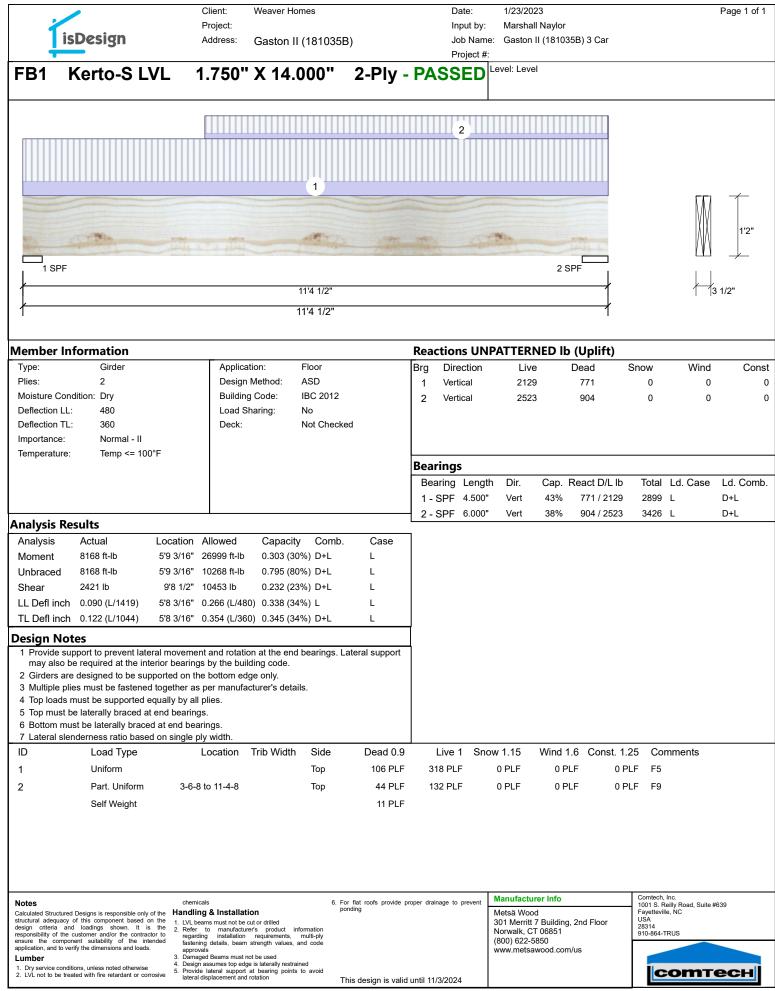


-	Client:	Weaver Homes		Date:	1/23/2023 Marshall Naylor			Page 1 of
isDesign	Project: Address:	Gaston II (1810)35B)	Input by: Job Nam	e: Gaston II (18103	5B) 3 Car		
		Custon II (1010	,002)	Project #:		,		
Window Hdr. K	erto-S LVL 1	.750" X 14.0	00" 2-Ply	- PASSED	Level: Level			
		15						1'2"
1 SPF End Grain								\rightarrow
		2 SPF E						
1	6'10"		1				1 1:	3 1/2"
1	6'10"		1					
Aember Information				Reactions UN	PATTERNED Ib	(Uplift)		
Type: Girder	Appli	cation: Floor		Brg Direction	Live	-	Snow Wind	Со
Plies: 2		n Method: ASD		1 Vertical	2861	3387	1990 0	
Moisture Condition: Dry		ing Code: IBC 20	12	2 Vertical	873	1906	1168 0	
Deflection LL: 480 Deflection TL: 360	Load	Sharing: No : Not Ch	aakad					
Importance: Normal -			lecked					
Temperature: Temp <=								
				Bearings				
				Bearing Lengt	h Dir. Cap.	React D/L lb	Total Ld. Case	Ld. Com
				1 - SPF 3.000"	Vert 80%	3387 / 3638	7025 L	D+0.75(L
				End Grain				
nalysis Results				2 - SPF 3.000"	' Vert 39%	1906 / 1531	3437 L	D+0.75(L
Analysis Actual	Location Allowed		mb. Case	End		10007 1001		D • 0.1 0(1
Moment 11172 ft-lb	2' 31049 ft-l	(,		Grain				
Unbraced 11172 ft-lb	2' 15767 ft-l	. ,						
Shear 6407 lb	1'5" 12021 lb	0.533 (53%) D+0	()					
