



Wise Engineering
3915 Old Fairground Rd.
Angier, NC 27501
(919)894-2203

April 26, 2023

Brooks O'Quinn
Additional Storage
5630 Spring Hill Church Rd.
Lillington, NC 27546

Subject: Concrete Slab for Metal Framed Storage Units

Mr. O'Quinn,

At your request, I reviewed the plans and the storage units being constructed at the subject address. Specifically, I reviewed the concrete slab, metal frame building, and the metal frame support system.

Based on my review and analysis, each concrete slab is approximately 120 ft long by 20 ft wide and consists of a 4 to 5-inch thick section of fiber reinforced concrete. The metal frame building is constructed of metal studs, with a metal frame header over each of the 9 ft roll up doors. Based on the layout of the structure and framing, the maximum point load at any location on the concrete slab is approximately 750 lbs (design load). Based on that minimum load, the 4-inch slab is structurally adequate to support the loads of the metal structure as constructed.

In summary, based on my review and analysis, the concrete slabs of both units are adequate to support the loads from the metal framed storage units. The above analysis is in accordance with the 2018 NC Building Codes.

If you need additional information or have other questions, please let me know.

Sincerely,

Randy K. Wise, PE



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: Y N	Commercial Project: <input checked="" type="radio"/> Y <input type="radio"/> N
Code Enforcement Project No:	Permit No:
Project Name: <i>ADDITIONAL STORAGE</i>	Owner: <i>BROOKS O'QUINN</i>
Project Address: <i>5630 SPRING HILL CHURCH RD, LITTLETON, NC 27546</i>	Suite No.:
Date Inspected: <i>4/24/2023</i>	Contractor Name:
Component Inspected: <i>CONCRETE SLAB(S)</i>	

Responsible Licensed NC Architect or NC Engineer

Name:	<i>RANDY WISE</i>		
Firm Name:	<i>WISE ENGINEERING</i>		
Phone Numbers:	Office:	Mobile:	<i>919 754-7907</i>
Email Address:	<i>randy@wise-engineer.com</i>		
Mailing Address:	<i>3915 OLD FAIRGROUND RD, ANGLIC, NC 27501</i>		

APPLICABLE CODE: *2018 NCBC*

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

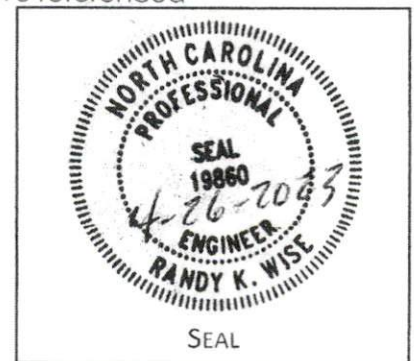
Describe Element/Component/Type of Inspection: * *CONCRETE SLABS*
FOR METAL FRAMED STORAGE FACILITY. SEE ATTACHED LETTER.

*(subgrade form/letter may also be required)

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 Code or other proposal of the architect or engineer for the project. This inspection is in compliance with all of the requirements of the above referenced Code. Attach any additional documents if needed.

RANDY K. WISE, PE *Randy K. Wise*
 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.