GREENPARK-TRINAR HALL-GLENWAY 3A EL1

Engineering Note Page (ENP-2)

REVISION 2018-10-17

Please read all notes prior to installation of the component

DESIGN INFORMATION

This building component is certified as an individual component for the loads and conditions shown on the calculation and drawing page.

The responsibility of the undersigned engineer is only limited to the calculation of this building component for the loads and conditions shown on this drawing.

The responsibility of the undersigned is limited to the verification of the structural capacity of the floor joists and LVL beams based on placement as shown on the layout. The loads applied are limited to the gravity effects of the specified loads. The structural integrity of the building and the effect of wind, uplift, seismic, lateral or other forces, calculation of adequate support and anchorage of components, as well as the dimensions and design loads used to calculate components are the responsibility of the overall building designer.

Floor joists and OSB rim board are designed to carry uniformly distributed loads only. Point loads should be transferred through the floor cavity with transfer blocks. Structural elements such as walls, posts, connectors, and transfer blocks are the responsibility of the overall building designer.

The undersigned engineer disclaims any responsibility for damages as a result of being furnished faulty or incorrect information, specifications and/or designs.

Installation of floor joists is to be carried out in accordance with the current edition of the manufacturer's literature available at http://www.kottgroup.com.

CODE

This building component is designed in accordance with the National Building Code of Canada, the Ontario Building Code, CCMC and Canadian Standards Association guidelines.

COMPONENT

- 1. The building component used in construction must be the same as indicated on the drawings.
- 2. The building component must be installed and assembled as per specification shown on the drawing and in accordance with the manufacturer's assembly and installation.
- 3. Members consisting of multiple plies must be connected as per the document "Multi-ply Connection Details".
- 4. Pass-thru transfer block framing is required at all point loads over bearings.

HANDLING AND INSTALLATION

These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with a uthorization.

These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the authorization.

These plans have been reviewed for use with the times. The building permit must be clearly posted on site at all times.

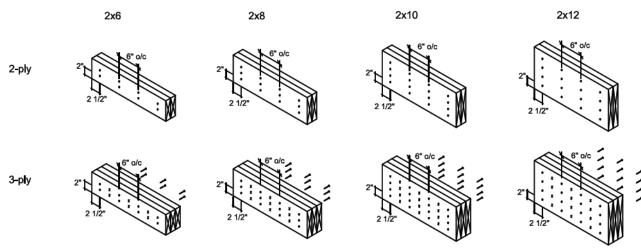
East Gwillimbury Building Standards Branch BCIN #16487

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



GREENPARK-TRINAR HALL-**GLENWAY 3A EL1**

Conventional Connections



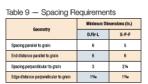
Conventional connection notes:

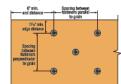
- -Nails to be 3" long wire nails.
- -Nalls to be located 2" mln. from the top and bottom of the member. Start all nalls 2 1/2" mln. from ends.
- -Number of rows and spacing as per details shown, unless noted otherwise.

3 1/4" mln

- "X" represents nall driven from the opposite side.

SIMPSON SDW SPACING REQUIREMENT



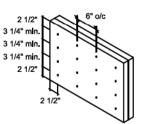


LVL Connections

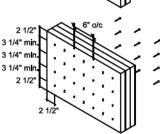
HEAD OF ALL SPECIFIED NAILS AND SCREWS MUST BE ON THE LOADED SIDE

9 1/2" LVL

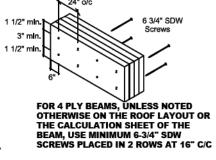
11 7/8" - 14" LVL



16"-18" LVL









- -LVL ply width is 1-3/4" -Nalls to be 3 1/2" common wire nalls.
- -Nails to be located 2 1/2" min. from the top and bottom of the member.
- -Minimum 3 1/4" spacing between rows.
- -Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nall or screw driven from the opposite side.



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H. Authier 43236 3228 Otta

K2H 7V1 613-838-2775

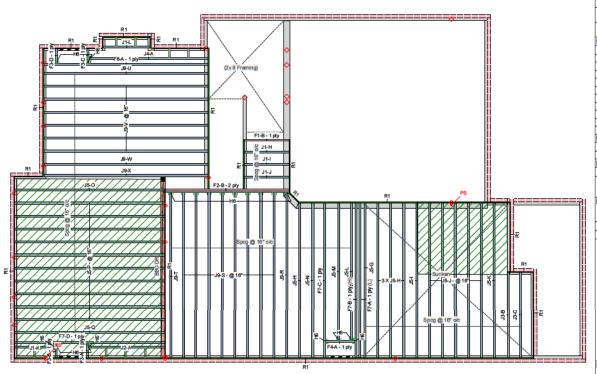
Multiple Member Connections

All connections are for uniformly distributed loads.

For multi-ply connections of I-joists, refer to Manufacturer's Installation Guide

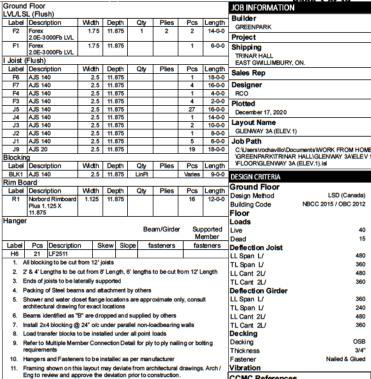


Ground Floor



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBE CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. BLOCK IS REQUIRED AT ALL



.egend

Point Load Support Load from Above

Wall Opening Norbord Rimboard Plus 1.125 X 11.875 AJS 140 11.875 AJS 20 11.875 Forex 2.0E-3000Fb LVL 1.75 X

Forex - 14056-R Kott Lumber Company

14 Anderson Blvd Stouffville, Ontario Canada L4A7X4 905-642-4400

LP - 12412-R

CCMC References

Boise - 12472-R , 12787-R





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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

Hatch Area represents where al load has been app e.g. 5 psf for ceramic tile)

Version 19.60.173 Powered by iStruct**

This layout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them



F₃-A

Dry | 1 span | No cant. December 17, 2020 15:47:17

BC CALC® Member Report Build 7364

Page 4 of 39

PASSED

Job name:

Customer:

Address: TRINAR HOMES

EAST GWILLIMBURY, ON.

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl

Description: Level - Ground Floor

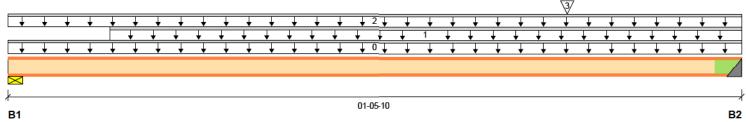
City, Province, Postal Code:

Specifier:

File name:

RCO Designer:

Code reports: CCMC 12787-R Company: **GREENPARK**



Total Horizontal Product Length = 01-05-10

Position Summany (Down / Halift) (Iba)

Reaction Sur	ililiary (Dowii / O	pilit) (ibs)			
Bearing	Live	Dead	Snow	Wind	
B1, 2-3/8"	73 / 0	37 / 0			
B2, 2"	145 / 0	74 / 0			

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-02-07	01-05-10	Тор		8			n\a
2		Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Тор	64	24			n\a
3	J2	Conc. Pt. (lbs)	L	01-01-07	01-01-07	Front	124	62			n\a

		Factored	Demand/		
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location
Pos. Moment	68 ft-lbs	5305 ft-lbs	1.3%	1	01-01-07
End Reaction	311 lbs	2207 lbs	14.1%	1	01-05-10
End Shear	288 lbs	2350 lbs	12.3%	1	01-03-10
Total Load Deflection	L/999 (0.001")	n\a	n\a	4	01-00-13
Live Load Deflection	L/999 (0")	n\a	n\a	5	01-00-13
Max Defl.	0.001"	n\a	n\a	4	01-00-13
Span / Depth	1.2				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	2-3/8" x 2-1/2"	155 lbs	4.2%	9.2%	Spruce-Pine-Fir
B2	Hanger	2" x 2-1/2"	311 lbs	14.1%	14.1%	LF2511



Cautions

Web stiffeners required at bearing B2.

Hanger LF2511 requires (12) 10dx1.5 face nails, (2) 10dx1.5 joist nails.

Header for the hanger LF2511 is a Single 2-1/2" x 11-7/8" I-joist



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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



POINT LOADS OVER BEARINGS



F₃-A

Dry | 1 span | No cant.

PASSED

Page 5 of 39

BC CALC® Member Report

Build 7364

December 17, 2020 15:47:17

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl

Job name: Address:

Customer:

Code reports:

TRINAR HOMES

Description: Level - Ground Floor

EAST GWILLIMBURY, ON.

City, Province, Postal Code:

Specifier:

File name:

RCO

Designer:

READ ALL NOTES ON THIS PAGE AND ON

NOTE PAGE IS AN INTEGRAL PART OF THIS

CONTAINS SPECIFICATIONS AND CRITERIA

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THIS

CALCULATION SUMMARY PAGE AS IT

CCMC 12787-R

GREENPARK Company:

Notes

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

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

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced. Hanger Manufacturer: Simpson Strong-Tie, Inc.

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

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

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

Disclosure

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must be reviewed and verified by a qualified engineer

expert to a anyone re evidence applicatio

East Gwillimbury

application building of These plans have been reviewed for use with the corrections as noted. No other changes may be properfiles made without written approval of the Building Installation Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the engineere Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly Guide any posted on site at all times.

obtain Ins Discipline
Building Code Reviewer BCIN H. Authier 43236 before ins

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH POINT LOADS OVER BEARINGS



BC CALC® Member Report

Single 11-7/8" AJS® 140

F3-B

Dry | 1 span | No cant. December 17, 2020 15:47:17

Build 7364 Job name:

Customer:

Address: TRINAR HOMES

EAST GWILLIMBURY, ON.

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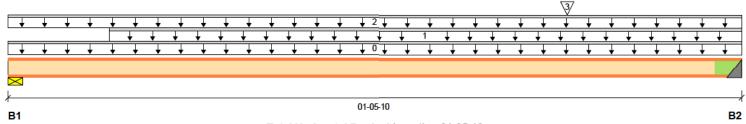
Description: Level - Ground Floor

City, Province, Postal Code:

Specifier:

RCO Designer:

Code reports: CCMC 12787-R Company: **GREENPARK**



Total Horizontal Product Length = 01-05-10

Reaction Summary (Down / Uplift) (lbs)

i touotion our		P(1, (1,2,0)			
Bearing	Live	Dead	Snow	Wind	
B1, 2-3/8"	61 / 0	31 / 0			
B2. 2"	99 / 0	51 / 0			

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-02-07	01-05-10	Тор		8			n\a
2		Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Тор	64	24			n\a
3	J1	Conc. Pt. (lbs)	L	01-01-07	01-01-07	Back	66	33			n\a

		Factored	Demand/		
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location
Pos. Moment	46 ft-lbs	5305 ft-lbs	0.9%	1	00-11-08
End Reaction	213 lbs	2207 lbs	9.6%	1	01-05-10
End Shear	189 lbs	2350 lbs	8.1%	1	01-03-10
Total Load Deflection	L/999 (0")	n\a	n\a	4	00-11-05
Live Load Deflection	L/999 (0")	n\a	n\a	5	00-11-05
Max Defl.	0"	n\a	n\a	4	00-11-05
Span / Depth	1.2				

Bearir	ng Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	2-3/8" x 2-1/2"	131 lbs	3.6%	7.8%	Spruce-Pine-Fir
B2	Hanger	2" x 2-1/2"	213 lbs	9.6%	9.6%	LF2511



Cautions

Web stiffeners required at bearing B2.

Hanger LF2511 requires (12) 10dx1.5 face nails, (2) 10dx1.5 joist nails.

Header for the hanger LF2511 is a Single 2-1/2" x 11-7/8" I-joist



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH

BLOCK IS REQUIRED AT ALL

POINT LOADS OVER BEARINGS

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

Page 6 of 39 **PASSED**



F3-B

Dry | 1 span | No cant.

Page 7 of 39 **PASSED**

BC CALC® Member Report

Build 7364

December 17, 2020 15:47:17

Job name: Address:

TRINAR HOMES

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl File name: Description:

City, Province, Postal Code:

EAST GWILLIMBURY, ON.

