

## Engineering Notes: EWP-Floors



# MHP 23038

PLEASE READ ALL NOTES 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.

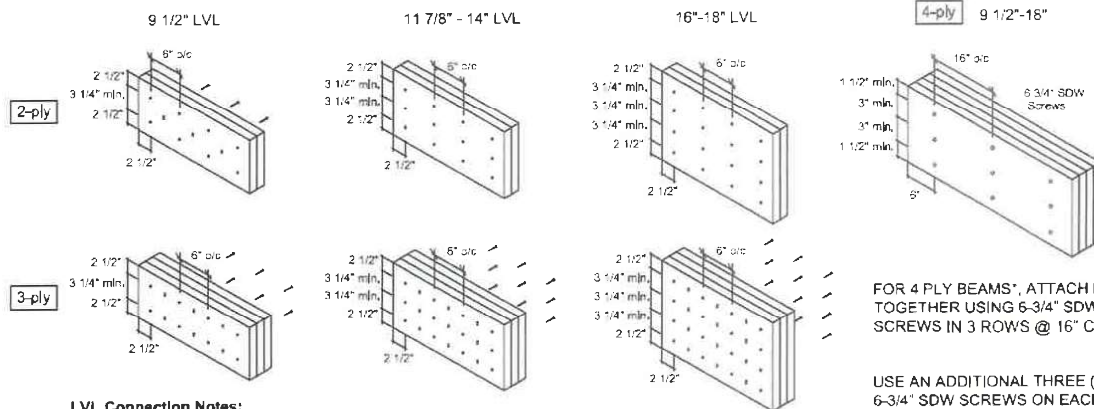
### HANDLING AND INSTALLATION

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 PLYS 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



