

## Engineering Notes: EWP-Floors



MHP 23028



PLEASE READ AND FOLLOW INSTRUCTIONS PRIOR TO INSTALLATION OF THE COMPONENT

**RESPONSIBILITIES**

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.

**COMPONENT DESIGN INFORMATION**

1. THIS BUILDING COMPONENT IS CERTIFIED AS AN INDIVIDUAL COMPONENT FOR THE LOADS AND CONDITIONS SHOWN ON THE CALCULATION PAGE BASED ON INFORMATION PROVIDED BY KOTT DESIGN.
2. THE BUILDING COMPONENT USED IN CONSTRUCTION MUST BE THE SAME AS INDICATED ON THE DRAWINGS.
3. UNLESS NOTED OTHERWISE ON THE LAYOUT OR BEAM CALCULATION SHEET, MEMBERS CONSISTING OF MULTIPLE PLIES MUST BE CONNECTED AS PER THE DOCUMENT "MULTIPLE MEMBER CONNECTION DETAILS" SHOWN ON PAGE 2 OF THIS DOCUMENT.
4. PASS-THRU TRANSFER BLOCK FRAMING IS REQUIRED AT ALL POINT LOADS OVER BEARINGS.
5. IT IS ASSUMED THAT EACH LVL BEAM WHERE NOT SEATED IN A HANGER IS ATTACHED USING (4) FOUR 3-1/4" COMMON SPIRAL NAILS FOR UP TO 5.5" LONG BEARINGS AND USING (6) SIX 3-1/4" COMMON SPIRAL NAILS FOR BEARINGS EQUAL TO OR LONGER THAN 5.5", UNLESS INDICATED OTHERWISE.

**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.

**HANDLING AND INSTALLATION**

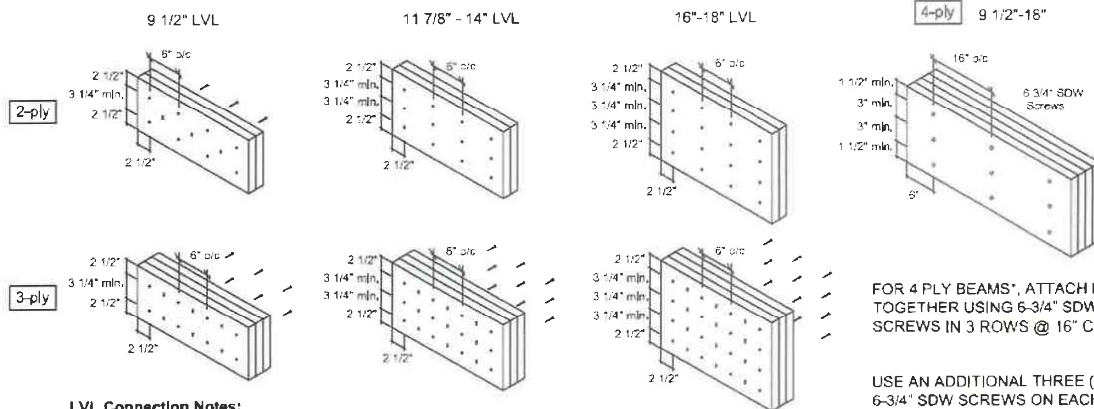
1. DO NOT DRILL ANY HOLE, CUT OR NOTCH A CERTIFIED BUILDING COMPONENT WITHOUT A WRITTEN PRE-AUTHORIZATION.
2. INSTALLATION AND ASSEMBLY OF FLOOR JOISTS AND LVL BEAMS IS TO BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUFACTURER'S LITERATURE.



## MULTIPLE MEMBER CONNECTIONS FOR BEAMS SHOWN ON KOTT LAYOUTS



### MULTIPLE MEMBER CONNECTIONS FOR UNIFORMLY DISTRIBUTED TOP & SIDE LOADED LVL BEAMS SHOWN ON KOTT LAYOUTS



#### LVL Connection Notes:

- LVL ply width is 1-3/4"
- Nails to be 3 1/2" common wire nails.
- Nails to be located 2 1/2" min. from the top and bottom of the member. Start all nails 2 1/2" min. from ends.
- Minimum 3 1/4" spacing between rows.
- Number of rows and spacing as per details shown, unless noted otherwise.
- "X" represents nail driven from the opposite side.
- Head of all specified screws must be on the loaded side.

