



IGO GROUP SAFETY STANDARD 19 - WORKING AT HEIGHTS

INDEPENDENCE GROUP NL





DOCUMENT APPROVAL FOR USE

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1. INTENT

This Standard details the requirements for preventing personnel from falling while working at height and preventing objects from falling from height onto persons below.

2. APPLICATION

This standard shall apply to all IGO sites and projects (exploration, construction and development) and to all IGO employees, contractors (including sub-contractors) and visitors to IGO sites and projects. All IGO sites and projects shall comply with the provisions of this standard, and all relevant legislative requirements for the location.

This standard specifically applies to both underground and surface operations.

Where this standard identifies Australian and New Zealand Standards, IGO's international sites and projects shall ensure any other Standards relevant to the location meet the minimum requirements established through this standard.

3. DEFINITION

Work at height shall be defined as work that involves risks associated with a fall by a person from one level to another that is reasonably likely to cause injury to the person. This includes gaining access to areas or working:

- within three metres of an unprotected edge or opening with a potential drop of two metres or more;
- on or in the vicinity of a surface through which a person could fall; and
- on or near the vicinity of a slippery, sloping or unstable surface.

4. DEFINED HAZARDOUS WORK

Work at Height is **Defined Hazardous Work**. Consequently:

- the task must be completed in accordance with a task specific Safe Work Procedure (SWP), or in absence of such, a JSEA. Refer to **IGO GSS3 - Personal Risk Management: 'Take 5' & JSEAs**, and;
- The task must be formally approved by means of a Permit To Work. **Refer to IGO GSS14 - Permit to Work.**

5. GENERAL REQUIREMENTS

All sites and projects shall develop a general 'working at height' procedure (and or a 'working near underground voids' procedure) based on this standard. Sites and projects shall identify and comply with the legal and other requirements relating to working at height as is relevant to their jurisdiction.

Fall prevention or fall protection shall be used wherever someone is working within three metres of an unprotected edge or opening with a potential drop of two metres or more. This applies to both above and below ground situations.

6. DESIGN OF PLANT AND STRUCTURES

Designers, manufacturers and persons sourcing plant and structures shall consider the potential risk of falls when designing plant or structures and shall, to the extent that is reasonably practicable, eliminate these risks. Where elimination is not possible fall prevention systems shall be integrated into the design.

7. RISK CONTROLS AND EQUIPMENT

Work shall be assessed to determine whether it is possible to eliminate the need to work at height (ie to complete the work at ground level or on a contained engineered structure). If work at height is required, the following hierarchy of controls shall be applied:

- the use a fall prevention devices
- the use a work positioning system
- the use a fall arrest device

Work positioning systems and fall arrest devices are collectively known as Fall Arrest and Restraint Devices (FARD). FARDs and their accessories must be appropriate to the type of work being conducted. All equipment used for fall restraint or fall arrest shall be designed, manufactured, selected, used and maintained in compliance with the AS/NZS 1891 series of standards.

Critical Control: The appropriate use of FARDs is a critical control.

6.1 Work on the Ground or on a Solid Structure

Wherever practical, work should be completed at ground level or on a structure engineered to bear the weight for which it is to be used (Refer to **IGO GSS20 Fixed Plant and Equipment**).

6.2 Fall Prevention Devices

Fall prevention devices or structures are designed to prevent a fall during temporary work at heights, and which, once in place do not require adjustment by workers using the device. They include:

- Temporary work platforms such as scaffolding, elevating work platforms, mast climbing work platforms, workboxes, building maintenance units, etc, and
- Temporary or adjustable perimeter guard rails, barricades or fencing located on edges (eg of roofs, structures, equipment (such as tanker trucks), around shafts, open holes and other excavations).

Fall prevention devices should be considered for use in situations in which the permanent installation of edge protection is not reasonably practicable. Fall prevention devices shall be correctly designed, installed and maintained by competent persons. For further information on fences and barriers, refer to **IGO GSS7 Barricades, Barriers and Signage**.

6.3 Work Positioning Systems

In situations where the permanent installation of edge protection or the use of a fall prevention device is not reasonably practicable, a work positioning system may be considered for use.

Work positioning systems (often called fall restraint systems) involve the use of equipment that enables a person to work in such a way as to physically prevent the user reaching a position at which

there is a risk of a fall at an unprotected edge (eg with a harness and a lanyard of a length which does not allow the person to reach the edge). Work positioning systems may include:

- Industrial rope access systems for gaining access to and working at a workface usually using vertically suspended ropes
- Restraint techniques designed for fall-arrest loading and consisting of a harness that is connected by a lanyard to an anchorage or horizontal life line. The restraint technique shall physically prevent the user reaching a position at which there is a risk of a fall at an unprotected edge.

