035B) 5" 2-Ply -	Project	_			
;" 2-Ply -	PASSED	Level: Leve			
apart patie	-	- 71			
	2	SPF End Gra	iin		
]
	F			-	Canat
	1 2	0	145 1104	0	Const 0 0
	Bearings				
	Bearing Len 1 - SPF 3.00	0	•	Total Ld. Case 2249 L	e Ld. Comb. D+S
	Grain				
SL SL SL L	2 - SPF 3.00 End Grain	0" 25	% 1145 / 1104	2249 L	D+S
-	1				
	Live 1 S 0 PLF	now 1.15 250 PLF	Wind 1.6 Cons 0 PLF	ot. 1.25 Commer 0 PLF G2	nts
9 PLF					
 For flat roots provide p ponding 	roper drainage to prevent	Metsä Woo 301 Merritt Norwalk, C (800) 622-5 www.metsa	d 7 Building, 2nd Floor F 06851 850 wood.com/us	Comtech, Inc. 1001 S. Reilly Roa Fayetteville, NC USA 28314 910-864-TRUS	ıd, Suite #639
	S L S L S L S L e Dead 0.9 250 PLF 9 PLF	Reactions UI Brg Li 1 2 necked Bearings Bearing Leng 1 - SPF 3.00 End Grain mb. Case S L S PLF PLF SPLF	Reactions UNPATTERI Brg Live D 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1 1 S 1	Brg Live Dead Snow 1 0 1145 1104 2 0 1145 1104 2 0 1145 1104 2 0 1145 1104 2 0 1145 1104 2 0 1145 1104 Bearings Bearing Length Cap. React D/L lb 1 - SPF 3.000" 25% 1145 / 1104 End Grain 2 - SPF 3.000" 25% S L 2 - SPF 3.000" 25% 1145 / 1104 End Grain - Set 1 - Set 1 - Set 1 S L - Set 1 - Set 1 - Set 1 S L - Set 1 - Set 1 - Set 1 S L - Set 1 - Set 1 - Set 1 S L - Set 1 - Set 1 - Set 1 e Dead 0.9 Live 1 Snow 1.15 Wind 1.6 Cons 250 PLF 0 PLF 9 PLF - Set 1 - Set 1 - Set 1 9 PLF 9 PLF - Set 1 - Set 1 - Set 1 - Set 1 6. For flat roots provide proper drainage to prevent prope	Bearings Bearings Bearings Bearings Bearings Bearing Length Cap. React D/L lb Total Ld. Case 1 - SPF 3.000° 25% 1145 / 1104 2249 L End Grain S L S S L S S L S S L S S L S S L S

Ťi	isDesign	Project:	iver Homes ston II (181035B)		Date: Input Job N		all Naylor			Page 1 c
	Kerto-S LVL	1.750" X	24.000"	3-Ply -	Proje PASSE		vel			
4			6							
	2	3				5				
			· · · · ·					•	•	Π \uparrow
							• • •	• •		2'
	- Clin	Min . To . Min .		fishing		and the second		-	1	
	nd Grain						2	SPF End Gr	rain	
<u>}</u>			22'6"						/ /	5 1/4"
<u>}</u>			22'6"							
									•	
lember I	nformation				Reactions I	UNPATTER	RNED Ib (U	plift)		
Туре:	Girder	Application:	Floor				-	Snow	Wind	Const
Plies:	3	Design Meth			1	225	6536	5095	0	0
Moisture Co Deflection L	ondition: Dry L: 480	Building Cod Load Sharing			2	225	4429	3676	0	0
Deflection T		Deck:	Not Checked							
mportance:	Normal									
emperature	e: Temp <= 100°F				Deeringe					
					Bearings	nath C	on Boost D/	Lib Toto		Id Comb
					Bearing Le	-	ap. React D/ 3% 6536 / 5		I Ld. Case	Ld. Comb. D+S
					End		0,000070	1100		210
nalysis R	Results				Grain 2 - SPF 3.5	500" 6	1% 4429/3	676 8104	4 1	D+S
Analysis			apacity Comb.	Case	End	500 .	1/0 4429/3	070 010-	+ L	D+3
Moment Jnbraced			499 (50%) D+S 994 (99%) D+S	L	Grain					
Shear			327 (33%) D+S	L						
	h 0.226 (L/1171) 11'1	11/16" 0.552 (L/480) 0.	410 (41%) S	L						
L Defl inc	h 0.501 (L/528) 1	1' 7/8" 0.735 (L/360) 0.	680 (68%) D+S	L						
esign No	otes									
1 Fasten al to exceed	ll plies using 3 rows of 10d d 6"	Box nails (.128x3") at 12	o.c. Maximum end d	listance not						
2 Refer to I	last page of calculations fo									
	are designed to be support s must be supported equal	-	ly.							
