WORKING AT HEIGHT PROCEDURE

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1. GENERAL INFORMATION

1.1 PROMAN ENERGY

Proman Energy is an energy company focused on meeting the energy needs of Trinidad and Tobago. Proman Energy is the owner of Block 1(a) located offshore in the west coast of Trinidad. Proman Energy currently produces natural gas from the Iguana and Zandolie fields in Block 1(a) with two (2) unmanned platforms and a 45km pipeline to Proman Energy's Gas Processing Unit which is located onshore.

2. TERMS AND ABBREVIATIONS

Anchorage	A secure point for attaching a lanyard, lifeline or other component of a travel restraint system or fall-arrest system. Anchorages require specific load and impact capacities for their intended use.
Competent Person	A person who has, through a combination of training, qualification and experience, acquired knowledge and skills enabling that person to correctly perform a specified task.
Edge Protection	Includes guard rails or other structural components.
Fall Prevention Device	A fall prevention device is any equipment that is designed to prevent a fall for temporary work at heights, and once in place does not require any further adjustment by workers using the device.
Fall Arrest System	A system whose purpose is to safely arrest a fall. It may consist of a harness, lanyard and energy absorber connected to an anchorage point or anchorage system.
Fall Restraint System	A system whose purpose is to limit a person's movement by physically preventing the person reaching a position at which there is a risk of a fall (e.g. unprotected edge). It consists of a harness that is connected by a lanyard to an anchorage or horizontal lifeline.
Free fall	Any fall or part of a fall where the person falling is under the unrestrained influence of gravity over any fall distance, either vertically or on a slope on which it is not possible to walk without the assistance of a handrail or hand line.
Industrial rope access systems	Industrial rope access systems are used for gaining access to and working at a workface, usually by means of vertically suspended ropes. The main purpose of the system is to gain access to a work area rather than to provide backup fall protection.
Karabiners	Metal types of connectors that can be attached to anchorage points. They come in a variety of sizes, shapes and locking mechanisms to suit various applications. They should be self-closing and self- or manual-locking and capable of being opened only by at least two consecutive deliberate manual actions.
Lanyard	An assembly consisting of a line and components which will enable connection between a harness and an anchorage point. It may incorporate an energy absorbing component.
Lifelines	
	A line that is anchored securely to a stable structure, designed to allow movement while maintaining fall protection.
Mechanically Elevating Work Platforms (MEWPs).	These include mechanical lifting devices suitable for lifting and carrying persons, such as: scissor lifts,

	cherry pickers, boom lifts and travel towers. There is battery powered and internal combustion engine types. Some are designed for hard flat surfaces only, while others are designed to be operated on rough terrain.
Personal energy absorber (or deceleration device)	A device which reduces the deceleration force imposed when a fall is suddenly arrested, and correspondingly reduces the loadings on the anchorage and the person's body. The energy absorber may either be a separate item or manufactured as part of the lanyard.
Personal Fall Limiters (PFL)	Personal fall limiters are self-retracting lifeline. They connect directly to the D-ring of a body harness and provide working lengths from 6 to 9 feet. On a quick tug, an internal braking mechanism engages. During a fall, this mechanism engages, and an energy absorbing mechanism slows, then stops the line over a short distance, preventing further falling while reducing the impact force on the user's body.
Restraint line	The line securing workers to a point of anchorage and is used to prevent a person from reaching a point from which he or she could fall.
Self-retracting Lanyard (SRL)	Self-retracting lanyard are larger and heavier than PFLs, connect directly to the anchor point, and provide longer working length up to 175 feet. On a quick tug, an internal braking mechanism engages. During a fall, this mechanism engages, and an energy absorbing mechanism slows, then stops the line over a short distance, preventing further falling while reducing the impact force on the user's body.
Temporary work platform	Work platforms, other than permanently installed fixed platforms, used to provide a working area for the duration of the job and designed to prevent workers from falling. Temporary work platforms include scaffolds, elevated work platforms and work boxes, portable and fabricated platforms or any other platform that provides a working area and is designed to prevent a fall.
Total Fall Distance	The total distance a person is likely to fall during both the free and restrained parts of a fall and includes the maximum dynamic extension of all supporting components.
Work Positioning	A work positioning system enables a person to work supported in a harness under tension in such a way that a fall is prevented.
Working At Height	Wherever it is possible for a person performing work to fall.

Table 1 - Table of Abbreviations

3. ACRONYMS

ANSI	American National Standards Institute
ASSP	American Society of Safety Professionals
CFR	Code of Federal Regulations
EWP	Elevating Work Platforms
IOGP	International Association of Oil and Gas Producers
IRATA	International Rope Access Trade Association
MEWP	Mobile Elevating Work Platforms
NASC	National Access and Scaffolding Confederation
OSHA	Occupational Safety and Health Administration
OEUK	Offshore Energies UK
PFAS	Personal Fall Arrest Systems
RTW	Road Tanker Wagon
STOW TT	Safe To Work in Trinidad and Tobago
SG	Safety guidance
TG	Technical guidance

Table 2 - Table of Acronyms

4. PURPOSE

The purpose of a Work at Height Procedure is to establish a clear, structured framework for ensuring the safety of workers who perform tasks at elevated locations, where there is a risk of falling.

This procedure gives guidelines for identifying, assessing, and managing fall hazards in compliance with the required safety regulations and best practices to prevent accidents, injuries, or fatalities. This procedure applies to all employees, contractors, and visitors required to access heights of 1.8 meters (6 ft.) and above including working at the edge of an excavation or pit that is 1.2 meters (4 ft.), or deeper at any Proman Energy facility.

5. SCOPE

The requirements specified in this procedure apply to all stakeholders of Proman Energy where fall distance is equivalent to or more than 1.8 meters (6 ft). Emergency responders (such as fire service or rescue workers) may be exempted in certain emergency situations, if following this procedure is impractical or could delay urgent interventions.

1. The hierarchy of control shall be used when assessing the risks associated with the tasks to be conducted at height.

    a) Eliminate work at height for work at ground level.

    b) Substitute for work on a solid structure with protective edges if work on ground level cannot be eliminated.

    c) Verify the competency level of personnel for hazard identification, inspection, and use of protective devices.

    d) Installation of fall prevention devices.

    e) Verify work-positioning systems.

    f) Use of fall protection equipment and other safety systems such as personal fall arrest system, safety nets, guardrails/barriers. (In some cases, a combination of control measures may be necessary.)

2. Whenever working at heights cannot be eliminated, a risk assessment of the task to determine the safest method and controls required for execution of the proposed activity. shall be completed.

3. In accordance with this procedure, a work at height checklist must be completed to ensure the minimum controls have been implemented. Work at height activities will be authorized through the Control of Work system. (See Appendix 1 for Work at Height Checklist).

6. ROLES AND RESPONSIBILITES

6.1 HSSE MANAGER

The HSSE Manager will oversee all aspects of this procedure to ensure that working at height activities within the organization are performed safely, with proper preparation, and in compliance with all relevant standards and regulations. Additionally, the HSSE Manager will ensure that:

1. A thorough risk assessment is conducted before any work at height begins, identifying the potential hazards associated with working at height, such as falls, falling objects, structural integrity of platforms, and weather conditions etc. and ensure that all hazards are mitigated, and necessary safety measures are in place.
2. Suitably qualified and experienced 'responsible persons' are appointed to assess working at height tasks, including work at height activities which fall within the requirement of the Control of Work system.
3. Periodically review and audit the effectiveness of the work-at-height procedure and system, working closely with relevant personnel to ensure continued compliance and safety.
4. Detailed procedures for working at height are implemented and regularly reviewed to reflect any changes in regulations or industry best practices, ensuring continued alignment.
5. Workers involved in tasks at height are adequately trained and competent.
6. Oversee the delivery of training programs on safe working at height practices, fall prevention, and rescue techniques.
7. Incidents or near-misses related to work at height are thoroughly investigated, identifying root causes and ensuring prompt corrective actions are taken.
8. Lessons learned from incidents are documented and communicated to all personnel to prevent recurrence.
9. Workers are encouraged to actively engage in safety programs and promptly report any unsafe conditions.
10. A culture of continuous improvement in safety practices are promoted and employees are encouraged to take ownership of their own safety.

