

Kempsville Sanford Component Plant 298 Harvey Faulk Rd Sanford, NC 27332

Phone #:919-775-1450

Builder: CRH Homes Dalton Res Garage SF Ceiling

THE PLACEMENT PLAN NOTES:

1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.

2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.

3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.

4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.

5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.

6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.

7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.

8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death.









** PLUMBING DROPS NOTED ARE IN APPROXIMATE LOCATIONS PER PLAN. BUILDER MUST VERY LOCATIONS BEFORE SETTING JOISTS.





2ND FLOOR CEILING LAYOUT

LABEL LEGEND

BBO = Beam by Others

PBO = Post by Others

J = I-Joist

FB = Flush Beam

RB = Roof Beam

DB = Dropped Beam

BP = Blocking Panels

SB = Squash Blocks

GBO = Girder by Others

	ustomer:		Job Name: 24020	0039 Dalt	on Res Gara	ge SF	1 Ply N	Status:				
J	ob Name:	Level: 3RD	FLOOR			4 4" D	Design					
	ity/ State:		Type: Floor	Joist			14" P	Passed				
Illustration Not to Sca	le. Pitch: 0/12	Designed by Single Mem	per Design Engine i	n MiTek® S	Structure Versio	n	Report Versior	n: 2021.03.26	02/13/2024 14:56			
		8	.6.3.353.Update10	.11								
				L								
1									2			
2 3/8"			26' 1"						2 3/8"			
			26' 5 :	3/4"								
			20 0									
DESIGN	INFORMATION	ANALYSIS RESUL	TS									
Building Code:	IRC 2018	Design Criteria	Location	Load	Combination	LDF	Design	Limit	Result			
Design Methodology: Risk Category:	ASD II (General Construction)	Max Pos. Moment:	13'- 2 7/8"		D+L	1.00	3445 lb ft	4270 lb ft	Passed - 81%			
Risk Outegory.	Residential	Live Load (LL) Pos. De	efl.: 13'- 2 7/8"		L	1.00	521 ID 0.513"	L/480	Passed - 29% Passed - L/610			
Service Condition:	Dry 20.0 psf	Total Load (TL) Pos. D	efl.: 13'- 2 7/8"		_ D + L		0.769"	L/240	Passed - L/406			
System Dead Load:	10.0 psf	SUPPORT AND R	EACTION INFOR	RMATION								
System Spacing:	16" c.c	Input ID Bearing	Controlling Load	LDF	Downward	Uplift	Resistance	Resistance	Result			
TL Deflection Limit:	L/480, 0.75" (absolute) L/240, 1.00" (absolute)	Length	Combination		Reaction	Reaction	n of Member	of Support				
	2,210, 100 (4200,400)	1 2 3/8"	D + L	1.00	533 lb		1306 lb	4305 lb	Passed - 41%			
Lateral Restraint Red	<u>uirements:</u>		D+L	1.00	333 10	-	di 000 l	4303 10	Fassed - 41%			
must be laterally restra	ber and the outer supports ained. Top and bottom edges	Type Start Loc End Loc Source Face Dead (D) Live (L) Snow (S) Roof Live (Lr) Wind (W)										
of the member must b following maximum ur	e fully restrained or have the braced length:	Liniform O'	FC1	Floor	Top 12 lb/		27 lb/ft	()	. , . , ,			
Тор: 0'	Bottom: 26'- 1"		Viev	w Fill)		ι 2	27 10/11	· ·	-			
			ACTIONS	Source	Dead (ו וח	ive (L) Spor	w(S) Roof Liv	(e (l r) Wind (W)			
Bearing Stress of Su	pport Material:	1 0'	0'- 2 3/8"	W4(i4)	178 li	D) L D	356 lb					
• 725 psi Wall @ 26	s'- 4 3/8"	2 26'- 3 3/8"	26'- 5 3/4"	W2(i3)	178 ll	C	356 lb		-			
		DESIGN NOTES										
		The dead loads used Analysis and Design	d in the design of th	is member	were applied to	the struct	ture as projected	dead loads.	ade may have			
		been modified to sim	plify reporting.	su using pre	scision loading	nom actua						
		• Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.										
		Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices. This report is based on medaled conditions insuit by the user. Source information for the load of the load										
		reference only. Verif	y that all loads and	support co	nditions are co	rect.	lation for the load	is and suppons	are provided for			
		 Review all loads and specified on this report 	l reactions to ensur- ort, anchorage for u	e that the n plift reactio	nember/bearing ons to be specifi	/connecto ed by othe	r/structure can re ers. Installation c	sist adequately of member and	. Unless already accessories (if			
		required) as per mar	ufacturer's instruct	ion.	'	- M	t (OL) = 1.00		Υ.			
		Beam Stability Facto	or used in the calcul	ation for All	Iowable Max Po	s Momen	t(CL) = 1.00					

