

## **Recommended Qualification Structure for Accessing Operations and Rigging (Construction) Level 3**

This structure has been recommended by employers and stakeholders from the above occupational area for organisations to form the basis of academic capability and competence outcomes. Qualifications with a competence outcome at the above level must have units derived from the following National Occupational Standards (NOS) and consist of the mandatory/optional groups as stated for the individual option route.

### **MANDATORY (all option routes)**

- VR209 v2 Confirm work activities and resources for the work
- VR210 v3 Develop and maintain good working relationships
- VR211 v2 Confirm the occupational method of work
- VR252 v3 Utilise provision of fall protection systems
- VR641 v2 Conform to general workplace health, safety and welfare

### **PLUS ONE OF THE FOLLOWING OPTIONAL ROUTES**

#### **Option 1 - Scaffolding and Offshore Scaffolding Option Route (Total 8)**

##### **Mandatory**

- VR405 v3 Erect specialised, designed scaffolds and rigging

##### **Plus optional (two from the following)**

- VR406 v3 Erect and dismantle overhead scaffolds
- VR407 v3 Erect and dismantle falsework scaffolds
- VR408 v3 Erect and dismantle shoring scaffolds
- VR609 v2 Erect and dismantle temporary roof scaffolds

##### **Additional for Scaffolding option (not compulsory)**

- VR411 v3 Inspect scaffolding and rigging systems

#### **Option 2 - Steeplejack Option Route (Total 12)**

##### **Mandatory**

- VR120 v2 Carry out site measurements and evaluations
- VR254 v3 Erect and remove specialist access equipment
- VR255 v4 Install and remove temporary lifting and suspension apparatus
- VR392 v2 Operate plant or machinery used as work platforms
- VR405 v3 Erect specialised, designed scaffolds and rigging
- VR410 v3 Erect and dismantle steeplejack scaffolds for multi-faceted surfaces
- VR411 v3 Inspect scaffolding and rigging systems

##### **Additional for Steeplejack option (not compulsory)**

- VR53 v2 Erect metal chimneys
- VR155 v4 Demolish/dismantle brick, masonry and concrete structures
- VR414 v3 Install sheet metal cladding to chimneys and ducting
- VR415 v3 Install ducting and flue systems

### **Option 3 - Lightning Protection Engineer Option Route (Total 12)**

#### **Mandatory**

- VR120 v2 Carry out site measurements and evaluations
- VR254 v4 Erect and remove specialist access equipment
- VR256 v3 Install lightning conductor systems
- VR257 v3 Commission lightning conductor installations systems
- VR372 v4 Identify and mark the location of utilities apparatus and sub-structures
- VR392 v2 Operate plant or machinery used as work platforms
- VR412 v3 Install electrical earthing systems

#### **Additional for Lightning Conductor Engineering Option (not compulsory)**

- VR255 v4 Install and remove temporary lifting and suspension apparatus

### **Option 4 - Lightning Protective Systems Inspection and Testing Option Route (Total 8)**

#### **Mandatory**

- VR120 v2 Carry out site measurements and evaluations
- VR250 v4 Use access equipment up to six metres
- VR325 v2 Inspect and test lightning protection systems

### **Option 5 - Rigging – Temporary Suspended Access Equipment Option Route (Total 12)**

#### **Mandatory**

- VR659 v2 Operate plant machinery or machinery for non-operational activities
- VR664 v2 Diagnose faults in plant or machinery systems or components
- VR670 v2 Determine and complete service to maintain plant or machinery
- VR671 v2 Determine and advise on the viability of repair or replacement for returning plant or machinery to service

#### **Plus optional (three from the following)**

- VR663 v2 Inspect plant or machinery for operational serviceability
- VR665 v2 Install repair or modify construction resources by heating, welding, brazing soldering and thermal cutting
- VR666 v2 Produce one-off components to restore or maintain the operational functions of plant or machinery
- VR667 v2 Install plant or machinery for operational activities
- VR668 v3 Carry out specific tests on plant or machinery to determine operational serviceability
- VR669 v2 Configure plant or machinery for specific operational activities
- VR672 v2 Hand over plant or machinery to the control of others
- VR673 v2 Provide technical information, advice and guidance to users of plant or machinery

## Unit endorsements for Accessing Operations and Rigging Level 3

Where industry requests; qualifications can be endorsed to show an option route and the type of resources and/or activities that relate to the unit. Listed below are the endorsements that can apply for units derived from the following NOS.