6.2 JOB SUPERVISOR

The job supervisor is responsible for ensuring that all work at height is managed in accordance with this procedure, including:

1. All work at height is subject to a suitable and sufficient risk assessment, and adequate safety controls (in keeping with the hierarchy identified in this procedure) are implemented, monitored, and reviewed.
2. The risks associated with working at height, working above water, working on the edge of an excavation or pit and dropped and falling objects are properly assessed, and agreed control measures are implemented, monitored, and reviewed.
3. That employees/contractors engaged in any activity (including organizing, planning, supervising, or executing) in relation to work at height, or work equipment for use in such work, are competent to do so.
4. All workplaces and equipment related to work at heights are appropriate, regularly inspected, and maintained.
5. Access to "Danger Areas" is restricted to authorized persons.
6. Arrangements are made to ensure emergency rescue can be performed in the quickest time for retrieval of personnel.

7. The review of fall rescue plans and certification of rescue equipment.
8. Assist with the execution of fall rescue drills to test the response of personnel.
9. All tasks are conducted in alignment with control measures identified and the requirements of this procedure.

6.3 HSSE REPRESENTATIVE

The HSSE Advisor plays a critical role in mitigating risks associated with working at height, ensuring that safety measures are in place, and that workers are adequately trained and protected. The HSSE Advisor is responsible for:

1. Assisting in performing detailed risk assessments for tasks involving work at height.
2. Ensuring that a safe system of work is established, taking into account potential hazards (e.g., falls, equipment failure).
3. Reviewing work plans, and rescue plans to ensure they comply with safety standards.
4. Providing guidance and awareness training to workers on safe working practices, proper use of fall protection equipment, and how to recognize hazards associated with working at height.
5. Ensuring workers understand the correct use of Personal Protective Equipment (PPE) such as harnesses, helmets, and personal fall limiters, etc.
6. Ensuring that all equipment used for working at height (ladders, scaffolding, fall arrest systems, etc.) is properly inspected, maintained, and fit for purpose.
7. Identifies and addresses any unsafe practices or conditions that could lead to accidents with the Job Supervisor.
8. Ensures that all regulatory and company safety standards are being adhered to.
9. Ensuring that rescue equipment is available and that workers are competent to perform rescue.
10. Ensuring that the procedure is updated on best practices and new safety standards related to working at height.

6.4 EMPLOYEES AND CONTRACTORS

Employees are tasked with ensuring safety and compliance with work at height by:

1. Ensuring that the procedure is read, understood, and adhered to at all times.
2. Understanding the hazards associated with working at height and complying with the risk management process applied to manage those risks.
3. Undertaking training for the safe operation and use of work-at-height equipment.
4. Ensuring that the job supervisor is made aware if feeling unwell prior to ascending height.
5. Reporting any unsafe equipment or condition that could potentially lead to an incident.
6. Using suitable work-at-height equipment and personal protective equipment in accordance with training and instructions.
7. Having the necessary competency to carry out the work, e.g., having the necessary skills, training, and knowledge.

7. GENERAL REQUIREMENTS

7.1 APPLICABLE STANDARDS

When it is not possible to work at ground level or in a protected area, appropriate fall restraint and or fall arrest systems must be utilized. The following standards must be applied to ensure their effectiveness and workers safety.

1. OSHA (Occupational Safety and Health Administration) Standards 29 CFR 1926.502: For design, installation, and use of fall protection systems, including guardrails, safety nets, personal fall arrest systems (harnesses, lanyards, etc.).

2. ANSI (American National Standards Institute) ANSI Z359: For personal protective equipment (PPE), such as harnesses, lanyards, and anchors, as well as system performance and ANSI Z359.2 for rescue plans.

3. ISO (International Organization for Standardization) ISO 45001, Standard that addresses occupational health and safety management systems, including requirements for assessing and controlling risks associated with fall hazards.

4. UK HSE Work at Height Regulation 2005: Legal standard designed to prevent injury and death from falls at height in the workplace.

5. IOGP lifesaving rule for work at height: To protect against fall when working at height.

6. NASC (National Access and Scaffolding Confederation) guidelines for scaffolding operations.

7.2 FALL PROTECTION PLAN

The Fall Protection Plan, which may be integrated into the task risk assessment, must be developed by a competent team and submitted for review and approval before any work at height begins.

It must outline the safety measures, equipment, and procedures required to protect workers from fall hazards during their work. The plan must identify suitable anchor points that can withstand a minimum force of 5,000 pounds (22.2 kN) per person attached and adequate clearance below the worker to prevent the worker from hitting the ground or obstacles if they fall.

7.3 FALL RESCUE PLAN

A fall rescue plan is required whenever workers are exposed to potential fall hazards, e.g., temporary access platforms, mechanically elevated working platform (MEWP) or other emergency situations where timely and effective rescue procedures are needed. It must define how to safely rescue a worker who has fallen and is suspended (e.g., caught in a fall arrest system or hanging in a harness).

For simple work at height, fall rescue planning may be incorporated within the overall task-based risk assessment and method statement. However, for complex or high-risk activities, a separate and detailed fall rescue plan is required to ensure effective and timely recovery in the event of a fall.

The classification of work at height as either simple or complex will be determined through the risk assessment process. This assessment will consider factors such as duration, accessibility, environment, equipment used, and the level of fall risk involved.

For example:

- Simple work typically implies low-risk, low-exposure tasks (e.g., short duration, controlled environment).
- Complex work implies higher-risk, harder-to-access locations, or where suspension trauma is a concern.

Self-rescue can be considered into a fall rescue plan if:

1. The fall protection system (e.g. fall arrest) allows the worker to self-rescue.
2. The height is moderate, and the worker can access a ladder, platform, or descent device after a fall.
3. The fall will not result in injury or unconsciousness.
4. Suspension trauma risk is minimal (e.g., short hang time).
5. The work area is easily accessible.

The rescue plan for complex or high-risk activities must list the rescue steps to ensure that workers can be safely recovered and treated after a fall incident. Elements of the plan must include at a minimum:

1. Project work and description (job location, and a description of the work being conducted).
2. Fall exposure evaluation and rescue operations considerations (anchorage, structural features, inaccessible areas, access points, rescue obstructions and any other risks etc.).
3. Identification of the necessary certified and fit for purpose tools and equipment (e.g., ropes, pulleys, winches, rescue stretchers) to carry out a safe and efficient rescue.
4. List of rescue personnel who are specifically trained in rescue techniques and the use of rescue equipment.
5. Step-by-step instructions on how to rescue a worker from a fall, whether it's a simple retrieval or a complex rescue requiring specialized equipment.
6. Time at which the worker should be rescued to prevent injury, such as within 15 to 30 minutes to avoid suspension trauma. The fall rescue plan should, provide a means of physical relief for the suspended worker.
7. Include the emergency medical procedures and the need for immediate medical attention after a fall.
8. Include the method and procedure for maintaining communication between the worker, rescuers, and Proman Energy Control Room during the rescue operation.

Work-at-height activities may require a unique rescue plan for several reasons:

1. Each work-at-height scenario presents unique risks depending on the environment, the type of work being done, and the equipment being used e.g., a worker on scaffolding has different rescue needs than a worker using a mechanical elevated work platform (MEWP).
2. A tailored rescue plan ensures that the correct procedures, tools, and personnel are ready to respond effectively.
3. Work-at-height locations may involve different structures, platforms, or equipment, all of which may require a unique approach to rescue.
4. Each location should have a plan that considers the specific access points, the height, and the environmental factors (wind, weather, etc.).
5. Different work-at-height locations may require different rescue equipment based on the height, structure, and job. A rescue plan should outline the proper tools and equipment needed for that particular environment.
6. Certain locations may present unique hazards that require specific rescue considerations. E.g., working near chemical hazards, electrical equipment, or in confined spaces might require special training, precautions, and rescue procedures.

The Rescue Plan must be completed by a competent team of personnel who are trained and certified in fall rescue. All Rescue Plans must be provided to Proman Energy’s Job Supervisor and HSSE department for review and approval.

The rescue plan must be reviewed regularly and updated as necessary to reflect changes in the work environment, personnel, equipment, or work practices.

7.4 FALL RESCUE TEAM

A designated rescue team must be available on-site or in very close proximity to the facility. The team must be adequately trained and properly equipped, positioned at or near the work site, and ready to respond immediately in the event of a fall or emergency involving work at height. A rescue team should be arranged:

- Where self-rescue is not feasible.
- To support activities such as rope access, confined space or suspended platform work.
- In event height is significant, or structures are hard to reach.
- If suspension trauma is a major concern.
- Where multiple workers are exposed to simultaneous fall hazards.
- Were there's a risk of injury, unconsciousness, or entrapment.

