

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.

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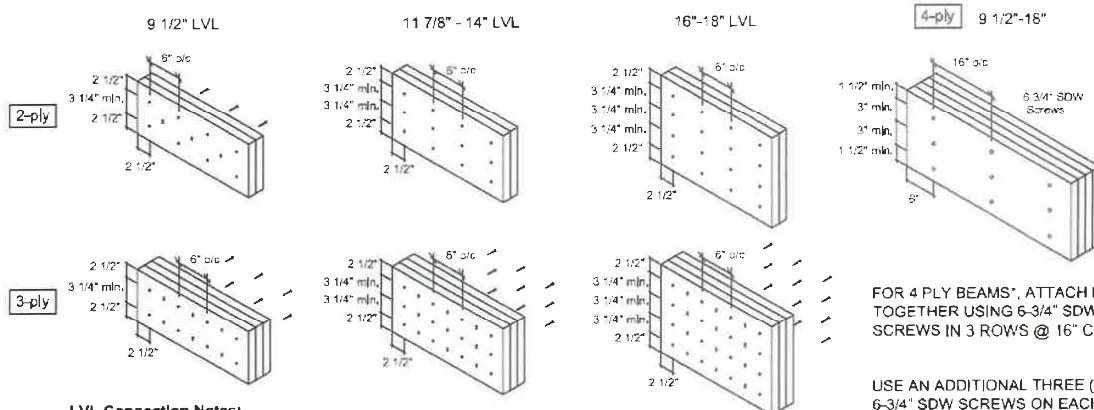
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MULTIPLE MEMBER CONNECTIONS FOR BEAMS SHOWN ON KOTT LAYOUTS



