

March 24, 2023

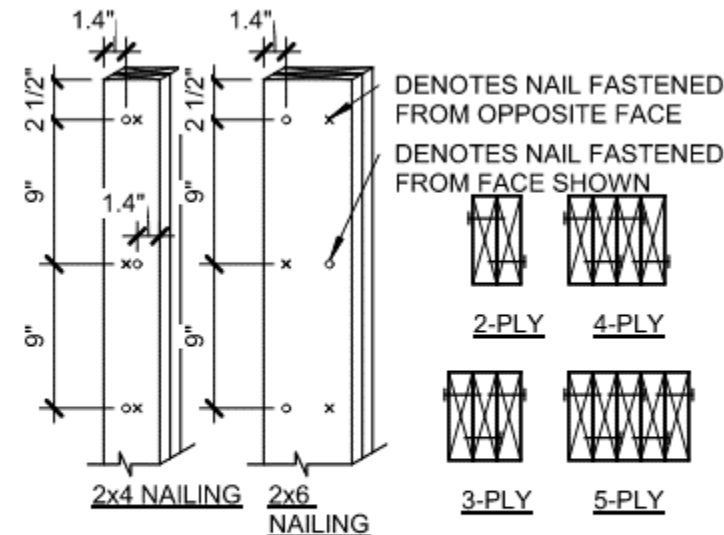
KC Custom Homes

Re: 2058 NW O'Brien Rd  
Lot 144, Estates of Woodside Ridge  
Lee's Summit, MO  
Permit # PRRES20222996

Apex Engineers Inc. observed the house under construction at the above-referenced address. Our firm has been retained to address comments from the city rough-in inspection. For the purposes of this report, the house will be referred to as facing south.

1. *Overnotched stud at garage dining room beam post*

- After computations, our firm has determined that a minimum of (8) 2x4 DFL studs are required to support the service loads of the structure. The studs shall be fastened per the detail below.



**NOTES:**

- EACH 2x PLY SHALL BE FASTENED WITH (1) ROW OF 10d NAILS AT 9" OC, ALTERNATING SIDE TO SIDE 1.4" MIN EDGE DISTANCE, AND STARTING 2 1/2" FROM EACH END.
- EXTEND FULL AREA OF COLUMN AS SOLID BLOCKING THROUGH JOIST BAYS AND WALLS TO LOAD-BEARING BEAM/WALL BELOW

Figure 1.0- Built-Up Stud Column

2. *Studs at the front door; blueprints call for 3 king stud and 1 trimmer stud but 1 king and 3 trimmer studs were installed.*

- 16-gauge coil steel straps (i.e., Simpson CS16) shall be installed at each trimmer stud at the front door to connect the trimmer studs above and below the header together. The strap shall have min. 11" of end length per stud. Install per the manufacturer's recommendations.

3. *Deck post-to-beam connections.*

- 16-gauge coil steel strap (i.e., Simpson CS16) shall be installed centered at the rim beam for all discontinuous deck posts, connecting the top and bottom posts. Each post shall have min. 11" of end length for the steel strap. Install per the manufacturer's recommendations.

Contingent upon the repairs outlined above, our firm recommends approval of these items.

Please call if our firm can of further assistance.

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#### **LIMITATIONS**

The scope of our services includes only those items specifically addressed herein. All other items are outside the scope of this inspection; including any environmental assessment (such as but not limited to mold, mildew, or the presence of any other toxic substance or environmental risks).

In addition, the scope of our services does not include any evaluation of the building or site for job-site safety and/or hazardous conditions. All construction shall be performed in compliance with IRC and OSHA standards at all times. Our firm has not been retained to examine the site or building for any of these conditions. In addition, the contractor shall retain sole responsibility for the quality of work, for adhering to plans, specifications, appropriate codes, and, for repairing defects, deficiencies, or omissions, regardless of when they are found. By the use of this report, it is understood the above conditions are agreed to.

Best Regards,  
Apex Engineers, Inc.



Nick A. Shifflett, E.I.T.  
*Field Engineer*

Clayton J. Hess,  
*Principal*