1. Rescue team members must receive specific training and certification in rescue operations for work-at-height situations. This includes but is not limited to:
    a) Fall rescue techniques.
    b) Rope access rescue (if applicable).
    c) Use of fall protection systems and rescue equipment (such as harnesses, ropes, and rescue stretchers).
    d) Basic First Aid and CPR training to assess and treat injuries after a fall.
2. The team should undergo regular drills and refresh their skills periodically. Evidence of drills and their lessons learned must be provided to Proman Energy for review upon request.
3. The team must have access to specialized rescue equipment suitable for the specific type of work being carried out at height.
4. All rescue equipment should be inspected and certified by a third-party to ensure it is in good working condition and compliant with safety standards (e.g., ANSI, OSHA regulations).
5. When performing work at height, the rescue equipment must be available at the location and set-up ready for use.
6. The rescue team members must be familiar with the specific work location, including:
    a) Access points and exit routes.
    b) The layout of scaffolding, platforms, or any work-at-height structures.
    c) Potential hazards in the environment (e.g., machinery, electrical lines, confined spaces).
    d) Location of fall protection equipment (anchor points, lifelines, etc.).
    e) The content of the rescue plan.
7. Each member must clearly know their roles and responsibilities.
8. The rescue team must be capable of responding immediately in the event of a fall. Response time should be minimized to reduce the risk of suspension trauma or other injuries. The rescue operation should commence immediately after a fall.

8. WORKING AT GROUND LEVEL

Whenever reasonably practicable, the requirement to work at height should be avoided to eliminate fall hazards. Consider if the work can be carried out at ground level or partially so, wherever feasible. Removing the need to work at height is the most effective approach to safeguarding workers from fall risks. Some examples of risk elimination by working at ground level include:

1. Assembling roofs at ground level before installation.
2. Constructing wall frames horizontally and then raising them into position.
3. Lowering shelving heights to allow workers to access items from the ground.
4. Utilizing tools with extendable handles, such as paint rollers (while considering potential musculoskeletal risks associated with tool use).
5. Bringing equipment down from height for repair or maintenance.

9. WORKING ON SOLID STRUCTURE

Working on a solid construction provides an environment where the likelihood of a fall may be eliminated. A solid construction for safe work at height is an area that is:

1. Structurally capable of supporting workers, material and any other loads applied to it.
2. Provided with barriers around its perimeter and around any openings from or through which a person could fall.
3. An even, accessible surface with gradient.
4. Provided with a safe means of entry and exit.

9.1 STRUCTURAL STRENGTH

Structural strength must be considered when planning or performing work that involves temporary or permanent structures, platforms, scaffolding, or any other surface that is required to support the combined weight of workers, materials, tools, and equipment. Before any activity begins, the surface must be assessed to ensure it can safely handle the required load to prevent accidents, collapse or other risks.

A Structural Engineer will be required to assess and approve structural strength when designing, modifying, or using a structure that needs to support significant loads. A significant load under this procedure refers to any load that may affect the integrity or safety of a structure due to its:

1. Weight or magnitude.
2. Duration (temporary or permanent).
3. Dynamic effects (e.g., moving equipment or vibration).
4. Impact on structural design limits.

9.2 BARRIERS OR EDGE PROTECTION

Edge protection should consist of guard rails, or other structural components. The top of the guard rail or component should be 42 inches above the working surface.

If the structure does not already have a permanent barrier, a temporary barrier consisting of a guard rail system inclusive of mid-rails and toe boards should be constructed by competent Scaffolders to withstand the force of someone falling against it.

Note: Guardrails should not be used to support fall arrest loads unless they are specifically designed, engineered, and certified for that purpose. Standard guardrails are typically constructed to withstand a horizontal force of 200 pounds (0.89 kN), as per regulatory requirements, which is significantly less than the 5,000 pounds (22.2 kN) required for certified fall protection anchor points. Using an uncertified guardrail as an anchor point poses a serious risk of structural failure in the event of a fall and shall not be used.

9.3 HOLES AND OPENINGS

Any holes, penetrations, or floor openings through which a person could fall must be made safe immediately upon formation. Control measures must be implemented without delay to eliminate fall hazards.

Cover requirements:

If a cover is used as a control method, it must meet the following criteria:

1. Made from a material strong enough to support the maximum anticipated load (including people and equipment).

2. Securely fixed in place to prevent dislodgement or accidental removal.
3. Must be highly visible (e.g., painted, flagged, or using reflective tape or markings).
4. Clearly marked or labelled with warnings such as: "DANGER – OPENING BELOW" or "DO NOT ENTER"

Barricade requirements:

A hard barricade (e.g., constructed from rigid materials such as wood, metal, or heavy-duty plastic) must be installed when any of the following conditions apply:

1. The hole or opening is not in active use but remains uncovered.
2. The hole is located in an area with frequent pedestrian or worker traffic.
3. Temporary covers are impractical or insufficient to eliminate the risk.

Note: Soft barriers do not meet minimum fall prevention standards on their own and must be supported by rigid controls or other engineered safety measures.

9.4 SURFACE AND GRADIENT

Surfaces of solid construction should be non-slip and free from trip hazards. If grating or steel sheet flooring is used for walkways and working platforms, ensure that:

1. Flooring panels are securely fixed and assembled.
2. Each panel is fixed securely before the next panel is placed in position.
3. During installation, flooring is secured by bolts and nuts, grating clamps, tack welding (if applicable), or other means to prevent movement before being fixed permanently.
4. If panels of grating or steel sheets are removed, hard barrier must be installed for edge protection.

10. WORKING ON TEMPORARY PLATFORM

A 'temporary work platform' is a working platform, other than a permanently installed fixed platform, used to provide a working area for the duration of the job. The design of the platform must prevent workers from falling. Temporary work platforms include scaffolds, elevating work platforms, portable or mobile fabricated platforms or any other platform that provides a working area and is designed to prevent a fall.

10.1 SCAFFOLD

Scaffolding must be properly designed, erected, and maintained in accordance with standards set by the National Access and Scaffolding Confederation (NASC), a UK-based organization recognized for its comprehensive scaffolding safety regulations. Its key guidance includes:

- Safety Guidance SG4:22 – Focuses on fall prevention during the erection, alteration, and dismantling of scaffolding.
- Technical Guidance TG20 – Provides engineering rules and compliance standards for scaffolds built using tubes and fittings.

When using scaffolding for work at height, the following safety measures must be adhered to:

1. Scaffolding must be erected and dismantled by trained and certified workers who are familiar with the scaffold design, safety standards, and procedures. A scaffold supervisor or inspector must oversee the erection and dismantling process.
2. All Scaffolders must be competent to erect, modify and dismantle scaffolding.
   a) Scaffolders must hold a valid Level 2 certificate and have a minimum of three (3) years' experience in scaffold operations.
   b) Scaffold Supervisors/Inspector must hold a valid Advance Level and Inspector certificate and have a minimum of five (5) years' experience in scaffold operation.
   c) Scaffold certification must be obtained from an accredited institution.
3. Scaffolds must be capable of supporting at least four (4) times the maximum intended load without failure.
4. ONLY tube and clamp scaffold will be allowed on Proman Energy's site.
5. In cases where engineered scaffolding is needed, it must be designed by a qualified Structural Engineer and built to meet specific design specifications. The scaffold must be customized and calculated to suit the unique demands of the job.
6. Details of the work scope required manpower, and materials/equipment must be provided to the scaffolding provider to support the development of an appropriate scaffold erection plan, whether for standard or engineered scaffolding structures.
7. Scaffold must be designed to be stable and prevent tipping, swaying, or collapsing. This includes having a solid base, secure anchorage points, and proper bracing.
8. Scaffolding must be erected on a firm, level foundation (e.g., concrete, steel) to ensure stability. If the ground is soft or uneven, additional supports, base plates, or mats must be used to distribute the load.
9. Use only approved non spark tools such as a retched spanners and hardware (e.g., bolts, clamps) when assembling and securing scaffolding components.
10. Ensure that scaffolds do not exceed the recommended height-to-base ratio, typically 4:1, unless properly braced or tied to a stable structure.

11. Scaffolds must have guardrails, toe boards, and other fall protection systems to prevent workers from falling. Also refer to section 18 Dropped Object Prevention.

