

Sydney Opera House, Sydney



Sydney Opera House (1957 - 1973) is a masterpiece of late modern architecture. It is admired internationally and proudly treasured by the people of Australia. It was created by a young architect who understood and recognised the potential provided by the site against the stunning backdrop of Sydney Harbour. Denmark's Jørn Utzon gave Australia a challenging, graceful piece of urban sculpture in patterned tiles, glistening in the sunlight and invitingly aglow at night. Jørn Utzon died in Copenhagen in November 2008 aged 90.

In its short lifetime, Sydney Opera House has earned a reputation as a world-class performing arts centre and become a symbol of both Sydney and the Australian nation.

World Heritage Listed

Sydney Opera House was inscribed in the World Heritage List in June 2007: "Sydney Opera House is a great architectural work of the 20th century. It represents multiple strands of creativity, both in architectural form and structural design, a great urban sculpture carefully set in a remarkable waterscape and a world famous iconic building." • UNESCO

The expert evaluation report to the World Heritage Committee stated: "it stands by itself as one of the indisputable masterpieces of human creativity, not only in the 20th century but in the history of humankind." •

Design/Structure

The distinctive roof comprises sets of interlocking vaulted “shells” set upon a vast terraced platform and surrounded by terrace areas that function as pedestrian concourses. The two main halls are arranged side by side, with their long axes, slightly inclined from each other, generally running north-south. The auditoria face south, away from the harbour with the stages located between the audience and the city. The Forecourt is a vast open space from which people ascend the stairs to the podium. The Monumental Steps, which lead up from the Forecourt to the two main performance venues, are a great ceremonial stairway nearly 100 metres wide.

The vaulted roof shells were designed by Utzon in collaboration with internationally renowned engineers Ove Arup & Partners with the final shape of the shells derived from the surface of a single imagined sphere. Each shell is composed of pre-cast rib segments radiating from a concrete pedestal and rising to a ridge beam. The shells are faced in glazed off-white tiles while the podium is clad in earth-toned, reconstituted granite panels. The glass walls are a special feature of the building, constructed according to the modified design by Utzon’s successor architect, Peter Hall.

History of the Design

The history surrounding the design and construction of the building became as controversial as its design. In 1956 the NSW Government called an open-ended international design competition and appointed an independent jury. The competition brief provided broad specifications to attract the best design talent in the world; it did not specify design parameters or set a cost limit. The main requirement of the competition brief was a design for two performance halls, one for opera and one for symphony concerts. Reputedly rescued from a pile of discarded submissions, Jørn Utzon’s winning entry created great community interest and the NSW Government’s decision to commission Utzon as the sole architect was unexpected, bold and visionary.

Construction

Design and construction were closely intertwined. Utzon’s radical approach to the construction of the building fostered an exceptional collaborative and innovative environment. The design solution and construction of the shell structure took eight years to complete and the development of the special ceramic tiles for the shells took over three years. The project was not helped by the changes to the brief. Construction of the shells was one of the most difficult engineering tasks ever to be attempted. The revolutionary concept demanded equally revolutionary engineering and building techniques. Baulderstone Hornibrook (then Hornibrook Group) constructed the roof shells and the interior structure and fitout. At the behest of the Australian Broadcasting Commission (ABC) the NSW Government changed the proposed larger opera hall into the concert hall because at the time, symphony concerts, managed by the ABC, were more popular and drew larger audiences than opera.

Completion and Opening

Cost overruns contributed to populist criticism and a change of government resulted in 1966 to Utzon’s resignation, street demonstrations and professional controversy. Peter Hall supported by Lionel Todd and David Littlemore in conjunction with the then NSW Government Architect, Ted Farmer completed the glass walls and interiors including adding three previously unplanned venues underneath the Concert Hall on the western side. Opened by Queen Elizabeth II in 1973, new works were undertaken between 1986 and 1988 to the land approach

and Forecourt under the supervision of the then NSW Government Architect, Andrew Andersons, with contributions by Peter Hall.