1. PURPOSE

This procedure has been produced to enable VolkerRail (VR) to comply with the requirements of the 'Work at Height (Amendment)' Regulations. It shall therefore provide a framework for:

- Defining work at height
- Management arrangements for establishing safe systems of work at height
- Selection and inspection of any work equipment required
- Risk assessment for work at height to establish the controls needed for a Safe System of Work
- Ensuring the competence of persons planning, supervising and carrying out work at height

2. SCOPE

This procedure applies to all businesses within the VR group, and in particular to persons within those businesses that are involved with the potential of planning, managing, supervising or working at height.

Compliance with this procedure is necessary to ensure the company meets its various and numerous legal obligations under current legislation such as the Health and Safety at Work Act, Work at Height (Amendment) Regulations etc.

3. **REFERENCES (INPUTS)**

- Health and Safety at Work Act
- Lifting Operations and Lifting Equipment Regulations
- Management of Health and Safety at Work Regulations
- Work at Height (Amendment) Regulations (WAHR)
- NR/L2/OHS/022 Working Safely at Height
- SAF26 Management of Personal Protective Equipment
- SAF30 Risk Assessment

4. ABBREVIATIONS & DEFINITION OF TERMS

Term	Definition			
Anchor Points	Designated points for personal protective equipment to be attached to MEWP anchor point. OLE or other framework not specifically designated for the purpose shall not be used as points of attachment unless assessed and authorised by an appropriately competent person.			
Emergency Plan	Documented arrangements required to affect a rescue of any person working at height – may form part of existing documentation, i.e. Task Briefing			
Fall Arrest Equipment	Equipment that does not prevent falls but mitigates the consequence of the fall e.g air mats, bean bags, safety nets, crash decks			
Fall Arrest system	Personal protective equipment comprising a full body harness and lanyard of suitable length and built in shock absorber designed to safely arrest a person should they fall from height			
	This can also include the use of airbag systems or loose fill bag systems.			
Mobile Elevated Working Platform	An enclosed working platform which can be adjusted to work at different heights in different locations.			
Personal Fall Arrest Equipment	Equipment worn by an invidiual that does not prevent a person falling to the ground thus mitigating the consequences. E.g Restraint system, harness and lanyard.			

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Term	Definition			
Reasonably Practicable	Where the overall cost in money effort and time of the risk control measures are not grossly disproportionate to the risk.			
Work Restraint system	chnique using personal protective equipment to prevent a person reaching position from which they could fall.			
Working at Height	Any work activity where there is a need to control a risk of a person or object falling a distance liable to cause personal injury. This is regardless of the work equipment being used, the duration the person is at height or the height at which the work is being performed. It includes access and egress from a place of work and working below ground level.			
	Examples:			
	Climbing gantries / structures			
	Working close to / in an excavation			
	Working on scaffolding or MEWPs			
	Working on the back of a flatbed road or rail vehicle			
	Working from a loading bay			
	Working in the vicinity of a maintenance pit			
	Entry into a confined space chamber			
	 Working on a platform/ access-egress from platform 			
	Use of ladders / stepladders			
Working Platform	Any guard platform used as a place of work i.e Scaffolding and Tower Scaffold			

5. ACTIONS (PROCESS)

Working at height is defined as working at a place from which a person could be injured by falling from it, regardless of whether it is above, at or below ground level.

The hierarchy of the Work at Height Regulations should be followed wherever work at height is to be carried out:

Avoid - Avoid work at height where possible

Prevent the fall - Use of work equipment or other if working at height cannot be avoided to prevent the fall.

Minimise the consequence - Use of work equipment or other measures to minimise the distance and consequences of a fall should one occur.

5.1 Avoid

Removing the need to work at height must be the first consideration. Where VR are the designers it shall be the responsibility of the designers to avoid so far is reasonably practicable the need for persons to work at height.

During the pre-construction phase, project risk assessments must be undertaken to determine the extent of any work at height and to identify the potential for falls from height of persons/materials.

Where it can be shown that reasonably practicable measures can be adopted to enable the works to be carried out without the need for persons to work at height, the work method shall be clearly defined in the associated 'method statement' and working at height prohibited (i.e. assembly of a structure at ground level and then lifted in place with a crane rather than assembly at height).

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5.2 Planning and Risk Assessment

Where working at height cannot be avoided, a suitable and sufficient risk assessment must be undertaken to properly plan, identify the risks associated with the work and ensure implementation of controls measures to reduce the risk to as low as reasonably practicable.