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



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

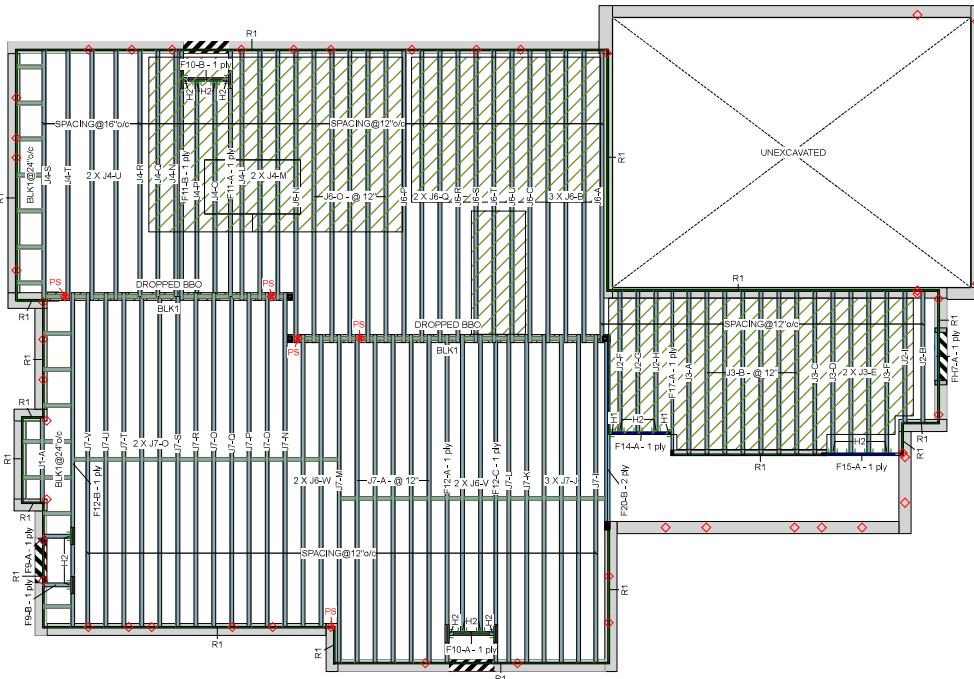
Last Revised January 13, 2023

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Ground Floor

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Ground Floor								JOB INFORMATION	
LVL/LSL (Flush)								Builder	GREENPARK GROUP
Label	Description	Width	Depth	Qty	Piles	Pcs	Length	Project	22-012
F20	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12-0-0	Shipping	OSHAWA
F17	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	10-0-0	Sales Rep	R M
F15	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	6-0-0	Designer	R O
F14	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	4-0-0	Plotted	July 21, 2023
F17	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	4-0-0	Layout Name	VILLA 11-3
F17	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875			1	4-0-0	Job Path	8 \CUSTOMERS\GREENPARK\ZADORRA ESTATES WILCOXSVILLA 11\WILLA 11-3\FLOORS\WILLA 11-3.dwg
Joist (Flush)								DESIGN CRITERIA	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length	Ground Floor	Design Method
F12	AJS 140	2.5	11.875			3	20-0-0	Building Code	LSD (Canada)
F11	AJS 140	2.5	11.875			2	14-0-0	Building Code	NBCO 2015 / CBC 2012
F10	AJS 140	2.5	11.875			2	4-0-0	Floor Loads	
F9	AJS 140	2.5	11.875			2	2-0-0	Dead	43
J7	AJS 140	2.5	11.875			24	20-0-0	Deflection Joist	15
J6	AJS 140	2.5	11.875			22	18-0-0	LL Span /	360
J4	AJS 140	2.5	11.875			12	14-0-0	TL Span /	240
J3	AJS 140	2.5	11.875			12	10-0-0	Deflection Flush Girder	
J2	AJS 140	2.5	11.875			5	8-0-0	LL Span /	360
J1	AJS 140	2.5	11.875			1	6-0-0	TL Span /	240
Rim Board								Deflection Dropped Girder	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length	LL Span /	360
R1	Notford Rimboard Flux 1.125 X 11.875	1.125	11.875			14	12-0-0	TL Span /	240
Blocking								Deflection Header	
Label	Description	Width	Depth	Qty	Piles	Pcs	Length	LL Span /	360
BLK1	AJS 140	2.5	11.875	1191		Veries	65-0-0	TL Span /	240
Hanger								Decking	
								Thickness	SPF Plywood
								Fastener	3/4"
								Vibration	Nailed & Glued
								CCMC References	
								Kott Inc.	
								3228 Moodie Dr, Ottawa	
								14 Anderson Blvd, Unbridge	
								Ontario	
								613-838-2775 /	
								905-642-4400	

Legend
PS Point Load Support
Load from Above
Wall

Installation Guide



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

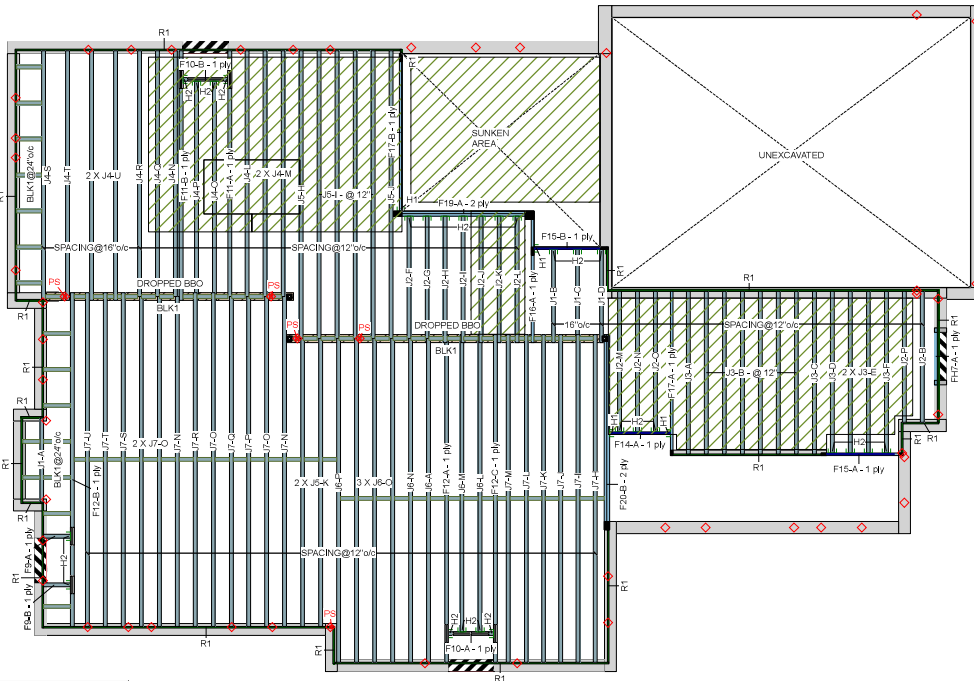
Hatch Area represents where
additional load has been applied.
(e.g. 5 psf for ceramic tile)