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

Last Revised January 13, 2023

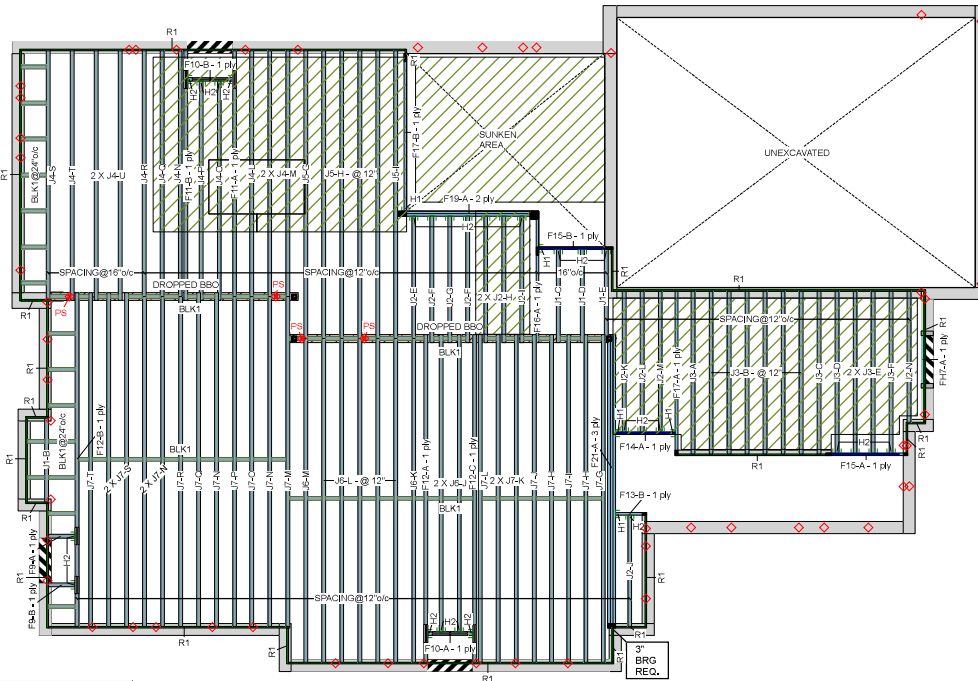


# MHP 23038

Ground Floor

ENG-M0723-149-KTF-GREENPARK-ZADORRA ESTATES-VILLA 11-1

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Ground Floor LVL/LSL (Flush)									
Label	Description	Width	Depth	Qty	Pies	Pcs	Length		
F21	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	3	3	18-0-0		
F17	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			2	10-0-0		
F19	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	8-0-0		
F16	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	8-0-0		
F15	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			2	6-0-0		
F14	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	4-0-0		
FH7	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	4-0-0		
F13	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	2-0-0		
Joist (Flush)									
Label	Description	Width	Depth	Qty	Pies	Pcs	Length		
F12	AJS 140	2.5	11.875			3	20-0-0		
F11	AJS 140	2.5	11.875			2	14-0-0		
F10	AJS 140	2.5	11.875			2	4-0-0		
F9	AJS 140	2.5	11.875			2	2-0-0		
J7	AJS 140	2.5	11.875			20	20-0-0		
J6	AJS 140	2.5	11.875			9	16-0-0		
J5	AJS 140	2.5	11.875			6	16-0-0		
J4	AJS 140	2.5	11.875			12	14-0-0		
J3	AJS 140	2.5	11.875			12	10-0-0		
J2	AJS 140	2.5	11.875			12	8-0-0		
J1	AJS 140	2.5	11.875			4	6-0-0		
Rim Board									
Label	Description	Width	Depth	Qty	Pies	Pcs	Length		
R1	Horibord Rimboard 11.875 X 1.125	1.125	11.875			12	12-0-0		
Blocking									
Label	Description	Width	Depth	Qty	Pies	Pcs	Length		
BLK1	AJS 140	2.5	11.875	LnFT		Varies	85-0-0		
Hanger									
							Beam/Girder	Supported Member	
Label	Pcs	Description	Skew	Slope	fasteners	fasteners			
H1	3	HJUS1 31910			30 16d	10 16d			
H2	28	LF2311			12 10dX1 1/2	1 89x1 1/4X5			
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									
5. 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									
11. Framing shown on this layout may deviate from architectural drawings, Arch / Eng to review and approve the deviation prior to construction									
12. Multi Ply beams with side loading to have all fasteners installed with the head on the side of the applied load									
13. Confirmation of adequate support & anchorage of components is the responsibility of the building designer, suggested uplift connectors are as shown									
14. Where beam hangs on side of S-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 S-ply member									

## 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)

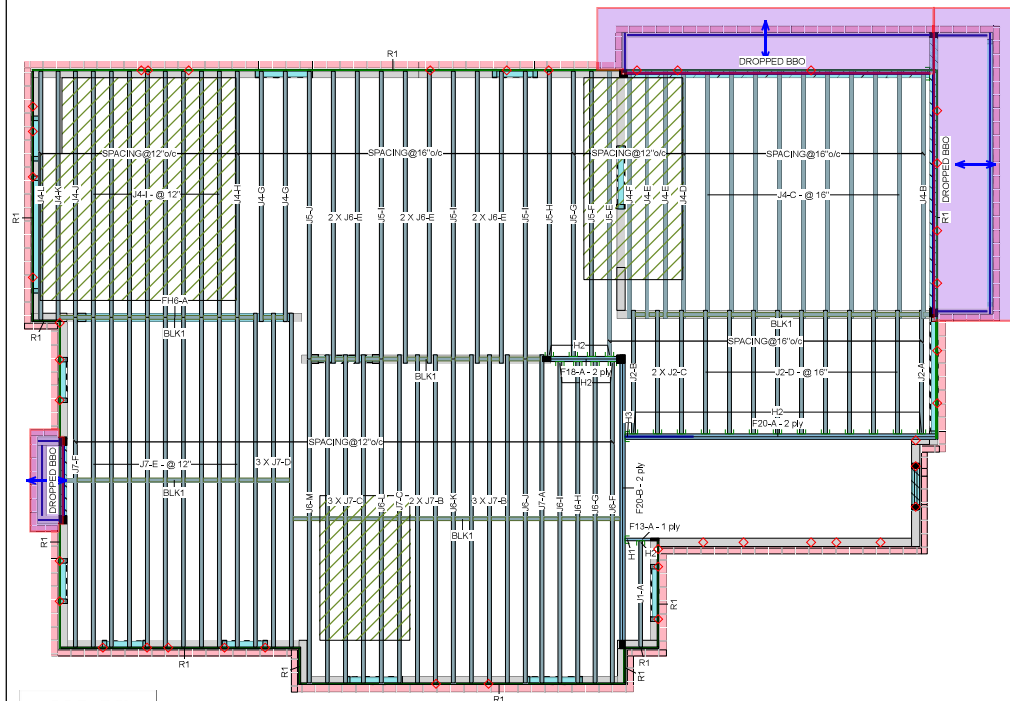
Legend  
PS Point Load Support  
Load from Above  
Wall

