

WORKING AT HEIGHT

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Impact of new harmonised OHS legislation

This information is not exhaustive – refer to full Act & Reg.

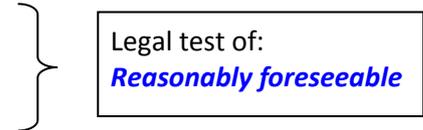
Extracts taken from from QLD WHS Regulation 2011 (effective 01 Jan 2012).

NOTE: WA, SA, TAS and VIC have not adopted the new harmonised WHS legislation as at 01 Jan 2012

Part 3.1 Managing risks to health and safety

34 Duty to identify hazards

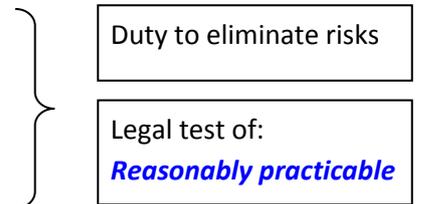
A **duty holder**, in managing risks to health and safety, **must identify** reasonably foreseeable **hazards** that could give rise to **risks** to health and safety.



35 Management of risk

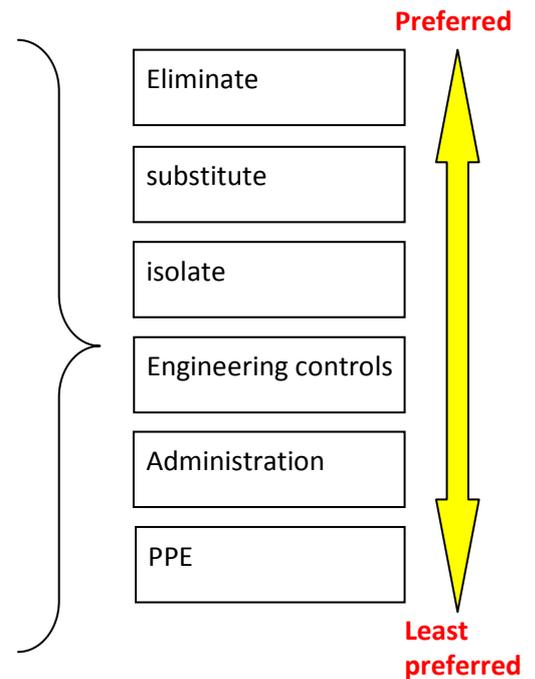
A duty holder, in managing risks to health and safety, must—

- (a) **eliminate** risks to health and safety so far as is reasonably practicable; and
- (b) if it is not **reasonably practicable** to eliminate risks to health and safety—minimise those risks so far as is reasonably practicable.



36 Hierarchy of control measures

- (1) This section applies if it is not reasonably practicable for a duty holder to eliminate risks to health and safety.
- (2) A **duty holder**, in minimising risks to health and safety **must** implement risk **control measures** under this section.
- (3) The duty holder must minimise risks, so far as is reasonably practicable, by doing one or more of the following—
 - (a) **substituting** (wholly or partly) the hazard giving rise to the risk with something that gives rise to a lesser risk;
 - (b) **isolating** the hazard from any person exposed to it;
 - (c) implementing **engineering** controls.
- (4) If a risk then remains, the duty holder must minimise the remaining risk, so far as is reasonably practicable, by implementing **administrative** controls.
- (5) If a risk then remains, the duty holder must minimise the remaining risk, so far as is reasonably practicable, by ensuring the provision and use of suitable **personal protective equipment**.



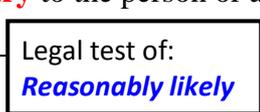
Part 4.4 Falls

78 Management of risk of fall

(1) A person conducting a business or undertaking at a workplace must, under part 3.1, manage risks to health and safety associated with a **fall** by a person **from one level to another** that is **reasonably likely** to cause **injury** to the person or any other person.



stop!



79 Specific requirements to minimise risk of fall

(1) This section applies if it is not **reasonably practicable** for the person conducting a business or undertaking at a workplace to **eliminate** the risk of a fall to which section 78 applies.

