		Client: BEN STOUT		Date:	4/8/2	021		Page 1 of 16
		Project:		Input I	by: Neal	Baggett		Ū.
i	sDesign	Address:		Job N	ame: 17 F	OREST RIDGE		
				Projec	ct #:			
BM4	Korto S I VI	1 750" X 13 000"			Level: Le	evel		
DIVI4	Reno-3 LVL	1.750 X 13.000	2-FIY - F	ASSED				
		1						
	and the second se							$\square \uparrow$
								NAA IIII
•		• •						
	a sittle and	and a state of	Pro-					
and the survey of the		• • • •	A CARLES AND A CARLES					
1 SPF		2 SPF End	Grain					1 1
		6'4"	1					3 1/2"
/		6'4"	{					
ļ								
Member Ir	nformation			Reactions L	JNPATTE	RNED lb (Uplift	)	
Туре:	Girder	Application: Floor		Brg	Live	Dead Snow	Wind	Const
Plies:	2	Design Method: ASD			1431	510 0	0	0
Moisture Cor	ndition: Dry	Building Code: IBC/IRC	2015	2	1450	517 0	0	0
Deflection LL	.: 480	Load Sharing: No		-			ů.	0
Deflection TL	.: 360	Deck: Not Chee	cked					
Importance:	Normal - II							
Temperature	: Temp <= 100°F							
				Bearings				
				Bearing Le	nath	Cap React D/L lb	Total I d Case	e Id Comb
				1 - SPE 30	00"	44% 510 / 1431	1941 I	D+I
					00"	18% 517 / 1450	1067 L	
Analysis R	esults			Fnd	00	1070 31771430	1907 L	DTL
Analysis	Actual Locatio	on Allowed Capacity Com	h Case	Grain				
Moment	2700 ft_lb 3'1.3/	4" 23540 ft-lb 0 115 (11%) D+l	J. 0430					
Upbraged	2700 ft-lb 31 0/	4" 16225 ft lb 0.176 (19%) D.L	L					
Olipiaceu			L					
Snear	1157 ID 511/	4" 9707 IB 0.119 (12%) D+L	L					
LL Defl inch	1 0.015 (L/4787) 3'1 3/4	4" 0.148 (L/480) 0.100 (10%) L	L					
TL Defl inch	n 0.020 (L/3530) 3'1 3/4	4" 0.197 (L/360) 0.100 (10%) D+L	L	_				
Design No	tes							
1 Fasten all	plies using 3 rows of 10d Box	nails (.128x3") at 12" o.c. Maximum e	end distance not	1				
to exceed	6".							
2 Refer to la	ast page of calculations for fas	teners required for specified loads.						
3 Girders an	e designed to be supported of	n the bottom edge only.						
5 Top brace	d at bearings	aii piles.						
6 Bottom bra	aced at bearings.							
7 Lateral sle	enderness ratio based on sing	le ply width.						
ID	Load Type	Location Trib Width Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6 Cons	t. 1.25 Commer	nts
1	Uniform	Тор	152 PLF	455 PLF	0 PLF	0 PLF	0 PLF F03 FL. T	TRUSSES
-	Solf Woight							
	Sell Weight		IOTE					
1								
					Manufe	cturer Info	Comtech Inc	
Notes		hemicals 6.	For flat roofs provide ponding	proper drainage to preve	Motoë M		1001 S. Reilly Roa Favetteville NC	ad, Suite #639
structural adequacy	of this component based on the 1. Ly	VL beams must not be cut or drilled			301 Mer	ritt 7 Building, 2nd Floor	USA 28314	
responsibility of the	customer and/or the contractor to re	eter to manufacturer's product information egarding installation requirements, multi-ply			Norwalk	, CT 06851 2-5850	910-864-TRUS	
application, and to ve	erify the dimensions and loads. a	astening details, beam strength values, and code pprovals			www.me	tsawood.com/us		
1. Dry service cond	litions, unless noted otherwise 7. D	lesign assumes top edge is laterally restrained rovide lateral support of booring points to provide			ICC-ES:	ESR-3633		
2. LVL not to be tre	eated with fire retardant or corrosive la	teral displacement and rotation	This design is valio	d until 11/27/2023			Cor	птесн
Vereier 20.00.21			-					