	Customer:					Job Name: 24020039 Dalton Res Garage SF						1 Ply Member			
J	Job Name:					Level: 3RD FLOOR									
	ity/ State:				Type: FloorJoist						14" F	Passed			
Illustration Not to Sca	le Pitch: 0/12	C)esianed b	ov Sinale Mem	ber Design E	naine ir	n MiTek® :	Structur	e Versior	ـــــــــــــــــــــــــــــــــــــ	Report Versio	n [.] 2021 03 26	02/13/2024 14:56		
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1													2		
2 3/8"						26' 1"							2 3/8"		
↓ <u>↓</u>						261 5 2	D/A"								
						26.23	3/4"						Ι		
DESIGN	INFORMATION		ANAL	YSIS RESU	LTS										
Building Code:	IRC 2018		D	esign Criteria	Loc	ation	Load	I Combir	nation	LDF	Design	Limit	Result		
Design Methodology:	ASD	-41>	Max Pos	s. Moment:	13'- :	2 7/8"		D + L		1.00	2583 lb ft	4270 lb ft	Passed - 61%		
Risk Category:	Residential	ction)	Max She	ear:	0'-2	7/16"		D + L		1.00	391 lb	1815 lb	Passed - 22%		
Service Condition:	Dry		Total Lo	ad (LL) Pos. Do ad (TL) Pos. D	efl.: 13'-2)efl.: 13'-2	2 7/8" 2 7/8"		L D+L			0.385" 0.577"	L/480 L/240	Passed - L/813 Passed - L/542		
System Live Load:	20.0 pst 10.0 psf		SUPP	SUPPORT AND REACTION INFORMATION											
System Spacing:	16" c.c			Input	Controlling	Load		Down	ward	Uplift	Resistance	Resistance	Deput		
LL Deflection Limit:	L/480, 0.75" (abso	lute)		Length	Combina	tion	LDF	Read	tion	Reaction	n of Member	of Support	Result		
	L/240, 1.00° (abso	iute)	1	2 3/8"	D + L		1.00	400	lb		1306 lb	4305 lb	Passed - 31%		
Lateral Restraint Red	<u>uirements:</u>		2	2 3/8"	D + L		1.00	400	lb	_	1306 lb	4305 lb	Passed - 31%		
Both ends of the mem	ber and the outer sup ained. Top and botto	pports m edaes	LOAD	Start Loc	Endloc	Sou	Irce	Eace	Dead (D)) [live (L) Spo	w(S) Roofli	ve (Lr) Wind (W)		
of the member must b	e fully restrained or h	nave the	Type	Oldit 200	End Loo	FC1	Floor	- 400	Doud (D	,,					
Top: 0'	Bottom: 26'- 1"		Uniform	0'	26'- 5 3/4"	Deckin View	ıg (Plan v Fill)	Тор	10 lb/ft		20 lb/ft		-		
			UNFA	CTORED R	EACTIONS	-									
Bearing Stress of Su	pport Material:		ID 1	Start Loc 0'	End Loc 0'- 2 3/8"		Source W4(i4)		Dead (E 133 lb)	Live (L) Sno 267 lb	ow (S) Roof Liv	ve (Lr) Wind (W)		
 725 psi Wall @ 0⁵ 725 psi Wall @ 26 	· 1 3/8" 5'- 4 3/8"		2	26'- 3 3/8"	26'- 5 3/4"		W2(i3)		133 lb		267 lb				
			DESIGN NOTES												
			• The d	ead loads use	d in the desig	n of thi	s member	were a	pplied to	the struc	ture as projected	dead loads.			
			 Analy been 	modified to sin	nas been pe nplify reportin	erforme ig.	a using pr	ecision	loading fi	rom actu	al modeled cond	itions. Some loa	ads may nave		
			• Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.												
			 Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices. This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct. 										n practices.		
			• Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, and processing (if												
			requir	ed) as per ma	nufacturer's i	nstructi	on.								
			• Beam	Stability Facto	or used in the	e calcula	ation for Al	llowable	Max Pos	s Momer	nt (CL) = 1.00				

