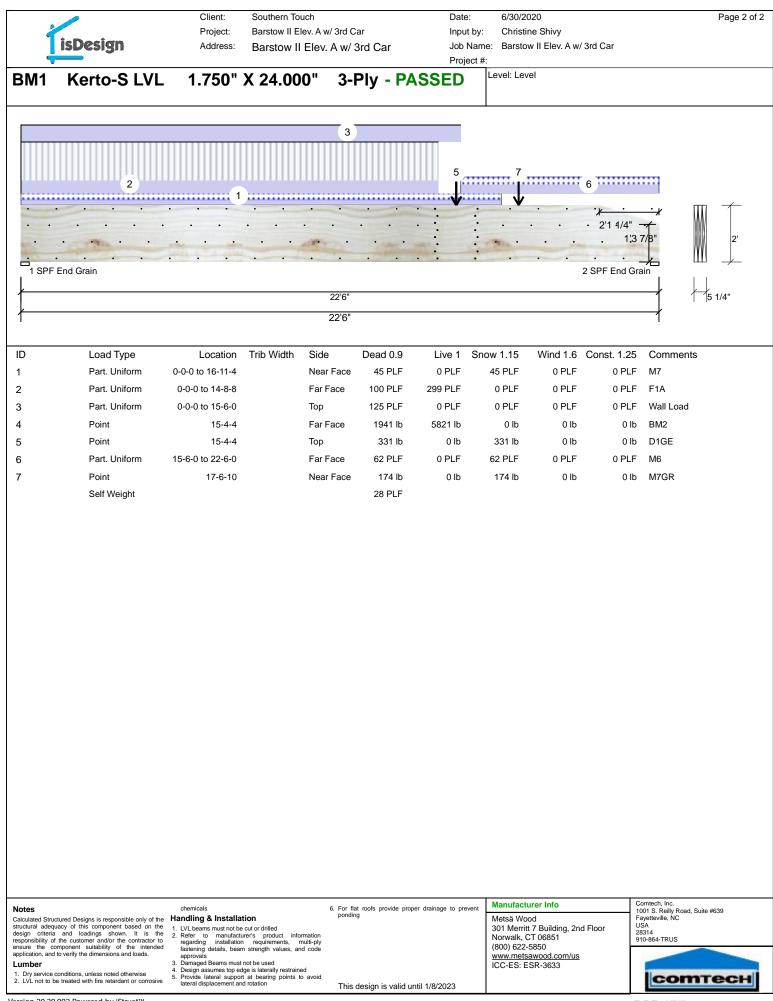
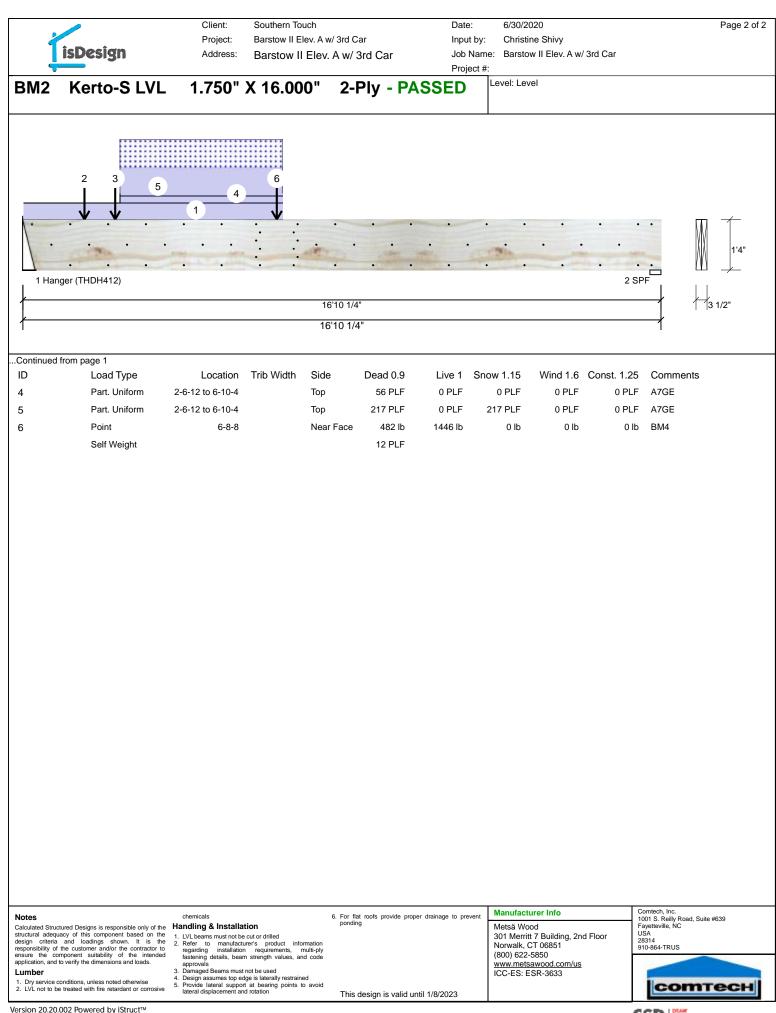
	/		Client:	Southern Touch			Date:	6/30/2020			Page 1 of 2
			Project:	Barstow II Elev. A	Aw/ 3rd Car		Input by:	Christine S	Shivy		
is	Design		Address:	Barstow II Ele	ev. A w/ 3rd Ca	r	Job Nam	e: Barstow II	Elev. A w/ 3rd Ca	ſ	
	_						Project #				
BM1 I	Kerto-S L	VL 1	.750" >	( 24.000"	3-Plv	- PASS	ED	Level: Level			
					5						
					3						
	2						5	7	6		
	2		1						0		
•		•		• • •		· · ·	•	. <b>v</b> .	· · ·	· · · /	$\Pi \uparrow$
									· · 2'1	1/4" -1	M
	Con Mila				·		-	- Win		1'3 7/8"	2'
-					74					. ,	
1 SPF End	d Grain								2 SPF	End Grain	,
					0010						
					22'6"					,	15 1/4"
1					22'6"					1	
Member In	formation					Reart	ions I IN		D lb (Uplift)	)	
Type:	Girder		Applicat	ion: Floo	r	Brg	Liv			) Wind	Const
Plies:	3		Design I			ы <u>у</u> 1	480			0	0
Moisture Con			Building		IRC 2015	2	541			0	0
Deflection LL:	•		Load Sh			2	541	0 000	1010	0	0
Deflection TL:	360		Deck:	Not 0	Checked						
Importance:	Normal										
Temperature:	Temp <= 10	00°F									
						Bearir	ngs				
							ng Leng	-	React D/L lb	Total Ld. Case	Ed. Comb.
