

Version 21.80.417 Powered by iStruct[™] Dataset: 22111501.1

		Client:	Great South Builders		Date:	4/24/2023				Page 2 of 17
		Project:	2L-2937/ 2 Story		Input by:	1/2 1/2020				1 490 2 01 11
lis	Design	Address:	,			e: J0423-1835	Beams			
					Project #:	J0423-1835	Beams			
1FJ1	NI-40x 11	1.875" - P /			-	Level: Level				
11 3 1		1.075 - 77	ASSED							
1 SPF Er	HORNIG HORNIG Id Grain	HORMIC HICKS	1 1 2 SPF En 31'8 3/4	id Grain	MORDIE	15'2 3/8"	REELC 3 SPF End	Grain	₩	 <u>11</u> 7/8" '2"
Member In	formation				Reactions UN	PATTERNE	O lb (Uplift)			
Туре:	Joist	Applica			Brg Direction	Live	Dead	Snow	Wind	Const
Spacing:	19.2" o.c.	-	Method: ASD	_	1 Vertical	434	109	0	0	0
Moisture Con		Building	-	5	2 Vertical	1215	304	0	0	0
Deflection LL:		Load S	-	1.04	3 Vertical	381	95	0	0	0
Deflection TL:		Deck:	3/4 APA Rate FloorPlywood							
Importance:	Normal - II		and Glued							
Temperature:	Temp <= 100°F				Boorings					
					Bearings					
					Bearing Lengt 1 - SPF 7.250" End		ap. React D/L lb 0% 108 / 482	Total 591	Ld. Case L_	Ld. Comb. D+L
Analysis Re	sults	·			Grain					
Analysis		cation Allowed	Capacity Comb.	Case	2 - SPF 5.250"	Vert 4	4% 304 / 1218	1522	LL	D+L
Neg Momen		6'6 3/8" 3760 ft-lb	0.602 (60%) D+L	LL	End Grain					
Unbraced		6'6 3/8" 2289 ft-lb	0.989 (99%) D+L	LL	3 - SPF 7.250"	Vert 3	7% 95 / 450	545	L	D+L
Pos Momen	t 1872 ft-lb 7'4	4 9/16" 3760 ft-lb	0.498 (50%) D+L	L_	End			0.0		
Shear		6'6 3/8" 1480 lb	0.528 (53%) D+L	LL	Grain					
LL Defl inch			0) 0.436 (44%) L	L						
			0) 0.259 (26%) D+L	– L						
	. ,			-	1					
may also b	pport to prevent lateral n e required at the interior	r bearings by the buil		eral support	4					
2 Bottom flar	nge must be laterally bra			9 Live	1 Snow 1.15	Wind 1.6 Co	anet 1.25 Com	ments		
	Load Type	Location						ments		
1	Uniform		1-7-3 10 PSF	- 40 PS	SF 0 PSF	0 PSF	0 PSF			
1 Notes It is the responsible contractor to ensure		Handling & Installati 1. Engineered wood produc Damaged products shall 2. Refer to the latest version	1-7-3 10 PSF 10 psf	E 40 PS		0 PSF Manufacturer I Nordic Structure	0 PSF	Comtech	oad Industrial Park	P.O. Box 40
Engineered Wo	od Products tions, unless noted otherwise	 construction details, ho member connections, and Provide lateral support a lateral displacement and 	d handling guidelines. at bearing points to prevent			Montreal, Québ (866) 871-3418	ec, Canada H3B 2S2			
	h fire-retardant or other strength-		proper drainage to prevent	design in "	1	www.nordic.ca APA PR-L274C			omt	есн
		set: 22111501.1	· This	s design is valio	1 until 11/3/2024					

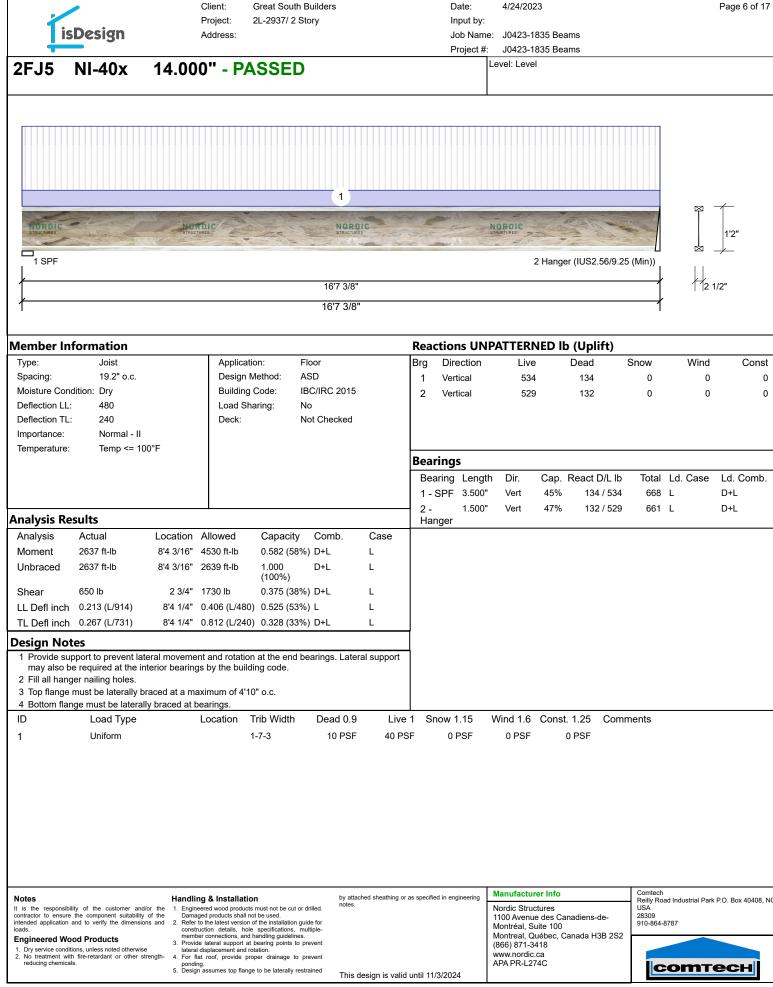
is	Design	Project: 2L-2937/ Address:	-		Project #:	4/24/2023 e: J0423-1835 Be J0423-1835 Be			Page 3 of 17
1DB1	Kerto-S LVL	1.750" X 9	.250" 2-1	Ply -	PASSED	Level: Level			
	2		1						
1 SPF End 2 SF	d Grain 3 SPF PF End Grain	End Grain 4 SPI	End Grain	5 SPF E	nd Grain	6 SPF End Gr	ain 7 SPF End G	Grain	
5'	7'1"	6'9"	7'3"	1	1 8	' Í	7'3"		1/2"
ł			41'4"						
Member In	formation			I	Reactions UN	PATTERNED	b (Uplift)		
Туре:	Girder	Application:	Floor	E	Brg Direction	Live	Dead S	now Wind	Const
Plies: Moisture Cond	2 Jition: Dr.(Design Method: Building Code:	ASD IBC/IRC 2015		1 Vertical	1636	423	0 0	
Deflection LL:	480	Load Sharing:	No		2 Vertical 3 Vertical	5125 5667	1324 1464	0 0	-
Deflection TL:	240	Deck:	Not Checked		4 Vertical	5465	1404	0 0	
Importance:	Normal - II				5 Vertical	6196	1601	0 0	-
Temperature:	Temp <= 100°F				6 Vertical	6557	1694	0 0	
					7 Vertical	2504	647	0 0	0
					Bearings				
					Bearing Lengt	h Dir. Cap	React D/L lb	Total Ld. Case	Ld. Comb.
