

# **CURRICULUM, TRAINING AND ASSESSMENT GUIDE**

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## Purpose of Guide

This Guide is designed for SSG's Training Providers (TPs) and Adult Educators who are responsible for the design and delivery of WSQ Manage Work at Height under the Generic Manufacturing Skills (GMS) WSQ Framework. This Guide aims to provide essential curriculum, training and assessment design advisory information, to guide developers, trainers and assessors in the interpretation and translation of competency standards into training and assessment programme. The Guide also contains training and assessment requirements stipulated by industry, and WSQ accreditation information for compliance. It is divided into 2 parts:

**Part I** - Details specific recommendations and advice for programme developers of "Manage Work At Height".

**Part II** – Provides a broad spectrum of information about WSQ and related components relevant to the "Manage Work At Height" programme.

# **PART I**

## **WSQ**

### **Manage Work At Height**

# CHAPTER 1: WSQ MANAGE WORK AT HEIGHT

## 1.1 Overview

On completion of this unit, learners will have knowledge and skills in managing work at height, so that such work can be carried out safely.

## 1.2 Key Features of WSQ Manage Work At Height

The Performance Statements (PS) covered are:

- PS1. Identify, explain and apply the relevant Workplace Safety and Health (WSH) legislation/Approved Code of Practice/Singapore Standards applicable to work at height
- PS2. Identify and explain the Roles & Responsibilities of stakeholders, competent and responsible persons.
- PS3. Identify hazards, evaluate the risk, and implement control measures for work at height
- PS4. Review the necessary fall preventive / protective control measures for safe execution of work at height
- PS5. Establish, evaluate, review and implement a Fall Prevention Plan
- PS6. Establish and implement a system for an effective monitoring and control of WAH risks
- PS7. Don, check and correct Individual Fall Protection Equipment and respond to a fall emergency

### Why this Course?

The “Manage Work At Height” course aims to provide learners with the knowledge and skills in planning, supervising, assessing and managing work at height.

## 1.3 Importation of Elective Credits from Other WSQ Frameworks or Recognised Equivalent

Not Applicable.

## 1.4 Target Audience

- 1.4.1 The “Manage Work At Height” is designed to meet the minimum standards for work at height training for supervisors, assessors and managers in Singapore, as recommended in the WSH (WAH) Regulations 2013 and the Approved Code of Practice for Working Safely at Height (2011).

1.4.2 Learners are assumed to have:

- Have at least WSQ ESS Workplace Literacy and Numeracy Level 4 and above or equivalent and the ability to carry out hazard identification, risk assessment, and risk control measures.

## 1.5 Recommended Learning Hours (RLH)

- RLH = 20.5 Hours (Training Hours: 15.5, Assessment Hour: 5)
- The RLH takes into account the time required for direct learning activities. Direct learning is broadly defined as trainer/assessor-directed & involves purposeful instructions given to trainees to complete as part of instructional design of a structured facilitated training and assessment programme.

Activity	Duration	Remarks
Facilitated Learning (Theory)	15.5 hours	Theory with case studies: 15.5 hours (includes 6 hours of practical training)
Assessment	5 hours	Written: 2 hours Practical: 3 hours

- Facilitated training and assessment
- E-learning<sup>1</sup> and assessment

## 1.6 Recommended Class Size, and Learner-Trainer Ratio

- Recommended Class Size: 20
- Trainer Learner ratio: 1: 20 (class room) 1:10 (Practical)
- Attendance Requirements: 100% for classroom and practical sessions

## 1.7 Recommended Assessor to Candidate Ratio

- Written Assessment: 1: 20 (Class size)
- Practical Assessment: 1: 1

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<sup>1</sup> For E-learning to be considered as "directed learning", the learning progress of trainees should be tracked via audit trail, progress reports, etc.

# CHAPTER 2: TYPES OF PROGRAMME

## 2.1 Programme Structure

2.1.1 This unit covers the following underpinning knowledge item which could be taught in the classroom via a combination of lectures, discussions and case-studies.

