



Insight

# Falls through fragile surfaces

A self-employed business man was fined £16,000 and ordered to pay costs after his employee fell through a fragile skylight on a farm building.

1/4

Falls through fragile surfaces account for nearly a quarter of fall from height fatal injuries.



1/2

In agriculture, this figure rises to approximately half of all deaths and serious injuries.

The employee fell several feet whilst repairing broken roof tiles, breaking his ribs and collar bone, and sustaining injuries to the head and spine. He wasn't able to return to work for six weeks.<sup>(1)</sup>

On average 9 people are killed each year after falling through a fragile surface. Many others suffer life changing injuries - which can result in significant numbers of high value claims.<sup>(2)</sup>

HSE (Health & Safety Executive) statistics indicate that falls through fragile surfaces (particularly fibre-cement roofs and rooflights) account for nearly a quarter of fall from height fatal injuries in the construction industry. In agriculture, this figure rises to approximately half of all deaths and serious injuries.

These accidents occur mainly on commercial premises (factory and warehouse roofs for example) and farm buildings, when activities such as roof maintenance, repair, equipment installation and cleaning work are being undertaken.

Fragile surfaces do not safely support the weight of a person and any equipment they are carrying and can collapse without warning. Falls don't even have to be from a great height, with some fatalities occurring from falls at two metres. This is why effective safety measures are required for all work on or near these surfaces.

The law states that all roof work must be planned and organised so that it is carried out safely. Not only must building owners, managing agents, contractors and employees manage the danger by either avoiding work on or near fragile surfaces or controlling any remaining risk with the use of control systems (such as staging, guard rails and fall arrest systems), but designers need to consider the factors that will influence safety, such as the fragility and longevity of materials used in the roof construction. The HSE states that 'all roofs should be assumed fragile, unless confirmed otherwise by a competent person'. Even those not susceptible to collapse can eventually become fragile, through corrosion or aging.

(1) HSE – Employer fines after employee falls through fragile roof – <http://press.hse.gov.uk/2016/employer-fined-after-employee-falls-through-fragile-roof/>

(2) HSE Fragile roofs – what you need to know as a building owner, user or managing agent

## FALLS THROUGH FRAGILE SURFACES

Protection against falls through these surfaces is required whenever anyone walks on or near fragile materials. The HSE have published a **hierarchy of steps** to be taken for all work on these surfaces. In addition those carrying out any such work must be:

- aware of the risks;
- told what the necessary safety precautions are, and
- to be trained and instructed to carry out the precautions required.

No matter how short the duration of the work, the consequences of not taking the relevant safety measures can be catastrophic (serious injury, permanent disability and even death). With those responsible facing the prospect of significant fines and custodial sentences, no one can afford to be complacent about the risks.



**More than a million businesses and 10 million workers are estimated to carry out jobs involving some form of work at height every year.**

Source: HSE Fragile Roofs safe working practices

### Hierarchy for work on fragile roofs

- Avoid workers having to go on the roof by adapting methods that allow work to be completed from underneath using a suitable work platform, or where this isn't possible, consider the use of a platform that allows people to work from within the basket without standing on the roof.
- If access cannot be avoided, mitigate fall distance and consequences by providing perimeter edge protections, guard rails and staging to spread the load.
- If the above isn't possible, use safety nets underneath the roof or a harness system on the proviso that adequate anchorage points are available and users have been given the appropriate training and are carefully supervised.



### The HSE lists surfaces that are likely to be fragile

- Old roof lights
- Liner panels on built-up sheeted roofs
- Non-reinforced fibre on cement sheets
- Corroded metal sheets
- Glass (including wired glass)
- Rotted chipboard
- Slates and tiles



**A 39 year old was fatally injured after falling nine metres through a fragile panel on a warehouse roof.**

An HSE investigation found that there weren't any safety measures in place to make sure the work could be carried out safely, failing to use harnesses or any other equipment to ensure their safety. The company pleaded guilty to a breach of the Health & Safety at Work Act and were fined £200,000. They were also ordered to pay costs of over £10,000 with the builder given a six months prison sentence (suspended for 12 months). – Source: HSE



**A man was jailed for six years, fined £400,000 and ordered to pay court costs of £55,000 after two of his employees fell off a roof they were repairing – on the same day.**

The roof, made of steel corrugated sheets with interspersed plastic skylights which had deteriorated over time, was being repaired when a 47 year old man fell through the skylight to the concrete floor. He suffered life changing injuries. Despite the accident, the men were ordered to return to the roof hours later, when a 42 year old man fell through a skylight, suffering fatal head injuries. A second man was jailed for eight months, with a £90,000 fine and £45,000 court costs. – Source: ITV

**Health and Safety Management**

Praxis42 specialise in occupational health, safety, fire and environment management. They have a range of training modules and services to help you comply with legislation and sensibly manage risk to protect your organisation, customers, partners and employees. Allianz customers have access to a free telephone consultation and exclusive discounts on fire and health and safety services. Also available is IOSH (Institution of Occupational Safety and Health) approved training and access to a 'Managing Safety' eLearning module.

To find out more visit [www.allianzbroker.co.uk/praxis42](http://www.allianzbroker.co.uk/praxis42)

For further information please see our Risk Control note – Falls through fragile surfaces on [www.riskdirector.co.uk](http://www.riskdirector.co.uk) or visit [HSE Fragile roofs – Safe working practices](#)