Legal test of:
Reasonably practicable

(2) The person conducting the business or undertaking at a workplace **must minimise the risk of a fall** by providing adequate protection against the risk under this section.
Maximum penalty—60 penalty units.

(3) The person provides adequate protection against the risk if the person provides and maintains a **safe system of work**, including by—

(a) providing a **fall prevention device** if it is reasonably practicable to do so; or

(b) if it is not reasonably practicable to provide a fall prevention device, providing a **work positioning system**;
or

(c) if it is not reasonably practicable to comply with either paragraph (a) or (b), providing a **fall arrest system**, so far as is reasonably practicable.

Preferred

Fall prevention

Positioning system

Fall-arrest system

Least preferred

80 Emergency and rescue procedures

(1) This section applies if a person conducting a business or undertaking **implements a fall arrest system** as a measure to control risk.

(2) Without limiting section 79, the **person must establish emergency procedures, including rescue procedures**, in relation to the use of the system.
Maximum penalty—60 penalty units.

(3) The person must ensure that the emergency procedures are **tested so that they are effective**.

Maximum penalty—60 penalty units.

(4) The person must provide relevant workers with suitable and adequate information, **training** and **instruction** in relation to the emergency procedures.

Maximum penalty—60 penalty units.

(5) In this section—
relevant worker means—

(a) a worker who, in carrying out work in the business or undertaking, uses or is to use a fall arrest system; and

(b) a worker who may be involved in initiating or implementing the emergency procedures.

Now a legal requirement to have a **tested** rescue system in place that is *proven* to be *effective*.

Note: This requirement is triggered by the use of fall-arrest systems.



Chapter 6 Construction work

Part 6.1 Preliminary

289 Meaning of *construction work*

(1) In this chapter, *construction work* means any work carried out in connection with the construction, alteration, conversion, fitting-out, commissioning, renovation, repair, maintenance, refurbishment, demolition, decommissioning or dismantling of a structure.

Very wide definition: - almost any work could be regarded as 'Construction Work'.

291 Meaning of *high risk construction work*

In this chapter, *high risk construction work* means construction work that—

- (a) **involves a risk of a person falling more than 2m**; or
- (b) is carried out on a **telecommunication tower**; or
- ...
- (f) is carried out in or near a **confined space**; or
- ...
- (j) is carried out on or near **chemical, fuel or refrigerant lines**; or
- (k) is carried out on or near **energised electrical installations or services**; or
- ...
- (n) is carried out on, in or adjacent to a road, **railway**, shipping lane or other **traffic corridor** that is **in use by traffic** other than pedestrians; or
- (o) is carried out in an area at a workplace in which there is any **movement of powered mobile plant**; or
- ...

Very wide definitions: - many types of work could be regarded by the courts as being 'High Risk Construction Work'.

Note: s291 (b) specifically states; 'telecommunication tower'.

It is the view of this author that work on other types of tower structures would also be regarded as 'high risk construction work' eg: **energy transmission towers and cable-way support towers** (ie chair lifts).

306C Risk of fall of less than 3m in housing construction work or less than 2m in other construction work or construction work on roof with slope not over 26°

(1) This section applies to—

- (a) construction work that **is housing construction work** during which a person could fall **less than 3m**; or
- (b) construction work that is **not housing construction work** during which a person could fall **less than 2m**; or
- (c) construction work on a **roof**, or partly completed roof, surface with a **slope not over 26°**

NOTE: QLD only:

This section does not apply to construction work if a person could fall from—

- (a) a **ladder** or **fixed ladder**; or
- (b) a platform supported by trestle ladders; or
- (c) **scaffolding** that the person is **erecting** or **dismantling**; or
- (d) an area near a ladder that the person needs to use to get on or off the ladder.

306D Risk of fall of at least 3m in housing construction work or at least 2m in other construction work or construction work on roof with a slope over 26°

(1) This section applies to—

- (a) construction work that **is housing construction work** during which a person could **fall at least 3m**; or
- (b) construction work that **is not housing construction work** during which a person could **fall at least 2m**; or
- (c) construction work on a **roof**, or partly completed roof, surface with a **slope over 26°**.