FOR 4 PLY BEAMS\*, ATTACH PLIES TOGETHER USING 6-3/4" SDW SCREWS IN 3 ROWS @ 16" C/C.

USE AN ADDITIONAL THREE (3) 6-3/4" SDW SCREWS ON EACH SIDE (OF EACH FACE) AT POINT LOAD LOCATIONS @ 1/2 SPACING, WHERE APPLICABLE.

\*UNLESS NOTED OTHERWISE ON LAYOUT OR CALCULATION SHEET OF BEAM IN THE FLOOR PACKAGE

FOR MULTIPLE MEMBER CONNECTION OF BOISE ALLJOISTS REFER TO THE BOISE CASCADE INSTALLATION GUIDE

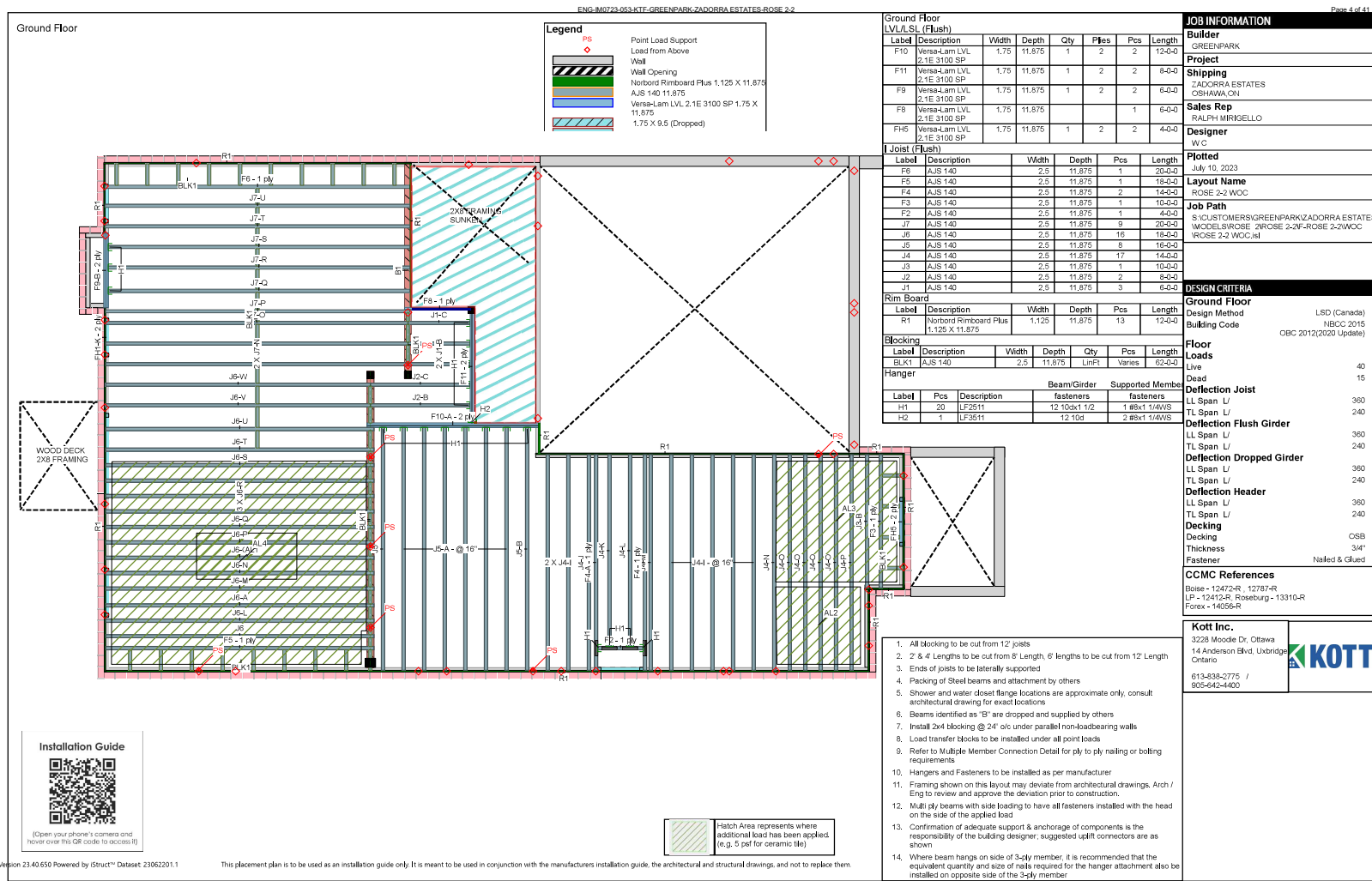
#### Installation Guide



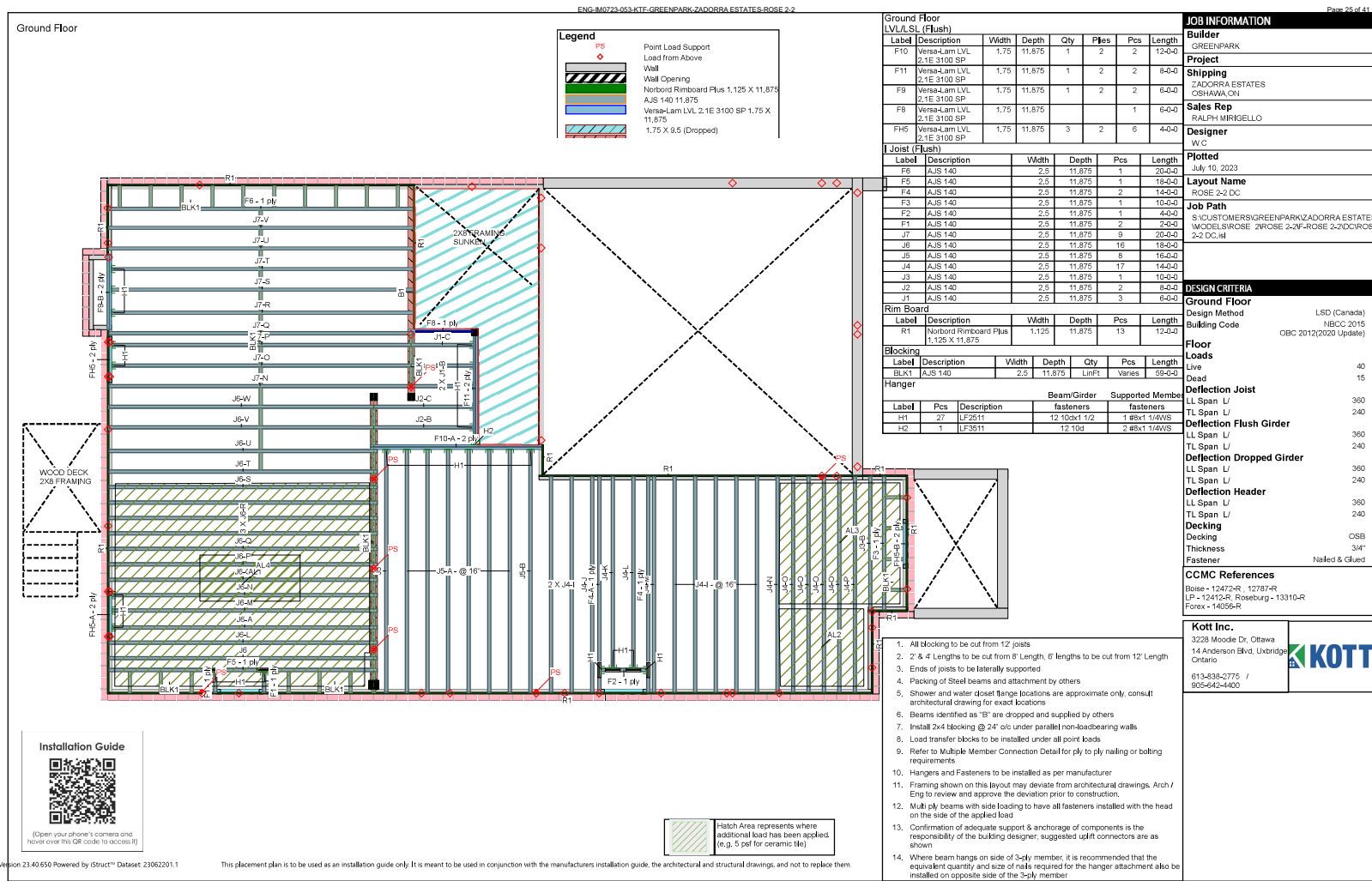
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Ground Floor							JOB INFORMATION	
LVL/SL (Flush)							Builder	
Label	Description	Width	Depth	Qty	Piles	Pcs	GREENPARK	
F10	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12'-0"	
F11	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	8'-0"	
F9	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	8'-0"	
F8	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	6'-0"	
FH5	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	4'-0"	
Joist (Flush)							Designer	
Label	Description	Width	Depth	Pcs	Length		W/C	
P8	AJS 140	2.5	11.875	1	20'-0"		July 07, 2023	
P5	AJS 140	2.5	11.875	3	18'-0"		Layout Name	
