

January 25, 2022

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

RE: Field Issue of over bored studs for data cable for Lot # 148 Hawthorne Ridge – 3224 SW Arboridge Dr. Lee's Summit, MO 64082 – Permit #PRRES20212481

This letter addresses the over-bored studs for data cable at great room exterior wall by fireplace.

- Hole is approximately 2" diameter for data cable.
- Hole is drilled through multiple stud packs at great room exterior wall.
- Wall supports 2' tributary width of roof loads of dead=20 psf and live roof = 25 psf.

Repair shall be as follows:

- Install a rotated stud adjacent to over bored stud at each stud pack.
- Install a Simpson SS3 stud shoe at (2) #2 Douglas Fir Larch stud pack.
- Install 2x10 solid blocking adjacent to each stud pack near over boring.
- Install 24" of CS-16 strap with a minimum of (12) 0.131" x 1-1/2" nails per manufacturer's specs on each stud of (3) and (4) stud pack centered over hole.

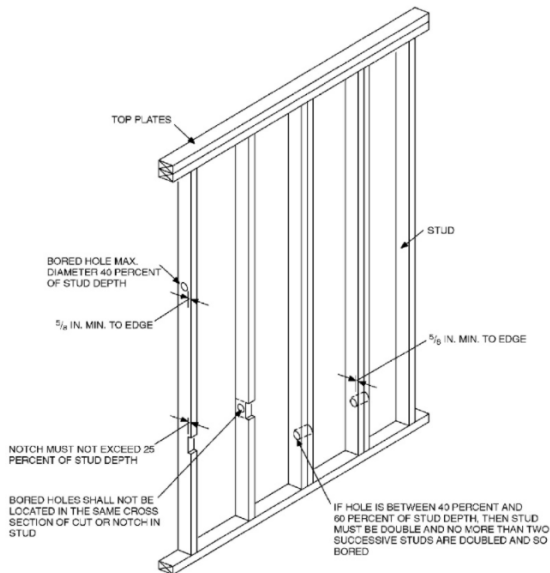


FIGURE R602.6(1) NOTCHING AND BORED HOLE LIMITATIONS FOR EXTERIOR WALLS AND BEARING WALLS

Many of these products are approved for installation with Strong-Drive® SD Connector screws.

Model No.	Stud Size	W (in.)	Fasteners (in.)	Allowable Loads ¹	
				DF/SP	
				Compression	
				Floor (100)	Roof (125)
SS1.5	2x	1½	(12) 0.148 x 1½	500	500
SS2.5	3x	2½	(12) 0.148 x 1½	730	740
SS3	(2) 2x	3½	(12) 0.148 x 3	730	830
SS4.5	(3) 2x	4½	(14) 0.148 x 3	840	840

¹ Roof loads are 125% of floor loads unless limited by other criteria. Floor loads may be adjusted for k

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	H, L, PL
			(86) 10d	38"	(98) 10d	44"	9,215	
CMST14	52W	14	(86) 16d	28"	(98) 16d	32"	6,890	
			(86) 10d	32"	(76) 10d	34"	6,890	
CMSTC16	54'	16	(50) 16d anchor	20"	(58) 16d anchor	25"	4,585	
CS14	100'	14	(25) 10d	15"	(25) 10d	16"	2,490	
			(23) 8d	16"	(23) 8d	19"	2,490	
CS16	150'	16	(20) 10d	11"	(22) 10d	13"	1,705	
			(22) 8d	13"	(25) 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"	(15) 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:

Allowable Load = No. of Nails Used x Table Load

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

Allowable Load = 40 Nails Used x 4,585 lb. = 3,668 lb.

4. Tension loads apply for uplift when installed vertically.
5. Nails: 16d = 0.162" dia. x 3½" long; 10d = 0.148" dia. x 3" long; 8d = 0.131" dia. x 2" long.
100 = 0.148" dia. x 3" long. See pp. 26-27 for other nail sizes and information.



Sincerely,

Bradley Huxol, PE

