



# Fall protection in formwork: Dalma Formwork

## A small business initiative

Dalma Formwork (Australia) Pty Ltd is a small family owned company which has been carrying out formwork on large scale building and construction projects since 1988.

The Director, Rade Cikes, firmly believes in the importance of 'raising the bar' on safety, and in committing to this objective, he has established the following company philosophy:

*To constantly seek new ways of improving safety on our projects.*

## Traditional formwork methods

The traditional methods of forming suspended concrete slabs and beams requires formwork carpenters to work from the top of the deck, including the leading edge.

Working from heights creates potential hazards for formwork carpenters. In particular, a fall from height may result in an injury, which may permanently incapacitate an individual, or even result in death.

## Striving to make formwork safer

Through consultation with its employees, Dalma has been investigating ways to improve existing formwork methods in order to facilitate a safer deck environment.

In 2006, through the support of the head contractor on a major construction site, Dalma trialled a new method they had developed to reduce the possibility of a worker falling while working from the top of the deck.

As an initial step in the design of their method, Dalma adopted a new industry procedure wherein the beam soffit would be prefabricated from the slab below the deck and lifted into place with the use of a telescopic forklift.

Despite the fact that prefabricating the beam from below meant a reduction in requirements to work on top of the beam, Dalma remained concerned that workers involved in completing the formwork once the beam had been lifted would still be exposed to the possibility of a fall.

To increase the level of fall protection for their workers, Dalma devised an innovative solution of removable handrails and posts to complement the procedure for prefabricating the beam from below.

## Applying handrails and posts

In designing their system of removable handrails and posts, Dalma ensured that they could be quickly and easily attached to the beam soffit without impacting on the requirements to prefabricate the beam soffit from below.

Once in place, the handrails and post ensure the worker is well protected from leading edges of the formwork, and can safely carry out activities to construct the beam sides and install the metal decking from the top of the formwork deck.

## The results

By developing and implementing a system of removable handrails and posts, together with prefabricated beam soffits, Dalma has dramatically increased the level of fall protection for their workers.

Importantly, Dalma has eliminated the worker's exposure to the leading edges of the formwork, and has gained success in overcoming one of the major hazards associated with formwork construction.

## A commendation for innovation

In 2006, Dalma was awarded a commendation for their solution for increasing the level of fall protection in formwork construction at the ACT Occupational Health and Safety Awards.

The commendation was announced by the ACT Minister for Industrial Relations, Andrew Barr MLA, at a function at the National Museum in Canberra.

For further information on Dalma Formwork's solution for increasing the level of fall protection in formwork construction contact:

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## About these case studies

The Australian Government is committed to improving the WHS standards for all workers on building and construction projects.

These case studies have been developed to share practical ideas that can be adopted by industry to assist in their own management of WHS issues.

The Federal Safety Commissioner consults widely with industry, WHS authorities and other relevant

agencies to promote a cooperative approach to improving WHS performance.

**The vision of the Federal Safety Commissioner is a building and construction industry where no one is harmed.**

### **For further information:**

- Visit the FSC website at [www.fsc.gov.au](http://www.fsc.gov.au)
- Contact the FSC Assist Line on **1800 652 500**
- Contact the OFSC via email at [ofsc@dewr.gov.au](mailto:ofsc@dewr.gov.au)

The Office of the Federal Safety Commissioner has prepared this case study to promote workplace health and safety (WHS) in the industry. When developing OHS initiatives, businesses and individuals should consider the circumstances and requirements particular to them and seek professional advice where required.

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