- UK1. Legal requirements, Approved Code of Practice and Standards for WAH
- UK2. Roles and Responsibilities of various stakeholders
- UK3. \* Risk Management
- UK4. Fall control measures UK5. Fall Prevention Plan (FPP)
- UK6. WAH Implementation and Monitoring Programme
- UK7. Individual Fall Protection equipment and first line response in emergency

\* The Risk Assessment/Management process should consider the management of infectious disease outbreak, employees' health (including mental well-being) and terrorist threats. Training Provider should take reference from the 3rd revision of the Code of Practice on Risk Management.

2.1.2 The unit also covers the following Performance Statements: These would best be taught via a combination of **lecture, demonstrations and hands-on practice.**

- PS1. Identify, explain and apply the relevant Workplace Safety and Health (WSH) legislation/Approved Code of Practice/Singapore Standards applicable to work at height
- PS2. Identify and explain the Roles & Responsibilities of stakeholders, competent and responsible persons.
- PS3. Identify hazards, evaluate the risk, and implement control measures for work at height
- PS4. Review the necessary fall preventive / protective control measures for safe execution of work at height
- PS5. Establish, evaluate, review and implement a Fall Prevention Plan
- PS6. Establish and implement a system for an effective monitoring and control of WAH risks
- PS7. Don, check and correct Individual Fall Protection Equipment and respond to a fall emergency



# CHAPTER 3: KEY DELIVERY ADVICE

## 3.1 Content Coverage

In developing the programme for the “Manage Work At Height” competency unit, TPs should always make cross references to the Performance Statements (PS), Underpinning Knowledge (UK), Range and Application and Evidence Sources sections as stipulated in the “Manage Work At Height” National Competency Standard.

The components of the Competency Standard and the interpretations are briefly explained here.

For example,

*The Range and Application and Evidence Sources reference to the Performance statements and/or Underpinning Knowledge is usually accompanied by the instructions “may include” or “must include”:*

### **“May include”**

- *Indicates that training providers are required to cover some (to indicate percentage if relevant) of the suggested Range and Application items listed when developing the “Manage Work At Height” programme.*
- *The training provider may choose to add more Range and Application items related to the corresponding Performance Statements and/or Underpinning Knowledge as part of their “Manage Work At Height” programme development.*

### **“Must include”**

- *Indicates that training providers are required to cover all of Range and Application items listed when developing courseware.*
- *The training provider may choose to add more Range and Application items related to the corresponding Performance Statements and/or Underpinning Knowledge as part of their “Manage Work At Height” programme development.*

## 3.2 Sequence of Coverage

The following sequence is recommended:

Lesson No.	Content	Instructional Mode	Duration (Hours)
1	UK1. Legal requirements, Approved Code of Practice and Standards for WAH <ul style="list-style-type: none"> <li>• Workplace Safety and Health Act</li> <li>• WSH (Work-at-Heights) Regulations</li> <li>• WSH(Work-at-Heights) (Amendments) Regulations</li> <li>• * WSH (Risk Management)</li> <li>• WSH (Construction) Regulations</li> <li>• WSH (Shipbuilding and Ship-Repairing) Regulations</li> <li>• WSH (General Provision) Regulations</li> <li>• Code of Practice for Working Safely at Height</li> </ul> <p>* The Risk Assessment/Management process should consider the management of infectious disease outbreak, employees' health (including mental well-being) and terrorist threats. Training Provider should take reference from the 3rd revision of the Code of Practice on Risk Management.</p>	Theory	1
2	UK2. Roles and Responsibilities of various stakeholders <ul style="list-style-type: none"> <li>• Occupier</li> <li>• Employer</li> <li>• Principal</li> <li>• Self Employed</li> <li>• Persons at work (Employee)</li> <li>• WAH Manager</li> <li>• WAH Assessor</li> <li>• WAH Supervisor</li> <li>• WAH Worker</li> </ul>	Theory	1

