

Project:
Eureka Tower,
Melbourne



500PLUS REBAR solutions in the World's tallest apartment block



REBAR SOLUTIONS

OneSteel Reinforcing works closely with customers to provide them with opportunities to save time, effort and money across many aspects of reinforced concrete design and construction. For Eureka Tower, this meant working in conjunction with Grocon to develop Reinforcing Solutions including 500PLUS PREFAB reinforcing cages for pier cages, pad footings and double storey columns, and 500PLUS REIDBAR continuously threaded rebar for many construction connections including core to slab & service penetrations.



© 500PLUS PREFAB & 500PLUS REIDBAR are Registered Trade Marks used by OneSteel.



Melbourne's 88-storey Eureka Tower at Southgate is the tallest residential building in the world.

At 300m tall – the same height as the Eiffel Tower – the building provides more than 500 luxury residential apartments.

Eureka Tower is double the size of its Southgate neighbour, the IBM Tower, and 58 metres higher than Melbourne's tallest building, Rialto in Collins Street.



The Eureka Tower design, by architects Nonda Katsalidis and Karl Fender, creates the maximum amount of usable floorspace and sees the building change floorplan several times as it rises, before the façade gently slopes back to the top of the tower.

With the site offering little spare space, and Grocon working to a tight construction schedule, Eureka Tower was

REINFORCING SOLUTIONS

Project:

Eureka Tower,
Melbourne



500PLUS REIDBAR

500PLUS REIDBAR is a continuously threaded, steel reinforcing bar and coupler system, which can be cut and joined at any point, greatly improving steelfixing flexibility.

The rugged threads are resistant to damage and permit rapid coupling on site.

500PLUS REIDBAR is available in most rebar diameters: 12, 16, 20, 25 & 32mm, with an extensive range of couplers and construction accessories such as nuts, threaded inserts, foot plates, grout sleeves and nailing plates, enabling the 500PLUS REIDBAR system to be used in a wide variety of applications.

500 PLUS[®]
REIDBAR

REINFORCING SOLUTIONS

an ideal project to take advantage of OneSteel Reinforcing's 500PLUS PREFAB Construction Solution.

OneSteel Reinforcing prefabricated thousands of tonnes of steel reinforcement assemblies for Eureka Tower including 100s of pier cages, pad footings and double-storey column cages.

Key to the structural efficiency of the tower are two very large blade columns, which rise from the basement level of the site to the lower level and carry the loads from the superstructure above.

Located diametrically opposite each other on both sides of the tower, the blade columns measure about 5.6m by 2m at the base and are 9 metres high. The very

heavily reinforced steel reinforcement assemblies for these columns, were also prefabricated in sections and assembled on site.

OneSteel Reinforcing's Christian Pyndiah, said the columns were among the largest and most complex reinforcement assemblies the company had prefabricated to date.

"Prefab really comes into its own on confined sites such as Eureka Tower, where it greatly reduces congestion, and frees up space and resources on site for the other trades," said Mr Pyndiah.

"Something different on this project that we looked at from a prefab point of view was possibly prefabricating modules of





reinforcing for the core walls, which are very heavily reinforced throughout the lower levels of the structure.”

In addition to its 500PLUS PREFAB Construction Solution, OneSteel Reinforcing also supplied large quantities of its continuously-threaded 500PLUS REIDBAR coupling system.

500PLUS REIDBAR was used in a number of areas of the project including providing provision for continuity reinforcement at all slab penetrations, core wall to floor connections and at many of the construction joints throughout the tower and lower level structures.

Alfio, the Eureka Tower Site Foreman, had more than 30 years experience in the building industry, but this was his first major project utilising prefabrication.

Alfio admitted to having been initially skeptical about the concept, but that he was now “very convinced of the benefits.”

“OneSteel Reinforcing did a great job up in staying ahead of our requirements, and the prefab reo really helped us to get the structure out of the ground quicker than we would have been able to using conventional steelfixing,” said Alfio.

“Having OneSteel Reinforcing take the responsibility of making and delivering all of the key reinforcing we need, when we need it, has really made programming and



Project:

Eureka Tower,
Melbourne



REINFORCING SOLUTIONS

CONTACTS

New South Wales
Tel: 02 9794 1000
Fax: 02 9772 1689

Western Australia
Tel: 08 6332 3111
Fax: 08 6332 3149

Victoria
Tel: 03 9207 2200
Fax: 03 9207 2270

Northern Territory
Tel: 08 8947 0330
Fax: 08 8947 0358

Queensland
Tel: 07 3845 5655
Fax: 07 3845 5697

Tasmania
Tel: 03 6273 0300
Fax: 03 6273 0315

South Australia
Tel: 08 8349 8666
Fax: 08 8349 7555

ACT
Tel: 02 6260 1244
Fax: 02 6260 1286

www.reinforcing.com



© 500PLUS PREFAB & 500PLUS REIDBAR
are Registered Trade Marks used by OneSteel.

planning a lot easier. And anything that makes life easier on a project of this scale has got to be worth it," he said.

Heading up OneSteel Reinforcing's operations at Eureka Tower was scheduler Roberto Garcia.

"This was a very exciting, but also very demanding project to work on," said Mr Garcia.

"We often had less than 24 hours notice to process large volumes of cut and bent loose bars because the entire design process was still being fast-tracked.

"This meant we needed to stay on the ball the whole time so that we could keep work progressing as smoothly as possible on site. Our computerised reinforcement scheduling system certainly added a lot of value on a project like this as it enabled

us to begin production just minutes after the data had been emailed to our manufacturing facility."

Eureka Tower was a joint venture between Grocon, Melbourne investor Tab Fried and architect Nonda Katsalidis.

The project set a new benchmark in residential apartment sales when more than \$200 million worth of apartments sold in their first month on the market.

Grocon Director Daniel Grollo said buyers were attracted to the tower's unique style and location at Southgate.

"It is not like any other building in the world," Mr Grollo said, "and I think it is going to be very difficult to get a permit for this height again."



Roberto Garcia