



## Safe Work at Height on Roofs

### A Simple Guide for Clients

*The guidance given in this document is intended as general advice based on present understandings of the Regulations, the 2005 Act and HSA's publications. While legal advice has been sought and taken into account in preparing the guide, the advice given should not be regarded as a legal interpretation of the Regulations or of the Act (No. 10 of 2005). Advice given here must be considered in the context of professional judgement being exercised by competent persons: it is not intended to provide the definitive approach in any situation. In all circumstances those best placed to decide on the appropriate action will be the parties undertaking the particular risk assessment and resulting control measures. Appropriate legal and insurance advice should be sought as necessary.*

#### What is ISHA?

The Irish Safety at Height Association (ISHA) was formed by a number of companies, Skyway Safe Access Equipment, Brandon Agencies, Bruce Shaw Safety Management and TGP Safety Management with the aim of promoting safe work at height practices in Ireland.

#### Introduction

The purpose of this guide is to inform clients (i.e. building owners, facility managers, etc.) of the issues surrounding employees, suppliers or sub-contractors who will be working at height on buildings, with a particular focus on building roofs. The guide also aims to outline the legislative duties placed on clients and those in control of the workplace with regard to working at height. Separate guides will be made available for other working at height topics.



#### Why must we consider safety at height?

Since working at height is a dangerous activity there are moral and ethical reasons to do so. Over the past ten years a significant proportion of all construction related fatalities have been attributed to falls from height. Given the definition of construction is so broad this covers a vast array of activities being carried out by individuals at height in Ireland on a daily basis. Legislation is also in place that requires everyone involved in the design, construction and maintenance of a building to consider how falls from heights are prevented. The potential consequence of ignoring legislation and/or an operative getting injured, fatally or otherwise, is jail or a hefty fine and a loss of reputation as a minimum. Applicable legislation includes the Safety, Health and Welfare at Work Act 2005, Safety, Health and Welfare at Work (Construction) Regulations 2006-2010 and the Safety, Health and Welfare at Work (General Applications) Regulations 2007. The Health and Safety Authority have also published a Code of Practice For Safety in Roof Works, which came into affect on the 1st of September 2011, which imposes requirements on duty holders.

#### Where do I start?

The most basic requirement of Irish work at height legislation can be summarised in two words "Risk Assessment". You must consider the risks to your employees, third parties on your building, or others working in an area under your control. Upon consideration of the risks you must determine appropriate control measures to be applied and implemented for works at height. You may need help and advice with this process and this is readily available through competent and adequately resourced safety professionals.

#### Surely, I can pass on my responsibilities?

No – this is a common misconception. Section 15 of the 2005 Act places onerous duties on those in control of the workplace including the access and egress to the workplace. If you are the person in control of the building or work being undertaken, then ultimately the primary responsibility is yours. You are not able to sub-contract your legislative duties. However, employees and other third parties have a role to play as well. Contractor's etc, must have their own insurance, carry out their own Risk Assessment and produce Method Statements for the work. They must provide appropriate training to their direct employees.

### Can I simplify the Risk Assessment process?

Yes, there are some key steps that can be taken to ensure an appropriate and comprehensive risk assessment is undertaken and documented. The most fundamental question is to consider – “How often do I or someone under my control need to access my roof or work and what tasks are being undertaken once there?”

To answer the question you must first look at the type of roof you have and what is on it:

1. If you have a flat roof with lots of plant and equipment that needs maintenance regularly then you will need to have different maintenance people up there at different times throughout the year. Therefore a high frequency of access to the roof will be required with a varying degree of tools and spare parts required to be brought to the roof. Given the high frequency of access the possibility of an accident occurring is high, a risk assessment will likely determine that the installation of collective protection measures is required. This means system that protects all persons on the roof, not just an individual, which is in place without requiring user intervention to make it work. This type of system would include a high parapet or permanent guardrails around the edge of the roof.



**What do I do for a high frequently accessed roof?**  
Okay, you have established that you need to do something to improve your roof safety systems based on your initial Risk Assessment.

If you have a high frequently accessed roof with a high chance of a fall similar to item 1 above then the first thing you need to consider is initial access onto the roof. Access must be easily achievable; you cannot access a roof similar to this with a ladder, as operatives will need to carry tools and spare parts to the roof. You must have a stairs (internal or external) leading on to the roof.

