



18-046260-01 Letter of Certification

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Letter of Certification

Contact: Kevin McDonald
 Name: McDonalds Design and Build
 Address: 101 Clintin Street

Project: Team Shank 150 x 400
 Builder PO #:
 Jobsite: co. rd 24

City, State: Defiance, Ohio 43512
 Country: United States

City, State: Napoleon, Ohio 43545
 County, Country: Henry, United States

This is to certify that the above referenced project has been designed in accordance with the applicable portions of the Building Code specified below. All loading and building design criteria shown below have been specified by contract and applied in accordance with the building code.

Overall Building Description

Shape	Overall Width	Overall Length	Floor Area (sq. ft.)	Wall Area (sq. ft.)	Roof Area (sq. ft.)	Max. Eave Height	Min. Eave Height 2	Max. Roof Pitch	Min. Roof Pitch	Peak Height
CONNECTING BUILDING	20/0/0	14/0/0	260	758	260	16/10/8	16/0/8	-0.500:12		
existing shop building (Existing)	60/0/0	90/0/0	5400	4197	5474	15/10/8	15/10/8	2.000:12	2.000:12	20/10/8
old shop office (Existing)	32/0/0	60/0/0	1920	1626	1927	14/10/8	12/2/8	-1.000:12		
Team Shank Fabrication	150/0/0	450/0/0	67500	29119	67559	23/10/8	23/10/8	0.500:12	0.500:12	27/0/0
Total For All Shapes			75080	35700	75220					

Loads and Codes - Shape: CONNECTING BUILDING

City: Napoleon County: Henry
 Building Code: Ohio Building Code - 2017 Edition
 Based on Building Code: 2015 International Building Code
 Building Risk/Occupancy Category: II (Standard Occupancy Structure)

State: Ohio
 Structural: 10AISC - ASD
 Cold Form: 12AISI - ASD
 Country: United States
 Rainfall: 1: 6.00 inches per hour
 fc: 3000.00 psi Concrete

Dead and Collateral Loads

Collateral Gravity: 3.00 psf
 Collateral Uplift: 0.00 psf

Roof Covering + Second. Dead Load: Varies
 Frame Weight (assumed for seismic): 2.50 psf

Roof Live Load

Roof Live Load: 20.00 psf Reducible

Wind Load

Wind Speed: Vult: 120.00 (Vasd: 92.95) mph

The 'Envelope Procedure' is Used
 Wind Exposure: B - Kz: 0.701
 Parts Wind Exposure Factor: 0.701
 Wind Enclosure: Enclosed
 Topographic Factor: Kzt: 1.0000

NOT Windborne Debris Region
 Base Elevation: 0/0/0
 Primary Zone Strip Width: 2a: 13/1/7
 Parts / Portions Zone Strip Width: a: 6/6/12
 Basic Wind Pressure: q: 21.95 psf

Snow Load

Ground Snow Load: pg: 25.00 psf
 Flat Roof Snow: pf: 17.50 psf
 Design Snow (Sloped): ps: 17.50 psf
 Rain Surcharge: 0.00
 Specified Minimum Roof Snow: 20.00 psf (Code)
 Exposure Factor: 2 Partially Exposed - Ce: 1.00
 Snow Importance: Is: 1.000
 Thermal Factor: Heated - Ct: 1.00
 Ground / Roof Conversion: 0.70

Seismic Load

Lateral Force Resisting Systems using Equivalent Force Procedure
 Mapped MCE Acceleration: Ss: 17.00 %g
 Mapped MCE Acceleration: S1: 7.00 %g
 Site Class: Stiff soil (D)
 Seismic Importance: Ie: 1.000
 Design Acceleration Parameter: Sds: 0.1813
 Design Acceleration Parameter: Sd1: 0.1120
 Seismic Design Category: B
 Seismic Snow Load: 0.00 psf
 % Snow Used in Seismic: 0.00
 Diaphragm Condition: Flexible
 Fundamental Period Height Used: 16/5/8

Transverse Direction Parameters

System NOT detailed for Seismic
 Redundancy Factor: Rho: 1.00
 Fundamental Period: Ta: 0.2632
 R-Factor: 3.00
 Overstrength Factor: Omega: 2.50
 Deflection Amplification Factor: Cd: 3.00
 Base Shear: V: 0.0604 x W

Longitudinal Direction Parameters

System NOT detailed for Seismic
 Redundancy Factor: Rho: 1.00
 Fundamental Period: Ta: 0.1634
 R-Factor: 3.00
 Overstrength Factor: Omega: 2.50
 Deflection Amplification Factor: Cd: 3.00
 Base Shear: V: 0.0604 x W

Loads and Codes - Shape: existing shop building
 Shape existing shop building is set as an existing shape.



