

## 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.

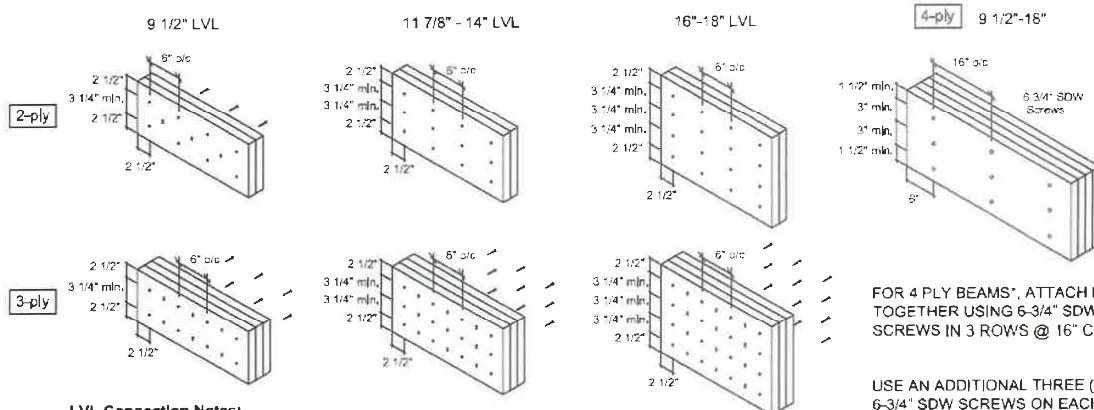
### HANDLING AND INSTALLATION

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 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

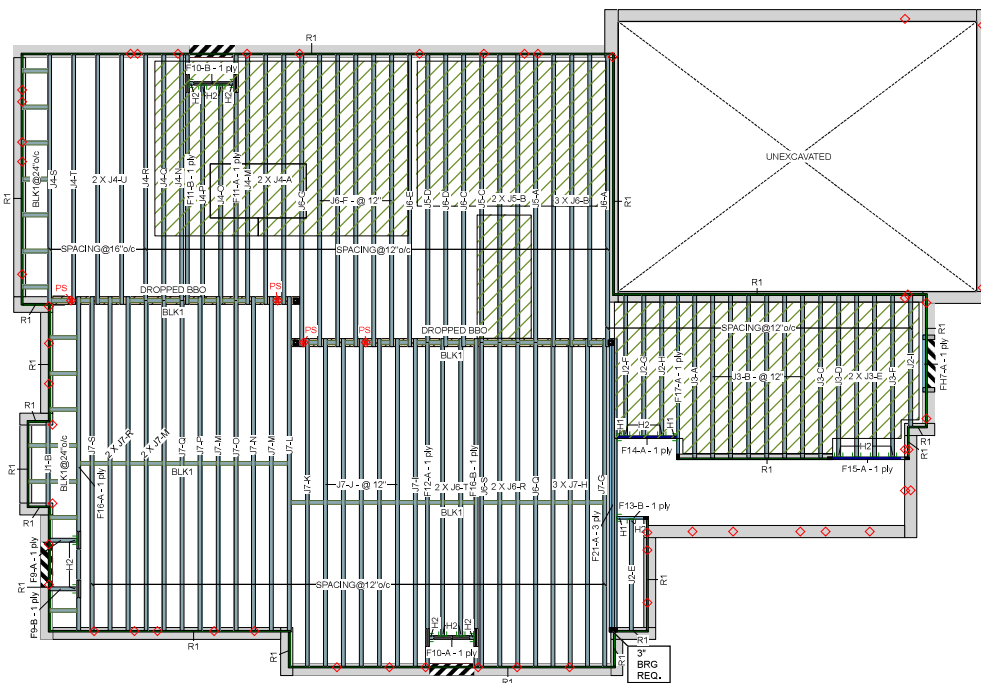
FOR MULTIPLE MEMBER CONNECTION OF BOISE ALLJOISTS REFER TO THE BOISE CASCADE INSTALLATION GUIDE