CSD DESIGN

IsDesign BM4 Kerto-S L	Client: BEN STC Project: Address: VL 1.750'' X 13.0	000" 2-Plv -	Date: Input by: Job Name Project #: PASSED	4/8/2021 Neal Baggett I 7 FOREST RIDGE	Page 2 of 16
• • • • • • • • • • • • • • • • • • •	••••••••••••••••••••••••••••••••••••••	2 SPF End Grain			1'1" 1'1" 3 1/2"
Multi-Ply Analysis	ws of 10d Boy pails ( 128v2")	at 12" o.c. Maximur	m and distance no	at to avcoad 6"	
Capacity Load Yield Limit per Foot Yield Mode Edge Distance Min. End Distance Load Combination Duration Factor	0.0 % 0.0 PLF 245.6 PLF 81.9 lb. IV 1 1/2" 3" 1.00				
Notes Calculated Structured Designs is responsible on structural adequacy of this component based design criteria and loadings shown. It responsibility of the customer and/or the contr ensure the component suitability of the 1 anglication and to werth the dimensioner of the	chemicals y of the <b>Handling &amp; Installation</b> on the is the 2. Refer to manufacturer's product regarding installation requirements, kended	<ol> <li>For flat roofs provide ponding</li> <li>information multi-ply , and code</li> </ol>	e proper drainage to prevent	Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS

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 application, and to verify the dimensions and loads. <b>Lumber</b> 1. Dry service conditions, unless noted otherwise 2. UVL not to be treated with fire retardant or corrosive	chemicals Handling & Installation 1. LVL beams must not be cut or drilled 2. Refer to manufacturer's product information regarding installation requirements, multi-phy fastening details, beam strength values, and code approvals 3. Damaged Beams must not be used 4. Design assumes top edge is laterally restrained 5. Provide lateral support at bearing points to avoid lateral displacement and rotation	<ol> <li>For flat roofs provide proper drainage to prevent ponding</li> <li>This design is valid until 11/27/2023</li> </ol>	Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633	Comtech, inc. 1001 S. Relilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS
Version 20.80.210 Powered by iStruct™				



	Client: BEN STOLIT	Date:	4/8/2021	Page 4 of 16
	Project:	Input by:	Neal Baggett	
lisDesign	Address:	Job Nam	e: 17 FOREST RIDGE	
	,	Project #		
DMC Karta O LV/I	4 750" V 0 050"		I evel: I evel	
BING Kerto-SLVL	1.750° X 9.250°	2-Ply - PASSED		
· ·	• •	• •	2ª • •	$\Lambda \Lambda \Lambda$
				9 1/2
•	• •	• •	• • <del>                                  </del>	
			<del></del>	
1 SPF End Grain		2 SPF I	End Grain	
/ / <i>/</i>	6'1"		/	3 1/2"
	01			
1	6'10"		1	
Multi-Ply Analysis				
Fasten all plies using 2 rows of 10	d Box nails (.128x3") at 12"	o.c Maximum end distance n	ot to exceed 6"	
Capacity 74.4 %				
Load 140.0 Vield Limit per Foot 188.3	PLF PI F			
Yield Limit per Fastener 94.1 lb	).			
Yield Mode IV				
Edge Distance 1 1/2"				
Min. End Distance 3"				
Duration Eactor 1 15				
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	ncling & Installation	portung	Metsä Wood 301 Merritt 7 Building, 2nd Floor	Fayetteville, NC USA
design criteria and loadings shown. It is the 2 responsibility of the customer and/or the contractor to	Refer to manufacturer's product information regarding installation requirements. multi-nlv		Norwalk, CT 06851	28314 910-864-TRUS
ensure the component suitability of the intended f application, and to verify the dimensions and loads.	astening details, beam strength values, and code approvals		(000) 0∠∠-5850 www.metsawood.com/us	
Lumber 3. [ 1. Dry service conditions unless noted otherwise 4. [	Damaged Beams must not be used Design assumes top edge is laterally restrained		ICC-ES: ESR-3633	
2. LVL not to be treated with fire retardant or corrosive	Provide lateral support at bearing points to avoid ateral displacement and rotation	This design is valid until 11/27/2023		соттесн



