

FALL PROTECTION

BACKGROUND

The Occupational Health and Safety Code has specific requirements for the protection of persons working on the roofs of buildings. The purpose of this bulletin is to identify some of these requirements.

INTRODUCTION

At fall heights of 1.2 metres or less the *OHS Code* does not require the use of a fall protection system unless there is an unusual possibility of injury. Between fall heights of 1.2 metres and 3 metres, a fall protection system is not required if the work is temporary in nature, unless there is an unusual possibility of injury. Section 139 of the Occupational Health and Safety Code Explanation Guide provides guidance on the definition of temporary work. If the fall height is 3 metres or more, a fall protection system is required. This can consist of a personal fall arrest system, a travel restraint system, a safety net, a control zone or another system approved by a Director of Inspection.

GENERAL PROTECTION

The Occupational Health and Safety Code Explanation Guide provides information on another system approved by a Director of Inspection. This procedure-based fall protection system can be used in the following situations:

- (1) *installation or removal of fall protection equipment (first person up/last person down)* – typical examples may involve installing a fall arrest anchor at the peak of a roof, installing a perimeter guardrail system on a flat roof, installing a portable fall arrest post at height, etc.;
- (2) *roof inspection or estimating* – applies to both flat and sloped roofs; and
- (3) *emergency repairs* – this does not include normal maintenance and service tasks. Emergency repairs must involve light duty tasks of limited duration.

Workers engaged in these three types of activities at height are exposed to fall hazards for very short periods of time, if at all, since they most likely are able to accomplish their work without going near the danger zone i.e. within 2 metres of the edge in the case of roofs. Workers engaged in such work are not continually or routinely exposed to fall hazards. As a result, they tend to be very focused on their footing, alert and aware of the hazards associated with falling i.e. more aware of their position than, for example, a roofer who is moving backwards while operating a felt laying machine, or a plumber whose attention is on an overhead pipe and not on the floor edge.

If an employer wishes to use a procedure-based fall protection system, all of the following conditions must be met:

(1) Written hazard assessment

A written hazard assessment specific to the work site and work being performed must be completed. This reinforces the requirements of Part 2 of the *OHS Code* for hazard assessment.

(2) Written procedures

The procedures to be followed by workers while performing the work must be in writing and available to workers before the work begins. Workers must understand the activity they are about to undertake. The procedures must be part of the fall protection plan required by section 143 of the *OHS Code*.

(3) Fall protection system must be used if practicable

If the use of a fall protection systems is practicable, it must be used e.g. if anchor points are available or a fall protection system can be rigged without exposing workers to a greater hazard, then a fall protection system must be used. The option of using an administrative procedure is not intended to allow an employer or worker to avoid using a fall protection system or some type of elevated work platform just because

doing so may be inconvenient or take more time than using an administrative procedure.

(4) Limit number of workers exposed to fall hazard

The work must be carried out in a way that minimizes the number of workers exposed to the fall hazard while the work is performed.

(5) Limit worker exposure to undue harm

Use of a procedure-based system must not expose a worker to undue harm. Working at height has inherent risks. Undue harm involves exposing a worker to greater potential harm and is not an acceptable practice e.g. having a worker free climb a severely sloped metal clad roof to install an anchor at the peak, having a worker inspect a difficult-to-access equipment location that could be inspected from another location using other means i.e. elevating work platform or nearby structure using optical equipment.

The work must not expose workers to an undue hazard resulting from poor environmental conditions e.g. high winds, icy footing, etc., roof slope, or surface finish.

(6) Light duty tasks of limited duration

The work must be limited to light duty tasks of limited duration and certain conditions apply:

- (a) the work must be a "light duty task" such as inspection, estimating, or simple emergency repairs e.g. membrane repair on a flat roof (the repair of insulation below the waterproofing membrane is not a light duty task), installation of perimeter sheet metal roof flashing, etc. The work done must be less than approximately 15 minutes in duration; and
- (b) while doing the task, the worker should not turn his or her back to the edge and must keep the edge in sight.

If either of these conditions cannot be met, a procedure-based system cannot be used.

(7) Worker competency

The workers performing the work must be competent to do so.

(8) Limitations on inspection, investigation and assessment activities

If the procedure-based approach is used for inspection, investigation or assessment activities, the activities must take place prior to the actual start of work or after work has been completed. If the activities take place while work is going on e.g. during construction of a roof or structure, the fall protection requirements of part 9 of the *OHS Code* apply to *all* workers exposed to a fall hazard.

The use of a procedure-based approach in these circumstances recognizes that before work begins, or after all work has been completed and workers have left the area, there may be a need for building inspectors, owners, etc. to inspect the area and/or the work. All fall protection equipment, such as perimeter guardrail systems or safety nets, may have been removed following completion of the work. The systems need not be reinstalled a second time for inspectors.

The OHS Code Explanation Guide for Part 9 - Fall Protection, can be found at

http://www3.gov.ab.ca/hre/whs/law/pdf/ohsc_p9.pdf

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