

# Work at height Competency framework

Draft for consultation

## 1 Introduction

- 2 The work at height competency framework has been developed by the NFCC Working at Height
- 3 group. It outlines the knowledge, awareness and performance criteria and training that are
- 4 required to obtain and maintain competence in operational access and rescue at height. It
- 5 includes the effective use of collective protection and personal harness-based methods of fall
  6 protection.
- Each level relates to fire and rescue service roles and should be used as a benchmark for
  training requirements and working at height responses.
- 9 Each level also reflects the NFCC Team Typing, NFCC Operational Guidance and current good
- 10 practice. Following consultation, the framework has also been structured to allow fire and
- rescue services some flexibility so it can align with different response and training models where
- 12 necessary.

Competence level	Role	Description
Level 1 <sup>(T)</sup>	Level 1 – Safe work at height Level 1 <sup>(T)</sup> – Team leader	Competent to operate on the incident ground setting up and using basic fall protection and provide a fundamental role in scene safety at height.
Level 2 <sup>(T)</sup>	Level 2 – Rope rescue Level 2 <sup>(T)</sup> – Team leader	Competent to build and implement simple lowering and raising systems. Top controlled access and rescue. Can operate effectively within a team to facilitate vertical access, package and recover casualty.
Level 3 <sup>(T)</sup>	Level 3- Rope rescue Level 3 <sup>(T)</sup> – Rope rescue team leader	A technical rope access and rescue operator. Competent in rope access skills. Can operate effectively within a team to facilitate complex access, can build, and implement complex casualty recovery systems.
	Rope Rescue – Subject matter expert	This additional level recognises the need for a service subject matter expert and individual who influences national guidance and good practice. They will be considered a service lead and will be an active member of an NFCC recognised organisation such as the Working at Height group or UKRO.

<sup>(T)</sup> Competent to lead an operational team. Has overall responsibility to safely supervise and lead a team in planning, implementing the safe system of work within the level of competency.

## 13 **Competence**

14 Regulation 5 of <u>The Work at Height Regulations</u> states that:

- 15 Every employer shall ensure that no person engages in any activity, including
- 16 organisation, planning and supervision, in relation to work at height or work equipment
- 17 for use in such work unless he is competent to do so or, if being trained, is being
- 18 supervised by a competent person.
- For more information refer to <u>the NFCC Operational Guidance for Height</u>, <u>structures and</u>
   <u>confined spaces Work at height</u>.

## 21 Level 1

22 Individuals must demonstrate and maintain competence at this level.

## 23 Level 2

24 Individuals must demonstrate and maintain competence at this level.

## 25 Level 3

26 Individuals must demonstrate and maintain competence at this level.

## 27 Supervision

- 28 Level 1 and 2 operators must be supervised by a competent operator of at least the
- competency level required to perform the task, who is also approved to incident command level1 and will take the role of team leader.
- Team leaders must be competent to manage the team to undertake the required task. They will have overall responsibility to supervise, plan and implement the safe system of work.
- 33 Level 3<sup>(T)</sup> rope rescue team leaders must receive rope rescue specific incident command
- training to enable them to have effective oversight and manage the safety of complex roperescue operations at height.

## 36 Instructors

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- Prospective instructors must be developed from the relevant level of operator and must beexperienced and competent at that level.
- Specific training in planning and delivery of training and assessment of the relevant level isrequired.
- 41 All roles that are supervising or arranging training should have appropriate risk assessment 42 training based on service policy.
- A competent instructor can deliver training and assessment to new operators at thedevelopment stage of the relevant level.
- 45 Prerequisites for personnel fall protection and rope rescue instructors:
  - Knowledge of <u>BS 8454, Code of practice for the delivery of training and education for</u> work at height and rescue
- Prospective Instructors must be developed from the relevant level of operator and must
   be experienced and competent at that level
- Specific training and competency in planning and delivery of training and assessment of
   the relevant level is required

• The ability to carry out risk assessments in line with service policy

## 53 Level 4 – Rope rescue subject matter experts

54 Subject matter experts will be an experienced L3 instructor. In addition, this individual will have 55 a broad in-depth understanding of the UK legislative framework and the overall implications and 56 impact to the service and other emergency services.

