



Exte

Exterior Elevation Front SCALE 1/4"=1'-0" GENERAL NOTES: GRADE PER SITE CONDITIONS PER BUILDER, CRAMLSPACE MASONRY FOUNDATION, ELEVATION SET TO SITE CONDITIONS PER BUILDER, STEPS AND RAILINGS BER BUILDER TO SITE CONDITIONS

MATERIALS NOTES:

-ROOF:ASPHALT SHINGLES, RIDGE VENTING -SIDING: VINYL OR CEMENT BOARD PER BUILDER -FOUNDATION: MASONRY CRAML WITH BRICK AND STONE FACADE





Exterior Elevation Back SCALE 1/8"=1'0"











<sup>-</sup> Working Plan View<sup>-</sup>





DESIGN BY:
GREAT BOUTH BUILDERS, INC.       BREAT BOUTH BUILDERS, INC.       KENISION TABLE       NOMBER     DESCRIPTION       JAN     JAN       JAN     JAN
PLAN 2L-2931 (2931 ) HTD. SQ. FT. OPEN FOYER (W/ CLOSED FOYER 3009 SF. HTD.) 2- STORY, 2- CAR GARAGE SIDE OR FRONT LOAD OPTIONS
2ND. FLOOR LAYOUT
DRAWINGS PROVIDED BY: Great South Builders, Inc. Karelian Homes, Inc. Pittsboro, NC 27312 Copyright, all rights reserved
DATE: 6/26/2023 SCALE: 1/4"=1'-0" SHEET: <b>3</b>

-WINDOW MINIMUM FENESTRATION: U: 0.35 Solar Heat Gain (SHGC): 0.30 -INSULATION MINIMUM EFFICIENCY: FLOORS: R-19 WALLS: R-15 CEILINGS: R-38

NOTES: 2ND FL GSB Plan #2L-2937

(\*BONUS HEADER SET AT 102" A.U.F.\*)

-ROOF OVERHANGS 12"

-ALL Non load bearing headers 2-2×6 -FACIA" 2×6" all GABLES only, 2×4" all FLAT areas -FRAME BATHTUBS at 5'-0"

- for specific MFGR INSTRUCTIONS

-ROOF Pitch MAIN 10/12, GARAGE 12/12, PORCH 3/12, DORMERS 12/12

- -TEMPERED glass in STAIRWELL window, BONUS WINDOW BOTTOM SASH -All walls 2x4, 8' nominal, use PRECUT studs -Window HEADER HEIGHT (2)-2X8) RAISED TO TOP PLATE U.N.O.

- -FOLLOW ROOF LAYOUT sheet and TRUSS DRAWINGS

ENERGY EFFICIENCY NOTES:



BUILDING AREA: TOTAL Heated: 2937SF (3009SF W/ OPT CLOSED FOYER) 1st FLOOR 1708SF 2nd FLOOR 1229SF (1301 W/ OPT CLOSED FOYER) GARAGE 545SF PORCH 1245F DECK 1925F





Norking Plan View

														35	-05-00	D										+
<u> </u>			<u> </u>									RIM1														
		15-03-08	M M		-03	-03	-03		L	-03	-03	-03	L-15	-07	-03	-03	-03	1-03	1-03	-03	-03	-03	1-03	-03	.03	-03
	00	_	7		-0 -7	- - -	1D	0 	1-0.	-0	-0.	1-0.	-0	-	-0.	-0	0-F F BK2	-0.	-0	-0	-0 -7	-0	-0	0 	1-0.	о Р
	32-00-					8-00	-00				8-0	8-00		MBING	5-	00-00			7-0	0-00			6-	09-00		
51-06-00		16-08-00		15,1	16-06-06 1F 11	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	ODD SPACING FOR PL	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	1FJ1	
	) <b>5-08-00</b>	<					¥					RIM <sup>*</sup>														
	13-10-00																									
							1:	3-02-0	0									22	2-00-0	0						
				 																	ł	58-08-	00			- 
					Pla 1F 1F 1F 1F 1F	otID 511 512 513 513 M1	Len 32- 28- 22- 22- 12-	gth 00-0 00-0 00-0 00-0 00-0	NI <sup>2</sup> F 0 1 0 1 0 1 0 1 0 1	40 JC Produ 1 7/3 1 7/3 1 7/3 1 7/3 1 7/3	Ct 8" N1 8" N1 8" N1 8" N1 8" N1 8" N1	5 / RI [-40x [-40x [-40x [-40x 1 7/8	MBC	MARD	BY C	OMT Plies 1 1 1 2 1	ECH s N 2 6 7 2 1	let Q 2 ,	ty	Fab <sup>-</sup> MFD MFD MFD MFD FF	Туре	_	Pli 10 Bł Bł	otID DB1 <1 <2	Ler 42- 2-( 1-(	<u>igtl</u> -00 )0-( )0-(

<u>Truss Placement</u> <u>Plan</u> SCALE: NTS

58-08-00



(Reference Engineered Truss Drawing) Do NOT Erect Truss Backwards

END REACTION (UP TO) REQ'D STUDS FOR (4) PLY HEADER

3400 1

6800 2

10200 3

13600 4

17000 5

Bob Lewis

DRAWN BY

05/15/23

DATE REV.

Seal Date

SEAL DATE

Quote #

#

QUOTE :

Bob Lewis

SALES REP.

J0423-1835

#

JOB



Indicates Left End of Truss (Reference Engineered Truss Drawing) Do NOT Erect Truss Backwards

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

END REACTION (UP TO) REQ'D STUDS FOR (4) PLY HEADER

3400 1

6800 2

10200 3

13600 4

17000 5

Bob Lewis

DRAWN BY

Bob Lewis

SALES REP.