Project: John Mark Transport Control of the state of the	1 BM3			Client:	BEN STOUT		Date:	4/8/2021		Page 6 o
BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED with Lawit	BM3			Project:			Input b	: Neal Baggett		
BM3 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED Level Level	BM3	isDesign		Address:			Job Na	me: 17 FOREST RII	DGE	
BM3     Kerto-S LVL     1.750" X 9.250"     2-Ply - PASSED       Image: state of the state of t	BM3		//	4 350			Project	#:		
Image: State of the state o		Kerto-S	LVL	1.750	X 9.250	2-Piy	- PASSED			
Image: September 2014       Image: September 2014         Image: September 2014       Image: September 2014 <th></th>										
IsPF End Grain       2 SPF End Grain         IsP End Grain       2 SPF End Grain         Bit 12"       8'4 1/4"         Multi-Ply Analysis         Fasten all plies using 2 rows of 10d Box nails (128x3") at 12" o.c Maximum end distance not to exceed 6"         Copacity       0.0 %         Code       0.0 %         Code of the statement of 13 %.         Edge Duaroo       1 1/2"         Min. End Dilance       3"         Lad Combination       1.80										
Image: September 2014       Image: September 2014         Image: September 2014       September 2014         September 2014       September 2014         Image: September 2014										
Image: Stress of the stress										
Image: State of the state										
I SPF End Grain     2 SPF End Grain       B4 1/4"     84 1/4"       Multi-Ply Analysis       Fasten all plies using 2 rows of 10d Box nails (128x3") at 12" o.c Maximum end distance not to exceed 6"       Chapatry     0.0%       Load     0.0%       Veld Limb per Foot     163.7 P.J.F.       Yield Limb per Foot     163.7 P.J.F.       Yield Limb per Foot     13.7 P.J.F.       Yield Limb per Foot     11.2"       Mode     N       Edge Distance     1       Darabon     1       Darabon     1.00										
IsPF End Grain     2 SPF End Grain       1 SPF End Grain     2 SPF End Grain       84 1/4"     84 1/4"       Multi-Ply Analysis       Fasten all plies using 2 rows of 10d Box nails (,128x3") at 12" o.c Maximum end distance not to exceed 6"       Compacity     0.0 PUF       Yeld Limit per Foot     163.7 PUF       Yeld Limit per Foot     163.7 PUF       Yeld Limit per Foot     163.7 PUF       Yeld Limit per Foot     112"       Min. End Distance     3"       Load Combination     0.0       Duration Factor     1.00	•	•		•	•	•	•	•	•	
Image: Second										1 <i>3</i> 717
I SPF End Grain     2 SPF End Grain       8/4 1/4*     2 SPF End Grain       Wulti-Ply Analysis       Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c Maximum end distance not to exceed 6"       Capacity     0.0 % F       Void Unit per Food     103 7 F.F       Veid Unit per Food     112"       Min. End Distance     3"       Duration Factor     1.00				_						
Image: Proceeding of the second of the se		•		•	•	•	•	•	•	╡━━╫╨╵┘
84 14*       84 14*         Multi-Ply Analysis         Fasten all plies using 2 rows of 10d Box nails (128x3") at 12" o.c Maximum end distance not to exceed 6"         Capacity       0.0 PuF         Vieid Umit per Foxt       0.8 PuF         Vieid Umit per Foxt       0.8 PuF         Vieid Umit per Foxt       1.8 PuF         Vieid Umit per Foxt       1.9 PuF         Vieid Umit per Foxt       1.9 PuF         Vieid Umit per Foxt       1.0 PuF         Vieid Umit per Foxt       1.00	1 SI	PF End Grain							2 SPF End Grain	
8'4 1/4"         Multi-Ply Analysis         Faster all plies using 2 rows of 10d Box nails (128x3") at 12" o.c Maximum end distance not to exceed 6"         Capacity         0.0 %       0.0 PLF         Vield Limit per Fost       163.7 PLF         Vield Limit per Fastener       81.9 lb.         Yield Mode       N         Edge Distance       1 12"         Min. End Distance       3"         Load Combination       Duration Factor         Duration Factor       1.00	/					8'4 1/4"				3 1/2"
Multi-Ply Analysis         Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c Maximum end distance not to exceed 6"         Capacity       0.0 %         Load       0.0 PLF         Yield Limit per Foot       103.7 PLF         Yield Limit per Fastener       81.9 lb.         Yield Limit per Fastener       81.9 lb.         Yield Limit per Fastener       3"         Load Combination       Duration Factor         Duration Factor       1.00	/					8'4 1/4"				-
Multi-Ply Analysis           Fasten all plies using 2 rows of 10d Box nails (128x3") at 12" o.c Maximum end distance not to exceed 6"           Capacity         0.0 %           Load         0.0 PLF           Yield Umit per Foot         163.7 PLF           Yield Mode         IV           Edge Distance         11/2"           Min. End Distance         3"           Load Combination         Duration Factor	•									
Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c Maximum end distance not to exceed 6"         Capacity       0.0 %         Load       0.0 PLF         Yield Limit per Fostener       81.3 b.         Yield Mindsone       11/2"         Min. End Obtance       3"         Load Combination       100	4I+: DI	. Analysis								
