

Location: Gulf Point Drive,
North Haven, Adelaide, South
Australia

Owners: Gerards

Architect: Tridente Architects
Pty Ltd

Interior Designer: Liz Forsythe
Design + Interiors

Engineer: CC+L Consultants

Builder: Kennett Pty Ltd

Constuction Date: 1996

written by: Susan Ferguson | with: Greg Nolan | design: Peter Walker



Marina Residence

North Haven, Adelaide - South Australia

In 1997, the RAI (South Australian Chapter) Award of Merit was awarded to Tridente Architects Pty Ltd for the design of a seaside residence at North Haven, a short drive west of the city of Adelaide, South Australia.

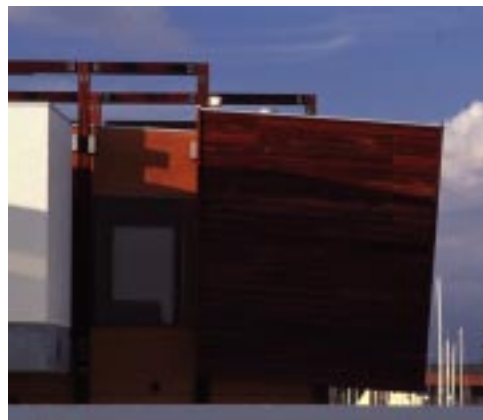
Located on a peninsular enclosing a marina, the residence makes strong references to both the historical context of the site and the history of South Australia, including the store houses and trade wharves of the Murray River. Through these references the building stands as a striking counterpoint to the more recent residential estate development of the locality.

The building is a mix of materials, incorporating masonry with timber and steel structural elements, and blending timber weatherboards with rendered concrete and marine plywood cladding. Facing the marina is a wharf-like frame, which is the most arresting element in the design. This lattice provides the viewer with both a structural reference and a window into the tectonic concerns of the architect.

The richness established by the broad palette of materials is further augmented by the assortment of forms and volumes. These create a dominance over the site in the juxtaposition of axis and plane, while providing a level of visual variety that strikes a chord with the waterfront architecture from which the design draws its inspiration.

above
The rectilinear frame
addressing the marina
photo: courtesy of the
architects

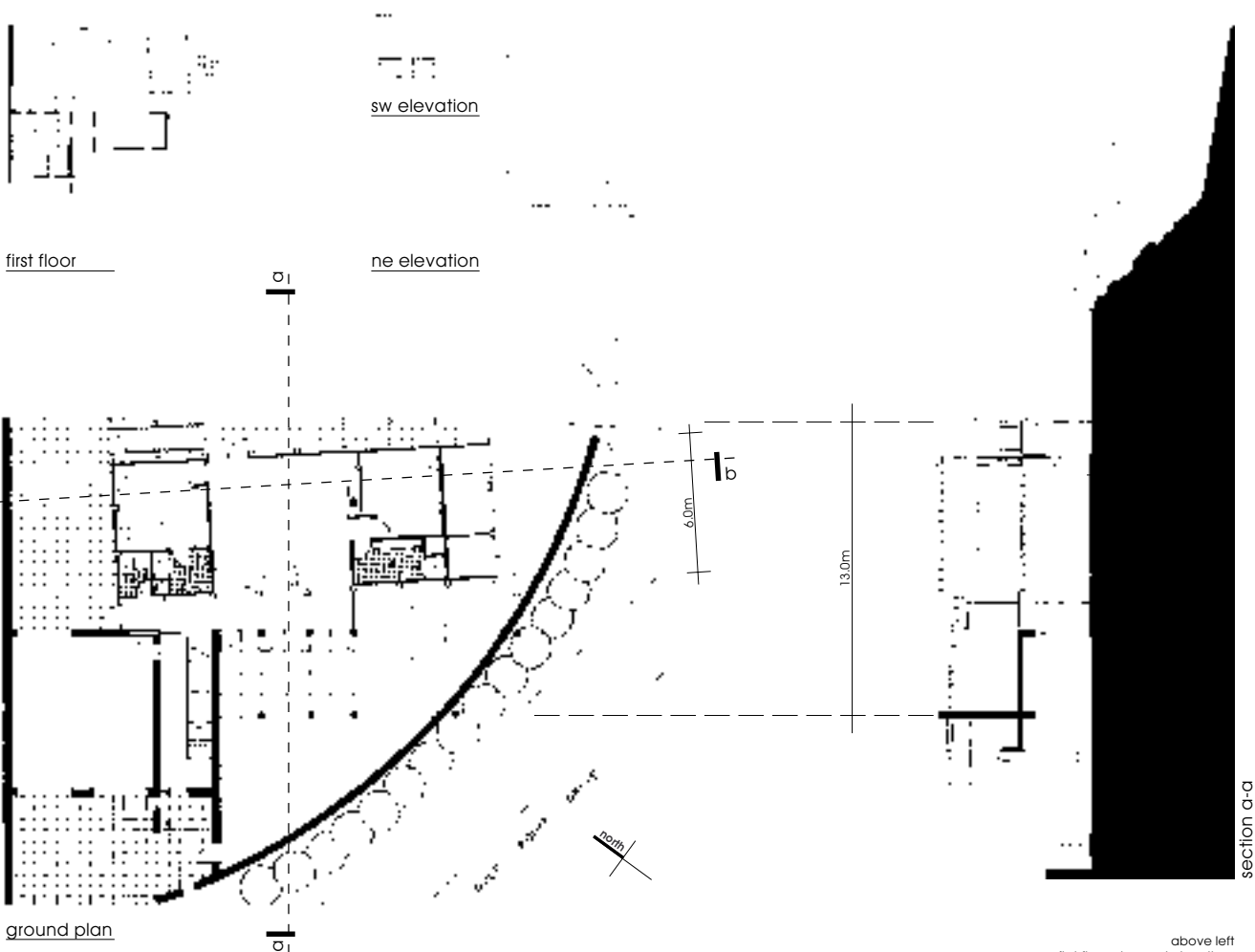
• **Architect's statement** - The design of the Marina Residence evolved through a collaborative process with the clients to establish key criteria, and the exploration of the contextual possibilities of a distinctive site. The house is situated between the harsh environment of the sea and a sheltered marina. The design draws on the past maritime life of the district and the tectonics of maritime and wharf construction.