Analysis Re					1 - SPF 8.000" End	Vert 11%	415 / 2213	2628 L_L_L_	D+L
Analysis		Allowed Capac		ase	Grain				
Neg Moment Unbraced		" 12542 ft-lb 0.493 ([.] " 6195 ft-lb 0.998 (100%)		_L_LL	2 - SPF 16.000 End Grain)" Vert 15%	1336 / 5717	7054 LL_L_L	D+L
Pos Moment			35%) D+L L_	_L_L_	3 - SPF 16.000)" Vert 17%	1460 / 6430	7891 _LL_L_	D+L
Unbraced	4387 ft-lb 30' 1/16'	" 4394 ft-lb 0.998 (100%)	D+L L_	_L_L	End				
Shear	3020 lb 32'7 3/4'	· · · · ·	14%) D+L L		Grain				
LL Defl inch	0.106 (L/902) 30' 11/16'	、 " 0.200 (L/480) 0.532 (·		4 - SPF 16.000 End)" Vert 17%	1411 / 6587	7997 L_LL_L	D+L
TL Defl inch	0.122 (L/789) 30' 9/16	" 0.400 (L/240) 0.304 (30%) D+L L_	_L_L_	Grain				
Design Not	es				5 - SPF 16.000 End)" Vert 18%	1596 / 7045	8641 _L_LL_	D+L
	oport to prevent lateral movem		d bearings. Lateral si	upport	Grain				
-	e required at the interior bearing designed to be supported on				6 - SPF 16.000 End)" Vert 19%	1704 / 7045	8749 L_L_LL	D+L
	es must be fastened together		ails.		Grain				
	nust be supported equally by a e laterally braced at a maximu				7 - SPF 8.000"	Vert 15%	642 / 2914	3556 _L_L_L	D+L
6 Bottom mu	st be laterally braced at a max	timum of 12'2" o.c.			End Grain				
	derness ratio based on single				-	11E ME	16 0	E Commente	
ID 1	Load Type	Location Trib Widt		ad 0.9	Live 1 Sno		1.6 Const. 1.2		
1	Uniform			10 PLF	40 PLF		PLF 0 PL		
2	Uniform		Top 19	90 PLF	762 PLF	0 PLF 0	PLF 0 PL	F 1FJ1	
	Self Weight			7 PLF					
Notes	che	emicals	6. For flat roofe	s provide pron	per drainage to prevent	Manufacturer Info		Comtech	+ 0 0 10100
Calculated Structured	Designs is responsible only of the Hand	lling & Installation	ponding	, <u>-</u> p.op	g protont	Metsä Wood		Reilly Road Industrial Pa USA 28309	к Г.U. BOX 40408, N
design criteria and responsibility of the o	loadings shown. It is the 2. Ref	beams must not be cut or drilled fer to manufacturer's product arding installation requirements,	information multi-ply			301 Merritt 7 Buildi Norwalk, CT 06851		28309 910-864-8787	
ensure the compon application, and to ver	ent suitability of the intended fast ify the dimensions and loads. app	tening details, beam strength values provals	, and code			(800) 622-5850 www.metsawood.co	om/us		
	ons, unless noted otherwise 4. Des	maged Beams must not be used sign assumes top edge is laterally rest wide lateral support at bearing poir	rained ts. to, avoid						
	J. FIU	ral displacement and rotation		ın is valid u	ntil 11/3/2024			COMT	ech
	Powered by iStruct™ Dataset: 221								

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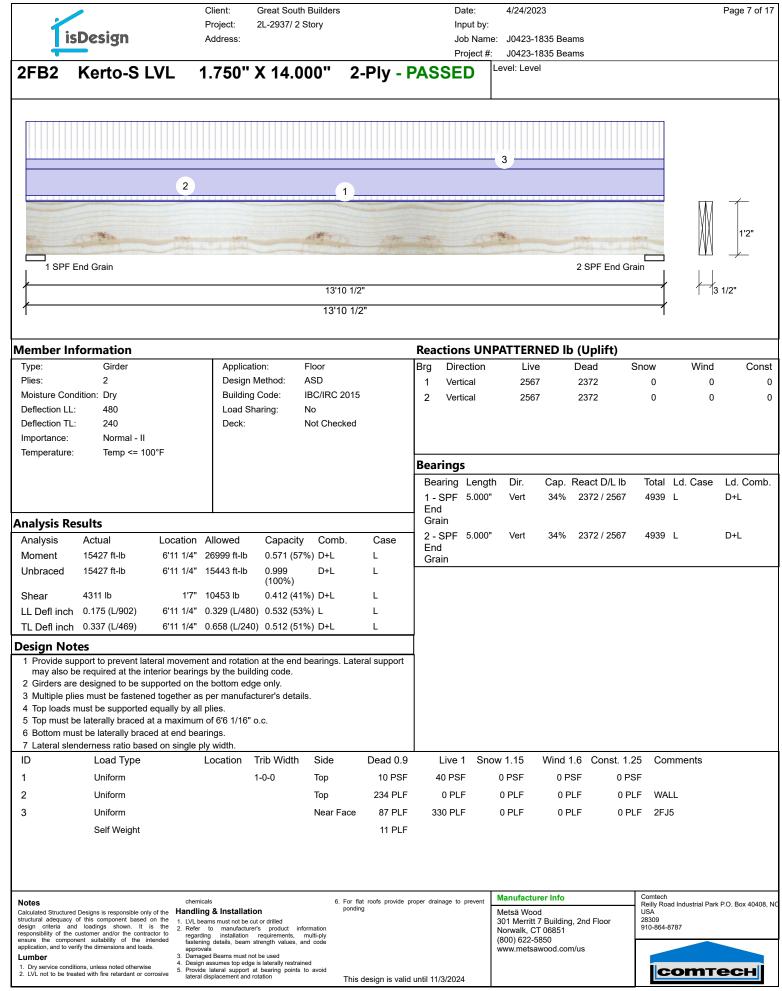
	ject: 2L-2937/2: dress: 50" X 11.87		y - PA	Project	ame: J0423-18 t #: J0423-18 Level: Level	835 Beams			
-S LVL 1.7		1	y - PA	Project	t #: J0423-11	835 Beams			
	50" X 11.87	1	y - PA	SSED					
1 SPF End Grain									
1 SPF End Grain									
1 SPF End Grain									
1 SPF End Grain			17-1-1						
1 SPF End Grain		and the second second			Contraction of the second			M	1
				A CONTRACTOR	2 SPF End	d Grain		₩.	11 7/8"
					2 OFT ER				
		23'5"						13 1	/2"
		23'5"					1		
on			R	eactions U		IED lb (Uplift)			
	Application:	Floor					Snow	Wind	Cons
	-			1 Vertical			0	0	(
	-	No		2 Vertical	2517	2625	0	0	1
	Deck:	Not Checked							
p <= 100°F			В						
					nath Dir.	Cap. React D/L	lb Total	Ld. Case	Ld. Comb
				-	-	•			D+L
				End Grain					
Location Alle	wed Capacity	Comb C			500" Vert	4% 2625 / 251	7 5143	L	D+L
	, ,			End Grain					
b 11'8 1/2" 148		D+L L							
4'6 3/8" 886		%) D+I I							
	-	-							
	. , .								