Hasten all piles using 2 rows of 10d Box halls (128x3') at 12" o.c Maximum end distance not to exceed 6"         Capacity       0.0%         Load       0.0PUF         Yield Imit per Foot       163.7 PLF         Yield Imit per Fastener       81.9 b.         Yield Mode       IV         Edge Distance       112"         Juation Factor       1.00	/uiti-Pi		( 10 )	<b>.</b>						
Capaday 0.0 % Load 0.0 PLF Yield Limit per Foot 163.7 PLF Yield Mode V V Edge Distance 11/12" Min. End Distance 3" Load Combination Duration Factor 1.00	asten all	Il plies using 2 ro	ws of 10d	Box nails (	.128x3") at 12"	o.c Maximu	im end distance	not to exceed 6'	•	
Yield Limit per Foot 183 7 PLF Yield Mode N Edge Distance 11/2* Min. End Distance 3* Lead Combination Duration Factor 1.00	oad		0.0 % 0.0 PLF							
Yield Linit per Fastener 819 lb. Yield Mode IV Edge Distance 11/2" Min. End Distance 3" Load Combination Duration Factor 1.00	ield Limit p	per Foot	163.7 PL	.F						
The mode of the second	ield Limit p	per Fastener	81.9 lb.							
Min. End Distance 3" Load Combination Duration Factor 1.00	dge Distan	nce	1 1/2"							
Lead Combination Duration Factor 1.00	lin. End Dis	istance	3"							
	oad Combi	vination	1.00							
			1.00							
Notes chemicals 6. For flat roofs provide proper drainage to prevent Manufacturer Info Comtech, Inc.										
Calculated Structured Designs is responsible only of the Handling & Installation ponding Fayetterville, NC Structured adequacy of this component based on the total based on total based on the total based on the total based on the total based on the total based on total based on the total based on total based on the total based on to	Notes		cher	micals		6. For flat roofs previ	de proper drainage to preven	Manufacturer Info	Com	ech, Inc. S. Bally Board Suite #220
design citeria and loadings shown. It is the 2. Refer to manufacture's product information requirements multi-nov 2814 910-864-TRUS	Notes Calculated Struct	uctured Designs is responsible or	cher hy of the <b>Hand</b>	micals ling & Installati	on	<ol> <li>For flat roofs provid ponding</li> </ol>	de proper drainage to preven	Manufacturer Info	Comt 1001 Fayet	ech, Inc. S. Reilly Road, Suite #639 teville, NC
ensure the component suitability of the intended application, and to verify the dimensions and loads. (800) 622-5850 www.metsawood.com/us	Notes Calculated Struc structural adeq design criteria	uctured Designs is responsible or juacy of this component based a and loadings shown. It of the customer and/or the cont	cher hly of the Handi I on the 1, LVL is the 2, Refr	micals <b>ling &amp; Installati</b> installati beams must not be c manufacture	on ut or drilled srse product information requiremente modificiti	6. For flat roofs provia ponding	de proper drainage to preven	Manufacturer Info Metsä Wood 301 Merritt 7 Buildin Norwalk, CT 06851	Comt 1001 Fayel g, 2nd Floor 910-8	ech, Inc. S. Reilly Road, Suite #639 teville, NC 4 64-TRUS
Lumber 3. Damaged Beams must not be used 4. Design assumes top edge is laterally restrained 4. Design assumes top edge is laterally restrained	Notes Calculated Struc tructural adequidesign criteria responsibility of ensure the cc application, and	uctured Designs is responsible or quacy of this component based a and loadings shown. It of the customer and/or the cont oronponent suitability of the	cher hy of the <b>Handi</b> on the 1. LVL is the 2. Reft rega fasts ds. appo	micals <b>ling &amp; Installati</b> beams must not be c ar to manufacture rafing installation ening details, beam rovals	ON ut or drilled rf's product information requirements, multi-ply strength values, and code	6. For flat roofs provid ponding	de proper drainage to preven	Manufacturer Info Metsä Wood 301 Merritt 7 Buildin Norwalk, CT 06851 (800) 622-5850 www.metsawood.co	Comt 1001 g, 2nd Floor m/us	ech. Inc. S. Reilly Road, Suite #639 teville, NC 64-TRUS
5. Provide lateral support at bearing points to avoid	Notes Calculated Struc structural adequi design criteria responsibility of ensure the c application, and Lumber 1. Dry service -	uctured Designs is responsible or quacy of this component based a and loadings show. It of the customer and/or the cont component suitability of the to verify the dimensions and load conditions, unless noted otherwise	hly of the Handi I on the 1. LVL is the 2. Refer ds. appr 3. Dan se 4. Des	micals <b>ling &amp; Installati</b> beams must not be c er to manufacture roling installation ning details, beam vorals naged Beams must no ign assumes top edge	ON ut or drilled sr's product information requirements, multi-ply strength values, and code st be used is laterally restrained	6. For flat roofs provie ponding	de proper drainage to preven	Manufacturer Info Metsä Wood 301 Merritt 7 Buildin Norwalk, CT 06851 (800) 622-5850 www.metsawood.co ICC-ES: ESR-3633	g, 2nd Floor m/us	ech, Inc. S. Reilly Road, Suite #639 teville, NC 4 64-TRUS





