

Residential

Minimalist Spiral Staircase

The architect, requested a spiral stair “with only handrail and treads but nothing unnecessary” – like supporting structure.

We were able to create a spiral tension truss using the balusters and tread edges as shear members acting with two thin pre-stressed spiral cables. The architect used similar spiral cables to fill the balustrade so that it appears as though there is no structure – apparently fulfilling the impossible requirements of the brief.

The stair winds around one of the main un-wrought posts of the frame of this modern innovative eco-friendly house near Melbourne, Australia.

The result is a truly minimalist and clean stair.

We developed several special details and methods for connecting and tensioning the prestressed cables. We believe this is a world first for this type of structure.

