

SKYLIGHT PROTECTION FACT SHEET

Skylights and plastic roof sheeting are essentially "glorified hidden holes" in the middle of your roof, if unprotected.

There have been numerous incidents this year where a worker has fallen through brittle roof sheeting or an unprotected skylight. In one particular incident, a 53-year-old sub-contractor lost his life after falling through polycarbonate roof sheeting. He was cleaning the roof gutters when he stepped onto the brittle roof sheeting which gave way, causing him to fall 3.5 meters onto a concrete pavement below.

Another incident occurred where a 27-year-old roofing contractor suffered a fractured back after falling 3.6 meters through roof sheeting. He was installing solar panels when the alsyn-ite roof sheeting he was working on gave way.

Sites where the incidents occurred

Safe Work NSW has been notified of 10 separate serious incidents where a worker has fallen through a roof this year.

In this **Fact Sheet** we focus on the key safety considerations around skylight protection and address the major issues around these two recent incidents.



Things to Consider

1 Environmental Impacts

Skylights and plastic roof sheeting are exposed to environmental elements that impact the durability and integrity of the roof, so even plastic roof sheeting that are claimed to be trafficable can become brittle over time due to the exposure and need a thorough inspection.

2 Lack of training and knowledge

In the case of these two workers the lack of training or knowledge should not have been an issue, with both workers being at a relatively experienced age (27 & 53) But this doesn't rule out the fact that their WAH training may have been overdue or brushed off with the thought "I have been working on roofs all my life, I have no need for training" consequently their day did not end like they were hoping.

It is extremely important to stay up to date with your WAH training and industry knowledge. Appropriate height safety training should be given to younger workers who are more exposed due to their inexperience. They should be accompanied in their work by more knowledgeable team members whose duty it is to ensure that the work site has been assessed and that there is an adequate height safety system in place.

3 Failure to implement safety systems

In these two incidents, negligent conduct was apparent, Working at heights is classed as high risk and not providing effective equipment, systems and procedures to ensure safe access and fall protection for any work to be carried out on top of your buildings could be seen as negligent. The Victorian parliament has just past new man slaughter laws with a maximum penalty of 20 years imprisonment for individuals and a maximum fine of \$16.5 million for companies who fail to implement safe environments for there employees.

4 Hidden hazards

Dirt and algal growth can make it hard to notice plastic sheeting, especially if it has the same profile as the surrounding sheeting. It is often not easy to tell at a glance where they are located and if they are properly protected. In this case the roof sheeting both workers fell through had zero protection. Simple signage and mesh cover or guardrail around skylight sheeting can potentially save someone from serious injury.

Things to Consider - CONT

5 Distractions

Different roof sheeting profiles, surface changes, dirt, moisture and obstructions on roofs make it more likely that an operator will stumble and stray from their intended travel path. In this case both operators were unaware of the dangers, without a clear path across a roof it allows operators to create a path on their own and this can lead to serious outcomes.

IDENTIFYING & IMPLEMENTATION

When skylights aren't protected the consequences can be tragic – Like the 2 cases we read about and all it takes is a few seconds and tragedy can strike.

Before you start the job, carry out a risk assessment that takes into account the roof conditions and how they may have been affected or might affect your access to the rooftop & equipment that need servicing.

Why are skylight protection systems so effective in preventing the risk of falls from heights?

- Skylight protection such as guardrail and cross over walkway systems provide a permanent and controlled path across a roof and is the highest level of fall prevention according to the hierarchy of fall prevention.
- Skylight cross over walkways are designed to provide stability and grip, allowing workers to carry out repairs and maintenance with confidence.
- Skylight mesh protection helps to minimise the risk of falling objects as well as preventing falls from height

"Prepare for the unexpected"

WHY SKYLIGHT PROTECTION WORKS



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Design

Get the correct protection for your site

Skylight protection can be as simple as a mesh cover, or slightly more complex, like a roof walkway crossover system for maintenance workers. They should be easy to see, strong and able to withstand weather effects for many years, but also designed in a way that they don't alter the light that a skylight lets in.