F4	AJS 140	2.5	11.875	2	14'-0"		ROSE 2-2 STD	
F3	AJS 140	2.5	11.875	1	10'-0"		Job Path	
F2	AJS 140	2.5	11.875	2	4'-0"		S:\CUSTOMERS\GREENPARK\ZADORRA ESTATE	
F1	AJS 140	2.5	11.875	2	20'-0"		MODEL SROSE 2-2 ROSE 2-2 ROSE 2-2 ROSE 2-2 STD.iad	
J7	AJS 140	2.5	11.875	9	20'-0"			
J6	AJS 140	2.5	11.875	12	18'-0"			
J5	AJS 140	2.5	11.875	10	16'-0"			
J4	AJS 140	2.5	11.875	17	14'-0"			
J3	AJS 140	2.5	11.875	1	10'-0"			
J2	AJS 140	2.5	11.875	2	8'-0"			
J1	AJS 140	2.5	11.875	3	6'-0"			
Rim Board							DESIGN CRITERIA	
Label	Description	Width	Depth	Pcs	Length		Ground Floor	
R1	Nordbord Rimboard Plus 1.125 X 11.875	1.125	11.875	13	12'-0"		Design Method	
							Building Code	
							NBC 2015	
							CBC 2012 (2020 Update)	
Blocking							Floor Loads	
Label	Description	Width	Depth	Qty	Pcs	Length	Dead	
BLK1	AJS 140	2.5	11.875	1 Int	Varies	59'-0"	Live	
							40	
							15	
Hanger							Deflection Joist	
Label	Pcs	Description	fasteners	fasteners	Supported Member		L1 Span / L	
H1	26	LF2511	12 10x1 1/2	1 #8x1 1/4WS			TL Span / L	
H2	1	LF3511	12 10d	2 #5x1 1/4WS			260	
							340	
							Deflection Flush Girder	
							L1 Span / L	
							360	
							240	
							Deflection Dropped Girder	
							L1 Span / L	
			</					

