

Sims Quality Engr-Const Consultant PLLC

6/13/25

5338 Clubhouse Lane
Hope Mills, NC 28348
Phone: 757-419-1714
Email : CSims51@twc.com
NC PE License # : 059559
NC Business License # : P-3157

TO:

Harnett County Inspections Department
420 McKinney Parkway
Lillington, NC 27546

Reference: Pre-Engineered Metal Building Inspection at 62 S. Harnett Lane, Bunnlevel,
Supplement Letter to Appendix G Inspection Form

Property Owner Xian Santiago has hired me as a third-party Engineer to do the inspection of his pre-engineered metal building (PEMB). Mr. Santiago recently became aware that he needed to get a building permit which he and his contractors failed to do.

On 6/13/25 I visited the property to conduct the inspection and noted the following.

1. He gave me a copy of the design drawings by Newmart Builders, Inc dated 16 December 2024 Revision 12 signed and sealed by NC Professional Engineer Plott. See attached first 5 sheets showing seals and code information. Mr. Santiago will submit full set of drawings with my report to obtain permit for the rest of the trade work.
2. As of the inspection date, the metal building is complete IAW the Newmart Drawings and placed on an oversized 5" concrete slab thicker than what's called for on the drawings and anchored IAW the details. See attached pictures showing Mr. Santiago started the interior wood framing and has stopped any further progress until he obtains all the required permits and OK to proceed from your office.
3. The building will be used mainly for storage and has contracted with Blanton Heating & Air for HVAC work and will hire a local licensed Electrical Contractor both who will pull their permits from your office after Mr. Santiago gets the Main Permit for the Building.
4. Hopefully this letter along with Appendix G form attached will suffice for Mr. Santiago to obtain the necessary permits from your office to properly continue the work. He now understands the permitting process and where he made his mistake. Please let me know if you have any questions.



Carl P Sims

Sims Quality Engr-Const Consultant PLLC



APPENDIX G

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: <u>Y</u> N	Commercial Project: Y <u>N</u>
Project Name: <u>Santiago Storage Bldg</u>	Permit No: <u>TDD</u>
Project Address: <u>62 S. Hargett Lane</u> <u>Bunn/level, NC 28323</u>	Owner: <u>Xian Santiago</u>
Date Inspected: <u>6/13/25</u>	Suite No:
Component Inspected: <u>Pre Engineered Metal Building</u>	Contractor Name: <u>owner</u>

Responsible Licensed NC Architect or NC Engineer

Name:	<u>CARL P. SIMS</u>
Firm Name:	<u>Sims Quality Engr-Const Consultant PLLC</u>
Phone Numbers:	Office: <u>757 419 1714</u> Mobile: <u>757 419 1714</u>
Email Address:	<u>C.Sims51@twc.com</u>
Mailing Address:	<u>5338 Clubhouse Lane Hope Mills, NC 28348</u>

APPLICABLE CODE:

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

Describe Element/Component/Type of Inspection: *

Metal Building Structure / SLAB

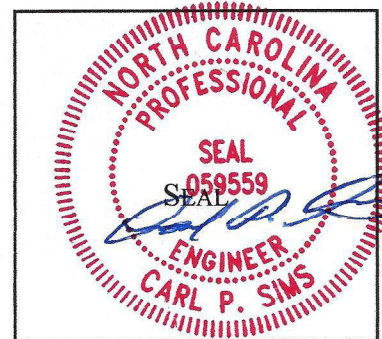
*(subgrade form/letter may also be required)

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 G.S. 160D-11-6 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.



Licensed Architect or Engineer



Inspection Department disclaimer:

Upon the receipt of a signed written document as required by G.S. 160D-11-6, 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.



STRUCTURAL DESIGN
ENCLOSED BUILDING

**MAXIMUM 30'- 0" WIDE X 14'- 0" HEIGHT-
BOX EAVE FRAME AND BOW FRAME**

16 December 2024

Revision 12

M&A Project No. 17062S/17174S/17254S/18033S/18113S/18246S/19309S/22257S/23335S/24243S

Prepared for:

**Newmart Builders
1000 Cycle Lane
South Hill, VA 23970**

Prepared by:

Moore and Associates Engineering and Consulting, Inc.

