

Date: 12/16/20

CERTIFICATE OF SEISMIC PERFORMANCE RATING

UNIVERSITY

CALIFORNIA

UC-Designed & Constructed Facility

OF

Campus-Acquired or Leased Facility

BUILDING DATA

Building Name: Marion Anderson School of Management Addition Address: 110 Westwood Plaza, Los Angeles, CA Site location coordinates: Latitude 34.07378 Longitudinal 118.44289

UCOP SEISMIC PERFORMANCE RATING (OR "RATING"): II (Applies to both the new Addition Building as well as Parking Structure 5 upon which the new Addition Building was constructed. Parking Structure 5 was seismically retrofitted concurrent with the construction of the new Addition Building)

ASCE 41-17 Model Building Type:

- a. Longitudinal Direction:
 - New Addition Building: Steel Moment Frames (S1) & Concrete Shear Walls (C2)
 - Existing Parking Structure Building: Concrete Shear Walls (C2)
- b. Transverse Direction: Same as above

Gross Square Footage:

- New Addition Building: 62,800 sf
- Existing Parking Structure Building: 284,200 sf
- See below for description of new/existing building

Number of stories *above* grade: The new building construction is upon the existing parking structure 5 building. The existing parking structure has 5 stories total, however it is built over a sloping site, such that the southern portion is generally 3 stories above foundation (L1 through L4) and the northern portion is generally 2 stories above a higher foundation (L4 through L6). Soil exists only along the eastern side of the southern portion, sloping from foundation to L3. Soil also exists under the northern portion of the parking structure. There is a segment of overlap between the southern and northern portions which contain the full 5 parking stories total. The new addition building is constructed above this overlapping area, and therefore is supported on both L4 and L6 of the existing parking structure. From L4 of the parking structure, the addition building rises another 4 stories. The 2nd level of the new addition building aligns with L6 of the parking structure, such that the new addition building (and the parking structure upon which it sits) have a seismic joint running between it and the adjacent school of management buildings. Number of basement stories *below* grade: See description above

Year Original Building was Constructed:

- New Addition Building: 2018
- Existing Parking Structure Building: 1959

This certificate is to be used in connection with the UC Facilities Manual, UC Seismic Program Guidelines.

Campus: UCLA Building Name:ASMA CAAN ID: Auxiliary Building ID:



Original Building Design Code & Year: CBC 2013 (New Addition Building); UBC 1958 (Existing Parking Structure)

Retrofit Building Design Code & Code (if applicable):

- Prior 2013 Voluntary Seismic Retrofit of Parking Structure 5, CBC 2010 (Existing Parking Structure Seismic Retrofit – Voluntary Seismic Upgrade to meet seismic performance level IV as defined by the UC Seismic Safety Policy revised 08/25/2011)
- New Seismic Retrofit of the Existing Parking Structure Concurrent with Construction of New Addition Building (includes strengthening of existing columns, shear walls, diaphragms, and new shear walls), CBC 2013

SITE INFORMATION

Site Class: D Basis: (Geocon, March 15, 2017, Pg. 6)

Geologic Hazards:	
Fault Rupture: No	Basis: Geocon Report, Pg. 4
Liquefaction: No	Basis: Geocon Report, Pg. 7
Landslide: No	Basis: Geocon Report, Pg. 7

ATTACHMENT

Original Structural Drawings: (Parking Structure A, Brandow and Johnston, 09/14/1954, General Notes=Sheet S-7) or

- 2013 Retrofit Structural Drawings: (PS5 Sesimic Correction, Englekirk Structural Engineers, 11/23/2013, General Notes=Sheet S0.1)
- 2018 New Building and Existing Parking Structure Retrofit Structural Drawings: (Anderson School of Management Addition, Nabih Youssef Structural Engineers, 12/01/2017, General Notes=Sheet S0.001)



CERTIFICATION & PRESUMPTIVE RATING VERIFICATION STATEMENT

I, Nabih Youssef, a California-licensed structural engineer, am responsible for the completion of this certificate, and I have no ownership interest in the property identified above. My scope of review to support the completion of this certificate included both of the following ("No" responses must include an explanation):

- a) the review of structural drawings indicating that they are as-built or record drawings, or that they otherwise are the basis for the construction of the building: ☑ Yes □ No
- b) visiting the building to verify the observable existing conditions are reasonably consistent with those shown on the structural drawings: ☑ Yes □ No

Based on my review, I have verified that the UCOP Seismic Performance Rating is presumptively permitted by the following UC Seismic Program provision (choose one of the following):

□ 1) Contract documents indicate that the original design and construction of the aforementioned building is in accordance with the benchmark design code year (or later) building code seismic design provisions for UBC or IBC listed in the Benchmark Building Codes and Standards table below.

