

Work Health & Safety

30 November 2015

URGENT Safety Alert

We are deeply saddened to learn of a tragic incident on Wednesday of last week in Perth WA, where two workers were killed by a falling concrete panel. Our sincere condolences are extended to the families and friends of the two young men who were killed. The incident serves as a prudent opportunity to remind EVERYONE in the construction industry of the risks associated with the handling of ANY heavy elements during construction, and to remind them of their obligations in that regard.



Preliminary incident summary

Whilst a thorough formal investigation is being carried out by WorkSafe WA, we understand that the project, Foundation Housing in West Perth, was being constructed by Jaxon Construction. We believe that three panels had been loaded on each side of an A-frame truck and transported to site. It is alleged that restraint chains on the panels were removed to allow unloading and three of the panels were lifted off the truck from the high side only. During unloading, the truck appears to have been on a slight lean towards the footpath, due to the camber of the road. As the third panel was lifted from the high side, initial reports of the incident suggest that the unbalanced load caused the three panels on the low side of the truck to overturn.

Fortunately, two of the falling panels appear to have collided with a steel column to arrest their fall, however the third single panel seems to have missed the column and fell to the ground, crushing the two workers who were sitting near the truck on a concrete kerb on the footpath, eating their lunch.

Media coverage of the incident can be viewed at the following links:

- https://au.news.yahoo.com/thewest/wa/a/30193668/two-seriously-injured-in-workplace-accident/
- http://www.abc.net.au/news/2015-11-25/three-men-dead-in-perth-workplace-accidents/6973130
- http://www.skynews.com.au/news/national/2015/11/25/two-dead-in-perth-construction-accident.html
- <u>http://www.watoday.com.au/wa-news/two-men-dead-after-east-perth-construction-site-incident-20151125-gl7s27.html</u>.

Important reminders

This terrible tragedy highlights the need for <u>everyone</u> in the construction industry to be reminded of the requirements of the various Australian Standards and Codes of Practice that govern the industry, particularly as those within the industry are so often handling heavy elements.

In particular, we would like to remind anyone involved with precast construction of the following requirements within *AS 3850-2015 Prefabricated Concrete Elements* and the *National Code of Practice for Precast, Tilt-up and Concrete Elements in Building Construction* (NCoP), which <u>may</u> be relevant to this incident:

- All work related to erection should be handled by the erection design engineer (NCoP, Clause 1.3).
- The builder, in association with the erector, the prefabricator and the erection design engineer, should prepare plans for the erection sequence and bracing layout (NCoP, Clause 2.4.8).
- the person with control should develop or obtain documentation in relation to concrete element construction work (NCoP, Clause 2.4.4).
- The erection documentation prepared by the engineer should cover every aspect of the erection process, including the:
 - *erection sequence

*orientation (position relative to each other) of the concrete elements (NCoP, Clause 4.1.6)

- Only persons directly involved (including supervisors and engineers) with the lifting of concrete elements should be allowed access to an area where lifting is taking place (NCoP, Clause 7.4).
- Where a footpath, road or other access way is located in an exclusion zone, all members of the public and all traffic should be prevented from passing through the zone while concrete element construction

work is being undertaken, until the concrete elements are fully secured with braces and other restraints (NCoP, Clause 7.4).

- Particular attention should be given when loading, separating, supporting and protecting the elements so as to prevent damage and permit safe unloading (AS 3850.2:2015, Clause C4.1.2).
- During unloading, the delivery vehicle shall be on firm ground and, if necessary, blocked to prevent tipping when partially unloaded. Where the unloading sequence could lead to instability of load, elements shall be individually restrained and the loading configuration shall be checked to ensure that removing individual elements does not result in instability of the load and/or the vehicle (AS 3850.2:2015, Clause 4.1.3).
- Where the site is not level, unloading should be commenced from the low side, once again taking care to prevent tipping when partially unloaded (AS 3850.2:2015, Clause C4.1.3).
- Vehicle stability during unloading shall be considered prior to restraints being removed (AS 3850.2:2015, Clause 4.1.3).

Key resources and further reading

The *National Code of Practice for Precast, Tilt-up and Concrete Elements in Building Construction* can be downloaded <u>here</u>.

AS 3850.1:2015 General requirements (Part 1 of AS 3850-2015) - purchase here.

AS 3850.2:2015 Building construction (Part 2 of AS 3850-2015) - purchase here.

Erection design engineering: Lifting - download here.

VicRoads Guide to restraining concrete panels and beams - download here.

National Transport Commission & RTA NSW Load Restraint Guide - download here.

As the investigation continues, we will keep Members informed as we learn more.

