Street 1: City		Job Name: Q2301 Level: 1st Flo Label: H4 - i1	429 Dor 5		2 Ply N 1 3/4" x 9	Status: Design	
Customer Ph		Type: Beam	5		Microlla	m® LVL	Passed
Illustration Not to Scale. Pitch: 0/12	Designed by Single Memb 8. 0 1 1 1 1	A	n MiTek® Structur 22 5-07-00 Ply to	e Version	Report Versio	n: 2021.03.26 0	9/13/2023 16:26
		5-00-00 5-07-00	2 + 3608 				
DESIGN INFORMATION	ANALYSIS RESUL	.TS	Land Cambi	nation IDE	Desire	Lineit	Desult
Building Code: IRC2015 Design Methodology: ASD Risk Category: II (General Construction) Residential Service Condition: Dry LL Deflection Limit: L/360, 0.75" (absolute)	Max Pos. Moment: Max Neg. Moment: Max Shear: Live Load (LL) Pos. De	Location 2'- 1/2" 0'- 2 1/2" 4'- 6 1/4" fl.: 2'- 9 7/8"	Dead Combi D + Lr D + Lr D + Lr 0.75(L + Lr +	nation LDF 1.15 1.15 1.15 0.6W)	Design 2275 lb ft 202 lb ft 1550 lb 0.012"	Limit 12824 lb ft I 12674 lb ft 7074 lb I L/360 F	Passed - 18% Passed - 2% Passed - 22% Passed - L/999
I L Deflection Limit: L/240, 1.00" (absolute)	SUPPORT AND RE	EACTION INFOR	MATION	0.000	0.021		
Lateral Restraint Requirements: Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges	Input ID Bearing Length	Controlling Load Combination	LDF Down Read	ward Uplift ction Reactior	Resistance of Member	Resistance of Support	Result
of the member must be fully restrained or have the following maximum unbraced length: Top: 1'- 10 1/2" Bottom: 5'- 7"	1 3-08 2 3-08	D + Lr D + Lr	1.15 2572 1.15 1560	2 lb 0 lb	9187 lb 9187 lb	16206 lb 16207 lb	Passed - 28% Passed - 17%
Province Officer of Oregon of Mathematical	Type Start Loc	End Loc Sour	rce Face	Dead (D) L	live (L) Sno	w (S) Roof Live	Lr) Wind (W)
 1323 psi Wall @ 0'- 2 1/2" 1323 psi Wall @ 5'- 4 1/2" 	Self 0' Weight 0'- 1/2" Point 0'- 1/2" Point 2'- 1/2" Point 4'- 1/2"	5'- 7" Self W 0'- 1/2" A05(2'- 1/2" A05(4'- 1/2" A05(Veight Top c01) Top c03) Top c08) Top	9 lb/ft 603 lb 718 lb 717 lb	- - -	607 lb - 718 lb - 716 lb	- 206/-368 lb 232/-450 lb 225/-451 lb
	ID Start Loc 1 0' 2 5'- 3 1/2"	End Loc 0'- 3 1/2" 5'- 7"	Source E2(i7) E9(i14)	Dead (D) L 1302 lb 789 lb	Live (L) Sno - -	ow (S) Roof Live (- 1279 lb - 762 lb	Lr) Wind (W) 728 lb/ -1095 lb 728 lb/ -1095 lb
	 DESIGN NOTES The dead loads used Analysis and Design been modified to sim Tributary Loads have default system spaci Transfer reactions m This report is based reference only. Verif Review all loads and specified on this repor required) as per mar Beam Stability Facto PLY TO PLY CONN Zone A: Factored loa 12d (0.131"x3.25" Install fasteners fn X1 = Minimum end 	d in the design of this has been performed plify reporting. been generated ba ng. The actual load ay differ from design on modeled conditio y that all loads and s reactions to ensure ort, anchorage for up ufacturer's instruction r used in the calcula VECTION and a 0 plf. Use 12d () nails properties: D om one face. d distance, X2 = Min	s member were a d using precision ased on actual spa is applied to the r n results as allow ins input by the u- support conditions that the member polifit reactions to b on. attion for Allowable (0.131"x3.25") na = 0.131", $L = 3.2nimum edge dista$	pplied to the struc loading from actua acing between me member are showr ed per building cod ser. Source inform s are correct. //bearing/connecto e specified by othe e Max Pos Momen ils. LDF = 1.00. C 25". Fastener capa ance, Y2 = Minimu	ture as projected al modeled condi mbers in the Specified des and standard nation for the loa r/structure can re ers. Installation of t (CL) = 0.99 Qty = 12. Row = icity = 96 lbs. X1 um row spacing.	d dead loads. itions. Some loads del which may diffe 1 Loads table. 1 load distribution p ds and supports and esist adequately. I of member and acc 2, Spacing = 12" = 2", Y1 = 0.75",	s may have er from the practices. re provided for Jnless already cessories (if

