		Client:	Benjamin Sto	out Real Estat	e	Da	ate:	2/23/2021				Page 1 of 10
	Destar	Project:				Inp	out by:	David Land	ry			
IS	Design	Address:				Jo	b Name	E: Lot 6 Sparta	an Ridge			
				<u> </u>		Pr	oject #:	J0221-0899				
BM1 B	Kerto-S LVL	1.750"	X 14.00	0" 2-	Ply - P	ASSEL	ין (Level. Level				
			3									
	-											
•	• • • • • • • • • • • • • • • • • • •		•									π \uparrow
												WM I
•	and the second second			alt in								1'2"
•				•								/WN L
1 SPF			2 S	PF .								
,	-										,	
	6	•										3 1/2"
1	6	•		1								
Member In	formation					Reaction	s UN	PATTERNE	D lb (Upl	lift)		
Туре:	Girder	Applic	ation: F	loor		Brg	Live	e Dead	Sn	ow	Wind	Const
Plies:	2	Desig	n Method:	SD		1	951	891		0	0	0
Moisture Cond	dition: Dry	Buildi	ng Code: I	BC/IRC 2015		2	951	891		0	0	0
Deflection LL:	480	Load	Sharing: N	10								
Deflection TL:	360 Normal	Deck:	ſ	lot Checked								
Temperature:	Temp <= 100°F											
iemperature.						Bearings						
						Bearing	Length	n Cap.	React D/L	lb Tota	I Ld. Case	Ld. Comb.
						1 - SPF	3.500"	35%	891 / 95	51 1842	2 L	D+L
L	•					2 - SPF	3.500"	35%	891 / 95	51 1842	2 L	D+L
Analysis Re	sults		0 1			7						
Analysis	Actual Loca	tion Allowed	Capacity	Comb.	Case							
Woment	2357 TT-ID	3" 26999 TT-I	0.087 (9%)		L .							
Shear	1478 lb 4'7	3 20999 It-II 1/4" 10453 Ib	0.141 (14%)) D+L	1							
LL Defl inch	0.007 (1/9415)	3' 0 139 (1 /4	80) 0.050 (5%)) D. L	1							
TL Defl inch	0.014 (L/4862)	3' 0.185 (L/3	60) 0.070 (7%)	D+L	L							
Design Not	·····				_	1						
1 Fasten all r	es using 3 rows of 10d B	ox nails (128x3'	') at 12" o.c. Ma	ximum end di	istance not	4						
to exceed 6)".		/ ut 12 0.0. Ma									
2 Refer to las	t page of calculations for fa	asteners require	d for specified lo	oads.								
4 Top loads n	nust be supported equally	by all plies.	uge only.									
5 Top must b	e continuously braced.											
6 Bottom bra 7 Lateral sler	ced at bearings. Iderness ratio based on sir	nale plv width.										
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Sno	w 1.15 W	ind 1.6 Co	onst. 1.25	Comment	s
1	Uniform			Тор	120 PLF	0 PLF	:	0 PLF	0 PLF	0 PLF	Wall Above	
2	Uniform			Тор	60 PLF	0 PLF		0 PLF	0 PLF	0 PLF	C1GE	
3	Uniform			Far Face	106 PI F	317 PI F	:	0 PLF	0 PLF	0 PI F	F2	
Ū	Self Weight				11 PI F	0		0.12.	0.2.	0.12		
	oon weight											
Notes		chemicals		6. For fla	at roofs provide p	roper drainage to	prevent	Manufacturer I	nfo		Comtech, Inc.	Suite #639
Calculated Structured structural adequacy	Designs is responsible only of the H of this component based on the	andling & Installa	ition	pondin	g		ſ	Metsä Wood	ilding 2nd F	F L	Fayetteville, NC JSA	
design criteria and responsibility of the c	loadings shown. It is the 2.	Refer to manufact regarding installation	urer's product infor requirements m	mation ulti-ply				Norwalk, CT 06	nang, ∠na Fi 851		28314 910-864-TRUS	
ensure the compon application, and to ver	ent suitability of the intended ify the dimensions and loads.	fastening details, bea approvals	m strength values, an	d code				(800) 622-5850 www.metsawoo	d.com/us			
1. Dry service conditi	ons, unless noted otherwise 5	Design assumes top e Provide lateral suppo	dge is laterally restraine t at bearing points to	d avoid				ICC-ES: ESR-3	633			
2. LVL not to be trea	ted with fire retardant or corrosive	lateral displacement a	id rotation	This	design is valid	until 2/26/2023	3				CON	HECH

