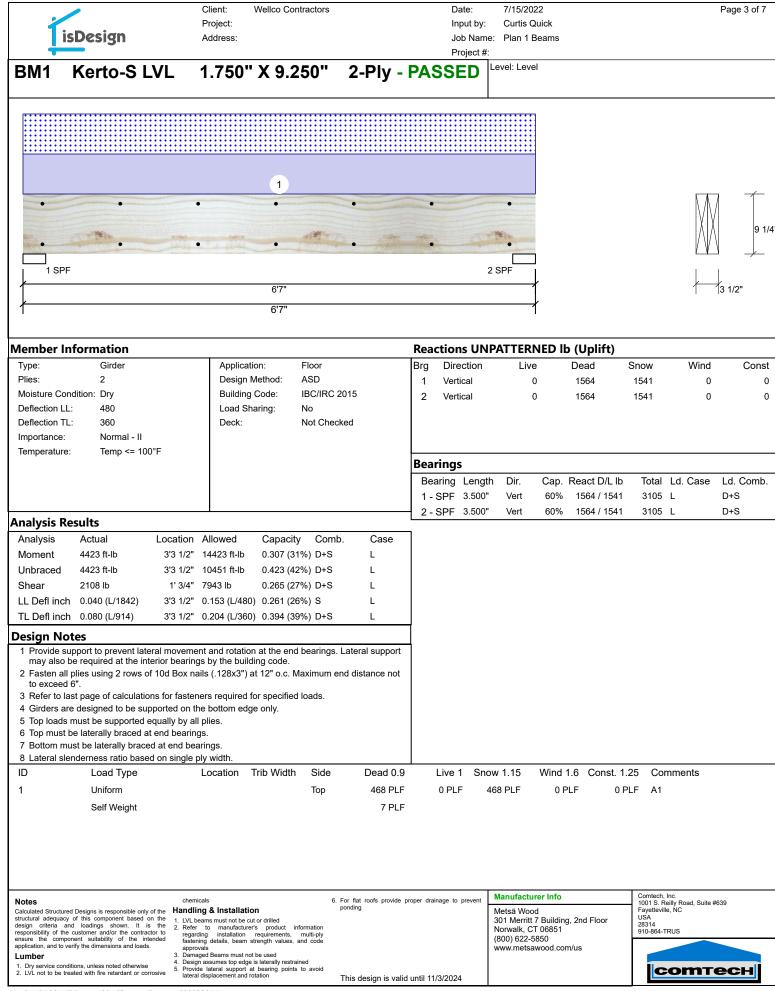
	Design		Project: Address:				J	nput by: ob Name: Project #:	Curtis C Plan 1 E					U	e 1 of
GDH	Kerto-S L\	/L 1	.750" X	( 11.87	′5'' 2-	Ply - P		-	evel: Leve	9					
1 SPF			•	• • • • • • • • •	1	•	•		*			2 SPF		11	- 7/8"
1					16'10"									1/2"	
1					16'10"							1			
/lember In	formation						Reactio	ns UNP	ATTERI	NED II	o (Uplift)				
Туре:	Girder		Applicatio	on: I	Floor		1	ection	Live		Dead	Snow	Wind		Со
Plies: Moisture Cond Deflection LL: Deflection TL: Importance:	480 360 Normal - II		Design M Building ( Load Sha Deck:	Code: I aring: I	ASD IBC/IRC 2015 No Not Checked	;		tical tical		)	2182 2182	0 0	0 0		
Temperature:	Temp <= 100	°F					Bearing	c							
								Length 3.500"	Dir. Vert Vert	Cap. 42% 42%	React D/L lb 2182 / 0 2182 / 0	) 2182	Ld. Case Uniform Uniform	Ld. ( D D	Con
nalysis Re							 _	3.300	vert	42 /0	210270	2102	onnonn	0	
Analysis Moment	Actual 8689 ft-lb		17919 ft-lb	Capacity 0.485 (489	%) D	Case Uniform									
Unbraced	8689 ft-lb	8'5"	8702 ft-lb	0.998 (100%)	D	Uniform									
Shear	1859 lb	15'6 5/8"		0.233 (239	-	Uniform									
	0.000 (L/999) 0.453 (L/433)		999.000 (L/0) 0.546 (L/360)		,	Uniform									
esign Not		00 1110	0.0.0 (2,000)	0.001 (007	<i>s)</i> <u></u>	<u>e</u>	1								
<ol> <li>Provide sup may also be 2 Fasten all p to exceed 6</li> <li>Refer to las</li> <li>Girders are</li> <li>Top loads m</li> <li>Top must b</li> <li>Bottom must</li> </ol>	oport to prevent late e required at the inte blies using 2 rows of	erior bearing 10d Box na ns for fasten ported on th qually by all a maximum d at end bea	gs by the buildi hils (.128x3") a hers required fo he bottom edge   plies. h of 10'8 15/16' arings.	ing code. t 12" o.c. Ma or specified I e only.	aximum end d										
- Latoral 3161	Load Type		•	rib Width	Side	Dead 0.9	Live	1 Snov	v 1.15	Wind	1.6 Const.	1.25 Co	mments		
ID	Uniform				Тор	250 PLF 9 PLF	0 PL	.F	0 PLF	0 F	PLF 0	PLF			

	Client:	Wellco Contractors		Date:		Page 2 of 7
	Project:			Input		
isDesign	Address:				lame: Plan 1 Beams	
				Proje		
GDH Kerto-S LVI	_ 1.750"	X 11.875"	2-Ply -	PASSED	Level: Level	
			2			
						Ξ
• • • •	• •	• •	• •	• •	• • • •	··· V V 11 7/8"
						Σ XX 11 7/8"
• • • •	• •	• •	• •	• •	• • • •	
1 SPF						2 SPF //
ļ			16'10"			3 1/2"
						3 1/2
1			16'10"			1
Multi-Ply Analysis						
Fasten all plies using 2 rows of		(.128x3") at 12"	o.c Maximu	um end distance	e not to exceed 6".	
	0.0 %					
	).0 PLF  63.7 PLF					
	31.9 lb.					
	V					
	1/2"					
	3"					
Load Combination Duration Factor 1	.00					
						1
Notes	chemicals		6. For flat roofs prov	ride proper drainage to prev		Comtech, Inc. 1001 S. Reilly Road, Suite #639
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the			ponding		Metsä Wood 301 Merritt 7 Building, 2nd Eleer	Fayetteville, NC USA
design criteria and loadings shown. It is th	e 2. Refer to manufactu	rer's product information			301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	28314 910-864-TRUS