Level - Ground Floor

Customer:

Specifier:

READ ALL NOTES ON THIS PAGE AND ON

NOTE PAGE IS AN INTEGRAL PART OF THIS

CONTAINS SPECIFICATIONS AND CRITERIA

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THIS

CALCULATION SUMMARY PAGE AS IT

RCO Designer:

Code reports:

CCMC 12787-R

GREENPARK Company:

Notes

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

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

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

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

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

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

Disclosure

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must be reviewed and verified by a qualified engineer

expert to a anyone re evidence applicatio

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Building Code before ins

Reviewer BCIN H. Authier 43236

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REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.



F3-C

Dry | 1 span | No cant.

Page 8 of 39 **PASSED**

December 17, 2020 15:47:17

BC CALC® Member Report

Build 7364

Job name: Address:

Customer:

TRINAR HOMES

EAST GWILLIMBURY, ON.

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl File name:

Wind

Description: Level - Ground Floor

City, Province, Postal Code:

Specifier:

Designer: **RCO**

Code reports: CCMC 12787-R GREENPARK Company:

01-05-10 B2

Total Horizontal Product Length = 01-05-10

Snow

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead
B1, 2"	191 / 0	73 / 0
B2. 2-3/8"	103 / 0	41 / 0

Loa	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Top	64	24			n\a
2	J4	Conc. Pt. (lbs)	L	00-05-05	00-05-05	Front	200	75			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
				Case	
Pos. Moment	116 ft-lbs	5305 ft-lbs	2.2%	1	00-05-05
End Reaction	379 lbs	2207 lbs	17.1%	1	00-00-00
End Shear	357 lbs	2350 lbs	15.2%	1	00-02-00
Total Load Deflection	L/999 (0.001")	n\a	n\a	4	00-05-05
Live Load Deflection	L/999 (0.001")	n\a	n\a	5	00-05-05
Max Defl.	0.001"	n\a	n\a	4	00-05-05
Span / Depth	1.2				

Bearing	J Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 2-1/2"	379 lbs	17.1%	17.1%	LF2511
B2	Wall/Plate	2-3/8" x 2-1/2"	205 lbs	5.6%	12.2%	Spruce-Pine-Fir

Cautions

Web stiffeners required at bearing B1.

Hanger LF2511 requires (12) 10dx1.5 face nails, (2) 10dx1.5 joist nails.

Header for the hanger LF2511 is a Single 2-1/2" x 11-7/8" I-joist

Notes

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

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

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

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

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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must be reviewed and verified by a qualified engi

expert to a anyone re evidence 🤄

East Gwillimbury

applicatio building c These plans have been reviewed for use with the properties made without written approval of the Building Installatio

Standards Branch. All work must comply with Coning By-Law 2018-043, as amended, and the engineer Ontario Building Code, as amended, and the accordant times. The building permit must be kept on site at all Guide and posted on site at all times.

obtain Ins auestions

Reviewer BCIN Discipline Building Code H. Authier 43236 before ins. BC CALC

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



F3-D

Page 9 of 39 **PASSED**

December 17, 2020 15:47:17

BC CALC® Member Report

Dry | 1 span | No cant.

Build 7364 Job name:

Customer:

Code reports:

Address: TRINAR HOMES

EAST GWILLIMBURY, ON.

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl File name:

Description: Level - Ground Floor

Wind

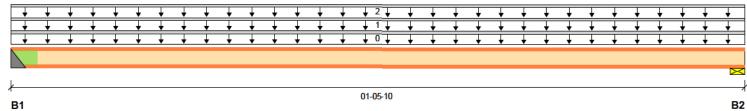
City, Province, Postal Code:

CCMC 12787-R

Specifier:

RCO Designer:

GREENPARK Company:



Total Horizontal Product Length = 01-05-10

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow
B1, 2"	66 / 0	26 / 0	
B2, 2-3/8"	68 / 0	28 / 0	

Loa	d Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Top	27	10			n\a
2		Unf. Lin. (lb/ft)	L	00-00-00	01-05-10	Top	64	24			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	34 ft-lbs	5305 ft-lbs	0.6%	1	00-08-10
End Reaction	137 lbs	1684 lbs	8.1%	1	01-05-10
End Shear	101 lbs	2350 lbs	4.3%	1	00-02-00
Total Load Deflection	L/999 (0")	n\a	n\a	4	00-08-10
Live Load Deflection	L/999 (0")	n\a	n\a	5	00-08-10
Max Defl.	0"	n\a	n\a	4	00-08-10
Span / Depth	1.2				

Bearing	J Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 2-1/2"	131 lbs	5.9%	5.9%	LF2511
B2	Wall/Plate	2-3/8" x 2-1/2"	137 lbs	3.7%	8.1%	Spruce-Pine-Fir

Cautions

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Header for the hanger LF2511 is a Single 2-1/2" x 11-7/8" I-joist

Notes

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

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

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

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

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

BLOCK IS REQUIRED AT ALL

POINT LOADS OVER BEARINGS

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.



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East Gwillimbury

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building c These plans have been reviewed for use with the properties made without written approval of the Building Installatio

Standards Branch. All work must comply with Coning By-Law 2018-043, as amended, and the engineer Ontario Building Code, as amended, and the accordant times. The building permit must be kept on site at all Guide and posted on site at all times.

obtain Ins Reviewer BCIN Discipline Building Code auestions H. Authier 43236 before ins. BC CALC

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



F4-A

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BC CALC® Member Report

Build 7364 Job name:

Address:

Customer:

TRINAR HOMES

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl Description: Level - Ground Floor

EAST GWILLIMBURY, ON.

City, Province, Postal Code:

Specifier:

File name:

RCO Designer: Company: **GREENPARK**

Code reports: CCMC 12787-R

03-00-00 B2

Total Horizontal Product Length = 03-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2"	284 / 0	110 / 0		
B2, 2"	446 / 0	171 / 0		

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	03-00-00	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-00-00	03-00-00	Тор	34	13			n\a
2	J5	Conc. Pt. (lbs)	L	01-04-02	01-04-02	Back	384	144			n\a
3	J5	Conc. Pt. (lbs)	L	02-08-02	02-08-02	Back	243	91			n∖a

0 1 1 0		Factored	Demand/		
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location
Pos. Moment	636 ft-lbs	5305 ft-lbs	12.0%	1	01-04-02
End Reaction	883 lbs	2207 lbs	40.0%	1	03-00-00
End Shear	871 lbs	2350 lbs	37.1%	1	02-10-00
Total Load Deflection	L/999 (0.008")	n\a	n\a	4	01-04-02
Live Load Deflection	L/999 (0.006")	n\a	n\a	5	01-04-02
Max Defl.	0.008"	n\a	n\a	4	01-04-02
Span / Depth	2.8				

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Hanger	2" x 2-1/2"	564 lbs	25.5%	25.6%	LF2511
B2	Hanger	2" x 2-1/2"	883 lbs	39.9%	40.0%	LF2511



Page 10 of 39

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Cautions

Web stiffeners required at bearing B1.

Hanger LF2511 requires (12) 10dx1.5 face nails, (2) 10dx1.5 joist nails.

Web stiffeners required at bearing B2.

Header for the hanger LF2511 is a Single 2-1/2" x 11-7/8" I-joist

Header for the hanger LF2511 is a Single 2-1/2" x 11-7/8" I-joist



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building negretit must be elearly times. The building permit must be clearly posted on site at all times.

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

BLOCK IS REQUIRED AT ALL

POINT LOADS OVER BEARINGS

READ ALL NOTES ON THIS PAGE AND ON



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BC CALC® Member Report Build 7364

Page 11 of 39

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Job name:

Address:

Customer:

File name:

TRINAR HOMES

EAST GWILLIMBURY, ON.

Description: Level - Ground Floor

City, Province, Postal Code:

Specifier: **RCO** Designer:

Code reports: CCMC 12787-R

GREENPARK Company:

Notes

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

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

Design meets User specified (1") Maximum Total load deflection criteria.

Calculations assume member is fully braced. Hanger Manufacturer: Simpson Strong-Tie, Inc.

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

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

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

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obtain Ins Discipline
Building Code Reviewer BCIN H. Authier 43236 before ins BC CALC ___

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Page 12 of 39 **PASSED**

December 17, 2020 15:47:17

BC CALC® Member Report

Build 7364 Job name:

Address:

TRINAR HOMES

File name:

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EAST GWILLIMBURY, ON.

Specifier:

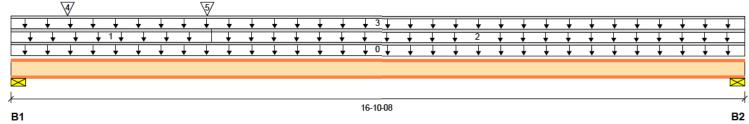
Description: Level - Ground Floor

City, Province, Postal Code: Customer:

RCO Designer:

Code reports: CCMC 12787-R

GREENPARK Company:



Total Horizontal Product Length = 16-10-08

Reaction Summary (Down / Unlift) (lbs)

moudelier ear	reading Cammary (20 mm, Cpmin, 180)						
Bearing	Live	Dead	Snow	Wind			
B1, 2-3/8"	538 / 0	225 / 0					
B2, 4-3/8"	324 / 0	143 / 0					

Lo	Load Summary							Dead	Snow	Snow Wind	Tributary
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	16-10-08	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-00-00	04-07-06	Тор	32	12			n\a
2		Unf. Lin. (lb/ft)	L	04-07-06	16-10-08	Тор	11	4			n\a
3		Unf. Lin. (lb/ft)	L	00-00-00	16-10-08	Тор	19	7			n\a
4	F3	Conc. Pt. (lbs)	L	01-03-10	01-03-10	Back	66	26			n\a
5	F3	Conc. Pt. (lbs)	Ē	04-06-02	04-06-02	Back	191	73			n\a

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	3364 ft-lbs	5305 ft-lbs	63.4%	1	06-01-13
End Reaction	1088 lbs	1684 lbs	64.6%	1	00-00-00
End Shear	1067 lbs	2350 lbs	45.4%	1	00-02-06
Total Load Deflection	L/495 (0.399")	n\a	48.5%	4	07-10-04
Live Load Deflection	L/707 (0.279")	n\a	50.9%	5	07-10-04
Max Defl.	0.399"	n\a	39.9%	4	07-10-04
Span / Depth	16.6				

	Bearing	Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
Ī	B1	Wall/Plate	2-3/8" x 2-1/2"	1088 lbs	29.8%	64.6%	Spruce-Pine-Fir
	B2	Wall/Plate	4-3/8" x 2-1/2"	666 lbs	9.9%	34.8%	Spruce-Pine-Fir

Notes

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

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

Design meets User specified (1") Maximum Total 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 2015 and CSA O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



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expert to a anyone re evidence 🤄

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Guide any posted on site at all times.

obtain Ins	Discipline	Reviewer	BCIN	Date
questions	Building Code	H. Authier	43236	2021-02-08
before ins	Sewage System			
50.0.0	Zoning			
	1			

BC CALC___ ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,

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PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS

ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

READ ALL NOTES ON THIS PAGE AND ON



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Specifier:

Designer:

RCO

Page 13 of 39 **PASSED**

BC CALC® Member Report

Build 7364

Job name: Address: TRINAR HOMES

File name:

December 17, 2020 15:47:17

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl Description: Level - Ground Floor

EAST GWILLIMBURY, ON. City, Province, Postal Code:

Customer:

Code reports: CCMC 12787-R **GREENPARK** Company:

15-11-12 B2

Total Horizontal Product Length = 15-11-12

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind
B1, 2-3/8"	145 / 0	74 / 0		
B2 6-7/8"	152 / 0	78 / 0		

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
Tag	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Тор		3			00-00-00
1		Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Top	8	3			n\a
2		Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Top	10	4			n\a

		Factored	Demand/		
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location
Pos. Moment	1171 ft-lbs	5305 ft-lbs	22.1%	1	07-09-10
End Reaction	311 lbs	1684 lbs	18.5%	1	00-00-00
End Shear	303 lbs	2350 lbs	12.9%	1	00-02-06
Total Load Deflection	L/999 (0.124")	n\a	n\a	4	07-09-10
Live Load Deflection	L/999 (0.082")	n\a	n\a	5	07-09-10
Max Defl.	0.124"	n\a	n\a	4	07-09-10
Span / Depth	15.5				

Bearing	Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	2-3/8" x 2-1/2"	311 lbs	8.5%	18.5%	Spruce-Pine-Fir
B2	Wall/Plate	6-7/8" x 2-1/2"	326 lbs	3.1%	17.0%	Spruce-Pine-Fir

Notes

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

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

Design meets User specified (1") Maximum Total 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 2015 and CSA O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



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ALLJOIST®,				BCI®
,				
BOISE GLULA				
VERSA-LAM®). VER	SA-RIN	/I PLU	S®.