12. Platforms should be made of solid planks or decking materials that can support the intended load. Planks must be manufactured and approved for the purpose of scaffolding in accordance with OSHA 29 CFR 1926.451 / ANSI/SSFI SC100 / ANSI A10.8. Planks should be properly secured to prevent them from moving or slipping. Laminated planks are not allowed.

13. All scaffold materials must be inspected by a competent person and certified free of damage prior to use in scaffold erection. Upon completion of the scaffold erection, a Scaffold Checklist must be completed and verified by Proman Energy's Job Supervisor before the scaffold is released for use.

14. Scaffolding should be inspected by a competent Scaffold Inspector after erection and verified by Proman Energy Job supervisor or HSSE personnel. Inspections should be conducted daily before use and after any significant weather events (e.g., high winds, rain, earthquake).

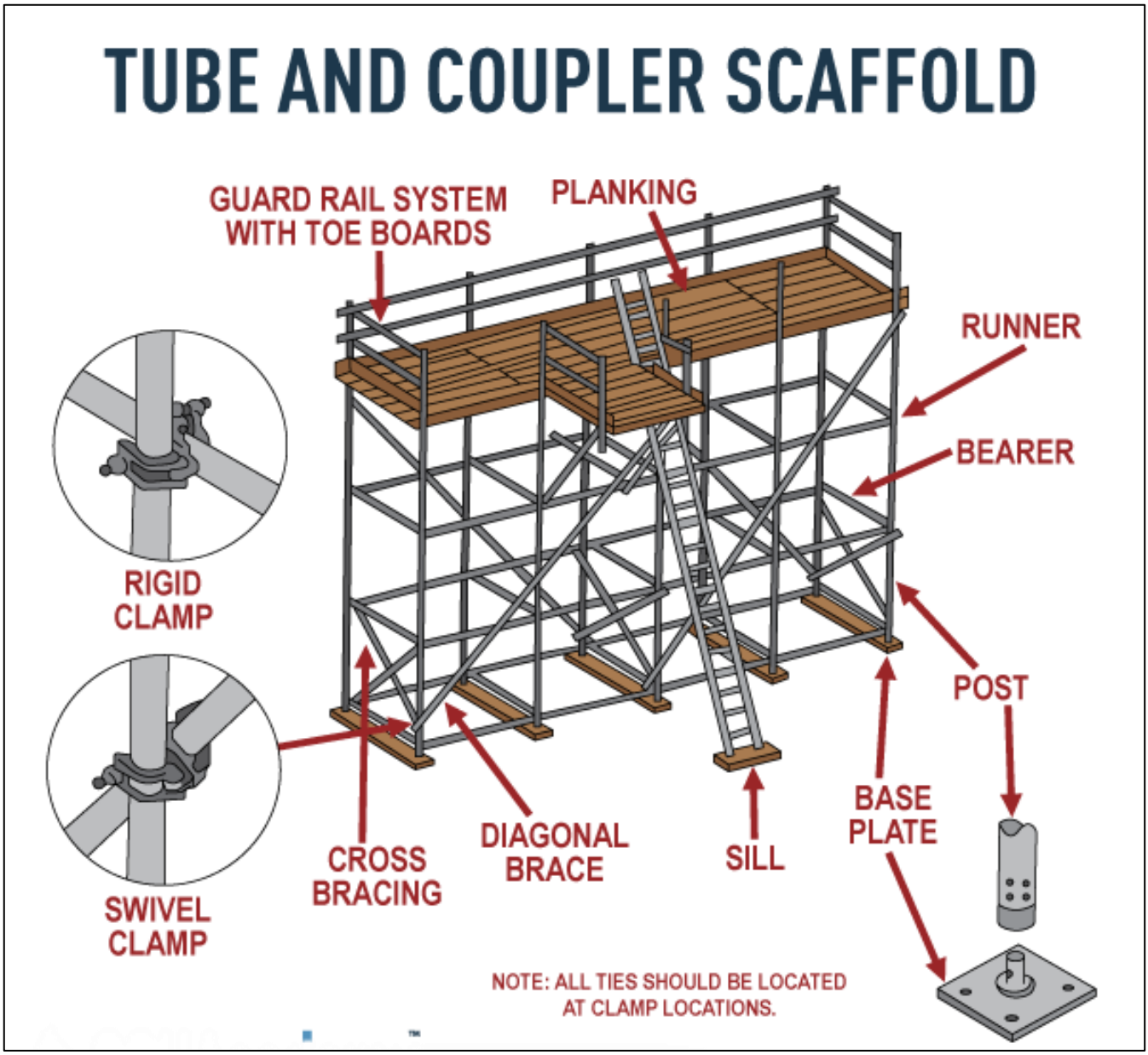
15. Scaffolds should be clearly marked with inspection tags indicating whether they are safe to use or have been condemned for repairs by a Scaffold Inspector. The following scaffold tags should be used in this instance:

    a) Green – Safe for use – Scaffold has been inspected and is safe to use. Meets all safety requirements

    b) Yellow – Caution/limited use – scaffold has restrictions (e.g., incomplete, under modification, or partially safe). Only authorized or trained personnel may use it under defined conditions.

    c) Red – Do not use - Scaffold is unsafe, incomplete, or under construction. Must not be used under any circumstances.

16. A formal scaffold inspection must be conducted at least once every seven (7) days and continue until the scaffold is fully dismantled. Each inspection must be documented, and the scaffold tag must be updated to reflect the latest inspection date and status.



10.2 MECHANICALLY ELEVATED WORK PLATFORMS (MEWP)

MEWPs include equipment such as aerial work platforms (AWPs), scissor lifts, and boom lifts which are used for work at height. However, the following safety requirements must be followed.

1. A thorough pre-use inspection must be conducted on the MEWP each time before operation to ensure it is in safe working condition. This includes checking:

   a) Hydraulic and electrical systems.

   b) Battery levels or fuel systems.

   c) Guardrails, stabilizers, and emergency lowering functions.

   d) Stability, tires, or tracks (for mobile MEWPs).

   e) Condition of guardrails.

f) Emergency systems.

g) Power function.

2. A qualified person (competent person) must perform third-party inspection of the equipment at regular intervals according to the manufacturer's guidelines and issue a certification upon completion.

3. The operator is required to verify the validity of the inspection certification before use, and if found expired, should take the unit 'out of service' until re-inspected.

4. Operators must be fully trained and certified in the safe operation of MEWP. Training must include emergency procedures, weight limits, and proper handling in various conditions (wind, terrain, etc.).

5. For works in Proman Energy's process facilities, MEWP must be diesel operated with spark arrestor and emergency shutdown system.

6. MEWP must be equipped with guardrails or edge protection to prevent workers from falling.

7. When using a MEWP at heights of 6 feet (1.8 meters) or above, workers must wear a Personal Fall Arrest System (PFAS), such as a full-body harness with a personal fall limiter and must remain tied off at all times. The anchor point must be located inside the platform (basket) and be clearly marked or specified by the MEWP manufacturer.

8. You should never anchor to external structures, guardrails, or parts of the machine not designated as anchor points.

9. MEWP should not be operated in high wind conditions, as the lift's stability can be compromised. Typically, wind speeds above 28 mph (45 km/h) are considered unsafe for MEWPs, but this can vary based on equipment specifications.

10. There must be an alternate operator at ground level to bring the MEWP to safety in an emergency.

11. When spotting the MEWP, ensure the work area is stable and free from obstacles, debris, or overhead hazards (e.g., power lines).

12. A clear rescue plan must be in place for workers operating at height. This includes procedures for retrieving workers in the event of equipment failure, or other emergencies. See section 7.3.

13. When using a MEWP, ensure stable and secure access, such as ramps or stairs, for getting onto and off the platform.

14. MEWP should be kept clear of overhead hazards, such as power lines, pipes, or heavy equipment.

15. MEWP should not be operated in unventilated areas where flammable gases might accumulate. Proper ventilation must be ensured.

16. A Banksman donned in a high-visibility vest, is required for the operation of all MEWP. Clear methods of communication must be established between the equipment operator and the banksman.

17. Speed limit must not exceed 5km/hr when traversing onsite on MEWP.

11. WORK POSITIONING SYSTEM / ROPE ACCESS

A positioning device system or rope access system is a body belt or body harness system rigged to allow a worker to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning. Work positioning systems require a high level of competency on the part of the user and supervisors to ensure safe use. As a minimum, persons shall undertake Industrial Rope Access Trade Association (IRATA) Certification Training and produce a medical fitness certificate to work on the positioning system or rope access.

