00	Dead 0.65	Snow 1.00	Wind 1.15	Trib.
0	FC3 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	13-09-12	22	11			n/a
1	E21(i8937)	Unf. Lin. (lb/ft)	L	13-04-04	14-09-12		81			n/a
2	E21(i8937)	Unf. Lin. (lb/ft)	L	13-04-04	14-05-12	36	39	114		n/a
3	FC3 Floor Material	Unf. Lin. (lb/ft)	L	13-09-12	19-05-04	15	7			n/a
4	E22(i8938)	Unf. Lin. (lb/ft)	L	14-09-12	17-03-12		41			n/a
5	E17(i8935)	Unf. Lin. (lb/ft)	L	17-03-12	19-05-04		81			n/a
6	E17(i8935)	Unf. Lin. (lb/ft)	L	17-07-12	19-05-04	36	39	114		n/a
7	B12 B(i8755)	Conc. Pt. (lbs)	L	13-08-00	13-08-00	158	146	24		n/a
8	E21(i8937)	Conc. Pt. (lbs)	L	14-08-12	14-08-12	58	87	184		n/a
9	E17(i8935)	Conc. Pt. (lbs)	L	17-04-12	17-04-12	56	84	177		n/a

Controls Summary	Factored Demand	Factored Resistance	Demand / Resistance	Load Case	Location
Pos. Moment	6,644 ft-lbs	38,727 ft-lbs	17.2%	1	13-08-00
End Shear	1,749 lbs	14,464 lbs	12.1%	13	17-11-14
Total Load Defl.	L/732 (0.309")	0.944"	32.8%	35	10-03-13
Live Load Defl.	L/1,515 (0.149")	0.629"	23.8%	51	10-03-13
Max Defl.	0.309"	n/a	n/a	35	10-03-13
Span / Depth	19.1	n/a	n/a		00-00-00

Bearing Supports	Dim. (L x W)	Demand	Demand / Resistance Support	Demand / Resistance Member	Material
B0 Wall/Plate	2-3/4" x 3-1/2"	919 lbs	17.9%	7.8%	Unspecified
B1 Wall/Plate	5-1/2" x 3-1/2"	2,285 lbs	22.2%	9.7%	Unspecified

Notes



DWG NO. TAM 26559-17
STRUCTURAL
COMPONENT ONLY



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

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

May 19, 2017 08:14:32

BC CALC® Design Report



Build 5033

Job Name:

Address:

City, Province, Postal Code: BRAMPTON,

Customer:

Code reports: CCMC 12472-R

File Name: YORK 1 ELEV B.mmdl

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

Specifier:

Designer:

Company:

Msc:

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.

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

CONFORMS TO ORG 2012

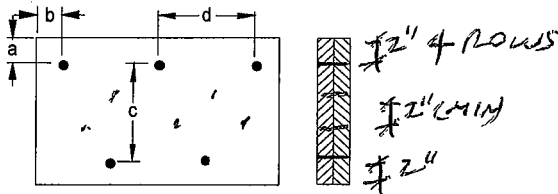
Disclosure

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Connection Diagram



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

b minimum = 3" d = 12"

Calculated Side Load = 22.2 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: 3/4" ARDOX SPIRAL Nails

3/4" ARDOX SPIRAL



P624

UWB NO. TAW 2655917
STRUCTURAL
COMPONENT ONLY