1	isDesign	Client: BEN STOUT Project: Address:	Date: Input by: Job Name: Project #:	4/8/2021 Neal Baggett 17 FOREST RIDGE	Page 9 of 16
BM2	Kerto-S LVL	1.750" X 16.000"	2-Ply - PASSED	evel: Level	
			1		
· .	· · · · ·				1'4"
	7'7 1	1/2" 1	11'1 1/4 19'8 3/4"	3 SPF · · ·	3 1/2"

## Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. except for regions covered by concentrated load fastening. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 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	
Duration Factor	1.00

## Concentrated Load

Fasten at concentrated side load at 11-5-12 with a minimum of (18) – 10d Box nails (.128x3") in the

pattern shown

puttern shown.		
Capacity	66.8 %	
Load	983.5lb.	
Total Yield Limit	1473.0 lb.	
Cg	0.9998	
Yield Limit per Fastener	81.9 lb.	
Yield Mode	IV	
Load Combination	D+L	
Duration Factor	1.00	

chemicals

5.

## Min/Max fastener distances for Concentrated Side Loads



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 ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

Version 20.80.210 Powered by iStruct™

1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive

		Client:	BEN STOU	Т		Da	ite:	4/8/2021				Page 10 of
		Project:				Inp	out by:	Neal Bagge	ett			
is	Design	Address	:			Jo	b Name:	17 FORES	T RIDGE			
						Pr	oject #:					
BM5 I	Kerto-S LV	/L 1.750	" X 24.00	)0" 3	-Ply - P	ASSEC	) L	evel: Level				
					•							
											<del>III</del>	
3		4						7 6				
	2	<u> </u>		1				M	5			
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												MM
	a sitte			alt in you	1.00	-	- ACT	The second	-			2'
		and the second states		Section Contracts	Contraction of the second	and a second	SAL AND		and the second states			Ш
1 SPF End	l Grain								2 \$	SPF End Gr	ain	
/				23'11	1"							5 1/4"
,				22:14	1"						_	1 1
Ι				23 1	1						I	
Member In	formation					Reaction	s UNP	ATTERNE	D lb (Up	lift)		
Туре:	Girder	App	lication:	Floor		Brg	Live	Dead	d Sn	OW	Wind	Const
Plies:	3	Des	ign Method:	ASD	45	1	957	520	5 3	791	0	0
Deflection	aition: Dry	Bui	ding Code:	IBC/IRC 20	15	2	957	5205	5 3	791	0	0
Deflection TL:	460	Loa	u Shanng: k·	res Not Checke	d							
Importance:	Normal - II	Dee	к.	Not Oneone	u							
Temperature:	Temp <= 100	°F										
1						Bearings						
						Bearing	Length	Cap.	React D/L	lb Total	Ld. Case	Ld. Comb.
						1 - SPF	3.500"	56%	5205 / 379	91 8996	L	D+S
						End						
Analysis Re	sults					Grain	0.500"	F00/	5005 / 07/			D.O
Analysis	Actual	Location Allowed	Capacity	Comb.	Case	2 - SPF End	3.500	56%	5205/379	91 8996	L	D+S
Moment	37841 ft-lb	11'11 1/2" 131295	ft-lb 0.288 (29	%) D+0.75(l	L+S) L	Grain						
Unbraced	37841 ft-lb	11'11 1/2" 37957 ft	-lb 0.997	D+0.75(I	L+S) L							
Shear	7185 lb	21'8 3/8" 30912 lb	0.232 (23	%) D+S	L							
LL Defl inch	0.160 (L/1763) 1	11'11 9/16" 0.587 (L	(480) 0.270 (27	'%) S	L							
TI Defl inch	0.378 (L/746)	11'11 9/16" 0.783 (L	/360) 0.480 (48	%) D+S	L							