responsibility of the customer and/or the contractor t ensure the component suitability of the intende application, and to verify the dimensions and loads.		requirements, multi-ply strength values, and code			(800) 622-5850	
Lumber	approvals 3. Damaged Beams must ( 4. Design assumes top ed)	not be used			www.metsawood.com/us	
<ol> <li>Dry service conditions, unless noted otherwise</li> <li>LVL not to be treated with fire retardant or corrosiv</li> </ol>	<ol> <li>Design assumes top ed 5. Provide lateral support lateral displacement and</li> </ol>	at bearing points to avoid	<b>-</b>			соттесн
	lateral displacement and		This design is	valid until 11/3/2024		
Version 21.80.417 Powered by iStruct™ Date						



Version 21.80.417 Powered by iStruct<sup>™</sup> Dataset: 22022301.1

	Client: Wellco Contractors	Date:	7/15/2022	Page 4 of 7
	Project:	Input by:		
isDesign	Address:		e: Plan 1 Beams	
		Project #		
BM1 Kerto-S LVL	1.750" X 9.250"	2-Ply - PASSED	Level: Level	
				$ \rightarrow $
•	• •	• •	• <u></u>	$\Lambda \Lambda \Lambda$
			<11/2"	9 1/
•	• •	• •	• <u> </u>	
1 SPF			2 SPF	
1	6'7"			3 1/2"
<i>†</i>	6'7"		/	
Multi Dhy Analysia				
Multi-Ply Analysis				
Fasten all plies using 2 rows of 100	d Box nails (.128x3") at 12"	o.c Maximum end distance n	ot to exceed 6".	
Capacity 0.0 % Load 0.0 PLF	:			
Yield Limit per Foot 163.7 P				
Yield Limit per Fastener 81.9 lb.				
Yield Mode IV Edge Distance 1 1/2"				
Min. End Distance 3"				
Load Combination				
Duration Factor 1.00				
Notes che	emicals	6. For flat roofs provide proper drainage to prevent	Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639
Calculated Structured Designs is responsible only of the structural adequacy of this component based on the	dling & Installation L beams must not be cut or drilled	ponding	Metsä Wood 301 Merritt 7 Building, 2nd Floor	Fayetteville, NC USA
design criteria and loadings shown. It is the 2. Re responsibility of the customer and/or the contractor to reg	efer to manufacturer's product information garding installation requirements, multi-ply		Norwalk, CT 06851	28314 910-864-TRUS
application, and to verify the dimensions and loads.	stening details, beam strength values, and code provals		(800) 622-5850 www.metsawood.com/us	
1. Dry service conditions, unless noted otherwise     4. De     5. Pre	amaged Beams must not be used esign assumes top edge is laterally restrained ovide lateral support at bearing points to avoid			
	eral displacement and rotation	This design is valid until 11/3/2024		соттесн

is	Design	Client: Project: Address:	Wellco C	ontractors			Date: Input by: Job Nam	7/15/203 Curtis C e: Plan 1 E	uick					Page 5 o
							Project #	:						
3M2	Kerto-S L\	/L 1.750	" X 9.	250" 2	2-Ply -	PAS	SED	Level: Leve	I					
		1		2			3							
	•	•	•	Ψ.		•	V	•					$\Lambda$	1 1
	The second s			all look				- Min					XXX	ç
•			-	and the second		•		•					$\langle \rangle \rangle$	
1 SPF								2 SPF						
			6'7" 6'7"					,					1 1	3 1/2"
I			6.7.											