5 Top must	be laterally braced at a m									
	raced at bearings. lenderness ratio based on	single ply width.								
D	Load Type		Width Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comment	6
	Tie-In	0-0-0 to 22-6-0 0-6-0	Far Face	15 PSF	40 PSF	0 PSF	0 PSF	0 PSF	1' Floor	
2	Part. Uniform	0-0-0 to 11-7-8	Тор	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall	
3	Part. Uniform	0-0-0 to 11-4-0	Near Face	79 PLF	0 PLF	79 PLF	0 PLF	0 PLF	M2	
Ļ	Part. Uniform	0-0-0 to 11-0-0	Тор	341 PLF	0 PLF	341 PLF	0 PLF	0 PLF	A2	
5	Part. Uniform	11-4-0 to 22-6-0	Near Face	164 PLF	0 PLF	164 PLF	0 PLF	0 PLF	M3	
6	Point	11-5-12	Тор	2293 lb	0 lb	2293 lb	0 lb	0 lb	B2	
	Self Weight			28 PLF						
otes		chemicals	6. For fl pondi	lat roofs provide pr	oper drainage to prev			1	Comtech, Inc. 1001 S. Reilly Road,	Suite #639
ructural adequad	red Designs is responsible only of the cy of this component based on the and loadings shown. It is the	1. LVL beams must not be cut or dri	led				t 7 Building, 2nd	Floor	Fayetteville, NC JSA 28314	
sponsibility of the	ne customer and/or the contractor to ponent suitability of the intended	 Refer to manufacturer's pr regarding installation require fastening details, beam strength 	ements, multi-ply			Norwalk, (800) 622	-5850		26314 910-864-TRUS	
oplication, and to umber	verify the dimensions and loads.	approvals 3. Damaged Beams must not be us	ed				awood.com/us			
	nditions, unless noted otherwise	 Design assumes top edge is late Provide lateral support at bear 	any restrained						loom	тесн

而千
13 1/2"
d Const 0 0 0 0
. Case Ld. Comb. D+L
D+L
omments

isDe		Client: Weaver H Project:	Homes		Da		1/26/2021 Marshall Na	avlor			Page 1 o
	sign	-	II (181035B)		-	-	Gaston II (1	-			
	<u>J</u>	Custon	II (101000B)			oject #:	,	,			
5/0 SLIDER	R Kerto-S L	VL 1.750"	X 9.250"	2-Ply	- PASS	ED Lev	el: Level				
	2			3							
		1									
-		-	ANT THE	177	The second	-	-				
1 SPF End G	Grain				2 SF	F End Gra	iin				
		6'7"									3 1/2"
1		6'7"					1				
lember Inform	nation				Reaction	s UNPA	TTERNE	D lb (Uplift	:)		
Type:	Girder 2	Application:	Floor		Brg	Live	Dead			Vind	Const
Plies: Moisture Condition:		Design Method: Building Code:	ASD IBC 2012		1	1060 1060	1887 1887			0 0	0 0
Deflection LL:	480	Load Sharing:	No		2	1000	1007	1110		Ū	Ū
Deflection TL:	360	Deck:	Not Checked								
mportance: Femperature:	Normal Temp <= 100°F										
					Bearings						
					Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
					1 - SPF	3.500"	33%	1887 / 1629	3516	L	D+0.75(L+S)
nalysis Results	5	I			End Grain						
Analysis Actu		Allowed Capac	ty Comb.	Case	2 - SPF End	3.500"	33%	1887 / 1629	3516	L	D+0.75(L+S)
			35%) D+0.75(L+		Grain						
			48%) D+0.75(L+								
Shear 2448			31%) D+0.75(L+								
LL Defl inch 0.04 TL Defl inch 0.09		' 0.153 (L/480) 0.280 (' 0.204 (L/360) 0.450 (
IL Dell Inch 0.09	JT (L/807) 331/2	0.204 (L/360) 0.450 (45%) D+0.75(L+	·3) L	l I						
	ned to be supported on t	the bottom edge only			1						
esign Notes		as per manufacturer's de	tails.								