VR, in its planning process for any potential activity involving working at height, will:

- Give priority to collective protection measures (i.e. guarded platform areas) over personal protection measures (i.e. personal fall arrest harnesses).
- Take account of the worksite location, weather, type of work being undertaken, the people involved with undertaking the task, the equipment and rescue arrangements.

VR Procedure SAF30, its associated Form SAF30F01 and Appendix F - Working at Height must be used to develop the risk assessment to ensure that the activity is appropriately planned and supervised and considers all of the following:

- a) If working at height is absolutely necessary, that all alternative methods of access have been considered and the chosen method of access is the safest option available.
- b) It is appropriately planned, managed and supervised.
- c) Weather conditions
- d) Worksite Location
- e) Type of work planned to be carried out.
- f) Personnel involved (competence, training, medical fitness, supervision)
- g) The selection and condition of Working at Height equipment
- h) Rescue

5.2.1 Falling objects

All work at height will take into account in the planning and delivery the potential for objects such as tools, equipment, materials etc. to fall and cause injury / damage.

Mitigation measures must take into account the need and practicability of such control measures as:

- Full enclosures of work areas
- Use of lanyards for tools and equipment
- Netting and boarding
- Exclusion zones / personnel prevention areas

The supervisory personnel will ensure that no material or object is thrown or tipped from height in circumstances where it is liable to cause injury to any person and those materials and objects are stored in such a way as to prevent risk to any person arising from the collapse, overturning or unintended movement of such materials or objects.

5.2.2 Emergency Methodologies

All working at height will include the provision for rescuing a person involved in the work activity. Where fall arrest equipment is being used, the rescue arrangements shall allow the person to be rescued in a safe and efficient manner (it is not sufficient to rely on the emergency services to affect a rescue due to the timescales required for freeing an individual that is suspended by their harness etc.).

Such provisions may include:

- Provision of communication systems
- A second competent person available at ground level
- Provision of ladders / MEWPs / rescue devices and systems
- Rescue tripods and winches for working around excavations
- First aid provision (personnel and equipment)

All persons shall be trained and competent on the use of any rescue equipment identified and fully briefed on the emergency plan which will form part of the method statement process.

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5.3 Prevent the Fall

5.3.1 Hand rails and Edge Protection

The use of a working platform incorporating handrails or edge protection should be the first consideration.

They must be spaced accordingly:

- Top guard-rail at least 950 millimetres above the edge from which any person is liable to fall.
- Toe-boards minimum 160 millimetres, must be suitable and sufficient to prevent the fall of any material or object, from any place of work
- Intermediate guard-rail positioned so that any gap between it and other means of protection does not exceed 470 millimetres.

The access / egress arrangements must also be taken into consideration and subject to the same appropriate risk mitigation measures.

5.3.2 Edge Protection

Edge protection should be provided where there is a risk of persons falling from height or below ground level. The edge protection should be suitable and sufficient to prevent materials and persons falling and be designed specific for its intended use. Only trained and competent persons should erect, alter or dismantle any edge protection in accordance with a safe system of work to prevent persons installing / removing the protection from falling.

5.3.3 Mobile Elevated Working Platforms (MEWPs)

MEWP's should only be used by persons who have the appropriate level of training and experience to use them.

The requirement for restraint systems should be clearly identified; where cherry pickers are used a harness and restraint lanyard should be used. Where a harness is required the MEWP should have a suitable anchor point for clipping on to.

Persons working within cages of a MEWP, must work within the confine of that cage, they must not stand on the guard rails, over stretch from the cage and remain attached by their harness to the anchor point at all times whilst within the basket.

All MEWPS, whether rail or road mounted must be subject to the pre-use checks and maintenance and inspection regimes as defined in VR procedure PE326 Safe Use of Vehicular Plant & Cranes.

Where other types of MEWPs are selected for use, the requirement for restraints should be risk assessed using the VR SAF30 procedure dependant on the work situation and type of equipment.

5.3.4 Scaffolding Systems and Towers

Scaffold systems should be designed by competent persons, appropriate to the ground bearing conditions, and the load bearing capacity required. Scaffold must only be erected, dismantled or adjusted by trained and competent person (PASMA) and inspected on a shift-by-shift basis.

All other scaffolding must be checked by a competent person. Once the required checks are completed, the scaffolding must be tagged to show the scaffold has been inspected and, if not moved or altered, must be inspected every seven days and re-tagged. Any scaffold not tagged must not be used until the competent person has rechecked it and authorised its use.

Towers should be constructed in accordance with manufacturer's guidance by persons with the relevant training and competency in their erection and should be inspected by the contractor's supervisor before they are used for the first time. Site supervision should be trained in the work at height system.

