

	Client: Wellco Contractors		10/6/2020	Page 2 of 6
	Project:	Input b		
isDesign	Address:	Job Na		
<b>—</b>		Projec	t #: J0920-4404	
BM1 Kerto-S LVL	1.750" X 14.000"	2-Ply - PASSED	Level: Level	
	1.700 X 14.000	2-I IY - I AOOLD		
••••	• • • •	• • •	• • •	• ] =. \// 1
				$\overline{\Sigma}$ $M$ 1'2"
• • •	• • • •	• • •	• • •	
1 SPF End Grain			2 SPF End	Grain
1		13'2"		3 1/2"
<i> </i>		13'2"		<del>/</del>
'		102		I
Multi-Ply Analysis				
	f 10 d Day and 1 ( 120, 21) at 121	a a Massimo and distance	wette average (C)	
	of 10d Box nails (.128x3") at 12"	o.c Maximum end distance	not to exceed 6	
	0 % 0 PLF			
	45.6 PLF			
	1.9 lb.			
Yield Mode				
	1/2"			
Min. End Distance 3'	1			
Load Combination				
Duration Factor 1.	.00			
Notes Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to	1. LVL beams must not be cut or drilled     2. Refer to manufacturer's product information     requirements multi-ply	<ol> <li>For flat roofs provide proper drainage to prever ponding</li> </ol>	Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	Comtech, Inc. 1001 S. Reiliy Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS
ensure the component suitability of the intended application, and to verify the dimensions and loads.	fastening details, beam strength values, and code approvals		(800) 622-5850 www.metsawood.com/us	
Lumber 1. Dry service conditions, unless noted otherwise	<ol> <li>Damaged Beams must not be used</li> <li>Design assumes top edge is laterally restrained</li> </ol>		ICC-ES: ESR-3633	
<ol> <li>Dry service conditions, unless noted otherwise</li> <li>LVL not to be treated with fire retardant or corrosive</li> </ol>	5. Provide lateral support at bearing points to avoid lateral displacement and rotation	This design is valid until 1/8/2023		сотесн
Version 20.20.002 Powered by iStruct™		5 ······	L	