Where the use of industrial rope access systems is required, the following conditions must be met to ensure the safety and effectiveness of the operation:

1. All rope access personnel shall be competent in rope access techniques.
    a) Rope Access Technicians must hold a valid IRATA Level 1 or Level 2 certification and have a minimum of three (3) years' experience in rope access operations.
    b) Rope Access Supervisors must hold a valid IRATA Level 3 certification and have a minimum of five (5) years' experience in rope access work.
2. Rope access work shall not be performed alone. Operators must work in teams to ensure assistance is available in the event of an emergency.
    a) The rope access team shall consist of a minimum of two (2) certified technicians, at least one of whom must be IRATA Level 3 certified and act as the team supervisor.
    b) Technicians may be certified to either Level 1 or Level 2, depending on their role and the complexity of the task.
    c) Refer to Section 7.4 for detailed rescue team requirements.
    d) Final team size shall be determined based on the scope, complexity, and risk level of the specific rope access task.
3. Industrial rope access systems must be installed only in a location where it is possible to provide prompt assistance or rescue if required.
4. Body harnesses must be secured to an anchorage capable of supporting at least twice the potential impact load of a worker’s fall or 3,000 pounds, whichever is greater.
5. All equipment shall be checked regularly by a competent person and certified for use.
6. Prior to use, all fixed anchorage points shall be checked by a competent person before attaching the rope access lines.
7. All operators shall wear an inspected and certified full body harness
8. As determined by the risk assessment for the task, appropriate personal protective equipment shall be used, e.g., helmets and gloves
9. Area must be cordoned off using danger or caution tape and signs posted in all access areas below the working area and anchorage locations to exclude and alert other workers.
10. A complete and approved rescue plan, certified rescue equipment and certified and competent rescue team must be available for the safe retrieval of personnel.

12. RESTRAINT TECHNIQUE

1. Restraint techniques should only be used when it is not reasonably practicable to prevent falls through the use of physical barriers, such as guardrails or edge protection.
2. The user of a fall restraint system shall maintain secure footing without having to tension the restraint line and without the aid of any other hand hold or lateral support.
3. A restraint system shall be installed by a competent person in accordance with the manufacturer's instructions.
4. Users of the fall restraint system shall be competent in its use.
5. Restraint anchorage shall be designed for fall-arrest loading.
6. An individual fall-arrest system should be used instead of restraint techniques if any of the following situations apply:
    a) The user can reach a position where a fall is possible.
    b) The user has a restraint line that can be adjusted in length so that a free fall position can be reached.
    c) There is a risk that the user may fall through the surface, for example fragile roofing material.
    d) The slope is over 15 degrees.
    e) There is other likely use or misuse of the system that could lead to a free fall.

13. BODY HARNESS

On all Proman Energy controlled worksites, full-body harness in compliance with ANSI Z359.1 Standard that is equipped with personal fall limiters and suspension trauma straps must be used.

Such harness must be designed with the following features:

1. Back D-ring for attaching to the fall arrest system and a front D-ring for specific cases like work positioning or rescue operations.
2. Made of strong, durable webbing, typically polyester or nylon, with high tensile strength to withstand the forces exerted in a fall.
3. Must be adjustable to fit a wide range of body size and rated for employee's weight.
4. Must meet strength requirements to withstand the forces generated during a fall. E.g., ANSI Z359.1 specifies that the harness and all components of the fall protection system must be able to withstand 5,000 pounds (22.2 kN) of force during a fall.
5. Full-body harnesses must be inspected and certified annually by a competent person (third party service provider trained in inspecting fall protection equipment.) as per manufacturers guidelines
6. Harnesses must be inspected by the user before every use for signs of wear and tear, such as fraying, cuts, abrasions, or corrosion of the buckles and hardware. And ensure that all parts of the harness are intact and functioning properly before use. A harness must be removed from service if there are any visible damages.
7. If the harness has been involved in a fall, even if there are no visible signs of damage, it must be removed from service immediately.
8. Harnesses must be cleaned regularly. Follow manufacturer's instructions on cleaning methods, as some chemicals or cleaning agents can degrade the material.

Wheresoever full-body harness is required for use, 100% tie-off must be maintained at all times.

13.1 CONNECTORS

Acceptable full-body harness connectors such as D-rings, locking carabiners, quick-connect connectors, webbing, and lanyard connectors can be used at Proman Energy. These components must meet the strength and locking requirements outlined by standards such as ANSI Z359.1, EN 361, and EN 362 under the following circumstances:

1. D-Rings (primary attachment points) are essential for fall arrest and work positioning.
2. Locking Carabiners should be used for secure connections where the risk of unintentional disengagement is high, such as for fall arrest or work positioning.
3. Quick-Connect Connectors are best for situations where frequent connections and disconnections are required.
4. Webbing and Strap Connectors are often used in restraint or positioning systems to limit the worker's movement and prevent them from falling.
5. Positioning Lanyard Connectors are used in work positioning systems, where the worker needs to be securely attached but free to move around and work hands-free.

13.2 PERSONAL FALL LIMITERS / SELF RETRACTING LANYARDS

A personal fall limiters (PFL) / self-retracting lanyards (SRL) are key component of a fall arrest system that automatically retracts the lifeline to reduce slack and arrest a fall quickly. They are designed to provide continuous

fall protection while allowing workers to move freely. To ensure the safe use of PFL/SRLs, certain safety requirements must be followed. Below are the critical safety requirements:

1. They must meet or exceed industry standards such as ANSI Z359.14 Standard for PFL/SRL performance.
2. The PFL/SRL must have a locking mechanism that quickly engages when a fall occurs. This mechanism should lock immediately to minimize the fall distance.
3. The PFL/SRL must be attached to a secure anchor point that is capable of withstanding at least 5,000 lbs (2,268 kg) of force or the specified requirements in relevant safety standard.
4. The anchor point should be positioned above the worker's head, when possible, to limit the fall distance. The location of the anchor point should not allow the worker to reach an unprotected edge or hazard.
5. They must be inspected before each use to ensure it is in good working condition.
    a) For webbing or rope for any cuts, frays, or damage.
    b) Retracting mechanism to ensure it is functioning correctly.
    c) Carabiner/connector for damage or wear.
    d) Locking mechanism to ensure it engages and locks properly in case of a fall.
    e) Housing for any cracks or damages.
6. Annual inspection must be conducted by a professional service provider and maintained according to the manufacturer's instructions. This includes checking the internal mechanisms and components.
7. Always connect the PFL/SRL to the appropriate harness attachment point. It should be attached to the back D-ring.
8. PFL/SRLs should only be used as part of a fall arrest system, not as a primary means of restraint or work positioning.
9. When using SRLs, ensure that there are no sharp edges in the path of the lanyard or webbing, as these could cause damage to the equipment or increase the risk of injury during a fall.
10. The PFL/SRL should be compatible with the full-body harness, ensuring the attachment points on both the PFL/SRL and the harness align and can safely bear the load in the event of a fall.
11. Ensure that the PFL/SRL is compatible with any other components in the fall protection system, such as lanyards, connectors, or lifelines.
12. PFL/SRL shall be kept free of knots or loops. Lanyards shall not be tied back to themselves unless the lanyard is specifically designed and rated by the manufacturer for this configuration.
13. Workers using PFL/SRLs must be trained in the proper use, inspection, and maintenance of the equipment.

13.3 TRAUMA STRAPS

The purpose of the trauma strap is to relieve the pressure on the legs during suspension. When a worker is suspended in a harness, blood can pool in the lower limbs, leading to suspension trauma. The trauma strap helps by allowing the worker to stand or shift weight, improving circulation and reducing the risk of serious injury.

1. Trauma straps must comply with ANSI Z359.1 (American National Standards Institute) for Fall Protection.
2. Workers should be trained in how to use trauma straps effectively, including how to deploy them in case of suspension.

3. Trauma straps should be properly attached to the harness according to the manufacturer's instructions, typically near the leg straps.
4. Ensure that the trauma straps do not interfere with the functionality of other safety equipment, such as the PFL/SRL.
5. Inspect trauma straps for any visible defects, wear, or damage.
6. The trauma straps must be easily accessible and ready for use when needed.

