

PROJECT REVIEWS

Volume 17 | No 2

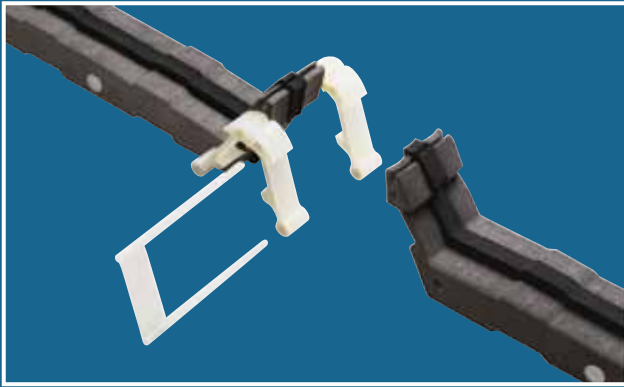
# Solutions in Steel®

SPECIAL EDITION

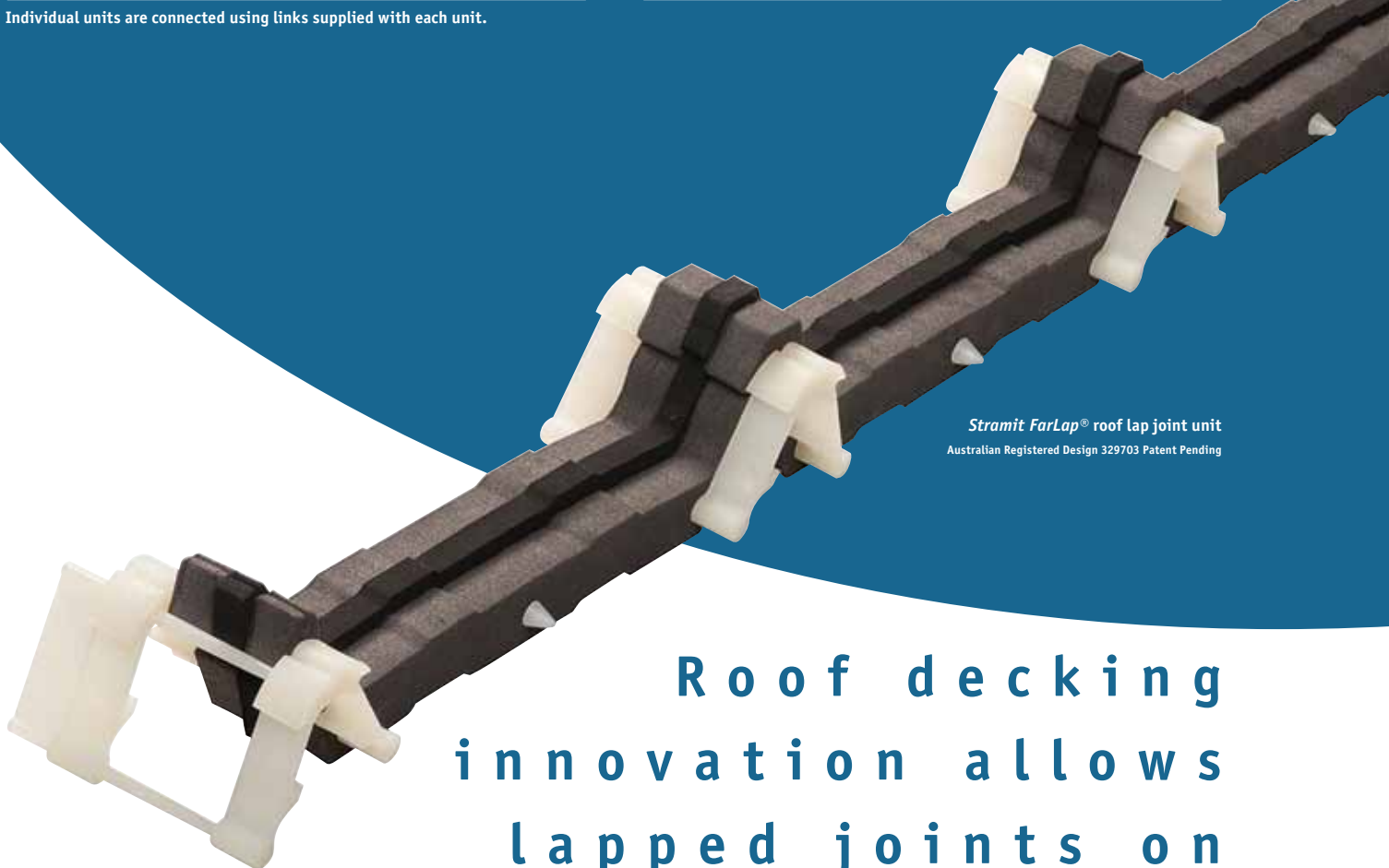
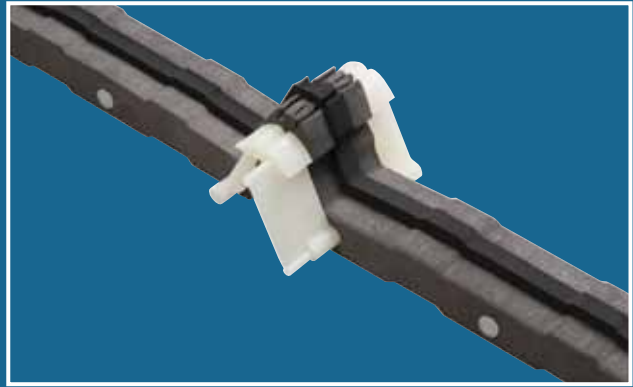
STRAMIT FARLAP®