Version 20.20.044 Powered by iStruct™

-	Client: Benjamin Stout F	Real Estate Date:	2/23/2021	Page 2 of 10
isDesign	Address:	Job Nar	me: Lot 6 Spartan Ridge	
		Project	#: J0221-0899	
BM1 Kerto-S L	.VL 1.750" X 14.000"	2-Ply - PASSED		
• • •	• • • •			
• •		1/2		
		$\overline{\nabla}$		112"
	2 SPE			
	2 01 1			
	6'			3 1/2"
1	6'	1		
Multi-Ply Analysis				
Fasten all plies using 3 ro	ws of 10d Box nails (.128x3") at 12	2" o.c Maximum end distance	not to exceed 6"	
apacity oad	211.5 PLF			
field Limit per Foot	245.6 PLF			
field Limit per Fastener	81.9 lb. IV			
dge Distance	1 1/2"			
lin. End Distance	3" D+l			
Duration Factor	1.00			
Notes Calculated Structured Designs is responsible o structural adequacy of this component base design criteria and loadings shown. It responsibility of the customer and/or the con	chemicals hy of the Handling & Installation f on the 1, LVL beams must not be cut or drilled is the 2. Refer to manufacturer's product information reactor to	 For flat roofs provide proper drainage to prevent ponding 	Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetiteville, NC USA 28314 910-864-TRUS
ensure the component suitability of the application, and to verify the dimensions and loa	intended instantation requirements, multi-p fastening details, beam strength values, and cod approvals	iy le	(800) 622-5850 www.metsawood.com/us	
Lumber Dry service conditions, unless noted otherwi LVL not to be treated with fire retardant or	 Jamagea Beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoil lateral disclocoment and retained 	id	ICC-ES: ESR-3633	сотесн
Arrian 20.20.044 Powarad hy iCtrust		I his design is valid until 2/26/2023		

Version 20.20.044 Powered by iStruct



isDesign	Client: Project: Address:	Benjamin Stout F	Real Estate	Date: Input by: Job Nam Project #	2/23/2021 David Landry ie: Lot 6 Spartan Ridge : J0221-0899	Page 4 of 1
BM2 S-P-F #2	2.000" X	12.000"	3-Ply - F	PASSED	Level: Level	
• •	• •	•	•	• •	• •	
•••	• •	•	٠	•	• • \	
1 SPF End Grain				2 SPF E	ind Grain	
]		8'1"				14 1/2"
1		8'1"			1	
Id Limit per Pasterier Id Mode ge Distance 1. End Distance ad Combination	IV 1 1/2" 3"					
n. End Distance ad Combination	3"					
ration Factor	1.00					

Manufacturer Info	Comtech, Inc.
	Fayetteville, NC USA 28314 910-864-TRUS
	соттесн



4		Client: Project:	Benjamin Stout I	Real Estate		Date: Input by:	2/23/2021 David Landry	Page 6 of 10
	isDesign	Address:				Job Name:	Lot 6 Spartan Ridge	
	<u> </u>	2 000" V	40.000"	2 Dbr	DACC		J0221-0899 .evel: Level	
BINI3	5-P-F #2	2.000 ^m X	12.000	2-Piy	- PA55	ED		
•	• •	•	• •	•	•	•	• • •	
	• •	•	• •	•	•	•	• • • — 2 SPF End Grain	
/				12'3 1/2"				3"
ł				12'3 1/2"				7
Multi-Ph	/ Analysis							
Fasten all	plies using 2 row	rs of 10d Box nails	(.128x3") at 12	2" o.c Maxir	num end d	istance no	t to exceed 6"	
Capacity		0.0 %						
Load Yield Limit of	er Foot	0.0 PLF 157 4 PLF						
Yield Limit pe	er Fastener	78.7 lb.						
Yield Mode		IV						
Edge Distan	се	1 1/2"						
Min. End Dis	tance	3"						
Load Combir	nation							
Duration Fac	ctor	1.00						

Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639				
	Fayetteville, NC USA 28314 910-864-TRUS				
	соттесн				