LL Defl inch 0.033 (L/2343		80) 0.205 (20%) 0.7						
TL Defl inch 0.067 (L/1165) 287/8 0.215 (L/.	360) 0.309 (31%) D+0	0.75(L+S) L	4				
Design Notes				4				
1 Provide support to prevent may also be required at the			gs. Lateral support					
2 Girders are designed to be		• •						
3 Multiple plies must be faste4 Top loads must be support		facturer's details.						
5 Top must be laterally brace								
6 Bottom must be laterally be	•							
7 Lateral slenderness ratio b		Trib Width Side	Dood 0.0		ow 1 15 Wind 1	.6 Const. 1.2	5 Commonto	
ID Load Type	e Location	Trib Width Side						
1 Uniform		Top	120 PLF	0 PLF	0 PLF 0 P			
2 Tie-In	0-0-0 to 2-0-0	1-0-0 Top	20 PSF	0 PSF	20 PSF 0 PS			
3 Point	1-9-8	Тор	1040 lb	3115 lb	0 lb 0	lb 0	lb F08	
Bearing Le	-	_		0 "	0005 11 -	п		
4 Point	2-0-0	Тор	2385 lb	dl 0	2385 lb 0	lb 0	lb C3	
Bearing Le ontinued on page 2	ngth 0-3-8							
					Manufacturer Infe		Comtech, Inc.	
Notes Calculated Structured Designs is responsible	chemicals	ation	For flat roofs provide p ponding	roper drainage to prevent	Manufacturer Info Metsä Wood		1001 S. Reilly Road, Suite # Fayetteville, NC	4639
structural adequacy of this component bas design criteria and loadings shown.	ed on the 1. LVL beams must not It is the 2 Refer to manufact	e cut or drilled			301 Merritt 7 Building	, 2nd Floor	USA 28314	
responsibility of the customer and/or the contractor to ensure the component suitability of the intended fastening details beam strength values and code					Norwalk, CT 06851 (800) 622-5850		910-864-TRUS	
application, and to verify the dimensions and Lumber	loads. approvals 3. Damaged Beams mu	st not be used			www.metsawood.com	n/us		
 Dry service conditions, unless noted othe LVL not to be treated with fire retardant of 	WISE E Provide lateral cupp	edge is laterally restrained ort at bearing points to avoid and rotation					Comt	есн
	iatorai uispiacententi a		This design is valid	until 11/3/2024				

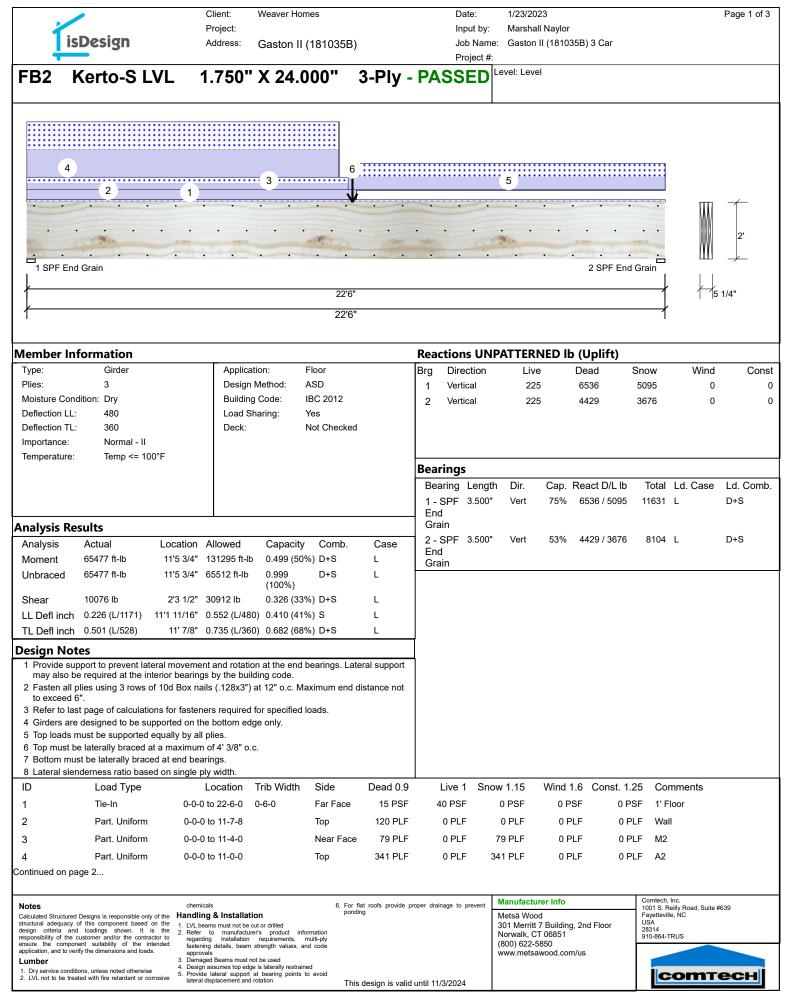
Version 21.80.417 Powered by iStruct[™] Dataset: 22061001.1