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	•	С	lient: V	Vellco Contra	ctors		Dat	e:	10/6/2020				Page 3 o
			roject:					ut by:	David Lan				
isl	Design	A	ddress:				Job	Name	: Lot 44 Ha				
	-							ject #:	J0920-440	)4			
BM2 K	Kerto-S LV	L 1.7	750" X	16.000	)" 2-	Ply - P	ASSED		evel: Level				
2 1 SPF 1 SPF Aember Infe Type: Plies: Moisture Condi Deflection LL:	4'7" 4'7" 4'7" ormation Girder 2 ition: Dry	3	Applicatio Design Mr Building C Load Sha	ethod: A Code: IB	oor SD IC/IRC 2015		Reactions Brg 1 2	5 UNF Live 681 681	Dea 80	)5 (	/ )	Wind 0 0	Const 0 0
Deflection LL: Deflection TL: Importance: Temperature:	480 360 Normal Temp <= 100°F	=	Load Sha Deck: Ceiling:	N	o ot Checked ypsum 1/2"		Bearings Bearing I 1 - SPF	-	Cap. 29%	React D/L lb 805 / 681	Total 1486	Ld. Case	Ld. Comb. D+L
Analysis Res	ulte						2 - SPF		29%		1486	L	D+L
Analysis		_ocation A	llowed	Capacity	Comb.	Case	1						
Moment	1393 ft-lb	2'3 1/2" 34		0.040 (4%)		L							
Unbraced	1393 ft-lb	2'3 1/2" 2		0.054 (5%)		L							
Shear	1008 lb	1'6 5/8" 1		0.084 (8%)		L							
LL Defl inch				0.020 (2%)		L							
TL Defl inch	0.005	2'3 9/16" 0.	.138 (L/360)	0.030 (3%)	D+L	L							
Design Note							Į						
to exceed 6" 2 Refer to last 3 Girders are o 4 Top loads m 5 Top braced a	page of calculations designed to be supported equ	for fasteners orted on the ually by all pl	s required for bottom edge ies.	r specified lo		stance not							
ID	Load Type			rib Width	Side	Dead 0.9	Live 1	Snov	w 1.15 V	Vind 1.6 Con	st. 1.25	Comment	s
1	Uniform				Near Face	99 PLF	297 PLF		0 PLF	0 PLF	0 PLF	F2	
2	Uniform				Тор	120 PLF	0 PLF		0 PLF	0 PLF	0 PLF	Wall	
3	Uniform				Тор	120 PLF	0 PLF		0 PLF	0 PLF	0 PLF	B2GE	
•	Self Weight				- <b>- P</b>	120 T LI	Ų I LI		J. LI	V. LI	~ 1 61	2202	
tructural adequacy of lesign criteria and esponsibility of the cu ensure the component	Designs is responsible only of this component based on to loadings shown. It is to ustomer and/or the contractor in suitability of the intende	he 1. LVL beam he 2. Refer to to regarding	& Installation		pondin nation Iti-ply		oper drainage to p	revent	Manufacturer Metsä Wood 301 Merritt 7 E Norwalk, CT 0 (800) 622-585	Building, 2nd Floor 16851	10 Fa . U	omtech, Inc. )01 S. Reilly Road ayetteville, NC SA 3314 10-864-TRUS	Suite #639
application, and to verify Lumber 1. Dry service condition	nt suitability of the interior y the dimensions and loads. ns, unless noted otherwise ed with fire retardant or corrosi	approvals 3. Damaged 4. Design as 5. Provide la	Beams must not b sumes top edge is	e used laterally restrained bearing points to	avoid	design is valid	until 1/8/2023		Www.metsawc ICC-ES: ESR-	od.com/us		con	птесн

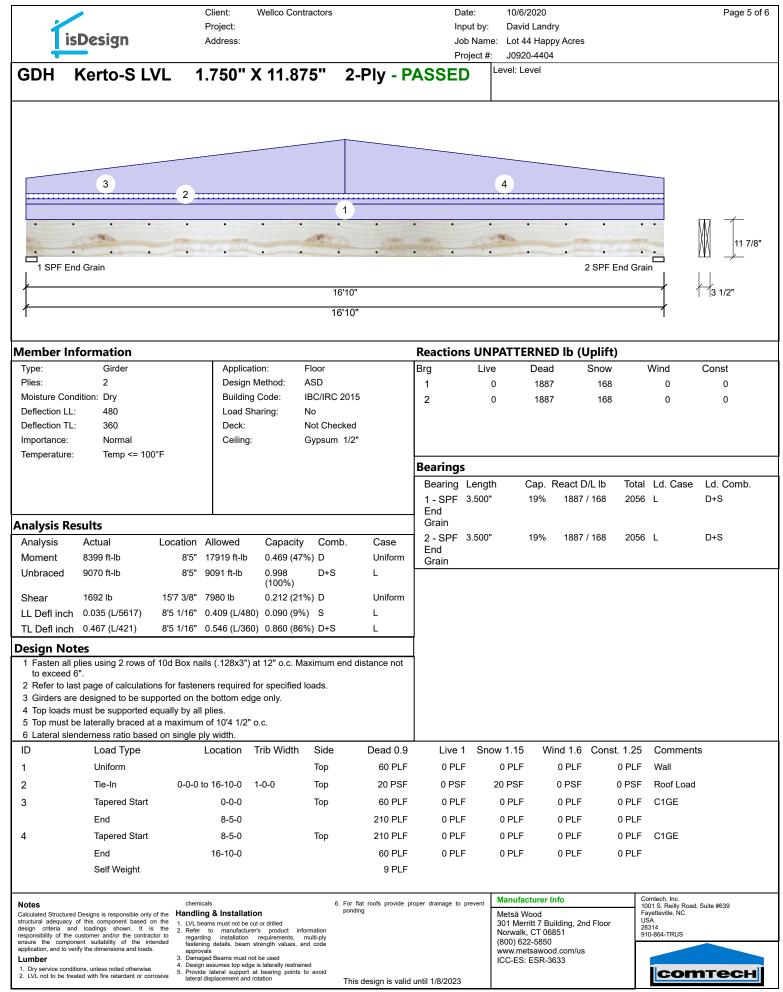
-		Client: Project:	Wellco Contractors		Date: Input by:	10/6/2020 David Landry	Page 4 of 6
1	isDesign	Address:			Job Name:	-	
-					Project #:	J0920-4404	
BM2	Kerto-S LVL	1.750"	X 16.000"	2-Ply - PASSI		evel: Level	
		2 SPF	Ē				1'4" 3 1/2"

## Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	80.6 %	
Load	198.0 PLF	
Yield Limit per Foot	245.6 PLF	
Yield Limit per Fastener	81.9 lb.	
Yield Mode	IV	
Edge Distance	1 1/2"	
Min. End Distance	3"	
Load Combination	D+L	
Duration Factor	1.00	

Notes	chemicals	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 design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads. <b>Lumber</b> 1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive	LVL beams must not be cut or drilled     Refer to manufacturer's product information     regarding installation requirements multi-ply		Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633	Fayetteville, NC USA 228314 910-864-TRUS



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	•	Project:			Input I		
ISD	esign	Address:			Job N		
			<u></u>		Projec	t #: J0920-4404	
GDH Ke	erto-S LV	'L 1.750"	X 11.875"	2-Ply -	PASSED		
	• •	• •	• •	• •	• •	• • • •	\$ M ↓
							Σ 11 7/8"
	• •	• •	• •	• •	• •	• • • •	
1 SPF End G	irain					2 SPF Er	nd Grain //
/				16'10"			3 1/2"
				16'10"			
				16.10.			Ι
Multi-Ply Ana	lysis						
Fasten all plies	using 2 rows	of 10d Box nails	(.128x3") at 12"	o.c Maximu	um end distance	e not to exceed 6"	
Capacity		0.0 %					
Load Yield Limit per Foot		0.0 PLF 163.7 PLF					
Yield Limit per Fast		81.9 lb.					
Yield Mode		IV					
Edge Distance		1 1/2"					
Min. End Distance Load Combination		3"					
Duration Factor		1.00					
Neter		obernieste		6 For first water	ido propor designar to as	Manufacturer Info	Comtech, Inc.
Notes Calculated Structured Desi	igns is responsible only of	chemicals the Handling & Installa	tion	<ol> <li>For flat roofs prov ponding</li> </ol>	vide proper drainage to preve	Metsä Wood	1001 S. Reilly Road, Suite #639 Fayetteville, NC
structural adequacy of th design criteria and los	is component based on adings shown. It is	the 1. LVL beams must not be the 2. Refer to manufacture	cut or drilled urer's product information			301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	USA 28314 910-864-TRUS
responsibility of the custo ensure the component application, and to verify th	suitability of the inten	r to regarding installatior ded fastening details, bear	n requirements, multi-ply n strength values, and code			(800) 622-5850	910-004-1RUS
Lumber		approvals 3. Damaged Beams must 4. Design assumes top ec				www.metsawood.com/us ICC-ES: ESR-3633	
<ol> <li>Dry service conditions,</li> <li>LVL not to be treated v</li> </ol>	unless noted otherwise with fire retardant or corros	E Dravida lateral aumoar	t at bearing points to avoid	This decign in	valid until 1/8/2022		соттесн
Version 20 20 002 Pow	11 10 174			rnis design IS	valid until 1/8/2023	1	