14. ANCHOR POINTS

The following anchor points are acceptable at Proman Energy:

1. Fixed Anchor Points - These are permanent installations, such as steel beams, structural columns, or other sturdy building components.
2. Temporary Anchor Points - These are used for short-term work (e.g., during construction or maintenance activities) and can be moved or removed when no longer needed. Handrails are not to be used as anchor points for fall protection unless they are explicitly rated and certified for that purpose.
3. Mobile Anchor Points: These are designed for use in various locations and can be easily moved around the worksite.

With the use of these anchor points, the following requirements must be met:

1. Adequate structural steel members should always be used before choosing process/utility piping as anchorage points UNLESS the use of a structural member as an anchor should result in a greater hazard posed by swing falls, or if there are no other acceptable fall protection methods available
2. I-Beams and process/utility piping (and their support structures), which are used as anchor points, must be in good condition.
3. Anchor points must be able to support a minimum load of 5,000 lbs (22.2 kN) per person connected to the system. This is the general requirement for single-user systems.
4. If multiple workers are connected to the same anchor point, the anchor must be able to support the combined load.
5. For dynamic loads (e.g., in the event of a fall), the anchor must be capable of sustaining the forces generated by a fall arrest system without failure.
6. Anchor points should be engineered and certified to meet the necessary standards by a qualified engineer.
7. Anchor points should be installed above the worker, ideally directly overhead, to reduce the fall distance and minimize fall arrest forces.
8. Anchor points must be easily accessible to workers, allowing them to attach their personal fall protection equipment (such as a harness and lanyard) safely before beginning work.
9. Anchor points must be inspected regularly for signs of wear, corrosion, or damage. This is typically done as part of the overall fall protection system inspection process.
10. Permanent anchor points should undergo annual inspections and testing by a competent person to ensure they remain secure and meet safety standards.
11. Any anchor point that has been subjected to a fall or impact should be taken out of service immediately and thoroughly inspected to ensure it has not been compromised.
12. Anchor points should be positioned to avoid obstructions that may interfere with the fall protection system’s operation or impede the worker's movements.
13. Whenever possible, use anchor points and tie-off methods which minimizes the free fall distance to less than 6 feet while still performing the work safely. The shorter free fall distances significantly reduce fall arrest force applied to personnel and the anchor.
14. Never use guard/handrails; C clamps; electrical equipment or conduits; cable trays; cast iron, riveted, plastic, or screwed piping; bolt, pipe, pipe support, or I-beam ends for anchorage points; or welded pipe hangers or piping section supported by pipe hangers.

15. LIFELINES

Lifelines are an essential component for connecting workers to an anchor point. Lifelines can be horizontal, vertical, or leading edge, depending on the work environment and task. The following safety requirements must be met for safe usage:

1. Lifelines must be made of strong, durable materials such as synthetic fibres or steel cables to withstand the forces involved in a fall. The material should also be resistant to environmental factors like UV exposure, chemicals, abrasion, and corrosion.

2. Lifeline should be able to support at least 5,000 lbs (22.2 kN) for single-user systems. If used for multiple users, the approved anchor point and the lifeline must be designed to support the combined load.

3. Lifeline should be flexible enough to allow workers freedom of movement but strong enough to arrest a fall effectively.

4. Horizontal lifeline used for fall protection along flat or sloped surfaces must be installed at an appropriate height above the work surface to minimize the fall distance. Horizontal lifelines must be installed at appropriate anchor points, which must be able to withstand the forces generated in the event of a fall.

5. Lifeline's tension and strength must be checked to avoid slacking, sagging, or stretching that could lead to an unsafe condition.

6. Vertical lifelines used for application such as confined spaces, must also meet similar strength and durability standards such as horizontal lifelines.

7. Ensure sufficient fall clearance between the worker and any obstacles or the ground. This includes accounting for the dynamics of fall arrest, including the stretch of the lifeline, deceleration distance, and worker position.

8. Lifelines must be securely attached to approved anchor points capable of withstanding a 5,000 lbs (22.2 kN) force for a single user.

9. The connectors (carabiners, shackles, etc.) used to attach the lifeline to the anchor point must be compatible with both the anchor and the lifeline, ensuring a secure connection.

10. Lifelines should be installed to avoid sharp edges, points of friction, or other factors that could damage the rope or cable during use.

11. Lifelines must be inspected before each use to ensure that they are free of defects, damage, or wear. Any lifeline that has been subjected to a fall must be removed from service immediately and replaced or repaired.

12. Lifelines should undergo regular inspections by a qualified person. For synthetic lifelines, inspections should be done every 6 months at a minimum, or more frequently based on use.

13. If any part of the lifeline is found to be damaged (e.g., fraying, kinking, corrosion), it must be replaced.

14. Workers using lifelines must receive proper training on how to use the equipment, including:

    a) Proper attachment to anchor points.

    b) Ensuring fall clearance and avoiding obstacles.

    c) Correct usage of connectors and personal fall limiters and trauma strap.

    d) Procedures in case of a fall (e.g., how to initiate self-rescue).

15. Lifelines must meet relevant safety standards and regulations of OSHA 1926 Subpart M for fall protection and ANSI Z359 Standards for Fall Protection Systems.

16. ENTRY AND EXITS

The entry and exit requirements for work at height focus on ensuring safe and efficient access to and from elevated work areas. These requirements are essential to prevent falls and minimize the risk of accidents during the process of entering or leaving the workspace.

16.1 SAFE ACCESS AND EGRESS USING STAIRWAYS, LADDERS OR PLATFORMS

Workers must use proper access points like stairways, ladders, or platforms to reach work areas. These must be designed to safely support the worker's weight and allow for secure, stable entry and exit.

1. Where possible, fixed equipment (like staircases or permanent ladders) should be used to provide stable access. These should be in good condition and meet regulatory requirements.
2. For temporary work at height, such as scaffolding or aerial work platforms, the entry and exit points must be securely positioned and easy to use.
3. Guardrails or edge protection should be in place to prevent falls during access.
4. External ladder access to scaffolding must be equipped with a safety gate or swing arm system. Ladders must extend no less than 1 meter (or 3 feet) above the landing point or guardrail.
5. Entry and exit routes must be free from obstacles and debris that could trip or hinder movement.
6. Ensure that the path to and from the work area is clearly marked and well-lit if working at night or in areas that that are not adequately illuminated. If work at height occurs during low-light conditions, ensure that adequate lighting is provided for safe entry and exit.
7. Fixed ladders must be capable of supporting at least 2 loads of 114kg (250 pounds) each concentrated between any two consecutive attachments. Each step or rung shall be capable of supporting a single concentrated load of 114kg (250 pounds) applied in the middle of the step or rung.
8. Rungs, cleat, steps shall be parallel, level, and uniformly spaced. They shall be spaced not less than 25cm (10 inches) apart and must be designed to prevent slipping off the end.

16.2 SAFE ACCESS AND EGRESS USING PORTABLE LADDERS

When using portable ladders for work at height, the following must be applied:

1. Use the correct ladder for the task (e.g., step ladder, extension ladder).
2. Ladders must not be used as a working platform for extended periods of time, or for tasks that require hands-free operation or carrying tools and materials. Ladders can be used for short-duration (no more than 15-30 minutes) tasks where the worker can maintain stability and perform the job with one hand (such as changing a light bulb).
3. The load rating of the ladder must be clearly marked, and it should be adequate for the intended work (e.g., Type IAA for heavy-duty use).
4. Ladders should be made of materials suitable for the environment (e.g., fiberglass ladders for electrical work to prevent conductivity, aluminium for lightweight portability).
5. Before each use, the ladder must be checked for damages, loose rungs, broken or cracked steps, or other defects. Any ladder found to be damaged should be removed from service and repaired or replaced.
6. Ladders must be kept clean and dry to prevent slipping. Oil, grease, or other contaminants should be cleaned off the rungs before use.

7. When setting up an extension ladder, ensure it is positioned at the correct angle. The general rule is that the base of the ladder should be placed one foot away from the wall for every four feet of ladder height (4:1 ratio).

8. When ladder is in use, it must be held by someone. Only one person is allowed on a ladder at a time.

9. Employees must maintain three points of contact (two hands and one foot, or two feet and one hand) while climbing or descending the ladder.

10. Workers should face the ladder when climbing or descending and keep their body centred between the ladder rails to maintain balance.

11. Avoid leaning too far out to the side while on the ladder, as this can cause it to tip. If additional reach is needed, move the ladder rather than overextending.