	Client: Weaver Homes Project:	Date: Input I		Page 2 of 2
isDesign	Address: Gaston II (181			
		Projec		
Window Hdr. Kerto-	S LVL 1.750" X 14.0	000" 2-Ply - PASSE	D Level: Level	
6 3 4				
2	5			
<u> </u>				\square \uparrow
				MM L
Crittine		14.712		1'2"
1 SPF End Grain	2 SPF	End Grain		
1	6'10"			3 1/2"
ł	6'10"	{		
Continued from page 1 ID Load Type	Location Trib Width Sid	de Dead 0.9 Live 1	Snow 1.15 Wind 1.6 Const. 1.2	5 Comments
5 Part. Uniform	2-3-0 to 6-10-0 To		160 PLF 0 PLF 0 PL	
6 Part. Uniform	2-3-0 to 0-0-0 To			F F07
Self Weight		11 PLF		
			Manufacturar Info	Comtech, Inc.
Notes Calculated Structured Designs is responsible only of the		For flat roofs provide proper drainage to preve ponding	Manufacturer Info Metsä Wood	1001 S. Reilly Road, Suite #639 Fayetteville, NC
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		301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851	USA 28314 910-864-TRUS
responsibility of the customer and/or the contractor to 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	 Damaged Beams must not be used Design assumes top edge is laterally restrained 			
2. LVL not to be treated with fire retardant or corrosive	 Provide lateral support at bearing points to avoid lateral displacement and rotation 	This design is valid until 11/3/2024		соттесн
Version 21.80.417 Powered by iStruct [™] Datase	et: 22061001.1			

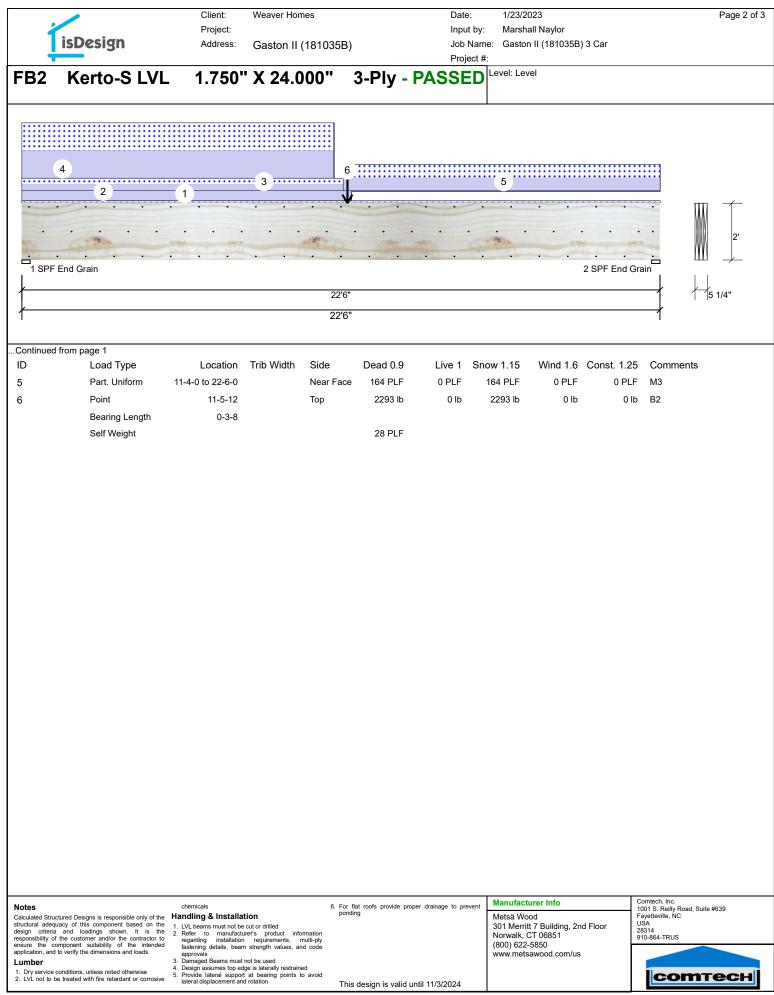
			ent: Wea oject:	aver Homes		Date	e: ut by:	1/23/2023 Marshall				Page 1 of
Tis	Design		-	ston II (18103	5B)	-			(181035B) 3 Car			
				-			ect #:					
6/0 SLIE	DER Kerto	o-S LVL	1.750)" X 9.25()" 2-Ply	- PASSI	ED	evel: Level				
	2				3	3						
				Щ								
				1								7 7
											MN	/
	College		-	199	n Arres	-	1000	No.			IVIV	1
C. D. K. THERMOOT AND			A - Aleranda		NUMBER OF STREET	States a Service					<u> </u>	
1 SPF	End Grain					2 SPF	End G	rain				
]				6'7"]			1	3 1/2"
Ĩ				6'7"				1				
lombor In	formation					Postions		ATTEDN	ED lb (Uplift	•)		