MiTek*	Customer: Street 1: City: Customer Ph	Job Name: Level: Label: Type:	Q2301429 1st Floor H4 - i15 Beam	2 Ply Member 1 3/4" x 9 1/4" 2.0E Microllam® LVL	Status: Design Passed				



MiTek [®]	Customer: Street 1: City: Customer Ph			ob Name: Q .evel: 1 : .abel: D ype: B	2301429 st Floor B7 - i17 eam				2 Ply Member 1 3/4" x 9 1/4" 2.0E Microllam® LVL			Status: Design Passed
Illustration Not to S	cale. Pitch: 0/12	Designed by	/ Single Membe 8.6	r Design Eng .2.271.Updat	gine in MiTek® te3.S.22	Structu	ire Version		Report Ver	sion: 2021.	03.26 09	9/13/2023 16:26
		0		A L L		6-07-(00 Ply to Ply Z	ones				
		1 7 368		6-00-00 6-07-00		2 7 3268						
DESIC	GN INFORMATION	ANALY	SIS RESULT	S								
Building Code:	IRC2015	De	esign Criteria	Locati	ion Loa	d Comb	pination I	_DF	Design	Limit		Result
Design Methodolog Risk Category: Service Condition:	jy: ASD II (General Construction) Residential Dry	Max Pos Max She Live Load	. Moment: ar: d (LL) Pos. Defl.	3'- 9 5'- 6 1 .: 3'- 3 1	" /4" /2"	D+L D+L Lr	.r ·	I.15 I.15	3422 lb ft 1909 lb 0.024"	12824 lk 7074 ll L/360	oft F b F P	Passed - 27% Passed - 27% assed - L/999
LL Deflection Limit:	L/360, 0.75" (absolute)	SUPPO	ORT AND REA	ACTION IN	FORMATION	D+L N	.r		0.050**	L/240	Р	assed - L/999
Lateral Restraint F	C/240, 1.00 (absolute)	ID E	Input Bearing Length	Controlling Lo Combinatic	oad LDF	Dow Rea	nward action Re	Uplift eaction	Resistan of Memb	ce Resis er of Su	stance ipport	Result
must be laterally re of the member mus following maximum	strained. Top and bottom edges at be fully restrained or have the unbraced length:	1 2 LOADI	3-08 3-08 NG	D + Lr D + Lr	1.15 1.15	180 230	02 lb 04 lb		9188 lk 9188 lk	o 1620 o 1620	07 lb 07 lb	Passed - 20% Passed - 25%
Top: 1'- 10 1/2"	Bottom: 6'- 7"	Type	Start Loc	End Loc	Source	Face	Dead (D)	Li	ve (L) S	Snow (S)	Roof Live (I	Lr) Wind (W)
Bearing Stress of • 1323 psi Wall (• 1323 psi Wall (Support Material: ₯ 0'- 2 1/2" ₯ 6'- 4 1/2"	Weight Point Point Point	0' 1'- 9" 3'- 9" 5'- 9"	6'- 7" 1'- 9" 3'- 9" 5'- 9"	A04(c02) A04(c01) A04(c03)	Тор Тор Тор Тор	9 lb/ft 722 lb 672 lb 671 lb		-	-	- 725 lb 631/-17 lk 623/0 lb	- 174/-467 lb 59/-344 lb 247/-352 lb
			Start Loc	CTIONS End Loc	Source	-	Dead (D)	Li	ive (L)	Snow (S)	Roof Live (I	Lr) Wind (W)
		1 2	0' 6'- 3 1/2"	0'- 3 1/2" 6'- 7"	E10(i16) E6(i2)		927 lb 1201 lb		-	-	875/-7 lb 1104/-10	o 317 lb/ -738 lb lb 317 lb/ -738 lb
		DESIG	N NOTES									
		The definition of the second sec	ad loads used i is and Design h nodified to simpl ry Loads have b system spacing er reactions may port is based or ice only. Verify v all loads and r ed on this report d) as per manu Stability Factor	n the design as been perf lify reporting, been general g. The actual y differ from do that all loads eactions to e t, anchorage facturer's ins used in the c ECTION	of this member formed using p ted based on a al loads applied design results of and support c and support c ansure that the for uplift react truction. calculation for A	er were actual sp d to the as allow by the condition membe ions to	applied to the h loading from pacing betwee member are ved per build user. Source rs are correc er/bearing/col be specified le Max Pos M	e structu en actua en men shown ing cod inform t. nnector by othe loment	ure as projec I modeled co nbers in the r in the Specii es and stand ation for the /structure ca rs. Installatio (CL) = 0.99	ted dead lo nditions. S model whicl ied Loads t ard load dis oads and s n resist ade on of memb	ads. ome loads h may diffe able. stribution p upports an equately. L er and acc	may have er from the ractices. e provided for Inless already æssories (if
		• Zone A	Exercise Factored load	= 0 plf. Use	e 12d (0.131"x3	3.25") n	ails. LDF = 1	.00. Q	ty = 14. Row	/ = 2, Spac	ing = 12"	/2 = 1 5"
		12d Insta X1 =	(0.131"x3.25") r all fasteners fror Minimum end (nails properti n one face. distance, X2	es: D`= 0.131" ? = Minimum eo	', L =́ 3.	.25". Fastene tance, Y2 = I	r capac	ity = 96 lbs. m row spacin	X1 = 2" , Y1 g.	1 = 0.75", Υ	<i>(</i> 2 = 1.5"