The building design has a masonry street frontage, breaking down in mass, fenestration and materials toward the marina using the owners' boat as a referent. The southwestern frontage of the Marina Residence addresses the rugged physical conditions of the sea and refers to a solid traditional sea architecture in massing and material treatment. Carefully placed openings in the western volume enable selected views of the surrounding area and framed vistas to the sea. The marina frontage volume combines the simplicity of timber building aesthetic with the complexity of marine technology, and provides a sweeping visual presence (in) the marina environment.

above left
the facade and wall facing the sea
photo: J. Abell

above right
the jarrah weatherboard cladding
of the protruding bathroom
photo: courtesy of the architects



above left
first floor plan and elevations

above right
section a-a

bottom left
ground floor plan
drawings: courtesy of the architects



top left
the upper level deck
photo: J. Abell

• **Structural Description** - The building blends materials and utilises various structural systems to achieve its forms and interest. The structure of the house progresses with elements of its geometry, from masonry with timber framed ceilings and suspended floors to a post and beam timber frame skewed on axis to the brick-work set out. Concurrently, the masonry facade of the street elevation, facing the open ocean, gives way to timber cladding in jarrah and marine grade plywood on the calmer side addressing the marina. This timber elevation is set within the wharf like frame of large Jarrah posts and beams that projects back into the house and supplies the principal support for the floor and roof structure of this north eastern pavilion. The beams are joined with concealed steel plates. Though recessed into the timber, these are arranged to allow water to drain from them and so minimise potential decay. For similar reasons, the top of each of the jarrah posts is fitted with a sheet metal cap.

The timber clad, upper level bathroom highlights the blend of materials used in the facades and construction. Enveloped in selected jarrah weatherboards reminiscent of clinker built boats, the bathroom pushes a jaunty volume to the east supported on a structural steel frame.

The house provides two generous levels of living. The owners occupy the raised level while guests can settle in the ground floor below. Movement between the two levels is articulated by an internal stairwell tucked into the masonry elevation, and via an open stairway that rises amid the exposed timber frame. The treads and risers of the stairway are formed of folded steel plate. A rendered in-situ concrete wall claims the protected courtyard spaces about the entry stairwell.

top right
the jarrah frame set against the diagonal of the stair

middle right
simple proportion and finish on the upper level

bottom right
juxtaposition of frame and clad form
photos: courtesy of the architects





top left
Jarrah frame against ply cladding

top centre
concealed steel plate connections

top right
the base plates lift the timber off the ground
photos: J. Abell

middle left
the sculptured facade to the sea

middle right
stair detail
photos: courtesy of the architects

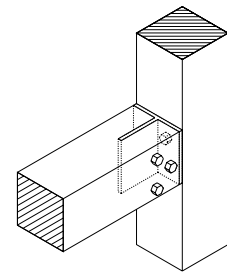
bottom left
section b-b

below
frame joint detail

A strategy for design with timber

•**The use of timber structures as architectural metaphor** - The use of timber structures as architectural metaphor - Post and beam structures, in the Australian context, draw from a number of sources. This country was settled by a seafaring colonial culture, and all of our ports were established for maritime trade. Up until the 1940's, transportation in Australia was dominated by shipping.

The storage buildings established adjacent to our waterways drew from an imported English technology of bridge and store construction that deployed heavy section timber members and bolted connections. With their strength and durability, a number of native species, including Jarrah, were favoured for these structures. Following a strict utilitarian arrangement of vertical and horizontal members, with bracing achieved by infill panel walls or by an external masonry shell, the forms of these maritime buildings have generated a post and beam aesthetic that has acquired an inseparable association with Australian timber building. There is a visual harmonic between the piles and masts of the water front and the posts and beams of these buildings. Tridente deliberately connects to this visual or aesthetic memory in the design of the Marina residence.



Tridente is faithful to vernacular wharf construction in proportion and sizing of members. However, the detailing has developed beyond that employed in these simpler uses. The members in the external frame are raised above the ground and connected with recessed steel plates in a manner that is visually consistent with solid timber construction.

All of the structural and exposed timber in the residence is Jarrah, hand selected by the architects. Jarrah is a durable (**class 2**) hardwood endemic to the southwest corner of Western Australia. Historically it was used for poles, piles and flooring in many maritime storage buildings throughout the country. The Jarrah used in the Marina residence will weather to a warm, rich grey - a colour in keeping with the waterfront buildings that once proliferated. The concealed timber framing is a softwood, Radiata Pine; the primary focus of the South Australian plantation based timber industry.



• references

Pickersgill, S. 1997, 'Foreign Languages', Architecture Australia, vol 86, no 4, pp[40-43.

• glossary

durability class: the natural durability of [particular species] is expressed by rating the timber as one of four classes. These classes are based on field trials of untreated heartwood in the ground and indicate the resistance of the heartwood of the species to fungal and insect (termite) attack. **class 1:** highest natural durability, 25 to 50 years in the ground **class 2:** high natural durability, 15 to 25 years **class 3:** moderate durability, 8 to 15 years **class 4:** low durability, 1 to 8 years; this includes untreated sapwood, irrespective of species.

weatherboard: boards that cover external surfaces and overlap to keep out the rain.

• on the internet

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