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Loads and Codes - Shape: old shop office

Shape old shop office is set as an existing shape.

Loads and Codes - Shape: Team Shank Fabrication

City: Napoleon **County:** Henry

State: Ohio

Country: United States

Building Code: Ohio Building Code - 2017 Edition

Structural: 10AISC - ASD

Rainfall: 1: 6.00 inches per hour

Based on Building Code: 2015 International Building Code

Cold Form: 12AISI - ASD

fc: 3000.00 psi Concrete

Building Risk/Occupancy Category: II (Standard Occupancy Structure)

Dead and Collateral Loads

Collateral Gravity: 3.00 psf

Roof Covering + Second. Dead Load: Varies

Roof Live Load

Roof Live Load: 20.00 psf Reducible

Collateral Uplift: 0.00 psf

Frame Weight (assumed for seismic): 2.50 psf

Wind Load

Wind Speed: Vult: 120.00 (Vasd: 92.95) mph

Snow Load

Ground Snow Load: pg: 25.00 psf

Seismic Load

Lateral Force Resisting Systems using Equivalent Force Procedure

The 'Envelope Procedure' is Used

Wind Exposure: B - Kz: 0.701

Parts Wind Exposure Factor: 0.701

Wind Enclosure: Partially Enclosed

Topographic Factor: Kzt: 1.0000

Flat Roof Snow: pf: 17.50 psf

Design Snow (Sloped): ps: 17.50 psf

Rain Surcharge: 0.00

Specified Minimum Roof Snow: 20.00 psf (Code)

Exposure Factor: 2 Partially Exposed - Ce: 1.00

Snow Importance: Is: 1.000

Thermal Factor: Heated - Ct: 1.00

Ground / Roof Conversion: 0.70

Mapped MCE Acceleration: Ss: 17.00 %g

Mapped MCE Acceleration: S1: 7.00 %g

Site Class: Stiff soil (D)

Seismic Importance: Ie: 1.000

Design Acceleration Parameter: Sds: 0.1813

Design Acceleration Parameter: Sd1: 0.1120

Seismic Design Category: B

Seismic Snow Load: 0.00 psf

% Snow Used in Seismic: 0.00

Diaphragm Condition: Flexible

Fundamental Period Height Used: 23/10/8

NOT Windborne Debris Region

Base Elevation: 0/0/0

Primary Zone Strip Width: 2a: 19/1/3

Parts / Portions Zone Strip Width: a: 9/6/10

Basic Wind Pressure: q: 21.95 psf

Transverse Direction Parameters

System NOT detailed for Seismic

Redundancy Factor: Rho: 1.00

Fundamental Period: Ta: 0.3544

R-Factor: 3.00

Overstrength Factor: Omega: 2.50

Deflection Amplification Factor: Cd: 3.00

Base Shear: V: 0.0604 x W

Longitudinal Direction Parameters

System NOT detailed for Seismic

Redundancy Factor: Rho: 1.00

Fundamental Period: Ta: 0.2160

R-Factor: 3.00

Overstrength Factor: Omega: 2.50

Deflection Amplification Factor: Cd: 3.00

Base Shear: V: 0.0604 x W

Crane Schedule Information

Name	Type	Service Classification	Method of Operation	Capacity (Ton)	Bridge Span	Bridge Construction
7.5 ton Crane	Top Running Crane	C (Moderate Service)	Pendant Operated	7.50	48/0/0	Single Girder



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Building design loads and governing building code is provided by the Builder and is not validated by Butler Manufacturing, a division of BlueScope Buildings North America, Inc. The Builder is responsible for contacting the local Building Official or project Design Professional to obtain all code and loading information for this specific building site.

The design of this building is in accordance with Butler Manufacturing, a division of BlueScope Buildings North America, Inc. design practices which have been established based upon pertinent procedures and recommendations of the Standards listed in the Building Code or later editions.

This certification DOES NOT apply to the design of the foundation or other on-site structures or components not supplied by Butler Manufacturing, a division of BlueScope Buildings North America, Inc., nor does it apply to unauthorized modifications to building components. Furthermore, it is understood that certification is based upon the premise that all components will be erected or constructed in strict compliance with pertinent documents for this project. Butler Manufacturing, a division of BlueScope Buildings North America, Inc. DOES NOT provide general review of erection during or after building construction unless specifically agreed to in the contract documents.

The undersigned engineer in responsible charge certifies that this building has been designed in accordance with the contract documents as indicated in this letter.

Labib Asaad
Engineer in responsible charge

Date: 1/25/19

Engineer's Seal:

This document has been electronically signed and sealed by Labib E. Asaad, P.E. using my digital signature with PE seal affixed. Printed copies of this document are not considered signed and sealed, and the signature must be verified on any electronic copy.
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