Project description
The 100 year old Usher Hall was renovated and extended to provide improved visitor facilities, including a curved foyer and refreshment area on the side of the circular building.

Our role
The curved extension meant the supporting walls were also curved, resulting in some critical tolerances. The chosen solution was to use architectural precast beams, with precast roof planks and an in situ topping. The support of these beams had to satisfy an architectural requirement of ‘no visible supports’. To achieve this, TSS 101 telescopic connectors were cast into the ends of the beams. The size of the TSS 101 connectors meant they could be fitted (on edge) within the slender precast elements (see photo below).

Outcome
No corbels or any other supports were needed, resulting in a roof structure which appears to be floating on air. The deployment of TSS connectors into receiving recesses in the walls allowed adequate tolerance for the curved layout. Given that TSS connectors are conventionally used for staircase construction, this was an early example of using telescopic connectors for unusual applications, to dramatic effect.

Footnote
At the time of this project, Invisible Connections’ products were supplied via J&P Building Systems Ltd. In 2014, Invisible Connections Ltd was formed to create specific focus on the telescopic connectors range.