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BLOCK IS REQUIRED AT ALL

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Page 14 of 39 **PASSED**

December 17, 2020 15:47:17

BC CALC® Member Report

Build 7364 Job name:

Customer:

Address: TRINAR HOMES

EAST GWILLIMBURY, ON.

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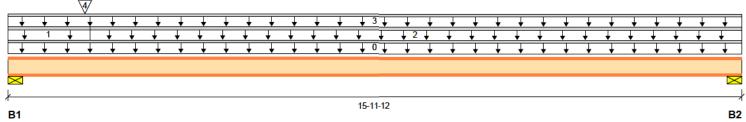
Description: Level - Ground Floor

City, Province, Postal Code:

Specifier:

RCO Designer:

Code reports: CCMC 12787-R GREENPARK Company:



Total Horizontal Product Length = 15-11-12

Reaction Summary (Down / Unlift) (lbs)

Neaction Out	reaction duminary (bown / opinity (ibs)							
Bearing	Live	Dead	Snow	Wind				
B1, 2-3/8"	627 / 0	258 / 0						
B2, 6-7/8"	188 / 0	91 / 0						

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Тор		3			00-00-00
1	_	Unf. Lin. (lb/ft)	L	00-00-00	01-09-06	Тор	64	24			n∖a
2		Unf. Lin. (lb/ft)	L	01-09-06	15-11-12	Тор	9	3			n∖a
3		Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Тор	8	3			n∖a
4	F4	Conc. Pt. (lbs)	L	01-08-02	01-08-02	Back	446	171			n\a

READ ALL NOTES ON THIS PAGE AND ON

NOTE PAGE IS AN INTEGRAL PART OF THIS

CONTAINS SPECIFICATIONS AND CRITERIA

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THIS

CALCULATION SUMMARY PAGE AS IT

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	1956 ft-lbs	5305 ft-lbs	36.9%	1	05-01-11
End Reaction	1263 lbs	1684 lbs	75.0%	1	00-00-00
End Shear	1234 lbs	2350 lbs	52.5%	1	00-02-06
Total Load Deflection	L/888 (0.207")	n\a	27.0%	4	07-01-06
Live Load Deflection	L/1292 (0.142")	n\a	27.9%	5	07-01-06
Max Defl.	0.207"	n\a	20.7%	4	07-01-06
Span / Depth	15.5				

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	2-3/8" x 2-1/2"	1263 lbs	34.6%	75.0%	Spruce-Pine-Fir
B2	Wall/Plate	6-7/8" x 2-1/2"	396 lbs	3.7%	20.7%	Spruce-Pine-Fir

Notes

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

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

Design meets User specified (1") Maximum Total 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 2015 and CSA O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



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applicatio

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obtain Ins	Discipline	Reviewer	BCIN	Date
questions	Building Code	H. Authier	43236	2021-02-08
before ins	Sewage System			
	Zoning			
BC CALC				

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Page 15 of 39 **PASSED**

December 17, 2020 15:47:17

BC CALC® Member Report

Build 7364

Job name: Address:

TRINAR HOMES

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl File name:

Description: Level - Ground Floor

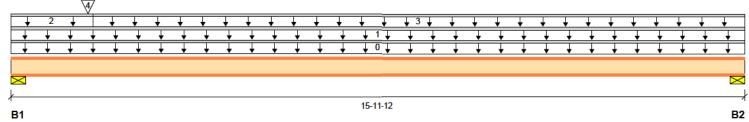
EAST GWILLIMBURY, ON.

City, Province, Postal Code:

Customer: Code reports: CCMC 12787-R Specifier:

RCO Designer:

GREENPARK Company:



Total Horizontal Product Length = 15-11-12

Reaction Summary (Down / Uplift) (lbs)

Bearing		Dead	Snow	Wind
B1, 2-3/8"	731 / 0	297 / 0		
B2, 6-7/8"	468 / 0	196 / 0		

Lo	ad Summary						Live	Dead	Snow	Wind	Tributary
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00	1.15	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Тор		3			00-00-00
1	_	Unf. Lin. (lb/ft)	L	00-00-00	15-11-12	Тор	24	9			n\a
2		Unf. Lin. (lb/ft)	L	00-00-00	01-09-06	Тор	64	24			n\a
3		Unf. Lin. (lb/ft)	L	01-09-06	15-11-12	Тор	29	11			n\a
4	F4	Conc. Pt. (lbs)	L	01-08-02	01-08-02	Front	284	110			n\a

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CONTAINS SPECIFICATIONS AND CRITERIA

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THIS

CALCULATION SUMMARY PAGE AS IT

Controls Summary	Factored Demand	Factored Resistance	Demand/ Resistance	Case	Location
Pos. Moment	3677 ft-lbs	5305 ft-lbs	69.3%	1	07-03-11
End Reaction	1468 lbs	1684 lbs	87.1%	1	00-00-00
End Shear	1433 lbs	2350 lbs	61.0%	1	00-02-06
Total Load Deflection	L/467 (0.394")	n\a	51.4%	4	07-08-07
Live Load Deflection	L/662 (0.278")	n\a	54.4%	5	07-08-07
Max Defl.	0.394"	n\a	39.4%	4	07-08-07
Span / Depth	15.5				

Bearin	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	2-3/8" x 2-1/2"	1468 lbs	40.2%	87.1%	Spruce-Pine-Fir
B2	Wall/Plate	6-7/8" x 2-1/2"	947 lbs	9.0%	49.4%	Spruce-Pine-Fir

Notes

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

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

Design meets User specified (1") Maximum Total 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 2015 and CSA O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9



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applicatio application building of These plans have been reviewed for use with the corrections as noted. No other changes may be properfiles made without written approval of the Building Installation Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the engineere Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly Guide any posted on site at all times.

obtoin Inc				
obtain Ins		Reviewer	BCIN	Date
questions	Building Code	H. Authier	43236	2021-02-08
before ins	Sewage System			
bololo ilis	Zoning			
BC CALC	_,		,	

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BC CALC® Member Report Build 7364

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl Description: Level - Ground Floor

Job name: Address:

Customer:

TRINAR HOMES

Wind

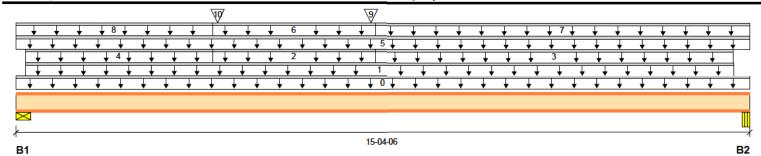
City, Province, Postal Code:

EAST GWILLIMBURY, ON.

Specifier: **RCO** Designer:

File name:

Code reports: CCMC 12787-R Company: **GREENPARK**



Total Horizontal Product Length = 15-04-06

Snow

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	
B1, 2-3/8"	424 / 0	234 / 0	_
B2. 4-1/8"	361 / 0	202 / 0	

Loa	ad Summary						Live	Dead	Snow
	Description	Load Type	Ref.	Start	End	Loc.	1.00	0.65	1.00
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	15-04-06	Тор		3	
1		Unf. Lin. (lb/ft)	L	00-02-06	15-00-06	Top		3	
2		Unf. Lin. (lb/ft)	L	04-01-06	07-06-06	Top		4	
3		Unf. Lin. (lb/ft)	L	07-06-06	15-00-05	Top		1	
4		Unf. Lin. (lb/ft)	L	00-02-06	04-01-06	Top		1	
5		Unf. Lin. (lb/ft)	L	00-00-00	15-04-06	Top	21	8	
6		Unf. Lin. (lb/ft)	L	04-01-06	07-06-06	Тор	32	12	
7		Unf. Lin. (lb/ft)	L	07-06-06	15-04-06	Top	9	3	
8		Unf. Lin. (lb/ft)	L	00-00-00	04-01-06	Тор	9	3	
9	F3	Conc. Pt. (lbs)	L	07-05-02	07-05-02	Front	145	74	/
10	F3	Conc. Pt. (lbs)	L	04-02-10	04-02-10	Front	99	51	

Controls Summary	Fastered Demand	Factored	Demand/	C	Laastian
Controls Summary	Factored Demand	Resistance	Resistance	Case	Location
Pos. Moment	3971 ft-lbs	5305 ft-lbs	74.9%	1	07-05-02
End Reaction	928 lbs	1684 lbs	55.1%	1	00-00-00
End Shear	916 lbs	2350 lbs	39.0%	1	00-02-06
Total Load Deflection	L/470 (0.382")	n\a	51.1%	4	07-05-02
Live Load Deflection	L/729 (0.246")	n\a	49.4%	5	07-05-02
Max Defl.	0.382"	n\a	38.2%	4	07-05-02
Span / Depth	15.1				

Bearing	g Supports	Dim. (LxW)	Demand	Demand/ Resistance Support	Demand/ Resistance Member	Material
B1	Wall/Plate	2-3/8" x 2-1/2"	928 lbs	25.4%	55.1%	Spruce-Pine-Fir
B2	Beam	4-1/8" x 2-1/2"	793 lbs	12.5%	41.4%	Spruce-Pine-Fir



ADPROFESSIONAL

Wind

1.15

Tributary

00-00-00 n∖a n∖a n∖a n∖a n∖a n\a

sas

2020

Page 16 of 39

PASSED

These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

Page 13 of 14

READ ALL NOTES ON THIS PAGE AND ON

NOTE PAGE IS AN INTEGRAL PART OF THIS

CONTAINS SPECIFICATIONS AND CRITERIA

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THIS

CALCULATION SUMMARY PAGE AS IT



F7-D

Dry | 1 span | No cant. December 17, 2020 15:47:17

BC CALC® Member Report Build 7364

Job name:

TRINAR HOMES

C:\Users\rochavillo\Docu...\GLENWAY 3A (ELEV.1).isl File name:

Description: Level - Ground Floor

City, Province, Postal Code:

EAST GWILLIMBURY, ON.

Specifier:

RCO Designer:

Code reports: CCMC 12787-R GREENPARK Company:

Notes

Address:

Customer:

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

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

Design meets User specified (1") Maximum Total 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 2015 and CSA O86.

Design based on Dry Service Condition.

Importance Factor: Normal Part code: Part 9

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input

must be reviewed and verified by a qualified endi

expert to a anyone re evidence applicatio

East Gwillimbury

Page 17 of 39

PASSED

application building of These plans have been reviewed for use with the corrections as noted. No other changes may be properfiles made without written approval of the Building Installation Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the engineere Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly Guide any posted on site at all times.

obtain Ins Discipline
Building Code before ins

Reviewer BCIN H. Authier 43236

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

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

READ ALL NOTES ON THIS PAGE AND ON

NOTE PAGE IS AN INTEGRAL PART OF THIS

CONTAINS SPECIFICATIONS AND CRITERIA

USED IN THE DESIGN OF THIS COMPONENT.

