

July 14, 2022

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

RE: Field Issue of CS-PF nailing pattern at rim board obscured by deck ledger for Lot #131 Hawthorne Ridge – 3120 SW Arbortree Dr. Lee's Summit, MO 64082 – Permit # PRRES20216307

Findings:

- CS-PF bracing is required on the great room/ covered deck wall, per plans.
- Bottom rim board nailing pattern for CS-PF is obscured by deck ledger

Recommendations:

- Install 6" ledger Loks from sole plate to each floor joist below along the great room/ covered deck wall.
 - Attach a H3 hurricane tie to each stud and attach to sole plate per manufacturer's specs.
- Or
- Attach HDU2-SDS2.5 holdown device to the corner studs of the great room/covered deck wall.
 - Device shall be connected at the top and bottom of the rim/band joists (see image below)
 - Install per manufacturer's specs.

Holdowns (cont.)

These products are available with additional corrosion protection. For more information, see p. 14. **SS** For stainless steel fasteners, see p. 21. **SD** Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 348-352 for more information.

Model No.	Ga.	Dimensions (in.)					Fasteners (in.)		Minimum Wood Member Size (in.)	Allowable Tension Loads (160)			Code Ref.	
		W	H	B	CL	SO	Anchor Bolt Dia. (in.)	Wood Fasteners		DF/SP	SPF/NF	Deflection at Allowable Load (in.)		
DT11Z	14	1 1/2	7 1/2	1 1/2	%	%	%	(6) #9 x 1 1/2" SD	1 1/2 x 5 1/2	840	840	0.17	IBC, FL, LA	
								(8) 0.148 x 1 1/2		910	640	0.167		
								(8) 0.148 x 1 1/2		910	850	0.167		
DT12Z	14	3 1/2	6 1/2	1 1/2	%	%	(8) 1/4 x 1 1/2 SDS	1 1/2 x 3 1/2	1,825	1,800	0.105			
(8) 1/4 x 1 1/2 SDS							3 x 3 1/2	2,145	1,835	0.128				
(8) 1/4 x 2 1/2 SDS							3 x 3 1/2	2,145	2,105	0.128				
HDU2-SDS2.5	14	3	8 1/2	3 1/2	1 1/2	1 1/2	1/2	(8) 1/4 x 2 1/2 SDS	3 x 3 1/2	3,075	2,215	0.088		IBC, FL, LA
HDU4-SDS2.5	14	3	10 1/2	3 1/2	1 1/2	1 1/2	1/2	(10) 1/4 x 2 1/2 SDS	3 x 3 1/2	4,565	3,285	0.114		
HDU5-SDS2.5	14	3	13 1/2	3 1/2	1 1/2	1 1/2	1/2	(14) 1/4 x 2 1/2 SDS	3 x 3 1/2	5,645	4,340	0.115		
HDU8-SDS2.5	10	3	16 1/2	3 1/2	1 1/2	1 1/2	1/2	(20) 1/4 x 2 1/2 SDS	3 x 3 1/2	6,765	5,820	0.11		
								(19) 1/4 x 2 1/2 SDS	3 1/2 x 3 1/2	6,970	5,995	0.116		
								(18) 1/4 x 2 1/2 SDS	3 1/2 x 4 1/2	7,870	6,580	0.113		
								(17) 1/4 x 2 1/2 SDS	3 1/2 x 5 1/2	9,535	8,030	0.137		
HDU11-SDS2.5	10	3	22 1/2	3 1/2	1 1/2	1 1/2	1	(30) 1/4 x 2 1/2 SDS	3 1/2 x 7 1/2	11,175	9,610	0.137		IBC, FL, LA
HDU14-SDS2.5	7	3	25 1/2	3 1/2	1 1/2	1 1/2	1	(36) 1/4 x 2 1/2 SDS	3 1/2 x 5 1/2	10,770	9,260	0.122		
								(36) 1/4 x 2 1/2 SDS	3 1/2 x 7 1/2	14,390	12,375	0.177		
									5 1/2 x 5 1/2	14,445	12,425	0.172		

1. HDU14 requires heavy-hex anchor nut to achieve tabulated loads (supplied with holdown).
2. HDU14 loads on 4x6 post are applicable to installation on either the narrow or the wide face of the post.
3. Fasteners: Nail dimensions are listed diameter by length. SD and SDS screws are Simpson Strong-Tie® Strong Drive SD Connector and SDS Heavy-Duty Connector screws. See pp. 21-22 for fastener information.

H3 approved for installation with Strong-Drive® SD Connector screws.

Model No.	Ga.	Fasteners (in.)			DF/SP Allowable Loads			Uplift with 0.131" x 1 1/2" Nails (lb)			SPF/NF Allowable Loads			Uplift with 0.131" x 1 1/2" Nails (lb)	
		To Rafters/Truss	To Plates	To Studs	Uplift (lb)	F _x	F _y				Uplift (lb)	F _x	F _y		
H3	18	(4) 0.131 x 2 1/2	(4) 0.131 x 2 1/2	—	400	210	170	400			365	180	145	290	
H3SS	18	(4) 0.131 x 2 1/2	(4) 0.131 x 2 1/2	—	280	145	120	275			225	100	85	210	

1. See Straps and Ties General Notes.

Sincerely,



Bradley Huxol, PE