 Girders are desig Multiple plies musication Top loads must b Top braced at beat 	e supported equally by a arings.										
1 Girders are desig 2 Multiple plies mu: 3 Top loads must b 4 Top braced at be: 5 Bottom braced at 6 Lateral slenderne	e supported equally by a arings. t bearings. ess ratio based on single			D 111		<u> </u>				<u> </u>	
1 Girders are desig 2 Multiple plies mu: 3 Top loads must b 4 Top braced at be: 5 Bottom braced at 6 Lateral slenderne D L	e supported equally by a arings. t bearings. ess ratio based on single oad Type	ply width. Location Trib Widt		Dead 0.9		Snow		ind 1.6 Cons		Comment	s
1 Girders are desig 2 Multiple plies mu: 3 Top loads must b 4 Top braced at be: 5 Bottom braced at 6 Lateral slenderne ID L 1 U	e supported equally by a arings. t bearings. ess ratio based on single oad Type Iniform		Тор	108 PLF	322 PLF	0	PLF	0 PLF	0 PLF	F4	s
1 Girders are desig 2 Multiple plies mu: 3 Top loads must b 4 Top braced at be: 5 Bottom braced at 6 Lateral slenderne ID L 1 U 2 U	e supported equally by a arings. t bearings. ess ratio based on single oad Type Iniform		Тор Тор	108 PLF 120 PLF	322 PLF 0 PLF	0 0	PLF	0 PLF 0 PLF	0 PLF 0 PLF	F4 WALL	S
1 Girders are desig 2 Multiple plies mu: 3 Top loads must b 4 Top braced at besigned 5 Bottom braced at 6 Lateral slenderne ID Li 1 U 2 U 3 U	e supported equally by a arings. t bearings. ess ratio based on single oad Type Iniform		Тор	108 PLF	322 PLF	0 0	PLF	0 PLF	0 PLF	F4 WALL	s

1		Client: Weaver Ho Project:	omes	Date Inpu		aylor	Page 1 d
isD	esign	Address: Gaston I	l (181035B)		Name: Gaston II (1 ect #:	81035B)	
Front GDH	H Kerto-S L	_VL 1.750" X 14	l.000" 2-P				
					I		
		2	1		3		
							$\overline{\mathbf{W}}$
1 SPF End G	rain	Minate and Minate and	ANT THE PARTY	An and a	C. The	2 SPF End	Grain
/			18'10"				3 1/2"
ŕ			18'10"				
ember Info	rmation			Reactions	UNPATTERNE	D lb (Uplift)	
Type:	Girder	Application:	Floor	Brg	Live Dead	d Snow	Wind Const
Plies: Moisture Conditic	2 on: Dry	Design Method: Building Code:	ASD IBC 2012	1	0 1619 0 1720		0 0 0 0
Deflection LL:	480	Load Sharing:	No	2	0 1120	1002	0 0
Deflection TL:	360	Deck:	Not Checked				
mportance:	Normal						
emperature:	Temp <= 100°F			Poarings			
				Bearings	a ra artha		
				Bearing L			otal Ld. Case Ld. Comb.
