

REINFORCING UPDATE

onesteel
reinforcing

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Project: Baiada Chicken Sheds
Location: Darlington Point, near Griffith NSW
Product: ONEMESH® MADE-TO-SIZE



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ONEMESH® Made-to-Size: The economical advantage for Baiada poultry shed slabs

To accommodate the expansion plans of Australian poultry giant Baiada, Yoogali Concrete Constructions has completed the first two of four chicken shed concrete slabs using a special-size mesh from OneSteel Reinforcing.

OneSteel Reinforcing manufactured the 9 m x 3 m SL72 ONEMESH® at Revesby in Sydney's west on its new state-of-the-art ATT mesh machine, which is a considerable size increase from the standard 6 m x 2.4 m ONEMESH®, and gives considerable savings in cutting and waste material, and a more sustainable outcome.

"This is the first time I know of mesh being manufactured to this size," said Ivano Donadel, Director and Partner of family owned company, Yoogali Concrete Constructions.

"Initially we were cautious of the large size of the sheets. However, almost immediately after we started installation we saw time and labour savings. It's proved to be invaluable and saved six hours per shed, which is substantial."

Located at Darlington Point, approximately 50 km south of Griffith, NSW, each shed is 150 m long and 14.5 m wide. Standard ONEMESH® provides coverage of approximately 12.5 square metres when lapped. With the larger 9 m x 3 m sheets, square metre coverage is almost doubled.

"Five sheets fit the width of the shed exactly," said Ivano. "Each sheet has a 100 mm lap with the fifth sheet having a 300 mm lap.

This meant there was a lot less cutting and a lot less waste."

The 160 sheets of special-size ONEMESH®, which was developed specifically for the project, were delivered directly to site.

"OneSteel Reinforcing supplied all the accessories for the project including bar chairs, polythene plastic, tie wire, key joints, dowels and joining tape," Ivano said.

"With a site that's out of town, it was important for productivity that everything was delivered as a complete package.

If something's missing you just can't drive to the branch and pick it up, so the whole project stops and you have 10 guys on site not doing anything.

"We're working to a tight time frame. We have completion dates that have to be met.

The 9 m x 3 m ONEMESH® significantly adds to efficiency. It's a great innovation for large slab projects," said Ivano.

Ivano says that OneSteel Reinforcing's ability to customise mesh sizes for a specific project, manufacture it on a short lead time and deliver it to site is a great advantage not available from other reinforcing steel suppliers.

"On large slabs like these, having the option of the 9 m x 3 m ONEMESH® from OneSteel Reinforcing is absolutely brilliant. I'd have no hesitation ordering it again," Ivano said enthusiastically.

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NEW! ECO-REO™ range of sustainable reinforcing products that make economical sense

OneSteel Reinforcing can now offer builders and construction companies a range of REBAR, REOMESH® and Decking products that can provide a more sustainable use of materials in structures.

These carry the additional branding of ECO-REO™, ECO-BAR™ or ECO-MESH™ as they feature more economic and environmental benefits compared to traditional reinforcing steels.



- * **ECONOMICAL** - The products can give more cost-efficient cover and economy in the number of sheets or bars, or the volume of steel needed to efficiently reinforce the structure and meet the design intent of the project.
- * **ENVIRONMENTAL** - OneSteel's manufacturing of reinforcing steel utilises energy reducing Polymer Injection Technology (PIT).

* Supporting information for specific OneSteel Reinforcing ECO-REO™ products is available at www.reinforcing.com in the 'Technical Resources' section.

ECO-BAR™ products include:

- **500PLUS® BAMTEC®** - Engineered reinforcing bar carpets can allow the size and positioning of reinforcing steel to be optimised with variable diameters and spacings.
- **500PLUS® PREFAB** - Prefabricated reinforcement is a more efficient process that can be designed to generate less waste and scrap on site.

ECO-MESH™ products include:

- **ONEMESH® MADE-TO-SIZE and UTEMESH®**

Customised special run ONEMESH® can minimise duplication of reinforcing steel and scrap losses that result from excess lapping and trimming of mesh sheets.

Engineered and tailored mesh solutions can include variable wire spacing and wire diameters and ductilities, and optimised mesh size (length and width).

Examples are the new UTEMESH® and the extra large (up to 9 m x 3m) ONEMESH® MADE-TO-SIZE sheets which give more cost-efficient cover and economy in the number of sheets used on projects.

ECO-REO™ products include:

- **TRUSSDEK®** - Like reinforcing bar carpets and special meshes, TRUSSDEK® panels can reduce lapping and steel intensity and also serves as a permanent formwork system, thereby eliminating other formwork and the need for backpropping.

Spacing between TRUSSDEK® panels can be optimised to reduce material, and concrete savings due to voiding of TRUSSDEK® panels can be significant.

The volume of the steel reinforcing bars or mesh in a TRUSSDEK® slab can be up to 60% of that used in a conventional one-way reinforced-concrete slab.

TRUSSDEK® panels can span up to 8.5 metres, which in steel-framed buildings can potentially lead to the complete elimination of the secondary steel beams.

> Click here for the full ECO-REO™ brochure

What OneSteel Reinforcing can offer you:

- When you talk to us in the early stages of your project, we can suggest ways of designing the reinforcing such as spacing and diameters to optimise material use
- This can improve the sustainability credentials of the project contributing to the awarding of Green Star® steel credit points where appropriate as well as potentially reducing the costs of reinforcing steel in the project
- OneSteel Reinforcing can move product off site and into prefabrication, which fulfils the intent to reduce waste on site, and provides the opportunity for dematerialisation and potentially speed up construction
- OneSteel Reinforcing is keen to assist customers in making progress towards adopting more sustainable building and construction practices.

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