ENGINEERING NOTE PAGE ENP-2. THIS

CALCULATION SUMMARY PAGE AS IT

isDesign

Client:

GREENPARK

Project: Address:

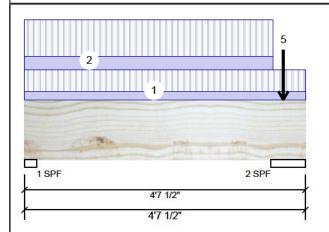
TRINAR HOMES EAST GWILLIMBURY, ON. Date: 12/18/2020 Input by: RCO

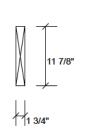
Project #:

1.750" X 11.875" - PASSED F1-B Forex 2.0E-3000Fb LVL

Level: Ground Floor

Job Name: GLENWAY 3A (ELEV.1)





Page 18 of 39

Member Information Application: Floor (Residential) Type: Plies: Design Method: Moisture Condition: Dry **Building Code:** Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Importance: Vibration: Normal General Load

Unfactored	Reaction	S UNPAITERN	IED IB (UPIITT)	
Brg	Live	Dead	Snow	Wind
1	136	61	0	0
2	514	272	0 (-24)	0

NBCC 2015 / OBC 2012 Not Checked Not Checked Floor Live: 40 PSF 15 PSF

Bearings and F	actored Reactions			
Bearing Length	Cap. React D/L I	b Total Ld. Case	Ld. Comb.	
1 - SPF 2.375"	11% 76 / 20	4 281 L	1.25D+1.5L	
2 SDE 6.875"	18% 340 / 77	N 111N I	1 25D+1 5I	

Analysis Results

Dead:

Γ	Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
	Moment	261 ft-lb	2'1 1/2"	17130 ft-lb	0.015 (2%)	1.25D+1.5L	L
	Unbraced	261 ft-lb	2'1 1/2"	11299 ft-lb	0.023 (2%)	1.25D+1.5L	L
	Shear	132 lb	3'1 1/2"	5798 lb	0.023 (2%)	1.25D+1.5L	L
	Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
	LL Defl inch	0.001 (L/33098)	2'1 9/16"	0.133 (L/360)	0.010 (1%)	L+0.5S	L
	TL Defl inch	0.002 (L/22837)	2'1 9/16"	0.199 (L/240)	0.010 (1%)	D+L+0.5S	L

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings.

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 4-7-8	0-7-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Part. Uniform	0-0-0 to 4-1-1		Тор	15 PLF	40 PLF	0 PLF	0 PLF	5
3	Point	4-3-2		Тор	158 lb	370 lb	-24 lb	0 lb	F13 F13 🚽
4	Point	4-3-2		Тор	2 lb	5 lb	0 lb	0 lb	J1 The
5	Point	4-3-2		Тор	48 lb	0 lb	0 lb	0 lb	Wall Self corn
	Self Weight				5 PLF				Star



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building negative property must be clearly the clearly the clearly the content of th times. The building permit must be clearly posted on site at all times.

Notes

oracinated successors are sponsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corn
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requirement fastening details, beam strength value naged Beams must not be used
- Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

APA: PR-L318

Manufacturer Info

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
ewage System			
oning			

This design is valid until 10/15/2022



NE1220-149 Page 19 of 39 Client: GREENPARK Date: 12/18/2020 Project: Input by: RCO isDesign Address: TRINAR HOMES Job Name: GLENWAY 3A (ELEV.1) EAST GWILLIMBURY, ON. Project #: 1.750" X 11.875" Level: Ground Floor Forex 2.0E-3000Fb LVL 2-Ply - PASSED F2-B 10 3 1 SPF 2 SPF 12'11 7/8' 12'11 7/8" Member Information Unfactored Reactions UNPATTERNED lb (Uplift) Brg Dead Wind Type: Application: Floor (Residential) Live Snow Plies Design Method: 2447 979 0 0 1 Moisture Condition: Dry **Building Code:** NBCC 2015 / OBC 2012 0 5401 2242 0 2 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Not Checked Deck: Importance: Vibration: Not Checked Normal General Load Bearings and Factored Reactions Floor Live: 40 PSF 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.625" 1224 / 3671 4895 I 1 25D+1 5L 2 - SPF 6.875" 74% 2802 / 8102 10904 I 1.25D+1.5L Analysis Results Actual Comb Case **Analysis** Location Allowed Capacity 0.488 (49%) 1.25D+1.5L L Moment 16721 ft-lb 6'4 5/16" 34261 ft-lb Unbraced 16721 ft-lb 6'4 5/16" 27196 ft-lb 0.615 (61%) 1.25D+1.5L L READ ALL NOTES ON THIS PAGE AND ON ALPROFESSIONAL ENGINEERING NOTE PAGE ENP-2. THIS Shear 5217 lb 1'1 3/4" 11596 lb 0.450 (45%) 1.25D+1.5L L NOTE PAGE IS AN INTEGRAL PART OF THIS Perm Defl in. 0.101 (L/1468) 6'3 15/16" 0.411 (L/360) 0.250 (25%) D Uniform CALCULATION SUMMARY PAGE AS IT LL Defl inch 0.253 (L/584) 6'3 15/16" 0.411 (L/360) 0.620 (62%) L L CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. A. EL-MASRI TL Defl inch 0.354 (L/418) 6'3 15/16" 0.616 (L/240) 0.570 (57%) D+L L REFER TO MULTIPLE MEMBER TO MEMBER Design Notes CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam 21, 2020 PASS THRU FRAMING SQUASH width X 4.5 **BLOCK IS REQUIRED AT ALL** 2 Girders are designed to be supported on the bottom edge only. POINT LOADS OVER BEARINGS 3 Multiple plies must be fastened together as per manufacturer's details. 4 Top loads must be supported equally by all plies. 5 Top braced at bearings. 6 Bottom braced at bearings. 7 Lateral slenderness ratio based on full section width. ID Trib Width Load Type Location Side Dead Live Snow Wind Commer* Tie-In 0-0-0 to 4-7-10 0-9-5 15 PSF 40 PSF 0 PSF 0 PSF East Gwillimbury 1 Top Building Standards Branch BCIN #16487 2 Point 0-9-2 Near Face 123 lb 328 lb 0 lb 0 lb 0 PLF 3 Part Uniform 1-5-2 to 12-1-2 Near Face 128 PLF 341 PLF 0 PLF These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building 0 PLF Part Uniform 4-8-12 to 8-3-4 68 PLF 180 PLF 0 PI F Top 5 Tie-In 8-4-6 to 12-11-14 0-8-5 15 PSF 40 PSF 0 PSF 0 PSF Top

Continued on page 2...

Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Notes

structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or conditions.
- **Handling & Installation**
- LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requiremen

aged Beams m

Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 10/15/2022

Forex APA: PR-L318

Manufacturer Info

Reviewer BCIN Discipline Building Code H. Authier 43236



NE1220-149 Page 20 of 39 Client: Date: 12/18/2020

isDesign

Project: Address: **GREENPARK**

TRINAR HOMES

EAST GWILLIMBURY, ON.

Input by: RCO

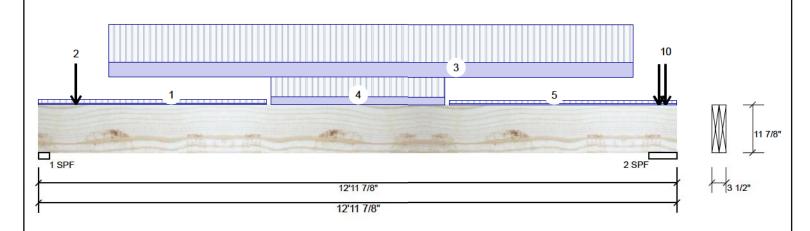
Job Name: GLENWAY 3A (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL F2-B

1.750" X 11.875" 2-Ply - PASSED

Level: Ground Floor



Continued from page 1									
	ID	Load Type	Location Trib Width	Side	Dead	Live	Snow	Wind	Comments
	6	Point	12-7-8	Тор	1087 lb	2674 lb	0 lb	0 lb	F2 F2
	7	Point	12-7-8	Тор	73 lb	193 lb	0 lb	0 lb	J9
	8	Point	12-7-8	Тор	57 lb	0 lb	0 lb	0 lb	Wall Self Weight
	9	Point	12-7-8	Тор	5 lb	0 lb	0 lb	0 lb	Wall Self Weight
	10	Point	12-9-2	Near Face	44 lb	106 lb	0 lb	0 lb	J9
		Self Weight			10 PLF				

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design orineria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

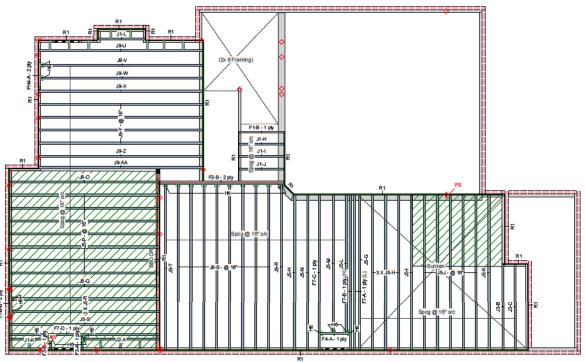
- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. IVI, beams must not be out or drilled
 2. Refer to manufacturer's product informating regarding installation requirements, multifastening details, beam strength values, and co approvals
 3. Damaged Beams must not be used
- Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 10/15/2022

Manufacturer Info 6. For flat roofs provide proper drainage to prevent ponding APA: PR-L318

Reviewer BCIN Discipline Building Code H. Authier 43236

Ground Floor



READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASI OINT LOADS OVER BEARING

JOB INFORMATION Ground Floor LVL/LSL (Flush) Builder Label Description Width Depth Qty Plies Pcs Length GREENPARK 1.75 11.875 F2 Forex 2 2 14-0-0 2.0E-3000Fb LVL Project F1 1.75 11.875 6-0-0 Shipping 2.0E-3000Fb LVL TRINAR HALL FH4 1.75 4-0-0 EAST GWILLIMBURY, ON. 2.0E-3000Fb LVL Sales Rep I Joist (Flush) Label Description Width Depth Pcs Length Designer F7 AJS 140 2.5 11.875 4 16-0-0 RCO F4 A.IS 140 2.5 11.875 4-0-0 Plotted 2 2-0-0 27 16-0-0 F3 AJS 140 2.5 11.875 December 18, 2020 J5 AJS 140 2.5 11.875 Layout Name J3 AJS 140 J2 AJS 140 2.5 11.875 2 10-0-0 GLENWAY 3A (ELEV.1) DECK CONDITION 2.5 11.875 1 8-0-0 J1 AJS 140 2.5 11.875 5 6-0-0 Job Path J9 AJS 20 2.5 11.875 20 18-0-0 C:\Users\rochavillo\Documents\WORK FROM HOME \GREENPARK\TRINAR HALL\GLENWAY 3A\ELEV 1 Blocking VFLOORVF-GLENWAY 3A EL1 ENGG\DECK Label Description Width Depth Qty Plies Pcs Length CONDITION/GLENWAY 3A (ELEV.1).isl BLK1 AJS 140 2.5 11.875 LinFt Varies 12-0-0 Rim Board DESIGN CRITERIA Label Description Width Depth Qty Plies Pcs Length Ground Floor Norbord Rimboa Plus 1,125 X 1.125 11.875 12-0-0 Design Method 11.875 **Building Code**

nger					Beam/Girder	Supported Member
hal	Pos	Description	Skow	Slone	factonore	factonore

H6 22 LF2511 1. All blocking to be cut from 12' joists 2. 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length

3. Ends of joists to be laterally supported

4. Packing of Steel beams and attachment by others

Shower and water closet flange locations are approximate only, consult architectural drawing for exact locations

6. Beams identified as "B" are dropped and supplied by others

7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls

8. Load transfer blocks to be installed under all point loads

9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements

10. Hangers and Fasteners to be installed as per manufacturer

Framing shown on this layout may deriate from architectural drawings. Architeng to review and approve the deviation prior to construction.