		,							
		bearings. Lateral sı	support						
	-								
		ls.							
tio based on single ply w									
	ation Trib Width							nments	
n		Top 2'	215 PLF	215 PLF	0 PLF	0 PLF (0 PLF		
eight			9 PLF						
	b 11'8 1/2" 199 b 11'8 1/2" 148 4'6 3/8" 886 515) 11'8 9/16" 0.4 252) 11'8 9/16" 0.8 event lateral movement ar 11'8 9/16" 11'8 9/16" event lateral movement ar 11'8 9/16" 11'8 9/16" event lateral movement ar 11'8 9/16" 11'8 9/16" event dat the interior bearin	er Application: Design Method: Building Code: Load Sharing: Deck: mal - II p <= 100°F	erApplication:FloorDesign Method:ASDBuilding Code:IBC/IRC 2015Load Sharing:NoDeck:Not Checkedmal - IIDeck: $p <= 100^{\circ}F$ Deck:LocationAllowedCapacityComb.CombCapacityLob11'8 1/2"19911ft-lb11'8 1/2"14883ft-lb11'8 1/2"1483ft-lb0.999D+LLocation0.357 (36%)D+LL252)11'8 9/16"0.823 (L/240)0.952 (93%)LLExported on the bottom edge only.fastened together as per manufacturer's details.ported equally by all plies.praced at a maximum of 5'3 5/8" o.c.Ily braced at end bearings.tib based on single ply width.TypeLocationTrib WidthSideDocationTrib WidthSideDocationTrib WidthSideDocationTrib WidthSideDocationTrib WidthSideDocationTrib WidthSideDocationDeckDeckDeckDeckDeckDeckDeckDeckDeckDeckDeckDeckDeckDeckDeckDeck <td>erApplication:FloorBDesign Method:ASDBuilding Code:IBC/IRC 2015Load Sharing:NoDeck:Not Checked$p <= 100^{\circ}F$Deck:LocationAllowedCapacityComb.CaseIb11'8 1/2"19911 ft-lb0.747 (75%) D+LL11'8 1/2"14883 ft-lb0.9990.9990.911 ft-lb0.357 (36%) D+LL(100%)4'6 3/8"8867 lb0.357 (36%) D+LL252)11'8 9/16"0.823 (L/240)0.952 (95%) D+LLUvent lateral movement and rotation at the end bearings. Lateral support at the interior bearings by the building code. to be supported on the bottom edge only. fastened together as per manufacturer's details. oported equally by all plies. oraced at a maximum of 5'3 5/8" o.c.Ily braced at end bearings. tio based on single ply width.TypeLocation Trib WidthSideDead 0.9</td> <td>erApplication:FloorBrgDirectionDesign Method:ASDBuilding Code:IBC/IRC 20152VerticalLoad Sharing:NoDeck:Not Checked2Verticalmal - IIDeck:Not CheckedBearingsBearing Lerp <= 100°F</td> Exercise of the second	erApplication:FloorBDesign Method:ASDBuilding Code:IBC/IRC 2015Load Sharing:NoDeck:Not Checked $p <= 100^{\circ}F$ Deck:LocationAllowedCapacityComb.CaseIb11'8 1/2"19911 ft-lb0.747 (75%) D+LL11'8 1/2"14883 ft-lb0.9990.9990.911 ft-lb0.357 (36%) D+LL(100%)4'6 3/8"8867 lb0.357 (36%) D+LL252)11'8 9/16"0.823 (L/240)0.952 (95%) D+LLUvent lateral movement and rotation at the end bearings. Lateral support at the interior bearings by the building code. to be supported on the bottom edge only. fastened together as per manufacturer's details. oported equally by all plies. oraced at a