3	UK3. Risk Management <ul style="list-style-type: none"> <li>• Identification of Work at height</li> <li>• Tools for the identification of hazardous conditions involving Work at height</li> <li>• Identification of hazardous conditions relating to Work at height</li> <li>• Evaluation of WAH risks</li> <li>• Consideration for control measures</li> <li>• Principle of Hierarchy of control</li> <li>• Monitor, review and record keeping of RA</li> <li>• Practical approach in risk management involving Work at height</li> <li>• PTW application process (Flow chart)</li> <li>• Consideration for revocation of PTW</li> <li>• Incompatible work</li> </ul>	Theory	2
4	UK4. Fall control measures <ul style="list-style-type: none"> <li>• Fall Prevention Systems</li> <li>• Types of Edge Protection (permanent/temporary)</li> <li>• Specifications for Edge Protection</li> <li>• Customized / Engineering fall prevention solutions</li> </ul>	Theory	3
	<ul style="list-style-type: none"> <li>• Maintenance &amp; Inspection of Edge Protection</li> <li>• Effective covers for floor openings/ hatch</li> <li>• Means of safe access – Scaffold Access</li> <li>• Safe use of equipment – Scaffold Access</li> <li>• Means of safe access - MEWP</li> <li>• Safe use of equipment – MEWP</li> <li>• Maintenance &amp; Inspection of equipment – MEWP</li> <li>• Means of safe access – Ladders</li> <li>• Safe use of equipment – Ladders</li> <li>• Maintenance &amp; Inspection of equipment – Ladders</li> <li>• Evaluation between Fall Prevention and Personal Fall Arrest System</li> <li>• Situation requiring Fall Arrest Systems</li> <li>• ABC's of fall arrest system</li> <li>• Types of anchorage systems / points</li> <li>• Travel Restraint Systems</li> <li>• Work Positioning Systems</li> <li>• Difference between Travel Restraint and Fall Arrest</li> <li>• Fall Arrest Systems</li> <li>• Considerations for Fall Arrest</li> <li>• Selection of suitable Personal Protective Equipment for Work at height</li> </ul>		

	<ul style="list-style-type: none"> <li>• Pre and post check on Personal Fall Protection Equipment</li> </ul>		
5	<p>UK5. Fall Prevention Plan (FPP)</p> <ul style="list-style-type: none"> <li>• Understand the elements of Fall Prevention Plan <ul style="list-style-type: none"> <li>- Policy for Fall Prevention</li> <li>- Responsibilities of key stakeholders</li> <li>- Risk Assessment and Control Measures for WAH</li> <li>- Safe Work Procedures</li> <li>- WAH Equipment</li> <li>- Inspection and Maintenance of WAH equipment</li> <li>- Training requirements</li> <li>- Incident Investigations</li> <li>- Emergency Preparedness for fall rescue</li> <li>- First Response</li> </ul> </li> <li>• Evaluate the adequacy and effectiveness of Fall Prevention Plan</li> </ul>	Theory	2

6	UK6. WAH Implementation and Monitoring Programme <ul style="list-style-type: none"> <li>• Design out WAH risk</li> <li>• Stakeholders responsible for Work at height</li> <li>• Effective Implementation of FPP</li> <li>• Monitoring regime for Work at height</li> <li>• Maintenance of FPE</li> </ul>	Theory	0.5
7	UK7. Individual Fall Protection equipment and First line Response in emergency <ul style="list-style-type: none"> <li>• Station 1: Inspecting fall prevention and fall protection equipment</li> <li>• Station 2: Donning, checking and correcting harness Fitting</li> <li>• Station 3: Using twin lanyard to maintaining 100% tie-off</li> <li>• Station 4: Traversing using Horizontal Lifeline</li> <li>• Station 5: Identification of fragile surface (skylight) and avoidance</li> <li>• Station 6: Ascending vertical lifeline using Fall Arrestor</li> <li>• Station 7: Using Travel/Work Restraint System</li> <li>• Station 8: Descending with Self-Retractable Lifeline (SRL)</li> <li>• Station 9: Harness Suspension &amp; Use of self-relief technique</li> <li>• Station 10: Responding to a Fall Emergency</li> <li>• Station 11: Gaining access into a simulated pits and tanks using a twin lanyard to ascend a vertical ladder (First-man out)</li> <li>• Station 12: Installation of temporary anchor point using work positioning system (Demonstration)</li> <li>• Station 13: Safe use of A-frame ladders.</li> <li>• Station 14: Safe use of Step platform ladder</li> </ul>	Practical	4
	Written Assessment		2
	Practical Performance		3
<b>Total</b>			<b>20.5hrs</b>

### 3.3 Recommended Learning Strategies and Methods

3.3.1 Curriculum developers are recommended to adopt the following structure for thinking about and planning a learning strategy:

- Summarise the learning strategy
- In this learning strategy, what learning principles are being applied?