.egend

Han

Point Load Support Load from Above Wall Opening Norbord Rimboard Plus 1.125 X AJS 140 11.875 AJS 20 11.875

Forex 2.0E-3000FbLVL 1.75 X 11.875

Kott Lumber Company KOTT 14 Anderson Blvd Stouffville, Ontario Canada L4A 7X4

Floor Loads Live Dead

Deflection Joist

Deflection Girder

CCMC References

Boise - 12472-R , 12787-R

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

LL Span L/

TL Span L/

LL Cant 2L/

TL Cant 2L/

Decking

Decking

Fastener Vibration

Thickness

LP - 12412-R Forex - 14056-R

905-642-4400

LSD (Canada) NBCC 2015 / OBC 2012

480

360

480

360

240

480

360

OSB

3/4"

Nailed & Glued



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

Hatch Area represents where al load has been app e.g. 5 psf for ceramic tile)

Version 19.60.173 Powered by iStruct**

This layout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them

NE1220-149 Page 22 of 39 Client: **GREENPARK** 12/17/2020 Date Project: RCO Input by: isDesign Address: TRINAR HOMES GLENWAY 3A (ELEV.1) DECK CONDITION Job Name: EAST GWILLIMBURY, ON. Project # 1.750" X 11.875" Level: Ground Floor Forex 2.0E-3000Fb LVL 2-Ply - PASSED 4 5 6 1 11 7/8 1 SPF End Grain 2 SPF End Grain 3 Unfactored Reactions UNPATTERNED lb (Uplift) Member Information Brg Dead Wind Type: Application: Floor (Residential) Live Snow Plies Design Method: 508 326 0 0 1 Moisture Condition: Dry **Building Code:** NBCC 2015 / OBC 2012 510 326 n O 2 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Vibration: Not Checked Normal General Load Bearings and Factored Reactions Floor Live: 40 PSF 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 3.000" 407 / 763 1170 I 1 25D+1 5L Fnd Grain Analysis Results 1.25D+1.5L 2 - SPF 3.000" 15% 408 / 764 1172 L **Analysis** Actual Location Allowed Comb Case Capacity End Moment 673 ft-lb 1'6" 34261 ft-lb 0.020 (2%) 1.25D+1.5L L Grain Unbraced 673 ft-lb 34261 ft-lb 0.020 (2%) 1.25D+1.5L L READ ALL NOTES ON THIS PAGE AND ON SUPPROFESSIONAL Shear 965 lb 0.083 (8%) 1.25D+1.5L L ENGINEERING NOTE PAGE ENP-2. THIS 1'2 1/8" 11596 lb NOTE PAGE IS AN INTEGRAL PART OF THIS Perm Defl in. 0.001 0.088 (L/360) 0.010 (1%) D Uniform CALCULATION SUMMARY PAGE AS IT (L/41615) CONTAINS SPECIFICATIONS AND CRITERIA 0.001 0.088 (L/360) 0.010 (1%) L LL Defl inch USED IN THE DESIGN OF THIS COMPONENT. A. EL-MASRI (L/26633) REFER TO MULTIPLE MEMBER TO MEMBER TL Defl inch 0.002 1'6" 0.131 (L/240) 0.010 (1%) D+L CONNECTION DETAIL FOR PLY TO PLY (L/16240) NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH **Design Notes BLOCK IS REQUIRED AT ALL** 1 Girders are designed to be supported on the bottom edge only. POINT LOADS OVER BEARINGS. 2 Multiple plies must be fastened together as per manufacturer's details. 3 Top loads must be supported equally by all plies. 4 Top braced at bearings. 5 Bottom braced at bearings 6 Lateral slenderness ratio based on full section width. ID Load Type Location Trib Width Side Dead Live Snow Wind Comme East Gwillimbury Part, Uniform 0-0-0 to 3-0-0 Top 40 PLF 0 PLF 0 PLF 0 PLF Wall Self Building Standards Branch BCIN #16487 2 Part. Uniform 0-0-0 to 3-0-0 Near Face 40 PLF 0 PLF 0 PLF 0 PLF Wall Self 3 Tapered Start 0-0-0 Near Face 1 PLF 2 PLF 0 PLF 0 PLF These plans have been reviewed for use with the These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the End 1-1-9 2 PLF 5 PLF 0 PLF 0 PLF Part. Uniform 126 PLF 335 PLF 0 PLF 0 PLF 0-0-0 to 3-0-0 Near Face .19

Continued on page 2...

Notes

structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corn
- **Handling & Installation**

aged Beams m

LVL beams must not be cut or drilled Refer to manufacturer's product regarding installation requirement fastening details, beam strength valu

Daniaged beams must not be used

Design assumes top edge is laterally restrained

Provide lateral support at bearing points to avoid

lateral displacement and rotation

This design is valid until 10/15/2022

Manufacturer Info

Forex
APA: PR-L318

Ontario Buildir approved docum times. The bui posted on site at	ents must l	be kept or	n site at al
Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			





NE1220-149 Page 23 of 39 Client: **GREENPARK** Date: 12/17/2020

isDesign

Project: Address:

TRINAR HOMES

EAST GWILLIMBURY, ON.

Input by:

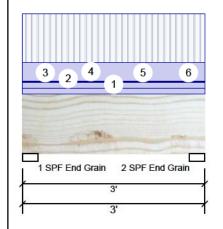
RCO

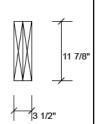
GLENWAY 3A (ELEV.1) DECK CONDITION

Job Name: Project #:

FH4-A Forex 2.0E-3000Fb LVL

2-Ply - PASSED Level: Ground Floor 1.750" X 11.875"





Continued fi	rom page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
5	Tapered Start	1-1-9		Near Face	2 PLF	5 PLF	0 PLF	0 PLF	
	End	2-5-9			2 PLF	5 PLF	0 PLF	0 PLF	
6	Tapered Start	2-5-9		Near Face	2 PLF	5 PLF	0 PLF	0 PLF	
	End	3-0-0			2 PLF	4 PLF	0 PLF	0 PLF	
	Self Weight				10 PLF				

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REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. IVI, beams must not be out or drilled
 2. Refer to manufacturer's product informating regarding installation requirements, multifastening details, beam strength values, and co approvals
 3. Damaged Beams must not be used
- Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

Reviewer BCIN Discipline Building Code H. Authier 43236



NE1220-149 Page 24 of 39 Client: **GREENPARK** 12/17/2020 Date:

Project: isDesign

Address: TRINAR HOMES

RCO Input by:

GLENWAY 3A (ELEV.1) DECK CONDITION Job Name:

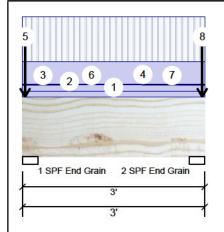
EAST GWILLIMBURY, ON. Project #

Brg

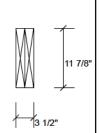
1

Forex 2.0E-3000Fb LVL

1.750" X 11.875" 2-Ply - PASSED Level: Ground Floor



15 PSF



Wind

Member Inforn	nation		
Type:	Girder	Application:	Floor (Residential)
Plies:	2	Design Method:	LSD
Moisture Condition:	Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load		SA 44 1 (2.44 SA 2016 A	
Floor Live:	40 PSF		

l '	014	440	105	U
2	513	446	169	0

Dead

Snow

160

Unfactored Reactions UNPATTERNED lb (Uplift)

Analysis Results **Analysis** Actual Location Allowed Comb. Case Capacity 0.019 (2%) 1.25D+1.5L L Moment 657 ft-lb 1'6" 34261 ft-lb Unbraced 657 ft-lb 1'6" 34261 ft-lb 0.019 (2%) 1.25D+1.5L L Shear 940 lb 0.081 (8%) 1.25D+1.5L L 1'9 7/8" 11596 lb Perm Defl in. 0.001 1'6" 0.088 (L/360) 0.010 (1%) D Uniform (L/37791) LL Defl inch 0.001 1'6" 0.088 (L/360) 0.010 (1%) L+0.5S (L/29305) TL Defl inch 0.002 1'6" 0.131 (L/240) 0.010 (1%) D+L+0.5S

Bearings and Factored Reactions

514

Bearing Length	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 3.000" End Grain	19%	557 / 940	1497	L	1.25D+1.5L +S
2 - SPF 3.000" End Grain	19%	557 / 939	1496	L	1.25D+1.5L +S

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NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Design Notes

Dead:

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam width X 4.5.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.

(L/16506)

- 5 Top braced at bearings.
- 6 Bottom braced at bearings

7 Lateral s	lenderness ratio based or	n full section width.							
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comme
1	Part. Uniform	0-0-0 to 3-0-0		Тор	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self
2	Part. Uniform	0-0-0 to 3-0-0		Near Face	40 PLF	0 PLF	0 PLF	0 PLF	Wall Self
3	Tapered Start	0-0-0		Near Face	1 PLF	3 PLF	0 PLF	0 PLF	
	End	0-7-9			2 PLF	5 PLF	0 PLF	0 PLF	



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Continued on page 2...

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corre
- **Handling & Installation**
- LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requirement
- naged Beams must not be us

Manufacturer Info APA: PR-L318

Discipline	rectioner	Den	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			
		MA I	

Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation This design is valid until 10/15/2022



NE1220-149 Page 25 of 39 Client: **GREENPARK** Date: 12/17/2020

isDesign

Project:

TRINAR HOMES

EAST GWILLIMBURY, ON.

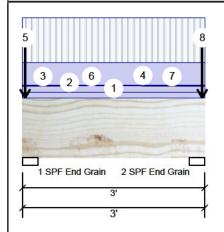
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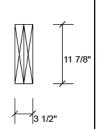
RCO

GLENWAY 3A (ELEV.1) DECK CONDITION

Job Name: Project #:

2-Ply - PASSED Level: Ground Floor 1.750" X 11.875" Forex 2.0E-3000Fb LVL





Continued from p	page 1								
ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
4	Part. Uniform	0-0-0 to 3-0-0		Near Face	148 PLF	304 PLF	0 PLF	0 PLF	J5
5	Point	0-0-8		Тор	87 lb	51 lb	169 lb	0 lb	Header Column Header Column
6	Tapered Start	0-7-9		Near Face	2 PLF	5 PLF	0 PLF	0 PLF	
	End	1-11-9			2 PLF	5 PLF	0 PLF	0 PLF	
7	Tapered Start	1-11-9		Near Face	2 PLF	5 PLF	0 PLF	0 PLF	
	End	3-0-0			1 PLF	2 PLF	0 PLF	0 PLF	
8	Point	2-11-8		Тор	87 lb	51 lb	169 lb	0 lb	Header Column Header Column
	Self Weight				10 PLF				

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- 1. IVI, beams must not be out or drilled
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6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 10/15/2022

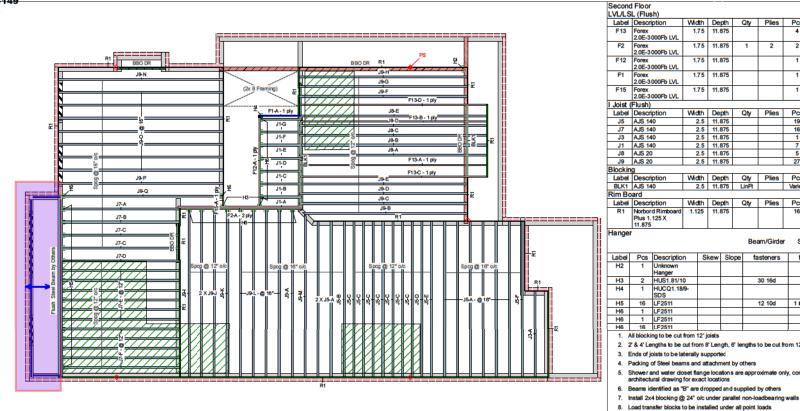
APA: PR-L318

Manufacturer Info

Reviewer BCIN Discipline Building Code H. Authier 43236

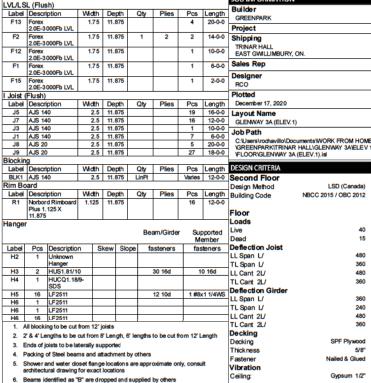


Second Floor



REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY IAILING OR BOLTING REQUIREMENTS. OINT LOADS OVER BEARING

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JOB INFORMATION

East Gwillimbury Building Standards Branch BCIN #16487

9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting

Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction.