Decian Not				,		1						
1 Easten all I	olies using 3 rows of	10d Box nails ( 128)	3") at 12" o.c. M	aximum end	distance not	4						
to exceed 6	5".	104 20X Hallo (1120)	o ) at 12 0.0.1									
2 Refer to las	st page of calculation	ns for fasteners requi	red for specified	loads.								
4 Top loads r	nust be supported e	qually by all plies.	euge only.									
5 Top must b	e laterally braced at	a maximum of 7'1 1/	8" o.c.									
6 Bottom bra	ced at bearings.	l an ainela nhuuidth										
		L ocation	Trib Width	Side	Dead 0 0		Snow	v 1 15 \\	ind 16 C	onst 1 25	Commen	ts
1	Luniform	Locallo		Ton			51100	יו.וס עע הסור		0113L 1.20		ING
1	Uniform		_	т	30 PLF	80 PLF				UPLF	FL. LOAD	
2	Part. Uniform	0-0-0 to 5-9-1	2	юр	114 PLF	0 PLF		UPLF	UPLF	0 PLF	WALL ABC	JVE
3	Part. Uniform	0-0-0 to 5-9-1	2	Тор	322 PLF	0 PLF	32	2 PLF	0 PLF	0 PLF	A01 RF. T	RUSSES
4	Point	5-9-1	2	Тор	1977 lb	0 lb	) 1	919 lb	0 lb	0 lb	13'-FB. @ 1	PLAY ROOM Brg
5	Part Uniform	18-1-4 to 23-11	ſ	Ton	11 <u>4</u> DI E		:	0 PI F		이미드		<b>NVE</b>
Continued on pr	ade 2	10-1-4 10 20-11-		104	╵╵┭┍┎┍	VFLF			UT LI	U I LI		~ • <b>L</b>
onunded on pa	490 Z											
Notes		chemicals		6. For	r flat roofs provide p	proper drainage to	prevent	Manufacturer	nfo	C 1	omtech, Inc. 001 S. Reilly Rose	d. Suite #639
Calculated Structured structural adequacy	Designs is responsible only o of this component based on	of the Handling & Insta	llation	por	nding		[]	Metsä Wood	uilding 2nd E	oor U	ayetteville, NC SA	
design criteria and responsibility of the	l loadings shown. It is customer and/or the contracted	the 2. Refer to manual or to regarding install	acturer's product in tion requirements	formation multi-ply			i	Norwalk, CT 06	anung, ∠nu Fi 851	2	8314 10-864-TRUS	
ensure the compor application, and to ve	nent suitability of the inter rify the dimensions and loads.	nded fastening details, b approvals	eam strength values, a	and code				(800) 622-5850 www.metsawoo	od.com/us			
Lumber 1. Dry service condit	ions, unless noted otherwise	<ol> <li>Damaged Beams m</li> <li>Design assumes to</li> </ol>	ust not be used edge is laterally restrai	ned				ICC-ES: ESR-3	633			
2. LVL not to be trea	ated with fire retardant or corro	osive 5. Provide lateral sup lateral displacemen	and rotation	to avoid Th	nis design is valid	l until 11/27/202	3				con	птесн



isDesign	Client: BEN STOUT Project: Address:	Date: 4/8/2021 Input by: Neal Baggett Job Name: 17 FOREST RIDGE Project #:	Page 12 of 10
BM5 Kerto-S L	/L 1.750" X 24.000"	3-Ply - PASSED	
	Ŵ	M	
	· · · · · · · ·		
1 SPF End Grain		2 SPF End	
	2	23'11"	<b>f</b> 1/4"
/	2	23'11"	
Multi-Ply Analysis Fasten all plies using 3 row 6"	rs of 10d Box nails (.128x3") at 12" o	o.c Nail from both sides. Maximum end distance not to	exceed

v		
Capacity	0.0 %	
Load	0.0 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		
Duration Factor	1.00	