Туре:	Girder		Application:	Floor		Brg Direct		Live	Dead	Snow	Wind	Co
Plies:	2		Design Meth			1 Vertica	al	1060	1887	1113	0	
Moisture Conc Deflection LL:			Building Cod		2	2 Vertica	al	1060	1887	1113	0	
Deflection TL:			Deck:	Not Cheo	ked							
mportance:	Normal - II	_										
Temperature:	Temp <= 100°	F				Bearings						
						Bearing L	ength	Dir.	Cap. React D/	b Total	Ld. Case	Ld. Cor
						1 - SPF 3 End	8.500"	Vert	34% 1887 / 1	629 3516	L	D+0.75(
nalysis Re	sults	I				Grain						
Analysis		Location All		apacity Com		2 - SPF 3 End	8.500"	Vert	34% 1887 / 1	629 3516	L	D+0.75(
Moment Unbraced	5009 ft-lb 5009 ft-lb	3'3 1/2" 144 3'3 1/2" 104		347 (35%) D+0.7 479 (48%) D+0.7		Grain						
Shear	2387 lb	1' 3/4" 794		300 (30%) D+0.7	. ,							
	0.042 (L/1741)			276 (28%) 0.75(I								
TL Defl inch	0.091 (L/807)	3'3 1/2" 0.2	04 (L/360) 0.	446 (45%) D+0.7	′5(L+S) L]						
esign Not]						
	port to prevent laterate required at the inter				Lateral support							
	designed to be supp es must be fastened t		•	•								
4 Top loads n	nust be supported eq	ually by all plie										
6 Bottom mus	e laterally braced at e st be laterally braced	at end bearing										
7 Lateral slen	derness ratio based Load Type			Width Side	Dead 0.9	Live 1	Snow	/ 1 15	Wind 1.6 Cons	t 1.25 Cor	nments	
1	Uniform	LOC		Тор	108 PLF	322 PLF		0 PLF	0 PLF	0 PLF F4		
2	Uniform			Тор	120 PLF	0 PLF		0 PLF	0 PLF	0 PLF WAI	LL	
3	Uniform			Тор	338 PLF	0 PLF	33	8 PLF	0 PLF	0 PLF A4		
	Self Weight				7 PLF							
							-	terre to it	- lafe	Cot'	Inc	
lotes alculated Structured	Designs is responsible only of	chemicals the Handling &	Installation	6.	For flat roofs provide p ponding	roper drainage to pre	eveni	Manufacture Metsä Wood	er into	Fayetteville	eilly Road, Suite #	#639
tructural adequacy of esign criteria and	of this component based on loadings shown. It is	the 1. LVL beams the 2. Pofor to	must not be cut or dri manufacturer's pr installation requir	roduct information			3 N	801 Merritt 7 Norwalk, CT		USA 28314 910-864-T	RUS	
