AMERICAN BUILDINGS
A NUCOR COMPANY

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March 17, 2020

Alexander Design Build. LLC
205 West Main Street
Clayton, NC 27520
Attn.: Kent Alexander

Project Name: Niell's Creek Church Gym
Buildings: A->55'-4"x110'-10"x20'-0"(RCG,4.0:12)

Project Location: Angier, NC 27501
NBG Project #: A20B0267A

This Letter of Design Certification ensures that the materials furnished by the metal building supplier are designed in accordance with the information specified to the metal building supplier on the order documents and summarized by the loading information listed below. The Project Engineer of Record (not the metal building supplier) is responsible for verifying that the building code and design loads meet any and all applicable local requirements.

The Professional Engineer whose seal appears on this Letter of Certification is employed by the metal building manufacturer. and does not serve as or represent the Engineer of Record for this project and shall not be construed as such.

DESIGN LOAD CRITERIA:

Structural Loads Applied in General Accordance with: North Carolina (NCBC 2018)
Risk Category: II - Standard Buildings

PROJECT-WIDE LOADING INFORMATION:

Ground Snow Load: 15.0 psf Snow Exposure Factor,Ce: 0.90 Snow Imp. Factor, Is: 1.00
Roof Live Load: 20.0 psf Reducible As Per Code.

Ultimate Design Wind Velocity: 115 mph Nominal Design Wind Velocity: 89 mph
***Components & Cladding Pressures: 24 psf/ -32 psf
Is Roof to meet UL 90 Requirements?: No Wind Exposure: B

Seismic Criteria: Ss: 0.229 S1: 0.086 • No ground snow included in seismic calculations.
Design Sds / Sd1: 0.244/0.138 Analysis Procedure: Equiv. Lat. Force Procedure
Seis. Imp. Factor, Ie: 1.00 Basic SFRS: Not Detailed for Seismic
Seis. Design Category: C Site Class: D

BUILDING-SPECIFIC LOADING INFORMATION:

	Roof Dead	Collateral Dead		Snow Coefficient		Snow Load (psf)		Wind		Seismic		
Bldg	(psf)*	Pri (psf)	Sec (psf)	Ct	Cs	Ps (psf)	**Pm (psf)	Enclosure	GCpi	R	Cs	V (kips)
A	3.5	3.0	3.0	1.0	1.00	9.45	---	Enclosed	± 0.18	3.00	0.081	8.3

**Primary Structural Not Included*

***P_m is based on the minimum roof snow load calculated per building code or the contract-specified roof snow load, whichever is greater. This value, P_m, is only applied in combination with Dead and Collateral Loads. Roof Snow in other loading conditions is determined per the specified Building Code.*

****Ultimate Design wind pressures to be used for wall exterior component and cladding materials not provided by Metal Building Supplier*

Mezzanine Information:

Floor Dead Load: N/A Floor Collateral Load: N/A Floor Live Load: N/A

Crane Information:

No cranes on building.

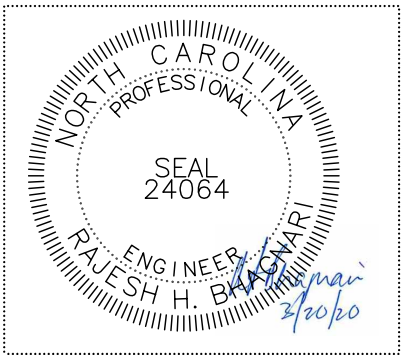
Roof-Top Unit Information

No roof-top units on building.

The design of structural members supporting roof gravity loads is controlled by the more critical effect of roof live load or roof snow applied in accordance with the governing building code.

DESIGN STANDARDS REFERENCED:

- AISC Specification for Structural Steel Buildings - Steel Construction Manual, 14th Edition, © 2010.
- AISI North-American Specification for the Design of Cold-Formed Steel Structures, © 2012 Edition.
- IBC codes are designed in accordance with ASCE7-10 Edition.
- MBMA Low Rise Building Systems Manual, Latest Edition.
- AWS Latest Edition of Structural Welding Code.
- No buyout structural components provided on this project.



Professional Seal

MBMA METAL BUILDING MANUFACTURERS ASSOCIATION

IAS ACCREDITED Metal Building Systems