NSW, NT and ACT have no equivalent legislation.

306G Travel restraint system as control measure

- (1) A travel restraint system used as a control measure must—
- (a) be **installed** by a **competent person**; and
 - (b) have an anchorage point with a capacity to withstand any load that could be exerted on it in the normal operation of the system to restrain any person who may reasonably be expected to use the system.
- (2) A person conducting a business or undertaking must not use, or allow another person to use, the system unless the **person** who is to use the system has been **trained** in the safe and correct use of the system.
- (3) A person conducting a business or undertaking **must not use**, or allow another person to use, a component of the system that shows **evidence of wear or weakness** to an extent that may **affect** the system's **safety**.
- (4) A person conducting a business or undertaking must ensure that, at least once **every 6 months**, a competent person—
- (a) **inspects** the system; and
 - (b) gives the person a written record of the inspection.
- (5) A person conducting a business or undertaking must keep the **record** for the lesser of the following—
- (a) **4 years**;
 - (b) the life of the system.

QLD ONLY

WHS Reg Definition:
Travel restraint system
means a system that—

(a) consists of a harness or belt, attached to 1 or more lanyards, each of which is attached to a static line or anchorage point; and

(b) is designed to restrict the travelling range of a person wearing the harness or belt so that the person can not get into a position where the person could fall off an edge of a surface or through a surface.

306I Fall arrest harness system as control measure

- (1) Each anchorage point of a fall arrest harness system used as a control measure must be—
- (a) designed by an engineer for the purpose for which it is intended to be used; or
 - (b) inspected and approved by a competent person before the anchorage point is first used by any person.
- (2) Each anchorage point of the system, other than an anchorage point supporting a static line, must have a capacity of at least—
- (a) if only **1 person** is using the anchorage point and the person could have a **limited free fall—12kN**; or
 - (b) if only **1 person** is using the anchorage point and the person could have a **free fall—15kN**; or
 - (c) if **2 persons** are using the anchorage point—**21kN**.
- (3) Each anchorage point of the system must be located so that a lanyard of the system can be attached to it before the person using the system moves into a position where the person could fall.
- (4) The system's device to **absorb the energy** of a **falling person** **must limit** the force applied to the person by a fall to **not more than 6kN**.

QLD ONLY

WHS Reg Definition:
Fall arrest harness system
means a system that—

a) does not prevent a fall, only catches a person after the fall has occurred; and

b) is designed to arrest the fall of a person using it and eliminate or minimise the risk of injury to the person as the fall is arrested.

- (5) The system must be installed in accordance with the instructions of—
- (a) if the system’s manufacturer or supplier has given instructions about its installation—the manufacturer or supplier; and
 - (b) to the extent the system’s manufacturer or supplier has not given instructions—an engineer or competent person.

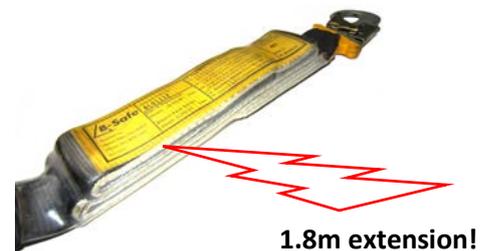
- (6) The system **must be maintained** in accordance with the instructions of—
- (a) if the system’s manufacturer or supplier has given instructions about its maintenance—the manufacturer or supplier; and
 - (b) to the extent the system’s manufacturer or supplier has not given instructions—an engineer or competent person.

- (7) A person conducting a business or undertaking must ensure there is **enough distance available** for a person using the system to fall to prevent the person **hitting an object**, the **ground** or another surface, other than a vertical surface. Maximum penalty—60 penalty units.

Clearance is crucial!
 Australian Standard AS1891.1 specifies 1.0m clearance **post fall**.

