# **Safety Alert**



# **Temporary site structures**

This Alert warns of the danger to workers and the public from poorly designed, constructed or maintained temporary structures on construction sites.

## September 2015

### **Background**

Structural failures of poorly designed, constructed or maintained temporary site structures have the potential to cause death or serious injury to workers and the public.

The windiest time of year in Victoria is typically early Spring, with wind gusts regularly exceeding 120km/h. Temporary site structures should be able to resist these and other serious weather conditions.

Temporary site structures include (but are not limited to): site sheds, temporary awnings, hoardings, site fences, temporary covered walkways and signage. They do not include temporary works such as scaffolding, formwork/falsework or props and bracing which have their own design requirements that must be followed.

Recent Victorian incidents involving the failure of temporary site structures include:

- a 30m long hoarding inside a shopping mall that collapsed, injuring five passing shoppers
- a large timber and corrugated sheet awning that detached from site sheds and blew into a busy street (see photo)
- a large section of reinforced plywood hoarding that detached from its bracings, fell and struck a passing pedestrian
- a perimeter hoarding that collapsed during high winds, breaking the arm of a pedestrian.

Some of the above incidents have resulted in duty holders being prosecuted.

#### **Control measures**

Ensure temporary site structures are safe and without risks to workers or the public, so far as is reasonably practicable. Temporary site structures should be designed and constructed:

 to resist potential severe weather conditions for the specific site location, including to resist uplift and lateral wind loads

- where applicable, in accordance with the Building Code of Australia, relevant Australian Standards, and accepted engineering principles
- to be freestanding, unless the supporting structure and connection points have been assessed by a competent person (typically a structural engineer) as being able to support the temporary structure.

Note: building permits may also be required for some temporary site structures (fences, hoardings, signs etc). Duty holders should check with the relevant authority.



A temporary site awning blew into an adjacent street

#### Inspection and maintenance

When the structure is first erected, a competent person should inspect and verify in writing that the structure complies with the engineering design prepared for the structure or the relevant Australian Standard.

Once verified, ensure a competent person assesses the structure for structural integrity at regular intervals and following any severe weather conditions. Also ensure workers do not modify the structure without written authorisation from a competent person.



#### **Further information**

#### WorkSafe

Guidance Note - Stability of buildings during construction

Health and Safety Solution - <u>Preventing masonry structures</u> <u>from collapsing</u>

Safety Alert - Preventing structural collapse

WorkSafe WA - <u>Masonry wall safety during construction work</u> <u>guide</u>

#### Other information

#### **Australian Standards**

AS1170: Structural Design Actions AS1684: Residential Timber Structures AS1720: Timber structures – Design methods

AS4100: Steel Structures

#### **Contact Details**

Call us on: 1800 136 089

Email us at: info@worksafe.vic.gov.au

For more information on occupational health and safety,

go to WorkSafe's website: worksafe.vic.gov.au

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