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OF PERMIT PLANS  
Nov 15 2023  
PER: *C. Morte*  
CHIEF BUILDING OFFICIAL



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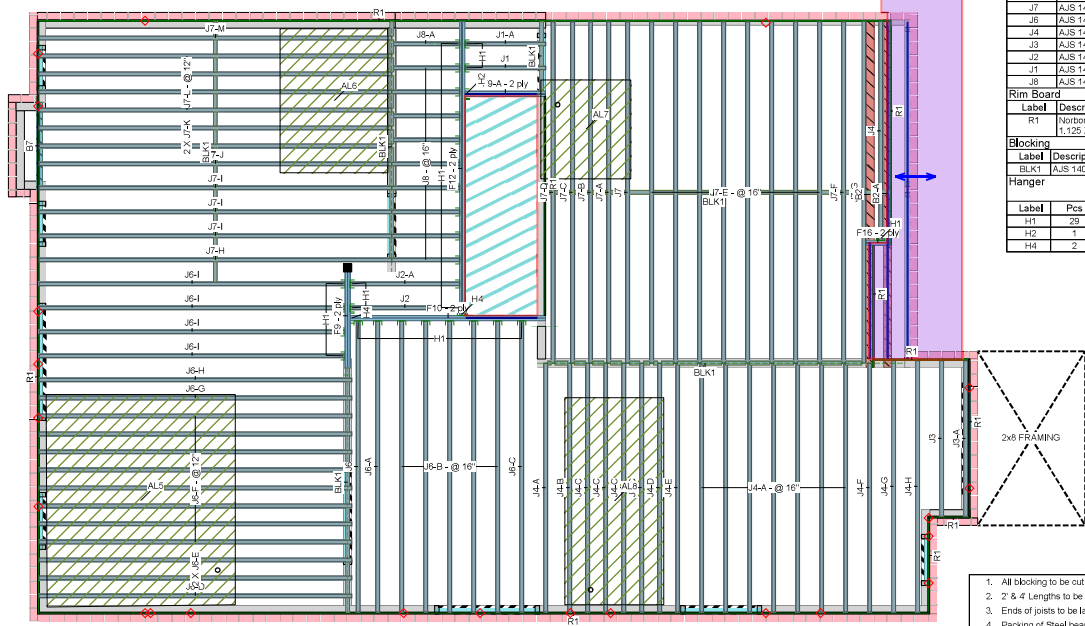


