

### WORKING ON FRAGILE ROOFING

#### OBJECTIVE

To provide guidelines on the safety measures that must be taken when working on fragile roofing.

#### STATUTORY REQUIREMENTS

Under Section 19 of the *Occupational Health, Safety and Welfare Act 1986*, employers are required to provide a safe work environment, safe systems of work and plant in a safe condition.

Regulation 2.3.3 *Fragile Roofing Materials* of the *Occupational Health, Safety and Welfare Regulations 1995* also prescribes specific requirements for existing buildings with fragile roofs, or roofs incorporating some fragile materials, e.g. skylights.

#### BACKGROUND

Fragile materials include corroded corrugated steel cladding, structurally unsound roof members, plastic sheeting, wired glass, and corrugated asbestos-cement roof sheeting.

Fragile roofing materials fracture without warning. Fractures can occur so rapidly that someone could easily fall through the fragile roofing material, suffering serious or even fatal injuries.

#### RISK CONTROL MEASURES

Before working on any roof area, or if the roof is used as a means of access (whether it be construction, repair, maintenance, demolition or inspection), it is essential to identify all hazards and conduct a risk assessment.

A risk assessment should include:

- an inspection of the perimeter walls for warning notices;
- a visual inspection of the roof to determine the presence, condition and extent of fragile materials;
- review of any asbestos register (where applicable);
- the existence and condition of safety mesh;
- means of access and egress; and
- any other factors that may affect the health and safety of workers.

A plan to safely carry out the work should then be developed.

From the risk assessment, it may be identified as necessary to use a safety harness and fall arrest equipment such as static lines, running lines or inertia reels. The fall arrest equipment needs to be installed by a certificated scaffolder or rigger.

It is also vital to consider the:

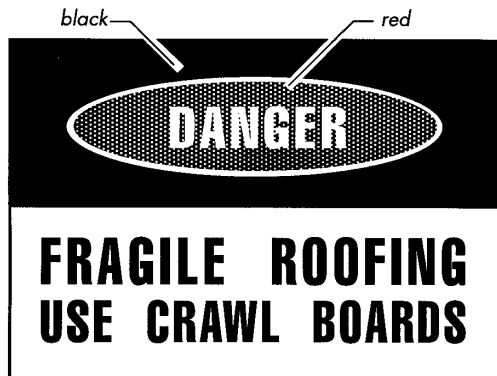
- accessibility of access and egress points;
- structural integrity of the roof including the cladding and supports; and
- distribution of the load on the roof.

When working on fragile roofing materials you must use appropriate access equipment such as crawl boards, roof ladders, walkways and planks.

Walking is not permitted on any fragile roofing except where crawl boards, walkways or roof ladders are used. Other systems with a similar level of protection may be used.

Suitable footwear that controls the risk of slipping and other site hazards must be worn when working on or near fragile roofs.

Fragile roof signage must be fixed to the walls of buildings where access can be made to fragile roofs. Signs should be made of sheet metal or other approved material that is at least 600mm by 450mm with wording and layout as shown (refer to diagram below).



Fragile skylights within buildings or structures must be secured with safety wire mesh immediately above or below the skylight and be regularly maintained.

If unsure whether safety mesh is fitted, consider the roof as unmeshed and dangerous.

## REFERENCES

Australian Standard - *AS2424 Plastics building sheets - General installation requirements and design of roofing systems*

Guide to Rigging  
WorkCover, New South Wales, 1995

Safe Work at Heights, Evaporative Air Conditioning Systems,  
WorkCover, South Australia, 2003

Prevention of Falls in General Construction,  
WorkSafe Victoria, 2004

Building Code of Australia (BCA)

## FURTHER INFORMATION

### Australian Standards

Standards can be purchased from SAI-Global  
Tel 131 242  
Website [www.sai-global.com.au](http://www.sai-global.com.au)

### SafeWork SA

GPO Box 465  
ADELAIDE SA 5001  
Tel. 1300 365 255  
(If calling from a mobile phone or from interstate  
tel. (08) 8303 0400)

Website [www.safework.sa.gov.au](http://www.safework.sa.gov.au)

Re-Issued November 2006

Review November 2007