

An aerial, high-angle photograph of a large-scale construction site. The image shows a dense network of steel beams forming the skeleton of a building. Several tall tower cranes are visible, their lattice structures extending upwards. In the lower right, a road with several cars and a white van is visible, providing a sense of scale. The overall scene is in grayscale, with a dark, moody atmosphere. The text is overlaid in white, creating a strong contrast.

GRIPPS[®]

FALLING OBJECT PREVENTION PLAN

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OBJECTIVE

This plan is designed to substantially diminish the hazards and potential for serious injuries to both workers and bystanders associated with dropped or falling objects. Its objective is to mitigate the risk of such incidents by ensuring that workers receive thorough training in properly securing tools at elevated heights and understanding and following the correct procedures.

SCOPE

This plan outlines minimum requirements to reduce the risk of property damage, harm to workers, or injury to bystanders caused by dropped or falling objects. It is important that all tools and equipment with the potential to a risk are properly secured using both primary and secondary falling object prevention solutions.

BACKGROUND

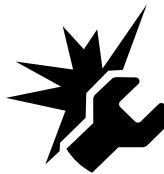
As a safety-focused organisation, we require all workers to prioritise actions and procedures aimed at preventing dropped or falling objects. It is important that every project integrates and enforces these protocols in their work plans to eliminate critical risks and maintain a safe and secure environment.

WHEN DO DROP HAZARDS OCCUR?



Hand tools and equipment can become drop hazards in four ways:

WITH USAGE



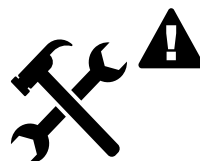
During operation, vigorous use and other factors may lead to a loss of control over the tool or equipment.

DURING TRANSPORT



During transportation to or from the work site.

FORGOTTEN ITEMS



Unsecured tools that are unintentionally left behind or placed on work surfaces.

FAILURES



When equipment fails due to age, wear and tear or manufacturing faults.

DEFINITIONS

Anchor

A secure point of attachment for lifelines, tethers or deceleration devices that are independent of the means of supporting or suspending a person.

Attachment Point

A tool accessory, specifically engineered to establish a connection point on a tool, enabling workers to attach a tether or lanyard. Examples include tool catch designs featuring V-Gripp tape and swivel catches, among others.

It is important that all attachment points be certified through third-party dynamic load testing conducted by the manufacturer.

These attachments are integral components of a primary drop prevention system.

Drop Hazard

Any object that descends or topples from its original position poses a risk of causing injury, fatalities, or damage to equipment and the environment.

Dropped objects can be categorised as either static or dynamic. A static dropped object refers to any item that falls from its previous position solely due to gravitational forces, such as weight-induced failure caused by corrosion or inadequate fixings. On the other hand, a dynamic dropped object encompasses items that descend due to externally applied forces. This can include impacts involving moving equipment or loads, entanglement with machinery or stacked items, movement, exposure to adverse weather conditions, etc.

Dynamic Load

Maximum dynamic load refers to the load an object can withstand without failing when dropped from a specified drop distance. The maximum dynamic load is usually much less than maximum static load due to the dramatic increase in force caused by the velocity of a falling object.

Exclusion Zones

Exclusion zones are designated areas established to restrict access to a specific location where height-related work is being carried out. These zones are a fundamental component of a comprehensive safety strategy, contributing significantly to accident prevention and the protection of both workers and bystanders.

Exclusion zones can be secured by using barricades and/or danger tape to deter unauthorised entry. Signage within the exclusion zones indicate the potential hazards and provide contact information for enquiries.

These exclusion zones are classified as secondary drop prevention systems.

Mitigation

Reducing the frequency, magnitude, or severity of exposure to risks involves minimising the potential impact of a threat or warning.

Primary Drop Prevention System

Primary drop prevention systems are implemented to mitigate the risk of objects becoming drop hazards. These systems are employed to fasten tools or objects to a worker or a securely fixed structure.

Examples of primary drop prevention systems include tool tethers, tool pouches, tool belts, tool holsters, spill control buckets, and additional tool attachment points.

Use primary drop prevention systems when it is not feasible to completely eliminate the risk of a dropped or falling object.

Safety Net

A device installed beneath work-in-progress to catch dropped or falling objects or workers.

These devices are to be considered a secondary drop prevention system.

Secondary Drop Prevention System

Secondary drop prevention systems are used to mitigate damage caused by a dropped or falling object after it has fallen. These systems can be employed in tandem with primary drop prevention systems.

Examples of secondary drop prevention systems include floor/hole coverings, safety nets, tool canopies, exclusion zones, toe boards, and personal protective equipment (PPE).