6. For flat roofs provide proper drainage to prevent	Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639
ponding n y	Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	Fayetteville, NC USA 28314 910-864-TRUS
e	www.metsawood.com/us ICC-ES: ESR-3633	
This design is valid until 11/27/2023		соттесн
	<ol> <li>For flat roofs provide proper drainage to prevent ponding</li> <li>This design is valid until 11/27/2023</li> </ol>	6. For flat roofs provide proper drainage to prevent ponding Manufacturer Info Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us ICC-ES: ESR-3633 id This design is valid until 11/27/2023

	•		Client:	BEN STOUT			Da	ate:	4/8/2021				Page 13 of 1
Tie	Design		Project:				In	put by: b Name <sup>.</sup>	Neal Bage	gett ST RIDGE			
			Address.				Pr	roject #:	IT I OKE				
GDH	Kerto-S L	VL 1	.750" >	( 11.875'	' 2-P	ly - P	ASSE	<b>)</b>	evel: Level				
						-							
												_	
			•		1	•	•	•			•		$\pi \prec$
	a rite	-			the grant and	alife	-	- Carl	tin .	-	-		11 7/8"
1 SPF Er	• • • • • • • • • • • • • • • • • • •	•	•		•			•	•	• • • 2 SPF	• End Grai	n ·	ш 🖵
	-				( 010 !!						-	<b> </b>	
					18'3"								3 1/2"
ï					19'							Ĩ	
Montherit	formation						Donatio		ATTERN				
Type:	Girder		Applicati	on: Floo	r		Bra	Live	Dea	ad Snov	v (1	Wind	Const
Plies:	2		Design N	lethod: ASD	)		1	0	20	16	0	0	0
Moisture Con	dition: Dry		Building	Code: IBC/	IRC 2015		2	0	20	16	0	0	0
Deflection LL:	480		Load Sha	aring: No Not	Checked								
Importance:	Normal - II		Doolu		onconcu								
Temperature:	Temp <= 10	0°F											
							Bearings	5	0	De e et D/L III	<b>T</b> -4-1		L.d. Osmik
							Bearing	Length 4.500"	Cap. 15%	2016 / 0	10tal 2016	Ld. Case Uniform	La. Comb. D
							End	1.000	10,0	201070	2010	onnonn	D
Analysis Re	sults			0 "			Grain	4 500"	15%	2016/0	2016	Uniform	D
Analysis Moment	Actual	Location	Allowed	Capacity (	comb.	Case	End		1070	201070	2010	erinerini e	2
Unbraced	8957 ft-lb	9'6"	8966 ft-lb	0.999 E	) (	Uniform	Grain						
Chase	1740 lb	17'0 2/0"	7090 lb	(100%) 0.218 (22%) 5	<b>`</b>	Uniform							
Snear	0.000 (L/999)	17 8 3/8	999.000 (L/0)	0.218 (22%) L	)	Uniform							
TL Defl inch	0.582 (L/379)	9'6 1/16"	0.612 (L/360)	0.950 (95%) E	) (	Uniform							
Design Not	tes						1						
1 Fasten all	olies using 2 rows c	of 10d Box na	ils (.128x3") a	t 12" o.c. Maxim	um end dista	nce not	1						
2 Refer to las	st page of calculation	ons for fasten	ers required for	or specified load	s.								
3 Girders are	e designed to be su	pported on th	e bottom edge	e only.									
5 Top must b	e laterally braced a	it a maximum	of 10'4 1/8" c	.C.									
6 Bottom bra 7 Lateral sler	iced at bearings. Inderness ratio base	ed on sinale p	lv width.										
ID	Load Type		Location 7	rib Width S	ide D	ead 0.9	Live	1 Snov	v 1.15 \	Wind 1.6 Cor	st. 1.25	Comment	s
1	Uniform			Тс	р	203 PLF	0 PLF	F	0 PLF	0 PLF	0 PLF	END WALL	_/ GABLE
	Self Weight					9 PLF							
	Sell Weight					9 PLF							
					6 F 7 -	afa and t	anna destes de		Manufacture	r Info	Co	omtech, Inc.	
Notes Calculated Structured	Designs is responsible only	chemic of the Handlin	ans Ig & Installatio	n	<ul> <li>b. For flat roop ponding</li> </ul>	uis provide pi	oper drainage to	prevent	Metsä Wood		10 Fa	01 S. Reilly Road, yetteville, NC	, Suite #639
design criteria and responsibility of the	d loadings shown. It is customer and/or the contra	s the 2. Refer ctor to regard	ams must not be cut to manufacturer ing installation	or drilled s product information requirements, multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-multi-m	on Iy				301 Merritt 7 I Norwalk, CT (	∃uilding, 2nd Floc )6851	r 28 91	314 0-864-TRUS	
ensure the compor application, and to ver	nent suitability of the in rify the dimensions and loads	tended fasteni 3. approv 3. Damos	ng details, beam si als and Beams must not	rength values, and coo	le				(800) 622-585 www.metsawo	ood.com/us			
Dry service condit     LVL not to be treat	ions, unless noted otherwise ated with fire retardant or co	4. Design 5. Provide	assumes top edge	s laterally restrained bearing points to avo	id				IUU-ES: ESR	-3033		con	птесн
		lateral	aspiacement and ro	uauUII	This desi	ıgn is valid	until 11/27/202	23					