- (8) For subsection (7), whether there is **enough distance available must be worked out** by taking the following into account—

- (a) the person’s height;
- (b) the height and position of the anchorage point;
- (c) the length of the lanyard;
- (d) any slack in the static line;
- (e) any stretching of the lanyard or static line when extended by a fall;
- (f) the length of the energy absorber when extended by a fall;
- (g) any other relevant factor.



- (9) A person conducting a business or undertaking must ensure that—

- (a) no part of the system can come into contact with anything that could affect the safe use of the system; and

Examples of a thing that could affect the safe use of a system—

- an edge of a platform or beam over which a lanyard would tighten if a fall were to happen
- part of an anchorage point that is not adequately padded

- (b) a person using the system **is trained** in the safe and **correct use** of the system.

Training is a legal requirement!
 Workers must be trained in the safe and correct use of the system.

(10) A person conducting a business or undertaking must ensure that—

(a) a component of the system **is not used** if it shows **evidence of wear or weakness** to an extent that may affect the system's **safety**; and

(b) if a competent person considers that an anchorage point of the system is worn or that its load-bearing capacity may be impaired—

(i) the anchorage point is not used; and

(ii) appropriate measures are taken to prevent its use while it is worn or its load-bearing capacity may be impaired; and

(c) at least once **every 6 months**, a competent person **inspects** the components of the **system**, other than each anchorage point, and gives the person a written record of the **inspection**; and

(d) the record is kept for the lesser of the following—

(i) **4 years**;

(ii) the life of the system.

Inspection requirements:
Fall protection systems must be inspected at **6 monthly** intervals by a competent person.

(11) If the system has been used to arrest a fall, the system must not be used again unless its manufacturer or a competent person has inspected it and decided that it is fit for safe use.

(12) A person conducting a business or undertaking must not use, or allow another person to use, the system unless it is used in accordance with the instructions of—

(a) if the system's manufacturer or supplier has given instructions about its use—the manufacturer or supplier;
or

(b) otherwise—an engineer or competent person.

(13) A person conducting a business or undertaking **must not use**, or allow another person to use, the system while the **person** using the system **is alone**.

(14) In this section—

free fall means a fall in which the distance a person using a fall arrest harness system falls vertically before the system starts to take loading **is more than 600mm** but not more than 2m.

limited free fall means a fall in which the distance a person using a fall arrest harness system falls vertically before the system starts to take loading is **not more than 600mm**

QLD only:

In QLD, if a worker is using a fall-arrest system, that person can't work alone!

NOTE 1: This rule *does not* apply to **travel restraint** or **positioning** systems. A person can work alone if he/she is using a travel restraint or positioning system.

NOTE 2: NSW, ACT and NT have no specific legislation for stopping a person from working alone at height.

GUIDANCE NOTES ON THE LEGAL TEST OF

'REASONABLY PRACTICABLE'



It is well established that the duties in the OHS / WHS statutes are *absolute duties*, and this absolute duty is qualified by 'reasonably practicable'. 'Reasonably practicable' was definitively defined in the English Kings Bench court in 1949 by Asquith LJ in Edwards v. National Coal Board [1949] 1 KB 704 at 712:

'Reasonably practicable' is a narrower term than 'physically possible' and seems to me to imply that a computation must be made by the owner, in which the quantum of risk is placed on one scale and the sacrifice involved in the measures necessary for averting the risk (whether in money, time or trouble) is placed in the other; and that if it be shown that there is a gross disproportion between them — the risk being insignificant in relation to the sacrifice — the defendants discharge the onus on them. Moreover, this computation falls to be made by the owner at a point of time anterior to the accident.

It is an 'objective' test – it is not what the duty holder knew about the risk and measures to respond to the risk, but rather what a reasonable person in the position of the duty holder would have known and done in response to the risk.