maximum of 5'3 5/8" o.c.Ily braced at end bearings. tio based on single ply width.TypeLocation Trib WidthSideDead 0.9	erApplication:FloorBrgDirectionDesign Method:ASDBuilding Code:IBC/IRC 20152VerticalLoad Sharing:NoDeck:Not Checked2Verticalmal - IIDeck:Not CheckedBearingsBearing Lerp <= 100°F	er Application: Floor Live 1 Vertical 2517 Design Method: ASD Building Code: IBC/IRC 2015 Load Sharing: No Deck: Not Checked Market States 1 Constraints 1 Constraint	er Application: Floor Design Method: ASD Building Code: IBC/IRC 2015 Load Sharing: No Deck: Not Checked mal - II p <= 100°F	er Application: Floor Design Method: ASD Building Code: IBC/IRC 2015 Load Sharing: No Deck: Not Checked 1 Vertical 2517 2625 0 2 Vertical 2517 2625 0 1 p <= 100°F	er Application: Floor Design Method: ASD Building Code: IBC/IRC 2015 Load Sharing: No Deck: Not Checked Imal - II P <= 100°F

CSD DESIGN

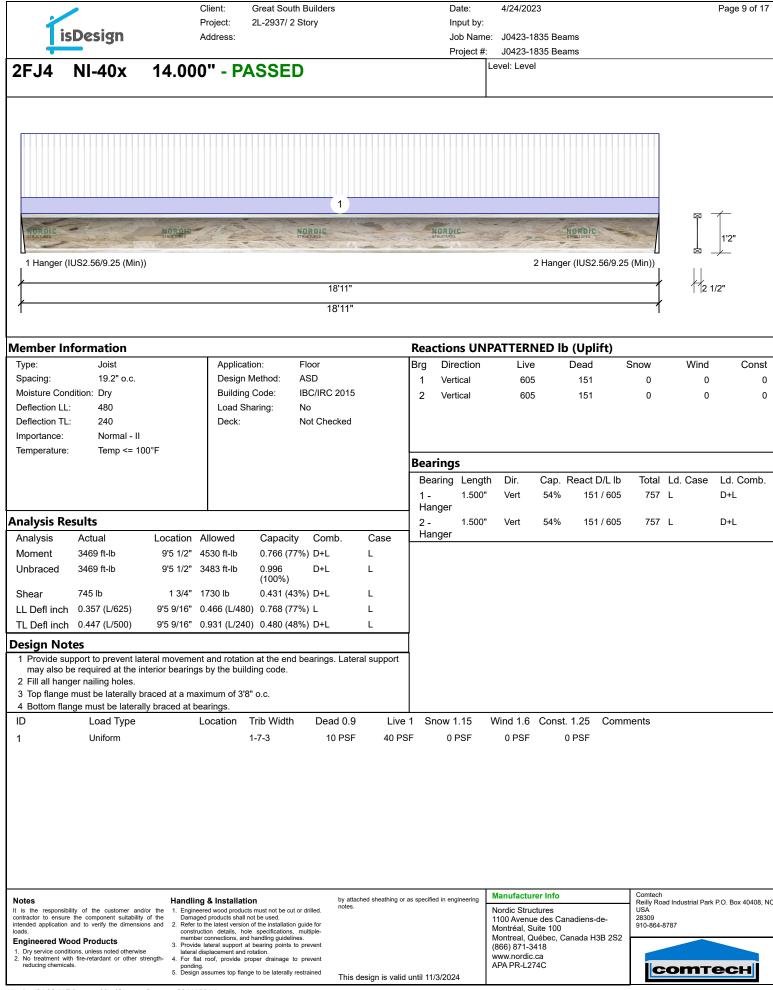
			Client:	Great South I			Date		4/24/202	3					Page 5 of 17
Tis	Design		Project: Address:	2L-2937/ 2 S	tory		Input	t by: Name:	J0423-18	835 Bea	ms				
		,	luurooo.				Proje		J0423-18						
2FB1	Kerto-S L	/L 1	.750"	X 14.00)0" 2 -	-Ply - I	PASSED	Le	evel: Level						
		2													
					1									m	\prec
														M	
	ale and a second	- init a	- inter			1 The			4-12		and a	- and		M	1'2"
1 SPF En	d Grain										2 SPF	End Gra	ain		
/					16'8 1/2"	'							\rightarrow		1/2"
/					16'8 1/2									1 10	
					100 1/2								I		
Member In	formation						Reactions	UNP			(Unlif	t)			
Туре:	Girder		Applicat	on: F	loor		Brg Directi		Live		Dead		now	Wind	Const
Plies:	2		Design I		SD		1 Vertica	ıl	332		2113		0	0	0
Moisture Con Deflection LL:	•		Building Load Sh		BC/IRC 2015		2 Vertica	ıl	337		2145		0	0	0
Deflection TL:			Deck:	•	lot Checked										
Importance:	Normal - II														
Temperature:	Temp <= 100°	Ϋ́F					Popringe								
							Bearings Bearing Le	enath	Dir.	Can	React D	/L lb	Total	Ld. Case	Ld. Comb.
							1 - SPF 3.	-	Vert	24%	2113/		2445		D+L
							End Grain								
Analysis Re Analysis		Location A	Allowed	Capacity	Comb.	Case	2 - SPF 5.	.000"	Vert	17%	2145	337	2482	L	D+L
Moment	9584 ft-lb		26999 ft-lb	0.355 (35%		L	End Grain								
Unbraced	9584 ft-lb	8'3 1/2" 9	9597 ft-lb	0.999	D+L	L	Grain								
Shear	2028 lb	1'5 1/2" 1	10453 lb	(100%) 0.194 (19%	b) D+L	L									
	0.041 (L/4711)) 0.102 (10%	-	L									
TL Defl inch	0.303 (L/639)	8'3 9/16" (0.806 (L/240) 0.376 (38%	5) D+L	L									
Design Not	tes														
	pport to prevent later e required at the inte				earings. Late	ral support									
2 Girders are	e designed to be supp	ported on the	bottom edg	e only.											
	es must be fastened nust be supported ec			turer's details											
	e laterally braced at			" o.c.											