ROOF LAP JOINT SYSTEM





Individual units are connected using links supplied with each unit.



*Stramit FarLap*® roof lap joint unit  
Australian Registered Design 329703 Patent Pending

## R o o f d e c k i n g i n n o v a t i o n a l l o w s l a p p e d j o i n t s o n l o n g r u n s

Stramit's innovative system for connecting steel decking is proving a winner with roofers.

The revolutionary *Stramit FarLap*® roof lap joint system simplifies the way long runs of roof decking are installed.

It allows long decking runs to be broken into shorter sheets that can be lapped, without the need for conventional stepped joints.

The *Stramit FarLap*® system provides a combination of a strong joint and a weather-resisting seal between lapped sheets of *Stramit Speed Deck Ultra*® concealed fixed decking.

Builders can now lay very long roofs using shorter sheets, without the need for structural modifications or on-site roll forming. There is

no need to design lapped joints, and no need for the steel detailer to "step" the cleats and provide additional purlins along the roof run.

Shorter sheet lengths mean lower transport costs, smaller cranes, safer work practices, smaller crews and less thermal expansion and contraction.

The *Stramit FarLap*® joint does not compromise the integrity of the roofing structure, and does not affect the roofing warranty.

(Roof penetrations, e.g., for air conditioning, should be installed one purlin span from the *FarLap*® joint.)

### Quick, easy installation

The system is simply installed by snapping on to the ribs of the bottom sheet, above a supporting purlin. The top, overlapping sheet is then pushed on to the connectors, providing a structural connection.

When the lower sheets are installed, the ends are turned up using a special turnup-turndown tool. The ends of the top sheets are turned down, stiffening the sheet ends and ensuring the free flow of rainwater.

Individual FarLap® units are connected into longer lengths using the two-pronged links supplied with each unit. Units can be linked together before or after installation.

The result is a very tidy installation. The concealed nylon connectors hold both sheets securely together, while the foam seal takes up the shape of the sheet profile, providing a water-resisting joint. The multiple foam layers allow for tolerances in both manufacture and laying.

### Warranties

Stramit Speed Deck Ultra® roofs, using the Stramit FarLap® roof lap joint system and insulated with foil-backed fibreglass blanket, retain all normal warranties.

### Fully tested

Testing for strength and weather resistance was carried out by independent testing authorities and at the Stramit Research & Development laboratory. Testing was also carried out to investigate the effect of longitudinal sheet movement caused by thermal expansion.



### Strength:

Tested to a simulated wind speed in excess of 200 km/h without failure.

### Weather Resistance:

A simulated rain/wind test (wind speed 58 km/h and water flow delivering 10 L/min run-off) resulted in no water penetration to the internal roof space, even with a slope of 1.5 degrees.

# Warehouse cashes in on fast roofing solution



*Project*  
Metcash NSW Distribution  
Centre Eastern Creek, NSW

*Builder*  
Hansen Yuncken

*Roofing Contractor*  
Ideal Metal Roofing

*Roofing Contractor*  
Speed Deck Ultra® Concealed  
Fixed Decking  
FarLap Roof Lap Joints  
Monoclad® Wall Cladding  
Eziform™ Ridge Vent

One of the first major projects to specify the **Stramit FarLap®** roof lap system was a huge Metcash distribution centre in western Sydney comprising two buildings with a total roof area of 100,000 square metres..

