1501 Lakestone Village Ln. #103 Fuquay-Varina, NC 27526 NC Firm License No.: P-2854

VA Business Entity License No.: 009365

Date: August 27, 2025

To: Craig Zeigler

Zeigler Classic Homes & Renovations, Inc.

PO Box 745

Rolesville, NC 27571

Re: 25-TDM-006.1

Pool House Rafter Attachment

700 Tilghman Rd. Coats, NC 27521

Permit No.: BRES-2505-0071

Mr. Zeigler:

At your request, the plans for the pool house under construction at the above referenced property were reviewed to address the rafter attachment.

Observations:

You indicated the rafters were raised after the seats had been cut into the rafters. A +/- 3" tall 2x4 block was fastened to each ceiling joist to support the raised rafter seat. The raised rafters have minimal lapping and attachment to the ceiling joists. A Simpson Strong-Tie H2.5A hurricane tie was installed between each ceiling joist and the double top plate.

Analysis and Recommendations:

Analysis revealed the rafters are not adequately tied to the underlying structure. Install a Simpson Strong-Tie LTS12 twist strap between each raised rafter and the double top plate below. The rafters attached in this prescribed manner will provide the required uplift resistance for all applied lateral loads imposed by ultimate design wind speeds up to 120 mph.

Please contact us if you have any questions.

Respectfully submitted, Hayes Structural Consulting & Design, PLLC



Digitally signed by Zachary H. Hayes, PE

Date: 2025.09.22 13:45:50 -04'00'

Zachary H. Hayes, PE
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(Revised September 22, 2025)