



November 4, 2021

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

RE: Field Issue of floor joist bored within bottom 2" of joist and over bored and notched stud for electrical at southwest garage corner Lot # 1 Hawthorne Ridge – 2906 SW Arboridge Dr. Lee's Summit, Mo 64082 – Permit # PRRES20212322

This letter addresses the floor joist bored within 2" of joist for 2" sump pump in unfinished storage area and the over-bored and notched stud for electrical at southwest garage corner for Lot #1 Hawthorne Ridge.

- Over-bored and notched stud at garage:
 - Stud is approximately 8.5' tall Douglas Fir Larch #2 2x4 at southwest corner of garage.
 - Rounded notch is 2" at deepest point leaving 1.5" of stud remaining with hole for electrical line approximately 1' from bottom of stud.
 - Hole for electrical line is approximately 1.25" diameter.
 - Studs are #2 Douglas Fir Larch 2x4 @ 16" oc with 10.5' of main floor roof loads for 475 plf on stud wall.
 - Install a stud flush to stud adjacent to notched stud on rear garage wall rotated perpendicular.
- Hole in floor joist within bottom 2" of joist:
 - Hole is approximately 2" in diameter.
 - Hole is $\frac{3}{4}$ " from bottom of floor joist and approximately 2' from foundation wall.
 - Floor joists are Douglas Fir Larch #2 2x10 at 16" oc and span approximately 15' with standard dead=10 psf and live=40 psf loads.
 - Install a 24" CS-16 strap centered beneath the overbored hole.
 - Install with fasteners per manufacturer's specs.

These products are available with additional corrosion protection. For more information, see p. 18.

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 39–40 for more information.

Model No.	Total L	Ga.	DF/SP		SPF/HF		Allowable Tension Loads (160)	Code Ref.
			Fasteners	End Length	Fasteners	End Length		
CMST12	40'	12	(74) 16d	33"	(84) 16d	38"	9,215	I4, L3, FL
			(86) 10d	39"	(98) 10d	44"	9,215	
CMST14	52½'	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	
			(30) 8d	16"	(36) 8d	19"	2,490	
SS 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	
			(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	
			(12) 8d	7"	(14) 8d	8"	845	

1. Fastener quantities and end lengths are calculated using an increase for wind or seismic loading.

2. Use half of the required nails in each member being connected to achieve the listed loads.

3. Calculate the connector value for a reduced number of nails as follows:

Sincerely,



Bradley Huxol, PE