# MHP 23038

Second Floor

ENG-M0723-149-KTF-GREENPARK-ZADORRA ESTATES-VILLA 11-1

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Second Floor										JOB INFORMATION	
LVL/LSL (Flush)										Builder	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length			GREENPARK GROUP	
F20	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	18-0-0			Project	
F18	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	6-0-0			22-012	
F13	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	2-0-0			Shipping	
LVL/LSL (Dropped)										OSHAWA	
Joist (Flush)										Sales Rep	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length			R M	
FH6	Versa-Lam LVL 2.1E 3100 SP	1.75	9.5	1	3	3	12-0-0			Designer	
J Joist (Flush)										R G	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length			Plotted	
J7	AJS 140	2.5	11.875			23	20-0-0			July 19, 2023	
J6	AJS 140	2.5	11.875			14	18-0-0			Layout Name	
J5	AJS 140	2.5	11.875			8	16-0-0			VILLA 11-1	
J4	AJS 140	2.5	11.875			28	14-0-0			Job Path	
J2	AJS 140	2.5	11.875			13	8-0-0			8 \CUSTOMERS\GREENPARK\ZADORRA ESTATES	
J1	AJS 140	2.5	11.875			1	6-0-0			MODELS\VILLA 11\VILLA 11-1\FLOORS\VILLA	
Rim Board										DESIGN CRITERIA	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length			Second Floor	
R1	Horibord Rimboard Plus 1.125 X 11.875	1.125	11.875			13	12-0-0			LSD (Canada)	
Blocking										Design Method	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length			NBCC 2015 / CBC 2012	
BLK1	AJS 140	2.5	11.875			Varies	57-0-0			Floor	
Hanger										Loads	
										Live	
Label	Pcs	Description	Skew	Slope	fasteners	fasteners				Dead	
H1	1	HUS1.61/10			30 16d	10 16d				Deflection Joist	
H2	22	1/2"x11			12 16d	1 8d x 1 1/4" x 9				LL Span / L	
H3	1	HHUS410			30 16d	10 16d				Deflection Flush Girder	
										LL Span / L	
1. All blocking to be cut from 12' joists										Deflection Dropped Girder	
2. 2' & 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length										LL Span / L	
3. Ends of joists to be laterally supported										Deflection Header	
4. Packing of Steel beams and attachment by others										LL Span / L	
5. Shower and water closet flange locations are approximate only; consult architectural drawing for exact locations										Deflection Decking	
6. Beams identified as "B" are dropped and supplied by others										Thickness	
7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls										SPF Plywood	
8. Load transfer blocks to be installed under all point loads										Fastener	
9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements										Nailed & Glued	
10. Hangers and Fasteners to be installed as per manufacturer										Vibration	
11. Framing shown on this layout may deviate from architectural drawings, Arch / Eng to review and approve the deviation prior to construction										Casing	
12. Multi Ply beams with side loading to have all fasteners installed with the head on the side of the applied load										CCMC References	
13. Confirmation of adequate support & anchorage of components is the responsibility of the building designer; suggested uplift connectors are as shown										Boise - 12472-R, 12787-R	
14. 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										LP - 12412-R, Roseburg - 13310-R	
										Forex - 14056-R	
										Kott Inc.	
										3228 Moodie Dr, Ottawa	
										14 Anderson Blvd, Uxbridge	
										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)

Legend

WB	Web Stiffener
-WB	In Hanger Label
	Denotes Web
PS	Stiffener
	Point Load Support
	Load from Above
	Wall