J0423-1835

#

JOB

Quote #

#

QUOTE





Version 21.80.417 Powered by iStruct<sup>™</sup> Dataset: 22111501.1

	Clie	ent: Great South Bui	lders	Date:	4/24/2023			Page 2 of 17
	Proj	ject: 2L-2937/ 2 Story	/	Input by:				
isDesign	Add	dress:		Job Name	e: J0423-1835 Beams			
				Project #:	J0423-1835 Beams			
1FJ1 NI-40x <sup>4</sup>	11.875"	- PASSED		1	Level: Level			
			1					,
NORDIC	NORDIC	NORDIC	NORDIC	NORDIC	NORDIC	NORDIC		44 7/0"
1 SPE End Grain			2 SPE End Grain		3	SPE End Grain		<u>,11</u> 7/8°
					Ũ			
<del> </del>	16'6 3/8"		ť		15'2 3/8"		, 1/2 1/:	2"
/			31'8 3///"				,	
			510 3/4			I		
Member Information				Reactions UNI	PATTERNED lb (U	plift)		
Type: Joist		Application: Floo	r	Brg Direction	Live Dea	d Snow	Wind	Const
Spacing: 19.2" o.c.		Design Method: ASE	)	1 Vertical	434 10	0 0	0	0
Moisture Condition: Dry		Building Code: IBC	IRC 2015	2 Vertical	1215 30	04 0	0	0
Deflection LL: 480		Load Sharing: No		3 Vertical	381 9	95 0	0	0
Deflection IL: 240		Deck: 3/4 / Floo	APA Rated Sturd-I- rPlywood Nailed					
Temperature: Temp <= 100°	-	and	Glued					
				Bearings				
				Bearing Length	n Dir Cap Rea	ct D/L lb Total	Id Case	Id Comb
				1 - SPF 7.250"	Vert 40%	08 / 482 591	L	D+L
				End				
Analysis Results				Grain				
Analysis Actual I	Location Allo	owed Capacity (	Comb. Case	2 - SPF 5.250"	Vert 44% 30	04 / 1218 1522	LL	D+L
Neg Moment -2265 ft-lb	16'6 3/8" 376	60 ft-lb 0.602 (60%) [	D+L LL	Grain				
Unbraced -2265 ft-lb	16'6 3/8" 228	39 ft-lb 0.989 (99%) [	D+L LL	3 - SPF 7.250"	Vert 37%	95 / 450 545	_L	D+L
Pos Moment 1872 ft-lb	7'4 9/16" 376	60 ft-lb 0.498 (50%) [	D+L L_	End				
Shear 781 lb	16'6 3/8" 148	30 lb 0.528 (53%) [	D+L LL	Grain				
LL Defl inch 0.174 (L/1100)	8'2" 0.40	00 (L/480) 0.436 (44%) L	. L_					
TL Defl inch 0.207 (L/928)	8'1 1/16" 0.79	99 (L/240) 0.259 (26%) [	D+L L_					
Design Notes								
1 Provide support to prevent latera	al movement an	nd rotation at the end bear	ings. Lateral support	1				
may also be required at the inter	ior bearings by	the building code.						
ID Load Type		cation Trib Width	Dead 0.9 Live	1 Snow 1 15	Wind 1.6 Const 1.2	5 Comments		
1 Uniform	200	1-7-3	10 PSF 40 P	SE OPSE		=		
1 Onioni		1-7-5	101 31 401 3	51 0151	0101 0101			
						T		
Notes	Handling &	Installation	by attached sheathing or notes	as specified in engineering	Manufacturer Info	Comtech Reilly Ro	ا Dad Industrial Park	P.O. Box 40408, N
It is the responsibility of the customer and/or contractor to ensure the component suitability of the intended explicitly and to use a suitability of the	the 1. Engineered v the Damaged pro	wood products must not be cut or drille oducts shall not be used.	d		Nordic Structures 1100 Avenue des Canadier	USA 28309	0707	
linended application and to verify the dimensions a loads.	anu 2. Reter to the l construction member const	details, hole specifications, multipl nections, and handling guidelings	e-		Montréal, Suite 100 Montreal, Québec, Canada	910-864 H3B 2S2	-8/8/	
Engineered Wood Products     1. Dry service conditions, unless noted otherwise	<ol> <li>Provide later</li> <li>lateral displace</li> </ol>	ral support at bearing points to preve accement and rotation.	nt		(866) 871-3418			
<ol><li>No treatment with fire-retardant or other streng reducing chemicals.</li></ol>	ponding.	f, provide proper drainage to preve	nt		www.nordic.ca APA PR-L274C		COPT	
	<ol><li>Design assur</li></ol>	mes top flange to be laterally restraine	This design is valid	until 11/3/2024				

		Client: Great South	Builders	Date:	4/24/2023			Page 3 of 17
	Design	Project: 2L-2937/2	Story	Input b	y:			
	Design	Address:		Job Na	me: J0423-1835 B	eams		
				Project	#: J0423-1835 E	eams		
1DB1	Kerto-S LVL	1.750" X 9.2	250" 2-Ply	- PASSEI				
	2		1					
ALC: NOT A				Salar and a second high		and the second second second		9-1/4"
1 SPF En 2 SF	d Grain 3 SPF PF EndlGrain	End Grain 4 SPF E	ind Grain 5 SI	۶ End Grain ا	6 SPF End G	ain 7 SPF End	Grain	
5'	7'1"	6'9"	7'3"		8'	7'3"		1/2"
	· · · ·		44!4"					
			414				I	
Member In	formation	1		Reactions U	NPATTERNED	lb (Uplift)		
Type:	Girder	Application:	Floor	Brg Direction	n Live	Dead	Snow Wind	Const
Piles: Moisture Con	2 dition: Drv	Design Method: Building Code:	ASD IBC/IRC 2015	1 Vertical	1636	423	0 0	· 0
Deflection LL	: 480	Load Sharing:	No	2 Vertical	5125	1324	0 0	) U
Deflection TL	: 240	Deck:	Not Checked	3 Vertical	5465	1404	0 0	) 0
Importance:	Normal - II			5 Vertical	6196	1601	0 0	) 0
Temperature:	Temp <= 100°F			6 Vertical	6557	1694	0 0	) 0
				7 Vertical	2504	647	0 0	) 0
				Bearings				
				Bearing Len	ath Dir. Car	. React D/L lb	Total Ld. Case	Ld. Comb.
Analysis Re	esults			1 - SPF 8.00	00" Vert 119	6 415 / 2213	2628 L_L_L_	D+L
Analysis	Actual Location	Allowed Capacity	Comb. Case	End				
Neg Momen	t -6184 ft-lb 34'1"	' 12542 ft-lb 0.493 (49	%) D+L L_L_L	- 2-SPE 16.0	100" Vert 15º	6 1336 / 5717	7054	D+I
Unbraced	-6184 ft-lb 34'1"	' 6195 ft-lb 0.998 (100%)	D+L L_L_L	End				5 2
Pos Momen	t 4387 ft-lb 30' 1/16"	' 12542 ft-lb 0.350 (35'	%) D+L L_L_L	Grain				
Unbraced	4387 ft-lb 30' 1/16"	4394 ft-lb 0.998	D+L L_L_L	3 - SPF 16.0	000" Vert 179	6430 / 6430	7891 _LL_L_	D+L
		(100%)		Grain				
Shear	3020 lb 32'7 3/4"	6907 lb 0.437 (44)	%)D+L L_L	4 - SPF 16.0	000" Vert 179	6 1411 / 6587	7997 L_LL_L	D+L
TL Defl inch	0.100 (L/902) 30 11/10 0.122 (L/789) 30' 9/16"	0.200 (L/480) 0.332 (33	%) L L_L_L_ %) D+I I I I	- End Grain				
		0.400 (L/240) 0.004 (00		5 - SPF 16.0	000" Vert 189	6 1596 / 7045	8641 _L_LL_	D+L
1 Provide su	tes	ent and rotation at the end	hearings. Lateral suppo	End				
may also b	be required at the interior bearing	ngs by the building code.			100" Vert 19ª	6 1704 / 7045	8749	D+I
2 Girders are	e designed to be supported on	the bottom edge only.	6	End		110477040	0/43 L_L_LL	DIE
4 Top loads i	must be supported equally by a	all plies.	3.	Grain				
5 Top must b	be laterally braced at a maximu	m of 17'6 3/16" o.c.		7 - SPF 8.00	00" Vert 159	642/2914	3556 _L_L_L	D+L
6 Bottom mu 7 Lateral sle	ist be laterally braced at a max nderness ratio based on single	imum of 12'2" o.c.		Grain				
ID	Load Type	Location Trib Width	Side Dead 0	.9 Live 1 S	now 1.15 Wind	1 1.6 Const. 1.	.25 Comments	
1	Uniform		Top 10 Pl	.F 40 PLF	0 PLF 0	PLF 0 P	ΊLF	
2	Uniform		Top 190 PL	.F 762 PLF	0 PLF 0	PLF 0 P	'LF 1FJ1	
	Self Weiaht		7 Pl	.F				
			,					
Notes	che	micals	6. For flat roofs provid	e proper drainage to preven	Manufacturer Infe	)	Comtech Reilly Road Industrial Pa	rk P.O. Box 40408 N
Calculated Structured structural adequacy	d Designs is responsible only of the data of this component based on the	ling & Installation	ponding	-	Metsä Wood 301 Merritt 7 Build	ing 2nd Floor	USA 28309	
design criteria and responsibility of the	d loadings shown. It is the 2. Reference of the interded regardless of the	er to manufacturer's product info arding installation requirements,	ormation multi-ply		Norwalk, CT 0685	1	910-864-8787	
application, and to ve	rify the dimensions and loads. app	ening details, beam strength values, a rovals naged Beams must not be used	nd code		www.metsawood.c	om/us		
1. Dry service condit	tions, unless noted otherwise ated with fire retordant or correction 5. Prov	ign assumes top edge is laterally restrain vide lateral support at bearing points	ed to avoid				Com	есн
<ol> <li>LVL not to be treat</li> </ol>	ated with the relardant or corrosive later	ral displacement and rotation	This design is va	alid until 11/3/2024				