						-	PF 3.500	54%	3878 / 4803	8681 L	D+L
	culto					End Grain					
Analysis Re	Actual	Location	Allowed	Conceity	comb. Cas		PF 3.500	" 58%	3802 / 5416	9218 L	D+L
Analysis Moment	61233 ft-lb		114169 ft-lb	Capacity C 0.536 (54%) D		End					
Unbraced	61233 ft-lb		61526 ft-lb		)+L L	Grain					
Unbraced	01200 11 10	140 1/2	010201010	(100%)							
Shear	9906 lb	20'3 3/8"	26880 lb	0.369 (37%) D	+L L						
Rt. Scarf	155 psi, 9198		320 psi	0.483 (48%) D	HL L						
LL Deflinet	lb	11111 7/16"	0 552 /1 /490	) 0 510 (519() 1							
	0.282 (L/939) 0.478 (L/554)			) 0.510 (51%) L ) 0.650 (65%) D							
		11911/10	0.735 (1/300	) 0.030 (0378) D							
Design Not		-(40.15	1- ( 400 0"								
1 Fasten all p to exceed 6	olies using 4 rows 6".	of 10d Box na	iis (.128x3") a	at 12" o.c. Maximi	um end distance	not					
2 Refer to las	st page of calculati	ons for fasten	ers required f	or specified loads	3.						
3 Concentrat present.	ed load fastener s	pecification is	in addition to	hanger fasteners	s if a hanger is						
	steners applied fro	om a single si	de of the men	nber use tip value	s where publishe	d.					
	LVL are in accorda	-									
	e designed to be su		-	e only.							
-	nust be supported e laterally braced		-	c							
	ced at bearings.		0. 12 0,0 0.								
10 Lateral sler	nderness ratio bas	ed on single p	ly width.								
Notes		chemi	cals		6. For flat roofs pro	ovide proper drainag	e to prevent	Manufacturer	Info	Comtech, Inc. 1001 S. Reilly Roa	d. Suite #639
Calculated Structured	Designs is responsible on of this component based	ly of the Handlin		n t or drilled	ponding	·		Metsä Wood	wilding 2nd Elect	Fayetteville, NC USA	.,
design criteria and responsibility of the	d loadings shown. It customer and/or the contra	is the 2. Refer actor to regard	to manufacture	it or drilled 's product information requirements, multi-pl	n V			Norwalk, CT 0		28314 910-864-TRUS	
ensure the compor application, and to ver	nent suitability of the in rify the dimensions and load	ntended fasteni ds. approv	ng details, beam s /als	strength values, and code	ė			(800) 622-585 www.metsawo			
Lumber 1. Dry service condit	ions, unless noted otherwis	<ol> <li>Dama 4. Design</li> </ol>	ged Beams must no n assumes top edge	is laterally restrained				ICC-ES: ESR-		-	
2. LVL not to be treat	ated with fire retardant or co		e lateral support a displacement and re	t bearing points to avoin tation		valid until 1/8/2	023			Cor	птесн
Version 20.20.002	Powered by iStruct™	и			-					CSD	

CSD BUILD



isl	Design	Client: Project: Address:	Southern Touc Barstow II Ele Barstow II E		Car	Date: Input by: Job Name	6/30/2020 Christine S e: Barstow II	Shivy Elev. A w/ 3rd Ca	r	Page 1 of
3M2 K	erto-S LVL	1.750"	X 16.000	)" 2-Ply	- PASS	Project #:	Level: Level			
1 Hanger (	2 3 5 • • • • • • • • • • • • • • • • • • •	4		16'10 1/4" 16'10 1/4"		• • •	34		2 SPF	1'4" 1'4" 1'3 1/2"
ember Info	Ormation Girder	Applic	ation:	oor				ED Ib (Uplift)		Corot
Type: Plies: Moisture Condi Deflection LL: Deflection TL:	2 tion: Dry 480 360	Desigi Buildir	n Method: As ng Code: IB Sharing: Ne	SD C/IRC 2015	Brg 1 2	Live 87 569	7 451	2 3249	Wind 0 0	Const 0 0
mportance: Temperature:	Normal Temp <= 100°F									
emperature.	16mp <= 100 1				Beari	ngs				
					Bear 1 - Hang	ing Lengtl 4.000"	h Cap. 64%	React D/L lb 4512 / 3249	Total Ld. Case 7761 L	Ld. Comb. D+S
nalysis Res	ults					PF 3.500"	39%	1144 / 891	2035 L	D+0.75(L+S)
Moment Jnbraced Shear	19615 ft-lb 6' 19615 ft-lb 6' 7542 lb 7' 0.172 (L/1142) 7'	Decision         Allowed           3 1/16"         39750 ft-lb           3 1/16"         19705 ft-lb           1177 1/8"         13739 lb           4 3/16"         0.409 (L/44)           13/16"         0.546 (L/36)	0.995 (100%) 0.549 (55%) 30) 0.420 (42%)	D+0.75(L+S) L D+0.75(L+S) L D+S L 0.75(L+S) L	ase					