- What learning theories or learning design theories underpin this strategy?
- How will this strategy resolve the identified learning problems? What is it about the learning strategy that will cause people to change in a way that resolves the learning problem?
- How would you describe the experience that learners will go through? How will this experience support their learning?
- What methods or tactics are most likely to be used to support this strategy?
- How will interface and media support this strategy?
- How will this strategy engage learners' interests?
- How will this strategy assess learners' progress or increased competence?

(Extracted from [www.networked-learning.com](http://www.networked-learning.com), accessed 19 Sep 2010)

3.3.2 An example of instructional strategy selection for cognitive, affective and psychomotor domains is given in **Annex A**.

3.3.3 A non-exhaustive list of recommended delivery methods is provided below.

- Demonstration
- Practice
- Observation
- Lectures
- Role play
- Group Discussion
- Written Exercise
- Case Study
- Workplace Practice
- Presentation
- Action Learning
- Coaching / Mentoring

3.3.4 Where relevant and appropriate, the learning activities for the unit should be designed to shape or cultivate the expected attitudes of the candidates and to prepare them for their role in the sector.

3.3.5 To enhance the transfer of learning, an andragogical or adult-learning approach to learning is encouraged in the development and delivery of the Competency Unit. Andragogical instructional techniques are designed with

these factors in mind:

- Adults are self-directed
- Adults have acquired knowledge and experience through the workplace that can be utilised as a resource for learning
- Adults show a greater readiness to learn tasks that are relevant to their work roles
- Adults are motivated to learn in order to solve problems and address needs
- Adults expect to be able to apply what they learn
- Adults need to be challenged with varied strategies that maintain interest

3.3.6 This unit may be delivered in a combination of simulated environment and off-the-job.

- Content relating to underpinning knowledge and principles may be delivered off-the-job. Off-the-job delivery can be face-to-face in the classroom in a training organisation, or at a workplace venue. Classroom delivery should be interactive and learner-centred, using a range of activities and instructional methods.
- The practical aspects of the Competency Unit, however, should be delivered in simulated workplace settings.

3.3.7 All training delivery should be related to the normal work process and every effort should be made to link the acquisition and application of the knowledge, skills and attitudes to the workplace.

3.3.8 Suggestions for delivery of this Competency Unit are given below:

<b>Competency</b>	<b>Instructional Methods</b>	<b>Remarks</b>
Underpinning Knowledge	Lectures, discussions, case studies, problem-based learning, videos, e- learning resources	<p>The knowledge component of this course is primarily focused on the requirements of:</p> <p>UK1. Legal requirements, Approved Code of Practice and Standards for WAH            UK2. Roles and Responsibilities of various stakeholders            UK3. * Risk Management            UK4. Fall control measures            UK5. Fall Prevention Plan (FPP) UK6. WAH Implementation and Monitoring Programme            UK7. Individual Fall Protection equipment and First line Response in emergency</p> <p>These can be delivered in a classroom using models and slides.</p> <p>* The Risk Assessment/Management process should consider the management of infectious disease outbreak, employees' health (including mental well-being) and terrorist threats. Training Provider should take reference from the 3rd revision of the Code of Practice on Risk Management.</p>



Performance Statements	Lectures, demonstrations, practice	<p>The demonstration and practice may include the following key skills:</p> <p>PS1. Identify, explain and apply the relevant Workplace Safety and Health (WSH) legislation/Approved Code of Practice/Singapore Standards applicable to work at height</p> <p>PS2. Identify and explain the Roles &amp; Responsibilities of stakeholders, competent and responsible persons.</p> <p>PS3. Identify hazards, evaluate the risk, and implement control measures for work at height</p> <p>PS4. Review the necessary fall preventive / protective control measures for safe execution of work at height</p> <p>PS5. Establish, evaluate, review and implement a Fall Prevention Plan</p> <p>PS6. Establish and implement a system for an effective monitoring and control of WAH risks</p> <p>PS7. Don, check and correct Individual Fall Protection Equipment and respond to a fall emergency</p>
Attributes	Discussions, modelling, sharing	<p>A competent employee must have a sense of "safety awareness" and is expected to take personal responsibility for his own safety as well as look out for the safety of his co-workers.</p>

