## D. ALLEN HUGHES ENGINEERING, Inc.

1669 Jimmie Kerr Rd., Haw River, NC 27258 336-516-8634, NC Firm No. C-2951

January 14, 2025

North Carolina Custom Modulars 1936 US Hwy 64 E. Asheboro, NC 27203 Office

Attention:

Crystal Rothstein, Loretta Cook, (336)460-0329, 336-610-5150,

nccmconstruction@yahoo.com

Reference:

Structural Evaluation of Notched Bottom Plate at Walk-In Garage Door at Back Side of Garage

190 Round Rock Lane, Broadway, NC 27505

Project No. 24DAH-0801A-D24MS112, Harnett County Permit No. SFD2201-0038

Dear Ms. Rothstein,

D. Allen Hughes Engineering, Inc. visited the site on August 1, 2024 and October 22, 2024. For this report, the front, back, left and right of the garage are the same as the house as seen looking at the garage from in front of the house. The purpose of this report is to evaluate the framing of the walk-in door at the back side of the garage. Right and left of the door are as seen looking out. Specifically, the bottom plate beneath one of the king studs on the right side of the door has been notched so that only 4 in. of one of the king stud is supported by the bottom plate. The wall is framed with 2x6 studs.

During our visits, it was not planned to evaluate the framing at the above referenced door. Recently, photographs and videos from our site visits were reviewed. Additionally, photos provided by you were reviewed. The right side of the door header is supported by a trimmer stud, (2) jack studs and (4) king studs. The 2x6 bottom plate of the wall has been notched (on the inside face) so that one of the king studs has 4 in. of the remaining stud bearing on the bottom plate. The notch was recently brought to our attention by John Kokoszka with Harnett County.

The loading conditions of the door framing were evaluated based on prescribed loads from the NC Residential Code, 2018. Based on our evaluation, the stud system supporting the door header and adjacent wall (including the (1) king stud over the notch as framed with the trimmer stud, (1) other jack stud and (3) attached kings studs) is adequate to support the proposed loads of the home as it is built.

Sincerely,

EN HUGK

D. Allen Hughes, P.E., President D. Allen Hughes Engineering, Inc.

## **DESIGN PROFESSIONAL INSPECTION FORM**

RECORD OF THE INSPECTION OF A **COMPONENT OR ELEMENT** BY A NC LICENSED ARCHITECT OR ENGINEER

**Project Information:** 

Residential Single-Family Project: VY N	Commercial Project: Y N V	
Code Enforcement Project No:	Permit No: Hamett County Permit No. SFD2201-0038	
Project Name: Back Porch Roof Framing and Its Bearing on Mod Home Roof	Owner:	
Project Address: 190 Round Rock Ln., Broadway, NC 27505	Suite No:	
Date Inspected: August 1, 2024 and October 22, 2024	Contractor Name: North Carolina Custom Modulars	
Component Inspected: Back Porch Roof Framing and It	s Bearing on Mod Home Roof	

Responsible Licensed NC Architect or NC Engineer

Name:	D. Allen Hughes	, PE	
Firm Name:	D. Allen Hughes En	D. Allen Hughes Engineering, Inc., NC Firm no. C-2951	
Phone Numbers:	Office:	Mobile: 336-516-8634	
Email Address:	ncmodengineers@gmail.com		
Mailing Address:	1669 Jimmie Kerr Rd., Haw River, NC 27258		

APPLICABLE CODE: 2018 NC RESIDENTIAL CODE

2018 NCBC = 2018 NC Building Code; 2018 NCRC = 2018 NC Residential Code

Describe Element/Component/Type of Inspection: \*

Back Porch Roof Framing and Its Bearing on Mod Home Roof

**Attestation/Signature:** By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per subsection (b2) of NC G.S. 153A-352 and is in compliance with the approved plans & specifications for the project. This inspection is in compliance with all of the requirements of the above referenced

code. Attach any additional documents if needed.

D. Allen Hughes, PE

Licensed Architect or Engineer

Inspection Department discisimer: Upon the receipt of a signed written document as required under subsection (a) of Article 160A-413.5., Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or Certificate of Compliance. This inspection does not address any local ordinances or zoning requirements.

4/2019

<sup>\*(</sup>subgrade form/letter may also be required)

## **DESIGN PROFESSIONAL INSPECTION FORM**

RECORD OF THE INSPECTION OF A **COMPONENT OR ELEMENT** BY A NC LICENSED ARCHITECT OR ENGINEER

**Project Information:** 

Residential Single-Family Project: VY N	Commercial Project: Y N V
Code Enforcement Project No:	Permit No: Harnett County Permit No. SFD2201-0038
Project Name: Garage Door Headers/Portal Frame with Repair, Garage Subgrade, Walk-In Garage Door Bearing on Notched Plate	Owner:
Project Address: 190 Round Rock Ln., Broadway, NC 27505	Suite No:
Date Inspected: August 1, 2024 and October 22, 2024	Contractor Name: North Carolina Custom Modulars
Component Inspected: Subgrade Test and Footing Projection	ection at Garage Portal Frame, Garage Foundation Walls, Portal

Component Inspected: Subgrade Test and Footing Projection at Garage Portal Frame, Garage Foundation Walls, Portal Frame Anchorage Repair, Confirm Garage Door Headers and Stud Columns Adequate in Bearing and Moment, Confirmed Adequate Bearing at Notched Bottom Plate at Back Walk-In Door, Garage Slab Subgrade/Backfill

**Responsible Licensed NC Architect or NC Engineer** 

Name:	D. Allen Hughes, PE	
Firm Name:	D. Allen Hughes Engineering, Inc. , NC Firm no. C-2951	
Phone Numbers:	Office: Mo	bile: 336-516-8634
Email Address:	ncmodengineers@gmail.com	
Mailing Address:	1669 Jimmie Kerr Rd., Haw River, NC 27	7258

APPLICABLE CODE: 2018 NC RESIDENTIAL CODE

2018 NCBC = 2018 NC Building Code; 2018 NCRC = 2018 NC Residential Code

## Describe Element/Component/Type of Inspection: \*

Subgrade Test and Footing Projection at Garage Portal Frame Footing, Garage Foundation Walls, Portal Frame Anchorage Repair, Confirm Garage Door Headers and Stud Columns Adequate in Bearing and Moment, Confirmed Adequate Bearing at Notched Bottom Plate at Back Walk-In Door, Garage Slab Subgrade/Backfill

**Attestation/Signature:** By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per subsection (b2) of NC G.S. 153A-352 and is in compliance with the approved plans & specifications for the project. This

inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

D. Allen Hughes, PE

Licensed Architect or Engineer

Inspection Department disclaimer: Upon the receipt of a signed written document as required under subsection (a) of Article 160A-413.5., Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or Certificate of Compliance. This inspection does not address any local ordinances or zoning requirements.

4/2019

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