esign Note	es									
<ol> <li>Fasten all pli to exceed 6"</li> <li>Refer to last</li> <li>Concentrate present.</li> <li>Fill all hange</li> <li>Girders are of</li> <li>Top loads mi</li> <li>Top must be</li> <li>Bottom brace</li> <li>Lateral slence</li> </ol>	ies using 3 rows of 10	or fasteners required cation is in addition ted on the bottom ed illy by all plies. haximum of 5'10 7/8	d for specified loa to hanger fasten dge only. " o.c.	ads. ers if a hanger is						
D	Load Type	Location	Trib Width					Vind 1.6 Const		
	Part. Uniform	0-0-0 to 6-10-4				) PLF	0 PLF		0 PLF Exterior V	/all
	Point Point	1-7-8 2-5-4		•	500 lb 436 lb	0 lb 0 lb	500 lb 2436 lb	0 lb 0 lb	0 lb B1GE 0 lb B1GR	
ntinued on pag		2-0 <b>-4</b>		νορ <u>ζ</u>		0.10	2 100 10	010	SID DION	
uctural adequacy of sign criteria and sponsibility of the cur sure the componer plication, and to verify umber Dry service condition	tesigns is responsible only of the this component based on the loadings shown. It is the stomer and/or the contractor to it suitability of the intended the dimensions and loads. ns, unless noted otherwise d with fire retardant or corrosive	<ol> <li>LVL beams must not be</li> <li>Refer to manufacturegarding installation fastening details, bear approvals</li> <li>Damaged Beams must</li> <li>Design assumes top ecision</li> </ol>	cut or drilled irrer's product inform requirements, mu n strength values, and not be used ge is laterally restrained t at bearing points to	ponding ation ti-ply code avoid	provide proper draina		Manufacturer Metsä Wood 301 Merritt 7 E Norwalk, CT 0 (800) 622-585 www.metsawo ICC-ES: ESR-	Building, 2nd Floor 6851 0 <u>iod.com/us</u>	Comtech, Inc. 1001 S. Reilly Roa Fayetteville, NC USA 28314 910-864-TRUS	d, Suite #639



CSD M

Project #:	Christine Shivy : Barstow II Elev. A w/ 3rd Level: Level 2 SPF	d Car	1'4"
SED L			
actions UNF	2 SPF		
actions UNF	2 SPF		
actions UNF	2 SPF		
actions UNF	2 SPF		
actions UNF	2 SPF		
actions UNF	2 SPF		
actions UNF	2 SPF		
actions UNF			
actions UNF			
actions UNF	1		
actions UNF	1		1 1/2"
actions UNF			
		lift)	
J Live		iow Wind	Const
1824	1145	0 0	0
1824	1145	0 0	0
arings			
earing Length	Cap. React D/L	lb Total Ld. Cas	e Ld. Comb.
- SPF 3.500"			D+L
- SPF 3.500"	57% 1145 / 182	24 2969 L	D+L
			vall
	- SPF 3.500" - SPF 3.500"	Live 1 Snow 1.15 Wind 1.6 C	Barring         Length         Cap.         React D/L lb         Total         Ld. Case           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • SPF         3.500"         57%         1145 / 1824         2969         L           • Live 1         Snow 1.15         Wind 1.6         Const. 1.25         Comme

	/	Client:	Southern Tou	ich		Da	ite:	6/30/2020				Page 1 of
		Project:	Barstow II Ele	ev. A w/ 3rd Ca	ar	Inp	out by:	Christine S	Shivy			Ū
	isDesign	Address:	Barstow II	Elev. A w/ 3	rd Car	Jol	b Name:	Barstow II	Elev. A w/ 3rd C	ar		
							oject #:					
BM4	Kerto-S LVL	1.750"	X 16.00	0" 2-F	Ply - P	PASSED	) <sup>Le</sup>	evel: Level				
					5							
	3											
			<u> </u>									
	4	5	6									
		2										
	<b>v</b> 1	<b>v</b>	V									,
•	• • •	•	•									$\overline{\mathbf{M}}$ 1
				./								
	CTWIL .			1.10								1'4"
•		- 1 · · · ·	• •	1								Ш
1 Hang	er (THF35140)	2 Ha	nger (THF3515	<sup>57)</sup> I								
<u>/</u>	6'8	1/2"		<b>→</b>								3 1/2"
												1 10 112
I	6.8	1/2"		I								
/lember	Information					Reaction	s UNP/	ATTERNE	D lb (Uplif	t)		
Type:	Girder	Applica		loor		Brg	Live	Dea	d Snow		Wind	Const
Plies:	2	-		SD		1	594	113			0	0
	ondition: Dry		0	BC/IRC 2015		2	594	126	7 608		0	0
Deflection I Deflection		Deck:	0	lot Checked								
Importance		Deek.										