### 3.4 Trainer's Guide and Learner's Guide and Handouts

3.4.1 The TP is required to prepare a trainer's guide for the course. The guide provides the trainer with information on the course including:

- Course aim
- Learning objectives
- Target audience
- Assumed skills and knowledge
- Course duration
- Class size and approved facilitator / learner ratio
- Lesson plan
- Course contents and instructional materials according to the course requirements
- Training methodologies
- Training resource requirements
- Course administration instruction
- Personal Protective Equipment (PPE) required during the training

3.4.2 The TP shall also facilitate the learning process by providing each learner with a learner's guide and any other relevant handouts based on the course objectives and activities.

3.4.3 The TP is required to submit a cross reference matrix (see **Annex B**) to show that the courseware submitted is aligned to the requirements of the competency standard.

3.4.4 The TP is to ensure that materials used for the training does not infringe on patent, design, copyright and intellectual property rights of any individual or organisation.

3.4.5 The TP shall maintain a version control of updates made to the course materials for verification by the relevant authorities.

### 3.5 Training Provider Requirements:

Training Providers are required to fulfill the following requirements:

- ISO 29993 certification;
- bizSAFE Level 3 certification;
- Blended learning

Have developed an SOP to conduct online training and assessment when required to do so.

For each WSH course, the Training Provider must have at least:

- a. 1 full time Principal/Director;
- b. 1 full time WSH Approved Adult Educator/ Trainer/Facilitators for each WSH course;  
and
- c. 2 approved full time/associate Adult Educator/ Trainer/Facilitators for each of the language.

Training Providers are to inform the WSH Council when they withdraw their training provider status for any WSH course(s), or have their status suspended or terminated by any authority.

Training Providers are to comply with the instruction by either (i) SkillsFuture Singapore (SSG), Ministry of Manpower (MOM) or the WSH Council to stop conducting any WSH Course(s) when an investigation is ongoing, or a non-compliance is being verified. Further actions would be taken when fraudulent acts or significant non-compliances are established.

## 3.6 Training Resources

### 3.6.1 Training Requirements:

- Training site emergency evacuation route – to be briefed at start of course
- Training SOP must be available before the conduct of the course
- Photos/slides of the various types of work at height hazards
- Local case studies, where possible, relating to work at height incidents/accidents while working in formwork activities
- Appropriate and relevant PPEs and equipment for classroom demonstration must be made available during the course

### 3.6.2 Standard Curriculum

- 3.6.2.1 Standard Curriculum (SC) for the course will be issued upon approval of the TP.
- 3.6.2.2 The materials are provided strictly for the explicit use and guidance of TPs approved for the conduct of the Manage Work At Height course only
- 3.6.2.3 Any other use of the materials or parts thereof, reproduction, publication, distribution, transmission, re-transmission, or storage in a retrieval system in any form, electronic or otherwise, for purposes other than that expressly stated above without the express permission of MOM is strictly prohibited

### 3.6.3 Practical Training Requirements:

- 3.6.3.1 The scaffold structure shall be constructed. Please refer to Annex C on the recommended setup for the structure and equipment used in the practical training area. When erecting the scaffold structure, the following are to be ensured:
- 3.6.3.2 Only metal scaffold structure is permitted for the conduct of the Manage Work At Height WAH course, unless otherwise approved by MOM.
- 3.6.3.3 The ENTIRE scaffold structure must be erected by an Approved Scaffold Contractor (ASC), and shall meet all safety requirements specified under WSH (Scaffold) Regulations unless otherwise stated.
- 3.6.3.4 The ENTIRE scaffold structure must be certified by a Professional Engineer (PE) including its anchor points for lifelines, SRLs, harness suspension and fall arrest.
- 3.6.3.5 Scaffold structure ties must be secured to a permanent structure certified by a PE to ensure the stability of the scaffold.
- 3.6.3.6 The scaffold structure must be erected under shelter so that regardless of weather conditions, the running of the course shall not be compromised.
- 3.6.3.7 The scaffold shall be inspected every 7 days by MOM approved

scaffold supervisor (only when the scaffold is in use). A register shall be created to account for all inspections carried out on all equipment including PPEs to be used by the Learners.