Version 20.20.044 Powered by iStruct™

· ·		Client: Benjamin Stout R Project:	eal Estate Date: Input I	2/23/2021 by: David Landry	Page 8 of 10
l isD	esign	Address:	Job N Projec	ame: Lot 6 Spartan Ridge t #: J0221-0899	
BM4 K	erto-S LVL	1.750" X 9.250'	2-Ply - PASSED	Level: Level	
	• •	· · · ·	· · · ·	· · · ·	••• 5
	• •	• • •	• •	• • •	
			11'7"	2	3 1/2"
ļ /			11'7"		
					_
Multi-Ply Ana	alysis				
Fasten all plies Capacity	s using 4 rows of 10 77.0 %	6 Box halls (.128x3*) at 12	o.c Maximum end distance	not to exceed 6	
₋oad Yield Limit per Foo	290.0 t 376.5	PLF PLF			
Yield Limit per Fas	tener 94.1 lb).			
Edge Distance	1 1/2"				
Vin. End Distance	3" D+S				
Duration Factor	1.15				
					Question Inc.
Notes Calculated Structured De	signs is responsible only of the Hau	hemicals	6. For flat roofs provide proper drainage to preve ponding	Manufacturer Info Metsä Wood	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC
structural adequacy of t design criteria and lo	his component based on the 1. L oadings shown. It is the 2. F	VL beams must not be cut or drilled Refer to manufacturer's product information		301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	USA 28314 910-864-TRUS
ensure the component application, and to verify t	suitability of the intended f he dimensions and loads.	egarding installation requirements, multi-ply astening details, beam strength values, and code approvals		(800) 622-5850 www.metsawood.com/us	
Lumber 1. Dry service conditions	s, unless noted otherwise 5. F	Damaged Beams must not be used Design assumes top edge is laterally restrained Provide lateral support at bearing points to avoid		ICC-ES: ESR-3633	Comtecul
2. LVL not to be treated	with the retardant or corrosive	ateral displacement and rotation	This design is valid until 2/26/2023		
orcion 20 20 044 Do	worod by CtructTM				

CSD DESIGN

			Client:	Benjamin Stout Re	eal Estate	Da	ate:	2/23/2021		Page 10 of 1
2			Project:			Inp	out by:	David Landry		0
	isDesign		Address:			Jol	b Name:	Lot 6 Spartan Ridge		
-						Pro	oject #:	J0221-0899		
GDH	Korto-S		1 750"	¥ 11 875"	2-Plv			evel: Level		
			1.750	X 11.075	Z -1 1y					
•	• •	•	• •	• •	• •	• •	•	• • •	⁶	$\Pi \uparrow$
•	• •	•		• •	• •	• •	•		· · ¥	11 7/8"
1 SPF	End Grain							2 SPF End	Grain A	₩ →
1					16'10"					1 3 1/2"
/					16'10"				ł	
•									I	
Multi-Pl	y Analysis									
Fasten all	l plies using 2 ro	ows of 10)d Box nails	(128x3") at 12"	o.c. Maxim	um end distar	nce no	t to exceed 6"		
Capacity	r pries doing 2 r	0.0 %		(.120,00) ut 12						
Load		0.0 PL	F							
Yield Limit p	er Foot	163.7	PLF							
Yield Limit p	er Fastener	81.9 lk	D.							
Yield Mode Edgo Diston	200	IV 1 1/2"								
Luge Distan	stance	1 1/∠ 3"								
Load Combi	ination	Ũ								
Duration Fac	ctor	1.00								
Notes			chemicals		6 For flat roofs are	wide proper draipage to	nrevent	Manufacturer Info	Comtech, Inc.	0 1 105-
NOTES Calculated Struct	ctured Designs is responsible	only of the Ha	ndling & Installa	tion	ponding	mue proper urainage to	PIEVEIIL	Metsä Wood	 1001 S. Reilly Road Fayetteville, NC 	I, Suite #639
structural adeque design criteria	uacy of this component base a and loadings shown. I	ed on the 1.1 t is the 2.1	LVL beams must not be Refer to manufactu	cut or drilled urer's product information				301 Merritt 7 Building, 2nd Floor	USA 28314	
responsibility of ensure the co	f the customer and/or the co omponent suitability of the	ntractor to r intended f	regarding installation fastening details, bear	n requirements, multi-ply n strength values, and code				(800) 622-5850	910-864-TRUS	
application, and	to verify the dimensions and lo	bads. a	approvals Damaged Beams must	not be used				www.metsawood.com/us		
1. Dry service	conditions, unless noted other	vise 5. F	Design assumes top ed Provide lateral suppor	lge is laterally restrained t at bearing points to avoid				100-E3. ESR-3033		ntecul
2. LVL not to b	be treated with fire retardant of	r corrosive	lateral displacement an	d rotation	This design is	valid until 2/26/2023	3			HECH
Version 20.20		. 734							_	

Version 20.20.044 Powered by iStruct™