Temperatur												
						Bearings						
						Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
							2.500"	25%	1130 / 798	1928	L	D+0.75(L+S)
	Doculto					Hanger	2 500"	200/	4007/004	04.00		
Analysis F Analysis		ation Allowed	Capacity	Comb.	Case	2 - Hanger	2.500"	28%	1267 / 901	2168	L	D+0.75(L+S)
Moment		8 5/8" 39750 ft-lb		D+0.75(L+S								
Unbraced		8 5/8" 18199 ft-lb	. ,	b) D+0.75(L+S	,							
Shear		2 7/8" 13739 lb		) D+0.75(L+8	,							
LL Defl inc		5 3/4" 0.161 (L/48			L.							
EE Boir int	(L/10813)	0 0, 1 0.101 ( <u>1</u> 10	(1,0)	0110(210)	-							
TL Defl ind	ch 0.017 (L/4494) 3'5 '	11/16" 0.215 (L/36	0.080 (8%)	D+0.75(L+8	S) L							
Design N	otes											
	all plies using 3 rows of 10d	Box nails (.128x3")	at 12" o.c. Max	kimum end dis	stance not	7						
to excee 2 Refer to	d 6". last page of calculations for	r fasteners required	for specified lo	ads								
	anger nailing holes.											
	are designed to be supporte		lge only.									
	ls must be supported equall ed at bearings.	y by all plies.										
	praced at bearings.											
	slenderness ratio based on s											
ID	Load Type	Location	Trib Width	Side	Dead 0.9				/ind 1.6 Cons	st. 1.25	Comment	S
1	Uniform			Near Face	67 PLF	0 PLF	6	7 PLF	0 PLF	0 PLF	M6	
2	Uniform			Far Face	59 PLF	177 PLF	. (	0 PLF	0 PLF	0 PLF	F3	
3	Uniform			Тор	125 PLF	0 PLF		0 PLF	0 PLF	0 PLF	Exterior Wa	all
4	Point	1-11-4		Тор	153 lb	0 lb		153 lb	0 lb	0 lb	C1	
5	Point	3-11-4		Тор	286 lb	0 lb		286 lb	0 lb	0 lb	C2	
ontinued on	page 2											
								/anufacturer	Info	0	omtech, Inc.	
Notes Calculated Structu	ured Designs is responsible only of the	chemicals Handling & Installat	ion	<ol><li>For flat ponding</li></ol>	roofs provide p	proper drainage to p	Jeveni	Aetsä Wood		1 F	001 S. Reilly Road, ayetteville, NC	Suite #639
structural adequa design criteria	acy of this component based on the and loadings shown. It is the	1. LVL beams must not be 2. Refer to manufactu	cut or drilled	nation			3		uilding, 2nd Floor	U 2	ISA 8314	
responsibility of t ensure the corr	the customer and/or the contractor to nponent suitability of the intended	regarding installation fastening details, beam	requirements, m	ulti-ply			(8	800) 622-5850	)	9	10-864-TRUS	
Lumber	o verify the dimensions and loads.	approvals 3. Damaged Beams must		4				ww.metsawo				
<ol> <li>Dry service co</li> <li>LVL not to be</li> </ol>	nditions, unless noted otherwise treated with fire retardant or corrosive	<ol> <li>Design assumes top ed</li> <li>Provide lateral support lateral displacement and</li> </ol>	at bearing points to	avoid		d until 1/0/0000					con	тесн
				THIS C	cordin is valle	d until 1/8/2023						

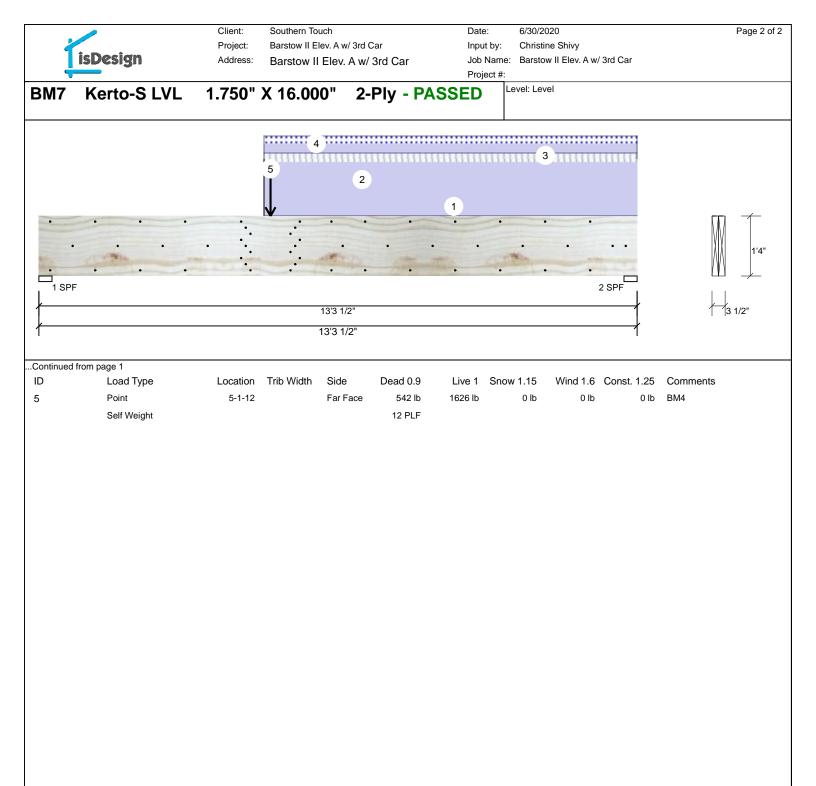
		Client:	Southern Touch		Date:	6/30/20				Page 2 c
1	icDocign	Project:	Barstow II Elev. A w		Input b	-	ne Shivy			
	isDesign	Address:	Barstow II Elev.	A w/ 3rd Car	Job Na Project		w II Elev. A w/ 3	ord Car		
3M4	Kerto-S LVL	1 750"	X 16 000"	2-Ply - PA		Level: Lev	el			
<b>5</b> 101-7		11700		2119 14	OOLD					
	3 4	5	6							
		2								
		. <b>v</b> .	v							1
			]						M	
	CO.W.								M	1'4"
1 Hang	ger (THF35140)	2 Hai	nger (THF35157)							<u> </u>
<u> </u>	6'8	8 1/2"							3	1/2"
<u> </u>	6'8	3 1/2"								
ontinued	from page 1									
D	Load Type		Trib Width Side	e Dead 0.9	Live 1 S	now 1.15	Wind 1.6	Const. 1.25	Comments	
6	Point	5-11-4	Тор	190 lb	0 lb	190 lb	0 lb	0 lb	C3	
	Self Weight			12 PLF						