MiTek°	Customer: Street 1: City: Customer Ph	Job Name: Level: Label: Type:	Q2301429 1st Floor DB7 - i17 Beam	2 Ply Member 1 3/4" x 9 1/4" 2.0E Microllam® LVL	Status: Design Passed			





MiTek°	Customer: Street 1: City: Customer Ph	Job Name: Level: Label: Type:	Q2301429 1st Floor DB9 - i18 Beam	2 Ply Member 1 3/4" x 9 1/4" 2.0E Microllam® LVL	Status: Design Passed			



	Customer:			Job Name: Q2301429					2 Ply N	Status:		
Street 1:					Level: 1st Floor					1 3/4" x 9 1/4" 2.0E		
MiTek [®]	City: Customer Ph			Label: Type:	DB3 - i1 Beam	9			Microlla	m® LVL	Passed	
Illustration Not to S		Designed b	v Single Mem	her Design F		/liTek® S	Structure Versi		Papart Varaio	. 2021 02 26	00/12/2022 16:26	
illustration Not to S		Designed b	8 Single Menn	.6.2.271.Up	date3.S.22	2 2			Report version	1. 2021.03.20	09/13/2023 10.20	
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				A	Ply	to Ply Z	ones					
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			Ŷ	~	\checkmark							
			1	1,06,00	2							
			1	2-06-00								
DEala				TC								
DESIC			esign Criteria		cation	Load	Combination	L DF	Design	Limit	Result	
Design Methodolog	ikozulo jy: ASD	Max Pos	. Moment:	0	'- 5"	0.6	D + 0.6W	1.60	51 lb ft	17806 lb ft	Passed - 0%	
Risk Category:	II (General Construction)	Max Neg	. Moment:	0	'- 5"		D + Lr	1.15	160 lb ft	12802 lb ft	Passed - 1%	
Service Condition:	Dry	Max She	ar:		2 3/4" INEORM		D + Lr	1.15	109 lb	7074 lb	Passed - 2%	
LL Deflection Limit:	L/360, 0.75" (absolute)	SOFPO	Input	Controlling		AHON	Downword	Linlift	Resistance	Resistance		
TE Denection Linit.	L/240, 1.00 (absolute)	ID I	Bearing Length	Combina	ation	LDF	Reaction	Reaction	of Member	of Support	Result	
Lateral Restraint P	Requirements:	1	6-00 D	+ 0.75(L + L	_r + 0.6W)	1.60	591 lb		15750 lb	15225 lb	Passed - 4%	
must be laterally re	strained. Top and bottom edges		6-00 6-00	0.6D + 0).6W	1.60 1.15	969 15	-173 lb	- 15750 lb	- 15225 lb	Passed - 6%	
following maximum	at be fully restrained or have the unbraced length:	2	6-00	0.6D + 0	.6W	1.60	909 ID	-166 lb	-	-	Fassed - 070	
Top: 1'- 10 1/2"	Bottom: 2'- 6"	LOAD	NG									
Bearing Stress of	Support Material:	Type	Start Loc	End Loc	Source	ə F	ace Dead	(D) Li	ve (L) Snov	w (S) Roof Liv	e (Lr) Wind (W)	
725 psi Column	@ 0'- 5"	Weight	0'	2'- 6"	Self Wei	ight	Top 9 lb/	ft	-		-	