5.4 Minimise the Risk of the Fall/Consequence

Where working at height cannot be avoided and the fall prevention methods listed in Section 5.3 are not suitable / do not eliminate the risk of a fall occurring, then reasonably practicable measures will be planned for, documented and put into place to ensure that the distances and consequences of a fall is not liable to cause personal injury.

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These will include the provision of Fall Arrest Equipment Systems.

5.4.1 Personal Fall Arrest Equipment

Personal Fall Arrest Equipment includes the use of harnesses and lanyards.

Persons using harnesses and lanyards should be trained, familiar and competent in the wearing and inspection of the equipment that they are required to wear. They should also be instructed on the risks associated with the wearing of such equipment and advised of the emergency actions to take in the event of a fall.

Where fall arrest equipment is used, the competency of the person must be checked, ensure they are familiar with the type of equipment and check that all of the equipment being used has the relevant inspection certificates and evidence of regular inspections.

Harnesses and lanyards should be visually inspected by the user before each use.

5.4.2 Fall Arrest Equipment

Fall Arrest Equipment includes the use of suitable and sufficient air mats, bean bags, safety nets, crash decks etc.

Where fall arrest equipment has been identified as the appropriate control measure it should be checked for damage before it is installed and be positioned by persons who have received the correct level of training and experience in its correct use.

Safety nets should only be installed by persons with FASET training, where nets are left in place, they should be visually inspected by a competent person daily before they are used.

5.5 Portable Steps and Ladders

Portable Ladders and Stepladders, other than for access, should only be used for short duration works where it is not reasonably practicable to use other equipment. They should be certified to BS EN 131 Professional Use or BS 2037/1129 Class 1 Heavy Industrial Use.

5.5.1 Condition and Inspection

All portable ladders and stepladders should be to the appropriate industrial standards and be of sufficient length/height for the tasks they are to be used for. They must be uniquely numbered and subject to pre-use checks by the user who will be trained and competent in their use. Use SAF88F02 when inspecting stepladders and SAF88F03 when inspecting ladders.

Ladders that are used daily / weekly will be subject to a 6 monthly formal inspection and ladders that are used monthly will be subject to a 12 monthly formal inspection with the appropriate tags displayed on the ladder to confirm the ladder is fit for use.

Records of these checks will be maintained at the originating depot for audit and inspection purposes.

5.5.2 Risk Assessment

Where, through the risk assessment process, alternative methods for accessing or working at height such as access platforms and towers is deemed impractical then a Portable Ladders and Stepladders Permit SAF88F01 must be obtained. The **Corporate Document Controller** will issue the permit books, as required.

The Working at Height Risk Assessment (SAF30) must be completed in advance of permit being raised and must be provided with the Permit to the person responsible for certifying the permit.

5.5.3 Review of the Permit

The permit may be certified by the **Construction Manager, Supervisor** or equivalent. This person will determine the duration of the permit.

On certifying the permit the **Construction Manager, Supervisor** or equivalent is declaring that they have reviewed the working at height task specific risk assessment and it justifies the use of portable ladders or stepladders.

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The permit will then be issued to a **Project Manager** or above for authorisation to the person carrying out the task.

5.5.4 Permit Authorisation

The permit may be validated by the **Project Manager**, **discipline CRE** with delegated authority from CEM or above.

The permit will then be issued to the VR Worksite PIC, COSS, Foreman or equivalent for acceptance and implementation.

5.5.5 Acceptance of the Permit

The permit may be accepted by the Task PIC, COSS, Foreman or equivalent.

On accepting the permit that role is declaring that they will undertake the work in accordance with the precautions set out in the permit and the task brief, safe system of work and working at height risk assessment.

The permit will then be passed for validation.

5.5.6 Validity and Retention of the Permit

The permit will only be valid for the dates shown and for a maximum of 1 week. All permits must be retained for a minimum of 12 months.

5.6 Vehicles

Consideration must be given to the risk of falling from height whilst undertaking the following activities:

- Accessing and egressing the drivers cab.
- Loading and unloading vehicles.
- Working on tail lifts.
- Working on trailers or vehicle platforms.
- Sheeting and un-sheeting of loads.

5.7 General Inspection of Working at Height Equipment

Where the safety of work equipment depends on how it is installed or assembled (i.e. scaffolding), it will not be used after installation or assembly in any position unless it has been inspected in that position by a suitably competent person.