	st be laterally braced nderness ratio based														
ID	Load Type	L	ocation	Trib Width	Side	Dead 0.9	Live 1	Snow	1.15	Wind 1	.6 Cor	ist. 1.2	5 Con	nments	
1	Uniform			1-0-0	Тор	10 PSF	40 PSF	() PSF	0 PS		0 PSI	-		
2	Uniform				Тор	234 PLF	0 PLF	(0 PLF	0 Pl	_F	0 PLI	F WAL	.L	
	Self Weight					11 PLF									
Notes		chemica					roper drainage to prev	vent	lanufactur	er Info			Comtech Reilly Road	d Industrial Par	k P.O. Box 40408, I
Calculated Structured structural adequacy	Designs is responsible only of of this component based on	the 1. LVL bea	g & Installation ms must not be cu	t or drilled	pondin	g			/etsä Wood 01 Merritt 7		, 2nd Floo	r	USA 28309		
responsibility of the ensure the compor	d loadings shown. It is customer and/or the contractor nent suitability of the inter	the 2. Refer or to regardin	to manufacturer g installation		mation ulti-ply 1 code			N	lorwalk, CT 300) 622-58	06851	-	Ļ	910-864-8	/87	
application, and to ver Lumber	rify the dimensions and loads.	approva 3. Damage	ls ed Beams must no	-					/ww.metsav		/us				
 Dry service condit LVL not to be treat 	ions, unless noted otherwise ated with fire retardant or corro	5. Provide	lateral support a isplacement and re	t bearing points to	avoid	design is valid	until 11/3/2024						C	отт	есн
I						J									



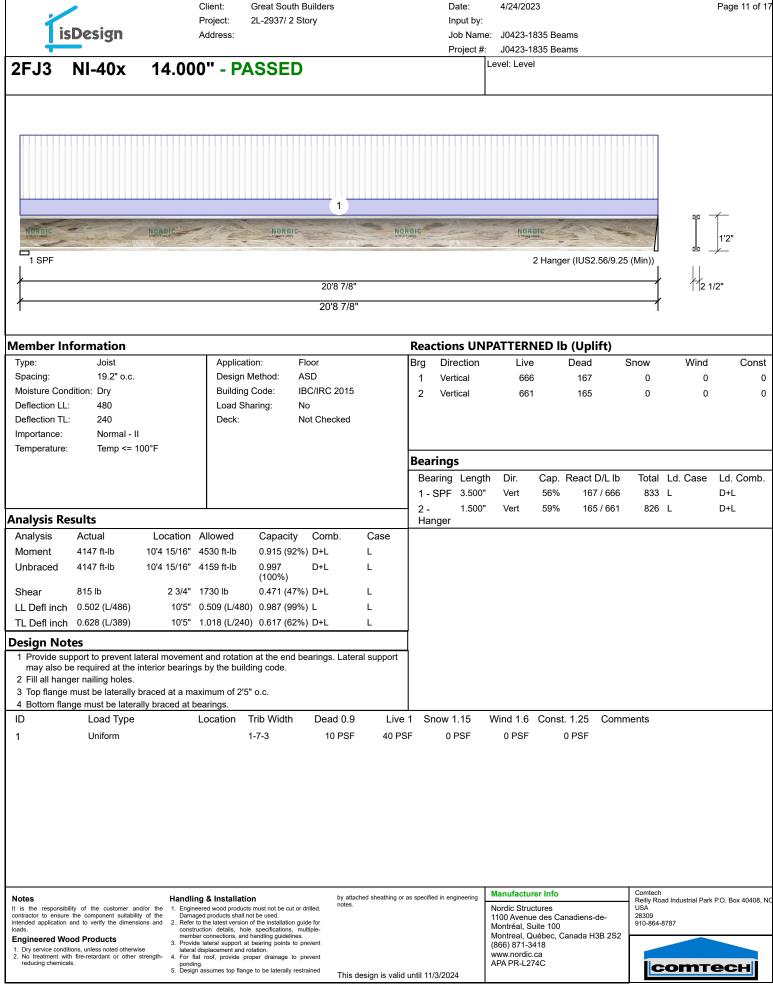
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-	esign		Client: Project: Address:	Great South 2L-2937/ 2 \$				Job	ut by:	4/24/202 J0423-18 J0423-18	335 Bea					Page 8 of
2FB3 k	Kerto-S L	VL	1.750)" X 14	.000" -	PASS	ED		Le	evel: Level						
	2			1						¥1.						1'2"
1 Hanger (IUS	61.81/9.5 (Min))							2 S	PF End	Grain						
				10'											11	3/4"
1				10'						1						
lember Info	rmation						Rea	ctions		ATTERN) (Unlif	t)			
Туре:	Girder		Applica	ition:	Floor		Brg	Direc		Live		Dead		Snow	Wind	Cor
Plies: Moisture Condition Deflection LL: Deflection TL: Importance:	1 on: Dry 480 240 Normal - II		-	g Code: haring:	ASD IBC/IRC 2015 No Not Checked		1 2	Vertic Vertic		198 202		1237 1258		0 0	0 0	
Temperature:	Temp <= 100°	°F					Dee									
							Be 1 -	rings aring L 1 nger	_ength 1.500"	Dir. Vert	Cap. 39%	React D/ 1237 /		Total 1435	Ld. Case L	Ld. Com D+L
Analysis Resu	llts						2 -	SPF 3	8.500"	Vert	28%	1258 /	202	1459	L	D+L
Moment 3 Unbraced 3		4'11 1/2" 1'4 1/2" 4'11 1/2"	13500 ft-lb 5549 ft-lb 5227 lb 0.241 (L/48	Capacity 0.248 (25° 0.604 (60° 0.200 (20° 0) 0.049 (5% 0) 0.178 (18°	%) D+L %) D+L %) D+L)) L	Case L L L L	En Gr									
Design Notes	;						1									
 Fill all hanger Girders are de Top must be la Bottom must be 	equired at the intention of the intention of the second se	erior bearing ported on th end bearing	gs by the bui ne bottom ed gs. arings.	lding code. ge only.												
ID 1	Load Type Uniform		Location	Trib Width 1-0-0	Side Top	Dead 0.9 10 PSF		Live 1 40 PSF		/ 1.15 0 PSF	Wind 2 0 P	1.6 Con SF	1.2 0 ost. 0 PS		nments	
2	Uniform Self Weight			1-0-0	Тор	234 PLF 5 PLF		0 PLF		0 PLF	0 P		0 PL		LL	



Į is	sDesign		iect: 2L-293 iress:	South Builders 7/ 2 Story		Projec	ame: J0423-					Page 10 o
2FB4	Kerto-S LV	/L 1.7	′50" X 14	1.000" 2	2-Ply -	PASSED	Level: Leve	el.				