- 3.6.3.8 All base plates must be centrally secured and fastened to the scaffold structure's sole plates.
- 3.6.3.9 All exposed pipes and bolts must be covered with PVC or rubber caps to prevent injury and/or corrosion.
- 3.6.3.10 The gaps between all toe boards and work platforms must be kept to a minimum or effectively covered to prevent falling debris.
- 3.6.3.11 There must be no corrosion on any part of the metal scaffold structure, especially the couplings and bolts.
- 3.6.3.12 Any protruding bolt that may potentially cause bodily injury when in contact must be made safe with effective covers or protectors.
- 3.6.3.13 All vertical and horizontal lifelines must be securely at both ends in accordance with manufacturer's instructions.
- 3.6.3.14 Vertical lifelines must be supported at the mid-point of the ladder to prevent swaying.
- 3.6.3.15 Any other essentials needed for the safe erection of a scaffold structure must be adhered to strictly.
- 3.6.3.16 The scaffold shall be inspected every 7 days by MOM approved scaffold supervisor (only when the scaffold is in use). A register shall be created to account for all inspections carried out on all equipment including PPEs to be used by the Learners.
- 3.6.3.17 There must be one facilitator to accompany one learner at the lower deck and one facilitator at the upper deck with the learner at all times. Similar for the assessors during the assessment.
- 3.6.3.18 CCTV shall not be permitted to replace the role of the facilitator, and at no time should the Learners be left alone without a facilitator or assessor during any stage of training or assessment.
- 3.6.3.19 Practical training does not include Practical Assessment. A separate Practical Assessment shall be conducted, apart from the practical training.
- 3.6.3.20 Practical training/assessment is 1:10 during training and 1:1 during assessment
- 3.6.3.21 For the same course, Facilitator and Assessor cannot be the same person, not even as the assistant facilitator or assessor.
- 3.6.3.22 Assessors must be familiar with the assessment criteria before conducting any assessment.
- 3.6.3.23 To be competent, the Learner must pass all assessment stations.
- 3.6.3.24 Learners who make any mistakes in his attempt of the assessment should be given an opportunity to complete all the stations, even though he had already failed the overall assessment. The exposure would prepare him for subsequent reassessment.
- 3.6.3.25 Learners who make no more than 3 mistakes cumulatively in his full practical assessment will be given another opportunity to reattempt the assessment on the same day of assessment. Only two assessment attempts shall be allowed for each learner per

practical assessment.

- 3.6.3.26 Learners who make more than 3 mistakes fail the assessment and would be required to retake the entire course.
- 3.6.3.27 Assessors are to ensure they have documented questions for each station and to each learner.
- 3.6.3.28 All training records must be kept by LSP for period of no less than 2 years for audit purpose.

#### 3.6.4 Total WSH Presentation Slides

Total WSH presentation slides will be issued upon approval of the Training Provider. The materials are provided strictly for the explicit use and guidance of training providers for the conduct of this course. Any other use of the materials or parts thereof, reproduction, publication, distribution, transmission, re-transmission, or storage in a retrieval system in any form, electronic or otherwise, for purposes other than that expressly stated above without the express permission of WSH Council is strictly prohibited.

### 3.7 Training Venue Requirements

- 3.7.1 Unless prior approval has been granted by the CB, which had certified its WSH courses, each TP shall maintain and conduct its WSH course at its primary Training Venue. In addition, the TP shall ensure that the following are not shared with any other TP:
  - (a) their approved Training Venue/s; and
  - (b) Any other equipment or loads, which are used for the conduct of the WSH course.
- 3.7.2 In the event, where the TP wishes to conduct its WSH theory course(s) at a venue, other than the approved Training Venue, the TP must inform the CB, which had certified its WSH course(s) at the approved Training Venue/s, of its intent to effect such a change, and it must also demonstrate to the CB that:
  - (a) It has an approved Training Venue at the registered address;
  - (b) That the proposed venue is conducive for learning; and
  - (c) That there are no safety and health concerns in relation to the proposed venue/s. The TP may conduct its WSH theory course(s) at a venue other than the approved Training Venue/s only after obtaining the CBS approval.
- 3.7.3 The requirement stated at Para 3.7.2 shall apply to a TP for single and multiple usage
- 3.7.4 Where the CB has granted approval to the TP to conduct the WSH theory course(s) at an alternate venue, the TP must ensure that:
  - a) All training and assessment records are kept by the TP, for courses

