~	•	Client: Project:	Weaver Hom Magnolia Ele				ate: put by:	8/3/2020 Christine S	hivy			Page 1 o
is	Design	Address:	Magnolia I	Elev. C				Magnolia E	lev. C			
BM1 M	Kerto-S LVL	1.750"	' X 16.00	0" 3	-Ply - P		oject #:	vel: Level				
						3						
	2											
••••				1947					•			
1 SPF								2 SPI				
1			12'						\neg			5 1/4"
1			12'									
lember Inf	ormation					Reaction	is UNPA	TTERNE	D lb (Uplif	t)		
Туре:	Girder			Floor		Brg	Live	Dea			Wind	Const
Plies: Moisture Cond	3 lition: Drv		0	ASD BC/IRC 20	15	1	1932 1932	345 345			0 0	0 0
Deflection LL:	480		-	Yes		2	1002	040	- 1550	,	0	0
Deflection TL:	360	Decl	k: 1	Not Checke	d							
Importance:	Normal											
Temperature:	Temp <= 100°F					Bearings	5					
						Bearing		Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
						1 - SPF	-	82%	3454 / 2912	6366		D+0.75(L+S)
						2 - SPF	3.500"	82%	3454 / 2912	6366	L	D+0.75(L+S)
nalysis Res						1						
Analysis Moment	Actual Loc 17729 ft-lb	ation Allowed 6' 62010 ft-		Comb. 6) D+0.75(Case							
Unbraced	17729 ft-lb	6' 17732 ft-		D+0.75(,							
Shear	4565 lb 1'	6 5/8" 17920 lb		6) D+L	L							
LL Defl inch	0.066 (L/2116)	6' 0.289 (L/	480) 0.230 (23%	%) 0.75(L+8	S) L							
TL Defl inch	0.143 (L/968)	6' 0.385 (L/	360) 0.370 (37%	%) D+0.75(L+S) L							
esign Not	es											
1 Fasten all p to exceed 6	lies using 4 rows of 10d	Box nails (.128x	3") at 12" o.c. Ma	ximum end	distance not	1						
 2 Refer to last 3 Girders are 4 Top loads m 	t page of calculations for designed to be supporten nust be supported equally a laterally braced at a ma	ed on the bottom y by all plies.	edge only.	oads.								
	ced at bearings.	de ale de deter										
7 Lateral slen	derness ratio based on s Load Type	single ply width. Locatior	Trib Width	Side	Dead 0.9	Live 1	I Snow	1.15 \^	/ind 1.6 Con	st. 1 25	Commen	ts
1	Uniform	Location		Тор	125 PLF	0 PLF		PLF	0 PLF	0 PLF	Exterior W	
2	Uniform			Тор	325 PLF	0 PLF			0 PLF	0 PLF	A2	
				•								
-							Ū					
3	Uniform Self Weight			Far Face		322 PLF		PLF	0 PLF	0 PLF		
							м	anufacturer	Info	с	omtech, Inc.	
Notes Calculated Structured	Designs is responsible only of the	chemicals Handling & Instal	lation	6. For por	r flat roofs provide pr nding	oper drainage to	prevent	etsä Wood		10 Fa	001 S. Reilly Road ayetteville, NC	, Suite #639
structural adequacy o	f this component based on the loadings shown. It is the	1. LVL beams must not 2. Refer to manufa	be cut or drilled	mation			30		uilding, 2nd Floor 851	28	SA 3314 10-864-TRUS	
design criteria and				oulti-ply				00) 622-5850		9	10-004-1KUS	
design criteria and responsibility of the creations of the component of th	ent suitability of the intended	fastening details, be	tion requirements, meam strength values, and	d code								
lesign criteria and esponsibility of the cr nsure the compone pplication, and to veril _umber	ent suitability of the intended fy the dimensions and loads.	fastening details, be approvals 3. Damaged Beams mu 4. Design assumes top	eam strength values, an	d code			Ŵ	ww.metsawo C-ES: ESR-	od.com/us			