6.4 Fall-Arrest Systems

In the situation where the permanent installation of edge protection, or the use of a fall prevention device, or the use of a work positioning system is not reasonably practicable a fall arrest system may be considered for use.

Fall arrest systems involve the use of equipment intended to safely stop a worker falling an uncontrolled distance and reduce the impact of the fall. Fall arrest systems may include:

- Catch platforms
- Industrial safety nets
- Individual fall-arrest systems
- Anchorage lines or rails

Lanyards must be fitted so that the wearer may not fall to a lower level without the fall being arrested. Lanyards shall have a shock absorber device when being used in a fall arrest system.

Critical Control: Workers using fall arrest systems shall not be permitted to work alone.

6.5 Inspection, Testing, and Tagging of FARDs

FARDs must be tested, certified for use, and inspected by the user before use. FARDS must be destroyed following a fall or where inspection has shown evidence of excessive wear or mechanical malfunction. Inspection, testing and tagging of FARDs must form part of an operations preventive maintenance program. A system of periodic tagging shall be used to show compliance.

8. ANCHORAGE POINTS

A fixed anchor point is an anchor point specifically designed & installed for the purpose of attaching a restraining or arresting device. A temporary anchor point is an anchor point that has not specifically been designed and installed as an anchor point, and is selected during the task for attaching a restraining or arresting device.

Where a temporary anchorage point is in service for a period of greater than 1 month it is must be converted to a fixed anchorage point and follow the requirements for a fixed anchorage point below.

Fixed anchorage points must comply with the requirements of **AS1891.4. Industrial Fall Arrest Systems and Devices Selection Use and Maintenance** including the ability to withstand a force of 15kN, and must be clearly labelled with that anchorage point's maximum rating and the maximum number of people who can attach to that point.

There shall be a system for ensuring that fixed anchorage points are tested and approved by a competent person to ensure that they are secure can take the required load.

Both fixed and temporary anchorage points must be inspected before use.

9. FIXED LADDERS

Fixed ladders shall be installed, used and maintained in accordance with **AS 1657 Fixed Platforms, Walkways, Stairways and Ladders—Design, Construction and Installation**.

10. PORTABLE LADDERS & SCAFFOLDING

Refer to **IGO GSS37 – Ladders & Scaffolding**.

11. FALLING OBJECTS

An exclusion zone must be established under an area where work at height is being completed to minimize the risk that someone may be injured by a dropped object. The exclusion zone must be defined by a barrier or barricade, and appropriately tagged in accordance with **IGO GSS7 Barricades, Barriers and Signage**.

12. INSPECTIONS, TESTING AND MAINTENANCE

Inspection, testing and tagging of working at height equipment shall be included as part of the site's preventive maintenance program.

13. EMERGENCY PROCEDURES

All sites and projects must have the capacity to affect the rescue of any person work at height or within a fixed caged ladder. Tasks may not commence if appropriate rescue equipment and resources are not available. Persons undertaking working at heights activities, and emergency response workers shall be:

- Able to recognise the risks of suspension intolerance
- Able to act quickly in the rescue of a person who is suspended in a fall arrest system.

14. TRAINING AND COMPETENCE

Personnel involved with working at heights shall be trained and competent in: the hazards associated with working at heights; the use of any working at heights permit; the risk control measures including PPE and emergency procedures. At a minimum competency training shall be required for personnel:

- Using fall restraint or fall arrest equipment
- Maintaining equipment used for and during working at heights
- Performing working at heights emergency response
- Required to inspect, test or tag working at height equipment

Critical Control: The Supervisor of anyone tasked with using a fall prevention or fall protection device must take reasonable steps to assure themselves that the user is competent in their use.

15. RECORDS

Sites shall identify any legal requirements relating to the keeping of working at heights records in particular records relating to:

- The keeping of registers, inspection data and maintenance records, including NATA certificates for all working at heights safety equipment;
- Emergency response training in relation to the rescue of persons using fall arrest systems; and
- Personnel who have undergone relevant competency training in respect to working at heights.

16. RELATED DOCUMENTS

16.1 Bowtie

Refer to IGO Business Critical Safety Register – Working at Heights

16.2 Common Management System Standards

- CMS ST-03 Risk Management
- CMS ST-12 Management of Change

16.3 HSES Standards and Guidelines

- IGO GSS3 - Personal Risk Management: 'Take 5' & JSEAs.
- to IGO GSS14 - Permit to Work.
- IGO GS20 - Fixed Plant and Equipment
- IGO GSS7 - Barricades, Barriers and Signage.
- IGO GSS38 - Scaffolding.

16.4 External Documents

- SafeWork Australia Managing the Risk of Falls
- AS 1657 Fixed Platforms, Walkways, Stairways and Ladders—Design, Construction and Installation
- AS1891.4. Industrial Fall Arrest Systems and Devices Selection Use and Maintenance
- AS/NZS 1891 Industrial fall-arrest systems and devices