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		Client:	Great South Builders		Date:	4/24/2023			Page 4 of 17
Tis	Design	Address:	2L-2931/ 2 Story		Job Name	e: J0423-1835 Bea	ms		
	-				Project #:	: J0423-1835 Bea	ms		
GDH	Kerto-S LVL	1.750"	X 11.875" 2	2-Ply - P	PASSED	Level: Level			
			1					m	- <i>i</i>
	Contraction of the second seco	M. C. M.	all a star	T	AL AS	- The	Charles (Charles)	e W	11 7/8"
	1 SPF End Gr	ain				2 SPF End Grain			- <b>/</b>
/ <u>/</u>			23'5	;"					/2"
/ <u>/</u>			23'5	5"					
			200						
Member In	formation				Reactions UN	PATTERNED Ib	(Uplift)		
Туре:	Girder	Applica	tion: Floor		Brg Direction	Live	Dead Sno	w Wind	Const
Plies: Moisture Con	2 dition: Drv	Design	Method: ASD	15	1 Vertical	2517	2625	0 0	0
Deflection LL:	480	Load S	haring: No	10	2 Vertical	2517	2625	0 0	0
Deflection TL:	240	Deck:	Not Checke	d					
Importance: Temperature:	Normal - II Temp <= 100°F								
Temperature.					Bearings				
					Bearing Lengt	h Dir. Cap.	React D/L lb T	otal Ld. Case	Ld. Comb.
					1 - SPF 42.500 End	0" Vert 4%	2625 / 2517 5	5143 L	D+L
Analysis Re	sults				Grain	ou ), , , , , , , , , , , , , , , , , , ,	0005/05/7		<b>D</b> .1
Analysis	Actual Loca	ation Allowed	Capacity Comb.	Case	End	J <sup>°</sup> Vert 4%	2625/251/ 5	0143 L	D+L
Unbraced	14872 ft-lb 11'8	5 1/2" 19911 π-ιο 5 1/2" 14883 ft-lb	0.747 (75%) D+L 0.999 D+L	L	Grain				
		0/01 0007 1	(100%)						
Shear	3162 lb 4'6 0 384 (l /515) 11'8 9	9/16" 0 411 (I /48)	0.357 (36%) D+L	L					
TL Defl inch	0.784 (L/252) 11'8	9/16" 0.823 (L/24	0) 0.952 (95%) D+L	L					
Design Not	es				]				
1 Provide su mav also b	port to prevent lateral mo e required at the interior b	ovement and rotation earings by the built	on at the end bearings. La ding code.	ateral support					
2 Girders are	designed to be supported	d on the bottom ed	ge only.						
4 Top loads r	nust be supported equally	by all plies.	clurer's details.						
5 Top must b 6 Bottom mu	e laterally braced at a ma st be laterally braced at ei	ximum of 5'3 5/8" o nd bearings	D.C.						
7 Lateral sler	nderness ratio based on s	ingle ply width.							
ID	Load Type	Location	Trib Width Side	Dead 0.9	Live 1 Sno	ow 1.15 Wind 1	.6 Const. 1.25	Comments	
1	Uniform		Гор	215 PLF	215 PLF	0 PLF 0 P	LF 0 PLF		
	Sell Weight			3 F L F					
							1 -		
Notes Calculated Structured	Designs is responsible only of the	chemicals Handling & Installat	6. For por	r flat roofs provide p nding	proper drainage to prevent	Manutacturer Info Metsä Wood	Re US	meen illy Road Industrial Park A	P.O. Box 40408, N
structural adequacy design criteria and responsibility of the	of this component based on the loadings shown. It is the sustomer and/or the contractor to	1. LVL beams must not be 2. Refer to manufactur	cut or drilled er's product information			301 Merritt 7 Building Norwalk, CT 06851	, 2nd Floor 28 91	309 0-864-8787	
ensure the comport application, and to ver	ent suitability of the intended ify the dimensions and loads.	fegaroing installation fastening details, beam approvals	strength values, and code			(800) 622-5850 www.metsawood.com	n/us		
1. Dry service condit	ons, unless noted otherwise	<ol> <li>Damaged Beams must n</li> <li>Design assumes top edg</li> <li>Provide lateral support</li> </ol>	ot be used e is laterally restrained at bearing points to avoid					Com	есн
<ol> <li>LVL not to be treat</li> </ol>	ted with the retardant or corrosive	lateral displacement and	rotation Th	nis design is valid	l until 11/3/2024				