ntes		chemicals		6. For flat roofs provide prove	drainage to preven	• Manufactu	urer Info		omtech, Inc.	20
alculated Struct	tured Designs is responsible only of the	1 IVI beams must not be	ion	6. For flat roofs provide prope ponding	r drainage to preven	Metsä Wo	bd	Eleor U	001 S. Reilly Road, Suite #6 ayetteville, NC SA	39
uctural adequa sign criteria sponsibility of	acy of this component based on the and loadings shown. It is the the customer and/or the contractor to	Handling & Installati 1. LVL beams must not be a 2. Refer to manufactur regarding installation	ion cut or drilled rer's product information requirements, multi-ply	6. For flat roofs provide prope ponding	r drainage to preven	Metsä Woo 301 Merritt Norwalk, C	od : 7 Building, 2nd :T 06851	Floor 10	001 S. Reilly Road, Suite #6 ayetteville, NC	39
alculated Struct uctural adequi sign criteria sponsibility of sure the con plication, and t	acv of this component based on the	Handling & Installati 1. LVL beams must not be 2. Refer to manufactur regarding installation fastening details, beam approvals 3. Damaged Beams must n	ion cut or drilled ref's product information requirements, multi-ply strength values, and code not be used	6. For flat roofs provide prope ponding	r drainage to preven	Metsä Wor 301 Merriti Norwalk, C (800) 622- www.mets	od 7 Building, 2nd 7 06851 5850 awood.com/us	Floor 10	001 S. Reilly Road, Suite #6 ayetteville, NC SA 8314	39
Iculated Struct uctural adequi sign criteria sponsibility of sure the cor plication, and t umber Dry service co	acy of this component based on the and loadings shown. It is the the customer and/or the contractor to mponent suitability of the intended	Handling & Installati 1. LVL beams must not be 0 2. Refer to manufactur regarding installation fastening details, beam approvals 3. Damaged Beams must n 4. Design assumes top edg	ton cut or drilled er's product information requirements, multi-ply strength values, and code not be used je is laterally restrained at bearing points to avoid	6. For flat roofs provide prope ponding		Metsä Woo 301 Merritt Norwalk, C (800) 622-	od 7 Building, 2nd 7 06851 5850 awood.com/us	Floor 10	001 S. Reilly Road, Suite #6 ayetteville, NC SA 8314	

~		Client: Project:	Southern Touch Barstow II Elev. A w/	3rd Car	Da Inp	te: out by:	6/30/2020 Christine S	hivy			Page	1 of
ĺ	sDesign	Address:	Barstow II Elev.	Aw/3rdCar	Jol	o Name:	Barstow II I	Elev. A w/ 3rd Ca	ar			
<b></b>						oject #:	vel: Level					
BM5	Kerto-S LVL	. 1.750	" X 9.250"	2-Ply -	PASSE	:D	ivel. Level					
				3								
	2		1								577	7
•		•	·	•	•	•					MM	ç
411	Contain .	三日日		·	-	•					$\mathbb{Z}$	
	F End Grain		6'1"		2 SPF End Gr	ain					3 1/2"	,
			6'1"								3 1/2	
	<b>c</b>											
Type:	nformation <sub>Girder</sub>	Applica	tion: Floor		Brg		Dead	D Ib (Uplift	•	Wind	Const	
Plies:	2		Method: ASD			961	1902			0	0	
Moisture Co	ndition: Dry	Buildin	g Code: IBC/IRC	2015	2	961	1902	2 1177		0	0	
Deflection L		Load S	•									
Deflection T		Deck:	Not Che	cked								
mportance:												
Femperature	e: Temp <= 100°F				Bearings							
					Bearing		Can	React D/L lb	Total	Ld. Case	Ld. Comb	-
					1 - SPF	-	33%	1902 / 1604	3505		D+0.75(L+	
					End					_	(	-,
nalysis R	lesults				Grain							
Analysis	Actual Loc	ation Allowed	Capacity Com	b. Case	2 - SPF End	3.500"	33%	1902 / 1604	3505	L	D+0.75(L+	-S)
Moment	4558 ft-lb 3	3' 1/2" 14423 ft-lb	0.316 (32%) D+0.	75(L+S) L	Grain							
Unbraced	4558 ft-lb 3	3' 1/2" 10944 ft-lb	0.416 (42%) D+0.									
