

Letter of Certification

Contact:
Name: MAR Building Solutions
Address: 1305 Jefferson Street

Project: LSMO Water Utilites
Builder PO #:
Jobsite: 123456 Hamblen

City, State: Lees Summit, Missouri 64081
Country: United States

City, State: Lees Summit, Missouri 64002
County, Country: Jackson, 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
Covered Parking Addition	60/0/0	64/0/0	3840	3619	3843	20/6/0	18/0/0	-0.5000:12		
Covered Parking (Existing)	60/0/0	190/0/0	11400	1078	11410	20/6/0	18/0/0	0.5000:12		
Total For All Shapes			15240	4697	15253					

Loads and Codes - Shape: Covered Parking Addition

City: Lees Summit County: Jackson

State: Missouri

Country: United States

Building Code: 2018 International Building Code

Structural: 16AISC - ASD

Rainfall: 1: 7.00 inches per hour

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

Cold Form: 16AISI - ASD

f_c: 3000.00 psi Concrete

Dead and Collateral Loads

Collateral Gravity: 10.00 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 Not Reducible

Wind Load

Wind Speed: Vult: 115.00 (Vasd: 89.08) mph

The 'Envelope Procedure' is Used
Primaries Wind Exposure: C - Kz: 0.882
Parts Wind Exposure Factor: 0.882
Wind Enclosure: Partially Open
Topographic Factor: Kzt: 1.0000
Ground Elevation Factor: Ke: 0.9636

NOT Windborne Debris Region

Base Elevation: 0/0/0

Site Elevation: 1024.0 ft

Primary Zone Strip Width: 2a: 12/0/0

Parts / Portions Zone Strip Width:

Walls, a: 6/0/0

Roof(s), 0.6h: 10/9/10

Velocity Pressure: qz: 24.46, (C&C) 24.46 psf

Snow Load

Ground Snow Load: pg: 20.00 psf

Flat Roof Snow: pf: 16.80 psf
Design Snow (Sloped): ps: 16.80 psf
Rain Surcharge: 0.00 psf
Specified Minimum Roof Snow: 20.00 psf (Code)
Exposure Factor: 2 Partially Exposed - Ce: 1.00
Snow Importance: Is: 1.000
Thermal Factor: Unheated - Ct: 1.20
Ground / Roof Conversion: 0.70
Obstructed or Not Slippery

Seismic Load

Lateral Force Resisting Systems using Equivalent Force Procedure

Mapped MCE Acceleration: Ss: 12.00 %g

Mapped MCE Acceleration: S1: 7.00 %g

Site Class: Stiff soil (D) - Default

Seismic Importance: Ie: 1.000

Design Acceleration Parameter: Sds: 0.1280

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: 19/3/0

Transverse Direction Parameters

System NOT detailed for Seismic

Redundancy Factor: Rho: 1.00

Fundamental Period: Ta: 0.2983

R-Factor: 3.00

Overstrength Factor: Omega: 2.50

Deflection Amplification Factor: Cd: 3.00

Base Shear: V: 0.0427 x W

Longitudinal Direction Parameters

System NOT detailed for Seismic

Redundancy Factor: Rho: 1.00

Fundamental Period: Ta: 0.1838

R-Factor: 3.00

Overstrength Factor: Omega: 2.50

Deflection Amplification Factor: Cd: 3.00

Base Shear: V: 0.0427 x W

Loads and Codes - Shape: Covered Parking

Shape Covered Parking is set as an existing shape.

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.

Engineer in responsible charge

Date: _____

Engineer's Seal:



05/09/2024