Installation Guide

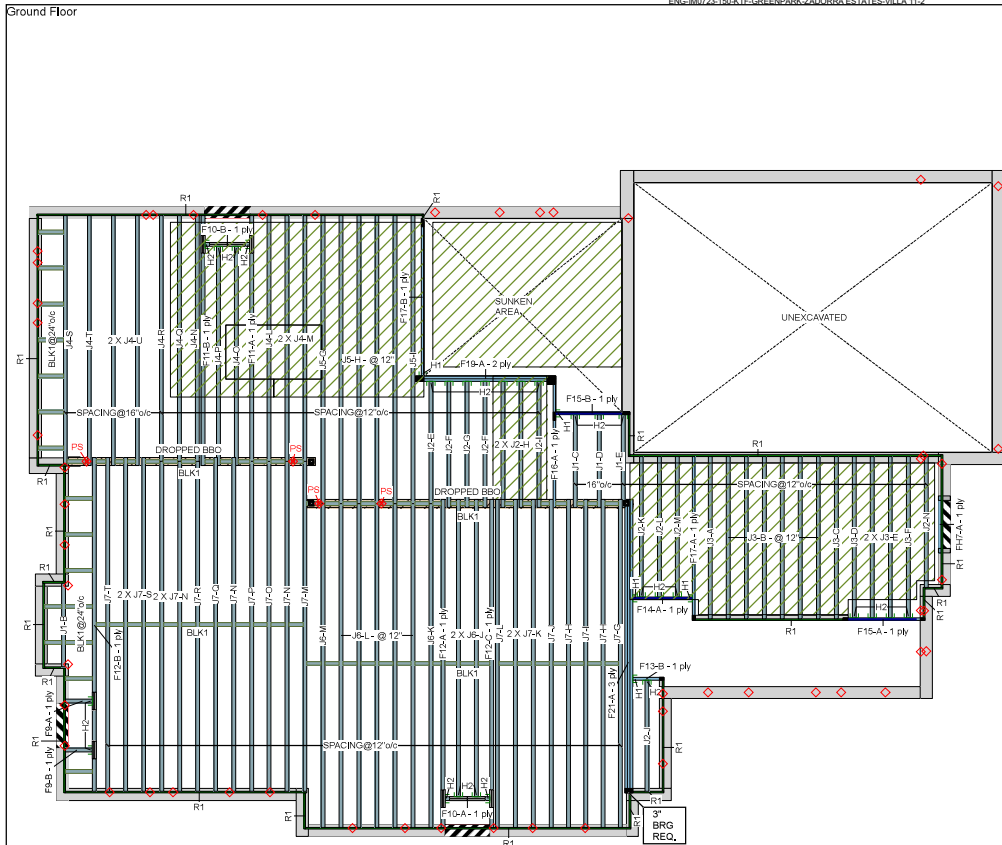


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Last Revised January 13, 2023

[illegible]

MHP 23038



Ground Floor										JOB INFORMATION	
LVL/LSL (Flush)										Builder	
										GREENPARK GROUP	
										Project	
										22-012	
										Shipping	
										OSHAWA	
										Sales Rep	
										R M	
										Designer	
										R G	
										Plotted	
										July 20, 2023	
										Layout Name	
										VILLA 11-2-SNK	
										Job Path	
										8\CUSTOMERS\GREENPARK\ZADORRA ESTATES	
										MODELS\VILLA 11\VILLA 11-2\FLOORS\SNK\VILLA	
										DESIGN CRITERIA	
										Ground Floor	
										Design Method	
										LSD (Canada)	
										Building Code	
										NBC 2015 / CBC 2012	
										Floor	
										Loads	
										Live	
										43	
										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	
										SPF Plywood	
										Thickness	
										3/4"	
										Fastener	
										Nailed & Glued	
										Vibration	
										CCMC References	
										Base - 12472-R, 12781-R	
										LP - 12412-R, Roseburg - 13310-R	
										Forex - 14055-R	
										Kott Inc.	
										3228 Moodie Dr, Ottawa	
										14 Anderson Blvd, Uxbridge	
										Ontario	
										613-338-2775 /	
										905-642-4400	
										14. 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 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	

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)