12. Tools or materials should be carried in a tool belt or hoisted up after the worker reaches the working platform. Do not carry tools in your hands while climbing.

13. The base of the ladder must rest on a solid, stable surface. It should not be used on soft ground or on surfaces that may shift (e.g., gravel, loose dirt, etc.).

14. If the ladder is used to reach a working platform (such as a rooftop or scaffold), ensure that the ladder extends at least 1 meter (3 feet) above the platform or landing for secure handhold access.

15. Ladders should not be used in adverse weather conditions such as high winds or rain. If the conditions are unsafe, workers should wait for better weather or use more secure platforms for access.

16. If working from a portable ladder at significant heights, consider using fall protection systems such as a harness and retractable lanyard attached to an anchor point.

17. If the ladder is positioned near the edge of a platform or railing, ensure the ladder is securely anchored or tied at the top (if possible) to prevent any lateral movement or slipping.

18. When working near the edge of a platform, workers should wear fall protection (such as a harness and lanyard) to reduce the risk of falling. The lanyard should be attached to a secure anchorage point that is independent of the ladder.

17. WORKING ABOVE WATER

When working above water, safety requirements must ensure that workers are protected from the risk of falling into the water and the associated hazards, such as drowning, hypothermia, or injury from water-based hazards. A combination of fall protection, personal protective equipment (PPE), and rescue plans is essential to ensure worker safety in these environments.

1. Use fall restraint systems (such as guardrails, safety nets, or fall arrest systems) to prevent workers from falling into the water.

2. When fall restraint systems are not practical, use fall arrest systems with full-body harnesses, lifelines, and PFL/SRL. Ensure these systems are anchored to secure points.

3. Workers must wear PFDs when working above water, especially when working near edges, unprotected platforms, or during activities where falling into the water is a risk. The PFD must be Type 1.

4. Ensure that rescue devices, such as life rings, rescue boats, are readily available and that workers are trained in their use.

5. Rescue equipment must be regularly inspected as per SOLAS requirement, functional and certified (where applicable).

6. A rescue plan that includes immediate and effective measures for retrieving workers who fall into the water must be developed and approved. This plan should involve trained rescue teams equipped with the appropriate rescue equipment.

7. The rescue plan must have established time limits for how long a worker can safely remain in the water after a fall (e.g., 3–5 minutes) and ensure that rescue teams are able to respond within this timeframe.

8. Constantly monitor weather and water conditions to ensure that workers are not exposed to dangerous conditions such as rough water or high winds.

18. DROPPED OBJECT PREVENTION

As part of the work at height procedure, it is a requirement to develop and implement a dropped object prevention plan for managing the risk of tools, materials or equipment that can potentially drop due to static or dynamic circumstances.

- Static Dropped Object: Falls due to gravity without external force (e.g., loose equipment, unsecured tools).
- Dynamic Dropped Object: Falls as a result of movement or interaction (e.g., lifting operations, vibration, wind).

1. When risk assessing work at height, identify potential drop zones and implement exclusion zones below elevated work areas.
2. Use tool lanyards, holsters, and tethering systems for all handheld tools.
3. Secure larger tools and equipment using netting, clamps, or tether points.
4. Avoid placing unsecured tools on ledges or beams.
5. Install toe boards, debris netting, or scaffold sheeting on elevated platforms to contain loose materials.
6. Ensure containers or tool bags used at height are closed and secured.
7. Train workers on dropped object hazards and prevention techniques. Include as a discussion in the toolbox meeting before commencing work.
8. Emphasize proper use of tethering devices and tool management.
9. Use clear signage to indicate drop zones or areas below overhead work.
10. Maintain effective radio or verbal communication when lifting or working above others.
11. Report all dropped object incidents or near-misses.

19. FITNESS TO WORK

19.1 PRE-WORK MEDICAL

Proman Energy mandates that all workers on-site meet medical fitness standards, which must align with the OEUK medical requirements. Prior to being assigned tasks involving work at height, employees are required to undergo a medical assessment or submit their fitness records to Proman Energy's Occupational Physician for verification of their suitability for the role.

19.2 POST RESCUE MEDICAL EVALUATION

After a rescue, the worker must receive a medical evaluation to ensure that they have not suffered any physical or psychological harm from the fall or the suspension. Medical attention will be required, even if the worker seems uninjured.

20. TRAINING AND COMPETENCE

1. All personnel required to work at height shall be aware of the content provided in this procedure and applicable standards.

2. It is mandatory that workers who are exposed to fall hazards receive training on the proper use of fall protection systems before performing any work at height. This includes:

   a) Selection, Correct use of personal fall protection equipment (harnesses, fall limiters, trauma straps etc.), maintenance and storage.

   b) How to inspect fall protection equipment for damage or wear before use.

   c) Proper installation and use of guardrails, safety nets, and other fall protection systems.

   d) Identification of fall hazards and the proper procedures for working in or around them.

   e) Procedures for working on elevated surfaces such as scaffolding, ladders, and roofs.

   f) Rescue procedures and emergency protocols if a fall occurs. Inclusive of Self-rescue (if applicable) and buddy-rescue techniques.

3. Training should be provided by a competent person or a qualified instructor with expertise in fall protection.

4. Certified specialty training requirements are specified within each relevant section of this procedure. Individuals responsible for ensuring the safety of work at height for others, such as scaffolders, structural engineers, and similar roles, must be properly trained and certified.

5. All users of work-at-height platforms must undergo at least basic awareness training on the risks and safety procedures associated with working at height.

21. REFERENCES

- OSHA (Occupational Safety and Health Administration) Standards 29 CFR 1926.502 for design, installation, and use of fall protection systems, including guardrails, safety nets, personal fall arrest systems
- ANSI (American National Standards Institute) ANSI Z359 for personal protective equipment (PPE), such as harnesses, lanyards, and anchors, as well as system performance and ANSI Z359.2 for rescue plans.
- ISO (International Organization for Standardization) ISO 45001
- DEL1-GEN-DEL-HS-PRD-0013_R1 – Proman Energy's Personal Protective Equipment Procedure.
- NASC SG34 – Scaffold-specific dropped object prevention guidance
- Tool tethering standards – ANSI/ISEA 121-2018
- NASC SG4:22 – Guidance for fall prevention during the erection, alteration, and dismantling of scaffolding.
- NASC TG20 – Guidance for engineering rules and compliance standards for scaffolds built using tubes and fittings.

22. APPENDICIES

22.1 APPENDIX 1: PRE-WORK CHECKLIST

The following Work at Height Checklist must be completed on-site by the Job Supervisor before any work at height begins.

LIFE SAVING RULE WORKING AT HEIGHTS CHECKLIST				
Document Number	PEL1-GEN-PEL-HS-FRM-0010	**Revision**	0	
Location:				
Equipment/ System Tag #:				
Permit to Work #:				
Work/ Task Description:				
Confirm each control/ safeguard below before starting work		**Guidance for confirming each control/safeguard**	**Person(s) Performing Work**	**Start-Work Verifier**
I HAVE CONFIRMED:				
1	The hazards are identified, controlled, and it is safe to start	• Complete a task risk assessment specific to the scope of work • Discuss hazards with the work team prior to the start of work • Check for simultaneous operations that may introduce additional hazards		
2	My fall protection equipment is: • certified • inspected • rated • fit for the task	• Fall protection equipment includes fall arrest and/or fall restraint systems • Full body harness is load rated to support the weight of the worker • Check every strap, buckle, fitting, and/or grommet for signs of wear on fall protection harness • Fall arrest system contains a self-retracting lifeline or shock absorbing lanyard • Fall restraint contains a fixed lifeline configured to prevent the worker from reaching the edge and falling • Fall arrest is shorter than the potential fall distance Note: Stop and notify supervisor if the fall protection equipment has excessive wear/damage/ mechanical malfunction or is not fit for the task		
3	The fall protection harness is adjusted to fit	• Only full body harnesses are used • Harness straps are not twisted • Harness body straps are adjusted for close body fit (i.e., no slack) Note: Use of body belts is not allowed		
4	The approved anchor point(s) are in place for 100% tie off	• 100% tie off can occur outside of protected areas (such as an elevated work area not enclosed by handrails) • The anchor point meets regulatory/company requirements • The position(s) of anchor points allow for 100% tie off • The number of anchor points available allow for 100% tie off • Pull on the connecting device to test if attachment is secure Note: Confirm anyone working at height is 100% tied off at all times (e.g., at least one hook must be anchored at all times)		
5	If a fall occurs, the fall path is clear	• Fall protection is fit for purpose to protect the worker if they fall • Fall arrest distance is shorter than fall distance to first obstruction • If the worker is likely to swing, check that the path is free of obstructions • Mobile obstructions have been removed from fall path		