conducted, at the alternate venue. Such records shall include the following documents:

i Photographs of the alternate venue

ii Photographs of the WSH theory course(s) being conducted at the alternate venue

iii Layout plan of the alternate venue; and

iv Leasing documents

b) The records mentioned in sub-paragraph (a) above, are continually updated;

c) The alternate venue is only used for the conduct of WSH theory course(s). No practical training/assessment shall be allowed at the alternate venue, unless approval has been granted by the Authorities; and

d) The alternate venue is not occupied and or used by another TP or WSH approved training provider at any time.

- 3.7.5 The TP must ensure that all Training Venues (including alternate venues) have been approved by the Urban Redevelopment Authority (URA) or the Housing & Development Board ("HDB"), either as a Commercial School (theory based only) or for Industrial Training (theory and practical), before it applies to be certified by the CB. Note: Tenancy agreement (e.g. from JTC Corporation or other Developers) does not constitute a URA approval. Only correspondence with letterheads bearing the office of the relevant government authorities granting the approval shall be recognised.
- 3.7.6 Paragraph 3.7.5 shall not apply to TP who is applying for a once –off use of the theory training premises.
- 3.7.7 The TP is to note that a CB's approval of any practical training venue is conditioned upon its safe and adequacy of the training facilities and equipment. The TP shall comply with all relevant legislations including but not limited to legislations involving land use, building, fire and safety
- 3.7.8 TP shall ensure that the classroom has adequate chairs and writing tables that are reasonably and comfortably spaced for the class of 20, to be conducive to the learning process and the purpose of conducting the assessment.
- 3.7.9 The classroom must have adequate lighting and ventilation. Emergency exit routes must be clearly marked out and briefed to the course learners at the start of the course. Necessary equipment such as projectors, multimedia players, whiteboards, and flipcharts must be available.
- 3.7.10 There shall be sufficient space as necessary for the appropriate set-up demonstration of fall arrest equipment and assessment purposes. There shall be adequate safety control measures taken to ensure the safety of the Learner during training.

## CHAPTER 4: KEY ASSESSMENT ADVICE

This chapter describes the following components:

A description on the general guidelines and requirements for conducting assessment is given in the reference WSQ resource websites in Part II of this document.

### 4.1 Recommended Assessment Strategies and Methods

4.1.1 There shall be a one 1- hour Written Assessment (WA) for the course comprising Part 1 and Part 2.

S/N	Assessment Activity	Method/Format	Duration (12 pax)
1	Written Assessment (Closed book) – individual Assessor to Learners Ratio: 1:20	Theory: Part 1 – 35 MCQs Part 2 – Choose 2 out of 5 scenario based questions	2 hours
2	Practical Assessment Assessor to Learners Ratio: 1:10	Demonstration of skills	3 hours
<b>Total Assessment Time</b>			<b>5 hours</b>

### 4.2 Industry Requirements

- The learner must achieve at least a 70% pass rate for the written assessment and 100% for the practical assessment in order to be issued with the certificate of successful completion. However, the learner is allowed to make no more than 3 mistakes cumulatively in his full practical assessment. He would then be allowed to take the assessment a second time after he has reviewed his mistakes and coached by his approved facilitator. Only ONE assessment attempt is allowed for each learner for the written summative assessment. Failure to pass either of the written or practical assessments shall render a “Not Yet Competent” outcome for the Learner and he must then re-attempt the course and assessments.
- MOM/WSH Council officers shall conduct audits with or without notice on WSQ WSH TPs
- To facilitate uploading of the assessment results, TPs shall install the Automated Marking System (AMS) and its associated hardware.
- The TP personnel who is authorised to use the AMS must also ensure that the assessment results are updated in SSG’s TPGateway system.
- TPs are to upload the test results to MOM/ WSH Council within 5 working days following the completion of the course. All errors must be rectified within 24



hours for re-submission of the affected results to MOM/ WSH Council via WSH TRS. This is in addition to the uploading of assessment results to SSG via TPGateway.

