San Diego Central Library Construction Facts

Location 330 Park Blvd. San Diego, CA 92101

About the
Building497,652 square feet (9 stories
including a 76,000 square foot
charter high school on 2 floors,
2 levels of parking with 250
spaces, an adjacent 350 seat
Auditorium and an outdoor Café)

Architects Rob Wellington Quigley, FAIA and Tucker Sadler & Associates

ConstructionTurner ConstructionManagerat Riskwww.TurnerConstruction.com



Construction Award



The **Central Library won the 2013 "Best in Show"** by the **Decorative Concrete Council**, a specialty council of the **American Society of Concrete Contractors**. An independent panel of industry professionals, who recognize decorative concrete projects around the world, based this award on the project's aesthetics, craftsmanship, functionality, and creativity.

Concrete Facts

43,000 total cubic yards of concrete (enough to pour a 3 foot wide sidewalk from the Library to Disneyland and back)

The 46 foot tall by 70 foot wide exposed structural concrete gravity arch in the main lobby serves as a focal point of the building's interior, and functionally provides stability for the six floors above

- 328 concrete columns. 356 concrete "wallumns"
- 850 miles of steel rebar weighing 12 million pounds is embedded in the columns providing extra strength and flexibility for the weight of the building and books
- The "waffle" decks above are both an aesthetic featue and provide extra structural strength for the building

Facts



About the Dome

At 143 feet in diameter, the Central Library dome is larger in size than the U.S. Capitol (135 ft), comparable to the Pantheon in Rome (142 ft) and the Duomo in Florence (149 ft), and under the size of the St. Peter's Basilica in the Vatican (195 ft).



The sunshades, which cover the sails and provide shade for the glass enclosed Helen Price Reading Room below, are made up of 1,500 perforated aluminum panels weighing 32,000 pounds. The dome, which was a unique engineering marvel, for this project, was constructed from a network of eight steel ribs and eight steel-mesh sails (17 tons each with the tallest 113 feet), tied together by cable and pipe grids.



Domes have long symbolized enlightenment and democracy in our culture. The specific dome design was inspired by buildings in Balboa Park. The dome anchors the nighttime cityscape with a soft and welcoming glow.

Architect Rob Wellington Quigley described the significance of the dome, "This dome stands as an icon, a symbol of the city's commitment to literacy and learning. Like the human spirit nurtured within, the dome is designed to be in the perpetual act of becoming. It doesn't look finished and it never will. It will always be becoming. It is intended to stand as a paradox, grand yet accessible, familiar yet unique, comforting yet provocative. It is permanent yet kinetic and ever changing to the sun and the sky and clouds."





