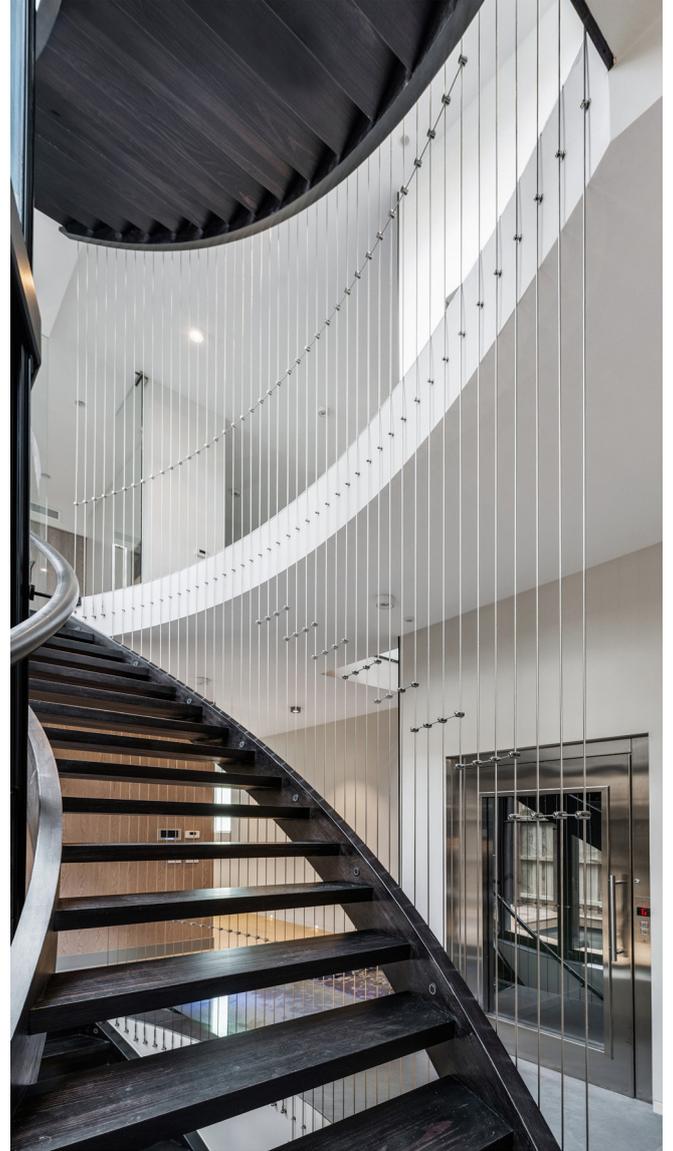


4 Story Vertical Wire Balustrade

Melbourne based balustrade builder Bayside Balustrades and stair builder Fairmont Stairs have delivered an amazing 4 story custom-made staircase for Oakley Property Groups.

The staircase project was part of a full property renovation by Oakley Property Groups conducted for the Hancock family at their home in the beautiful Melbourne suburb of Albert Park.



CLIENTS VISION

The Hancock family originally had a vision of a floor to ceiling curved glass balustrade however felt it would inhibit air flow. They also like the idea of long vertical lines, and a modern minimalist feature so opted for a vertical wire balustrade spanning floor to ceiling through multiple floors. To achieve this vision they contracted Harry Nickou from specialist balustrade builder Bayside Balustrades. Harry explained "This was a custom project requiring a lot of attention to detail. The ceiling did not have any structural beams above the stair area to fix into so we opted to fix into a steel handrail system on the top floor."

The client wanted an aesthetically stunning finish whilst also ensuring the staircase and balustrade met all safety regulations. "To achieve the adequate tensioning on the wire to meet the engineers requirements we used tensioner systems at both termination points of the wire" Harry said. Due to the continuous level change of the stair treads, each individual vertical wire strand was measured, cut and swaged onsite.

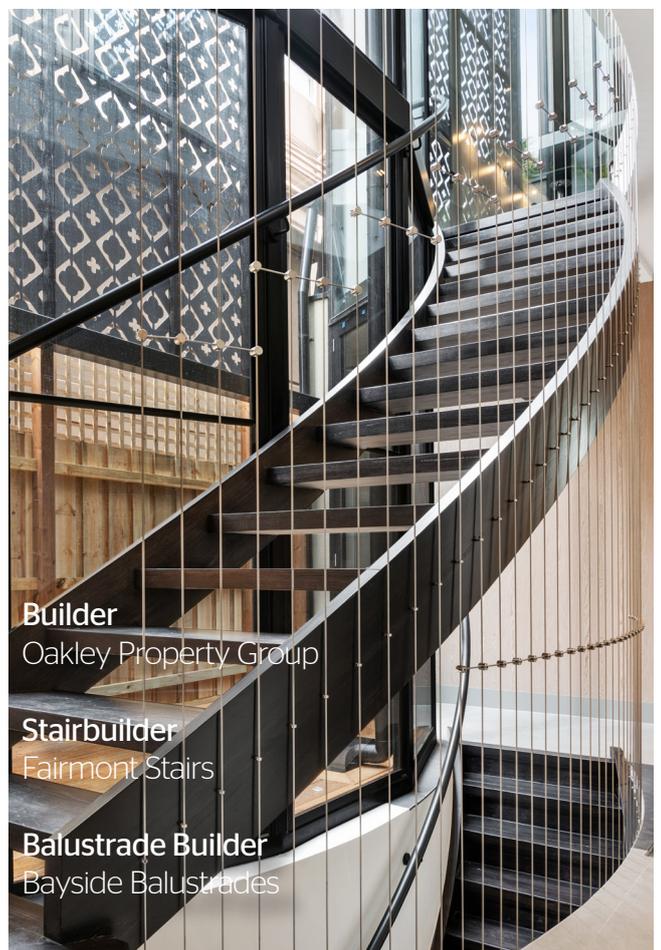


METICULOUS DESIGN

The design required each individual wire section to be one continuous piece, with some sections stretching up to 11.5 metres in height. Bayside Balustrades used 2 methods to maintain the tension and prevent spreading of the wire strands. Utilising the middle floor landings and the staircase stringer, they installed Screw Eyes and fed the wire strands through the eyelet. This restricted the wires from moving.

Secondly, they installed Net Clips onto vertical wires and fed a second wire horizontally. Tightening the Net Clips provided a sturdy brace, giving adequate tensions to the wires to meet regulation requirements. For the stair section the net clip braces were staggered to match the riser height. On the flat landing sections of the balustrade the Net Clip horizontal sections were installed at handrail height, giving the illusion of a fine wire handrail system.

At the top of the staircase the wires were fitted to custom-made square handrail with drilled and tapped threads into the underside which the wire and ProRig Swage Studs were screwed into. The wires at the bottom finished into Screw Eyes with Hex Head Tensions.



Builder
Oakley Property Group

Stairbuilder
Fairmont Stairs

Balustrade Builder
Bayside Balustrades