Shear	2353 lb	5'1" 7943 lb	0.296 (30%) D+0.	75(L+S) L								
LL Defl incl	h 0.033 (L/2037) 3	3' 1/2" 0.141 (L/48	0) 0.240 (24%) 0.75(	L+S) L								
TL Defl inc	h 0.072 (L/932) 3	3' 1/2" 0.188 (L/36	0) 0.390 (39%) D+0.	75(L+S) L								
esign No	otes											
	I plies using 2 rows of 10d	Box nails (.128x3")	at 12" o.c. Maximum	end distance not								
to exceed 2 Refer to la	ast page of calculations for	fasteners required	for specified loads.									
	re designed to be supporte											
-	s must be supported equally	y by all plies.										
-	ed at bearings. raced at bearings.											
	enderness ratio based on s	single ply width.										
ID	Load Type	Location	Trib Width Side	Dead 0.9	Live 1	Snow	1.15 W	ind 1.6 Cons	it. 1.25	Comment	is	
1	Uniform		Тор	125 PLF	0 PLF	. (	) PLF	0 PLF	0 PLF	Exterior W	all	
2	Uniform		Тор	387 PLF	0 PLF	38	7 PLF	0 PLF	0 PLF	A1		
3	Uniform		Тор	106 PLF	316 PLF	. (	) PLF	0 PLF	0 PLF	F7		
	Self Weight			7 PLF								
• •		chemicals		For flat roofs provide ponding	proper drainage to p	nevent	lanufacturer	nfo	10	omtech, Inc. 001 S. Reilly Road	, Suite #639	
Notes	ed Designs is responsible only of the y of this component based on the	Handling & Installat 1. LVL beams must not be		pononny			letsä Wood 01 Merritt 7 Bi	uilding, 2nd Floor	Fa	ayetteville, NC ISA		
Calculated Structur			er's product information			Ň	lorwalk, CT 06	851		8314 10-864-TRUS		
Calculated Structur tructural adequac	e customer and/or the contractor to	regarding installation	requirements, multi-ply				200) 633 5050					
Calculated Structur tructural adequac lesign criteria a esponsibility of the ensure the comp application, and to	e customer and/or the contractor to conent suitability of the intended verify the dimensions and loads.	regarding installation fastening details, beam approvals	strength values, and code			8) <u>w</u>	300) 622-5850	d.com/us				
alculated Structur ructural adequac esign criteria a sponsibility of the nsure the comp oplication, and to umber . Dry service con	e customer and/or the contractor to ponent suitability of the intended verify the dimensions and loads.	regarding installation fastening details, beam approvals 3. Damaged Beams must r 4. Design assumes top edg	strength values, and code ot be used			8) <u>w</u>		d.com/us	Γ		птес	

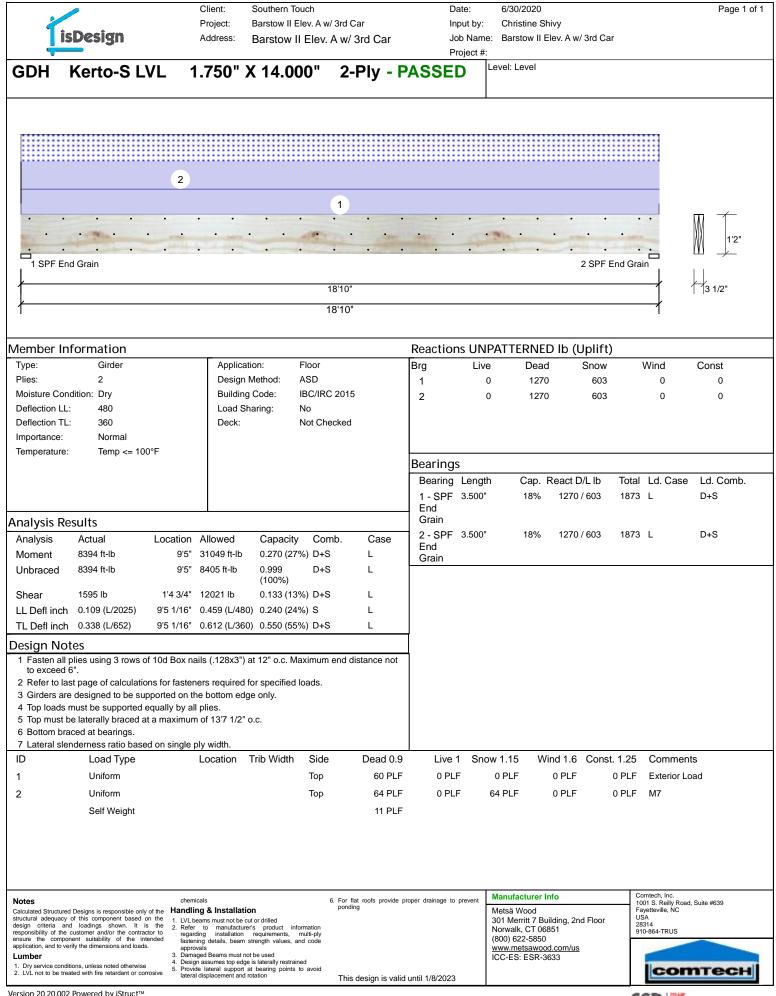
ť		Project:	Southern Touch Barstow II Elev. A		-	t by:	6/30/2020 Christine S	-			Page 1 o
	isDesign	Address:	Barstow II Elev	v. A w/ 3rd Car		Name: ect #:	Barstow II	Elev. A w/ 3rd Ca	ar		
BM6	Kerto-S LVL	1.750"	X 9.250'	' 2-Ply -	PASSE	D Lev	vel: Level				
	2 3 J J F End Grain	4 5 J J J 2 SPF End Grain									
	3'4"										3 1/2"
1	3'4"		1								
lember I	nformation				Reactions	UNPA	TTERNF	D lb (Uplift	)		
Туре:	Girder	Applicatio	on: Floor		Brg	Live	Dea	•••	•	Wind	Const
Plies: Moioturo Co	2	Design N		RC 2015	1	863	97			0	0
Deflection L	ndition: Dry L: 480	Building ( Load Sha		C 2015	2	1886	161	1 836		0	0
Deflection T		Deck:	•	hecked							
mportance:											