				1 - SPF 3 End	.000" 28%	1619/952 25	571 L D+S
nalysis Resu	ılts			Grain			
-		ation Allowed Capacit	y Comb. C	ase 2 - SPF 3	.000" 30%	1720 / 1052 27	772 L D+S
Moment 1	2090 ft-lb 9'8	3 7/8" 31049 ft-lb 0.389 (3	9%) D+S L	End Grain			
Unbraced 1	2090 ft-lb 9'8	3 7/8" 12111 ft-lb 0.998	D+S L				
Shear 2	360 lb 17'5	(100%) 5 3/4" 12021 lb 0.196 (2	0%) D+S L				
		3/16" 0.461 (L/480) 0.400 (4					
TL Defl inch 0		3/16" 0.615 (L/360) 0.800 (8)	,				
esign Notes							
		d on the bottom edge only.					
	•	ther as per manufacturer's deta	ils.				
•	st be supported equally						
5 Bottom braced	aterally braced at a ma d at bearings.						
	erness ratio based on s	ingle ply width.					
D	Load Type	Location Trib Width	Side De	ad 0.9 Live 1	Snow 1.15 W	ind 1.6 Const. 1.2	25 Comments
1	Uniform		Тор б	0 PLF 0 PLF	0 PLF	0 PLF 0 P	LF wall
2	Part. Uniform	0-0-0 to 9-6-0	Тор 9	0 PLF 0 PLF	96 PLF	0 PLF 0 Pl	LF M2
3	Part. Uniform	9-6-0 to 18-10-0	Top 1	7 PLF 0 PLF	117 PLF	0 PLF 0 Pl	LF M3
	Self Weight			I1 PLF			
2 3	Part. Uniform		Top 1'	7 PLF 0 PLF			
		chemicals		provide proper drainage to pre	Manufacturer I	nfo	Comtech, Inc. 1001 S. Reilly Road, Suite #639
Notes			ponding		Metsä Wood		Fayetteville, NC
Calculated Structured Des structural adequacy of th	his component based on the	Handling & Installation			301 Morritt 7 D	uilding 2nd Floor	USA
Calculated Structured Des tructural adequacy of th lesign criteria and lo esponsibility of the custo	his component based on the badings shown. It is the omer and/or the contractor to	 LVL beams must not be cut or drilled Refer to manufacturer's product in regarding installation requirements, 	multi-ply		301 Merritt 7 Bu Norwalk, CT 06	851	USA 28314 910-864-TRUS
Calculated Structured Des tructural adequacy of th lesign criteria and lo esponsibility of the custo insure the component pplication, and to verify th	his component based on the badings shown. It is the order and/or the contractor to suitability of the intended he dimensions and loads.	 LVL beams must not be cut or drilled Refer to manufacturer's product in regarding installation requirements, fastening details, beam strength values, approvals 	multi-ply		Norwalk, CT 06 (800) 622-5850 www.metsawoo	851 d.com/us	28314
alculated Structured Des tructural adequacy of th esign criteria and lo seponsibility of the custo nsure the component pplication, and to verify th .umber . Dry service conditions,	his component based on the badings shown. It is the omer and/or the contractor to suitability of the intended he dimensions and loads.	 LVL beams must not be cut or drilled Refer to manufacturer's product in regarding installation requirements, fastening details, beam strength values, 	multi-ply and code sined		Norwalk, CT 06 (800) 622-5850	851 d.com/us	28314

	•		aver Homes		Date		1/26/2021				Page 1 of
Tis	Design	Project: Address: G:	aston II (181035B	2)	-	it by: Name:	Marshall N Gaston II (-			
