

A brief history of Stahlton

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The first Stahlton job appears to be a fire station in New Plymouth that was sold to E J Collins for £2,726, engineered by Boon Bros. Ltd, awarded to Stahlton on 30 January, 1963.



Stahlton was a prestressed flooring system using fired clay components and was first manufactured under license from Switzerland. Stahl is German for steel and Ton is part of the German word for clay.

It was introduced into New Zealand by Amalgamated Brick & Pipe (later to become Ceramco) as a means of utilizing excess capacity in their brick kilns.

The prestressed ribs were originally formed by placing a series of 12 inch by 6 inch (300 mm by 150 mm) fired clay tiles along a prestressing bed, and running prestressing wires along grooves in the clay tiles. The prestressing wires were tensioned and grouted into the tiles. After the grout had developed sufficient strength to hold the tension in the wires, the wires were destressed and the ribs cut to length.

The prestressed ribs formed with the clay tiles were placed on temporary props and spanning between beams or supporting walls. Hollow fired clay infill blocks placed between the ribs to form the floor thickness appropriate for the spans and loads. An in situ concrete topping was placed to complete the floor. As brick sales placed more demands on kiln capacity, fired clay floor components were phased out and concrete took over for both the prestressed ribs and the infill blocks.

Stahlton won the Christchurch Teachers Training College job, and when they were let down by their concrete block supplier, they introduced treated timber infills on that job. Use of timber for infills met a lot of resistance at the time but eventually took over completely from concrete and fired clay infills.



1963-1976



1976-1988



1988-now

Development of double tee moulds that could be stressed against, and had parallel sided webs with adjustable bottoms to enable a range of sizes to be produced from the one mould were developed in house when no suitable equivalent could be found overseas. This system gave Stahlton a significant competitive advantage in supply of tees.

The product range was expanded to include bridge beams but demand for these was intermittent.

The original Stahlton production facility was located in Rankin Ave New Lynn on what was an old clay mine used for brick production that had later been turned into a tip site. This created problems with substantial and uneven settlement of the ground under the long prestressing beds.

The design and administration offices were located in Veronica Street New Lynn opposite Lynn mall and later moved to new premises in Veronica Street West now occupied by an accountancy firm.

Stahlton preferred the licensed manufacturer approach rather than trying to cover New Zealand with their own plants thus avoiding the associated management and control problems. The first licensed manufacturer was Rosebank Daveys in Balclutha to supply the Dunedin Hospital in the early 70's. This plant was later purchased by Fulton Hogan beginning a long and satisfactory association between Fulton Hogan and Stahlton.

Stahlton was also produced in Upper Hutt, Ashburton, Balclutha and Papua New Guinea.

The weight of the precast concrete components made transport over long distances costly, but Stahlton managed to supply throughout New Zealand and to a number of Pacific Islands. Stahlton components were even placed by helicopter to buildings on Mt Ruapehu.

In the late 1980's a major recession caused collapse of the construction industry. The number of prestressed concrete floor suppliers in Auckland fell from 5 to only 2, yet despite the reduction in competition, Stahlton was unable to maintain 10% of its previous turnover. The total demand for the whole of New Zealand could have been met by just the one New Lynn plant, but there were numerous others also competing for that remaining market.

In the early 1990's, with no construction upturn in sight, Ceramco closed the Stahlton operation and commenced to sell off the New Lynn land on which the production unit was located.

When Stahlton was terminated by Ceramco, Rod Fulford and Ian Pye continued to supply design and technical services to the licensed manufacturers, and maintained a small supply operation into the Auckland market by obtaining product from whatever plant would supply them.

In 1995 Rod Fulford and Gordon McNab established a new operation on the present Ranui site and various moulds and stressing beds were transferred from New Lynn. There were 3 hollowcore plants in the Wellington area and only one in Auckland. Gordon McNab was a major shareholder of one in Wellington and the Hollowcore machine from that plant was relocated to Ranui.

The Ranui operation was effectively owned 50% by Gordon McNab and 50% by Rod Fulford. Gordon managed the relocation of plant and equipment and establishing the new production facility and then took on the role of operations manager. Rod contributed planning, design and engineering to the reestablishment, and then took on responsibility for general management, engineering, admin etc.

Stahlton always had a very stable and loyal workforce, and when the new plant opened in Ranui, a number of former employees joined the new operation despite the gap of 4 or so years. That skill base contributed to the relatively seamless buildup of the new facility.

By 2000, the operation was running very successfully and profitably. The market had picked up significantly and was expected to grow further. Civil engineering infrastructure was going to become more important and further expansion was going to be required. With both Rod Fulford and Gordon McNab approaching retirement age, and seeing the need for considerable further investment, the operation was sold to Fulton Hogan who took over in January 2001.

Rod Fulford made himself available for a further period to help as needed and continues today giving back to the wider precast concrete industry his vast experience and technical knowledge in the role of Executive Director of Precast New Zealand Incorporated.

Fulton Hogan Limited saw significant growth right across its roading and infrastructure business as well as in the precast concrete market, investing heavily in expanding the Ranui factory with large capacity gantry cranes, bridge beam stressing beds and latest technology slip forming Hollowcore machinery. **Stahlton Prestressed Concrete** complimented Fulton Hogan's activities in the Civil Construction market in Auckland supplying larger Super tee and Hollowcore bridge beams. In March 2007 Fulton Hogan purchased Precast Components Ltd in Otaki and Hamilton and in July of the same year acquired 5 Stresscrete plants from Fletcher Concrete & Infrastructure Ltd in Tauranga, New Plymouth, Bulls, Christchurch and Cromwell. A rebranded **Stahlton Engineered Concrete**, incorporating Dunedin and Balclutha factories, now operated 10 factories nationwide positioning itself as the largest precast concrete producer in New Zealand.

Market tightening and rationalization within Fulton Hogan between 2011 to 2013 resulted in closing Dunedin, Tauranga and Bulls factories, the sale of Balclutha, Cromwell, New Plymouth and Hamilton factories to our present 3 factory **Stahlton** business in Auckland, Otaki (Transpower Octagonal Poles only) and Christchurch.

In its 52 years of existence, **Stahlton** has continued to be one of the leading suppliers of flooring components throughout New Zealand, proud of our biggest asset, **our people**, who are passionate to the precast concrete industry, doing our best to offer our customers the best service we can, vast experience and solution focused technical knowledge.