ember Inf	ormation					React	ions UN	PATTERI	NED Ib	(Uplift)				
ype: lies:	Girder 2		ation: n Method:	Floor ASD			Direction Vertical	Live		Dead	Sno		Wind	Co
lies. Ioisture Cond		-	ng Code:	IBC/IRC 2015	5		Vertical	(		1380 1696	13 16		0 0	
eflection LL:	480		Sharing:	No										
Deflection TL:		Deck		Not Checked										
nportance: emperature:	Normal - II Temp <= 100°l	F												
emperature.	Temp <= 100 1	·				Beari	ngs							
							ing Lengt	h Dir.	Сар.	React D/L I	b 7	Fotal Ld.	Case	Ld. Cor
						1 - S	PF 3.500"	Vert	53%	1380 / 135	7 2	2737 L		D+S
nalysis Re	sults	1				2 - S	PF 3.500"	Vert	65%	1696 / 167	2	3368 L		D+S
Analysis Kes		Location Allowed	Capac	ity Comb.	Case	1								
<i>I</i> oment	6221 ft-lb	2'6 1/8" 14423 ft-ll	-	43%) D+S	L									
Jnbraced	6221 ft-lb	2'6 1/8" 10451 ft-ll	•	60%) D+S	L									
Shear	2870 lb	5'6 1/4" 7943 lb	0.361 (	36%) D+S	L									
L Defl inch	0.052 (L/1405)	3'2 1/16" 0.153 (L/4	80) 0.342 (	34%) S	L									
TL Defl inch	0.105 (L/698)	3'2 1/16" 0.204 (L/3	60) 0.515 (	52%) D+S	L									
esign Not	es					T								
1 Provide sup	port to prevent latera	al movement and rota		nd bearings. Late	eral support	1								
-	-	rior bearings by the bi 10d Box nails (.128x3	-	Maximum end o	listance not									
to exceed 6	".													
		s for fasteners require orted on the bottom e		ed loads.										
	nust be supported eq		ugo only.											
•	e laterally braced at e	•												
	t be laterally braced derness ratio based	-												
D	Load Type	Location	Trib Widt	h Side	Dead 0.9	Li	ve 1 Sno	ow 1.15	Wind 1	.6 Const.	1.25	Comme	ents	
	Point	2-6-2		Тор	1561 lb		0 lb	1561 lb	0	lb	0 lb	C2		
	Bearing Length	0-3-8												
2	Point	3-9-6		Тор	734 lb		0 lb	734 lb	0	lb	0 lb	C1		
	Bearing Length	0-3-8							-					
3	Point	5-9-6		Тор	734 lb		0 lb	734 lb	0	lb	0 lb	C1		
ntinued on pa								-						
otes		chemicals		6. For f	lat roofs provide p	roper draina	ge to prevent	Manufactu	rer Info			omtech, Inc. 01 S. Reilly R	and Suite #1	330
	Designs is responsible only of f this component based on	the Handling & Install		pondi	ing . F			Metsä Woo		and Elect	Fa	yetteville, NC	sau, ouite #t	
alculated Structured	loadings shown. It is	the 2. Refer to manufac	e cut or drilled urer's product n requirements					301 Merritt Norwalk, C	Г 06851	, ∠nu Fi00ľ	28	314 0-864-TRUS		
ructural adequacy o esign criteria and esponsibility of the c	ustomer and/or the contractor		qui ottionto					(800) 622-5	850		- H			
ructural adequacy o esign criteria and sponsibility of the consure the component		ded fastening details, bea approvals	-	s, and code				www.metsa	wood.com	n/us				
tructural adequacy or esign criteria and asponsibility of the cr nsure the compone pplication, and to verifi .umber	ustomer and/or the contractor ent suitability of the intend	ded fastening details, bea	t not be used dge is laterally res	trained					wood.com	n/us				есн

		Client: Wellco Contractor	s Date:	7/15/2022	Page 6 of 7
2		Project:	Input by:		
1	isDesign	Address:		ie: Plan 1 Beams	
			Project #		
BM2	Kerto-S LVL	1 750" V 0 250'	2-Ply - PASSED	Level: Level	
	Reno-3 LVL	- 1.750 A 9.250	2-Ply - PASSED		
		1 2	3		
		V V	V		
•	•	•	•	STATE TIME STATE	
enter internet	- A MAR		the same real of the	N. THE ST.	9 1/-
100 A 100 A 100	Child HAR (DAY)	and a strength of the strength			
	PF			2 SPF	1 1
<u> </u>		6'7"			3 1/2"
					3 1/2
1		6'7"		1	
Continued	from page 1				