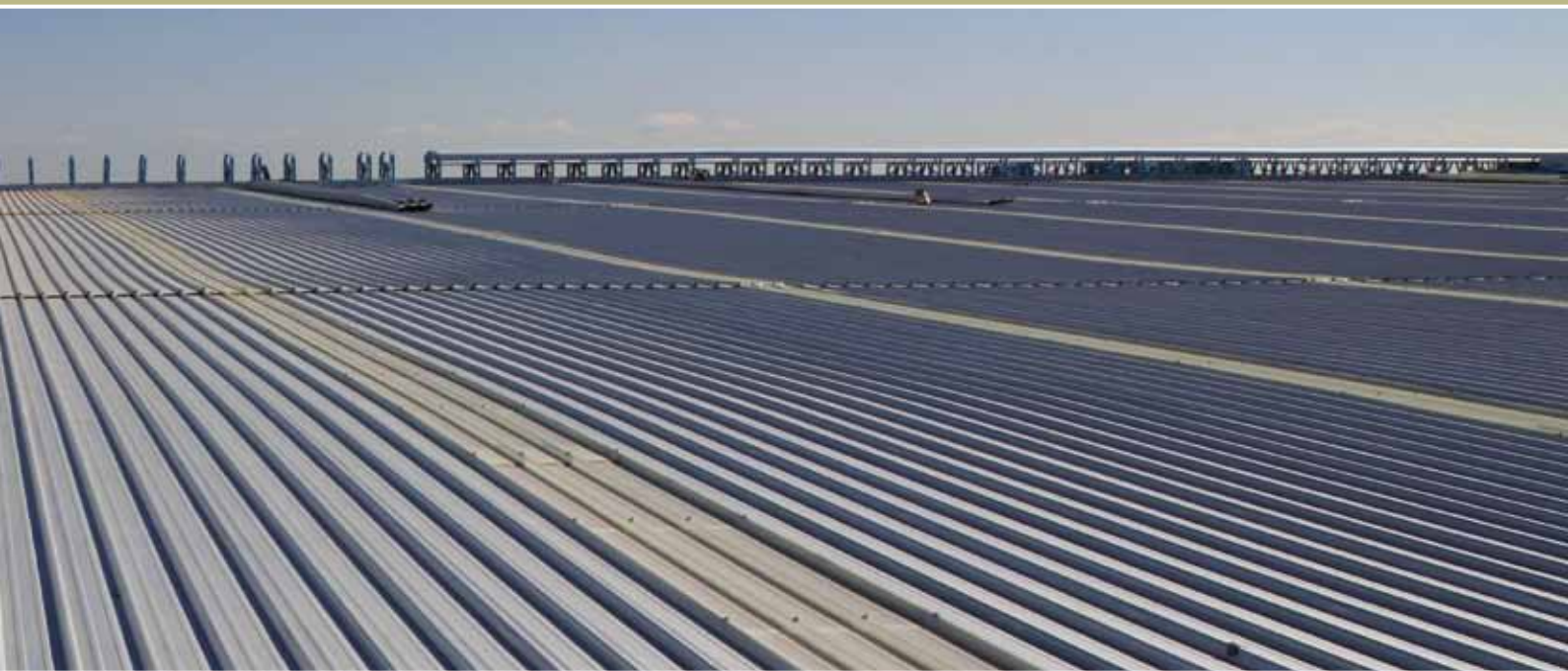
The two warehouses, a 60,000m<sup>2</sup> dry goods building and a 40,000m<sup>2</sup> refrigerated building, were both roofed with **Stramit Speed Deck Ultra®** concealed fixed decking sheets connected by **Stramit FarLap®** roof lap joints.

The **FarLap®** joint allows **Stramit Speed Deck Ultra®** concealed fixed decking sheets to be lapped and connected via the snap-in-place joint and seal. This eliminated the need for “step-down” joints as well as eliminating the site access problems associated with long-run continuous roof sheeting.

**FarLap®** was selected as a cost-effective solution to managing the long roof runs, but brought the added advantage of allowing maximum internal building heights to be achieved by eliminating steps in the roof.

The roofing installers, Ideal Metal Roofing, were “thrilled” by the ease of laying the **FarLap®** system, which sped up the installation of the roof and eliminated the requirement for step flashing, which would have been labour intensive and time consuming.





# Major savings on transport costs

*Project*  
Shopping Centre  
Warrnambool, Victoria

*D&C Builder*  
Magellan Projects

*Roofing Contractor*  
Keene Plumbing

The significant savings from using the *Stramit FarLap*<sup>®</sup> roof lap joint system are demonstrated by this shopping centre development at Warrnambool, west of Melbourne.

The use of the *FarLap*<sup>®</sup> system on this 5200 square metre roof generated total savings of roughly \$28,000 including reductions in freight, labour and crane hire costs.

The major saving was in freight costs, by using shorter sheet lengths that were much more economical to transport.

The initial building design called for 37-metre runs of *Stramit Speed Deck Ultra*<sup>®</sup> concealed fixed roof decking. This would have required three long loads to be transported to Warrnambool from Melbourne, involving road closures, a pilot and escort.

