



Rating form completed by
Heavenz Kaur, Holly Razzano

Text in green is to be part of UC Santa Cruz building database and may be part of UCOP database

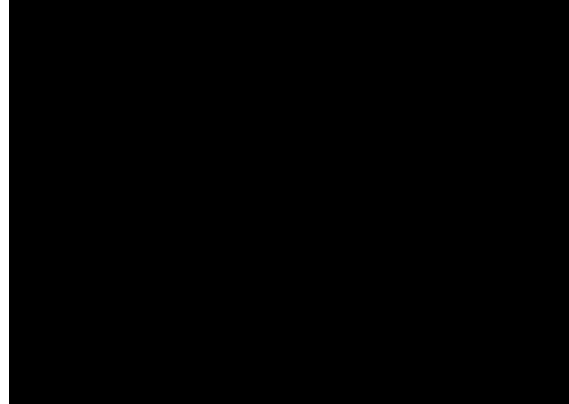
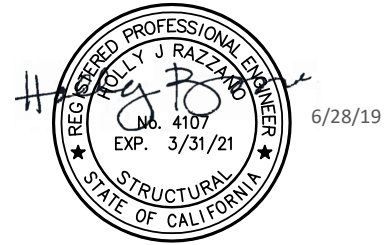
DATE: 2019-06-30

UC Santa Cruz building seismic ratings
Stevenson College Music Practice

CAAN #7430

535 Stevenson Service Road, Santa Cruz, CA 95064, United States

UCSC Campus: Main Camous



Rating summary	Entry	Notes
UC Seismic Performance Level (rating)	IV (Fair)	
Rating basis	Level 1	FEMA P-154 ¹
Date of rating	2019	
Recommended UC Santa Cruz priority category for retrofit	None	Priority A=Retrofit ASAP Priority B=Retrofit at next permit application
Ballpark total construction cost to retrofit to IV rating ²	N/A	
Is 2018-2019 rating required by UCOP?	Yes	Building was not previously rated
Further evaluation recommended?	No	

Building information used in this evaluation

- Construction Drawings by Esherick Homsey Dodge and Davis Architects and Planners dated, December 1974

¹ We translate this FEMA 154 evaluation to a Seismic Performance Level rating using professional judgment. Noncompliant items or a certain score in the FEMA 154 evaluation do not automatically put a building into a particular rating category, but we evaluate such items along with the combination of building features and potential deficiencies, focused on the potential for collapse or serious damage to the gravity supporting structure that may threaten occupant safety. See Section III B of the UC Seismic Policy and Method B of Section 321 of the 2016 California Existing Building Code.

² Per Section 3.A.4.i of the Seismic Program Guidebook, the cost includes all construction cost necessitated by the seismic retrofit, including restoration of finishes and any triggered work on utilities or accessibility. It does not include soft costs such as design fees or campus costs. The cost is in 2019 dollars.

- University of California building database information provided by Jose Sanchez (UCSC).

Additional building information known to exist

None

Scope for completing this form

Reviewed structural drawings for original construction and carried out FEMA 154 evaluation. We made a site visit on June 5th, 2019. We looked for potentially hazardous nonstructural components during the site visit. No nonstructural hazards were identified.

Brief description of structure

Two independent one-story wood buildings located on a sloping site.

Identification of levels: First Level, Roof

Foundation system: Continuous Wall footings under wood bearing and shear walls.

Structural system for vertical (gravity) load: 2x6 T&G sheathing spanning between a 6x10 rafter and 2x6 wood perimeter bearing walls.

Structural system for lateral forces: 2x6 straight sheathing diaphragm spans between plywood shear walls supported on stepped, continuous wall footings to form the lateral system of the building.

Brief description of seismic deficiencies and expected seismic performance including mechanism of nonlinear response and structural behavior modes

No major seismic deficiencies were observed in the buildings. Some diaphragm cracks may appear at reentrant corners of the roof due to absence of any collector elements during a seismic event.

