

April 26, 2022

Summit Homes  
 120 SE 30<sup>th</sup> St.  
 Lee's Summit, MO 64082

**RE: Field Issue of CS-PF bracing for Lot # 29– Woodside Ridge 421 NW Kaylea Ct, Lee's Summit, MO 64082 – Permit # PRRES20215573**

Findings:

- CS-PF bracing is required on the great room/ covered deck wall, per plans.
  - CS-PF bracing is required corner to corner on the great room/ covered deck wall.
- Wood structural panel sheathing does not overlap with the band/rim joist, per CS-PF detail.
  - Wood structural panel ends at the sole plate.

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

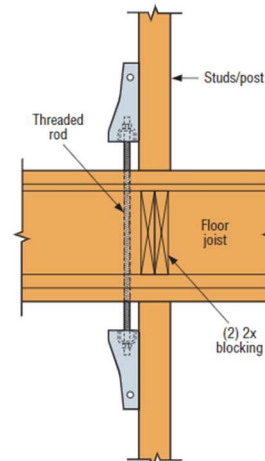
- Attach HDU2-SDS2.5 holdown device to the corner studs of the great room/covered deck wall.
- Device shall be connected at the top and bottom of the rim/band joists (see image below)
- Install per manufacturer's specs.

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. 349-352 for more information.


Model No.	Ga.	Dimensions (in.)						Fasteners (in.)	Minimum Wood Member Size (in.)	Allowable Tension Loads (lb)			Code Ref.
		W	H	B	CL	SD	Anchor Bolt Dia. (in.)			DF/SP	SPF/HF	Deflection at Allowable Load (in.)	
DT11Z	14	1 1/2	7 1/2	17 1/2	3/4	3/4	3/4	(6) #9 x 1 1/2" SD	1 1/2 x 5 1/2	840	840	0.17	IBC, FL, LA
								(6) 0.148 x 1 1/2		910	640	0.167	
								(8) 0.148 x 1 1/2		910	850	0.167	
DT12Z	14	3 3/4	6 3/4	1 1/2	1 1/2	1 1/2	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		2,145	1,835	0.128	
DT12Z-SDS2.5								(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 3/4	3 1/2	1 1/2	1 1/2	1/2	(6) 1/4 x 2 1/2 SDS	3 x 3 1/2	3,075	2,215	0.088	
HDU4-SDS2.5	14	3	10 3/4	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 3/4	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 3/4	3 1/2	1 1/2	1 1/2	7/8	(20) 1/4 x 2 1/2 SDS	3 x 3 1/2	6,765	5,820	0.11	
								(3) 3/8 x 3 1/2	3 1/2 x 3 1/2	6,970	5,995	0.116	
								(3) 3/8 x 4 1/2	3 1/2 x 4 1/2	7,870	6,580	0.113	
HDU11-SDS2.5	10	3	22 1/4	3 1/2	1 1/2	1 1/2	1	(30) 1/4 x 2 1/2 SDS	3 1/2 x 5 1/2	9,535	8,030	0.137	
								(3) 3/8 x 5 1/2	3 1/2 x 5 1/2	11,175	9,610	0.137	
								(3) 3/8 x 7 1/4	3 1/2 x 7 1/4	10,770	9,260	0.122	
HDU14-SDS2.5	7	3	25 3/4	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	14,390	12,375	0.177	IBC, FL, LA
								(3) 3/8 x 7 1/4	3 1/2 x 7 1/4	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.



Typical HDU Tie Between Floors

is approved for installation with **strong-drive®** SU Connector screws.

Model No.	Ga.	Fasteners (in.)			DF/SP Allowable Loads			Uplift with 0.131" x 1 1/2" Nails (160)	SPF/HF Allowable Loads			Uplift with 0.131" x 1 1/2" Nails (160)
		To Rafters/ Truss	To Plates	To Studs	Uplift (160)	Lateral (160)			Uplift (160)	Lateral (160)		
						F <sub>x</sub>	F <sub>y</sub>			F <sub>x</sub>	F <sub>y</sub>	
H3	18	(4) 0.131 x 2 1/2	(4) 0.131 x 2 1/2	—	400	210	170	400	365	180	145	290
 HSSS	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

