

## **Case Study**

Products: LYSAGHT ROOFING SUPAPURLINS® and LYSAGHT KLIP-LOK 700 HI-STRENGTH®
Project: Warehouse, Interchange Park,

Customers: Whitehorse Constructions,
Direct Metal Roofing



## Roll-to-roof option overcomes site challenges



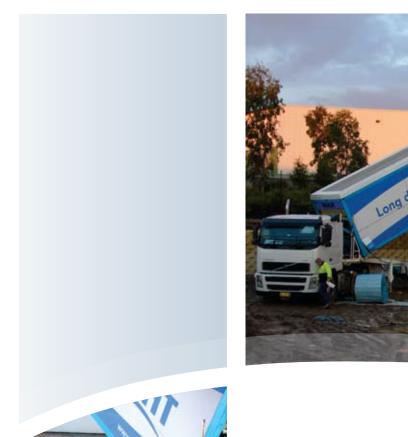
Supply of roofing for a warehouse in one of Sydney's newest and largest industrial estates has demonstrated the versatility of BlueScope Lysaght's mobile roll forming service.

The LYSAGHT® mobile roll forming mill produced 30,000 square metres of KLIP-LOK 700 HI-STRENGTH® concealed fix cladding on a site where conditions were among the most challenging it has overcome.

Builder Whitehorse Constructions is busy on a number of design and construct projects at the massive Interchange Park development in Sydney's west in which its parent, the Paclib Group, is a joint venture partner.

"Because of the very large size of this warehouse we needed a roofing profile which would provide excellent water carrying capacity," Whitehorse Project Manager, Damon Malek, said.







"Our client also required a warehouse facility which could provide a very wide range of leasing options, including the possibility of a 50:50 or 70:30 interior split to cater for multiple tenants.

"Those considerations had an impact on the location of roof fans, which in some instances would have been more than 30 metres from the ridge."

Roofing contractor, Direct Metal Roofing suggested KLIP-LOK 700 HI-STRENGTH® cladding delivered directly to the roof structure by the LYSAGHT® mobile roll forming mill as a solution to the challenges.

The potential efficiencies of the roof cladding were enhanced by the use of LYSAGHT® SUPAPURLINS, engineered to make full use of the spanning capacity of KLIP-LOK 700 HI-STRENGTH®cladding.

Even with a step on either side of the 185.2 metre wide building's ridge, the task was clearly beyond the length of factory produced roofing capable of being trucked to the site.

"LYSAGHT® mobile roll forming was the best solution and probably the only practical one," Direct Metal Roofing's Greg Oliver said. "We have worked on other projects where BlueScope Lysaght has provided that service and the results were excellent.

"Because of the building design and despite the site conditions it was possible for their operators to output the 0.48mm bmt sheets directly to the roof frame, even with an eave height of 9.4 metres.

"Heavy rain in the week before the roofing installation made site conditions difficult, so it would not have been possible to operate a crane large enough to position the cladding on the roof frame."

The LYSAGHT® mobile roll forming crew was able to reposition its equipment around the building frame as the work proceeded in stages.

The flexibility of the roll forming rig enabled the process to cope with access conditions which varied from extremely tight to unrestricted.



Greg Oliver, Direct Metal Roofing





A unique sled arrangement allowed the tails of the 47.3 metre ridge-to-step sheets to be linked to the heads of the step-to-gutter sheets, simplifying the installatiion process.

Direct Metal Roofing supplied a crew of ten to carry out the cladding, often using eight men to position and fix each of the extra-long sheets of KLIP-LOK 700 HI-STRENGTH® in the COLORBOND® steel colour Shale Grey®.

"The weather and the configuration of the building made it a challenging job for our team, but they have worked with BlueScope Lysaght's operators before and there were no issues which couldn't be overcome," Greg Oliver said.

"With KLIP-LOK 700 HI-STRENGTH® you get a wide cover which helps the job go as quickly as possible. The long lengths produced by the mobile roll forming mill just multiply that effect."

The BlueScope Lysaght mobile roll forming unit is built on a structural cage to eliminate roller distortion and the need for time-intensive adjustments. This means that product quality and tolerances are far superior to the results from a basic roll former without a structural cage.



Damon Malek, Whitehorse Project Manager