6	Barriers and drop/exclusion zones are in place	• Identify drop/exclusion zones • Control access to drop/exclusion zones during work at height (e.g., attendant, or physical barriers)		
7	The rescue plan is in place and is ready to be used	• The work crew has discussed the rescue plan, including: - How to start the rescue response - Location of rescue equipment and responders • The rescue crew: - is available - is aware of specific hazards related to this task - can execute the rescue plan		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

LIFE SAVING RULES MAN RIDING START WORK CHECKLIST				
Document Number	PEL1-GEN-PEL-HS-FRM-0006	**Revision**	0	
Location:				
Equipment/ System Tag #:				
Permit to Work #:				
Work/ Task Description:				

	Confirm each control/ safeguard below before starting work	Guidance for confirming each control/safeguard	Person(s) Performing Work	Start-Work Verifier
I HAVE CONFIRMED:				
1	Personnel involved with the man-riding operations are qualified to perform their task.	• Rider, Winch operator, and Spotter have all been trained and can describe their responsibilities		
2	The man-riding equipment is: • Certified • Inspected • rated for the task	• Winches are certified as suitable for man-riding • Rigging equipment, including cable, inspected for wear/defects • Harness inspected per work-at-height requirements • Fall arrest gear, if using, inspected		
3	All rotating or moving equipment close to man-riding activities are secured to prevent unplanned movement.	• Hoisting and rotating equipment in the immediate area and at different levels are not moving (e.g., set the brake for the traveling block, lock out tag out).		
4	Communication methods have been agreed to by the workers.	• Communication methods (e.g., hand signals and radios) agreed to and tested for movement of rider - If using hand signals, confirm common understanding of hand signals to be used by the work crew		
5	The tools/materials being used at height are secured.	• Tools used at heights have securing wire/lanyards/tethers • Materials used at height are secured in storage boxes, pouches, bags etc. • Cover openings to lower levels (e.g., gratings, gaps, etc.) or use debris nets **Note:** Follow the site/company dropped object prevention program (e.g. work at height tool register).		
6	Barriers and drop/ exclusion zones are in place.	• Establish drop/exclusion zones • Control access to drop/exclusion zones during work at height (e.g., attendant or physical barriers)		
7	Rescue plan is in place and is ready to be used.	• Confirm the work crew has discussed the rescue plan, including: - How to start the rescue response - Location of rescue equipment and responders • Confirm the rescue crew: - is available - is aware of specific hazards related to this task - can execute the rescue plan		

Confirm these controls/safeguards are in place and verified prior to starting work.
Stop and seek help if anything changes.

	Printed Name & Role	Signature	Date
Start-Work Verifier			

23. APPENDIX 11: FALL RESCUE PLAN

PROMAN ENERGY WORK AT HEIGHT RESCUE PLAN	
FACILITY:	LOCATION/ AREA OF WORK:
JOB TASK: Describe the work task to be done at height	
PERSONNEL: List the names of personnel who are involved in the work at height:	
1. 2. 3. 4. 5.	6. 7. 8. 9. 10.
NOTE: Workers must never work at height alone so that the plan can immediately activate. A lone worker cannot initiate a plan for self-rescue if they are hurt of unable to reach a means of communication.	
RESCUE: Onsite Rescue Services:	
List Names: 1. 2. 3. 4.	 5. 6. 7. 8.
METHOD OF COMMUNICATION (√ as appropriate) *Safety Standby and Suspended Worker:* ☐ Direct voice ☐ Visual hand signals ☐ Audible signal ☐ Radio ☐ Industronics ☐ Other *Safety Standby to Rescue Team:* ☐ Direct voice ☐ Visual hand signals ☐ Audible signal ☐ Radio ☐ Industronics ☐ Other *Safety Standby to Control Room or Person in Charge of Area:* ☐ Direct voice ☐ Visual hand signals ☐ Audible signal ☐ Radio ☐ Industronics ☐ Other	
Emergency Contact In the event of an emergency / fall from height the WAH Safety Standby should immediately alert: Rescue Team: Name 1…… Contact ……..…… …..	

Name 2 …….…….…… Contact ……....

First Aid Attendant(s)

Name 1……. Contact ……..……. …..

Name 2……. Contact ……..……

Control Room / Person in Charge of area on the day ……..……..……

Safety Personnel

Are the workers competent & their training current in the use of rescue equipment? Yes ☐ No ☐

Are there enough trained rescuers available? Yes ☐ No ☐

Is the rescue equipment selected appropriate for nature of work? Yes ☐ No ☐

What obstructions are in the way of reaching the suspended worker? (Detail)……

…….……

…….……

Have assessments been made of anchor points? Yes ☐ No ☐

By whom? ……

Has the method of lowering casualty been decided? Yes ☐ No ☐

(Detail) ……...

……..

Methods of Rescue:
(Check √ as appropriate)

☐ Rescue ladder ☐ Remote Rescue Kit ☐ Suspended access equipment ☐ Climb / down building / structure

☐ Aerial equipment from ground ☐ Crane man basket ☐ Via building roof ☐ Pulling worker through window

☐ Pulling worker up, through floor / grating ☐ ……... (list other)

☐ Patient lowering system required/lowering area ……..……

☐ Anchor overhead ……..……..……

Anchorage: ☐ Beam ☐ Stairwell ☐ Support Strut ☐ Support Column ☐ Other: ……

Pre-Rigging required? ☐ Yes ☐ No

☐ Hauling system required ……..……

☐ Patient lowering system required/lowering area ……..…..

☐ Anchor overhead ……..……
Rescue Equipment Requirements: (√ as appropriate and indicate quantity needed) ☐ Rescue ladder: _____ ☐ Aerial ladder truck: _____ ☐ Remote Rescue Kit: _____ ☐ Self rescue ladder: _____ ☐ Suspended access equipment: _____ ☐ Suspension trauma safety strap: _____ ☐ Climbing / rope rescue system: _____ ☐ Crane man basket: _____ ☐ MEWP: _____ ☐ Hauling Systems: _____ ☐ Carabineers: _____ ☐ Pulleys: _____ ☐ Shock absorbers/lanyards: _____ ☐ Body Harnesses: _____ ☐ Anchor Straps: _____ ☐ Webbing: _____ ☐ Ascenders: _____ ☐ Rigging Plates: _____ ☐ Safety Lines: _____ ☐ Main Lines: _____ ☐ Wrist/Ankle Harnesses: _____ ☐ Stretcher: _____ ☐ Fire Extinguishers: _____ ☐ ……... (list other)
Rescue Equipment Inspections: Identified rescue equipment inspected by competent person: (name)……... Record of inspection(s) attached ☐ Yes
Medical Equipment Requirements: (√ where applicable below and indicate quantity needed) ☐ Trauma Kit: _____ ☐ First Aid Kit: _____ ☐ Resuscitator & Automated External Defibrillator
Additional PPE Requirements: (Indicate what is needed) ☐ High Visibility Vests ☐ Hearing Protection ☐ Safety Boots ☐ Hard Hats ☐ Safety Glasses/Goggles ☐ Gloves ☐ Face Shields ☐ Breathing apparatus
Action if worker is injured: (√ as appropriate) Can casualty still be rescued within 5 minutes? Yes ☐ No ☐ Is a qualified first aider who understands suspension trauma present? Yes ☐ No ☐ Who and how will the emergency services and hospital be alerted? (Detail)……..……. ……...
Diagram of Work Area: Include a drawing or diagram of the rescue equipment setup.

Description of Response Steps: (List the response steps. It is recommended they be listed separately for a fall with no injury and a fall with injuries or unconscious). **FALL AND UNINJURED**:	
Step 1:	
Step 2:	
Step 3:	
Step 4:	
Step 5:	
Step 6:	
Step 7:	
Step 8:	
Step 9:	
Step 10:	
Estimated time for rescue:	
FALL AND INJURED	
Step 1:	
Step 2:	
Step 3:	
Step 4:	
Step 5:	
Step 6:	
Step 7:	
Step 8:	
Step 9:	
Step 10:	