**1009 East Avenue
North Augusta, SC 29841**

**401 S. Main Street, Suite 200
Mount Airy, NC 27030**



Validity Notice

Plans Expiration Date: 16 December 2025
Plans are valid for one year from issuance date

Moore and Associates Engineering and Consulting, Inc. ("Moore & Associates") is the author and owner of all plans, drawings, specifications, etc. ("Instruments of Service") provided by it, and retains all common law, statutory, and other reserved rights, including without limitation copyrights. A limited license is granted to you for use of the Instruments of Service solely and exclusively in connection with the specific project for which the Instruments of Service were created by Moore & Associates. All other uses, including without limitation transfer to a third party, are strictly prohibited. Acceptance of the Instruments of Service constitutes your agreement to indemnify and to hold Moore & Associates harmless from all cost, expenses, damages, and attorney's fees arising from or relating to any unauthorized use or transfer of the Instruments of Service.

		Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 60127, Expiration Date: <u>10/25/26</u>	
			
			
			
			<p>Validity Notice</p> <p>Plans Expiration Date:</p> <p>16 December 2025</p>

MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.		DRAWN BY: LT CHECKED BY: AM PROJECT MGR: JRP CLIENT: NEWMART		NEWMART BUILDERS, INC. 1000 CYCLE LANE SOUTH HILL, VA 23970 30'-0"x14'-0" ENCLOSED STRUCTURE JOB NO: 18246S/19309S/ 22257S/23335S/24243S	
THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE PROSECUTED TO THE FULL EXTENT OF THE LAW.		DATE: 12-16-24 SCALE: NTS		SHEET 1 TOTAL SHEETS: 2 DATE: 12	

DRAWING INDEX

SHEET 1	PE SEAL COVER SHEET
SHEET 2	DRAWING INDEX
SHEET 3	INSTALLATION NOTES AND SPECIFICATIONS
SHEET 3A	LIST OF APPLICABLE BUILDING CODES
SHEET 4	TYPICAL SIDE AND END ELEVATIONS
SHEET 5	TYPICAL INTERIOR RAFTER/COLUMN AND SIDE FRAMING SECTIONS (BOX EAVE RAFTER)
SHEET 6	MAXIMUM RAFTER SPAN (BOX EAVE RAFTER)
SHEET 7	TYPICAL INTERIOR RAFTER/COLUMN AND SIDE FRAMING SECTIONS (BOW EAVE RAFTER)
SHEET 8	MAXIMUM RAFTER SPAN (BOW EAVE RAFTER)
SHEET 9	BASE RAIL ANCHORAGE OPTIONS
SHEET 9A	BASE RAIL ANCHORAGE OPTION
SHEET 9B	ADDITIONAL BASE RAIL ANCHORAGE OPTION
SHEET 10	BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS
SHEET 11	BOW EAVE RAFTER END WALL AND SIDE WALL OPENINGS
SHEET 12	CONNECTION DETAILS
SHEET 13	CONNECTION DETAILS
SHEET 14	BOX EAVE RAFTER LEAN-TO OPTION
SHEET 14A	BOX EAVE RAFTER LEAN-TO OPTION
SHEET 15	BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION
SHEET 16	SIDE WALL AND END WALL HEADER OPTIONS

Validity Notice

Plans Expiration Date:

16 December 2025

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

DRAWN BY: LT

CHECKED BY: AM

PROJECT MGR: JRP

CLIENT: NEWMART

NEWMART BUILDERS, INC.
1000 CYCLE LANE

SOUTH HILL, VA 23970

30'-0"x14'-0" ENCLOSED STRUCTURE

DATE: 12-16-24

SCALE: NTS

JOB NO: 18246S/19309S/
22257S/23335S/24243S

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS EXPRESSLY PROHIBITED AND ANY REPRODUCTION THEREOF MAY BE SUBJECT TO LEGAL ACTION.