10. Hangers and Fasteners to be installed as per manufacturer

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Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

Legend Point Load Support Load from Above

CCMC References

LP - 12412-R orex - 14056-R

Kott Lumber

14 Anderson Blvd

Stouffville, Ontario

Company

Canada

L4A7X4

905-642-4400

Boise - 12472-R , 12787-R

KOTT

Hatch Area represents where al load has been applied e.g. 5 psf for ceramic tile)

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This layout is to be used as an installation guide only. It is meant to be used in conjunction with the architectural and structural drawings, not to replace them

NE1220-149 Page 27 of 39 Client: **GREENPARK** Date: 12/17/2020 Project: Input by: RCO isDesign Address: TRINAR HOMES Job Name: GLENWAY 3A (ELEV.1) EAST GWILLIMBURY, ON. Project #: Level: Second Floor Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED F12-A 5 4 3 1 Hanger (HUS1.81/10) 2 SPF End Grain 9'4 11/16 9'4 11/16' Unfactored Reactions UNPATTERNED lb (Uplift) Member Information Brg Wind Type: Application: Floor (Residential) Live Dead Plies: 1 Design Method: 695 285 0 0 1 Moisture Condition: Dry **Building Code:** NBCC 2015 / OBC 2012 0 715 293 0 2 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Vibration: Not Checked Normal General Load Bearings and Factored Reactions

Floor Live: 40 PSF 15 PSF Dead:

Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 3.000" 356 / 1043 1398 I 1.25D+1.5L Hanger 2 - SPF 3.500" 32% 366 / 1072 1438 L 1.25D+1.5L **End** Grain

Analysis Results Comb. **Analysis** Actual Location Allowed Capacity Case 0.183 (18%) 1.25D+1.5L L Moment 3129 ft-lb 4'8" 17130 ft-lb Unbraced 3129 ft-lb 4'8" 5011 ft-lb 0.624 (62%) 1.25D+1.5L L Shear 1236 lb 1'2 1/8" 5798 lb 0.213 (21%) 1.25D+1.5L L Perm Defl in. 0.022 (L/4806) 4'8 1/16" 0.299 (L/360) 0.070 (7%) D Uniform LL Defl inch 0.055 (L/1968) 4'8 1/16" 0.299 (L/360) 0.180 (18%) L L TL Defl inch 0.077 (L/1396) 4'8 1/16" 0.449 (L/240) 0.170 (17%) D+L L

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PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS



Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.

L	4 Bottom braced	at bearings.								
ſ	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
l	1	Tie-In	0-0-0 to 1-1-13	1-10-9	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
l	2	Point	0-11-7		Near Face	37 lb	99 lb	0 lb	0 lb	J1
l	3	Tie-In	1-1-13 to 9-4-11	1-10-6	Тор	15 PSF	40 PSF	0 PSF	0 PSF	~
l	4	Part. Uniform	1-7-7 to 8-3-7		Near Face	31 PLF	81 PLF	0 PLF	0 PLF	
l	5	Point	8-11-7		Near Face	26 lb	69 lb	0 lb	0 lb	J1
		Self Weight				5 PLF				These



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Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corr

Handling & Installation

LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requiremen

APA: PR-L318

Manufacturer Info

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			



Daniaged beams must not be used

Design assumes top edge is laterally restrained

Provide lateral support at bearing points to avoid

lateral displacement and rotation

This design is valid until 10/15/2022

isDesign

Client:

GREENPARK

Project: Address:

TRINAR HOMES

EAST GWILLIMBURY, ON.

Date: 12/17/2020

Input by: RCO

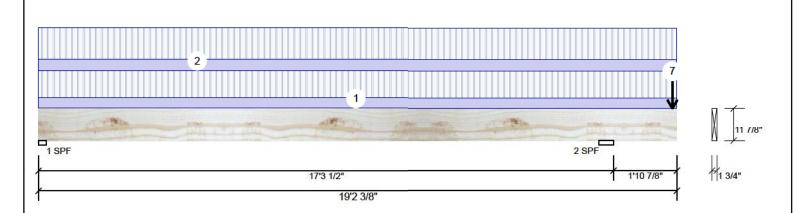
Job Name: GLENWAY 3A (ELEV.1)

Project #:

Forex 2.0E-3000Fb LVL F13-A

1.750" X 11.875" - PASSED

Level: Second Floor



Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Conditio	n: Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load		32 AAP (12 AP (20 AP	
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED Ib (Uplift

Brg	Live	Dead	Snow	vvina
1	370	158	0 (-24)	0
2	546	474	249	0

Bearings and Factored Reactions

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	2.750"	26%	197 / 572	770	L_	1.25D+1.5L
2 - SPF	5.250"	29%	593 / 1069	1662	LL	1.25D+1.5L +S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-1377 ft-lb	17'3 1/2"	14389 ft-lb	0.096 (10%)	1.25D+1.5S +L	_L
Unbraced	-1377 ft-lb	17'3 1/2"	2659 ft-lb	0.518 (52%)	1.25D+1.5S +L	LL
Pos Moment	3054 ft-lb	8'3 3/16"	17130 ft-lb	0.178 (18%)	1.25D+1.5L	L_
Unbraced	3054 ft-lb	8'3 3/16"	3055 ft-lb	1.000 (100%)	1.25D+1.5L	L_
Shear	639 lb	18'3 3/8"	4522 lb	0.141 (14%)	1.25D+1.5S	_L
Perm Defl in.	0.057 (L/3574)	8'1"	0.564 (L/360)	0.100 (10%)	D	Uniform
LL Defl inch	0.175 (L/1157)	8'7 1/2"	0.564 (L/360)	0.310 (31%)	L	L_
TL Defl inch	0.232 (L/875)	8'5 3/4"	0.845 (L/240)	0.270 (27%)	D+L	L_
LL Cant	-0.060 (2L/761)	Rt Cant	0.200 (2L/480)	0.301 (30%)	L	L_
TL Cant	-0.068 (2L/677)	Rt Cant	0.300 (2L/360)	0.225 (23%)	D+L	L

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PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Page 28 of 39



- 1 Girders are designed to be supported on the bottom edge only.
- 2 Top must be laterally braced at a maximum of 14'8 5/8" o.c.
- 3 Bottom braced at bearings.



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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requirement fastening details, beam strength value approvals
- approvals

 Damaged Beams must not be used Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 10/15/2022

Manufacturer Info

APA: PR-L318

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

CSD DESIGN

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NE1220-149 Client: **GREENPARK** 12/17/2020

EAST GWILLIMBURY, ON.

isDesign

Project: Address:

TRINAR HOMES

Date:

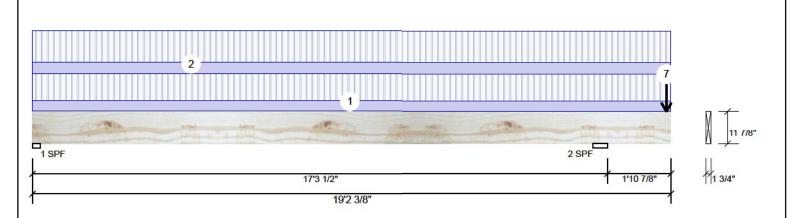
Input by: RCO

Job Name: GLENWAY 3A (ELEV.1)

Project #:

1.750" X 11.875" - PASSED F13-A Forex 2.0E-3000Fb LVL

Level: Second Floor



1			Trib Width	Side	Dead	Live	Snow	Wind	Comments
_	Tie-In	0-0-0 to 19-2-6	0-6-4	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 19-2-6	0-7-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Point	19-0-12		Тор	100 lb	55 lb	185 lb	0 lb	Header Column
4	Point	19-0-12		Тор	11 lb	7 lb	25 lb	0 lb	
5	Point	19-0-12		Тор	89 lb	0 lb	0 lb	0 lb	Wall Self Weight
6	Point	19-0-12		Тор	6 lb	4 lb	15 lb	0 lb	
7	Point	19-0-12		Тор	16 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				5 PLF				

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Handling & Installation

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2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

Manufacturer Info

APA: PR-L318

Reviewer BCIN Discipline Building Code H. Authier 43236



This design is valid until 10/15/2022

NE1220-149 Page 30 of 39 Client: GREENPARK Date: 12/17/2020 Input by: Project: RCO isDesign Address: TRINAR HOMES Job Name: GLENWAY 3A (ELEV.1) EAST GWILLIMBURY, ON. Project #: Level: Second Floor Forex 2.0E-3000Fb LVL 1.750" X 11.875" - PASSED F13-B 1 SPF 2 SPF 17'3 1/2' 1'10 7/8 19'2 3/8' Unfactored Reactions UNPATTERNED lb (Uplift) Member Information Brg Dead Wind Type: Application: Floor (Residential) Live Snow Plies 1 Design Method: 164 98 0 (-20) 0 1 Moisture Condition: Dry **Building Code:** NBCC 2015 / OBC 2012 0 275 288 206 2 Deflection LL: 360 Load Sharing: No Deflection TL: 240 Deck: Not Checked Importance: Vibration: Not Checked Normal General Load Bearings and Factored Reactions Floor Live: 40 PSF 15 PSF Dead: Bearing Length Cap. React D/L lb Total Ld. Case Ld. Comb. 1 - SPF 2.750" 381 L_ 13% 122 / 259 1 25D+1 5L 2 - SPF 5.250" 17% 360 / 618 978 II 1.25D+1.5L Analysis Results +S Actual Location Allowed Comb **Analysis** Capacity Case Neg Moment -997 ft-lb 1.25D+1.5S _L 17'3 1/2" 15246 ft-lb 0.065 (7%) +L READ ALL NOTES ON THIS PAGE AND ON AL PROFESSIONAL Unbraced -997 ft-lb 17'3 1/2" 2659 ft-lb 0.375 (38%) 1.25D+1.5S LL **ENGINEERING NOTE PAGE ENP-2. THIS** NOTE PAGE IS AN INTEGRAL PART OF THIS Pos Moment 1469 ft-lb 8'1 7/16" 16788 ft-lb 0.087 (9%) 1.25D+1.5L L_ CALCULATION SUMMARY PAGE AS IT 0.552 (55%) 1.25D+1.5L L_ CONTAINS SPECIFICATIONS AND CRITERIA Unbraced 1469 ft-lb 8'1 7/16" 2659 ft-lb USED IN THE DESIGN OF THIS COMPONENT. A. EL-MASRI Shear 468 lb 18'3 3/8" 4870 lb 0.096 (10%) 1.25D+1.5S _L REFER TO MULTIPLE MEMBER TO MEMBER Perm Defl in. 0.033 (L/6158) 7'11 13/16" 0.564 (L/360) 0.060 (6%) D Uniform CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. LL Defl inch 0.079 (L/2561) 8'7 1/2" 0.564 (L/360) 0.140 (14%) L PASS THRU FRAMING SQUASH TL Defl inch 0.112 (L/1811) 8'5" 0.845 (L/240) 0.130 (13%) D+L **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS LL Cant -0.027 Rt Cant 0.200 0.136 (14%) L L (2L/1685)(2L/480) TL Cant -0.031 Rt Cant 0.300 0.103 (10%) D+L (2L/1483) (2L/360) Design Notes 1 Girders are designed to be supported on the bottom edge only. 2 Top braced at bearings. East Gwillimbury 3 Bottom braced at bearings. ID Load Type Location Trib Width Side Dead Live Snow Wind Comme 5 40 PSF These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building 1 Tie-In 0-0-0 to 19-2-6 0 - 3 - 4Top 15 PSF 0 PSF 0 PSF 0-0-0 to 19-2-6 15 PSF 40 PSF 0 PSF 0 PSF 2 Tie-In 0-2-12 Top Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all 3 Part Uniform 0-5-6 to 5-6-1 Top 1 PLF 0 PLF 0 PLF 0 PLF Continued on page 2... times. The building permit must be clearly posted on site at all times. Manufacturer Info Notes

Reviewer BCIN

H. Authier 43236

Discipline Building Code

CSD DESIGN

Forex

This design is valid until 10/15/2022

APA: PR-L318

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corr

structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended

Handling & Installation

LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requiremen

aged Beams must not be used Daniaged beams must not be used

Design assumes top edge is laterally restrained

Provide lateral support at bearing points to avoid

lateral displacement and rotation NE1220-149 Page 31 of 39 Client: Date: 12/17/2020

isDesign

Project: Address: **GREENPARK**

TRINAR HOMES EAST GWILLIMBURY, ON.

