

NC FIRM LICENSE NO.: P-2854
1991 EDDIE HOWARD ROAD | WILLOW SPRING, NC 27592
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Date: May 14, 2025

To: Scott Rhodes

Scott Rhodes Building, Inc.

Re: 23-KAHD-002.1.2

Brick Lintel Installation and Deviations

Fleming Residence 354 Pointer Creek Drive Angier, NC 27501

Mr. Rhodes:

At your request, the plans and provided information were reviewed for the above referenced single family residence under construction to address the brick lintel installation and plan deviations.

Observations:

- 1. You indicated an L6x4x5/16 steel angle with the long leg placed vertically was installed above each garage door opening and above the slider door opening. You indicated each steel angle was fastened to the LVL header above the opening with (2) rows of ½" diameter lag screws spaced 16" o.c.
- 2. You indicated an L6x4x5/16 steel angle with the long leg placed vertically was installed above the roof lines at the left and right sides of the front porch where the ridge jogs forward. You also indicated an L6x4x5/16 steel angle with the long leg placed vertically was installed above the screen porch roof line at the chimney. You indicated each steel angle was fastened to the adjacent wall studs with (2) ½" diameter lag screws spaced 16" o.c. Steel stops were welded to the angles.
- 3. You indicated a triple 2/8 window unit was installed within the front exterior wall of the garage per the front elevation in lieu of two individual windows per the first floor plan. You indicated a (3) 1¾"x11½" LVL header was installed above the window opening.
- 4. You indicated the headers above the 3/0 garage service door and 3/0 door between the master bedroom and screen porch are braced by (1) king stud at each end. You indicated the rough openings measure +/- 38" in width.

Analysis and Recommendations:

- 1. The steel angles above each garage door opening and above the slider door opening were installed per my letter dated February 25, 2025 and are suitable to support the loading imposed by the brick veneer above the openings.
- The steel angles above the roof lines were installed per my letter dated February 25, 2025 and are suitable to support the loading imposed by the brick veneer above the roof.
- 3. Analysis revealed the (3) 1¾"x11½" LVL header is suitable to support the loading above the triple 2/8 window opening. The header is to be supported by a minimum of (2) 2x6 jack studs and (3) king studs at each end. An L5x3½x5/16 steel angle with the long leg placed vertically is to be installed above the window opening to support the brick veneer above. The steel angle is to be embedded a minimum of 4" into the brick veneer at each side of the opening.
- 4. Analysis revealed (1) king stud is suitable to brace each end of the headers above the +/- 38" rough openings for the garage service door and door between the master bedroom and screen porch. Additional king studs are not required.

Please call me if you have any questions.

Respectfully submitted,

Zachary H. Hayes, PE Owner/Structural Engineer Hayes Structural Consulting & Design, PLLC



Digitally signed by Zachary H. Hayes, PE

Date: 2025.05.14 07:48:37 -04'00'