Static Load

Maximum static load, or tensile strength, refers to the maximum load an object can withstand before failing. This measurement does not take into account drop distance or velocity.

Tool Belt

An ergonomically designed tool belt is designed to support and organise various fall prevention items, including tool tethers/lanyards, pouches, and holsters attached to workers.

It is mandatory for all tool belts to undergo third-party testing for static load conducted by the manufacturer.

When used in conjunction with other falling object prevention accessories, these devices constitute a primary drop prevention system.

Tool Bucket

A tool bucket, specifically used for transporting tools and materials, must have a secure closure mechanism to prevent any accidental spillage of its contents. They must undergo load rating and third-party static load testing conducted by the manufacturer.

These devices are designated as a primary drop prevention system.

Tool Canopy

A structure designed to rest over an area that is capable of withstanding the impact force of dropped objects or tools.

This structure is to be considered a secondary drop prevention system.

Tool Holster

A specialised bag or pouch designed to safely house individual tools or items such as hammers, wrenches, levels, radios, bottles, etc. The design ensures easy accessibility during use while safeguarding against accidental drops when used.

These holsters are recognised as primary drop prevention systems.

Tool Pouch

A bag or pouch that is designed to secure its contents (nuts, bolts, nails, screws, small hand tools, etc.) from being spilled or dropped. Many tool pouches allow the user to remove a tool for use while preventing it from becoming a drop hazard through use of tethers, retractables, etc.

These devices are to be considered a primary drop prevention system.

Tool Tether / Lanyard

A robust extension designed from durable materials, specifically engineered to stop an object from dropping or falling. Typically, these extensions incorporate a connection point at each end of the tether to securely fasten the object to either a worker or a stationary item.

Classified as a primary drop prevention system, all tool tethers must undergo third-party certification for dynamic load testing by the manufacturer.

RESPONSIBILITIES

MANAGEMENT/SUPERVISION

Establishing clear expectations for the elimination of dropped or falling objects and actively enforcing the implementation of this procedure.

Coordinating assessments to verify the effectiveness and adherence to the procedure.

Providing workers with the necessary equipment and materials to execute the procedure proficiently.

Facilitating opportunities for workers to undergo essential training as needed.

HEALTH AND SAFETY TEAM

Communicating this process and relevant information to workers.

Coordinating assessments to verify the effectiveness and adherence to the procedure.

Conducting necessary training with workers.

ALL WORKERS

Notify your supervisor about any potential drop or fall hazards within your assigned work area.

Initiate work activities only after ensuring the elimination or proper mitigation of all identified drop or fall hazards.

Stop work if hazardous conditions arise, preventing the safe completion of the task.

Immediately report any instances of dropped or fallen objects.

Include potential drop or fall hazards into Job Hazard Analyses and Pre-Job Planning processes.

Report and replace damaged or broken tools/equipment immediately.

TRAINING

In certain situations, workers may require additional training specifically addressing dropped and falling objects.

Comprehensive training will be extended to all workers involved in activities that could lead to or expose them to potential drop or fall hazards and may include:

- The nature of hazards and dropped or falling objects in the workplace.
- Correct procedures and equipment use for dropped or falling object prevention.
- Purpose and application of applicable primary and secondary drop or fall prevention systems.
- Proper storage and handling of equipment and materials at height.
- Reporting requirements for incidents and near misses.

If there is a suspicion that a trained worker lacks sufficient understanding or comprehension of procedures or standards related to dropped or falling object prevention, retraining will be mandatory. Additionally, retraining may be necessary in other instances, such as changes in procedures or equipment for preventing dropped or falling objects.