Femperatur	e: Temp <= 100°F				Bearings						
					Bearing L	enath	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
					1 - SPF 3	-	19%	978 / 1056	2034		D+0.75(L+S)
					End						
nalysis F		tion Allowed	Ossesit: O	and Orac	Grain 2 - SPF 3	.500"	34%	1611 / 2041	3652	L	D+0.75(L+S)
Analysis Moment		tion Allowed 1/4" 12542 ft-lb	Capacity Co 0.178 (18%) D+	omb. Case -L L	End						( )
Jnbraced		1/4" 11972 ft-lb	0.186 (19%) D+		Grain						
Shear	2465 lb	2'4" 6907 lb	0.357 (36%) D+	L L							
L Defl inc	h 0.009 (L/3860) 1'10	1/4" 0.072 (L/480)	0.120 (12%) L	L							
L Defl inc	h 0.015 (L/2376) 1'10	1/4" 0.096 (L/360)	0.150 (15%) D+	L L							
esign No											
1 Fasten a to exceed	II plies using 2 rows of 10d B 16"	lox nails (.128x3") at	12" o.c. Maximu	m end distance not							
2 Refer to l 3 Girders a 4 Top loads	ast page of calculations for f ire designed to be supported s must be supported equally	l on the bottom edge									
6 Bottom b	ed at bearings. raced at bearings.										
7 Lateral sl D	enderness ratio based on si Load Type		rib Width Sid	le Dead 0.9	Live 1	Snow	1 1 5 \^	/ind 1.6 Cons	t 1 25	Commen	te
I	Uniform		TID WIGHT SIC				PLF	0 PLF	0 PLF	Interior Wa	
<u>2</u>	Point	0-11-4	Тор				68 lb	0 lb	0 lb	A7GE	-
- 3	Point	1-10-4	Тор			5	0 lb	0 lb	0 lb	F3	
, 1	Point	2-5-12	Тор				0 lb	0 lb	0 lb	BM2	
5	Point	2-11-4	Тор			7'	13 lb	0 lb	0 lb	C1	
	Self Weight			7 PLF							
otes		chemicals		<ol> <li>For flat roofs provide ponding</li> </ol>	proper drainage to pre	went	anufacturer	Info	10	omtech, Inc. 001 S. Reilly Road	, Suite #639
ructural adequad	red Designs is responsible only of the $H$ cy of this component based on the 1 and loadings shown. It is the 2	. LVL beams must not be cut	or drilled	e,A		30		uilding, 2nd Floor	U	ayetteville, NC SA 3314	
sponsibility of the some	e customer and/or the contractor to ponent suitability of the intended	<ol> <li>Refer to manufacturer's regarding installation in fastening details, beam str</li> </ol>	equirements, multi-ply			(80	orwalk, CT 00 00) 622-5850	)		10-864-TRUS	
	verify the dimensions and loads.	approvals				WV	ww.metsawo	od.com/us			
umber	aditions, unless noted otherwise	<ul> <li>Damaged Beams must not l</li> <li>Design assumes top edge is</li> </ul>	e used			IC	C-ES: ESR-	3633			

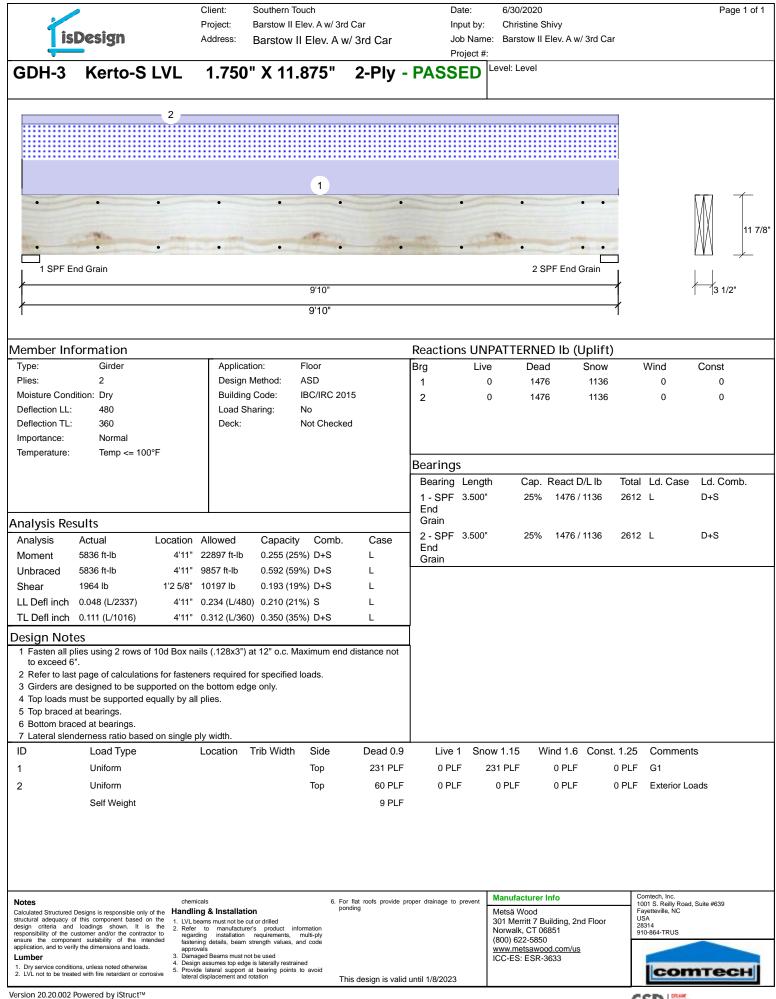
lis	Design	Client: Project: Address:		uch lev. A w/ 3rd Ca   Elev. A w/ 3			ut by:	6/30/2020 Christine S Barstow II	Shivy Elev. A w/ 3rd (	Car		Page 1 o
						Pro	ject #:	evel: Level				
3 <b>M</b> 7 <b>k</b>	Kerto-S LVI	L 1.750"	X 16.00	0" 2-P	Ply - P	ASSED		Vel. Level				
			4									
			5					3		111		
			Ĭ	2								
			₩			1						
												M
-	Criffin .			att and		The	-	¥1	-			1'4"
1 SPF									2 SPF	<u></u>		
∤				13'3 1/2"						$\rightarrow$		3 1/2"
∤				13'3 1/2"						$\rightarrow$		
lember Inf Type:	formation <sub>Girder</sub>	Appl	cation:	Floor		Reactions Brg		ATTERNI Dea	D Ib (Uplif	•	Wind	Const
Plies:	2			ASD		1	1104	115			0	0
Moisture Cond			0	IBC/IRC 2015		2	854	197	<b>'1 23</b>	0	0	0