57 They will be a leading influence on their service operational policy for level 3 operations and 58 training. They will maintain an awareness of national guidance and attend NFCC Safe Working 59 at Height group meetings or workshops, or the UKRO National Challenge.

## 60 Framework guide

No criteria (blank): There is no requirement for knowledge or demonstration of competence inthis area.

Awareness criteria (A): Individuals should be aware that the function or task presents a risk
 and that controls need to be introduced. If exposed to a function, anyone with an awareness
 only must be supervised.

66 Knowledge criteria (K): An individual should demonstrate an understanding of the task or 67 function, including the contributing factors, risks, hazards and control measures. Individuals 68 should also have the knowledge necessary to perform consistently or be effective in their 69 specific role. These criteria apply to individuals in development, in a supporting role or where 70 they no longer undertake the functions or tasks practically, such as incident commanders, but 71 still need the relevant knowledge to make decisions or influence change.

Performance criteria (P): In addition to having the relevant knowledge and understanding, individuals should have demonstrated application of the task in a practical environment. An individual should be able to undertake the task effectively and safely without supervision.

**Requirement for the role (Y):** Indicates that training is required for a higher level of operation,
for example a specialist operator, service-wide instructor or level 2 incident commander.

- 77 Additional skill (AS): Ideal but not a requirement.
- 78 **Team leader responsibility (T):** Competent to lead an operational team. Has overall

responsibility to safely supervise and lead a team in planning, implementing the safe system ofwork within the level of competency.

- 81 The following is also required to support the framework:
- Incident command training appropriate to the role
- Manual handling
- First aid and trauma care appropriate to the role
- Leadership level 1 leading yourself
- Health and safety at work appropriate to the role
- Awareness of NFCC Operational Guidance and how it is used in their service

- Awareness of National Occupational Standards
- 89 Risk assessment training in line with service policy

## 90 Framework

Subject	Detail	Competence leve			
		1	2	3	4
Legal	Understand the fire and rescue service's responsibilities to respond to incidents involving work at height	К	К	К	К
	Understand the legalisation associated with working at height	К	К	К	К
Supervisor or	Understand the roles of team members	К	К	К	К
team leader	Understand the duties of a team leader			K <sup>(T)</sup>	K <sup>(T)</sup>
	Understand and recognise the capabilities and limitations of a team	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
	Understand and recognise the competency level of team members	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
	Understand how working at height or the rope sector is managed in relation to the incident command system and decision control process	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
	Understand the logistics of working at height and rope rescue	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
	Understand how safety zones and cordons are implemented and used at working at height and rope rescue incidents	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
	Be able to perform appropriate scene assessment and information gathering to support working at height and rope rescue incidents	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
	Perform risk assessments appropriate to the working at height or rope rescue activity and demonstrate the ability to implement appropriate control measures based on the hazards identified	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
	Be able to plan activities for working at height and rope rescue appropriate to the activity and understand the need for contingency planning	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>