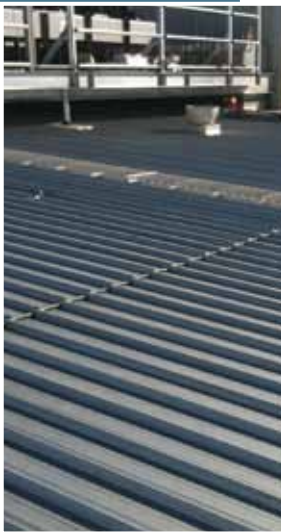
By breaking the runs into shorter sheets, joined by the *FarLap*<sup>®</sup> system, only four standard deliveries were required to deliver all the roofing material needed to the site.

The cost of transporting three long loads to Warrnambool from Melbourne was almost 40 times more than the cost of four normal loads. Further savings were derived from reduced time and labour (as fewer hands were required) plus savings in crane hire.

The combination of *Speed Deck Ultra*<sup>®</sup> concealed fixed roof decking and the *FarLap*<sup>®</sup> roof lap joint system was also much more economical than rolling 37-metre roofing sheets on-site.

Other advantages of using shorter sheet runs on this project included overcoming limited site access, reducing OH&S risks, and reducing thermal expansion and contraction on the finished roof.

The roofing contractor, Keene Plumbing, and builder Magellan Projects were both very happy with the results and indicated they would use the *Stramit FarLap*<sup>®</sup> roof lap joint system again.





*Project*  
University of Wollongong  
Building 11

*Builder*  
Ichor Constructions

*Roofing Contractor*  
Rise Above Roofing Services

## Overcoming restricted site access

The initial order for this roof at Wollongong University was for 34-metre sheets of *Speed Deck Ultra*® concealed fixed decking.

However, long trucks were unable to access the site. In addition, power lines and trees 20 metres high prevented a crane from reaching over to the site from the road.

The solution was to break the roof run into

two 17-metre sheets connected with the *Stramit FarLap*® roof lap joint system.

This allowed the use of a shorter truck and a smaller crane.

As well as simplifying and speeding the installation, the solution also improved site safety, providing lighter, shorter sheets that were easier to handle, and a lighter pack mass.





# Managing long runs on a windy site

The vast roof on this train maintenance facility in Victoria presented a problem for the roofers in handling long roofing sheets on an open, windy site.

After considering on-site rolling, it was decided that shorter, more manageable lengths were a better option. With fewer people required on site, shorter sheets also meant labour savings as well as a safety improvement.

*Stramit Speed Deck Ultra*® concealed fixed decking, connected using the *FarLap*® roof lap joint system, provided a simple solution that eliminated the need for step-down joints to be designed and fabricated.

The Craigieburn Train Maintenance Facility was built by John Holland under a design and construct contract for the Victorian Department of Transport. Located at the Craigieburn Stabling Yard about 30km north of Melbourne, the facility will become part of one of the largest and most modern train maintenance facilities in Australia, including stabling roads, a train wash facility, and a jacking road for train maintenance works.

The 20,000 square metres of *Stramit Speed Deck Ultra*® roofing was installed by Close Commercial Services.

*Project*  
Train Maintenance Facility  
Craigieburn, Victoria

*D&C Builder*  
John Holland

*Roofing Contractor*  
Close Commercial Services





# Shorter roof sheets save road closures at hospital site

The use of the *Stramit FarLap*® roof lap joint system on a new carpark at Canberra Hospital prevented disruptive road closures on the site.

A metal roof on the eight level post-tensioned concrete carpark structure was designed for full length 40-metre runs of roof sheeting. However, site access was limited and the only option for locating the large crane required was outside the main entrance to the emergency unit.

Splitting the runs into two lengths of *Stramit Speed Deck Ultra*® concealed fixed decking, connected by the *FarLap*® joint system, allowed the use of a smaller crane that could be located in a small compound where it could operate without disruption.

The roofing contractors, Delnas Metal Roofing, had attended the ACT launch of the *FarLap*® system and realised it could be used to lap the shorter sheets without changes to the roof structure. Another advantage was a significant saving on transport costs.

The new Southern Carpark provides approximately 1800 car parking spaces, including more than 100 disabled car parking spaces.

*Project*  
Canberra Hospital  
Southern Carpark

*Location*  
Woden, ACT

*Construction Management*  
Hindmarsh Construction

*Roofing Contractor*  
Delnas Metal Roofing





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[www.stramit.com.au](http://www.stramit.com.au)

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The Solutions in Steel® newsletter highlights innovative projects that use **Stramit**® steel building products.

Suggestions for articles are welcome.

Please send details of your nominated project to The Marketing Manager,  
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