CSD |

1 .	/	Client Projec						3/2020 hristine Shivy			Page 1 of
	sDesign	Addre	-				-	agnolia Elev. C			
	Kerto-S LVL	4 75					oject #:	: Level			
BM2	Kerto-5 LVL	. 1.75	J X 10.00	JU 2-P	ry - P/	ASSEE					
	2										
•	• •	• •			-	-	••				Π \uparrow
											1'4"
1.	No. market		10-	1	17	-					M
1 SPF							2 SPF				
/			10'9 1/2"								3 1/2"
/			10'9 1/2"				1				
	formation							TERNED Ib (U			
Type: Plies:	Girder 2		pplication: esign Method:	Floor ASD		Brg 1	Live 3389	Dead : 1200	Snow 0	Wind 0	Const 0
Moisture Con	•	В	uilding Code:	IBC/IRC 2015		2	3389	1200	0	0	0
Deflection LL Deflection TL			0	No Not Checked							
Importance:	Normal		eck.	NOT CHECKED							
Temperature:											
						Bearings					
						Bearing	-	Cap. React D		tal Ld. Case	Ld. Comb.
						1 - SPF 2 - SPF		88% 1200/3 88% 1200/3		89 L 89 L	D+L D+L
Analysis Re						1	0.000				0.2
Analysis Moment		ocation Allow 5'4 3/4" 34565			Case						
Unbraced		5'4 3/4" 54505 5'4 3/4" 11746			L						
Shear		1'6 5/8" 11947			L						
LL Defl inch	0.085 (L/1457)	5'4 3/4" 0.259	(L/480) 0.330 (33	%) L	L						
TL Defl inch	0.115 (L/1076)	5'4 3/4" 0.345	(L/360) 0.330 (33	%) D+L	L						
Design No						1					
	plies using 3 rows of 10 6".	d Box nails (.12	.8x3") at 12" o.c. M	aximum end dis	tance not						
1 Fasten all to exceed		or fasteners rec	quired for specified	loads.							
to exceed 2 Refer to la			vm edge only								
to exceed 2 Refer to la 3 Girders are 4 Top brace	e designed to be suppor d at bearings.		om edge only.								
to exceed 2 Refer to la 3 Girders ard 4 Top braced 5 Bottom bra	e designed to be suppor d at bearings. aced at bearings.	rted on the botto									
to exceed 2 Refer to la 3 Girders ard 4 Top braced 5 Bottom bra	e designed to be suppor d at bearings.	rted on the botto	h.	Side	Dead 0.9	Live 1	Snow 1.	15 Wind 1.6	Const. 1.2	5 Comment	s
to exceed 2 Refer to la 3 Girders and 4 Top braced 5 Bottom bra 6 Lateral sle	e designed to be suppor d at bearings. aced at bearings. enderness ratio based or	rted on the botto n single ply widt	h.	Side Far Face	Dead 0.9 89 PLF	Live 1 267 PLF			Const. 1.2 0 PL		S
to exceed 2 Refer to la 3 Girders and 4 Top braced 5 Bottom bra 6 Lateral slee ID	e designed to be suppor d at bearings. aced at bearings. Inderness ratio based or Load Type	rted on the botto n single ply widt	h.				0 P	LF 0 PLF	0 PL		S

SDH			Magnolia Elev.	0			Magnolia Elev. C			
	Kerto-S LVL	1.750"	X 11.875"	2-Ply - F		bject #:	vel: Level			
	2									
-			1				• •			
•			1	2. AT.	-	417				
1 SPF	End Grain		8'10"			2 SPF	End Grain			3 1/2"
<u> </u>			8'10"							3 1/2
ember I	nformation _{Girder}	Applic	ation: Floor		Brg	Live	TTERNED Ib (U Dead S	SIITT)	Wind	Const
lies:	2 ondition: Dry LI: 480	Desigi Buildir	n Method: ASD ng Code: IBC/IRC Sharing: No Not Che		1 2	0	1101 1101	177 177	0	0
mportance	Normal	Dook								
emperatur	e: Temp <= 100°F				Bearings					
					Bearing 1 - SPF End	Length	Cap. React D/ 12% 1101 /		al Ld. Case 7 L	Ld. Comb. D+S
nalysis F					Grain 2 - SPF	2 500"	12% 1101 /	177 107	7 L	D+S
Analysis Moment	Actual Loc 2185 ft-lb	cation Allowed 4'5" 17919 ft-lb	Capacity Cor 0.122 (12%) D	nb. Case Uniform	End Grain	0.000	12/0 1101/	111 121	,	BIG
Jnbraced	2536 ft-lb	4'5" 10756 ft-lb	. ,	; L	Glain					
Shear L Defl inc		'7 3/8" 7980 lb	0.100 (10%) D 30) 0.030 (3%) S	Uniform L						
	(L/18257)	,	60) 0.140 (14%) D+S							
esign N					1					
1 Fasten a to excee	ll plies using 2 rows of 10d d 6".	Box nails (.128x3") at 12" o.c. Maximum	end distance not						
	last page of calculations fo are designed to be supporte									
4 Top load	s must be supported equal									
6 Bottom b	ed at bearings. raced at bearings.									
7 Lateral s D	lenderness ratio based on Load Type		Trib Width Side	Dead 0.9	Live 1	Snow	1.15 Wind 1.6	Const. 1.25	Commen	ts
	Uniform	2004071	Тор	200 PLF			PLF 0 PLF	0 PLF		
2	Uniform		Тор	40 PLF	0 PLF	40	PLF 0 PLF	0 PLF	2'-0" Gabl	e End
	Self Weight			9 PLF						
uctural adequae sign criteria sponsibility of th sure the com	red Designs is responsible only of the cy of this component based on the and loadings shown. It is the customer and/or the contractor to ponent suitability of the intended verify the dimensions and loads.	 LVL beams must not be Refer to manufacture regarding installation 	tion	6. For flat roofs provide ponding	proper drainage to p	M 30 No	anufacturer Info etsä Wood 1 Merritt 7 Building, 2nd nwalk, CT 06851 00) 622-5850 ww.metsawood.com/us	Floor	Comtech, Inc. 1001 S. Reilly Road Fayetteville, NC USA 28314 910-864-TRUS	1, Suite #639
umber . Dry service cor	nditions, unless noted otherwise treated with fire retardant or corrosive	 Damaged Beams must Design assumes top ed 	not be used lge is laterally restrained t at bearing points to avoid			IC	C-ES: ESR-3633			птесн