CSD DESIGN

		(	Client:	Great South I	Builders		Date:	: •	4/24/202	3					Page 5 of 17
Tis	Design	F	Project: Address:	2L-2937/ 2 St	lory		Input Job N	by: Name	10423-18	35 Beau	ms				
		,	luurooo.				Proje	ect #:	J0423-18	335 Bear	ns				
2FB1	Kerto-S L	VL 1	.750"	X 14.00	)0" 2·	-Ply - F	PASSED	Lev	el: Level						
		2													
					<u>           </u>									т	$\prec$
														M	
	al and a second	- Mine	- Aller			17			CA.		Magazi	1.10	-	M	1'2"
1 SPF En	id Grain										2 SPF E	End Gra	in		
/					16'8 1/2"	,									1/2"
/ <u>/</u>					16'8 1/2'	"							/	1 1-	
					100 1/2								·		
Member In	formation						Reactions		TTFRN	FD lb	(Unlif	t)			
Туре:	Girder		Applicati	on: F	loor		Brg Directi	on	Live		Dead	-, Sr	างพ	Wind	Const
Plies:	2		Design N	Aethod: A	SD		1 Vertical	I	332		2113		0	0	0
Moisture Con	dition: Dry · 480		Building	Code: IE aring: N	BC/IRC 2015		2 Vertical	I	337		2145		0	0	0
Deflection TL:	: 240		Deck:	n N	lot Checked										
Importance:	Normal - II														
Temperature:	Temp <= 100	)°F					Bearings								
							Bearing Le	ength	Dir.	Cap. F	React D/	'L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF 3.	500"	Vert	24%	2113 /	332	2445	L	D+L
Analysis Re	esults						_ End Grain								
Analysis	Actual	Location A	Allowed	Capacity	Comb.	Case	2 - SPF 5.0	000"	Vert	17%	2145 /	337	2482	L	D+L
Moment	9584 ft-lb	8'3 1/2" 2	26999 ft-lb	0.355 (35%	) D+L	L	Grain								
Unbraced	9584 ft-lb	8'3 1/2" 9	9597 ft-lb	0.999 (100%)	D+L	L									
Shear	2028 lb	1'5 1/2"	10453 lb	0.194 (19%	) D+L	L									
LL Defl inch	0.041 (L/4711)	8'3 9/16" (	0.403 (L/480	) 0.102 (10%	) L	L									
TL Defl inch	0.303 (L/639)	8'3 9/16" (	0.806 (L/240	) 0.376 (38%	) D+L	L	4								
1 Provide su	tes	ral movement	t and rotation	at the end b	earings Late	ral support									
may also b	be required at the inte	erior bearings	by the build	ing code.	ouringo. Eutor										
2 Girders are 3 Multiple pli	e designed to be sup es must be fastened	ported on the I together as p	e bottom edg per manufac	e oniy. turer's details											
4 Top loads r	must be supported e	qually by all p	olies.	"											
6 Bottom mu	ist be laterally brace	d at end bear	ings.	0.0.											
7 Lateral slei	nderness ratio base	d on single pl ۱	y width.	Trib Width	Sido	Dood 0.0	Livo 1	Spow	15	Wind 1	6 Con	ot 1 25	Corr	monto	
1	Uniform	L		1-0-0	Top	10 PSF	40 PSF	3110W 01	PSF	0 PS	SF	0 PSF	:	ments	
2	Uniform				Тор	234 PLF	0 PLF	0	PLF	0 PL	.F	0 PLF	WAL	.L	
	Self Weight					11 PLF									
												r	Const- 1		
Notes Calculated Structured	Designs is responsible only	chemica of the <b>Handlind</b>	us g & Installatio	n	6. For flat ponding	at roofs provide p g	roper drainage to prev	vent Ma	nutacture	er Info			Comtech Reilly Road USA	1 Industrial Par	k P.O. Box 40408, M
structural adequacy design criteria and responsibility of the	of this component based of d loadings shown. It is customer and/or the contract	n the 1. LVL bea the 2. Refer	ms must not be cu to manufacturer	t or drilled 's product infor	mation			30 No	1 Merritt 7 rwalk, CT	Building, 06851	2nd Floor		28309 910-864-87	787	
ensure the compor application, and to ve	rify the dimensions and loads.	ended fastening approva	y installation g details, beam s ls	requirements, m trength values, and	code			(80 ww	0) 622-58 w.metsaw	50 /ood.com	/us	F			
1. Dry service condit	tions, unless noted otherwise	<ol> <li>Damage</li> <li>Design a</li> <li>Provide</li> </ol>	ed Beams must not assumes top edge lateral support a	be used is laterally restrained t bearing points to	d avoid									omt	есн
<ol><li>LVL not to be treat</li></ol>	ated with fire retardant or corr	osive lateral di	isplacement and ro	otation	This o	design is valid	until 11/3/2024								CCH



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		Client:	Great South	Builders			Date:	4/24/202	3				Page 8 of 17
Tis	Design	Project: Address	2L-2937/ 2 S	tory			Input by:	e <sup>.</sup> .10423-1	835 Beams				
	-	/ 1441000					Project #:	J0423-1	835 Beams				
2FB3	Kerto-S LVL	. 1.75	50" X 14.	000" -	PASS	ED		Level: Level					
	2												
			1										
												M	1
												X	1'2"
		Mara Carpi						Terr				N	
1 Hanger (	US1.81/9.5 (Min))						2 SPF Er	nd Grain					
/			10'					,	·			×+1 3	8/4"
/ <u>/</u>			10'						•				
			10					I					
Member In	formation					Reacti	ons UN	PATTERN	IED lh (Un	lift)			
Туре:	Girder	Арр	lication: F	loor		Brg [	Direction	Live	Dead		Snow	Wind	Const
Plies:	1	Des	ign Method: A	SD		1 \	/ertical	198	1237		0	0	0
Moisture Cone	dition: Dry	Buil	ding Code: I	BC/IRC 2015	5	2 \	ertical	202	1258		0	0	0
Deflection TL:	240	Dec	k: N	lot Checked									
Importance:	Normal - II												
Temperature:	Temp <= 100°F					Boarin							
						Bearin	ng Lengt	h Dir	Cap React	D/L lb	Total	Id Case	Id Comb
						1 -	1.500"	Vert	39% 123	7 / 198	1435	L	D+L
Analysis De	It-					Hange	er S S S S S S S S S S S S S S S S S S S	N/a at	00% 405	0 / 000	4450		D.I
Analysis Re	Actual Loca	tion Allowed	Capacity	Comb	Case	End	'F 3.500	ven	28% 125	07 202	1459	L	D+L
Moment	3352 ft-lb 4'11	1/2" 13500 ft	lb 0.248 (25%	6011121 6) D+L	L	Grain							
Unbraced	3352 ft-lb 4'11	1/2" 5549 ft-l	0.604 (60%	6) D+L	L								
Shear	1044 lb 1'4	1/2" 5227 lb	0.200 (20%	6) D+L	L								
TL Defl inch	0.012 (L/9764) 411 0.086 (L/1349) 4'11	1/2" 0.241 (L 1/2" 0.481 (L	(240) 0.049 (5%) (240) 0.178 (18%)	) L 6) D+L	L								
Design Not	·····			-,	_	1							
1 Provide su	oport to prevent lateral mo	vement and rot	ation at the end b	earings. Late	eral support	1							
may also b 2 Fill all hand	e required at the interior be er nailing holes.	earings by the	ouilding code.										
3 Girders are	designed to be supported	on the bottom	edge only.										
4 Top must b 5 Bottom mu	e laterally braced at end b st be laterally braced at er	earıngs. d bearings.											
ID	Load Type	Location	n Trib Width	Side	Dead 0.9	Liv	ve 1 Sno	ow 1.15	Wind 1.6 C	onst. 1.2	25 Cor	nments	
1	Uniform		1-0-0	Тор	10 PSF	40	PSF	0 PSF	0 PSF	0 PS	SF		
2	Uniform			Тор	234 PLF	0	PLF	0 PLF	0 PLF	0 PL	_F WAI	_L	
	Self Weight				5 PLF								
Notes		chemicals		6. For fla	at roofs provide p	roper drainage	e to prevent	Manufactur	er Info		Comtech Reilly Ros	ıd Industrial Park	P.O. Box 40408. N
Calculated Structured structural adequacy	Designs is responsible only of the of this component based on the	andling & Insta	llation be cut or drilled	pondir	ng			Metsä Wood 301 Merritt 7	l ' Building, 2nd F	loor	USA 28309		
responsibility of the of ensure the comport	sustomer and/or the contractor to ent suitability of the intended	. Refer to manufa regarding installa fastening details. b	acturer's product infor tion requirements, m eam strength values, and	mation ulti-ply d code				Norwalk, CT (800) 622-58	06851 350		910-864-8	101	
application, and to ver	ity the dimensions and loads.	approvals Damaged Beams m Design assumes for	ust not be used edge is laterally restraine	d				www.metsav	vood.com/us				
<ol> <li>Dry service condit</li> <li>LVL not to be treat</li> </ol>	ons, unless noted otherwise ted with fire retardant or corrosive	Provide lateral sup lateral displacement	port at bearing points to and rotation	avoid This	design is valid	until 11/3/2	024				C	отт	есн
L					~								