Í	isDesign	Client: BEN STOUT Project: Address:	Date: Input b Job Na Project	4/8/2021 y: Neal Baggett me: 17 FOREST RIDGE :#:	Page 14 of
GDH	Kerto-S LVL	1.750" X 11.875"	2-Ply - PASSED	Level: Level	
	· · · ·	· · · ·	· · · · ·	· · · ·	
1 SPF	End Grain			2 SPF End	I Grain //
			18'3"		<b>1 1 3</b> 1/2"
1			19'		1
Multi-Ply	/ Analysis				
Fasten all	plies using 2 rows o	f 10d Box nails (.128x3") at 12"	o.c Maximum end distance	not to exceed 6"	
Capacity Load	0. 0.	0 % 0 PLF			
Yield Limit pe	er Foot 16	3.7 PLF			
Yield Limit pe Yield Mode	er Fastener 81 IV	.9 lb.			
Edge Distand	ce 1	1/2"			
Min. End Dis Load Combir	itance 3" nation				
Duration Fac	tor 1.	00			
Notes		chemicals	6. For flat roofs provide proper drainage to preven	Manufacturer Info	Comtech, Inc. 1001 S. Reilly Road, Suite #639
Calculated Struct structural adequa	tured Designs is responsible only of the acy of this component based on the	Handling & Installation	ponding	Metsä Wood 301 Merritt 7 Building, 2nd Floor	Fayetteville, NC USA
design criteria responsibility of	and loadings shown. It is the the customer and/or the contractor to	2. Refer to manufacturer's product information regarding installation requirements. multi-plv		Norwalk, CT 06851	28314 910-864-TRUS
ensure the cor application, and t	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	
Lumber 1. Dry service or	onditions, unless noted otherwise	<ol> <li>Jamaged Beams must not be used</li> <li>Design assumes top edge is laterally restrained</li> <li>Provide lateral support at hearing maintents to support</li> </ol>		ICC-ES: ESR-3633	
2. LVL not to be	e treated with fire retardant or corrosive	lateral displacement and rotation	This design is valid until 11/27/2023		соттесн



	Client: BEN STOUT		Date:	4/8/2021	Page 16 of 1
isDesign	Address:		Job Name	: 17 FOREST RIDGE	
			Project #:		
BM1 Kerto-S LVL	1.750" X 11.875	" 2-Ply -	PASSED		
• • •	• • •	• •	• •		
		• •	•••		11 7/8"
	• • •	• •	• •	•••	
1		12'			/ ` 3 1/2"
]		12'7"			.]
Multi-Ply Analysis					
Fasten all plies using 4 rows of 1	10d Box nails ( 128x3") at 12"	o c Maximum e	nd distance no	nt to exceed 6"	
Capacity 81.0	1%				
oad 305. /ield Limit per Foot 376	0 PLF 5 PLF				
/ield Limit per Fastener 94.1	lb.				
/ield Mode IV	0"				
Ain. End Distance 3"	2				
oad Combination D+S					
Juration Factor 1.15	,				
Notes	chemicals	6. For flat roofs provide prop	per 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	Handling & Installation 1. LVL beams must not be cut or drilled	ponung		Metsä Wood 301 Merritt 7 Building, 2nd Floor	Fayetteville, NC USA 29214
design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended	<ol> <li>Refer to manufacturer's product information regarding installation requirements, multi-ply factening details, becam strength values, and sold</li> </ol>			Norwalk, CT 06851 (800) 622-5850	20314 910-864-TRUS
application, and to verify the dimensions and loads.	approvals 3. Damaged Beams must 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 corrosive</li> </ol>	<ol> <li>Design assumes top edge is laterally restrained</li> <li>Provide lateral support at bearing points to avoid lateral displacement and rotation</li> </ol>				соттесн
	atorai uropiacomont anu rotation	I his design is valid u	ntu 11/07/0000		