	4											
		2		1			3					
											M/	$\overline{1}$
	Contractor .			alt in the	1 The		C. P. Marken				Ŵ	1'2"
	End Grain		2 SPF End Gr	ain	3 SPF E	End Grain		4 SF	PF End Gra	ain I		_ <u>/</u>
/	4'10"		1	3'		1	4	'10"				3 1/2"
ł				12'8"						-+		
/lember Ir	nformation					Reactions L	JNPATTER	NED lb (Up	lift)			
Type:	Girder 2		Application:	Floor		Brg Directio				now	Wind	Cor
Plies: Moisture Cor			Design Method: Building Code:	ASD IBC/IRC 2015	5	1 Vertical 2 Vertical	155 290			0 0	0	
Deflection LL	-		Load Sharing:	No		3 Vertical	290			0	0	
Deflection TL	.: 240		Deck:	Not Checked		4 Vertical	155			0	0	
Importance:	Normal - II											
Temperature	: Temp <= 100°F	-				P						
						Bearings						
						Bearing Ler	-	Cap. React			Ld. Case	Ld. Com
						1 - SPF 3.5 End	00" Vert	29% 1375	/ 1579	2955	L_L	D+L
nalysis R	esults					Grain						
Analysis		_ocation Allo	wed Cap	acity Comb.	Case	2 - SPF 3.5	00" Vert	54% 2658	/ 3463	6121	LL_	D+L
	nt -2528 ft-lb		-	(9%) D+L	LL_	End Grain						
Unbraced	-2528 ft-lb	4'10" 917	8 ft-lb 0.275	5 (28%) D+L	LL_	3 - SPF 3.5	00" Vert	54% 2658	/ 3463	6121	LL	D+L
Pos Momer	nt 2611 ft-lb 1	0'5 9/16" 269	99 ft-lb 0.097	′ (10%) D+L	L_L	End		2000	, 0100	0121		DIE
Unbraced	2611 ft-lb 1	0'5 9/16" 917	8 ft-lb 0.28	5 (28%) D+L	L_L	Grain						
Shear	2441 lb	9'1 3/4" 104	53 lb 0.234	l (23%) D+L	_LL	4 - SPF 3.5	00" Vert	29% 1375	/ 1579	2955	L_L	D+L
LL Defl inch	n 0.008 (L/7132) 2	"5 13/16" 0.11	5 (L/480) 0.067	7(7%) L	L	End Grain						
TL Defl inch	n 0.014 (L/3838) 1	0'2 5/16" 0.23	30 (L/240) 0.063	8 (6%) D+L	L							
esign No	ites					1						
	upport to prevent latera	l movement an	d rotation at the	end bearings. Lat	eral support	4						
may also l	be required at the inter	ior bearings by	the building cod									
	e designed to be suppo lies must be fastened to		• •	lataile								
	must be supported equ	•										
	be laterally braced at e	-										
	ust be laterally braced a enderness ratio based o	•										
ID	Load Type		ation Trib Wi	dth Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6 C	onst. 1 25	i Cor	nments	
1	Uniform	200	1-0-0	Тор	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF			
2	Uniform			Near Face		378 PLF	0 PLF	0 PLF	0 PLF		4	
2	Uniform				234 PLF	0 PLF	0 PLF	0 PLF	0 PLF			
				Тор								
4	Uniform Self Weight			Тор	287 PLF 11 PLF	287 PLF	0 PLF	0 PLF	0 PLF	B1		
	-						". Manufactu	rer Info	1	Comtech		
Notes Calculated Structure	ed Designs is responsible only of t	chemicals the Handling &	Installation	6. For 1 pond		roper drainage to preve	Manufactu Metsä Woo				ad Industrial Parl	k P.O. Box 4040
structural adequacy design criteria ar	of this component based on t nd loadings shown. It is t	the 1. LVL beams m the 2 Refer to	nust not be cut or drilled manufacturer's produ-	t information			301 Merritt	7 Building, 2nd F	loor	28309 910-864-8	3787	
responsibility of the ensure the compo	customer and/or the contractor onent suitability of the intend	to regarding led fastening del	installation requireme tails, beam strength va	nts, multi-ply			Norwalk, C (800) 622-5	850	┝			
application, and to v Lumber	erify the dimensions and loads.	approvals 3. Damaged Be	ams must not be used				www.metsa	wood.com/us				
1. Dry service cond	litions, unless noted otherwise eated with fire retardant or corrosi	Provide later	nes top edge is laterally ral support at bearing	points to avoid						lc	от	есн
		iateral uisplat	cement and rotation	This	s design is valid	until 11/3/2024					_	

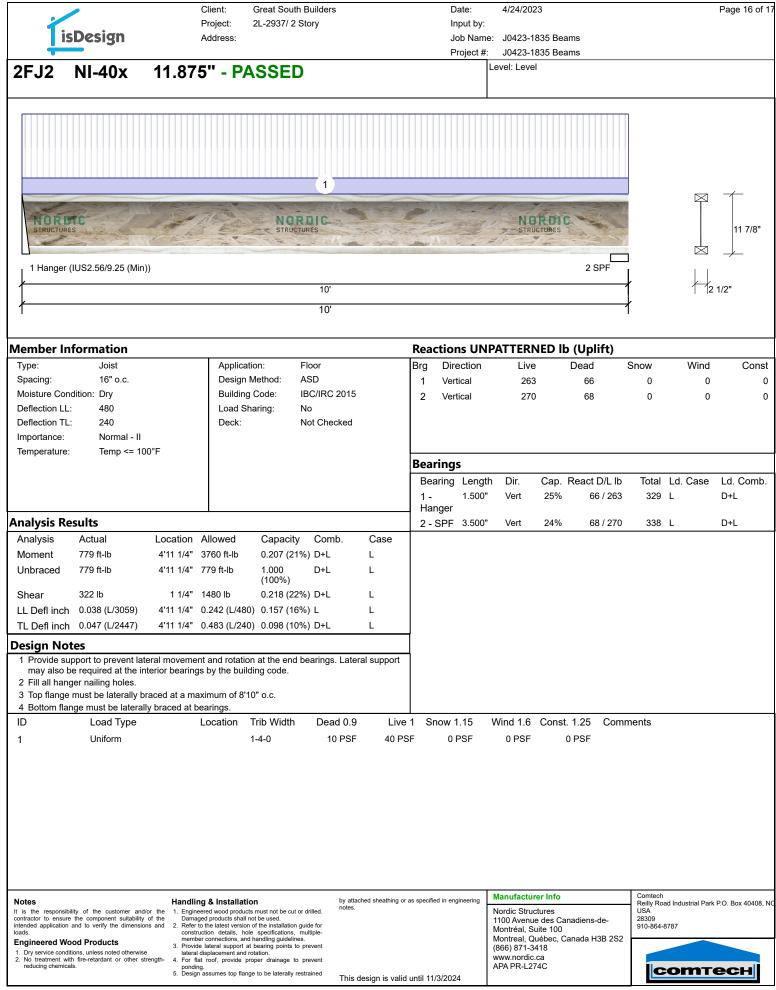


		CI	ient:	Great South B	uilders			Date	۵.	4/24/202	3				Page 12 of 1
2			roject:	2L-2937/ 2 Sto					ut by:	-1/2-1/202	0				
l is	Design		ddress:		,				-	J0423-18	35 Bea	ms			
	-	,							ject #:	J0423-18					
		44.000	" D						·	evel: Level					
2FJ7	NI-40x	14.000	- P/	433ED											
		1													
NORDIC				ORDIC NUCTURES											1'2"
1 Hanger (II	US2.56/9.25 (Min))				2 SPF										,
/		6'10 7/8	8"			\rightarrow								12	1/2"
/		6'10 7/	/8"			\rightarrow									
		01017	0			•									
Member Inf	ormation						Rea	ctions		ATTERN	ED lb	(Uplift)			
Туре:	Joist		Applica	tion: Fl	oor		Brg	Direc		Live		Dead	Snow	Wind	Const
Spacing:	19.2" o.c.		Design	Method: AS	SD		1	Vertic	al	218		55	0	0	0
Moisture Cond			Building	-	C/IRC 2015		2	Vertic	al	224		56	0	0	0
Deflection LL:	480		Load SI	-											
Deflection TL:	240		Deck:	Ne	ot Checked										
Importance:	Normal - II														
Temperature:	Temp <= 100)°F													
							Bea	rings							
							Be 1 -	aring L 1	_ength 1.500"	Dir. Vert	Cap. 20%	React D/L lb 55 / 218		Ld. Case L	Ld. Comb. D+L
Analysis Res	sults							nger SPF 3	3.500"	Vert	19%	56 / 224	280	L	D+L
Analysis	Actual	Location Al	llowed	Capacity	Comb.	Case									
Moment	427 ft-lb	3'4 15/16" 45		0.094 (9%)	D+L	L									
Unbraced	427 ft-lb	3'4 15/16" 16		0.260 (26%)		L									
Shear	261 lb	1 3/4" 17		0.151 (15%)		L									
						L									
				0) 0.057 (6%)		L .									