		(	Client:	Great South E	Builders		Da	te:	4/24/202	23					Page	10 of 1
The second se	Destaur	I	Project:	2L-2937/ 2 St	ory		Inp	out by:								
19	Design	,	Address:				Jol	b Name	e: J0423-1	835 Bea	ms					
							Pro	oject #:	J0423-1	835 Bea	ms					
2FB4	Kerto-S L	VL 1	.750"	X 14.00	0" 2	2-Ply - F	PASSE	D	Level. Leve	•						
									3							
		2														
		2	and the second		1										1	_
														MV		
	a million	-			String Son	The second			and the second					MA	1	1'2"
	10 :		0.005		A CARGONIC STOCK			Section Section			4 005 1	- 10			4	_
1 SPF E	nd Grain		2 SPF	End Grain		3 SPF E	nd Grain				4 SPF E	ind Gra	iin			
1	4'10			1	3'		1		4	'10"					3 1/2"	
1					12'8"								_1			
Member In	formation		Applicat	ion: F	loor		Reaction	s UN			(Uplift	:)	2014	Wind		Const
Plies:	2		Design I	Method: A	SD		1 Verti	cuon	1558	; }	1407	31	0	vvind C	1	Const 0
Moisture Con	dition: Dry		Building	Code: IE	BC/IRC 2015	5	2 Verti	cal	2907	,	2626		0	C	1	0
Deflection LL	: 480		Load Sh	aring: N	0		3 Verti	cal	2907	,	2626		0	C	1	0
Deflection TL	: 240		Deck:	N	ot Checked		4 Verti	cal	1558	3	1407		0	0	1	0
Importance:	Normal - II															
Temperature:	Temp <= 100	)°F					Boarings									
							Bearings	1	- Di-	0			Tatal			
							Bearing	Lengt	h Dir. Vort	Cap.	APACE D/I	_ ID 570	Iotal	Ld. Case	La. C	Comp.
							End	3.500	ven	29%	13/3/1	579	2955	L_L	D+L	
Analysis Re	esults						Grain									
Analysis	Actual	Location	Allowed	Capacity	Comb.	Case	2 - SPF	3.500"	Vert	54%	2658 / 3	463	6121	LL_	D+L	
Neg Momen	t -2528 ft-lb	4'10" 2	26999 ft-lb	0.094 (9%)	D+L	LL_	Grain									
Unbraced	-2528 ft-lb	4'10" 9	9178 ft-lb	0.275 (28%	) D+L	LL_	3 - SPF	3.500"	Vert	54%	2658 / 3	463	6121	LL	D+L	
Pos Momen	t 2611 ft-lb	10'5 9/16"	26999 ft-lb	0.097 (10%	) D+L	L_L	End							-		
Unbraced	2611 ft-lb	10'5 9/16"	9178 ft-lb	0.285 (28%	) D+L	L_L	Grain									
Shear	2441 lb	9'1 3/4"	10453 lb	0.234 (23%	) D+L	_LL	4 - SPF	3.500"	Vert	29%	1375 / 1	579	2955	L_L	D+L	
LL Defl inch	0.008 (L/7132)	2'5 13/16"	0.115 (L/480	) 0.067 (7%)	L	L	Grain									
TL Defl inch	0.014 (L/3838)	10'2 5/16"	0.230 (L/240	) 0.063 (6%)	D+L	L										
Design Not	tes															
1 Provide su	pport to prevent late	ral movemen	t and rotatio	n at the end b	earings. Late	eral support	]									
2 Girders are	e required at the inte	ported on the	e bottom edo	ing code. ie only												
3 Multiple pli	es must be fastened	together as	per manufac	turer's details.												
4 Top loads i	must be supported e	qually by all p	plies.													
5 Top must b 6 Bottom mu	e laterally braced at ust be laterally brace	end bearings	S. Tinas													
7 Lateral sle	nderness ratio base	d on single pl	y width.													
ID	Load Type	l	Location	Trib Width	Side	Dead 0.9	Live 1	Sno	ow 1.15	Wind 1	.6 Cons	st. 1.25	i Corr	iments		
1	Uniform			1-0-0	Тор	10 PSF	40 PSF		0 PSF	0 P\$	SF	0 PSF	:			
2	Uniform				Near Face	95 PLF	378 PLF		0 PLF	0 PI	_F	0 PLF	: 2FJ4	Ļ		
3	Uniform				Тор	234 PLF	0 PLF		0 PLF	0 PI	_F	0 PLF	: WAL	L		
4	Uniform				Тор	287 PLF	287 PLF		0 PLF	0 PI	F	0 PLF	- B1			
	Self Weight					11 PLF										
												—				
Notes	Destant	chemica	als a 8 Installation		6. For f	flat roofs provide p ing	roper drainage to	prevent	Manufactu	rer Info		$\square$	Comtech Reilly Road	1 Industrial Pa	rk P.O. Box	x 40408, M
calculated Structured structural adequacy design criteria	of this component based of	n the 1. LVL bea	y or mistallation ams must not be cu	ut or drilled		-			301 Merritt	u 7 Building	, 2nd Floor		28309 210 964 C	797		
responsibility of the ensure the composition	customer and/or the contrac nent suitability of the inte	tor to 2. Refer tor to regardin ended factoria	to manufacture ng installation ng details beam of	rs product inforr requirements, mi strength values and	nation ulti-ply code				Norwalk, C (800) 622-5	F 06851 850		┝	JU-004-8/	07		
application, and to ve	rify the dimensions and loads.	approva 3. Damage	ed Beams must no	t be used					www.metsa	wood.com	i/us					
1. Dry service condit 2. LVL not to be tree	tions, unless noted otherwise ated with fire retardant or con	4. Design 5. Provide	assumes top edge lateral support a	is laterally restrained at bearing points to	avoid									om	ec	
		···- lateral d	isplacement and r	UIATION	This	s design is valid	until 11/3/2024									



