

The Church of Jesus Christ of Latter-Day Saints Church History Library



LDS Church History Library
Salt Lake City, Utah
237,000 Square Feet
Completed in 2009

2009 UMC Excellence in Masonry Honor Design Award

2010 ACEC Engineering Excellence Honor Award

*2009
Excellence
in Masonry
Design Awards*

The Church History Library, for The Church of Jesus Christ of Latter-Day Saints, is a 237,000 square foot facility designed to meet the long term needs of the church in the areas of operations, service and collection. This building consists of two main areas with different structural design. The first, a six story concrete structure with 2 levels extending below grade, consists of a one-way slab supported on tapered concrete beams and concrete walls. Lateral forces from wind and earthquakes are resisted by special concrete shearwalls and a 42" thick concrete mat foundation at the base. This portion of the building provides space for the church collections and for the highly specialized mechanical systems serving these collection areas. The second area provides for the service and operational functions, and surrounds the concrete structure on two sides with a five story steel structure designed with concrete slabs on metal deck supported on steel beams and girders. The steel columns are a combination of wide flange and concrete-filled tube steel members bearing on a 24" thick concrete mat foundation. The lateral design for this area incorporates special steel moment frames, steel braced frames and special concrete shearwalls. To help meet the longevity requirements of the owner, this structure is designed with additional earthquake resistance well beyond the minimum code requirements for this type of building.