



### SOP- 02

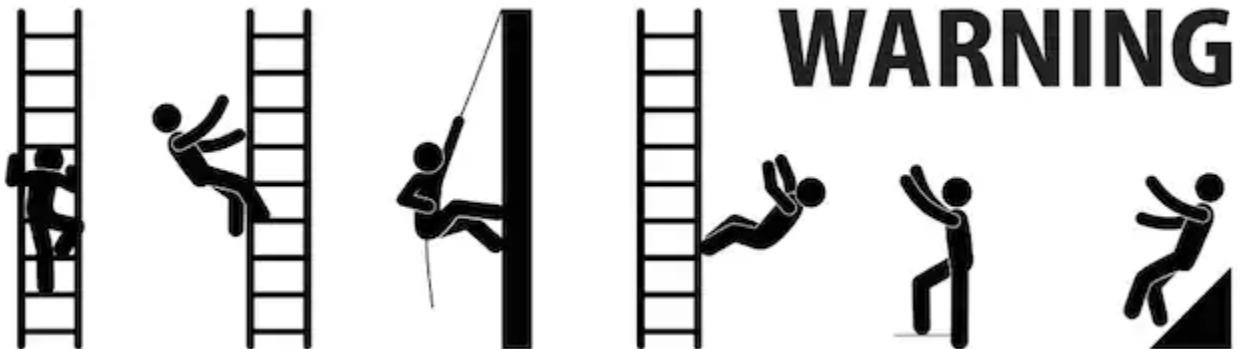


### Work at Height

When selecting work equipment MARK shall give collective protection (passive systems in that they do not require any action by the person at the work position) priority over personal protection measures; examples include:

- Guardrails,
- Tower scaffolds;
- Mobile elevated work equipment which provides collective fall prevention;
- Nets and airbags

When choosing the suitability of equipment to work at height consideration shall be given to all the following points:



**SOP- 02****Work at Height****Working conditions**

Slopes, poor ground, obstructions and traffic can determine the choice of work equipment e.g. a mobile elevated work platform (MEWP) could reach over bad ground or obstructions as long as its stability was not compromised. MEWP's must be used on firm ground which is free from slopes / holes likely to result in overturning. Tower scaffolds should rest on firm level ground, with the wheels or feet properly supported and if necessary outriggers fitted.

**Weather conditions**

Adverse weather conditions need to be anticipated and suitable precautions taken. Rain, ice, or snow can turn a secure footing into a skating rink. A roof should always be inspected before work starts to see if conditions have changed and to check whether it is safe to work. Sudden gusts of wind can lead to a loss of balance. An anemometer should be available to measure wind speed on the roof if large sheets are being handled and the safety manager contacted for advice on wind speeds.

SOP- 02Work at Height**Access and egress**

The distance to be negotiated for access and egress needs consideration. Ladders are likely to be less suitable from higher access. Provide fixed access or towers with internal stairs from higher access.

**Distance and consequences of a fall**

A fall arrest lanyard would be unacceptable if the deployment length of the lanyard and energy absorber were greater than the fall height. The user would hit the floor before the system could deploy. Nets and airbags become less reliable in terms of preventing injury the higher the fall, alternative work equipment should be selected in such circumstances.

**Ease of rescue / evacuation**

If evacuation from employed fall arrest equipment is going to be difficult, choose other work equipment.

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### **Duration and frequency of use**

Long Duration higher frequency of work can justify a better standard of fall protection e.g. a tower scaffold rather than a ladder. However a ladder may be justified for short duration low risk repetitive work. Care should be taken when requiring precautions for short duration work (taking minutes rather than hours) because it may not be reasonably practicable to install safeguards such as edge protection.

### **Risk of use Installation and removal of equipment**

A MEWP used by 1 person to work safely at height may entail less risk than exposing 2 or 3 people to risk in order to erect a tower or scaffold for the 1 person to work safely. The 2 or 3 people will be exposed to more risk during installation and removal of scaffold tubing / boarding etc. which has to be installed / dismantled at height. A MEWP will entail lower installation and removal risks. If there are overhead electrical lines crossing the site or near to the site, there may be a danger of contact or near contact with scaffolding tubes, metal roof sheets, or ladders causing flashover.

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### Work on sloping and flat roofs

For work on sloping roofs unless of very short duration full edge protection is required on all roof elevations to which access is needed. This is to prevent people and materials falling from the lower edge of the roof. The potential loading on edge protection when a person falls down a pitched roof onto it is much greater compared to falling against it on a flat roof. The scaffold supplier must be aware of the roof pitch when specifying edge protection. All work within 2 meters of gable ends no matter what the time duration of the work must have edge protection at those edges.

For work of a short duration on a pitched roof the decision on whether or not to erect edge protection will depend on a number of factors. The minimum standard for such short duration work on a pitched roof is:

- ❖ A safe means of access to roof level and
- ❖ A properly constructed and supported roof ladder

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Under no circumstances must any individual work directly on tiles or slates unless additional measures to prevent falls e.g. a safety harness with a suitable anchorage point are provided. Roof ladders must be designed and fabricated to be fit for purpose and:

- ❖ Strong enough to support workers when spanning across the supports for the roof coverings;
- ❖ Long enough to span the supports (at least three rafters) and
- ❖ Secured or placed to prevent accidental movement

The anchorage at the top of the roof ladder should be by some method which does not depend on the ridge capping. The anchorage should bear on the opposite slope by a properly designed manufactured ridge iron or be secured by other means.

Eaves and gutters should not be used as footing or to support a roof ladder.