pplication, and to ver	sustomer and/or the contractor ent suitability of the inten- ify the dimensions and loads.	approvals	etails, beam strengtl	n values, and code			(4	800) 622-58 vww.metsaw	50			
.umber I. Dry service conditi	ons, unless noted otherwise ted with fire retardant or corros	 Design assu Provide late 	eams must not be us imes top edge is late eral support at bear	rally restrained ing points to avoid							от	ecu
IVI not to be to	with the related of corros	latoral diant	acement and rotation		This design is valid							



Version 21.80.417 Powered by iStruct[™] Dataset: 22061001.1



Version 21.80.417 Powered by iStruct[™] Dataset: 22061001.1



1	Client:		Date: 1/23/2023	Page 3 of
is Decign	Projec		Input by: Marshall Naylor	
isDesign	Addres	ss: Gaston II (181035B)	Job Name: Gaston II (181035B) 3 Car Project #:	
B2 Kerto-S	LVL 1.75	0" X 24.000" 3-Ply	- PASSED Level: Level	
	· · · ·	· · · · · · ·	· · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
1 SPF End Grain			2 SPF End Gra	
Ĺ		22'6"		5 1/4"
ŕ		22'6"		 1
ulti-Ply Analysis				
asten all plies using 3	rows of 10d Box n	ails (.128x3") at 12" o.c Nail fror	n both sides. Maximum end distance not to exc	ceed
pacity	77.4 %			
ad	218.7 PLF			
ld Limit per Foot	282.4 PLF			
eld Limit per Fastener	94.1 lb.			
eld Mode	IV			
ge Distance	1 1/2"			
n. End Distance	3"			
ad Combination Iration Factor	D+S 1.15			
	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 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 1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive	I. LVL beams must not be cut or drilled Refer to manufacturer's product information regarding installation requirements, multi-ply fastering details, beam strength values, and code approvals Damaged Beams must not be used Design assumes top edge is laterally restrained Design assumes top edge is laterally restrained.	ponding This design is valid until 11/3/2024	Metsä Wood 301 Merritt 7 Building, 2nd Floor Norwalk, CT 06851 (800) 622-5850 www.metsawood.com/us	Fayetteville, NC USA 28314 910-864-TRUS