

Sundial Bridge at Turtle Bay – Facts and Figures

Dimensions:	700 feet long 23 feet wide 217 feet high (pylon)
Weight:	3.2 million pounds (1,600 tons)
Materials:	Steel structure with galvanized steel cables
Deck materials:	Non-skid glass panels in steel framework and granite accents
Foundation:	115 tons of rebar 1,900 cubic yards of concrete
Superstructure:	400 tons of steel 200 tons of glass and granite for the deck
Cables:	4,342 feet of cable, 1¾ inches and 2 5/16 inches diameter
Pylon:	580 tons of steel
Projected Budget:	\$23 million
Funding source:	The McConnell Foundation, Redding Redevelopment Agency, Federal Highway Administration, and Turtle Bay Exploration Park

Project Team

Architect and Engineer:	Santiago Calatrava (Zurich)
Project Manager:	Omni Means (Redding/Roseville, Calif.), Margaret Zech
General Contractor:	Kiewit Pacific Co. (Vancouver, Wash.)
Steel Detailers:	Tensor Engineering
Steel Fabricator:	Universal Structural, Inc (Vancouver, Wash.)
Erection Engineers:	Buckland and Taylor

Concrete

The amount of concrete used in the bridge foundation (1,724 cubic yards) is equivalent to the amount needed to complete foundations for 43 homes.

Weight

At 1,600 tons, the Sundial Bridge weighs more than England's famed London Eye and twice as much as the elevated bridge that links the twin Petronas Towers in Kuala Lumpur.

Cables

The superstructure is made of enough cable to stretch across more than 14 football fields.

Pre-fabrication

Due to the sensitivity of the riparian forest site which forms the transition between the land and Sacramento River environments, steel for the bridge was pre-fabricated at USI, a steel yard in Vancouver, Washington. A total of 18, 40-foot deck sections and 25 truckloads of pylon pieces were transported from Vancouver to Turtle Bay. 14 larger pieces were shipped by barge to Vallejo and then trucked to Redding sometimes taking up the entire freeway. The trucks traveled at night and during the weekends to avoid significant traffic delays. The effort required the coordination of three state Highway Patrol agencies.