based on risk assessment       in						
and understand the need for delegation       Image: state is a state i			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
at height or rope rescue environment       P(T)       P(T			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
EquipmentDemonstrate the ability to perform routine inspection and implement a suitable defect procedureP(T)P(			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
working at height or rope rescue systemsP(T)<		Be able to effectively co-ordinate team activity	P <sup>(T)</sup>	<b>P</b> <sup>(T)</sup>	<b>P</b> <sup>(T)</sup>	P <sup>(T)</sup>
Be able to supervise teams and provide effective oversight by monitoring action and operating systemsP(T)P			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
oversight by monitoring action and operating systemsP(T)P(		Be able to perform effective safety checks	P <sup>(T)</sup>	<b>P</b> <sup>(T)</sup>	<b>P</b> <sup>(T)</sup>	P <sup>(T)</sup>
the working at height environmentP(T) <th< td=""><td></td><td>oversight by monitoring action and operating</td><td>P<sup>(T)</sup></td><td>P<sup>(T)</sup></td><td>P<sup>(T)</sup></td><td>P<sup>(T)</sup></td></th<>		oversight by monitoring action and operating	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
for working at height or rope rescueImage: Sector priceDemonstrate the ability to work effectively with other agencies to perform working at height or rope rescue activitiesK(T)K(T)K(T)K(T)K(T)Understand the hazards and requirements of confined space environmentsK(T)K(T)K(T)K(T)K(T)Be able to effectively debrief work at height and rope rescue activitiesP(T)P(T)P(T)P(T)P(T)EquipmentDemonstrate the ability to maintain and select equipment appropriatelyPPPPDemonstrate the ability to perform pre-use checksPPPPDemonstrate the ability to perform routine inspection and implement a suitable defect procedurePPPPBe able to don PPE and harness assembly safelyPPPPPBe able to perform buddy/buddy or cross checkPPPP			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
other agencies to perform working at height or rope rescue activitiesImage: Second Se			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
confined space environmentsImage: Confined space environmentsBe able to effectively debrief work at height and rope rescue activitiesP(T) <t< td=""><td></td><td>other agencies to perform working at height or</td><td>K<sup>(T)</sup></td><td>K<sup>(T)</sup></td><td>K<sup>(T)</sup></td><td>K<sup>(T)</sup></td></t<>		other agencies to perform working at height or	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
EquipmentDemonstrate the ability to maintain and select equipment appropriatelyPPPPDemonstrate the ability to perform pre-use checksPPPPPDemonstrate the ability to perform routine inspection and implement a suitable defect procedurePPPPPBe able to don PPE and harness assembly safely Be able to perform buddy/buddy or cross checkPPPPP			K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>	K <sup>(T)</sup>
equipment appropriatelyIIIIDemonstrate the ability to perform pre-use checksPPPPDemonstrate the ability to perform routine inspection and implement a suitable defect procedurePPPPBe able to don PPE and harness assembly safelyPPPPPBe able to perform buddy/buddy or cross checkPPPP			P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>	P <sup>(T)</sup>
checksImage: Second and and any or perform routine inspection and implement a suitable defect procedurePPPPBe able to don PPE and harness assembly safelyPPPPBe able to perform buddy/buddy or cross checkPPPP	Equipment		Р	Ρ	Ρ	Ρ
inspection and implement a suitable defect procedure Be able to don PPE and harness assembly safely P P P P Be able to perform buddy/buddy or cross check P P P P			Р	Ρ	Ρ	Р
Be able to perform buddy/buddy or cross check       P       P       P       P		inspection and implement a suitable defect	Ρ	Ρ	Ρ	Ρ
		Be able to don PPE and harness assembly safely	Р	Р	Р	Р
procedures effectively		Be able to perform buddy/buddy or cross check procedures effectively	Ρ	Ρ	Ρ	Ρ

Team equipment	Be able to coil and bag rope	Р	Р	Р	Р
	Be able to assemble and manage the rigging bag	Ρ	Р	Р	Р
	Be able to assemble and manage the quick action bag			Ρ	P
Rigging and anchors	Be able to use rope protection and understand its limitations	Р	Ρ	Ρ	Ρ
	Be able to set up a basic anchor	Ρ	Ρ	Р	Р
	Be able to set up a horizontal lifeline	Ρ	Ρ	Р	Р
	Be able to set up a mobile fall arrest system		AS	Р	Ρ
	Be able to set up a small Y-Hang		AS	Р	Р
	Be able to set up a large Y-Hang		AS	Р	Р
	Be able to set up deviations		Р	Р	Р
	Be able to extend anchors	Р	Ρ	Р	Ρ
	Be able to rig ring loops		AS	Р	Ρ
	Be able to rig multi-point anchors		AS	Р	Ρ
	Be able to set up releasable anchors		AS	Ρ	Ρ
	Understand the use of vehicle anchors and be able to set up vehicle anchors	AS	К	К	К
	Be able to set up ground anchors		AS	К	К
Basic access	Be able to use work restraints in a variety of environments	Р	Р	Ρ	Р
	Be able to use work positioning in a variety of environments		Р	Ρ	Ρ
	Be able to use fall arrest in a variety of environments	Р	Р	Ρ	Р
	Be able to safely manage and use lifeline systems in a variety of environments		Ρ	Ρ	Р
	Be able to safely descend using rope systems			Р	Р
	Be able to safely ascend using rope systems			Р	Р
	Be able to safely negotiate edges			Р	Р