D	Load Type	Location Trib Width Sid	e Dead 0.9 Live 1 Sn	ow 1.15 Wind 1.6 Const. 1.2	25 Comments
	Bearing Length	0-3-8			
	Self Weight		7 PLF		
				Γ	
otes		chemicals	6. For flat roofs provide proper drainage to prevent	Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639
ructural adequ	tured Designs is responsible only of the acy of this component based on the	Handling & Installation 1. LVL beams must not be cut or drilled	ponding	Metsä Wood 301 Merritt 7 Building, 2nd Floor	Fayetteville, NC USA
sponsibility of	and loadings shown. It is the the customer and/or the contractor to	<ol> <li>EVE beams must not be cut or diffied</li> <li>Refer to manufacturer's product information regarding installation requirements, multi-ply</li> </ol>		Norwalk, CT 06851	28314 910-864-TRUS
nsure the co	mponent suitability of the intended to verify the dimensions and loads.	fastening details, beam strength values, and code approvals		(800) 622-5850 www.metsawood.com/us	
umber		<ol> <li>Damaged Beams must not be used</li> <li>Design assumes top edge is laterally restrained</li> </ol>			
	conditions, unless noted otherwise e treated with fire retardant or corrosive	<ol> <li>Provide lateral support at bearing points to avoid lateral displacement and rotation</li> </ol>	This design is valid until 11/3/2024		соттесн
rcion 21.90	417 Doworod by CtructTM Datas		This design is valid until 11/3/2024		

	Client: Wellco Contractors	Date:	7/15/2022	Page 7 of 7
	Project:	Input by:		
isDesign	Address:	Job Nam	e: Plan 1 Beams	
· · · ·		Project #		
BM2 Kerto-S LVL	1 750" X Q 250"	2-Ply - PASSED	Level: Level	
DIVIZ KEI 10-3 LVL	1.750 × 9.250	2-FIY - FASSED		
• •	• •	• •	• -	
			5	
			• <1 1/2"	Å   Å   9 1/
•	• •	• •	•	
1 SPF			2 SPF	
<del> </del>	6'7"			3 1/2"
/	6'7"		/	
	0.1		I	
Multi-Ply Analysis				
	A Roy pails ( 170, 7") at 17"	o c Maximum and distance -	at to average 6"	
Fasten all plies using 2 rows of 10c Capacity 0.0 %	a box halls (.126x3 ) at 12	o.c Maximum end distance n	of to exceed 6.	
Capacity 0.0 % Load 0.0 PLF				
Yield Limit per Foot 163.7 P				
Yield Limit per Fastener 81.9 lb.				
Yield Mode IV				
Edge Distance 1 1/2"				
Min. End Distance 3" Load Combination				
Duration Factor 1.00				
Notos	emicals	6. For flat roofs provide proper drainage to prevent	Manufacturer Info	Comtech, Inc.
Calculated Structured Designs is responsible only of the Hance	dling & Installation	<ol> <li>For flat roots provide proper drainage to prevent ponding</li> </ol>	Metsä Wood	1001 S. Reilly Road, Suite #639 Fayetteville, NC
design criteria and loadings shown. It is the 2. Re	L beams must not be cut or drilled fer to manufacturer's product information		301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	USA 28314 010 864 TRUS
responsibility of the customer and/or the contractor to ensure the component suitability of the intended fas	garding installation requirements, multi-ply stening details, beam strength values, and code		(800) 622-5850	910-864-TRUS
application, and to verify the dimensions and loads. app Lumber 3. Da	provals imaged Beams must not be used		www.metsawood.com/us	
1. Dry service conditions, unless noted otherwise 4. De 5. Pro	esign assumes top edge is laterally restrained ovide lateral support at bearing points to avoid			соттесн
L list to be dedice whithing related and or contosive late	eral displacement and rotation	This design is valid until 11/3/2024		