The control and inspection regime will also take into account:

- Required frequencies of inspections dependant on the equipment to be used.
- Work equipment exposed to conditions causing deterioration which is liable to result in dangerous situations (i.e. adverse weather conditions).
- Measures to prevent unauthorised use.
- Appropriate signage to either approve or restrict usage.
- Storage and availability of suitable compliant records of inspections.
- Inspections of any lifting equipment are in accordance with the LOLER regulations (Certificate of Thorough Examination).

5.8 Duties of all persons at works

All employees / sub-contractors working under the control of any supervisory person is legally obliged to report to that person any activity or defect relating to working at height which they believe to be likely to endanger the safety of themselves or another person.

All employees / sub-contractors shall use any work equipment or safety device provided to them by VR for work at height in accordance with the training provided to them in the use of the work equipment or device concerned and the instructions supplied.

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5.9 Competence Requirements

VR will ensure that no person engages in any activity, including organisation, planning and supervision, in relation to work at height or work equipment for use in such work unless they are competent to do so or, if being trained, is being supervised by a competent person.

Working at height will only be undertaken by those persons that have been formally trained. Such training will include but not be limited to:

- Harness inspection and training
- Ladder inspection
- Safe working at height
- Awareness briefing on Working at Height Regulations and Risk Assessments.
- Scaffold inspection (steel) / PASMA (lightweight systems)
- MEWP Operator (through Sentinel / CPCS or IPAF if non-rail mounted)

Where deemed appropriate Emergency Rescue at Height training can be provided.

The training and competence requirements for each individual will be established within their competence profile.

6. DOCUMENTATION (OUTPUTS)

- SAF88F01 Portable Ladders and Stepladders Permit
- SAF88F02 Stepladder inspection form
- SAF88F03 Ladder inspection form

7. ISSUE RECORD

Issue	Date	Comments
1	07/03/2012	Formerly referenced as SQE/88. It has been separated from the Quality & Environmental section and SQE/88 Issue 1 will be withdrawn upon this issue. Formal review of arrangements, no changes made.
2	10/07/2017	Five year review of procedure, updated to current template.
3	21/02/2019	 The procedure has undergone a full review with general revisions throughout. Key changes are: a) Align the flow of the procedure to the Working at Height hierarchy (Avoid, Prevent the Fall, Minimise the Risk). b) Incorporate further guidance on the use of edge protection, scaffold systems and towers and MEWPs. c) Introduce a new Steps and Ladders Permit process as a result of shared learning from a fatality within the industry and best practice from VolkerFitzpatrick's/ARC Southern Shield Steps and Ladders Permit Process
4	19/06/2019	Amendment to section 5.5.1 Condition and Inspection to introduce check forms SAF88F02 and SAF88F03 Amendment to section 5.5.4 Permit authorisation
5	08/04/2020	Minor amendments following issue of NR Standard NR/L2/OHS/022 – issue 2
6	18/07/2023	Reference to NR/L2/OHS/022 in section 3. References

8. WHAT HAS CHANGED IN THIS LATEST ISSUE AND WHY?

The NR standard NR/L2/OHS/022 has been included in the Reference section of this procedure.

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9. BRIEFING REQUIREMENTS

All new employees will receive an introduction to the Integrated Management System (IMS) at induction, according to the nature of the role.

All employees with an email address receive the 'Record of Revisions' each month, which details changes to the IMS. All Line Managers retain the responsibility to ensure their staff are briefed on changes as appropriate.

The following table defines how revised issues of this document are briefed to existing employees according to related specific responsibilities.

This is determined using the 'RACI' principle. Those roles identified as 'Responsible' and 'Accountable' should receive a formal awareness briefing facilitated by the Document Owner.

Discipline	Role	RACI	Type of briefing
Engineering	Senior / Project Engineer	Accountable	Detailed
Delivery	Construction Manager	Accountable	Detailed
Delivery	Depot Supervisor	Accountable	Detailed
Supervisory	All	Accountable	Detailed
HSQES	Trainee / H&S Advisor / Manager	Responsible	Detailed
HSQES	Competence Assurance Manager	Responsible	Detailed
HSQES	Competence Assurance Officer	Responsible	Detailed
HSQES	Training & Competence Manager	Responsible	Detailed
HSQES	Corporate Document Controller	Responsible	Detailed

Competence	RACI	Type of briefing
Working at Height	Responsible	Detailed
PIC	Responsible	Detailed
COSS	Responsible	Detailed

10. IMS AUTHORISATION

Document owner approval:

Kirsti Neal, Senior H&S Manager, 18/07/2023

Approval for IMS:

Paula Roberts, IMS Coordinator, 18/07/2023

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