




August 2, 2021

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

RE: Field Issue of over bored drain hole in master bath for Lot #25 Hawthorne Ridge – 1509 Sugar Tree. Lee's Summit, MO 64081 – Permit # PRRES20210281

This letter addresses the over bored drain hole in master bath for Lot # 25 Hawthorne Ridge.

- Install Simpson HSS2 – SDS1.5 stud shoe at over bored hole in master bath.
- Pipe diameter is approximately 2" in a 2x4 stud.
- Load bearing wall has approximately 2' tributary width of roof load in addition to exterior wall weight and standard floor joist load of D=10 psf and L=40 psf.

 Many of these products are approved for installation with [Strong-Drive® SDS Connector screws](#).

Model No.	Stud Size	W (in.)	Fasteners (in.)	Allowable Loads ¹		
				DF/SP		Tension
				Compression		
				Floor (100)	Roof (125)	
SS1.5	2x	1 $\frac{1}{8}$	(12) 0.148 x 1 $\frac{1}{2}$	500	500	—
SS2.5	3x	2 $\frac{9}{16}$	(12) 0.148 x 1 $\frac{1}{2}$	730	740	—
SS3	(2) 2x	3 $\frac{1}{8}$	(12) 0.148 x 3	730	830	—
SS4.5	(3) 2x	4 $\frac{9}{16}$	(14) 0.148 x 3	840	840	—
HSS2-SDS1.5	2x	1 $\frac{1}{8}$	(12) $\frac{1}{4}$ x 1 $\frac{1}{2}$ SDS	1,165	1,165	1,025
HSS2-2-SDS3	(2) 2x	3	(12) $\frac{1}{4}$ x 3 SDS	1,165	1,165	1,025
HSS2-3-SDS3	(3) 2x	4 $\frac{9}{16}$	(12) $\frac{1}{4}$ x 3 SDS	990	990	960
HSS4-SDS3	4x	3 $\frac{9}{16}$	(12) $\frac{1}{4}$ 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 in the table are listed diameter by length. SDS screws are Simpson Strong-Tie® [Strong-Drive® SDS Heavy-Duty Connector screws](#). For additional information, see [Fastener Types and Sizes Specified for Simpson Strong-Tie Connectors](#).

Sincerely,

Bradley Huxol, PE

