



House Vingos

RESIDENTIAL STEEL AWARD WINNER

House Vingos was the winner of the Residential Steel Award for its innovative use of steel, combined with all the other elements of construction. It delivers **a statement piece of architecture** and a warm, welcoming family home.

Project brief

The combined form, shape and materiality of this project are unique. A steel portal frame was used and uniquely exposed in this luxury home, which was an unusual approach. The result was striking as the steel, combined with the other elements and particularly the natural oak timber within the home, delivers a statement piece of architecture but also a wonderful, warm family home.

Steel provides a striking result

The steel portal frame, inclined at 77 degrees, delivers an impressive external form and interesting internal volumes, whilst delivering effective solar control screening on the north side and permitting soft high-level natural light in on the south side. The result is a unique architectural form that enables very effective sun shading on one side; and permits beautiful, soft natural light from the other side.

INTERESTING FACTS:

- The steel portal frame, rotated at 77 degrees, delivers an impressive external form.
- Primary steel portal frame complemented by two secondary steel systems.
- The structural system is a passive solar radiation solution.
- Steel provides a striking architectural statement.
- On-site measurements differed to structural drawings, requiring changes.

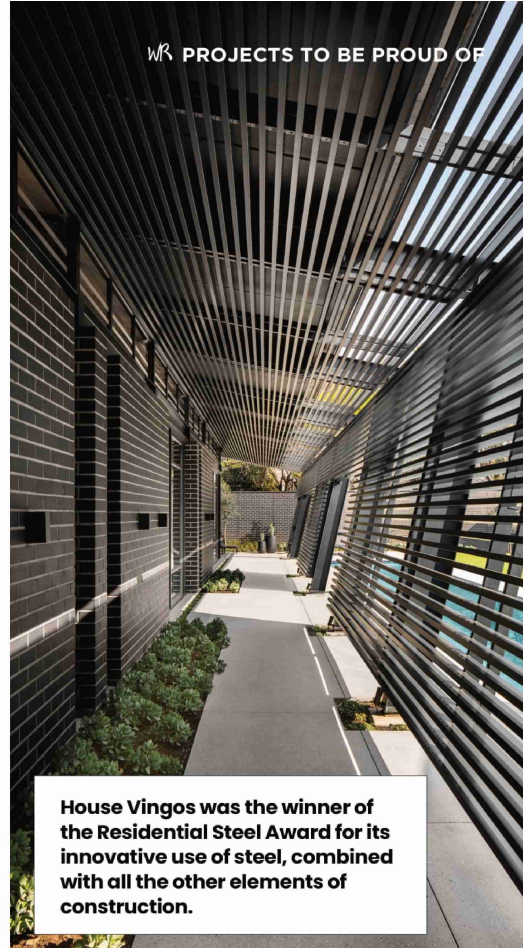
This is a demonstration of creative application and how the structural system can also result in a very successful passive solar radiation solution and striking architectural statement.

Benefits of steel in this application

Steel was primarily chosen for its low-maintenance properties, but also for its ability to deliver a crisp, powerful and sculptural architectural statement.

On-site measurements of the walls and slabs revealed differences from the structural drawings, which required adjustments to be made to the steel during detailing, workshop fabrication and on-site assembly.

Drew Architects had the vision for a steel portal frame structure to define the primary shape and form of the architectural response. This primary steel



portal frame is then complemented by two secondary steel systems – one to carry the steel sheeting and one to carry the aluminium slats.

Project team

- Viva Engineering
- SAFINTRA South Africa
- SAFAL Steel
- Industrial Painting Services
- Drew Architects

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