

Renaissance Arts Academy Seismic Information

RenArts is located at 2558 N San Fernando Rd. Los Angeles, CA 90065 and consists of two connected buildings as follows:

Building 1 (North) – built in 1956

Building has bearing walls that consist of exterior reinforced brick. The roof framing consists of wood bow trusses and wood purlins and are supported by masonry pilasters/columns. Lateral forces are resisted by the reinforced brick shear walls. Diaphragms consist of diagonal wood sheathing and are flexible relative to the walls. Foundations consist of concrete footings and concrete slab on grade.

Seismic upgrades added during renovation:

1. Added seismic ties for out-of-plane of the existing reinforced brick walls and bracing the walls against lateral movements.
2. Added continuity ties at 4'-0" o.c. along the length of the building (perpendicular to existing wood trusses) for connecting the perimeter walls within the diaphragm.
3. Added 1/2" plywood and corresponding nailing to increase the overall stiffness of the existing diaphragm.
4. Strengthening of the existing bow trusses at bottom chords was performed for added safety and better performance of the trusses.

Building 2 (South) – built in 1965

The structural system of this building consists of exterior concrete walls and precast concrete double tee beams and girders with poured in place concrete topping as roof diaphragm. The gravity load of the roof structure is supported by interior steel reinforced concrete columns and exterior cast in place steel reinforced concrete bearing walls. Lateral seismic loads of the building is carried out by exterior concrete shear walls on all four sides. The new wood framed mezzanine addition complies with current codes, designed with new plywood shear walls and mat foundations. The mezzanine addition was well within 10% of allowable added loads to the overall building as permitted by code.

All plans and completed construction in both buildings were approved by the LA Dept of Building and Safety prior to issuance of E-1 Certificate of Occupancy for full time school use.