



Krieger CTR - B

DATE: 10/27/2020

**ASCE 41-17 Tier 1 Seismic Evaluation
Minimum Building Report Information**



BUILDING DATA

Campus: [UCLA](#)

Building Name: [Krieger CTR-B](#)

CAAN ID: [4399](#)

Auxiliary Building ID: [4399B](#)

Address: [101 Bellagio Drive, Los Angeles 90024](#)

Site location coordinates: Latitude [34.07556671](#) Longitudinal [-118.4551378](#)

Aerial Photo	Exterior Elevation

ASCE 41-17 Model Building Type:

- a. Longitudinal Direction: S1a – Steel Moment Resisting Frame with Flexible Diaphragm
- b. Transverse Direction: S1a – Steel Moment Resisting Frame with Flexible Diaphragm

Site-specific Ground Motion Study? **No**

Seismic Design Acceleration Parameters of Interest (S_{Xs} and S_{X1}):

- a. For BSE-1E **0.895g** and **0.515g**
- b. For BSE-2E **1.836g** and **0.94g**

Estimated Fundamental Period (seconds)

- a. Longitudinal: **0.1s**
- b. Transverse: **0.1s**

Gross Square Footage: 3,790
Number of stories *above* grade: 1
Number of basement stories *below* grade: 0

Year Original Building was Constructed: 1987
Original Building Design Code & Year: UBC-1985
Retrofit Building Design Code & Code (if applicable): N/A, N/A

SITE INFORMATION

Site Class: D (Measured)	Basis: Geotechnologies, Inc. , 10/21/2002, Pg. 15
Geologic Hazards:	
Fault Rupture: No	Basis: Referenced Geotechnical Report
Liquefaction: No	Basis: Referenced Geotechnical Report
Landslide: No	Basis: Referenced Geotechnical Report

BUILDING COMPLEX KEY PLAN

The Kriger CTR complex is composed of three buildings. Shown below is a key plan of the complex along with the distribution of Building ID's at the complex.



Figure 1 Key Plan of the Krieger CTR complex

UCOP SEISMIC PERFORMANCE RATING (OR "RATING"): V

“BALLPARK” RETROFIT COST (if applicable)

- Minor (<\$50/sf)
- Moderate (~\$50-\$200/sf)
- Major (>\$200/sf)

**SUMMARY TIER 1 SEISMIC EVALUATION STRUCTURAL NON-COMPLIANCES/FINDINGS
SIGNIFICANTLY AFFECTING RATING DETERMINATION**

Significant Structural Deficiencies, Potentially Affecting Seismic Performance Level Designation:

- Lateral System Stress Check (wall shear, column shear or flexure, or brace axial as applicable)
- Lateral System Detailing (reinforcement ratio, confinement, aspect ratio, etc)
- Load Path
- Adjacent Buildings
- Weak Story
- Soft Story
- Geometry (vertical irregularities)
- Torsion
- Mass – Vertical Irregularity
- Cripple Walls
- Wood Sills (bolting)
- Diaphragm Continuity
- Openings at Shear Walls (concrete or masonry)
- Liquefaction
- Slope Failure
- Surface Fault Rupture
- Masonry or Concrete Wall Anchorage at Diaphragm
- URM wall height to thickness ratio
- URM Parapets or Cornices
- URM Chimney
- Heavy Partitions Braced by Ceilings
- Appendages

BRIEF DESCRIPTION OF ANTICIPATED FAILURE MECHANISM

Building light gage modular construction. Drawings do not detail foundations or attachment, so rating has assumed no connection to the foundation which is a common deficiency for buildings of this type. Superstructure relies on moment frame action of light gage tubes and C-shape joists, which does not pass Tier 1 quick checks for moment frame drift. Building would rate V regardless of connection to foundation.

COMMENTS AND RECOMMENDATIONS

Building is unlikely to rate higher than V without retrofit based on light gage construction, so Tier 2 evaluation is not recommended. Connection to foundation should be investigated with more detailed field observations.

POTENTIAL FALLING HAZARDS

- Heavy ceilings, features or ornamentation above large lecture halls, auditoriums, lobbies or other areas where large numbers of people congregate.
- Heavy masonry or stone veneer above exit ways.
- Unbraced masonry parapets, cornices or other ornamentation above exit ways.
- Unrestrained hazardous materials storage.
- Masonry chimneys.
- Unrestrained natural gas-fueled equipment such as water heaters, boilers, emergency generators, etc.
- None of the above.

Appendices

- A. ASCE 41-17 Tier 1 Checklists
- B. Quick Check Calculations