			Client:	Great South E	Builders			Da	ate:	4/24/202	3				Page 12 of 1
Tie	Design		Project:	2L-2937/ 2 Sto	ory			Inp	out by:	. 10402.44					
	Design	·	Address:					Jo Pr	o Name	. J0423-18	335 Ве	ams			
2E 17		14 000	0" _ <b>D</b> A	SSED					L	_evel: Level	00 20				
21 37	111-408	14.000	U - F/	USSED											
		1	)												,
	THE ALL AND A	Kall I.	Vienter	AN DEAL		No. No.								₩ T	1
NORDI		AFIN SHI	NO	RDIC											4101
STRUCTURES	MILL STATE		SIRU	CTURES		NY									1.2.
														$\bowtie$	$\rightarrow$
1 Hanger (	US2.56/9.25 (Min	))			2 SPF										
		6'10	7/8"			1								12	1/2"
/		6'10	7/8"			$\rightarrow$									
•															
Manakarda	<b>(</b>						Dee					. (1]			
	loist		Applicati	ion: El	oor		Bra	Dire					Snow	Wind	Const
Spacing:	19.2" o.c.		Design N	Method: A	SD			Verti	cal	218		55	0	0	001131
Moisture Cond	dition: Dry		Building	Code: IB	C/IRC 2015		2	Verti	cal	224		56	0	0	0
Deflection LL:	480		Load Sh	aring: N	D										
Deflection TL:	240		Deck:	N	ot Checked										
Temperature:	Temp <= 1	00°F													
Temperature.		001					Bea	rings	;						
							Be	earing	Length	Dir.	Cap.	React D/L I	b Total	Ld. Case	Ld. Comb.
							1 -		1.500"	Vert	20%	55 / 21	8 273	L	D+L
							Ha	anger							
		Location	Allowed	Consoitu	Comb	Casa	2-	SPF	3.500"	Vert	19%	56 / 22	4 280		D+L
Moment	Actual 427 ft-lb	2'4 15/16"	4530 ft-lb		D+I	Lase									
Unbraced	427 ft-lb	3'4 15/16"	1638 ft-lb	0.260 (26%)	) D+L	L									
Shear	261 lb	1 3/4"	1730 lb	0.151 (15%)	, ) D+L	L									
LL Defl inch	0.009 (L/8380)	3'4 15/16"	0.163 (L/480	) 0.057 (6%)	L	L									
TL Defl inch	0.012 (L/6704)	3'4 15/16"	0.327 (L/240	) 0.036 (4%)	D+L	L									
Design Not	es						7								
1 Provide su	port to prevent la	teral movemen	nt and rotation	n at the end be	earings. Later	al support	1								
2 Fill all hang	er nailing holes.	nterior bearings	s by the build	ing code.											
3 Top flange	must be laterally b	praced at bearing	ngs.												
4 Bottom flan	ige must be latera	lly braced at be	earings.	Trib Width	Dood 0.0	Livo		now 1	15	Wind 1.6	Cons	+ 1.25 Co	monto		
1	Loau Type		LUCATION	1-7-3	10 PSF		: 1 G 3E		. 15		COIIS	0 PSE	ninents		
1	Official			1-7-5	10 - 3-	40 F C	51	UF	5	0-3-		UFSF			
										Manufactur	er Info		Comtech		
Notes It is the responsibil	ity of the customer and	d/or the 1. Enginee	g & Installatio ered wood products	o <b>n</b> s must not be cut or d	rilled.	ned sneatning or	as speci	ried in engi	neering	Nordic Struc	tures			ad Industrial Park	P.O. Box 40408, N
contractor to ensure intended application	the component suitability and to verify the dimension	ons and 2. Refer to	ed products shall no the latest version action details hole	or be used. of the installation guid specifications	de for Itiple-					1100 Avenue Montréal, Su	e des Ca lite 100	anadiens-de-	28309 910-864-	8787	
Engineered Wo	od Products	3. Provide	e lateral support at	handling guidelines. bearing points to pr	event					Montreal, Qu (866) 871-34	iébec, C	Canada H3B 2S	2		
<ol> <li>Dry service condit</li> <li>No treatment with reducing chomical</li> </ol>	ons, unless noted otherwis n fire-retardant or other s	se lateral of strength- 4. For flat	displacement and ro t roof, provide pro	otation. oper drainage to pr	event					www.nordic.	ca 4C				
reducing chemical	a.	ponding 5. Design	J. assumes top flang	e to be laterally restr	<sup>ained</sup> This d	esign is valid	l until 1	1/3/2024		AFA PR-L2/	40		C	OMT	есн
							-								

		С	client:	Great South E	Builders		Dat	e:	4/24/202	23				Page 13 of 1
	Design	Р	Project:	2L-2937/ 2 St	ory		Inpu	ut by:						
	Design	A	ddress:				Job	Name	: J0423-1	835 Bean	าร			
								ject #:	JU423-1	835 Bean	IS			
2FB5	Kerto-S LV	/L 1.	.750")	K 14.00	0. 2.	Ply - F	ASSEL	ין כ						
						3								
	2			1										
								-						$1 \neq 1$
													M	Λ
					CHE LAND				1984				L XIX	1'2"
	and the second s	Silline L	The state						and the second s				/ V	
1 SPF								23	SPF				<u> </u>	
11				9'8 1/2"					1				1	[]3 1/2"
1				9'8 1/2"					ſ					
Member In	formation						Reactions		PATTERN	IFD lb	(Uplift)			
Туре:	Girder		Applicatio	on: F	loor		Brg Direc	tion	Live	·	Dead	Snow	/ Wine	d Const
Plies:	2		Design M	lethod: A	SD		1 Vertic	al	2874		771	C	)	0 0
Moisture Con	dition: Dry		Building	Code: IE	8C/IRC 2015		2 Vertic	al	2874		771	C	)	0 0
Deflection LL:	480		Load Sha	aring: N	0									
Deflection TL:	240		Deck:	N	ot Checked									
Temperature:	Normai - II	F												
remperature.	1emp <= 100 1	F					Bearings							
							Bearing L	Lenath	n Dir.	Cap. R	eact D/L	lb To	tal Ld. Case	e Ld. Comb.
							1 - SPF 3	3.500"	Vert	70%	771 / 28	74 36	45 L	D+L
							2-SPF 3	3.500"	Vert	70%	771 / 28	74 36	45 L	D+L
Analysis Re	sults						·							
Analysis	Actual I	Location A	llowed	Capacity	Comb.	Case								
Moment	8031 ft-lb	4'10 1/4" 2	6999 ft-lb	0.297 (30%	) D+L	L								
Choraced	8031 π-ID 3368 lb	4°10°1/4° 1° 9'2" 1	1443 π-ID	0.702 (70%	) D+L	L								
	0 076 (I /1464)	03 I 1/10 1/4" 0	0455 ID 231 (L/480)	0.322 (32%	) D+L	L								
TL Defl inch	0.096 (L/1154)	4'10 1/4" 0	462 (1/240)	0.020 (00%	) D+I	1								
Decign Not	0.000 ( <u>L</u> ,,			0.200 (2170	, 2 2	-	1							
1 Provide su	<b>Les</b>	al movement	and rotation	at the end be	arings Later	al support	4							
may also b	e required at the inter	rior bearings	by the buildi	ng code.	Jannys. Later									
2 Girders are	e designed to be supp	orted on the	bottom edge	e only.										
4 Top loads r	nust be supported eq	ually by all pl	lies.	ulei s uetalis.										
5 Top must b	e laterally braced at e	end bearings.												
6 Bottom mu 7 Lateral sler	st be laterally braced	at end bearir	ngs. width											
ID	Load Type	I I	ocation T	rib Width	Side	Dead 0.9	Live 1	Sno	w 1.15	Wind 1	6 Const	. 1.25	Comments	
1	Uniform	-	1	-0-0	Тор	10 PSF	40 PSF		0 PSF	0 PS	F	0 PSF		
2	Uniform				Near Face	103 PLF	413 PLF		0 PLF	0 PL	F	0 PLF	2FJ3	
2	Uniform				Far Face	35 PLF	130 PLF			0 PI	F		2F 17	
5	Self Weight				i ui i uoo		1001 21		0121	012	•	0121		
	Sell Weight													
Notes		chemicals	s		6. For flat	t roofs provide n	roper drainage to p	revent	Manufactur	er Info		Com	tech	ark D.O. Boy 40400 M
Calculated Structured	Designs is responsible only of this component based on the	the Handling	& Installation	1 as della d	ponding	, p	. <u>3</u> P	ſ	Metsä Wood	ן 7 Duil-1	and Ele	USA	y rtoau muustriai Pa	air F.U. DUX 40408, N
design criteria and responsibility of the	d loadings shown. It is t customer and/or the contractor	the 2. Refer to regarding	to manufacturer's installation	or anned s product inform requirements m	nation Ilti-ply				Norwalk, CT	о Бинаілд, 106851	∠nu ⊨100ľ	910-	864-8787	
ensure the compor application, and to ver	nent suitability of the intend rify the dimensions and loads.	ded fastening approvals	details, beam st	rength values, and	code				(800) 622-58 www.metsav	850 wood.com/	us			
Lumber 1. Dry service condit	ions, unless noted otherwise	<ol> <li>Damaged</li> <li>Design as</li> </ol>	Beams must not ssumes top edge is	be used s laterally restrained	avoid									
2. LVL not to be treat	ated with fire retardant or corros	sive lateral dis	splacement and rol	ation	This c	design is valid	until 11/3/2024						com	есн

