



June 21, 2022

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

RE: Field Issue of over-bored stud and roof sheathing for Lot #132 Hawthorne Ridge –3116 SW Arbortree Drive, Lee's Summit, MO 64082 – Permit # PRRES20215763

Findings:

- 2 x 6 stud has been over-bored in the laundry room to allow for DWV.
- Hole is larger than 50% of stud depth and less than 5/8" from the edge of the stud.
- 2 x 6 stud is approximately 9' tall.

Recommended modifications:

- Install stud shoe on over-bored stud. Attach per manufactures specs.

SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 348-352 for more information.

Model No.	Stud Size	W (in.)	Fasteners (in.)	Allowable Loads ¹			Code Ref.
				DF/SP			
				Compression	Tension		
				Floor (100)	Roof (125)		
SS1.5	2x	1½	(12) 0.148 x 1 ½	500	500	—	IBC, FL, LA
SS2.5	3x	2½	(12) 0.148 x 1 ½	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	—	
HSS2-SDS1.5	2x	1½	(12) ¼ x 1 ½ SDS	1,165	1,165	1,025	
HSS2-2-SDS3	(2) 2x	3	(12) ¼ x 3 SDS	1,165	1,165	1,025	
HSS2-3-SDS3	(3) 2x	4½	(12) ¼ x 3 SDS	990	990	960	
HSS4-SDS3	4x	3½	(12) ¼ x 3 SDS	1,205	1,205	1,025	

1. Roof loads are 125% of floor loads unless limited by other criteria.
Floor loads may be adjusted for load durations according to the code provided they do not exceed those in the roof column.
2. **Fasteners:** Nail dimensions are listed diameter by length.
SDS screws are Simpson Strong-Tie® Strong-Drive SDS Heavy-Duty Connector screws. See pp. 21-22 for fastener information.

Findings:

- Engineering sheathing was installed as roof sheathing with the overlay facing down.
- Installed roof sheathing can be used as roof or wall sheathing, per manufacturer.
- Sheathing has been installed with the strong axis parallel to truss chords.

Recommended modifications:

- Structurally, the installed roof sheathing requires no modifications.

Sincerely,

Bradley Huxol, PE