	Be able to use working platforms safely	AS	AS	AS	AS
	Be able to use ladders safely	Р	Р	Р	Р
Technical access	Demonstrate being able to pass mid-rope obstructions			AS	AS
	Demonstrate being able to pass mid-rope deviation			AS	AS
	Be able to negotiate an intermediate anchor			AS	AS
	Be able to perform rope-to-rope transfer			AS	AS
	Be able to manage systems to aid climbing			AS	AS
Emergency actions	Be able to perform a rescue from descent			Р	Р
	Be able to perform a rescue loop pick off		AS	Р	Р
	Be able to perform a suspended recovery using remote attachment system		AS	Р	Р
	Be able to use de-weight techniques			Ρ	Ρ
	Be able to perform evacuation by lowering		Ρ	Ρ	Ρ
	Be able to perform a hanging and pitch head haul			Р	Р
Rigging for rescue	Understand forces, mechanical advantage (MA) and efficiency		К	К	К
	Be able to set up rigging plates and focal point		AS	Р	Р
	Be able to set up and use lowering system		Ρ	Ρ	Ρ
	Be able to use hauling systems		Ρ	Р	Ρ
	Be able to use taglines		AS	Р	Р
	Be able to manage an attendant attachment		Р	Р	Р
	Be able to demonstrate passing knots though lowering and hauling system		AS	AS	AS
Casualty	Demonstrate safe use of a rescue loop		Р	Р	Ρ
packaging	Be able to safely use a full body harness		Р	Р	Ρ
	Be able to set up stretcher rigging		AS	Р	Р

Stretcher attendant	Be able to manage a casualty as a stretcher attendant			Ρ	Ρ
	Be able to adjust position as a casualty attendant			Р	Р
	Demonstrate appropriate stretcher control when acting as a stretcher attendant			Р	Ρ
Edge transition	Understand how to plan a rescue path		К	К	К
	Be able to transition a horizontal stretcher over an edge		AS	Ρ	Ρ
	Be able to transition a vertical stretcher over an edge		AS	Р	Ρ
	Be able to transition a stretcher over an edge using a tripod or quadpod		AS	Ρ	Ρ
	Be able to transition a stretcher over an edge using a winch		AS	AS	AS
	Be able to transition a stretcher over an edge using a lowering or raising system		AS	Ρ	Ρ
	Be able to transition a stretcher over an edge using a cantilever type, monopod, A-frame			AS	AS
Complex	Be able to set up and use a cross haul			Р	Ρ
systems	Be able to set up and use a skate block			Р	Ρ
	Be able to set up and use horizontal tensioned lines			Ρ	Ρ
	Be able to set up and use diagonal tensioned lines			Ρ	Ρ
	Be able to set up and use a reeve			Р	Ρ
Knots and hitches	Be able to tie the figure of eight, rethreaded and on the bight	Р	Р	Ρ	Ρ
	Be able to tie a double figure 8 (bunny)			Р	Ρ
	Be able to tie an alpine butterfly	Р	Р	Р	Ρ
	Be able to tie a barrel knot		Р	Р	Ρ
	Be able to tie a long tail bowline		AS	Р	Ρ