		С	lient:	Great South E	Builders		Dat	e:	4/24/202	3				Page 14 of 17
		Р	roject:	2L-2937/ 2 St	ory		Inpu	ut by:						
is	Design	A	ddress:				Job	Name	: J0423-18	35 Beams				
							Pro	ject #:	J0423-18	35 Beams				
2FB6	Kerto-S		1 750	" X 14	000" -	PASS	FD	I	Level: Level					
			1.700		- 000	IAUU								
2														
					3									
$\checkmark$			1										_	
													M	1
													IVI.	
	and the second				St in Star								IAI	1'2"
													$\square$	
1 SPF Er	nd Grain				2 SPF	F End Grain								/
4	-					-								
1		7	7'8 1/2"				1						1 11 :	3/4"
		7	7'8 1/2"				1							
L														
Member In	formation		-				Reactions	UNI	PATTERN	IED Ib (	Jplift)			
Туре:	Girder		Applica	tion: F	loor		Brg Direc	tion	Live	De	ead	Snow	Wind	Const
Plies:	1		Design	Method: A	SD		1 Vertic	al	1556	1	847	0	0	0
Moisture Cond	dition: Dry		Building	g Code: IE	3C/IRC 2015		2 Vertic	al	1611		426	0	0	0
Deflection LL:	480		Load S	haring: N	0									
Deflection 1L:	240		Deck:	N	ot Checked									
Importance:		۰ <b>۳</b>												
remperature:	1emp <= 100						Bearings							
							Dearing I	onatk	Dir	Can Ba	aat D/L lb	Tatal		Id Comb
								_engtr	1 DII.			10121	Lu. Case	La. Comb.
							Fnd	5.500	vert	00% 1	647 / 1550	3403	L	D+L
Analysis Re	sults						Grain							
Analysis	Actual	Location A	llowed	Canacity	Comb	Case	2-SPF 3	3.500"	Vert	40%	426 / 1611	2037	L	D+L
Moment	3472 ft-lb	3'10 1/4" 1:	3500 ft-lb	0 257 (26%	) D+I	I	End							
Unbraced	3472 ft_lb	3'10 1/4" 7	008 ft_lb	0.495 (50%	) D+I	-	Grain							
Shear	1824 lb	1'5 1/2" 5'	227 lh	0.349 (35%	) D+I	-								
	0.045 (1./1017)	3'10 5/16" 0	181 /1 //8/	0.040 (00%)	)	1								
TL Defl inch	0.057 (L/1516)	3'10 5/16" 0	362 (1/2/	0, 0,200 (20%)	) D+I	1								
	0.037 (L/1310)	3103/10 0.	.302 (L/24)	5) 0.150 (10%)	) D+L	L	ł							
Design Not	es						4							
1 Provide sup	port to prevent late	ral movement	and rotation	on at the end be	earings. Late	ral support								
2 Girders are	designed to be sup	ported on the	bottom ed	ge only.										
3 Top must b	e laterally braced at	end bearings.												
4 Bottom mus	st be laterally brace	d at end bearir	ngs.								-			
ID	Load Type	Lo	ocation	Trib Width	Side	Dead 0.9	Live 1	Sno	w 1.15	Wind 1.6	Const. 1.	25 Co	mments	
1	Uniform			1-0-0	Тор	10 PSF	40 PSF		0 PSF	0 PSF	0 P	SF		
2	Point		0-0-12		Far Face	1435 lb	0 lb		0 lb	0 lb	C	lb 3FE	33	
3	Part. Uniform	0-1-12	to 7-8-8		Far Face	95 PLF	378 PLF		0 PLF	0 PLF	0 P	LF 2FJ	14	
-	Self Weight					5 PLF								
	een worgn					0121								
Notes		chemicals	3		6. For fla	at roofs provide p	roper drainage to p	revent	Manufacture	er Info		Comtech	ad Industrial D	PO Boy 40400 M
Calculated Structured	Designs is responsible only	of the Handling	& Installati	on	pondin	g . F	J F	ſ	Metsä Wood	Dual P		USA 20200	aa maasmar Pari	
design criteria and responsibility of the	l loadings shown. It is	the 1. LVL beam the 2. Refer to	ns must not be o manufacture	ut or drilled er's product inform	nation				301 Merritt 7 Norwalk, CT	Building, 2r 06851	nd ⊢loor	28309 910-864-	8787	
ensure the compon application, and to ver	ent suitability of the inte ify the dimensions and loads	ended fastening	installation details, beam	strength values, and	code				(800) 622-58	50		<b>—</b>		
Lumber		3. Damaged	I Beams must n ssumes ton edge	ot be used e is laterally restrained	I									
<ol> <li>Dry service conditi</li> <li>LVL not to be treat</li> </ol>	ons, unless noted otherwise ted with fire retardant or corr	osive 5. Provide la lateral dis	ateral support	at bearing points to rotation	avoid	design is volid	until 11/2/2024					C	OMT	есн
<u></u>					INIS	uesiyn is valld	unun 11/3/2024							