• 725 psi Column	@ 2'- 1"	Point Point	0'- 3/4" 2'- 3/4"	0'- 3/4" 2'- 3/4"	B01(c0 C01(c0)1)	Top 192	b b		- 258	lb 171/-752 lb	
		UNFA	CTORED RE	EACTIONS	\$							
		ID 1	Start Loc 0'	End Loc 0'- 6"	S PB	ource 3O2(i10)	Dead 252	(D) L Ib	ive (L) Sno	w (S) Roof Live	e (Lr) Wind (W)	
		2	2'	2'- 6"	PB	3O3(i11)	497	lb	-	- 468	lb 226 lb/ -545 lb	
		DESIG	N NOTES									
		The de	ead loads use	d in the desi	gn of this r	member	were applied t	o the struct	ure as projected	dead loads.	ds may have	
		been r	nodified to sin	nplify reporti	ng.					del which may di	ffor from the	
		default	t system spac	ing. The ac	ctual loads	applied	to the member	are shown	in the Specified	Loads table.	lier from the	
		Transf This re	er reactions me port is based	ay differ from	m design r I conditions	esults as s input b	s allowed per b v the user. So	ouilding cod urce inform	es and standard ation for the load	load distributior s and supports	n practices. are provided for	
		referen	nce only. Veri v all loads and	fy that all loa	ads and su	pport co	, nditions are co pember/bearing	orrect. a/connector	/structure can re	sist adequately	Linless already	
		specifi	ed on this rep	ort, anchora	ge for uplit	ft reactio	ns to be speci	fied by othe	rs. Installation of	of member and a	accessories (if	
		Beam	Stability Facto	or used in the	e calculation	on for All	owable Max P	os Moment	(CL) = 0.99			
		PLY T	O PLY CONI	NECTION								
		• Zone A	A: Factored loa	ad = 0 plf. U	Jse 12d (0.	.131"x3.2	25") nails. LDI	= = 1.00. Q	ty = 6. Row = 2	, Spacing = 12"	' V2 - 1 5"	
		Inst	all fasteners fr	om one face	eriles. D =		L = 0.20 . 1 do			-2,11-0.75	, 12 - 1.5	
			= Minimum en	d distance,	$X_2 = Winir$	num eag	je distance, Y	z = iviinimu	m row spacing.			
I												

MiTek [®]	Customer: Street 1: City: Customer Ph	Job Name: Level: Label: Type:	Q2301429 1st Floor DB3 - i19 Beam	2 Ply Member 1 3/4" x 9 1/4" 2.0E Microllam® LVL	Status: Design Passed			





MiTek [®]	Customer: Street 1: City: Customer Ph	Job Name: Level: Label: Type:	Q2301429 1st Floor DB11 - i20 Beam	2 Ply Member 1 3/4" x 9 1/4" 2.0E Microllam® LVL	Status: Design Passed			





MiTek°	Customer: Street 1: City: Customer Ph	Job Name: Level: Label: Type:	Q2301429 1st Floor DB17 - i23 Beam	2 Ply Member 1 3/4" x 16" 2.0E Microllam® LVL	Status: Design Passed			