Deflection LL: Deflection TL:		Load	0	No Not Checked								
mportance:	Normal	2001	•									
Temperature:	Temp <= 100°F	-										
						Bearings						
						Bearing	-	•	React D/L lb		Ld. Case	
						1 - SPF		43%	1157 / 1104	2261		D+L
nalysis Re	sults	·				2 - SPF	3.500"	54%	1971 / 854	2825	L	D+L
Analysis		ocation Allowed	Capacity	Comb.	Case	]						
Moment	10974 ft-lb	5'1 3/4" 34565 ft-	b 0.317 (329	%) D+L	L							
Unbraced	10974 ft-lb	5'1 3/4" 10979 ft-	b 0.999 (100%)	D+L	L							
Shear	2315 lb	1'6 5/8" 11947 lb	0.194 (199	%) D+L	L							
	0.066 (L/2353)	5'11 3/4" 0.321 (L/-			L							
TL Defl inch	0.149 (L/1036)	6'5 1/4" 0.428 (L/	360) 0.350 (359	%) D+L	L							
esign Not	es					ĺ						
1 Fasten all p	olies using 3 rows of 1	0d Box nails (.128x3	8") at 12" o.c. Ma	aximum end dis	tance not	1						
to exceed 6 2 Refer to las	It page of calculations	for fasteners require	ed for specified	loads.								
	ed load fastener spec	ification is in additio	n to hanger faste	eners if a hange	er is							
present. 4 Girders are	designed to be suppo	orted on the bottom	edge only.									
	nust be supported equ											
	e laterally braced at a ced at bearings.	maximum of 11'3 3/	8" O.C.									
	iderness ratio based o	on single ply width.										
D	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow	1.15 V	Vind 1.6 Con	st. 1.25	Commen	its
	Part. Uniform	5-0-0 to 13-3-8		Тор	125 PLF	0 PLF	(	0 PLF	0 PLF	0 PLF	Exterior W	/all Load
2	Part. Uniform	5-0-0 to 13-3-8		Тор	112 PLF	0 PLF	(	0 PLF	0 PLF	0 PLF	Gable Dea	ad Load
3	Part. Uniform	5-0-0 to 13-3-8		Far Face	15 PLF	40 PLF	(	0 PLF	0 PLF	0 PLF	1'-0" Floor	Load
4	Part. Uniform	5-0-0 to 13-3-8		Тор	40 PLF	0 PLF	40	0 PLF	0 PLF	0 PLF	Gable Live	e Load
ntinued on pa	ige 2											
							N	lanufacturer	Info	C	omtech, Inc.	
lotes alculated Structured	Designs is responsible only of t	chemicals he Handling & Instal	ation	<ol><li>For flat ponding</li></ol>	roofs provide pr	oper drainage to p	revent	letsä Wood		1 F	001 S. Reilly Road ayetteville, NC	d, Suite #639
ructural adequacy of esign criteria and	of this component based on th I loadings shown. It is th	he 1. LVL beams must not he 2. Refer to manufa	be cut or drilled cturer's product info	ormation			3		Building, 2nd Floo 6851	2	ISA 8314 10-864-TRUS	
nsure the compon	customer and/or the contractor ent suitability of the intender ify the dimensions and loads.		on requirements, an strength values, ar	multi-ply nd code			3)	300) 622-585 /ww.metsawo	0	9	10-00-11000	
umber		<ol> <li>Damaged Beams mu</li> <li>Design assumes top</li> </ol>		od				CC-ES: ESR-				
. Dry service conditi		5. Provide lateral supp	euge is laterally restrain	eu								

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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	ponding This design is valid until 1/8/2023	Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 <u>www.metsawood.com/us</u> ICC-ES: ESR-3633	Fayettevile, NC USA 28314 910-864-TRUS





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