	ustomer:			Job Name: 2	4020039 Dalt	on Res Gara	ge SF	1 Ply M	Status:				
A	ob Name: ddress:			Level: 3 Label: J	RD FLOOR 28 - i158			14" P	Design				
	ity/ State:			Type: F	loorJoist					Passed			
Illustration Not to Sca	e. Pitch: 0/12	Design	ed by Single Mem ہ	ber Design En 3.6.3.353.Upda	gine in MiTek® \$ ate10.11	Structure Versio	n	Report Versio	n: 2021.03.26	02/13/2024 14:56			
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1										2			
2 3/8"					26' 1"					2 3/8"			
2 3/0				2									
				2	26' 5 3/4"					1			
DESIGN		AN		LTS									
Building Code:	IRC 2018		Design Criteria	Locat	tion Load	Combination	LDF	Design	Limit	Result			
Design Methodology: Bisk Category:	ASD II (General Constructio	n) Max	Pos. Moment:	13'- 2	7/8"	D+L	1.00	1722 lb ft	4270 lb ft	Passed - 40%			
	Residential	Live	Load (LL) Pos. De	efl.: 13'- 2	7/8"	L	1.00	261 lb 0.256"	L/480	Passed - 14% Passed - L/999			
Service Condition: System Live Load:	Dry 20.0 psf	Tota	l Load (TL) Pos. D)efl.: 13'- 2	7/8"	D+L		0.385"	L/240	Passed - L/813			
System Dead Load:	10.0 psf	SU	PPORT AND R	EACTION IN	IFORMATION		-	_	_	_			
System Spacing: LL Deflection Limit:	16" c.c L/480. 0.75" (absolute		Bearing	Controlling L Combination	.oad LDF	Downward Reaction	Uplift Reactior	Resistance of Member	Resistance of Support	Result			
TL Deflection Limit:	L/240, 1.00" (absolute		Length 2 3/8"	D+L	1.00	267 lb		1306 lb	4305 lb	Passed - 20%			
Lateral Restraint Rec	uirements:	2	2 3/8"	D + L	1.00	267 lb		1306 lb	4305 lb	Passed - 20%			
Both ends of the mem	ber and the outer suppo	rts LO											
of the member must b	e fully restrained or have	e the	/pe Start Loc	End Loc	Source FC1 Floor	Face Dead (I	D) L	Live (L) Sno	w (S) Roof Liv	re (Lr) Wind (W)			
Top: 0'	Bottom: 26'- 1"	Unif	form 0'	26'- 5 3/4"	Decking (Plan View Fill)	Top 7 lb/ft		13 lb/ft		-			
		UN		EACTIONS	0	Daad		line (I.)					
Bearing Stress of Su	pport Material:		1 0'	End Loc 0'- 2 3/8"	Source W4(i4)	Dead (89 lb	D) I	178 lb		e (Lr) vvind (vv) -			
• 725 psi Wall @ 26	5'- 4 3/8"		2 26'- 3 3/8"	26'- 5 3/4"	W2(i3)	89 lb		178 lb		-			
		DE	DESIGN NOTES										
		• r • Ar	ne dead loads use nalysis and Desigr	d in the design 1 has been per	i of this member formed using pr	ecision loading	from actua	ture as projected al modeled condi	tions. Some loa	ids may have			
		be • Tr	 been modified to simplify reporting. Tributary Loads have been generated based on actual spacing between members in the model which may differ from the 										
		de Tr	default system spacing. The actual loads applied to the member are shown in the Specified Loads table.										
		• Ti	 This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for 										
		l re	 reterence only. Verify that all loads and support conditions are correct. Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already 										
		sp re	specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.										
		• Be	eam Stability Facto	or used in the o	calculation for Al	llowable Max Po	s Momen	t (CL) = 1.00					

