

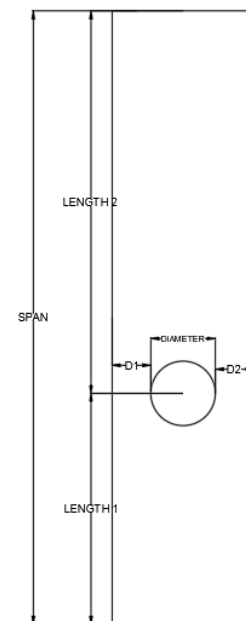
July 15, 2022

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

**RE: Field Issues for Lot #123 Hawthorne Ridge – 3246 SW Arbortree Dr,
 Lee's Summit, MO 64082 – Permit # PRRES20220195**

1. Overbored hole in LBW wall stud

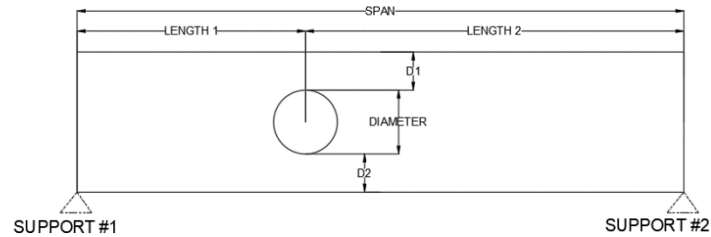
- D1 – at or less than 1"
- D2 – at least 1/2"
- Diameter of hole – 2"
- Length 1 – 4"
- Length 2 – 8.66'
- Span – 9'
- Location – Garage
- Loading -
 - 90 PLF on wall
- D1 – at or less than 1/2"
- D2 – At or less than 5/8"
- Diameter of hole – 2-1/4"
- Length 1 – Vary
- Length 2 – Vary
- Span – 14'
- Location – Bathroom 1 interior LBW
- Loading -
 - 260 PLF on wall



Model No.	Stud Size	W (in.)	Fasteners (in.)	Allowable Loads ¹	
				DF/SP	
				Compression	
				Floor (100)	Roof (125)
SS1.5	2x	1 ⁵ / ₁₆	(12) 0.148 x 1 1/2	500	500
SS2.5	3x	2 ⁵ / ₁₆	(12) 0.148 x 1 1/2	730	740
SS3	(2) 2x	3 ⁵ / ₁₆	(12) 0.148 x 3	730	830
SS4.5	(3) 2x	4 ⁵ / ₁₆	(14) 0.148 x 3	840	840

Recommended modifications:

- Install Simpson SS1.5 stud shoe on overbored holes per manufacturer specs.



2. Holes within 2" of each other in multiple floor joists

- | | |
|---|---|
| <ul style="list-style-type: none"> • D1 – at least 2" • D2 – at least 2" • Diameter of hole – maximum of 2" • Length 1 – 4' • Length 2 – 8' • Span – 11' • Support #1 – Interior kitchen LBW • Support #2 – (2) 2x10 flush • Location – Above home office • Loading - <ul style="list-style-type: none"> ◦ Dead = 10 psf @ 16" oc ◦ Live = 40 psf @ 16" oc | <ul style="list-style-type: none"> • D1 – at least 2" • D2 – at least 2" • Diameter of hole – 4" • Length 1 – 12" • Length 2 – 5' • Span – 6' • Support #1 – Rear foundation wall • Support #2 – W8x15 steel beam • Location – Under bathroom 1 • Loading - <ul style="list-style-type: none"> ◦ Dead = 10 psf @ 16" oc ◦ Live = 40 psf @ 16" oc |
|---|---|

Recommended modifications:

- Install 24" length of CS-16 under the holes on bottom of floor joists per manufacturer's spec's.

Sincerely,



Bradley Huxol, PE