			Client:	Great South E	Builders			Date:	:	4/24/202	3				Page 15 of 1
	Design		Project: 2	2L-2937/ 2 Ste	ory			Input	by:						
IS	Design		Address:					Job N	Vame	: J0423-18	335 Bea	ms			
								Proje	ect #:	J0423-18	335 Bea	ms			
2FJ8	NI-40x	11.87	5" - PA	SSED						evel: Level					
								]							
			1												
								7						$\bowtie$	$\uparrow$
Noen	IC I	15		NOP	nic	En	Care -								
STRUCTURE	S.	Ear	And the second s	STRUCTUR	RES 7Z	130	The last								11 7/8"
		13-60 MA		and and	i REAM	16									
					2 Hanger (II I	S2 56/9 25	(Min))	_							
					z Hanger (10	02.00/0.20	(((((((((((((((((((((((((((((((((((((((								
1			6'10 1/8"					1						1 12	1/2"
/ <i>/</i>			6'10 1/8"					1							
Manakara	<b>Ct</b> *						<b>D</b>					(11-1-6)			
wiemper in	Iormation		A				Kea						0	147	<u> </u>
Type: Specing:	JOIST		Application	סת: Fl Iethod: ^י	00r SD		Brg	Urecti	on '	Live			SNOW	vvind	Const
Moisture Con	lition: Drv		Building	Code: IB	SD SC/IRC 2015			Vertical	1	180		40	0	0	0
Deflection LL:	480		Load Sha	arina: No	0			vertical	I	179		45	0	0	0
Deflection TL:	240		Deck:	New York	ot Checked										
Importance:	Normal - II														
Temperature:	Temp <= 10	0°F													
							Bea	rings							
							Bea	aring Le	ength	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							1 -	SPF 3.5	500"	Vert	16%	46 / 186	232	L	D+L
A set at a Da	- 14-						2-	1.5	500"	Vert	17%	45 / 179	224	L	D+L
	Suits	1 4	A II	O an a site s	Querrali	0	На	nger							
Analysis	Actual	Location	Allowed		Comp.	Case									
Noment	353 TT-ID	3'5 13/16"	3760 π-ID	0.094 (9%)	D+L	L .									
Choor		33 13/10		0.238 (20%)	) D+L	L .									
Silear		00//0		0.147 (13%)	) D+L	L 1									
LL Dell Inch	0.010 (L/7039)	35 13/10	0.103 (L/400)	0.003 (0%)		L 1									
	0.013 (L/0127)	3 3 13/10	0.320 (L/240)	0.039 (4%)	DŦL	L	┥								
Design Not	es						4								
1 Provide su may also b	oport to prevent lat e required at the in	eral movemer	nt and rotation is by the buildi	at the end be na code.	earings. Later	al support									
2 Fill all hang	er nailing holes.	0	,	0											
3 Top flange	must be laterally b	raced at beari	ings.												
4 Bottom flar	ge must be lateral	ly braced at b	earings.	with \A/i altila	Deed 0.0	Live			- ,	Mind 1 C	Comot	1.05			
	Load Type		Location I		Dead 0.9	Live	1 3	10W 1.15	-		Const.		ments		
1	Uniform		1	-4-0	10 PSF	40 PS	s⊢	0 PSF	-	0 PSF	(	) PSF			
								ad in	elm e	Manufactur	er Info		Comtech		
Notes It is the responsibi	ity of the customer and/	Handlin or the 1. Engine	Ig & Installation ered wood products	<b>n</b> must not be cut or d	by attac notes.	mea sneathing or	as specifi	ea in engineer	ing	Nordic Struc	tures		<ul> <li>Reilly Roa</li> <li>USA</li> </ul>	ad Industrial Park	P.O. Box 40408, N
contractor to ensure intended application	the component suitability and to verify the dimension	of the Damag ns and 2. Refer t	jed products shall no to the latest version o	t be used. f the installation guid	de for					1100 Avenue Montréal Su	e des Car lite 100	nadiens-de-	28309 910-864-	8787	
loads. Engineered Wo	od Products	constru membe	uction details, hole er connections, and h	specifications, mu andling guidelines.	itiple-					Montreal, Qu	uébec, Ca	anada H3B 2S2			
<ol> <li>Dry service condit</li> <li>No treatment with</li> </ol>	ons, unless noted otherwise fire-retardant or other st	e lateral rength- 4. For fla	displacement and rot at roof, provide pro	ation. per drainage to pr	event					(866) 871-34 www.nordic.	r18 ca				
reducing chemical	s.	pondin 5. Design	g. 1 assumes top flange	to be laterally restr	ained	laaina :!! !	م الفسري	12/2024		APA PR-L27	4C			OMT	есн
L		9	, 9-	,	This d	iesign is valid	until 11	/3/2024							



		C	Client:	Great South E	Builders			Date:	4/24/202	3				Page 17 of 1
		F	Project:	2L-2937/ 2 St	ory			Input by	/:					
is	Design	A	Address:					Job Na	me: J0423-18	335 Beam	S			
Ţ.								Project	#: J0423-18	335 Beam	S			
2FB7	Kerto-S L	VL	1.750	" X 14.	000" -	PASS	ED		Level: Level					
				2										
1 SPF Er	21 and Grain 4'5" 4'5" formation	3 2 SPF En	d Grain				Poarti	ons III		IED Ib (	Inift)			1'2" 
	Circler		Applies	tion: E	loor								Mind	Canat
Plies:	1		Design	Method A	SD			/ortical	Z00	L	190 C	now	VIIIu	Const
Moisture Cond	dition: Drv		Building	a Code: IE	3C/IRC 2015			ertical	700		180	0	0	0
Deflection LL:	480		Load S	haring: N	0			Cilicai	700		109	0	0	0
Deflection TL:	240		Deck:	N	ot Checked									
Importance:	Normal - II													
Temperature:	Temp <= 100°F													
							Bearin	gs						
							Bearin	ng Leng	gth Dir.	Cap. R	eact D/L lb	Total	Ld. Case	Ld. Comb.
							1 - SP	F 3.50	0" Vert	17%	189 / 700	889	L	D+L
Analus': P	a		1				End Grain							
Analysis Re	suits			<u> </u>	<u> </u>			F 3 50	0" Vert	17%	189 / 700	889	I.	D+I
Analysis	Actual L	ocation A	Allowed	Capacity	Comb.	Case	End	1 0.00			100 / 100	000	-	5-2
Moment	788 ft-lb	2'2 1/2" 1	3500 ft-lb	0.058 (6%)	D+L	L	Grain							
Unbraced	788 π-ID	2.2 1/2" 1	1156 TT-ID	0.071 (7%)	D+L	L								
Snear	713 ID	1.5 1/2 5	0227 ID	0.136 (14%	) D+L	L .								
LL Defi inch	0.005 (L/9301)	2.2 9/16 0	).099 (L/48	0) 0.052 (5%)	L	L .								
I L Defi Inch	0.006 (L/7326)	2.2.9/16 0	).198 (L/24	0) 0.033 (3%)	D+L	L	-							
Design Not	Design Notes													
1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support														
2 Girders are	may also be required at the interior bearings by the building code. 2 Girders are designed to be supported on the bottom edge only													
3 Top must b	e laterally braced at er	nd bearings												
4 Bottom mu	st be laterally braced a	at end beari	ngs.		0.1		<u> </u>							
D	Load Type	L	ocation	Trib Width	Side	Dead 0.9	Liv	e 1 Si	now 1.15	Wind 1.6	Const. 1.2	5 Cor	nments	
1	Uniform			1-0-0	Тор	10 PSF	40 F	PSF	0 PSF	0 PSF	0 PS	F		
2	Uniform				Far Face	42 PLF	165 I	PLF	0 PLF	0 PLF	0 PL	F 2FJ	2	
3	Uniform				Near Face	28 PLF	112	PLF	0 PLF	0 PLF	0 PL	F 2FJ	8	
	Self Weight					5 PLF								
									Menufacti	or Info		Comtaat		
Notes Calculated Structured	Designs is reenoneible only of th	chemical e Handling	is I & Installati	ion	<ol><li>For flat pondir</li></ol>	at roofs provide p ng	roper drainage	to prevent	Metsä Wood	or 11110		Reilly Roa	ad Industrial Par	k P.O. Box 40408, N
structural adequacy of design criteria and	canculated sound the pushings is responsible only or the <b>nativity of installation</b> structural adequacy of this component based on the <u>1. LVL beams must not be cut or drilled</u>							301 Merritt 7 Building, 2nd Floor				28309	3787	
responsibility of the customer and/or the contractor to ensure the component suitability of the intended fastening details, beam strendt values, and code									Norwalk, CT 06851 (800) 622-5850			010-004-0		
application, and to ver	application, and to verify the dimensions and loads. Lumber application, and to verify the dimensions and loads. Lamber approvals because very substrate ver								www.metsawood.com/us					
1. Dry service conditions, unless noted otherwise     2. IVI not to be treated with fire retardant or corrosive     5. Provide lateral support at bearing points to avoid												lc	от	есн
2. LVL not to be treated with the retardant or corrosive lateral displacement and rotation This design is valid u								ıntil 11/3/2024						

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