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Ground Floor

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Ground Floor										JOB INFORMATION	
LVL/LSL (Flush)										Builder	
F20	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875	1	2	2	124-0		GREENPARK GROUP	
F17	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875			2	104-0		Project	
F19	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875	1	2	2	84-0		Shipping	
F16	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875			1	84-0		Sales Rep	
F15	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875			2	64-0		Designer	
F14	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875			1	44-0		Plotted	
FH7	Versa-Lam LVL	2.1E 3100 SP	1.75	11.875			1	44-0		Layout Name	
Joist (Flush)										Job Path	
F12	AJS 140		2.5	11.875			3	204-0		8 CUSTOMERS GREENPARK ZADORRA ESTATES	
F11	AJS 140		2.5	11.875			2	144-0		MODELS VILLA 11 VILLA 11-3 FLOORS SINK VILL	
F10	AJS 140		2.5	11.875			2	44-0		DESIGN CRITERIA	
F9	AJS 140		2.5	11.875			2	24-0		Ground Floor	
F7	AJS 140		2.5	11.875			18	204-0		Design Method	
J6	AJS 140		2.5	11.875			8	184-0		Building Code	
J5	AJS 140		2.5	11.875			8	164-0		Floor	
J4	AJS 140		2.5	11.875			12	144-0		Loads	
J3	AJS 140		2.5	11.875			12	104-0		Live	
J2	AJS 140		2.5	11.875			12	84-0		Dead	
J1	AJS 140		2.5	11.875			4	64-0		Deflection Joist	
Rim Board										Deflection Flush Girder	
R1	Horizontal Rim Board	Plus 1.125 X 11.875	1.125	11.875			12	124-0		Deflection Dropped Girder	
Blocking										Deflection Header	
BLK1	AJS 140		2.5	11.875	LinF1		Varies	68-0		Decking	
Hanger										Decking	
										Thickness	
H1	4	HUS1.81/10					30 16d	10 16d		Fastener	
H2	27	LF2511					12 10d x 1 1/2	1 8d x 1 1/4 WS		Vibration	
										CCMC References	
										Kott Inc.	
										3228 Moodie Dr, Ottawa	
										14 Anderson Blvd, Uxbridge	
										Ontario	
										613-338-2775 / 905-642-4400	
										Legend	
										PS Point Load Support	
										Load from Above	
										Wall	

Installation Guide



(Open your phone's camera and
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Hatch Area represents where
additional load has been applied.
(e.g. 5 psf for ceramic tile)

