

June 16, 2022

Summit Homes 120 SE 30th St. Lee's Summit, MO 64082

RE: Field Issue of city inspection comments for Lot #116 Reserve at Stoney Creek –1924 SW Hightown Dr. Lee's Summit, MO 64082 – Permit # PRRES20215839

Inspection Comments: have engineer address C11 gable truss not provided with bearing on top plate. Have engineer address B1 gable truss that has had webs cut and bottom chord removed.

Recommended modifications:

- Gable end has been modified to be field framed with 2x4's @ 16" O.C.
- Trusses have been cut and are only supporting self-weight.
- Install a sistered 2 x 4 stud to existing 2x4 gable truss studs at 6' O.C. on exterior gable wall.
- Attach existing truss webs to sistered 2 x 4 studs with SDS structural screws or 10D nails @12" O.C.

Inspection Comments: provide joist hangers at joist to dbl rim connection basement den.

Recommended modifications:

- Add (1) A34 framing angle at end of floor joist (side above window).
- Install per manufacturer's installation instructions.
- See table below for more information.

Inspection Comments: address floor joist over notched for DWV basement bath

Recommended modifications:

- Install a 24" CS-16 strap centered underneath the notch.
- Install additional 2x6 stud beneath the notch to support floor joist.
 - o Build out wall as necessary to install stud.
 - Stud shall have a bottom plate and be fastened to blocking or another member tied to an existing wall.

Inspection Comments: address (1) ply of dbl 2x10 joist not provided with full bearing at steel beam above basement bed hall.

Recommended modifications:

- Fasten members together w/ 4" structural screws or 10D nails w/4 fasteners per linear ft in "W" pattern.
- Fasten 3' portion of joists located between the W8x10 and W8x13 steel beams.

Inspection Comments: have engineer address dbl top plates that have been notched around full height studs on exterior gable walls, also the 2x4 studs are over 12'.

Recommended modifications:

- Rotated studs are in addition to structural 2x4 @ 16" oc studs.
- No structural modifications are required at the time of inspection.

Framing Angles and Plates (cont.)

(12) 0.131 x 1 1/2

(12) 0.131 x 11/2

	Model	Type of Connection	Fasteners (in.)	Direction of Load	DF/S	SP Allowable L	oads	SPF/HF Allowable Loads			Code
	No.				Floor (100)	Roof (125)	(160)	Floor (100)	Roof (125)	(160)	Ref.
	A34	1	(8) 0.131 x 1½	Ft	395	480	545	340	415	480	IBC, FL, LA
				F2 ⁶	395	430	430	340	370	370	
•			(8) #9 x 11/2" SD	Ft	640	640	640	550	550	550	
				F ₂	495	495	495	425	425	425	
				Uplift	240	240	240	170	170	170	_
	A35	2	(9) 0.131 x 1½	A ₁	295	350	350	255	300	300	IBC, FL, LA
				E	295	360	385	255	310	330	
- 1				C ₁	185	185	185	160	160	160	
- 1		3	(12) 0.131 x 1 ½	A ₂	295	325	325	255	280	280	
				C ₂	295	330	330	255	285	285	
•				D	225	225	225	195	195	195	
- 1		4	(12) 0.131 x 1½	Fi	590	650	650	510	560	560	
				F2 ⁶	590	670	670	510	575	575	
		5	(12) 0.131 x 1 1/2	Ft	555	555	555	475	475	475	
		6	(12) PH612I	Fi	420	420	420	360	360	360	_

	Market	T-1-1	Ga.	DF/SP		SPF/I	HF	Allowable	0.4	
	Model No.	Total		Fasteners	End Length	Fasteners	End Length	Tension Loads (160)	Code Ref.	
ľ	CMST12	40'	12	(74) 16d	33"	(84) 16d	38"	9,215		
I				(86) 10d	39"	(98) 10d	44"	9,215		
ľ	CMST14	5216	14	(56) 16d	26"	(66) 16d	30"	6,490		
				(66) 10d	30"	(76) 10d	34"	6,490		
	CMSTC16	54'	16	(50) 16d sinker	20*	(58) 16d sinker	25*	4,585		
	CS14	100'	14	(26) 10d	15"	(30) 10d	16"	2,490	1	
				(30) 8d	16"	(36) 8d	19"	2,490	14, L3, FL	
	CS16	150'	16	(20) 10d	11"	(22) 10d	13*	1,705		
				(22) 8d	13*	(26) 8d	14"	1,705		
	CS18	200'	18	(16) 10d	9"	(18) 10d	11"	1,370		
	0310			(18) 8d	11"	(22) 8d	12"	1,370		
	CS20	250'	20	(12) 10d	6"	(14) 10d	9*	1,030]	
				(14) 8d	9*	(16) 8d	9*	1,030]	
	CS22	300'	22	(10) 10d	7*	(12) 10d	7*	845		
	0322			(12) 8d	7*	(14) 8d	8*	845	1	

Fastener quantities and end lengths are calculated using an increase for wind or seismic loading.
Use half of the required nails in each member being connected to achieve the listed loads.
Calculate the connector value for a reduced number of nails as follows:

 $\mbox{Allowable Load} = \frac{\mbox{No. of Nalls Used}}{\mbox{No. of Nalls in Table}} \, \mbox{x Table Load}$

Example: CMSTC16 in DF/SP with 40 nails total. (Half of the nails in each member being connected)

Allowable Load = 40 Nalls (Used) x 4,585 lb. = 3,668 lb.

Tension loads apply for uplift when installed vertically.
Nalls: 16d = 0.162" dia. x 3%" long, 16d sinker = 0.148" dia. x 3%" long, 10d = 0.148" dia. x 3" long. See pp. 26-27 for other nail sizes and information.

Sincerely,

LTP4 7

LTP5 8

Bradley Huxol, PE