INSTALLATION NOTES AND SPECIFICATIONS

1. DESIGN IS FOR MAXIMUM 30'-0" WIDE x 14'-0" EAVE HEIGHT ENCLOSED STRUCTURES.
2. DESIGN WAS DONE IN ACCORDANCE WITH ALL THE APPLICABLE BUILDING CODES LISTED ON SHEET 3A.
3. DESIGN LOADS ARE AS FOLLOWS:
 - A) ROOF DEAD LOADS:
 - SELF-WEIGHT = 1.5 PSF
 - MEP = 0 PSF
 - COLLATERAL = 0 PSF
 - B) ROOF LIVE LOAD = 12 PSF
 - C) FLOOR LIVE LOAD = 100 PSF (4" CONCRETE SLAB-ON-GRADE)
 - D) GROUND SNOW LOAD = 45 PSF

NOTE: UNBALANCED LOADING DUE TO SNOW DRIFT/SLIDING FROM AN ADJACENT TALLER STRUCTURE HAS NOT BEEN EVALUATED. DROP-DOWN LEAN-TO'S (THOSE CAUSING A HEIGHT DIFFERENTIAL FROM THE MAIN STRUCTURE) SHALL BE LIMITED TO GROUND SNOW LOADS \leq 30 PSF.
4. 3-SECOND GUST ULTIMATE WIND SPEED (LW) 105 TO 130 MPH (NOMINAL WIND SPEED 81 TO 101 MPH).
5. MAXIMUM RAFTER/POST AND END COLUMN SPACING = 3.0 FEET (UNLESS NOTED OTHERWISE).
6. END WALL COLUMNS (POST) ARE SIMILAR TO SIDE WALL COLUMNS (POSTS) IN SIZE AND SPACING (UNLESS NOTED OTHERWISE).
7. RISK CATEGORY I (NOT FOR HUMAN OCCUPANCY).
8. WIND EXPOSURE CATEGORY B.
9. STRUCTURAL ANALYSIS/DESIGN IS BASED ON TS MEETING THE REQUIREMENTS OF ASTM A653 GRADE 50 TYPE SS WITH MINIMUM YIELD STRENGTH (F_y) OF 50 KSI AND GALVANIZING MEETING THE MINIMUM REQUIREMENTS OF G60.
10. USE E70 ELECTRODES FOR WELDED CONNECTIONS. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.3.
11. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2"x3"-14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
12. CONNECTOR SLEEVES ARE MINIMUM 8" LONG, TS 1 3/4"x2 3/4"-14 GAUGE FOR 2"x3"-14 GAUGE (UNLESS NOTED OTHERWISE).
13. AVERAGE FASTENER SPACING ON-CENTERS = 10" O.C. (MAX.).
14. FASTENERS CONSIST OF 1/4"x3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. SPECIFICATIONS APPLICABLE ONLY FOR ROOF SLOPES OF 14" (3:12 PITCH) OR LESS. ROOF SLOPES LESS THAN 3:12 REQUIRE USE OF LAP JOINT SEALANT.
15. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL AT OR WITHIN 6" OF EVERY COLUMN.
16. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATION ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND, THEREFORE, REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.
17. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:
 - SOIL SITE CLASS = D
 - RISK CATEGORY I
 - $R = 3.25$ $I_E = 1.0$
 - $S_{DS} = 2.625 g$ $V = C_s W$
 - $S_{D1} = 2.13 g$
18. IF MORE THAN 50% OF COLUMNS (LEGS) ARE REMOVED IN ANY LONGITUDINAL (SIDE) WALLS OF A BUILDING, THE ENGINEER IS TO BE NOTIFIED TO DETERMINE WHETHER PORTAL FRAMES OR OTHER LONGITUDINAL STABILITY ELEMENTS WILL BE REQUIRED.
19. ANALYSIS/DESIGN OF THIS STRUCTURE WAS BASED ON THE LOADS, BUILDING CODE, AND STRUCTURAL GEOMETRY NOTED HEREIN. NO CHANGES SHALL BE MADE TO THE STRUCTURE WITHOUT EXPRESS WRITTEN PERMISSION FROM THE DESIGN ENGINEER. ANY CHANGES IN THE USE OR GEOMETRY OF THE STRUCTURE IN ANY MANNER IS A VIOLATION OF THE BUILDING CODE AND NEGATES ANY LIABILITY ON THE PART OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.
20. USE E70 ELECTRODES FOR WELDED CONNECTIONS. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.3.
21. WHEN USING GENERIC MASTER DESIGNS TO OBTAIN BUILDING PERMIT, IT MUST BE ACCOMPANIED BY SUFFICIENT ADDITIONAL INFORMATION TO INDICATE THE LOCATION, NATURE, AND EXTENT OF THE CONSTRUCTION AND SHOW IN DETAIL THAT IT WILL CONFORM TO ALL APPLICABLE CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS.
22. WHEN APPLYING FOR BUILDING PERMIT, THE BUILDING OFFICIAL MUST BE CONSULTED TO VERIFY WHETHER THE USE OF THE MASTER DESIGN IS ADEQUATE OR IF A SITE-SPECIFIC DESIGN IS REQUIRED FOR OBTAINING A BUILDING PERMIT. GENERIC MASTER DESIGNS CAN NOT BE USED WHERE A SITE-SPECIFIC DESIGN IS REQUIRED.
23. ANY VARIATION FROM THE ANALYSIS/DESIGN PARAMETERS OF THE MASTER DESIGN REQUIRES THE DEVELOPMENT OF A SITE-SPECIFIC DESIGN.