	Be able to tie a big fat knot		AS	Ρ	Р
	Be able to tie a stopper knot		Р	Р	Р
	Be able to tie a joining rope		AS	Р	Ρ
	Be able to tie a clove hitch	Р	Р	Р	Р
	Be able to tie a prusik hitch			Ρ	Р
Equipment capabilities, limitations and safe operation	Understand working load limit (WLL), safe working load (SWL), minimum breaking load (MBL) and safety factor	A	K	K	К
	Understand the capabilities and limitations of rope	К	K	К	К
	Understand the capabilities and limitations of connectors	К	К	K	К
	Understand the capabilities and limitations of steel strops	К	К	К	К
	Understand the capabilities and limitations of protected nylon slings	К	К	К	K
	Understand the capabilities and limitations of descenders		К	К	K
	Understand the capabilities and limitations of ascenders		AS	К	К
	Understand the capabilities and limitations of backup device or mobile fall arrest	К	К	К	K
	Understand the capabilities and limitations of pulleys		К	K	К
	Understand the capabilities and limitations of fall arrest lanyards	К	К	K	К
	Understand the capabilities and limitations of adjustable lanyards	К	К	К	К
	Understand the capabilities and limitations of harness	К	К	К	K
	Understand the capabilities and limitations of stretcher		AS	К	К

Understand the capabilities and limit	tations of	K	K
dedicated pulley systems			

## 91 Initial training duration and frequency framework

Subject	Detail	Co	ompet	ence	evel
		1	2	3	4
Training	Complete initial operators' course	Y	Y	Y	Y
requirement	Minimum 12 hours of continuous professional development (CPD) per year	Y			
	Minimum 24 hours of CPD per year		Y		
	Minimum 48 hours of CPD per year			Y	Y
	Three yearly revalidation assessment	Y	Y	Y	Y
Instructor or trainer requirement	Have received and maintained an appropriate level of medical and trauma training in line with NFCC Operational Guidance	Y	Y	Y	Y
	Complete level 1 incident command initial training and CPD	Y	Y		
	Complete rope rescue specific incident command training			Y	Y
	Complete initial training instructor course	Y	Y	Y	Y
	Complete instructor development	Y	Y	Y	Y
	Instructor CPD – 6 hours of CPD per year	Y			
	Instructor CPD – 18 hours of CPD per year		Y		
	Instructor CPD – 36 hours of CPD per year			Y	Y
	Support research and development to improve firefighter safety at a national level				Y

Standards and development	Support development in firefighter working at height safely at a service level		Y
	Attend regional and national safe working at height events or seminars		Y
	Support the development of national standards and guidance and consequential service level policy and procedures		Y
	Engage with nationally recognised sector bodies and organisations to support continuous improvement		Y

## 92 Initial operator training

- 93 Initial training shall only be delivered by an instructor of the equivalent level of higher.
- 94 Minimum durations (1 day = 8 hours):
- Level 1 One day
- Level 2 Three days (minimum)
- 97 Level 3 Seven days (minimum)

## 98 Maintenance of competence

99 Training sessions can be led and supervised by competent team leaders or instructors of the 100 equivalent level or higher.

#### 101 Minimum continuous professional development (CPD)

102 Level 1 operator

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- Four training sessions per year training should be undertaken to demonstrate all competencies across the skill set over the four sessions
- 105 Level 2 operator
- Six training sessions per year training should be undertaken to demonstrate all competencies across the skill set over the six sessions
- 108 Level 3 operator
- Six training sessions per year training should be undertaken to demonstrate all competencies across the skill set over the six sessions
- 111 Instructors
- Deliver 1 full initial training course per year or be reassessed
- 113 Levels 1, 2 and 3 operator revalidation
- 114 A full operator course should be taken if:

- Insufficient training sessions are attended in any 12-month period to demonstrate the
   maintenance of competence
- Performance at scheduled training sessions is deemed to demonstrate a lack of
   competence

## 119 Levels 1<sup>(T)</sup> and 2<sup>(T)</sup> team leader – initial training

- 120 Initial training shall be delivered by a competent instructor of equivalent level or higher.
- 121 Prerequisite:
- Minimum 12-month competent operator
- 123 Incident command level 1 competent

## 124 Level 3<sup>(T)</sup> team leader – initial training

Level 3 should successfully complete an initial rope rescue specific incident command course.
 Training shall be delivered by a level 3<sup>(T)</sup> instructor. Minimum duration three days.

- 127 Prerequisite:
- Minimum 12-month competent operator
- Incident command level 1 competent