NOS	Endorsement
VR250	Two of the following: Ladders Step ladders/platform steps Proprietary towers Podiums Mobile scaffold towers
VR252	Two or more of the following: scaffold/rigging secured steelwork structures wire and rope systems permanently installed anchorage points temporary anchorage points track systems proprietary systems
VR254	Occupational specific – One from the following specific occupational areas Steeplejacking: steeplejack vertical ladders, roof ladders Lightning conductor engineering: Roof ladders, tower scaffolds, crawler boards Rigging: Suspended access equipment, suspended platforms
VR255	Occupational specific -  Suspended Access – Three of the following: suspended platforms, winches, counterbalance suspension rigs, rope access anchor systems, suspension rigs  Steeplejack – Two of the following: block and tackle material lifting gear (manual and mechanical), rope access anchor systems, counterbalance suspension rigs, suspension rigs  Lightning Protection Engineering – Two of the following: block and tackle material lifting gear (manual and mechanical), suspended platforms, rope access anchor systems, bosun's seats, winches, counterbalance suspension rigs, suspension rigs  Offshore – Two of the following: block and tackle material lifting gear (manual and mechanical), rope access anchor systems, winches
VR392	One of the following: mobile elevated working platform scissor mobile elevated working platform boom vehicle mounted; mobile elevated working platform boom self propelled mobile elevated working platform mast climber
VR405	One of the following: Scaffolding Steeplejacking Rigging – suspended access equipment Off-shore scaffolding
VR406	Two of the following: drop scaffolds hung scaffolds scaffolds to span gaps (bridging) load bearing scaffold

	scaffolds with restricted access and/or build restrictions truss out
VR407	One of the following: Tube and fitting Systems scaffold
VR408	Two of the following: Raking-shore scaffolds Flying-shore scaffolds Deadshore scaffolds
VR410	One of the following: Tube and fitting Systems scaffold
VR609	One of the following: Tube and fitting Systems scaffold
VR659	Two of the following: hand-operated power tools static machinery pedestrian controlled equipment tracked plant wheeled plant rollers
VR664	Four of the following: power unit transmission steering hydraulics pump brakes pneumatics electrics electronics operating ancillaries or attachments
VR665	Heating; Two of the following: Free components (thermal shock) Heat treat Reduce or remove corrosion Adjust (local/spot) Expansion and contraction fit Welding: Two of the following: Oxygen and fuel gas Manual metal arc MIG or MAG Tungsten inert gas shielded Soldering: One of the following: Oxygen and fuel gas Iron and flux Electric soldering iron Joints; Two of the following: Butt Lap

	<p>Fillet Corner</p> <p>Corner Positions: Two of the following: Flat Vertical/horizontal Vertical Overhead</p> <p>Thermal Cutting: One of the following: Oxy fuel gas arc Plasma arc</p>
VR668:	<p>Four of the following: Electric systems Cooling systems Lubrication systems Emission control Hydraulic systems Hydrostatic drive Transmission systems Pneumatic systems Braking systems Vibration management Steering/suspension systems Generator output control Electronic management Powered access equipment Material handling equipment Water pumps Craneage Lifting equipment Load testing (cranes, hoists, MEWPs, MHE)</p>
VR669	<p>Two of the following: Attachments Ancillaries Fire prevention (spark arrestors) Structural support (anchors and ties) Safety measures (restricted movement, passage or access, warning alarms, notices, lights or governors) Contaminant reduction (noise, gases, fluids) Carriage of ancillaries/additional equipment Rail and trackside Cutting equipment (blade or teeth angles and aspects) Additions (e.g. publicity boards, notices, lights) Machine control (laser measurement or guidance, global positioning system) Productivity measurement (weigh load sensors, compaction sensors)</p>
VR671	<p>Five of the following: Time labour costs cost of component sub-assemblies and parts cost of consumables</p>

	<p>cost of overheads (transport, delivery, operational down time, power consumption, specialist tools and services)</p> <p>cost of replacement, like for like</p> <p>cost of replacement, alternative item of plant or machinery</p> <p>benefits of replacement</p> <p>availability of resources and capability</p> <p>report findings</p>
VR673	<p>Two of the following:</p> <ul style="list-style-type: none"> <li>Breakdown</li> <li>Handover</li> <li>Request</li> <li>Contract/guarantee/warranty/hire agreement</li> <li>Recall</li> <li>Modification/alteration</li> </ul>

**Note:** Where industry requests an Awarding Organisation to further endorse a unit, the Awarding Organisation must first seek approval from the Standards Setting Body to ensure the endorsement is appropriate to the unit.