C J	ustomer: ob Name:		Job Name: 24020039 Dalton Res Garage Si Level: 3RD FLOOR					1 Ply	Status:					
	ddress: ity/ State:				Label: Type:	J28 - i15 FloorJoi	9 st			14"	Passed			
Illustration Not to Sca	le. Pitch: 0/12	D	esigned by	Single Mem	ber Design E 8.6.3.353.Upc	ngine in M date10.11	iTek® S	tructure Ve	rsion	Report Vers	ion: 2021.03.26	02/13/2024 14:56		
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2 3/8"						26' 1"						2 3/8"		
							1							
						20 3 3/4								
DESIGN Building Code:	INFORMATION		ANALY De	SIS RESUI	LTS Loca	ation	Load	Combinatio	n LDF	Design	Limit	Result		
Design Methodology:	ASD	ruction)	Max Pos.	Moment:	13'- 2	2 7/8"		D+L	1.00	861 lb ft	4270 lb ft	Passed - 20%		
Risk Category:	Residential	uction)	Max Shea	ar: I (LL) Pos. De	0'- 2 efl.: 13'- 2	7/16" 2 7/8"		D+L L	1.00	130 lb 0.128"	1815 lb L/480	Passed - 7% Passed - L/999		
System Live Load:	Dry 20.0 psf		Total Loa	d (TL) Pos. D	0efl.: 13'- 2	2 7/8"		D + L		0.192"	L/240	Passed - L/999		
System Dead Load:	10.0 psf 16" c c		SUPPC	ORT AND R		NFORM	ATION					_		
LL Deflection Limit: TL Deflection Limit:	L/480, 0.75" (abs L/240, 1.00" (abs	olute) olute)	ID B	earing ength	Controlling Combinat	Load tion	LDF	Reaction	Reactic	on of Membe	er of Support	Result		
Lateral Restraint Rec	quirements:		1 2	2 3/8" 2 3/8"	D + L D + L		1.00 1.00	133 lb 133 lb		1306 lb 1306 lb	4305 lb 4305 lb	Passed - 10% Passed - 10%		
Both ends of the mem	ber and the outer su	upports												
of the member must b following maximum ur	of the member must be fully restrained or have the following maximum unbraced length:		Uniform	O'	End Loc 26'- 5 3/4"	FC1 Floo Decking (F	r Plan	-ace De Top 3	ad (D) 8 lb/ft	7 lb/ft	now (S) Roof Li	ve (Lr) Wind (W)		
Тор: 0'	Bottom: 26'- 1"		UNFAC	TORED RE	EACTIONS	VIEW FII	I)							
• 725 psi Wall @ 0	i pport Material: - 1 3/8"		ID 1	Start Loc 0'	End Loc 0'- 2 3/8"	So W	urce 4(i4)	De	ead (D) 44 lb	Live (L) S 89 lb	now (S) Roof Liv	ve (Lr) Wind (W)		
• 725 psi Wall @ 26	3'- 4 3/8"		2 DESIGI	26'- 3 3/8" N NOTES	26'- 5 3/4"	W	'2(i3)		44 lb	89 lb		-		
			• The dead loads used in the design of this member were applied to the structure as projected dead loads.											
			 Analysi been m Tributai default Transfe This rej referen Review specifie require Beam S 	s and Design roodified to sin ry Loads hav system spac r reactions n port is based ce only. Veri all loads and ed on this rep d) as per mai Stability Facto	has been pe nplify reportin e been gener ing. The act nay differ from on modeled fy that all load d reactions to d reactions to nort, anchorag nufacturer's ir or used in the	erformed u g. rated base ual loads a n design re conditions ds and sup ensure th ge for uplift nstruction.	sing pre- d on act applied to sults as input by oport con at the m reaction n for All	cual spacing to the mem s allowed po y the user. Inditions are tember/bea ns to be sp owable Ma:	ing from actu between m ber are shov er building co Source infor correct. ring/connect ecified by oth x Pos Mome	ual modeled cor embers in the rr vn in the Specifi odes and standa mation for the k tor/structure can hers. Installation ent (CL) = 1.00	nditions. Some loa nodel which may c ed Loads table. ard load distributio bads and supports n resist adequately n of member and	ads may have liffer from the n practices. a are provided for to Unless already accessories (if		