



## Construction & Utilities Incident Report 07:003

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# *Unsecured precast panel brace kills a worker*

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Issued: 30 November 2007

## **Incident**

WorkSafe inspectors attended an incident where an unsecured precast panel brace fell on a worker during removal and killed him.

## **Preliminary Inspection**

Preliminary inspection revealed that:

- All erected precast panels in the area of the incident had been tied permanently into the structure and made secure.
- Written instructions from the erection design engineer were supplied for the removal of the braces.
- The bolts connecting the top of over 30 braces to the panels had been removed on the day prior to the incident.
- These braces, which were to be removed at a later time, were only being supported at the base.
- On the day of the incident, a separate contractor came on site to remove the re-usable, screw-type anchors onto which the bases of the braces were bolted.
- The contractor removed the base bolt of a prop which had already had its top fixing removed. The brace became unstable and fell, causing fatal injuries.

## **WorkSafe's Expectations**

Australian Standard AS 3850 *Tilt-up concrete construction*, clearly stipulates that “*the removal of braces from a panel shall be planned and conducted in a controlled manner to prevent risk of injury to people and damage to equipment*”. [Section 7.3]

The Industry Standard for *Precast and Tilt-up Concrete for Buildings*, clearly states: “*Prior to the removal of braces, it is the responsibility of the erection design engineer or the project design engineer to inspect the structure to ensure that all structural elements affecting stability are securely fixed to the precast or tilt-up concrete elements. A written instruction authorising the removal of the braces should be supplied*”. [Section 8.17]

After receiving the written authorisation, panel braces should be removed in accordance with a documented safe work method statement (SWMS).

The SWMS should require:

- Removal bottom bolts of the braces first;
- Support the weight of the brace with a crane or other suitable means prior to the removal of the top bolts;
- Lower the brace in a controlled manner.

## Further Information

Further information can be found in:

- Foundations for Safety Victoria's Industry Standard *Precast and Tilt-up Concrete for Buildings*, is available free of charge from WorkSafe Publications on 1800 136 089 or can be accessed and downloaded from: [www.worksafe.vic.gov.au/construction](http://www.worksafe.vic.gov.au/construction).
- Australian Standard AS 3850, *Tilt-up concrete construction* can be purchased from Standards Australia offices or on-line at: [www.standards.com.au](http://www.standards.com.au)

If you need general advice to assist in improving health and safety at your worksite, you can get it from the WorkSafe Advisory Service on telephone 1800 136 089.

<b>Category:</b>	Precast Panels
<b>Sub-category:</b>	Braces
<b>Relevant to:</b>	Builders, precast panel manufacturers, erectors and riggers
<b>Authorised by:</b>	Allan Beacom. Acting Director of Construction & Utilities

## Disclaimer:

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