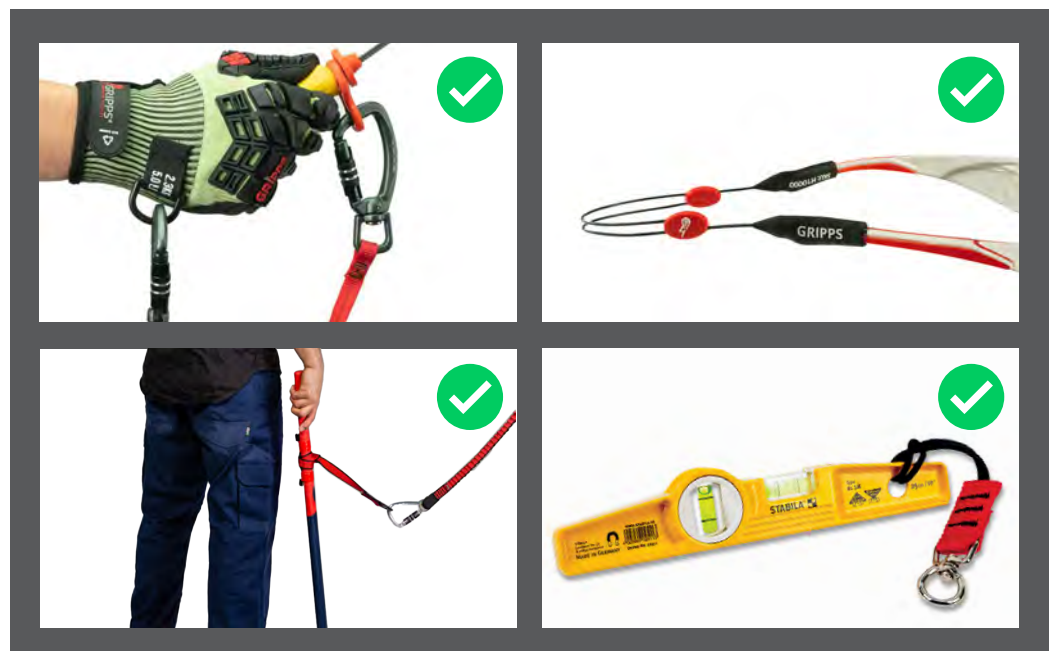
PRIMARY DROP PREVENTION SYSTEMS CRITERIA

Tool Attachment Points

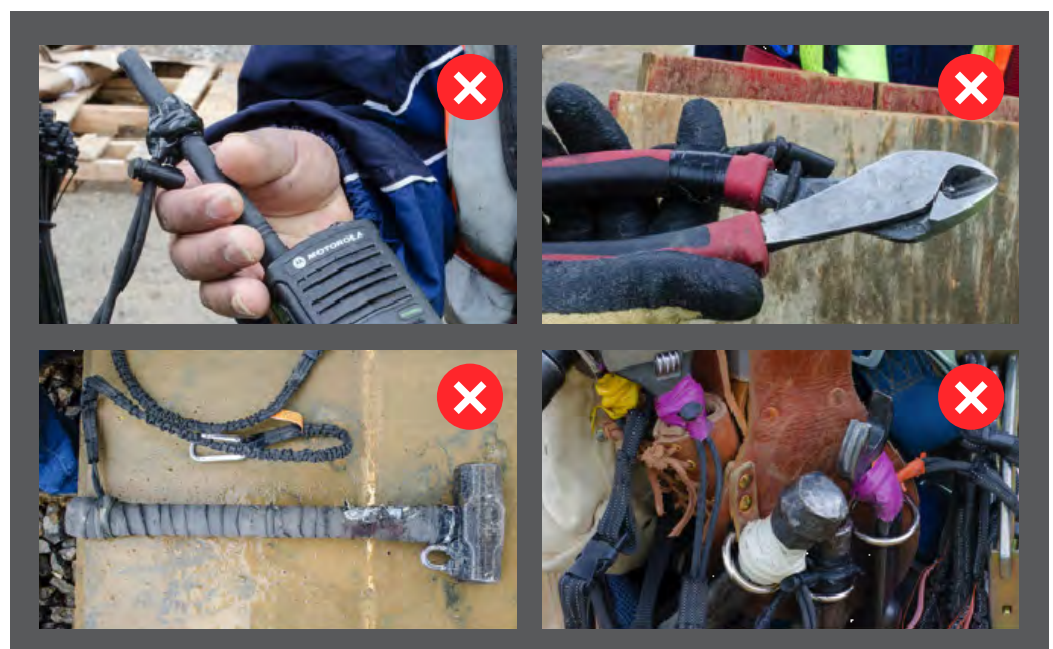
Before choosing a tool tether/lanyard, it is essential to establish a suitable attachment point on the tool. If the manufacturer has already provided a designated connection point for drop or fall prevention, this step becomes unnecessary.

These attachment points should undergo testing to ensure they meet a sufficient load rating for the intended use of the tool. All attachment points are certified through third-party testing for dynamic load by the manufacturer.

Examples of **CORRECT** tool attachment:



Examples of **INCORRECT** tool attachment:



Tool Tethers / Lanyards

Once a secure attachment point on a tool is established, it is crucial to choose an appropriate tool tether or lanyard.

Tool tethers must undergo testing to determine an appropriate load rating that aligns with the weight of the tool being tethered. These should be certified through third-party testing for dynamic loads by the manufacturer



Tool Holsters and Catches

Certain tools and objects may necessitate the use of a tool holster or catch. Tools placed in these holsters should adhere to the manufacturer's specified load-rating, ensuring their weight is either equal to or less than the recommended limit.



