

Safety and health alert

13/01 Precast concrete panel falls over

Incident

In February 2001 a 6.5 tonne precast concrete panel fell over on a construction site. The panel had just been erected with final levelling (plumbing) taking place when it fell. At the time the support for the panel was by way of temporary bracing. A rigger received severe bruising injuries. This incident could have easily resulted in a fatality.

Factors

- Final plumbing of the precast concrete panel when not attached to the crane.
- Changing the floor anchor specified by the design engineer without consulting the design engineer.
- Use of an equivalent floor anchor to the originally specified anchor, with the substituted anchor having a smaller head diameter. This allowed for greater deformation of the anchor's washers when fixing the temporary bracing to the floor, and resulted in a pull through of the foot of the temporary bracing over the washer and head of the anchor.
- Incompatibility of anchor type with bracing foot.

Recommendations

- As far as practicable do not rely solely on temporary bracing to support precast concrete panels when plumbing panels. Support panels with the use of a crane whilst final adjustments are made.
- Where the design engineer specifies a proprietary product for bracing or anchors, alternative products should not be substituted without approval from the design engineer.
- Ensure the casting and erection of precast concrete panels is in accordance with the relevant requirements of Australian Standards AS 3850.1-1990, AS 3850.2-1990 and AS 3850.3-1992.

Further Information

Further information can be obtained from the WorkSafe internet site www.worksafe.wa.gov.au, or by contacting customer service on 1300 307 877 or email: safety@docep.wa.gov.au.

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