FEMA P-154 Score

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}																		
FEMA BUILDING TYPE	Do Not Know	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
Basic Score	2.1	1.9	1.8	1.5	1.4	1.6	1.4	1.2	1.0	1.2	0.9	1.1	1.0	1.1	1.1	0.9	1.1	
Severe Vertical Irregularity, V_{L1}	-0.9	-0.9	-0.9	-0.8	-0.7	-0.8	-0.7	-0.7	-0.7	-0.7	-0.8	-0.6	-0.7	-0.7	-0.7	-0.6	NA	
Moderate Vertical Irregularity, V_{L1}	-0.6	-0.5	-0.5	-0.4	-0.4	-0.5	-0.4	-0.3	-0.4	-0.4	-0.3	-0.4	-0.4	-0.4	-0.4	-0.3	NA	
Plan Irregularity, P_{L1}	0.7	-0.7	-0.6	-0.5	-0.5	-0.6	-0.4	-0.4	-0.4	-0.5	-0.3	-0.5	-0.4	-0.4	-0.4	-0.3	NA	
Pre-Code	-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-0.2	-0.1	-0.1	-0.2	0.0	-0.2	-0.1	-0.2	-0.2	0.0	0.0	
Post-Benchmark	1.9	1.9	2.0	1.0	1.1	1.1	1.5	NA	1.4	1.7	NA	1.5	1.7	1.6	1.6	NA	0.5	
Soil Type A or B	0.5	0.5	0.4	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.1	0.3	0.2	0.3	0.3	0.1	0.1	
Soil Type E (1-3 stories)	0.0	-0.2	-0.4	-0.3	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	0.0	-0.2	-0.1	-0.2	-0.2	0.0	-0.1	
Soil Type E (> 3 stories)	-0.4	-0.4	-0.4	-0.3	-0.3	NA	-0.3	-0.1	-0.1	-0.3	-0.1	NA	-0.1	-0.2	-0.2	0.0	NA	
Minimum Score, S_{MIN}	0.7	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	1.0	
FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: Yes, 1.4																		

Summary of review of non-structural life-safety concerns, including at exit routes.³

None observed

UCOP non-structural checklist item	Life safety hazard?	UCOP non-structural checklist item	Life safety hazard?
Heavy ceilings, feature or ornamentation above large lecture halls, auditoriums, lobbies or other areas where large numbers of people congregate	N	Unrestrained hazardous materials storage	N
Heavy masonry or stone veneer above exit ways and public access areas	N	Masonry chimneys	N

³ For these Tier 1 evaluations, we do not visit all spaces of the building; we rely on campus staff to report to us their understanding of if and where non-structural hazards may occur.

Unbraced masonry parapets, cornices or other ornamentation above exit ways and public access areas	N	Unrestrained natural gas-fueled equipment such as water heaters, boilers, emergency generators, etc.	N
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Discussion of rating

No major structural deficiencies or falling hazards were observed. These buildings are light and have a small footprint so the likelihood of seismic damage that the buildings may incur is very low; therefore, the buildings have been rated IV.

Recommendations for further evaluation or retrofit

None.

Peer review of rating

This seismic evaluation was discussed in a peer review meeting on 17 June 2019. Reviewers present were Bret Lizundia of Rutherford and Chekene and Joe Maffei of Maffei Structural Engineering. Comments from the reviewers have been incorporated into this report. The reviewers agreed on the assigned rating.

Additional building data	Entry	Notes
Latitude	36.99788	
Longitude	-122.05085	
Are there other structures besides this one under the same CAAN#	No	
Number of stories above lowest perimeter grade	1	
Number of stories (basements) below lowest perimeter grade	0	
Building occupiable area (OGSF)	821 sq ft	
Risk Category per 2016 CBC Table 1604.5	II	
Site data		
Site class	D	
Site class basis	Geotech ⁴	
Liquefaction potential	Low	
Liquefaction assessment basis	County map	See footnote below
Landslide potential	Low	
Landslide assessment basis	County map	See footnote below
Active fault rupture identified at site?	No	
Fault rupture assessment basis	County map	See footnote below

⁴ Determination of site class and assessment of geotechnical hazards are based on correspondence with Pacific Crest Geotechnical Engineers and Nolan, Zinn, and Associates Geologists. [Revised Geology and Geologic Hazards, Santa Cruz Campus, University of California, Job # 04003-SC 13 May 2005]. Site class is taken as D throughout the main campus of UC Santa Cruz. The following links provide hazard maps for liquefaction, landslide, and fault rupture:

<https://gis.santacruzcounty.us/mapgallery/Emergency%20Management/Hazard%20Mitigation/LiquifactionMap2009.pdf>

<https://gis.santacruzcounty.us/mapgallery/Emergency%20Management/Hazard%20Mitigation/LandslideMap2009.pdf>

<https://gis.santacruzcounty.us/mapgallery/Emergency%20Management/Hazard%20Mitigation/FaultZoneMap2009.pdf>

Applicable code	
Applicable code or approx. date of original construction	Built: 1975 Code: 1973 UBC
Applicable code for partial retrofit	None
Applicable code for full retrofit	None
Model building data	
Model building type North-South	Wood,W1 - Light wood frame single or multi-family dwelling
Model building type East-West	Wood,W1 - Light wood frame single or multi-family dwelling
FEMA P-154 score	1.4
Previous ratings	
Most recent rating	Unknown
Date of most recent rating	Unknown
2 nd most recent rating	-
Date of 2 nd most recent rating	-
3 rd most recent rating	-
Date of 3 rd most recent rating	-
Report Attachments	