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ENG-M0723-03-KTZ-GREENPARK-ZADORRA ESTATES-ROSE 2-2

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Second Floor



Second Floor							
LVL/LSL (Flush)							
Label	Description	Width	Depth	Qty	Pies	Pcs	Length
F12	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	18'-0"
F10	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12'-0"
F9	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	6'-0"
F16	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	2'-0"
Joist (Flush)							
Label	Description	Width	Depth	Pcs	Length		
J7	AJS 140	2.5	11.875	27	20'-0"		
J6	AJS 140	2.5	11.875	25	18'-0"		
J4	AJS 140	2.5	11.875	19	14'-0"		
J3	AJS 140	2.5	11.875	2	10'-0"		
J2	AJS 140	2.5	11.875	2	8'-0"		
J1	AJS 140	2.5	11.875	2	6'-0"		
J8	AJS 140	2.5	11.875	10	4'-0"		
Rim Board							
Label	Description	Width	Depth	Pcs	Length		
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875	16	12'-0"		
Blocking							
Label	Description	Width	Depth	Qty	Pcs	Length	
BLK1	AJS 140	2.5	11.875	1in Ft	Varies	67'-0"	
Hanger							
				Beam/Girder		Supported Member	
Label	Pcs	Description	Fasteners			Fasteners	
H1	29	Z5T11	12 10d	1 #BX1 1/4WS			
H2	1	LF3511	12 10d	2 #BX1 1/4WS			
H4	2	HF4US410	30 16d			10 16d	

JOB INFORMATION	
Builder	GREENPARK
Project	ZADORRA ESTATES OSHAWA, ON
Shipping	ROSE 2-2 ALL OPT
Sales Rep	RALPH MIRIGELLO
Designer	8/CUSTOMERS/GREENPARK/ZADORRA ESTATES
Plotted	July 07, 2023
Layout Name	ROSE 2-2 ALL OPT
Job Path	8/CUSTOMERS/GREENPARK/ZADORRA ESTATES
	MODELS/ROSE 2/ROSE 2-2/ROSE 2-2/ROSE 2-2

DESIGN CRITERIA	
Second Floor	LSD (Canada)
Design Method	NBCC 2015
Building Code	IBC 2012(2020 Update)

Floor Loads	
Live	40
Dead	15
Deflection Joist	
LL Span /	360
TL Span /	240
Deflection Flush Girder	
LL Span /	360
TL Span /	240
Deflection Dropped Girder	
LL Span /	360
TL Span /	240
Deflection Header	
LL Span /	360
TL Span /	240
Decking	OSB
Thickness	5/8"
Fastener	Nailed & Glued

CCMC References	
Boise - 12472-R	12787-R
LP - 12412-R	Roseburg - 13310-R
Forex - 14035-R	
Kott Inc.	
3228 Woodle Dr. Ottawa	
14 Anderson Blvd. Unbridge	
Ontario	
613-838-2775 /	
905-642-4400	



Installation Guide



(Open your phone's camera and  
hover over this QR code to access it)

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

- All blocking to be cut from 12' joists
- 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length
- Ends of joists to be laterally supported
- Packing of Steel beams and attachment by others
- Shower and water closet flange locations are approximate only; consult architectural drawing for exact locations
- Beams identified as "B" are dropped and supplied by others
- Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls
- Load transfer blocks to be installed under all point loads
- Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements
- Hangers and Fasteners to be installed as per manufacturer
- Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction.
- Multi ply beams with side loading to have all fasteners installed with the head on the side of the applied load.
- Confirmation of adequate support & anchorage of components is the responsibility of the building designer; suggested uplift connectors are as shown.
- Where beam hangs on side of 3-ply member, it is recommended that the equivalent quantity and size of nails required for the hanger attachment also be installed on opposite side of the 3-ply member

Legend

PS	Point Load Support
Load from Above	
Wall Opening	
Norbord Rimboard Plus 1.125 X 11.875	
AJS 140 11.875	
Versa-Lam LVL 2.1E 3100 SP 1.75 X 11.875	
1.75 X 9.5 (Dropped)	