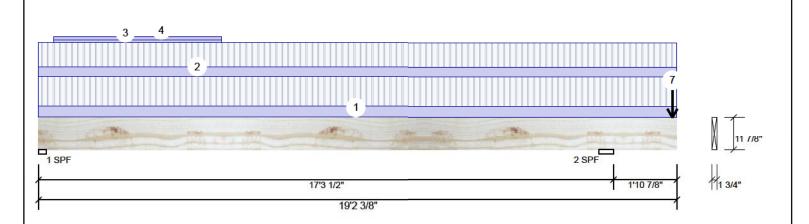
Input by: RCO

Job Name: GLENWAY 3A (ELEV.1)

Project #:

1.750" X 11.875" - PASSED F13-B Forex 2.0E-3000Fb LVL

Level: Second Floor



ı	Continued from p	age 1								
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
	4	Part. Uniform	0-5-6 to 5-6-1		Тор	1 PLF	0 PLF	0 PLF	0 PLF	
	5	Point	19-0-12		Тор	100 lb	55 lb	185 lb	0 lb	Header Column
	6	Point	19-0-12		Тор	0 lb	0 lb	1 lb	0 lb	
	7	Point	19-0-12		Тор	40 lb	0 lb	0 lb	0 lb	Wall Self Weight
		Self Weight				5 PLF				

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



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Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. LVL beams must not be out or drilled
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals
 3. Damaged Beams must not be used
 4. Design assumes top edge is laterally restrained
 5. Provide lateral support at bearing points to avoid lateral displacement and rotation
- 6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 10/15/2022

APA: PR-L318

Manufacturer Info

Reviewer BCIN Discipline Building Code H. Authier 43236



CSD DESIGN

isDesign

Client: Project: Address: **GREENPARK**

TRINAR HOMES EAST GWILLIMBURY, ON. Date: 12/17/2020

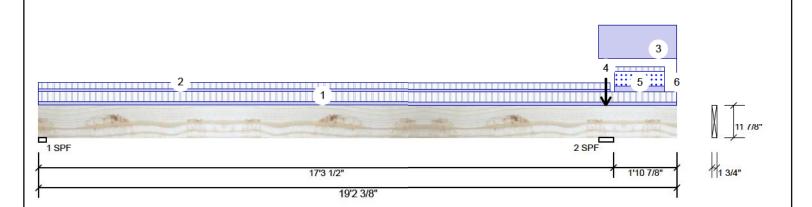
Input by: RCO Job Name: GLENWAY 3A (ELEV.1)

Project #:

F13-C Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor



Type:	Girder	Application:	Floor (Residential)
Plies:	1	Design Method:	LSD
Moisture Condition	on: Dry	Building Code:	NBCC 2015 / OBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal	Vibration:	Not Checked
General Load		324.00° 1.00	
Floor Live:	40 PSF		
Dead:	15 PSF		

Unfactored Reactions UNPATTERNED Ib (Up	olift)
---	--------

Live	Dead	Snow	Wind
335	157	0 (-2)	0
737	755	580	0
		335 157	335 157 0 (-2)

Bearings and Factored Reactions

	Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
	1 - SPF	2.750"	24%	196 / 508	704	L_	1.25D+1.5L
1	2 - SPF	5.250"	47%	944 / 1686	2629	LL	1.25D+1.5L

Analysis Results

Mambay Information

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-263 ft-lb	17'3 1/2"	11135 ft-lb	0.024 (2%)	1.4D	Uniform
Unbraced	-358 ft-lb	17'3 1/2"	2659 ft-lb	0.135 (13%)	1.25D+1.5L +S	LL
Pos Moment	2860 ft-lb	8'5 7/16"	17130 ft-lb	0.167 (17%)	1.25D+1.5L	L_
Unbraced	2860 ft-lb	8'5 7/16"	2860 ft-lb	1.000 (100%)	1.25D+1.5L	L_
Shear	642 lb	16'1"	5798 lb	0.111 (11%)	1.25D+1.5L +S	LL
Perm Defl in.	0.066 (L/3096)	8'5"	0.564 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.156 (L/1304)	8'7 1/2"	0.564 (L/360)	0.280 (28%)	L	L_
TL Defl inch	0.221 (L/918)	8'6 11/16"	0.845 (L/240)	0.260 (26%)	D+L	L_
LL Cant	-0.053 (2L/858)	Rt Cant	0.200 (2L/480)	0.267 (27%)	L	L_
TL Cant	-0.071 (2L/645)	Rt Cant	0.300 (2L/360)	0.237 (24%)	D+L	L_

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. REFER TO MULTIPLE MEMBER TO MEMBER

CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Page 32 of 39

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top must be laterally braced at a maximum of 15'8 5/8" o.c.
- 4 Bottom braced at bearings.



These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as aménded. These approved documents must be kept on site at all times. The building permit must be clearly posted on site at all times.

Notes

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- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corro
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requirement fastening details, beam strength value approvals
- approvals

 Damaged Beams must not be used
- Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 10/15/2022

Fo A

Manufacturer Info	Discipline	Reviewer	BCIN	Date
orex	Building Code	H. Authier	43236	2021-02-08
NPA: PR-L318	Sewage System			
	Zoning			
		KU		

isDesign

Client:

GREENPARK

Project: Address:

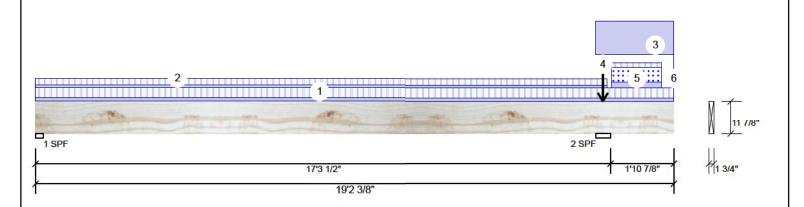
TRINAR HOMES EAST GWILLIMBURY, ON. Date: 12/17/2020

Input by: RCO Job Name: GLENWAY 3A (ELEV.1)

Project #:

1.750" X 11.875" - PASSED F13-C Forex 2.0E-3000Fb LVL

Level: Second Floor



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 19-2-6	0-7-1	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-0-0 to 17-2-6	0-4-12	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	16-10-0 to 19-2-6		Top	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
4	Point	17-0-12		Тор	338 lb	335 lb	525 lb	0 lb	F8 F8
5	Part. Uniform	17-4-0 to 18-10-0		Тор	15 PLF	10 PLF	35 PLF	0 PLF	
6	Part. Uniform	19-2-6 to 19-2-6		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
	Self Weight				5 PLF				

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PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Page 33 of 39

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 3. Damaged Beams must not be used
- Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

APA: PR-L318

Manufacturer Info

Reviewer BCIN Date Discipline Building Code H. Authier 43236



This design is valid until 10/15/2022

NE1220-149 Client: **GREENPARK**

isDesign

Project: Address:

TRINAR HOMES EAST GWILLIMBURY, ON. Date: 12/17/2020

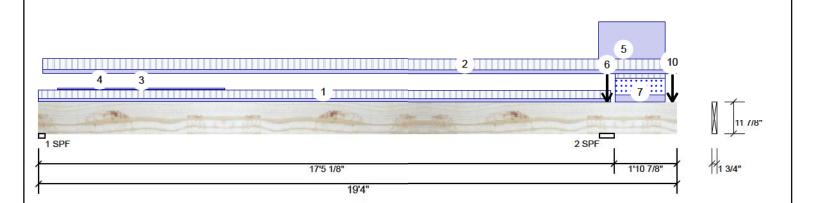
Input by: RCO

Job Name: GLENWAY 3A (ELEV.1)

Project #:

1.750" X 11.875" - PASSED Forex 2.0E-3000Fb LVL F13-D

Level: Second Floor



Member Infor	mation			L
Type:	Girder	Application:	Floor (Residential)	В
Plies:	1	Design Method:	LSD	
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	
Deflection LL:	360	Load Sharing:	No	
Deflection TL:	240	Deck:	Not Checked	
Importance:	Normal	Vibration:	Not Checked	
General Load		241041 (204128-1040)		L
Floor Live:	40 PSF			E
Dead:	15 PSF			
		1		

Unfactored Reactions UNPATTERNED lb (Uplift)

Brg 1	Live	Dead	Snow	Wind
1	340	177	0 (-4)	0
2	749	794	593	0

Bearings and Factored Reactions

I	Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	_
I	1 - SPF	2.375"	29%	221 / 516	737	L_	1.25D+1.5L	
	2 - SPF	5.250"	48%	992 / 1716	2709	LL	1.25D+1.5L +S	

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-341 ft-lb	17'5 1/8"	11135 ft-lb	0.031 (3%)	1.4D	Uniform
Unbraced	-466 ft-lb	17'5 1/8"	2634 ft-lb	0.177 (18%)	1.25D+1.5S +L	_L
Pos Moment	2986 ft-lb	8'4 13/16"	17130 ft-lb	0.174 (17%)	1.25D+1.5L	L_
Unbraced	2986 ft-lb	8'4 13/16"	2991 ft-lb	0.998 (100%)	1.25D+1.5L	L_
Shear	672 lb	16'2 5/8"	5798 lb	0.116 (12%)	1.25D+1.5L +S	LL
Perm Defl in.	0.071 (L/2899)	8'4 1/8"	0.569 (L/360)	0.120 (12%)	D	Uniform
LL Defl inch	0.165 (L/1244)	8'8 1/8"	0.569 (L/360)	0.290 (29%)	L	L_
TL Defl inch	0.235 (L/871)	8'6 7/8"	0.854 (L/240)	0.280 (28%)	D+L	L_
LL Cant	-0.056 (2L/818)	Rt Cant	0.200 (2L/480)	0.280 (28%)	L	L_
TL Cant	-0.073 (2L/624)	Rt Cant	0.300 (2L/360)	0.245 (24%)	D+L	L_

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PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Page 34 of 39

Design Notes

- 1 Performed Secondary Bearing Check (CSA 086-14 6.5.7.3). Assumed point load size: beam
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top must be laterally braced at a maximum of 15' 3/8" o.c.
- 4 Bottom braced at bearings.



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Manufacturer Info

APA: PR-L318

_	Discipline	Reviewer	BCIN	Date
	Building Code	H. Authier	43236	2021-02-08
	Sewage System			
	Zoning			



isDesign

Client: Project: **GREENPARK**

Address: TRINAR HOMES

EAST GWILLIMBURY, ON.

Date: 12/17/2020

Input by: RCO

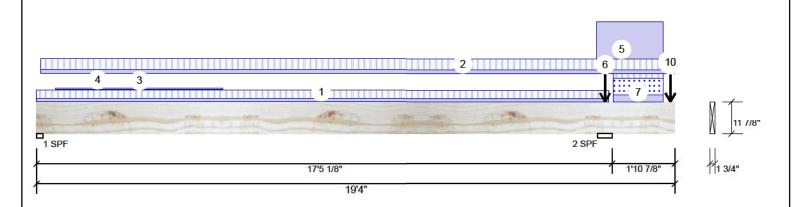
Job Name: GLENWAY 3A (ELEV.1)

Project #:

F13-D Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor



ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Comments
1	Tie-In	0-0-0 to 17-4-0	0-5-3	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
2	Tie-In	0-1-10 to 19-4-0	0-6-14	Тор	15 PSF	40 PSF	0 PSF	0 PSF	
3	Part. Uniform	0-6-15 to 5-7-12		Top	2 PLF	0 PLF	0 PLF	0 PLF	
4	Part. Uniform	0-7-0 to 5-7-11		Тор	3 PLF	0 PLF	0 PLF	0 PLF	
5	Part. Uniform	16-11-10 to 18-11-10		Тор	80 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
6	Point	17-2-10		Тор	337 lb	334 lb	523 lb	0 lb	F8 F8
7	Part. Uniform	17-5-10 to 18-11-10		Тор	15 PLF	10 PLF	35 PLF	0 PLF	
8	Point	19-2-6		Тор	6 lb	0 lb	0 lb	0 lb	Wall Self Weight
9	Point	19-2-6		Тор	6 lb	4 lb	14 lb	0 lb	
10	Point	19-2-6		Тор	46 lb	0 lb	0 lb	0 lb	Wall Self Weight
	Self Weight				5 PLF				

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Manufacturer Info

APA: PR-L318

Reviewer BCIN Discipline Building Code H. Authier 43236

CSD DESIGN

isDesign

Client: Project: Address:

GREENPARK

TRINAR HOMES

EAST GWILLIMBURY, ON.