IL Defi inch	0.012 (L/6704)	3'4 15/16" 0.3	327 (L/240	0) 0.036 (4%)	D+L	L	4								
may also be 2 Fill all hange 3 Top flange r	port to prevent late required at the int er nailing holes. nust be laterally bra	erior bearings b aced at bearing	by the build		earings. Later	al support									
	ge must be laterally				Dood 0.0	1	1 0	no	15 '	Mind 1.0	Cart	1.05 0-	monte		
ID 1	Load Type Uniform	LC		Trib Width 1-7-3	Dead 0.9 10 PSF	Live 40 PS		now 1.1 0 PS		Wind 1.6 0 PSF		PSF	iments		
1	Uniform			1-7-3	10 PSF	40 PS	ŝF	0 PS	ŝF	0 PSF	() PSF			
Notes	ty of the customer and/o the component suitability o	r the 1. Engineered	& Installati	ts must not be cut or d	notor	ned sheathing or	as specifi	ed in engine	l	Manufacture	tures	nadiens-de-	Comtech Reilly Ro USA 28309		: P.O. Box 40408,

1		Client: Project:	Great South B 2L-2937/ 2 Sto			I	Date: nput by:	4/24/202					Page 13 of
15	Design	Address:					lob Name Project #:		835 Beams 835 Beams				
2FB5	Kerto-S LVL	1 750"	X 14 00	0" 2-	Plv - F			Level: Leve					
			X 14.00	U 2		A001							
					3								
	2		1									Π	-{
												M	
	- right		-	Win Sty -	- Anger			The law				M	1'2"
1 SPF				A A CARGO IN THE		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	2.5	SPF .				Ш	<u> </u>
			9'8 1/2"				2.						3 1/2"
<u> </u>			9'8 1/2") 1/Z
1			001/2					I					
lember Inf	formation					Reactio	ns UNI	PATTERN	IED lb (Up	lift)			
Туре:	Girder	Applica				l v	rection	Live			Snow	Wind	Co
Plies: Moisture Cond	2 dition: Dry	, e	Method: AS g Code: IB	C/IRC 2015			rtical rtical	2874 2874			0 0	0	
Deflection LL:	•		sharing: No)			lioui	2074			Ū	Ŭ	
Deflection TL:	240	Deck:	No	ot Checked									
Importance: Temperature:	Normal - II Temp <= 100°F												
remperature.	Temp <= 100 T					Bearing	s						
							Length	n Dir.	Cap. React	D/L lb	Total	Ld. Case	Ld. Com
						1 - SPF	3.500"	Vert	70% 771	/ 2874	3645	L	D+L
nalysis Re	sults					2 - SPF	3.500"	Vert	70% 771	/ 2874	3645	L	D+L
Analysis		cation Allowed	Capacity	Comb.	Case]							
Moment	8031 ft-lb 4'1	0 1/4" 26999 ft-lb	0.297 (30%)	D+L	L								
Unbraced		0 1/4" 11443 ft-lb	0.702 (70%)		L								
Shear	3368 lb	8'3" 10453 lb	0.322 (32%)		L								
		0 1/4" 0.231 (L/48			L								
		0 1/4" 0.462 (L/24	0) 0.200 (21%)	D+L	L	1							
esign Not	es oport to prevent lateral m	novement and rotati	on at the end be	arings. Later	al support	4							
	e required at the interior	• •	•	U U									
	designed to be supporte es must be fastened toge		• •										
-	nust be supported equal												
	e laterally braced at end st be laterally braced at e	-											
	derness ratio based on		Tuik \A/idth	Cida	Deed 0.0		1 0		Mind 1.6		05 00		
ID 1	Load Type Uniform	Location		Side Top	Dead 0.9 10 PSF	Live 40 PS		w 1.15 0 PSF	Wind 1.6 C	onst. 1 0 Ps		mments	
1 2	Uniform			Near Face	10 PSF	40 P3 413 PI		0 PSF	0 PSF 0 PLF	0 P		13	
2 3	Uniform			Far Face	35 PLF	413 PI		0 PLF	0 PLF	0 P			
-	Self Weight				11 PLF	10011		с і	J . LI	01		-	
	een rreigin												
		ala ang 1 -		A E - A -	reafe * *	anna deste "	I	Manufactur	er Info		Comtech		
Notes Calculated Structured	Designs is responsible only of the	chemicals Handling & Installat	ion	For flat ponding	roofs provide p	roper drainage t	o prevent	Metsä Wood	1		Reilly Ro USA	ad Industrial Park	P.O. Box 404
structural adequacy of lesign criteria and esponsibility of the c	of this component based on the loadings shown. It is the sustomer and/or the contractor to	 LVL beams must not be Refer to manufactu 	cut or drilled rer's product informa					Norwalk, CT		loor	28309 910-864-	8787	
ensure the compone	ent suitability of the intended ify the dimensions and loads.	fastening details, beam approvals	requirements, mult strength values, and o	code				(800) 622-58					
.umber 1. Dry service condition	ons, unless noted otherwise	 Damaged Beams must i Design assumes top edition Provide lateral support 	ge is laterally restrained	avoid									
	ted with fire retardant or corrosive	lateral displacement and	I rotation		esign is valid		0.4					OMT	CCH

İS	Design	Ą	Address:					Name: ect #:	J0423-18 J0423-18						
2FB6	Kerto-S	LVL	1.750	" X 14	.000" -	PASS	ED	Le	evel: Level						
2					3										
			1												1'2"
1 SPF En	d Grain				2 SP	F End Grain									
ļ			7'8 1/2" 7'8 1/2"											<i>†1</i> 1 3	3/4"
I			/ 8 1/2				I								
lember Inf	ormation						Reactions	UNP	ATTERN	IED lb	(Uplift)			