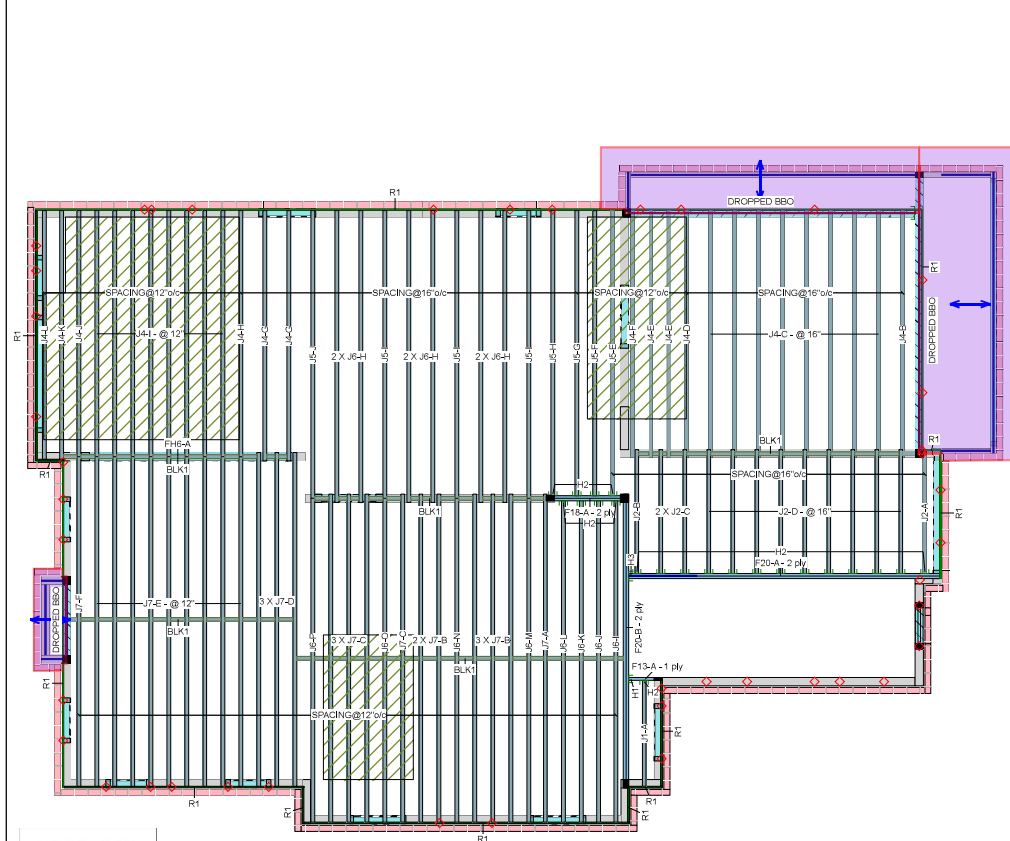
Legend  
PS Point Load Support  
Load from Above  
Wall

# MHP 23038

Second Floor

ENG-M0723-150-KTF-GREENPARK-ZADORRA ESTATES-VILLA 11-2

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Second Floor										JOB INFORMATION		
LVL/LSL (Flush)										Builder	GREENPARK GROUP	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length				Project	
F20	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	2	2	4	18-0-0				22-012	
F18	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	6-0-0				Shipping	
F13	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	2-0-0				OSHAWA	
LVL/LSL (Dropped)										Sales Rep	R M	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length				Designer	
FH6	Versa-Lam LVL 2.1E 3100 SP	1.75	9.5	1	3	3	12-0-0				R O	
Joist (Flush)										Plotted	July 20, 2023	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length				Layout Name	
J7	AJS 140	2.5	11.875			23	20-0-0				VILLA 11-2	
J6	AJS 140	2.5	11.875			14	18-0-0				Job Path	
J5	AJS 140	2.5	11.875			8	16-0-0				8 \CUSTOMERS\GREENPARK\ZADORRA ESTATES	
J4	AJS 140	2.5	11.875			27	14-0-0				MODELS\VILLA 11\VILLA 11-2\FLOORS\VILLA	
J2	AJS 140	2.5	11.875			13	8-0-0				11-2\Jd	
J1	AJS 140	2.5	11.875			1	6-0-0					
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				Design Method	
Blocking										NBSO 2015 / CBC 2012		
Label	Description	Width	Depth	Qty	Piles	Pcs	Length				Building Code	
BLK1	AJS 140	2.5	11.875			Varies	56-0-0					
Hanger										Floor		
										Loads		
										Live		
Label	Pcs	Description	Skew	Slope	fasteners	fasteners	Member				40	
H1	1	HUS1.8/10			30 16d	10 16d					15	
H2	22	1/2F211			12 16d	1 8d x 1 1/4WS					360	
H3	1	HHS410			30 16d	10 16d					240	
<div>1. All blocking to be cut from 12' joists</div> <div>2. 2' &amp; 4' Lengths to be cut from 8' Length, 6' lengths to be cut from 12' Length</div> <div>3. Ends of joists to be laterally supported</div> <div>4. Packing of Steel beams and attachment by others</div> <div>5. Shower and water closet flange locations are approximate only; consult architectural drawing for exact locations</div> <div>6. Beams identified as "B" are dropped and supplied by others</div> <div>7. Install 2x4 blocking @ 24" o/c under parallel non-loadbearing walls</div> <div>8. Load transfer blocks to be installed under all point loads</div> <div>9. Refer to Multiple Member Connection Detail for ply to ply nailing or bolting requirements</div> <div>10. Hangers and Fasteners to be installed as per manufacturer</div> <div>11. Framing shown on this layout may deviate from architectural drawings. Arch / Eng to review and approve the deviation prior to construction</div> <div>12. Multi Ply beams with side loading to have all fasteners installed with the head on the side of the applied load</div> <div>13. Confirmation of adequate support &amp; anchorage of components is the responsibility of the building designer; suggested uplift connectors are as shown</div> <div>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</div>												360
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