Tool Belts

When choosing an appropriate method for tool tethering, it is crucial to also identify a suitable anchor point for securing the other end of the tethering device.

For smaller tools, connecting directly to the worker may be the optimal choice, but this is only advisable for tools weighing less than 2.5kg / 5lbs. D-rings on fall protection harnesses, certified by the manufacturer for use as a tool connection point, serve as a reliable option.

Tool belts equipped with designated tether points are acceptable, provided they have undergone third-party testing for static and dynamic loads and are certified by the manufacturer.



Wristbands and Gloves

An alternative and permissible method for securing a tether to the worker's body involves using a wristband or tether-ready gloves. Wristbands and tether-ready gloves should not be used with tools weighing more than 2.5kg/5lbs.

Wristbands and tether-ready gloves must be officially certified by the manufacturer, having undergone third-party testing to ensure their dynamic load capacity.



Tool Bags and Pouches

To ensure the secure transportation of tools and equipment, use lifting bags, buckets, and pouches that have a closure system enabling users to safeguard contents against potential spills.

All lifting bags and buckets must have a load rating specified by the manufacturer and undergo third-party testing for static load compliance.



SECONDARY DROP PREVENTION SYSTEMS CRITERIA

Safety Netting

In situations requiring the use of safety nets, it is recommended use employ nets with specific-sized webbing approved by the manufacturer. The selection should align with the nature of the task, location, and the type of tools/materials involved. Fastening the net to its supports will be achieved using forged steel safety hooks or shackles like a GRIPPS Mat Clip.

To ensure optimal safety, nets should be installed as closely below the ongoing work as deemed practicable, but never exceeding a distance of 8 meters. The hanging, maintenance, and testing of safety nets must adhere to the manufacturer's instructions and comply with relevant health and safety regulations.

It is important to note that nets designed for preventing dropped or falling objects should not be used as fall protection for workers. In such instances, these nets may be deployed beneath fall protection nets. When falling object nets are used independently, signage should be prominently displayed to notify employees that "Fall protection is still required in work areas above placed netting."

Regular inspections of safety netting are essential, with a frequency of at least weekly. Defective netting should not be deployed, emphasising the importance of maintaining the integrity of the safety measures in place.

Toe Boards

When employed as a secondary drop prevention system, toe boards should be positioned along the periphery of overhead work to safeguard individuals below. These toe boards must be able to endure a force of at least 20kg / 44lbs in both downward and outward directions.

Toe boards must be a minimum height of 8cm and maintain a clearance over the working surface not exceeding 1cm.

Exclusion Zones

Exclusion zones serve as a supplementary measure for preventing drops and falls, complementing the primary safety applications in use.

Exclusion zones must be clearly marked using barricades or caution/danger tape to control access. Entry into an exclusion zone is restricted to workers directly involved in the overhead activity.

Guardrail Systems

If guardrail systems serve as a secondary drop prevention system, they should undergo inspections to verify that any openings are not sufficiently large to allow tools or materials to pass through.

GENERAL

Discipline

Failure to adhere to these safety procedures, or using essential primary and secondary drop prevention systems, will be deemed a violation of the company's safety regulations and may lead to disciplinary measures.

Equipment Inspection

Inspect all primary and secondary drop prevention systems before use. Immediately replace any excessively worn or damaged tools or materials identified during inspection.

Housekeeping

Waste management at the worksite is crucial, and to ensure proper disposal, workers should use designated bins conveniently placed throughout the area. When working at heights, waste can be temporarily stored in closed tool buckets, pouches, or similar containers to prevent spillage until it can be appropriately disposed of in a waste bin.

Adhering to a "clean as you go" approach is essential for maintaining an orderly workspace, reducing the likelihood of dropped or falling materials. Tools, equipment and other materials should be stored in an organized and systematic manner to further enhance safety and efficiency on the worksite.

Tool and Material Handling

Workers should employ positive tool transfer practices. When passing a tethered tool from one worker to another, it is essential to ensure a "100% tie off" is maintained. The tool must be securely tethered to the passing worker, and before handing it over, the receiving worker should connect their tether to the tool.

Once the positive connection is established, the passing worker can safely disconnect their tether from the tool. This method ensures that the tool is never at risk of becoming a drop or fall hazard.

Tool and Material Storage

When tools, equipment, or materials are stacked above the toe board's edge, screening or paneling must be erected from the working surface to the top of the guardrail or midrail. This measure should extend a sufficient distance to prevent these objects from posing drop or fall hazards.

Unless guardrails with screening or paneling are in place, materials should not be stored within four feet of the leading edge. It is crucial that all stacked materials are stable and self-supporting.

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