

April 12, 2022

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

RE: Field Issue of interior bracing behind fireplace and covered porch rafter connection for Lot #75 Manor at Stoney Creek – 1406 SW Georgetown Dr Lee's Summit, MO 64082 – Permit # PRRES20212067

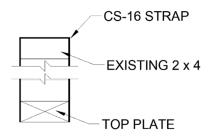
Rafter connection at covered porch:

- Rafters are bearing on stacked top plate varying between (5-6) 2x4's.
- Rafters are 2x6 @ 24" OC spanning approximately 3.25".

## **Recommended modifications:**

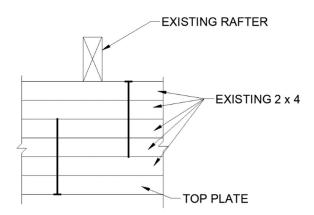
## Option 1

- Install CS-16 strap vertically connecting stacked top plates centered between each rafter.
- Install 2' length of CS-16 horizontally connecting each top plate splice.
- Strap shall be fastened to each 2x4 top plate member.
- Strap shall start at upper top plate and end at bottom top plate (see image below).
- Install with 8D nails or 2.5" structural screws.



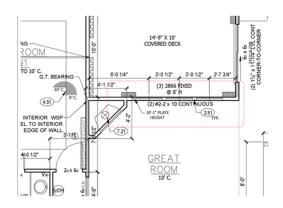
## Option 2

• Install 6" SDWC truss screws alternating fastening direction between rafters to ensure stacked plates are connected.



## Interior bracing recommended modifications:

- Bracing shall be replaced with nail pattern on continuous 2x10 header:
  - o 3" grid pattern at header to braced wall panel connection
  - o Nail king and jack studs 12" OC
  - Attach with 10D nails.
- Fasten SDWC truss screws to band/rim joist below.
  - 1 truss screw per jack stud and king stud.
  - o Install screws at 30-degree max per manufacturers specs.



Sincerely,

Bradley Huxol, PE