Validity Notice

Plans Expiration Date:

16 December 2025

**MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.**

DRAWN BY: LT

CHECKED BY: AM

PROJECT MGR: JRP

CLIENT: NEWMART

NEWMART BUILDERS, INC.

1000 CYCLE LANE

SOUTH HILL, VA 23970

30'-0"x14'-0" ENCLOSED STRUCTURE

DATE: 12-16-24

SCALE: NTS

**JOB NO: 18246S/19309S/
22257S/23335S/24243S**

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY VIOLATION THEREOF MAY BE PROSECUTED TO THE FULL EXTENT OF THE LAW.

LIST OF APPLICABLE BUILDING CODES

2021 INTERNATIONAL BUILDING CODE (IBC 2021)

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2012 INTERNATIONAL BUILDING CODE (IBC 2012)

DELAWARE BUILDING CODE

(IBC 2012, IBC 2015, IBC 2018, IBC 2021
<DEPENDENT UPON LOCAL JURISDICTION>)

MARYLAND BUILDING CODE 2021

<ADOPTS THE IBC 2021 WITH AMENDMENTS>

BALTIMORE CITY BUILDING CODE

<ADOPTS THE IBC 2021 WITH AMENDMENTS>

(IBC 2018, IBC 2021 <DEPENDENT UPON LOCAL JURISDICTION>)

NEW JERSEY UCC BUILDING SUBCODE 2021

<ADOPTS THE IBC 2021 WITH AMENDMENTS>

NORTH CAROLINA BUILDING CODE 2018

<ADOPTS THE IBC 2015 WITH AMENDMENTS>

PENNSYLVANIA BUILDING CODE 2018

<ADOPTS THE IBC 2018 WITH AMENDMENTS>

PHILADELPHIA BUILDING CODE 2018

<ADOPTS THE IBC 2018 WITH AMENDMENTS>

SOUTH CAROLINA BUILDING CODE 2021

<ADOPTS THE IBC 2021 WITH AMENDMENTS>

VIRGINIA UNIFORM STATEWIDE BUILDING CODE, PART I,

CONSTRUCTION/VIRGINIA CONSTRUCTION CODE

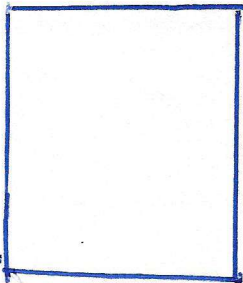
(VCC) <ADOPTS THE IBC 2021 WITH AMENDMENTS>

WEST VIRGINIA BUILDING CODE 2018

<ADOPTS THE IBC 2018 WITH AMENDMENTS>

Front Drive

← 28'-2" →



↑
25'-4"
↓

★ NC

Validity Notice

Plans Expiration Date:

16 December 2025

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

DRAWN BY: LT

CHECKED BY: AM

PROJECT MGR: JRP

CLIENT: NEWMART

NEWMART BUILDERS, INC.

1000 CYCLE LANE

SOUTH HILL, VA 23970

30'-0"x14'-0" ENCLOSED STRUCTURE

DATE: 12-16-24

SCALE: NTS

JOB NO: 18246S/19309S/
22257S/23335S/24243S

THIS DOCUMENT IS THE PROPERTY OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY VIOLATION THEREOF MAY



