Takla Engineering, PLLC

NC Firm License # P-1952

Consulting | Design | Efficiency

PO Box 71298 Durham, NC 27722 | Office@TaklaEngr.com

Alfred A. Takla, PE AlfredTakla@TaklaEngr.com NC PE License # 047507

Andy A. Takla, PE AndyTakla@TaklaEngr.com NC PE License # 050695

Project: 679 Jasmine Rd

Location: Fuquay-Varina, NC

Company: Family Building Company

Care Of: John Szalecki

Subject: Footing and 3rd Party Inspection

Job Number: 2-2470-25

Electronically signed by Andy A. Takla, PE Date:2025/04.17 Time:9:02:43 AM

NORTH CAROLINA PROFESSIONAL SEAL 050695 ENGINEER ANDREW ATEF TAKLA

As requested, engineer(s) from Takla Engineering visited the above referenced site on April 16th, 2025 to evaluate the bearing capacity of the sub-grade soils supporting:

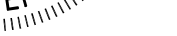
_____ Foundation wall and/or interior pier footings
__X__ Turndown monoslab on grade
_____ Front porch patio turndown slab footings
_____ Rear porch patio turndown slab footings
_____ Detached garage turndown footings

*Patio slabs with no thickened or lug footings are outside the scope of our inspection.

Observations of lot topography, vegetation, and soil characteristics were made to characterize the site. In-situ subgrade soil bearing capacity was evaluated by means of probing excavation bottoms with a 1/2" diameter steel probe rod and/or a static cone penetrometer (SCPT) with a 60 degree cone assembly, friction sleeve, and pressure gauge readings correlating with blow counts from a Dynamic Cone Penetrometer (DCP). The evaluations indicate the average bearing capacity of the soils directly supporting the above referenced elements meet or exceed the minimum 2000 pounds per square foot as referenced by NCRC 2018, Chapter 4 and engineered specifications. It is important to note that this evaluation did not include mechanical soil borings, standard Proctor tests, or density testing. Additionally, this assessment does not address site drainage, which is crucial for maintaining long-term bearing capacity. Drainage design and implementation are outside the scope of this evaluation.

We also performed a 3rd party monoslab inspection in-lieu of a municipal inspector using the plans provided by the builder and approved by municipal building inspections department. Based on our inspection, we verify the following:

- Depth and size of turndown grade beam footing excavations for monoslab meets or exceeds per plan specifications and code requirements.
- Locations of all turndown grade beam footing excavations appear per plans. Note, our inspection does not guarantee against overhangs of framing members.
- Approximately 4" of stone are placed within the field(s) of the slab.
- R10 insulation is installed per code.
- Vapor barrier is correctly placed.
- Formwork heights in relation to grade provides room for plan specified concrete slab thickness.
- Footings are prepared in compliance with NCRC 2018 Chapter 4 (Sections R401-R404)
- **All conditions are acceptable to receive concrete.**



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: Y (N)
Code Enforcement Project No:	Permit No: SFD-2502-0120
Project Name: 679 Jasmine Rd	Owner:
Project Address: 679 Jasmine Rd	Suite No:
Date Inspected: 4-16-2025	Contractor Name: Family Building Company (John Szalecki)
Component Inspected: Slab	

Responsible Licensed NC Architect or NC Engineer

Name:	Andy A Takla, PE
Firm Name:	Takla Engineering, PLLC
Phone Numbers:	Office: 919-258-2648 Mobile: 919-423-0470
Email Address:	andytakla@taklaengr.com
Mailing Address:	PO Box 71298 Durham, NC 27722

APPLICABLE CODE: NCRC 2018

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

Describe Element/Component/Type of Inspection: *

Monoslab Subgrade and 3rd Party Inspection

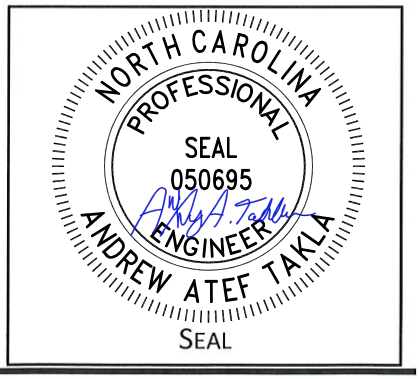
*(subgrade form/letter may also be required)

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 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.

Electronically signed by
Andy A. Takla, PE
Date:2025.04.17
Time:9:02:56 AM

Licensed Architect or Engineer



SEAL

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.