			× *		Proj	ect #:					
DB1 I	Kerto-S LVL	1.750" X	14.000"	2-Ply -	PASSE	ED	vel: Level				
2	6 3 4	1	5								
1 SPF En	d Grain		2 SPF End Gi	rain							
]		6'10"									3 1/2"
I		6'10"		I							
/lember Inf	formation				Reactions	UNP	ATTERNE	D lb (Uplif	t)		
Туре:	Girder	Application			Brg	Live	Dea	d Snow	1	Wind	Const
Plies: Moisture Cond	2 hition: Drv	Design Met Building Co			1	2861 873	338 190			0 0	0 0
Deflection LL:	480	Load Sharin			2	873	190	6 1168)	0	U
Deflection TL:		Deck:	Not Checke	d							
Importance: Temperature:	Normal Temp <= 100°F										
remperature.	Temp <= 100 P				Bearings						
					Bearing L 1 - SPF 3	-	•	React D/L lb 3387 / 3638	Tota 7025	Ld. Case	Ld. Comb. D+0.75(L+S)
Analysis Re	sults				End Grain						
Analysis		ation Allowed	Capacity Comb.	Case	2 - SPF 3 End	.000"	38%	1906 / 1531	3437	Ľ	D+0.75(L+S)
Moment	11172 ft-lb		0.360 (36%) D+0.75(,	Grain						
Unbraced Shear	11172 ft-lb 6425 lb 1'		0.710 (71%) D+0.75() 0.534 (53%) D+0.75()								
		7 5/8" 0.161 (L/480) 0									
		3 7/8" 0.215 (L/360) 0									
Design Not	es				ſ						
 Multiple plie Top loads n Top braced Bottom braced 	designed to be supporte es must be fastened toge nust be supported equall at bearings. ced at bearings. iderness ratio based on s	ther as per manufacture / by all plies.	•								
ID	Load Type		Width Side	Dead 0.9	Live 1	Snow	1.15 V	/ind 1.6 Con	st. 1.25	Comment	S
1	Uniform		Тор	120 PLF	0 PLF	() PLF	0 PLF	0 PLF	WALL	
2	Tie-In	0-0-0 to 2-0-0 1-0-	0 Тор	20 PSF	0 PSF	20) PSF	0 PSF	0 PSF	2' ROOF	
3	Point	1-9-8	Тор	1040 lb	3115 lb		0 lb	0 lb	0 lb	F08	
4	Point	2-0-0	Тор	2385 lb	0 lb		385 lb	0 lb	0 lb	C3	
5	Part. Uniform Part. Uniform	2-3-0 to 6-10-0	Тор	160 PLF 97 PLF	0 PLF 300 PLF) PLF	0 PLF 0 PLF	0 PLF 0 PLF	C2 F07	
6	Self Weight	2-3-0 to 0-0-0	Тор	97 PLF 11 PLF	300 PLF	() PLF	UPLF	UPLF	FUI	
							laws for the	1	<u> </u>	Comtook Iss	
structural adequacy of design criteria and	Designs is responsible only of the of this component based on the loadings shown. It is the	1. LVL beams must not be cut or of 2. Refer to manufacturer's	por Irilled product information	r flat roofs provide pr nding	oper drainage to pre	N 3		uilding, 2nd Floor	1 F U 2	comtech, Inc. 001 S. Reilly Road, ayetteville, NC ISA 8314	Suite #639
responsibility of the c ensure the compon application, and to ver Lumber 1. Dry service conditi	sustomer and/or the contractor to ent suitability of the intended ify the dimensions and loads. ons, unless noted otherwise ted with fire retardant or corrosive	 Relef to Inalitiatuation requires regarding installation requires approvals Damaged Beams must not be tild Design assumes top edge is lat Provide lateral support at be lateral displacement and rotatic 	irements, multi-ply th values, and code ised erally restrained aring points to avoid	iis design is valid		8) <u>w</u>	orwalk, CT 00 800) 622-5850 <u>ww.metsawo</u> CC-ES: ESR-:) <u>od.com/us</u>	g	10-864-TRUS	тесн