The roof edge itself must be protected (i.e. 1100mm high parapet or free standing guardrail system). This is known as “collective protection” as it protects all on the roof area. No special training or equipment is required as the system works “passively”, meaning no measures are required to be taken by the individual to make the system operable. Should a passive collection measure be provided the chance of an accident are low.



2. On the opposite end of the scale if you have a curved barrel vault roof with no frequent access requirements (i.e. no plant, smoke vents or rooflights, etc. on it) and the gutters are easily accessed by a mobile elevated working platform (MEWP) from the perimeter of the building, then your risk assessment is likely to conclude that you should restrict access to the roof and adopt a suitable system to maintain the gutters from the safety of the basket of an MEWP. However, if the roof guarantee requires you to clean down the roof at regular intervals, then you may need a permanent safety system.

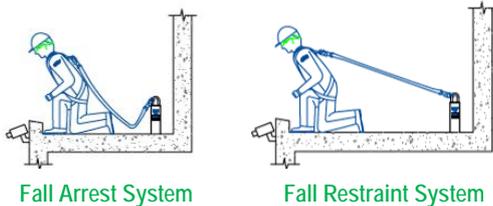


**What do I do for an infrequently accessed roof?**

Why not go for collective protective in this case? Given the frequency of access is low, a full passive collective protection system may not be required and the risk assessment may determine that a fall prevention cable system be reasonably practicable. A cable system is a permanent fall prevention system whereby operatives tie off with their harnesses. This is known as “individual protection” and also as being “active” which means the system only covers the person attached to it and it requires users to manually engage the system. With this type of system the risks are much higher as there is so much more that can go wrong. You need to ensure that the equipment is certified and fit for purpose. You must also make sure the operatives are trained in harness systems; they have the right equipment and are competent in its use. Professional safety advice is a must when dealing with individual and active protection.



It also important that, where possible, the fall prevention system implemented is a restraint system rather than an arrest system. A restraint system will stop users from falling over a roof edge. An arrest system will allow a user to fall over the edge and will then stop their fall.



Should an arrest system be employed, then an emergency plan must be in place to rescue the person from their arrested position on the building elevation. Following a fall and arrest a person can die in as little as 20 minutes so it is vital that a plan to rescue the person can be achieved in a shorter period than this. Careful thought and consideration must be given to this emergency plan to ensure it is achievable at all possible fall locations such as inner courtyards or elevations with restricted fire tender or MEWP access.

**What if I have an existing roof with no protection?**

The safest thing to do is to consider passive collective protection like free standing guardrail systems unless you can show by risk assessment that a lower system will suffice.

**What if I am still not sure what is best?**

You should engage a competent and adequately resourced professional safety company or consultant to ensure you provide the most appropriate system available to prevent operatives from falling from height. You should ensure that designs prepared for you are by a competent professional. The design should include drawings and specifications backed up with the company's Professional Indemnity insurance.

Remember, if you end up in court the judge will ask whether you carried out a risk assessment and whether you provided “reasonable” protection to operatives working at height. You need the assurance of being able to answer yes to both questions.

**Do I have any other duties?**

The installation of a new fall protection system constitutes “Construction Work” as defined in the Safety, Health and Welfare at Work (Construction) Regulations 2006-2010. You will therefore be required to appoint a competent and adequately resourced project supervisor for the design process (PSDP) and project supervisor for the construction stage (PSCS) for these works.

In fact, the work that is being undertaken on the roof itself, such as roof repairs, plant maintenance or cleaning may require the appointment of project supervisors, PSDP and PSCS. A client assessment of requirements checklist is available from the Construction Safety Partnership (CSP) to determine if and when the appointments need to be made. This very useful tool can be used to determine the requirements for works being undertaken and also serves as documented evidence of checks being undertaken. This checklist is available here: [http://www.csponline.ie/documents/ClientAssessmentofSafetyRequirementsforConstructionProjectsFinal\\_001.pdf](http://www.csponline.ie/documents/ClientAssessmentofSafetyRequirementsforConstructionProjectsFinal_001.pdf)