English court decisions have been confirmed by the Australian High Court. In Slivak v. Lurgi (Australia) Pty Ltd (2001) 205 CLR 304 Gaudron J at pp 322-323 observed that:

The words "reasonably practicable" have, somewhat surprisingly, been the subject of much judicial consideration. It is surprising because the words "reasonably practicable" are ordinary words bearing their ordinary meaning. And the question whether a measure is or is not reasonably practicable is one which requires no more than the making of a value judgment in the light of all the facts. Nevertheless, three general propositions are to be discerned from the decided cases:

- *the phrase "reasonably practicable" means something narrower than "physically possible" or "feasible";*
- *what is "reasonably practicable" is to be judged on the basis of what was known at the relevant time;*
- *to determine what is "reasonably practicable" it is necessary to balance the likelihood of the risk occurring against the cost, time and trouble necessary to avert that risk.*

It is important to note that, in determining what is (reasonably) practicable, the courts are usually doing so in the context of an incident (or event) which occurred at some point in time in the past. Because of the 'event focus' of prosecutions, traditionally the courts have not been concerned with what proactive steps might need to be taken by a duty holder to address risks more holistically, across a business or undertaking, for all work performed.

In the 2002 case of WorkCover Authority of New South Wales (Inspector Patton) v. Fletcher Constructions Australia Ltd (2002) NSWIRComm 316, the court endorsed the following passages from the judgment in WorkCover Authority of New South Wales (Inspector Byer) v Cleary Bros (Bombo) Pty Ltd (2001) 110 IR 182 paras [87] and [88]:

Per Walton J:

It is evident from [the] authorities that what is required by s 53(a) ... is the balancing of the nature, likelihood and gravity of the risk to safety occasioning the offences with the costs, difficulty and trouble necessary to avert the risk. At the one end of the scale, it could not be reasonably practicable to take precautions against a danger which could not have been known to be in existence. ... Similarly, if the happening of an event is not reasonably foreseeable then it will not generally be reasonable to make provision against that event ...

At the other end of the scale, there will be cases ... in which known or obvious risks to safety exist. In these circumstances, the defendant will not have established a defence under s 53(a) of the Act where it was reasonably practicable to have complied with the Act by ensuring that persons were not exposed to those risks. This may be the case because no measures were reasonably available or because measures which were available were not reasonably practicable. ...[T]he assessment of the reasonable practicability of those steps requires a balancing of the quantum of the risk with the sacrifice (in money, time and trouble) in adopting the measures necessary to avert the risk. In my view, where there is a known risk which entails the potential for serious injury to persons in the workplace, the defendant will generally have to demonstrate that the costs, difficulty or trouble occasioned by the measures significantly outweigh the risk.

Walton J (at para 94) observed that the test of reasonably practicable:

...plainly calls for a balancing of the various interests of the particular employer in their particular circumstances against the stringent and explicit policy expressed in the Act to ensure that all places of work are safe and without risks to health and safety. ... [I]t must be kept firmly in mind that in order to establish a defence under s 53 a defendant must be able to show that it had done all that was reasonably practicable. This is how the balancing of interests ... must operate. However, for a defendant to establish such a defence in the absence of pre-established safe work method, would, in my view, at the minimum, require evidence of the particular or unique circumstances that made the establishment of a safe work method in advance of the activities being commenced, impracticable. By their nature, such situations would be rare.

Summary:

Interpretation by the courts of the legal proposition ‘reasonably practicable’ suggests that duty holders will need to adopt an active, imaginative and flexible approach to identifying potential dangers and to assessing the likelihood (probability) and consequence (severity) of risks arising. They can also be expected to determine suitable control measures and to implement these measures unless the cost, time and trouble of doing so are *grossly disproportionate* to the risk assessed.

Factors considered in the common law calculus of negligence		
Consideration of risk	<i>Weighed against</i>	Criteria for determining action
<input type="checkbox"/> Magnitude of risk of injury <input type="checkbox"/> Probability of risk		<input type="checkbox"/> Expense (only if grossly disproportionate) <input type="checkbox"/> Difficulty <input type="checkbox"/> Inconvenience
Factors considered in determining reasonably practicable		
<input type="checkbox"/> Quantum of risk <input type="checkbox"/> Likelihood of risk	<i>Weighed against</i>	<input type="checkbox"/> Cost (only if grossly disproportionate) <input type="checkbox"/> Time <input type="checkbox"/> Trouble