

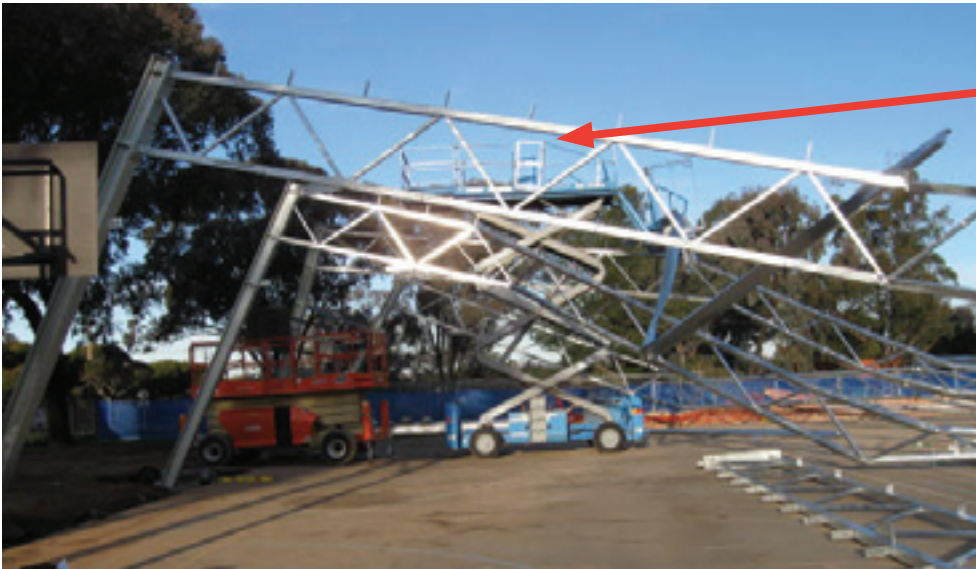
SAFETY ALERT

PREVENTING STRUCTURAL COLLAPSE DURING CONSTRUCTION

November 2010

This safety alert follows a recent incident where a covered outdoor learning area (COLA) collapsed during its construction. The COLA nearly struck a worker and caused major property damage.

To avoid such incidents, WorkCover reminds employers and principal contractors to ensure the stability of buildings and other structures at every stage of their construction. This can be achieved by installing lateral supports according to prescribed erection procedures.



Collapsed steel structure narrowly missed a worker positioned on the scissor lift's work platform.

OCCUPATIONAL HEALTH AND SAFETY REQUIREMENTS

The *Occupational Health and Safety Act 2000* requires employers and those who control workplaces to take all necessary steps to ensure that safe work systems are established and maintained, and that all staff are adequately informed, trained and supervised.

Clause 234 of the *Occupational Health and Safety Regulation 2001* provides more specific obligations to prevent the collapse of a building or other structure during a temporary state of weakness or instability.

RISK CONTROLS

Before erecting buildings or structures ensure that:

- An erection procedure is prepared that is specific for the site. Specifically, the procedure should consider the construction sequence, rate of erection, any construction loads and whether lateral or other supports are required – including temporary ones. If temporary supports are required, they should be clearly shown on the structural drawings of the building or structure to be erected. The procedure should be checked and approved by a competent engineer.
- Exclusion zones are established to keep unauthorised people outside of potential collapse zones.

- Temporary supports and the instructions for their installation are available.
- Documented safe work methods are developed in consultation with workers undertaking the activity and are provided to the principal contractor.

During erection of buildings or structures, the person in control of the work must:

- Ensure that work is supervised by competent person(s) and done safely.
- If they are not included in the original structural drawings, obtain the engineer's written approval before loads are placed on structures.
- Where temporary bracing is used, ensure that it is installed according to the manufacturer's instructions. This should include securely anchoring the bracing and ensuring that all bolted connections are effective.
- In accordance with the engineer's specifications, verify the stability of the building. This should be done at the end of each work day and when a new erection phase is about to start. It should also be done when strong winds are expected in the area.

FURTHER INFORMATION

- AS3828: 1998 Guidelines for the Erection of Building Steelwork
- Industry standard *Safe erection of structural steel for buildings*, WorkSafe Victoria
- *ACT Code of practice for steel construction*
- workcover.nsw.gov.au or call **13 10 50**.

Disclaimer

This publication may contain occupational health and safety and workers compensation information. It may include some of your obligations under the various legislations that WorkCover NSW administers. To ensure you comply with your legal obligations you must refer to the appropriate legislation.

Information on the latest laws can be checked by visiting the NSW legislation website (www.legislation.nsw.gov.au).

This publication does not represent a comprehensive statement of the law as it applies to particular problems or to individuals or as a substitute for legal advice. You should seek independent legal advice if you need assistance on the application of the law to your situation.

Catalogue No. **WC02984** WorkCover Publications Hotline **1300 799 003**



WorkCover NSW 92-100 Donnison Street Gosford NSW 2250
 Locked Bag 2906 Lisarow NSW 2252 WorkCover Assistance Service **13 10 50**
 Website workcover.nsw.gov.au

ISBN 978 1 74218 744 0 © Copyright WorkCover NSW 1110