



## Brittle Roofing Safety

### What is Brittle Roofing?

No person should work in any area where there is a risk of falling due to the presence of fragile (brittle) material.

Brittle roofing is any roofing material that will not safely support the weight of a person walking on it.

It might be old iron, glass skylights, asbestos-cement corrugated sheeting, transparent plastic or PVC sheeting, or any substance that may fail if walked on.

### Inspect Before Beginning Work

Before working on any roof, the underside should always be inspected to ascertain if there are any hidden skylights or faulty sheets, or if there is sarking or approved safety mesh or any other protection that may only be visible from below.

This inspection should also form part of the site hazard identification because, from below, faulty or hazardous sheeting or skylights of a matching roof profile can sometimes be identified.

Identifying faulty sheets from below is a much more cost-effective system than a serious harm, or even fatal, accident.

While carrying out this inspection, take the time to consider the correct and safest method of access to the roof. Is it a secure ladder; or perhaps a scissor hoist; or a cherry picker; or access from a neighbouring building?

Lives have been lost through the thoughtless use of the wrong type of access; a ladder which is too short or not secured; or an old and poorly maintained scissor hoist.

Ensure any skylights or other hazardous areas are securely covered, or guard rails are erected around them to prevent accidental access to those dangerous areas.

It is not sufficient to simply warn staff to keep away, or to highlight the area with dazzle paint. There must be adequate physical protection provided.

That protection should always be provided before any other work is carried out as, if it is left till later, it may be too late.

### Plan the Safest Access

Consider the safest method of getting from the access point of the roof to the actual work area. If there is no sarking under the roof or safety mesh under or over the roof a walkway will need to be laid over the brittle roofing material. This walkway needs to be 450 mm wide and fitted with a guard rail on the lower side.

It is not an option to walk on the purlin lines.

An accident occurred when a roofer, walking on the screw line on the purlins, slipped. The asbestos cement sheeting broke and he fell through. He fell 3 metres onto a rip saw and suffered serious injuries. Legal action resulted.

This roofer was 'lucky' in that the sheet of material was only 1 metre long. When it shattered

it 'opened' up a large hole which he passed through. Larger asbestos cement sheets will shatter leaving sharp edges which will rip the body and legs as the unfortunate person passes through, somewhat adding to the injuries of the victim.

Planning should always consider edge protection as there are specific requirements when a fall of 3 metres is risked. In simple terms, if a fall of 3 metres is risked, the workers must be protected. Edge protection could consist of guard rails along the exposed edges or it could be the provision and use of safety harness and life line.

## Do You Need Extra Protection?

Workers on a roof must be protected from the possibility of a fall. That protection may involve the use of harnesses and life lines or edge protection. Every roof job no matter how minor, must be properly planned, hazards identified and action taken to manage those hazards. It is the jobs that are not properly thought out that result in an accident.

A recent accident happened when several employees were cleaning up for the day. They were in the process of removing the old iron off the roof and stacking it on the ground. One worker decided to go down to the ground to assist

with that operation. As he turned to go to the ladder he stepped on a piece of brittle roof which gave way. He fell to the concrete floor below where he sustained serious injuries. His employer was convicted and fined.

## Summary

To protect employers and employees from these situations the following is a summary of the requirements:

- Inspect the site from below
- Plan the work
- Ensure all employees are trained and competent
- Identify all hazards and manage them
- Provide safe access to the roof and while on the roof
- Provide protection at the edge of the roof
- Cover or guard all brittle dangerous areas
- Provide and use fall protection where necessary
- Provide temporary walkways as a safe means of access.

**No one should walk directly on fragile material.**

Ensure you can go home to your family tonight.