☑ 2) The existing rating is based on an acceptable basis of seismic evaluation completed in 2006 or later.

□ 3) Contract documents indicate that a comprehensive¹ building seismic retrofit design was fullyconstructed with an engineered design based on the 1997 UBC/1998 *or later* CBC, and (choose one of the following):

□ the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1E (or BSE-R) and BSE-2E (or BSE-C) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 CBC *or later* for EXISTING buildings, and is presumptively assigned a rating of IV.

□ the retrofit project was completed by the UC campus. Further, the design was based on ground motion parameters, at a minimum, corresponding to BSE-1 (or BSE-1N) and BSE-2 (or BSE-2N) as defined in ASCE 41, or the full design basis ground motion required in the 1997 UBC/1998 *or later* CBC for NEW buildings, and is presumptively assigned a rating of III.

□ the retrofit project was not completed by the UC campus following UC policies, and is presumptively assigned a rating of IV.

¹ A comprehensive retrofit addresses the entire building structural system as indicated by the associated seismic evaluation, as opposed to addressing selective portions of the structural system.

This certificate is to be used in connection with the UC Facilities Manual, UC Seismic Program Guidelines.

Campus: UCLA Building Name:ASMA CAAN ID: Auxiliary Building ID:



Date: 12/16/20

CERTIFICATION SIGNATURE

Nabih Youssef

Print Name

Structural Engineer Title

SE 2026 CA Professional Registration No. 09/30/21 License Expiration Date

12/16/20

Signature

Date



AFFIX SEAL HERE

Nabih Youssef Structural Engineers 213-362-0707 nabih@nyase.com

Firm Name, Phone Number, and Address

Campus: UCLA Building Name:ASMA CAAN ID: Auxiliary Building ID:



UNIVERSITY OF CALIFORNIA

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Benchmark Building Codes and Standards

	Building Seismic Design Provisions	
Building Type ^{a, b, j}	UBC	IBC
Wood frame, wood shear panels (Types W1 and W2)	1976	2000
Wood frame, wood shear panels (Type W1a) ^j	1976 ^j	2000
Steel moment-resisting frame (Types S1 and S1a) ^j	1997 ^j	2000
Steel concentrically braced frame (Types S2 and S2a)	1997	2000
Steel eccentrically braced frame (Types S2 and S2a)	1988 ^g	2000
Buckling-restrained braced frame (Types S2 and S2a)	f	2006
Metal building frames (Type S3)	f	2000
Steel frame with concrete shear walls (Type S4)	1994	2000
Steel frame with URM infill (Types S5 and S5a)	f	2000
Steel plate shear wall (Type S6)	f	2006
Cold-formed steel light-frame construction—shear wall system (Type CFS1)	1997 ^{<i>h</i>}	2000
Cold-formed steel light-frame construction—strap-braced wall system (Type CFS2)	f	2003
Reinforced concrete moment-resisting frame (Type C1) ⁱ	1994	2000
Reinforced concrete shear walls (Types C2 and C2a)	1994	2000
Concrete frame with URM infill (Types C3 and C3a) ^j	f	f, j
Tilt-up concrete (Types PC1 and PC1a)	1997	2000
Precast concrete frame (Types PC2 and PC2a)	f	2000
Reinforced masonry (Type RM1)	1997	2000
Reinforced masonry (Type RM2)	1994	2000
Unreinforced masonry (Type URM) ^{<i>j</i>}	f	f, j
Unreinforced masonry (Type URMa) ^{<i>j</i>}	f	f, j
Seismic isolation or passive dissipation	1991	2000

Note: This table has been adapted from ASCE 41-17 Table 3-2. Benchmark Building Codes and Standards for Life Safety Structural Performed at BSE-1E.

Note: UBC = Uniform Building Code

Note: IBC = International Building Code

a Building type refers to one of the common building types defined in Table 3-1 of ASCE 41-17.

b Buildings on hillside sites shall not be considered Benchmark Buildings.

c not used

d not used

e not used

f No benchmark year; buildings shall be evaluated in accordance with the UC Seismic Safety Policy and the UC Seismic Program Guidelines.

g Steel eccentrically braced frames with links adjacent to columns shall comply with the 1994 UBC Emergency Provisions, published September/October 1994, or subsequent requirements.

h Cold-formed steel shear walls with wood structural panels only.

i Flat slab concrete moment frames shall not be considered Benchmark Buildings.

j Shaded cells are intentionally modified from ASCE 41-17 Table 3-2.