Not all Skylights are the same. Skylight protection should be customised to suit:

- Condition of roof and skylight positioning
- Minimal disturbance to light entering from skylight
- Access requirements
- Type and size of skylights
- Customised solutions around raised or dome type skylights

[View Case Study](#)

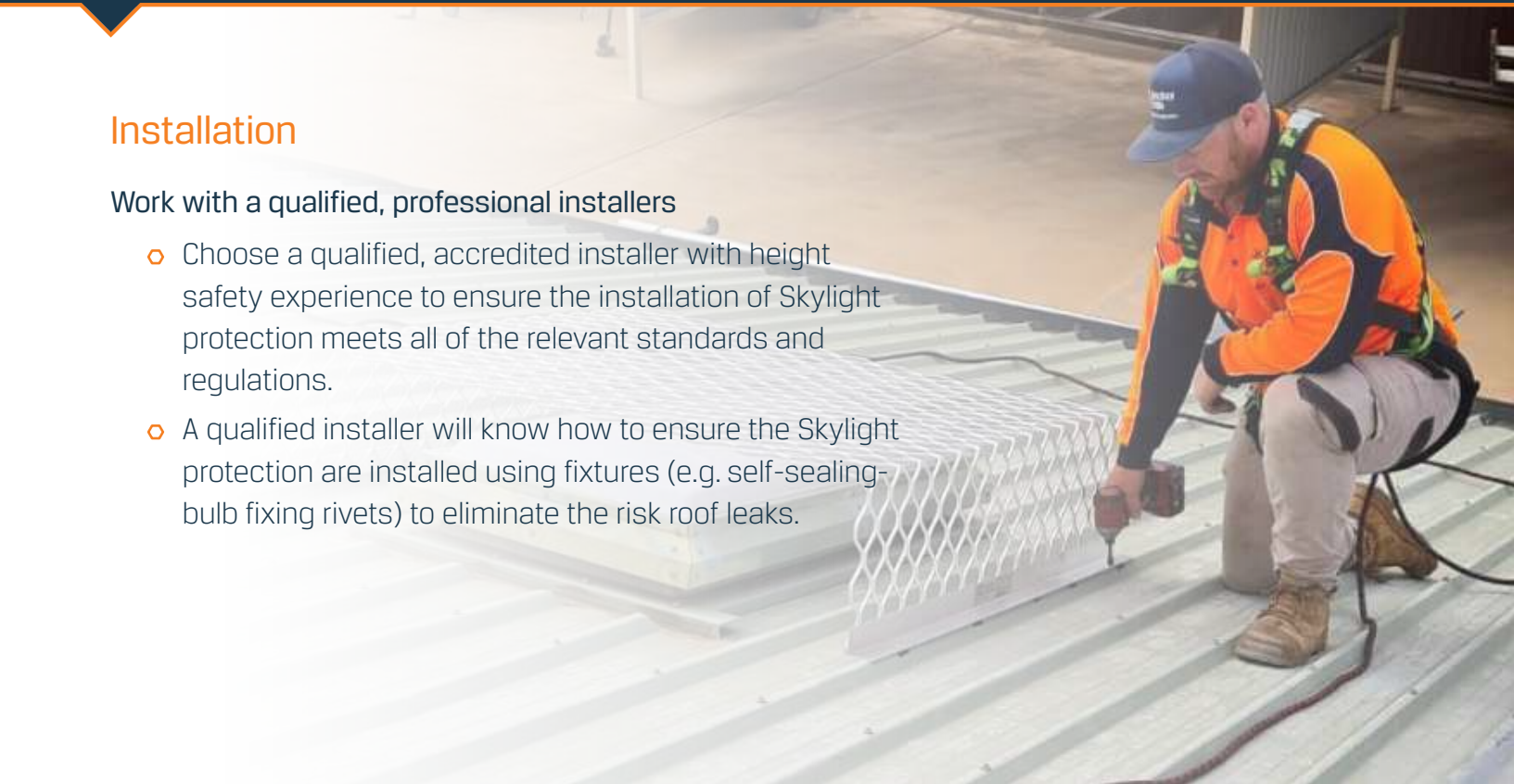


WHY SKYLIGHT PROTECTION WORKS

Installation

Work with a qualified, professional installers

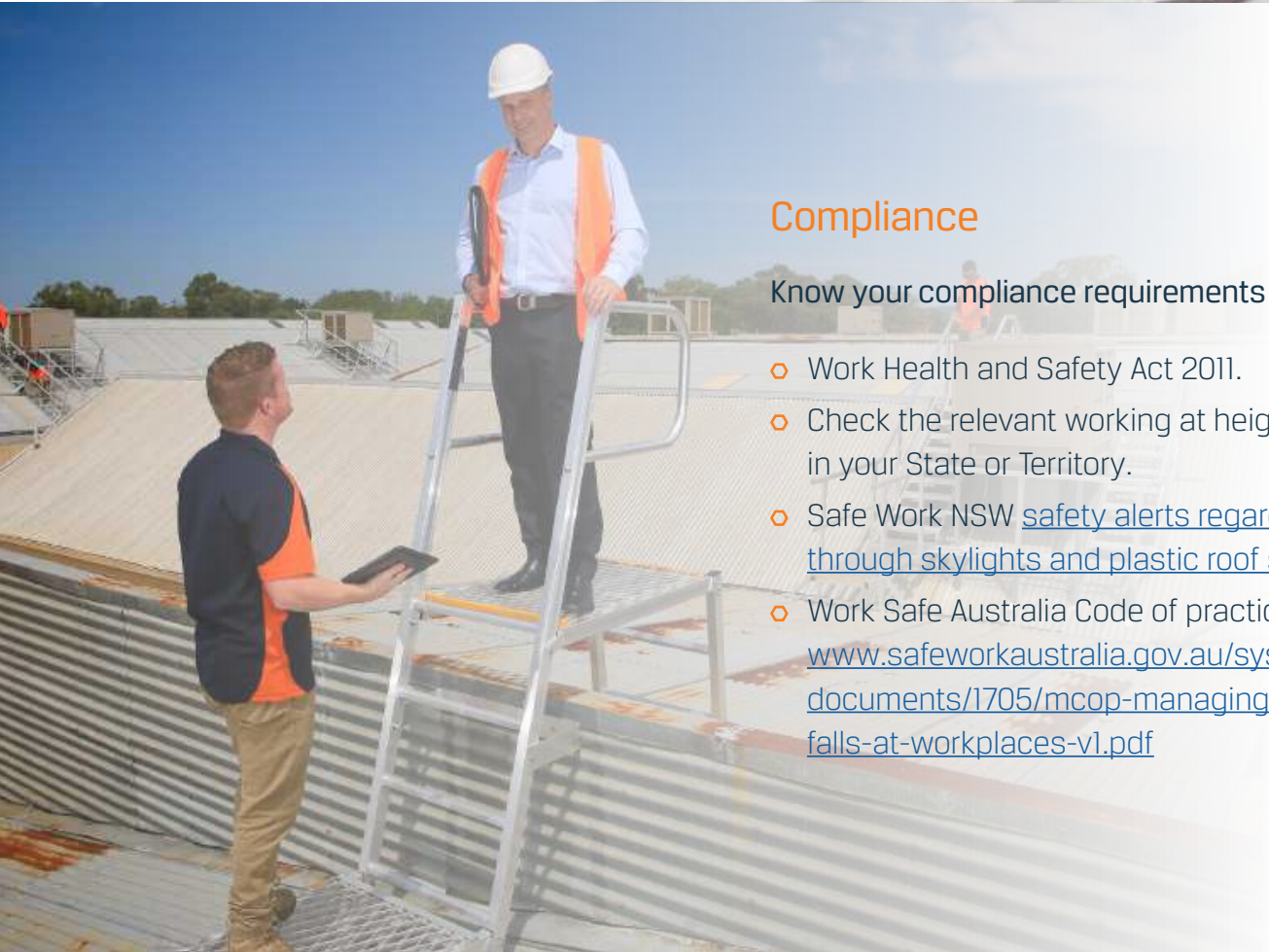
- Choose a qualified, accredited installer with height safety experience to ensure the installation of Skylight protection meets all of the relevant standards and regulations.
- A qualified installer will know how to ensure the Skylight protection are installed using fixtures (e.g. self-sealing-bulb fixing rivets) to eliminate the risk roof leaks.



Compliance

Know your compliance requirements

- Work Health and Safety Act 2011.
- Check the relevant working at heights legislation in your State or Territory.
- Safe Work NSW [safety alerts regarding falls through skylights and plastic roof sheeting](#)
- Work Safe Australia Code of practice <https://www.safeworkaustralia.gov.au/system/files/documents/1705/mcop-managing-the-risk-of-falls-at-workplaces-v1.pdf>



EXPERT TIP

"With 10 years height safety experience and working on roofs, before I allow workers on any roof I ensure the roof area's are inspected and every single skylight is pointed out to all workers at the beginning of any work completed. Although this is a good idea, I have found in my experience workers can become task orientated and forget there are skylights altogether. Thus the simple solution to preventing falls altogether is to install aluminium mesh & walkways through high traffic areas and setting up guardrails around the raised or dome type skylights. Ensuring each worker gets home safely"

Garry White- Anchor Safe Recertification Manager

