Building: California NanoSystems Institute (CNSI)
Built: 2000
Bridges: Suspended steel

Damage summary:
cable breakage, local buckling, connection failure

Before 2014 earthquake
Building: Parking Structure 8
Built: 1977
LFRS: Reinforced concrete shear walls
Gravity System: Reinforced concrete columns

Before 2015 earthquake
Building: Parking Structure 8  
Built: 1977  
LFRS: Reinforced concrete shear walls  
Gravity System: Reinforced concrete columns  
Retrofit: FRP visible on columns; details unknown. You are aware that many structures on campus were retrofitted in the late 1980’s and 1990’s.

Following 2015 earthquake
Building: Ackerman Student Union
Gravity/LFRS: Unknown
Geology: Surficial geology mapped as Quaternary alluvium and older alluvium by Dibblee and Ehrenspeck (1991)*

Location: Bruin Walk Slope, North of Kerckhoff Hall

Construction: Surrounding buildings were constructed in late 1920’s – 1930’s

Geology: Surficial geology mapped as Quaternary alluvium and older alluvium by Dibblee and Ehrenspeck (1991)*

Building: Kerckhoff Hall
Built: 1929
Building System: Reinforced Concrete and Brick, 6 Stories
LFRS: Base-isolation system installed after 1994 Northridge EQ damage; at the time, oldest base-isolated building in California!

Damage following 2015 EQ


Retrofit plans and photo, Weidlinger Associates, www.wai.com. 33 lead rubber bearings (LRB) and 93 natural rubber bearings (NRB) installed.

Kerckhoff Hall Opening Ceremony, 20 Jan. 1931
photo: alumni.ucla.edu/share/ucla-history
Building: Mathematical Sciences Building
Built: 1957
Gravity/LFRS: Reinforced concrete moment frame visible; not known if shear walls are used in building
Retrofit: Structure was retrofitted between 1992-1994; details unknown

Before 2015 earthquake

Following 2015 earthquake
**Location:** Court of Sciences

**Construction:** Surrounding buildings were constructed in 1950’s-1960’s

**Geology:** Surficial geology mapped as Quaternary alluvium and older alluvium by Dibblee and Ehrenspeck (1991)*; excerpt at right:


Before 2015 earthquake

After the 2015 EQ