

Sydney Modern Project: Architecture

Project overview

The Sydney Modern Project is a once-in-a-generation transformation of the 151-year-old Art Gallery of New South Wales in Sydney, Australia, creating an art museum campus comprising two buildings connected by an Art Garden on Gadigal Country overlooking Sydney Harbour.

The centerpiece of the Sydney Modern Project is a new building designed by Pritzker prize-winning architects Kazuyo Sejima + Ryue Nishizawa / SANAA.

Designed as a complementary counterpart to the Art Gallery's revitalised original building with its 19th-century neoclassical facade, SANAA's design for the new building responds to the unique project site with a series of interlocking pavilions that gently step down towards Sydney Harbour. The pavilions sit low and lightly on the site, following the natural topography of the land.

The design delivers much-needed exhibition space while respecting and enhancing public use of the surrounding landscape, retaining and celebrating significant trees and improving access to Sydney's eastern cultural precinct. The new building also comprises art research and education spaces, multipurpose spaces, gallery shop, food and beverage facilities, and visitor amenities.

The new building has been designed to meet the evolving expectations of audiences for a 21st century art museum with greater capacity to accommodate future Art Gallery visitors, particularly students, teachers and artists.

The Art Gallery is the first public art museum in Australia to achieve the highest environmental standard for design. The Sydney Modern Project has been awarded a 6-star Green Star design rating by the Green Building Council of Australia. Classified as 'world leadership' in sustainability, the rating exceeds the Art Gallery's original 5-star goal and sets a new standard for art museums globally.

The Art Gallery expansion opens to the public on 3 December 2022.

Location	<p>The Art Gallery is located in Sydney, New South Wales, Australia. It sits above Sydney Harbour in the Domain, a 34-hectare parkland area on the eastern fringe of the city's Central Business District. Located in one of the world's most beautiful cultural precincts, the Art Gallery is adjacent to the Royal Botanic Garden Sydney.</p> <p>In 1958, construction of a freeway through the Domain separated the Botanic Garden from the Art Gallery. A land bridge (overpass) was built in the late 1990s partly reuniting the two. The Sydney Modern Project transforms the land bridge into an art garden and civic gathering place, connecting the new and existing gallery buildings through landscape.</p> <p>A decommissioned underground World War II naval fuel tank comprises part of the site and has been transformed into a spectacular art space within the new building.</p>
Key milestones	<p>Sydney Modern vision and masterplan launched: 2013 International design competition announced: 2014 SANAA selected as design architect: 2015 NSW Government funding announced: 2017 State Significant Development Application approved: 2018 Construction commenced: November 2019 Sydney Modern Project completed: December 2022</p>
Project funding	<p>Total project cost: AU\$344 million NSW Government funding: AU\$244 million Private donor contributions: AU\$100 million</p>
Project team for new building	<p>Architect: Kazuyo Sejima + Ryue Nishizawa / SANAA, Tokyo, Japan Executive architect: Architectus, Sydney, Australia Builder: Richard Crookes Constructions Delivery authority: Infrastructure NSW Structural engineer: Arup Landscape architects: McGregor Coxall and Gustafson Guthrie Nichol (GGN)</p>
Project specifications	<p>Art Gallery prior to expansion: 23,000 sqm (original building) Art Gallery after expansion: 40,000 sqm (new and original building) Exhibition space prior to expansion: 9000 sqm (original building) Exhibition space after expansion: 16,000 sqm (new and original building)</p>

Architectural features and key facts

New art spaces	<ul style="list-style-type: none"> • Dedicated gallery to showcase Aboriginal and Torres Strait Islander art: 1000 sqm with 5.5-metre-high ceiling with timber floors • Major exhibition gallery: 1300 sqm with 5.5-metre-high ceiling • Contemporary gallery: 1100 sqm column-free space with 5.5-metre-high ceiling • The Tank: 2200 sqm gallery with 7-metre-high ceiling • Project and new media galleries: 465 sqm with 5-metre-high ceiling • Sculpture gallery and atrium: 1000 sqm with double-height arched atrium reaching 11 metres at highest point • Purpose-built learning studio for younger audiences, Media Lab and multipurpose spaces for public programs, performance and lectures • Accessible roof 'art terraces' and courtyards: 3,400 sqm
Facade	<p>The external facade materials are glass for the public spaces and limestone for the art pavilions clad in more than 50,000 pieces of hand-cut and hand-laid limestone bricks.</p>
Rammed earth wall	<p>Cutting a dramatic curve through the building, and traversing two storeys, is a vast rammed earth wall, 250 metres long. Sand from the local Sydney area and the state was compressed to create the solid structure, lending an organic feel to the new building that echoes the original topography of the site and links back to the sandstone facade of the original building.</p>
The Tank	<p>SANAA repurposed an underground decommissioned World War II naval fuel tank on the site to create a spectacular 2200sqm art space at the lowest level of the building. With 7-metre-high ceilings, 125 columns and incredible acoustics, the art space is used for exhibitions and performances.</p>
Glass canopy	<p>Comprised of 108 curved sheets of form-cast glass, the Welcome Plaza canopy leading into the new building provides a sculptural covered space for visitors and the community to gather. Its varied fluctuating ripples echo the waves of the nearby harbour. In-laid with ceramic fritting, it casts shadows on the floor that change with the light of the day.</p>
Gallery Shop	<p>A first-of-its-kind bio-resin installation designed by Akin Atelier and produced from surfboard material fabricated in Sydney forms the luminous opaque walls of the Gallery Shop in the new building. The colour gradation references the striated, layered nature of Sydney basin's sandstone geology. Sintered layers of colour with micro-weighted pigment were hand-poured into custom molds for 109 consecutive days.</p>

Sustainability

The Art Gallery is committed to sustainability and has worked extensively with SANAA and the project team to ensure the design maximises open space across the site, integrating the building with the landscape. Key initiatives include:

- First public art museum in Australia to achieve a 6-star Green Star design rating
- 100% of building's energy needs powered by renewable energy
- More than 10% of energy needs generated by solar panels on the Entrance Pavilion roof
- Rainwater capture and harvesting reused for irrigation and cooling towers
- Approximately 70% of the new gallery is constructed above existing structures – the land bridge built in 1999 and the concrete roof over two decommissioned World War II naval oil tanks built in the early 1940s. Adaptive re-use of the tanks has enabled public access to a significant State asset for the first time.

Landscape and civic spaces

The expansion delivers new open green spaces across the site, including the outdoor public Art Garden and Welcome Plaza linking the new and existing buildings. These publicly accessible external spaces include more than 3400 sqm of accessible roof 'art terraces' and courtyards. The forecourt of the original building has also been expanded with two reflecting pools designed by Kathryn Gustafson as well as additional planting, seating, shade and amenity to create a new civic plaza.

The project will increase biodiversity with 70% more trees on site. Significant landscape design will use endemic ecological planting (Sydney sandstone woodland) and reinstate historic species associated with the 'Governor's Domain', more in keeping with the site's original flora pre-European settlement. More than 8000 sqm of green roof and landscaped areas planted with close to 50,000 Australian native species

Linking the two buildings, the Art Garden includes a major art commission by Wiradjuri and Kamilaroi artist Jonathan Jones titled *bíal gwiwúŋo (the fire is not yet lighted)*, opening mid 2023; Joseph Beuys' work *7000 oaks*, featuring a Moreton Bay fig tree and basalt stone; and the garden terrace, based on a master plan by Kathryn Gustafson.