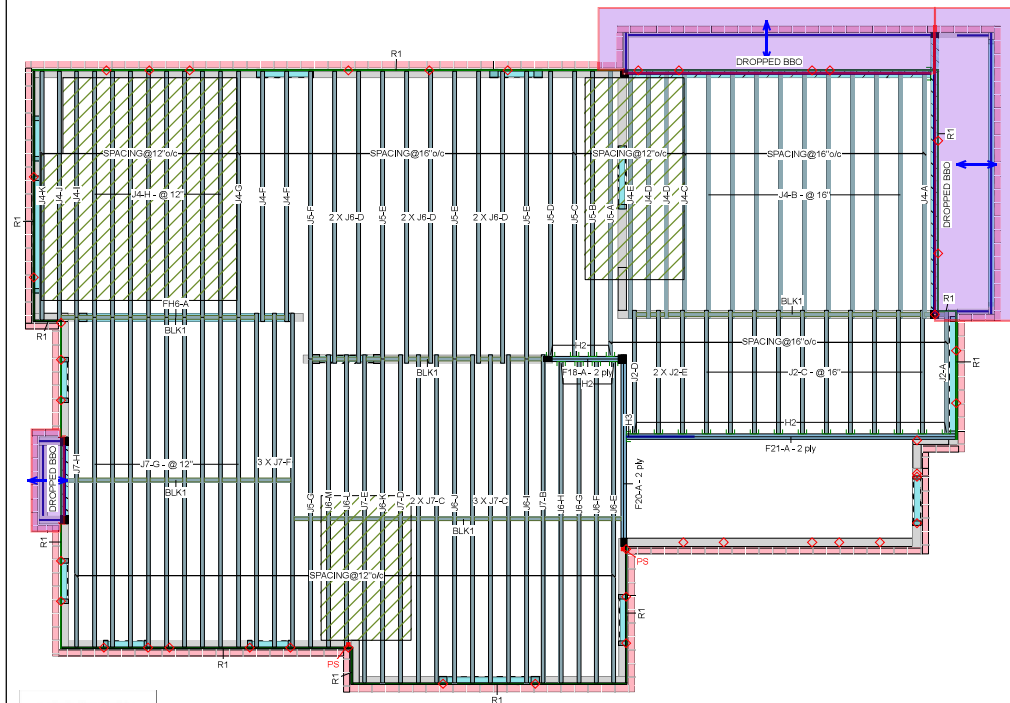
PS Point Load Support
Load from Above
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Second Floor

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Second Floor										JOB INFORMATION	
LVL/LSL (Flush)										Builder	
Label	Description	Width	Depth	Qty	Pieces	Pcs	Length			GREENPARK GROUP	
F21	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	20-0-0			Project	
F20	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	12-0-0			22-012	
F18	Versa-Lam LVL 2.1E 3100 SP	1.75	11.875	1	2	2	6-0-0			Shipping	
										OSHAWA	
LVL/LSL (Dropped)										Sales Rep	
Label	Description	Width	Depth	Qty	Pieces	Pcs	Length			R M	
FH8	Versa-Lam LVL 2.1E 3100 SP	1.75	9.5	1	3	3	12-0-0			Designer	
										R O	
Joist (Flush)										Plotted	
Label	Description	Width	Depth	Qty	Pieces	Pcs	Length			July 21, 2023	
J7	AJS 140	2.5	11.875			21	20-0-0			Layout Name	
J6	AJS 140	2.5	11.875			15	18-0-0			VILLA 11-3	
J5	AJS 140	2.5	11.875			9	16-0-0			Job Path	
J4	AJS 140	2.5	11.875			28	14-0-0			8 CUSTOMERS GREENPARK ZADORRA ESTATES	
J2	AJS 140	2.5	11.875			14	8-0-0			MICHELLESVILLA 11 VILLA 11-3 FLOORS VILLA 11-3 Jd	
Rim Board										DESIGN CRITERIA	
Label	Description	Width	Depth	Qty	Pieces	Pcs	Length			Second Floor	
R1	Norbord Rimboard Plus 1.125 X 11.875	1.125	11.875			13	12-0-0			Design Method	
										LSD (Canada)	
Blocking										Building Code	
Label	Description	Width	Depth	Qty	Pieces	Pcs	Length			NBC 2015 / CBC 2012	
BLK1	AJS 140	2.5	11.875	LinFt	Varies	57-0-0				Floor	
Hanger										Loads	
										Live	
										40	
										Dead	
										15	
										Deflection Joist	
										LL Span /	
										240	
										LL Span /	
										360	
										LL Span /	
										240	
										Deflection Dropped Girder	
										LL Span /	
										240	
										LL Span /	
										360	
										LL Span /	
										240	
										Decking	
										SPF Plywood	
										Thickness	
										5/8"	
										Fastener	
										Nailed & Glued	
										Vibration	
										Ceiling:	
										Gypsum 1/2"	
CCMC References											
Boise - 12472-R, 12787-R											
LP - 12412-R, Roseburg - 13310-R											
Forex - 14058-R											
Kott Inc.											
3228 Moodie Dr, Ottawa											
14 Anderson Blvd, Uxbridge											
Ontario											
613-338-2775 /											
905-642-4400											

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