Project:

ARK

Input by: RCO

Job Name: GLENWAY 3A (ELEV.1)

Project #:

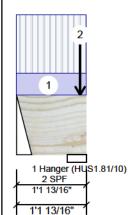
Date:

F15-A Forex 2.0E-3000Fb LVL

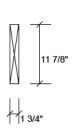
1.750" X 11.875" - PASSED

Level: Second Floor

12/17/2020



Member Information



Wind

0

0

n

Page 36 of 39

Type:	Girder		Application:	Floor (Residential)	Brg
Plies:	1		Design Method:	LSD	1
Moisture Cond	ition: Dry		Building Code:	NBCC 2015 / OBC 2012	2
Deflection LL:	360		Load Sharing:	No	
Deflection TL:	240		Deck:	Not Checked	
Importance:	Normal		Vibration:	Not Checked	
General Load					-
Floor Live:	40 PSF				Bear
Dead:	15 PSF				Bea
					1-
					_ Hai
Analysis Res	sults				2 -
Analysis	Actual	Location A	llowed Capac	ity Comb. Case	T

2							
Bearings	s and Fa	ctored F	Reactions				
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.	
1 - Hanger	3.000"	2%	22 / 61	83	L	1.25D+1.5L	
2 - SPF	3.813"	9%	95 / 292	387	L	1.25D+1.5L	

Unfactored Reactions UNPATTERNED lb (Uplift)

41

195

Dead

18

76

6 1/2" 17130 ft-lb 0.001 (0%) 1.25D+1.5L L Moment 10 ft-lb Unbraced 10 ft-lb 6 1/2" 17130 ft-lb 0.001 (0%) 1.25D+1.5L L Shear 56 lb 1'2 1/8" 5798 lb 0.010 (1%) 1.25D+1.5L L Perm Defl in. 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) LL Defl inch 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%) TL Defl inch 0.000 (L/999) 0 999.000 (L/0) 0.000 (0%)

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT.

Wind

0 lb

J9

0 PSF

Comments

REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS.

PASS THRU FRAMING SQUASH BLOCK IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.

Snow

0 PSF

Live

40 PSF

149 lb



Design Notes

ID

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings.

Load Type

iD.	Load Type	Location	THE WIGHT	Side	Deau
1	Tie-In	0-0-0 to 1-1-13	1-10-9	Тор	15 PSF
2	Point	1-0-9		Far Face	56 lb
	Self Weight				5 PLF

Location Trib Width

Cido



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Notes

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Lumber

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosin
- Handling & Installation
- LVL beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code
- Design assumes top edge is laterally restrained
 Provide lateral support at bearing points to avoid lateral displacement and rotation

naged Beams must not be used

ponding

Dood

Forex APA: PR-L318

Manufacturer Info

Discipline	Reviewer	BCIN	Date
Building Code	H. Authier	43236	2021-02-08
Sewage System			
Zoning			

This design is valid until 10/15/2022



isDesign

Client: Project: Address:

TRINAR HOMES

GREENPARK

EAST GWILLIMBURY, ON.

Date: 12/17/2020

Input by: RCO

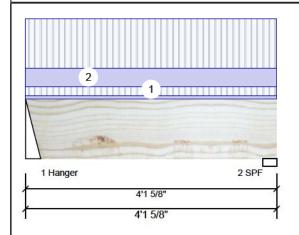
Job Name: GLENWAY 3A (ELEV.1)

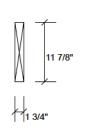
Project #:

Forex 2.0E-3000Fb LVL

1.750" X 11.875" - PASSED

Level: Second Floor





Wind

0 0

Page 37 of 39

Mem	ber	Info	rma	tion

Type:	Girder
Plies:	1
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal
General Load	
Floor Live:	40 PSF

15 PSF Dead:

Unfactored Reactions UNPATTERNED lb (Uplift) Application: Floor (Residential) Brg Design Method:

Building Code:	NBCC 2015 / OBC 2012
Load Sharing:	No
Deck:	Not Checked

Vibration: Not Checked

> Bearings and Factored Reactions Bearing Length 3.000"

> > 2 - SPF 2.750"

40 PSF

40 PLF

Hanger

1

2

Live

98

97

Cap. React D/L lb 58 / 147 5%

58 / 146

Dead

47

46

206 L

204 L

0

0

Total Ld. Case Ld. Comb. 1.25D+1.5L

1.25D+1.5L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	177 ft-lb	2' 15/16"	17130 ft-lb	0.010 (1%)	1.25D+1.5L	L
Unbraced	177 ft-lb	2' 15/16"	11809 ft-lb	0.015 (1%)	1.25D+1.5L	L
Shear	89 lb	1'2 1/8"	5798 lb	0.015 (2%)	1.25D+1.5L	L
Perm Defl in.	0.000 (L/999)	0	999.000 (L/0)	0.000 (0%)		
LL Defl inch	0.001 (L/49670)	2'1"	0.126 (L/360)	0.010 (1%)	L	L
TL Defl inch	0.001 (L/33657)	2'1"	0.189 (L/240)	0.010 (1%)	D+L	L

Design Notes

- 1 Fill all hanger nailing holes.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Top braced at bearings.
- 4 Bottom braced at bearings.

Load Type

READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY

7%

NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



Dead Wind Comments Live Snow

0 PSF

0 PLF

0 PSF

0 PLF

1	Tie-In	0-0-0 to 4-1-10 0-2-3	Тор	15 PSF
2	Part. Uniform	0-0-0 to 4-1-10	Тор	15 PLF
	Self Weight			5 PLF

Location

Trib Width

Side



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Notes

ID

structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended

- Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corre
- **Handling & Installation**
- LVL beams must not be cut or drilled
 Refer to manufacturer's product regarding installation requirement fastening details, beam strength value
- Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

naged Beams must not be used

This design is valid until 10/15/2022

Forex APA: PR-L318

Manufacturer Info Reviewer BCIN Discipline Building Code H. Authier 43236



NE1220-149 Page 38 of 39 Client: **GREENPARK** Date: 12/17/2020 Project: Input by: RCO isDesign Address: TRINAR HOMES Job Name: GLENWAY 3A (ELEV.1) EAST GWILLIMBURY, ON. Project #: Level: Second Floor Forex 2.0E-3000Fb LVL 1.750" X 11.875" 2-Ply - PASSED 2 5 3 1 6 1 SPF 2 SPF 12'10 1/4" 12'10 1/4" mbay Information Unfactored Deactions UNIDATTEDNED Ib (Unlift)

Member Information				Untactore	Unfactored Reactions UNPAITERNED ID (Uplift)				
Type:	Girder	Application:	Floor (Residential)	Brg	Live	Dead	Snow	Wind	
Plies:	2	Design Method:	LSD	1	2339	954	0	0	
Moisture Condition	n: Dry	Building Code:	NBCC 2015 / OBC 2012	2	2674	1087	0	0	
Deflection LL:	360	Load Sharing:	No	337					
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal	Vibration:	Not Checked						
General Load		Sign and the control of the control		3.5 - 2.5	F F COLUMN TO SECUL	are a statement of a state of the			
Floor Live:	40 PSF			Bearings a	and Facto	red Reactions			
Dead:	15 PSF			Bearing L	ength	Cap. React D/L lb	Total Ld. Case	Ld. Comb.	
				1 - SPF 2	.750"	79% 1193 / 3509	4702 L	1.25D+1.5L	
				2-SPF 5	.500"	45% 1359 / 4012	5371 L	1.25D+1.5L	
A ! - D -	L_								

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	16468 ft-lb	6'11 3/16"	34261 ft-lb	0.481 (48%)	1.25D+1.5L	L
Unbraced	16468 ft-lb	6'11 3/16"	27232 ft-lb	0.605 (60%)	1.25D+1.5L	L
Shear	5297 lb	1'1 7/8"	11596 lb	0.457 (46%)	1.25D+1.5L	L
Perm Defl in.	0.102 (L/1449)	6'5 1/4"	0.410 (L/360)	0.250 (25%)	D	Uniform
LL Defl inch	0.251 (L/588)	6'5 1/4"	0.410 (L/360)	0.610 (61%)	L	L
TL Defl inch	0.353 (L/418)	6'5 1/4"	0.615 (L/240)	0.570 (57%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Top loads must be supported equally by all plies.
- 4 Top braced at bearings.
- 5 Bottom braced at bearings.

C. Lateral clanderness ratio based on full section width

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PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS.



6 Lateral significances ratio based on full section width.											
	ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Commen	ts
	1	Tie-In	0-0-0 to 4-7-0	0-7-2	Тор	15 PSF	40 PSF	0 PSF	0 PSF		
	2	Point	1-1-7		Near Face	165 lb	429 lb	0 lb	0 lb	J9	<u></u>
	3	Part. Uniform	1-9-7 to 12-5-7		Near Face	129 PLF	342 PLF	0 PLF	0 PLF		
	4	Point	4-7-14		Far Face	18 lb	41 lb	0 lb	0 lb	F15	Our town
	5	Point	8-5-0		Far Face	285 lb	695 lb	0 lb	0 lb	F12 c	orrec
	6	Tie-In	8-5-14 to 12-6-0	0-6-10	Тор	15 PSF	40 PSF	0 PSF	0 PSF	S	nade Stand

East Gwillimbury Building Standards Branch BCIN #16487

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Continued on page 2...

Notes

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 LVL not to be treated with fire retardant or corrosive
- Handling & Installation
- 1. IVI, beams must not be out or drilled
 2. Refer to manufacturer's product inforegarding installation requirements, in fastening details, beam strength values, an approvals
 3. Damaged Beams must not be used
- Daniaged beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid lateral displacement and rotation

Forex APA: PR-L318

Manufacturer Info

Reviewer BCIN Discipline Building Code H. Authier 43236

This design is valid until 10/15/2022



NE1220-149 Page 39 of 39 Client: **GREENPARK** Date: 12/17/2020 Project: Input by: RCO isDesign Address: TRINAR HOMES Job Name: GLENWAY 3A (ELEV.1) EAST GWILLIMBURY, ON. Project #: Level: Second Floor 1.750" X 11.875" Forex 2.0E-3000Fb LVL 2-Ply - PASSED 2 5 3 1 6 7 1 SPF 2 SPF 12'10 1/4" 12'10 1/4" .Continued from page 1 ID Location Trib Width Side Dead Live Snow Wind Comments Load Type 7 15 PSF 40 PSF 0 PSF 0 PSF Tie-In 12-6-0 to 12-10-4 0-2-10 Top Self Weight 10 PLF READ ALL NOTES ON THIS PAGE AND ON ENGINEERING NOTE PAGE ENP-2. THIS NOTE PAGE IS AN INTEGRAL PART OF THIS CALCULATION SUMMARY PAGE AS IT CONTAINS SPECIFICATIONS AND CRITERIA USED IN THE DESIGN OF THIS COMPONENT. REFER TO MULTIPLE MEMBER TO MEMBER CONNECTION DETAIL FOR PLY TO PLY NAILING OR BOLTING REQUIREMENTS. PASS THRU FRAMING SQUASH **BLOCK IS REQUIRED AT ALL** POINT LOADS OVER BEARINGS. East Gwillimbury Building Standards Branch BCIN #16487 These plans have been reviewed for use with the corrections as noted. No other changes may be made without written approval of the Building Standards Branch. All work must comply with Zoning By-Law 2018-043, as amended, and the Ontario Building Code, as amended. These approved documents must be kept on site at all times. The building negative property must be clearly the clea

This design is valid until 10/15/2022

KUII

Discipline Building Code

CSD DESIGN

Manufacturer Info

APA: PR-L318

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Reviewer BCIN

H. Authier 43236

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