Type: Plies: Moisture Cond Deflection LL: Deflection TL: Importance:	Girder 1 lition: Dry 480 240 Normal - II		Applica Design Building Load S Deck:	Method: g Code: haring:	Floor ASD IBC/IRC 2015 No Not Checked	5	Brg Direc 1 Vertica 2 Vertica	al	Live 1556 1611		Dead 1847 426		0 0	Wind 0 0	Cor
Temperature:	Temp <= 100)°F					P								
							Bearings Bearing L 1 - SPF 3 End	-	Dir. Vert	Cap. F 66%	React D/L 1847 / 15		Total 3403	Ld. Case L	Ld. Com D+L
nalysis Re							Grain 2 - SPF 3	500"	Vert	40%	426 / 16	311 2	2037	1	D+L
	Actual 3472 ft-lb 3472 ft-lb 1824 lb 0.045 (L/1917)	Location A 3'10 1/4" 1 3'10 1/4" 7 1'5 1/2" 5 3'10 5/16" 0	3500 ft-lb '008 ft-lb 5227 lb 0.181 (L/48		%) D+L %) D+L %) D+L %) L	Case L L L	End Grain				-20710				
TL Defl inch	0.057 (L/1516)	3'10 5/16" 0).362 (L/24)	0) 0.158 (16	%) D+L	L	l								
 Provide sup may also be Girders are Top must be 	port to prevent late required at the int designed to be sup laterally braced at to be laterally braced	erior bearings oported on the t end bearings	by the buil bottom ed	ding code.	bearings. Late	eral support									
ID	Load Type			Trib Width	Side	Dead 0.9	Live 1	Snow	1.15	Wind 1.	.6 Cons	t. 1.25	Com	iments	
1			0-0-12	1-0-0	Top Far Face			(3EB3	1	
3	Part. Uniform Self Weight	0-1-12	to 7-8-8		Far Face	95 PLF 5 PLF	378 PLF	I	0 PLF	0 PL		0 PLF	2FJ4		
2		0-1-12	0-0-12 to 7-8-8	1-0-0	Far Face Far Face	5 PLF	40 PSF 0 lb 378 PLF) PSF 0 lb 0 PLF Ianufacture		lb	Co	omtech		Р.О. Вох

			lient: roject:	Great South E 2L-2937/ 2 Sto				Date: Input	by:	4/24/2023					Page 15 of
ISL	Design	A	ddress:							J0423-18					
		44.000						Proje		J0423-18 evel: Level	35 Bea	ms			
2FJ8	NI-40x	11.875	" - P/	ASSED						vei. Levei					
			1												
NORDI STRUCTURES	c	A LONG		NORI	DIC		CI INTER AND								11 7/8"
1 SPF					2 Hanger (IUS	62.56/9.25 (Min))	l							,
			6'10 1/8"					1						112	1/2"
1			6'10 1/8'	n				1							
Member Info							-			ATTERN	ED Ib	(Uplift)			
Type:	Joist		Applica		oor		Brg	Directi		Live		Dead	Snow	Wind	Cons
Spacing: Moisture Condit	16" o.c. ition: Dry		-		SD C/IRC 2015		1	Vertical		186		46 45	0	0	
Deflection LL:	480		Load S	-			2	Vertical		179		45	0	0	
Deflection TL:	240		Deck:	-	ot Checked										
Importance:	Normal - II		Deek.		of officiated										
Temperature:	Temp <= 100)°F													
iomporataro.	tomp + tot						Bea	rings							
							<u> </u>	aring Le	enath	Dir.	Can	React D/L lb	o Total	Ld. Case	Ld. Comb
								SPF 3.	-	Vert	Сар. 16%	46 / 186			D+L
							2-		500"	Vert	17%	45 / 179			D+L
Analysis Res	sults							nger		voit		107 173	. 227	-	2°2
	Actual	Location A	llowed	Capacity	Comb.	Case		-							
-	353 ft-lb	3'5 13/16" 3	760 ft-lb	0.094 (9%)		L									
Unbraced	353 ft-lb	3'5 13/16" 13	367 ft-lb	0.258 (26%)		L									
Shear	217 lb	6'8 7/8" 14	480 lb	0.147 (15%)		L									
	0.010 (L/7659)			0) 0.063 (6%)		L									
TL Defl inch			-	0) 0.039 (4%)		-									
		0010/10 0.	.020 (L/24	0) 0.000 (470)	DIE	-	ł								
may also be 2 Fill all hange 3 Top flange m	es port to prevent late required at the int er nailing holes. nust be laterally br ge must be laterally	erior bearings l aced at bearing	by the buil gs.		earings. Latera	al support									
ID	Load Type		-	Trib Width	Dead 0.9	Live	1.5	now 1.15	5 V	Vind 1.6	Const	1.25 Con	nments		
	21	L													
I	OmiOIII			1-4-0	10 295	40 PS	1-	0 235		UFOF					
1	Uniform			1-4-0	10 PSF	40 PS	F	0 PSF	=	0 PSF) PSF			
contractor to ensure th	y of the customer and/ he component suitability nd to verify the dimension	or the 1. Engineere of the Damaged s and 2. Refer to the construction	l products shall he latest versio ion details, ho	cts must not be cut or d not be used. In of the installation guid ole specifications, mu	rilled. notes.	ned sheathing or	as specifi	ied in engineer	Ning N 1 N	lontréal, Su	ures des Ca ite 100	nadiens-de-	USA 28309 910-864-	ad Industrial Park	P.O. Box 404
t is the responsibility contractor to ensure the ntended application and oads. Engineered Wood	the component suitability on to verify the dimension	or the 1. Engineere of the Damaged s and 2. Refer to the construction 3. Provide la	ed wood produc l products shall he latest versio ion details, ho connections, an	cts must not be cut or d not be used. In of the installation guid ble specifications, mu id handling guidelines. at bearing points to pr	rilled. notes. de for ltiple-	ned sheathing or	as specifi	ied in engineer	N 1 N N	lordic Struct 100 Avenue Iontréal, Su	ures des Ca ite 100 ébec, C	nadiens-de- anada H3B 2S:	Reilly Ro USA 28309 910-864-	ad Industrial Park	P.O. Box 4040



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