- Authorities (i.e. MOM/ WSH Council) may request from TPs information on the course. TPs are to ensure that the information given to the Authorities are accurate and updated.

Note: For system(s) or requirement(s) administered by the relevant authorities, i.e. MOM/ WSH Council, the TP shall fulfil the requirements and follow up with the agencies accordingly.

### **4.3 Assessment Instruments and Tools**

4.3.1 Assessments instruments and tools will be required to conduct the assessment planned. Examples of such templates include:

- An Evidence Sources Checklist to serve as a reporting snapshot of the types of evidence gathering that may be used.
- A Verbal Assessment Checklist to record answers to questions concerning Underpinning Knowledge if this is used as an alternative to written exercise.
- Written Assessment Checklists as an instrument for the recording of answers to questions concerning the performance statements and underpinning knowledge.
- A Recording and Reporting Assessment Table Format as an instrument for the concise recording of competency and re-assessment information concerning the Competency Unit.

### **4.4 Assessment Plan**

4.4.1 General Guidelines on Assessment

The assessment plan shall comprise the following:

- Overview of the assessment tools and its duration
- Clear instructions on the conduct of the assessment (inclusive of emphasis on Safety for Learners)
- SOP on the upkeep of the confidentiality of the assessment questions
- Instruments or tools of assessment (e.g. question paper, practical checklist)
- Assessment summary record

4.4.2 Principles of Assessment

The assessment plan should be valid, reliable, fair and flexible.

- Valid – Are the assessment methods and tools appropriate and effective? Are the evidence collected relevant to the training?
- Reliability – Are the results consistent from one assessment to another?
- Fair – Are the assessment criteria clear? Do all the trainees know what to expect from the assessment? Will the assessment disadvantage any trainee? Do the trainees have any recourse for appeals?
- Flexibility – Can the assessment be used for multiple assessments? Are the assessment tools and methods uniform across different approaches and drawing on a range of different methods? Can they be used appropriately to the context, task and individual under assessment?

## 4.5 Conduct of Assessment

4.5.1 The learner shall be assessed either “Competent” or “Not Yet Competent”. All PS and UK MUST be assessed as ‘Competent’ to be deemed to competent in the unit; AND The candidate must answer at least 70% of the questions correctly in the closed book written test.

4.5.2 The practical assessment must be conducted strictly in accordance with the practical assessment plan. Each Learner is expected to complete and pass ALL the assessment requirements within the stipulated assessment time allocated.

4.5.3 The written assessment is in close book.

4.5.4 For summative written assessment, the default is Individual assessment unless otherwise instructed.

4.5.5 Written Assessment

TP must adhere to the following guideline for the written assessment:

- Must administer multiple choice question (MCQ) and scenario- based question tests for the WA.
- Ensure sufficient copies of the Code of Practice for Working at Heights are available for the learners to refer to. TPs are to retrieve the collaterals after each course and assessment and ensure that all collaterals shall be clean and free of any markings or answers.
- Assessors shall alternate the test question sets.
- The total allocated time for the written assessment is 2 hours.
- The passing mark for the written assessment is 70%.

- During the administration of the written assessment, there shall be an Assessor to ensure the integrity of the assessment process. The trainer for the course is not permitted to be the assessor for the same course learners during the assessment.
- SOP on the upkeep of the confidentiality of the written assessment questions

## 4.6 Briefing to Candidate

4.6.1 The briefing to candidate is to explain the purpose and context of assessment so as to ensure that there are no surprises during the conduct of assessment.

4.6.2 The briefing to candidate shall include the following:

- The assessment requirements and process, including clear instructions on each of the assessment adopted
- Candidates' rights and the appeal process for assessment outcome

4.6.3 During the briefing, assessors are to establish any special needs and how such needs will be addressed during the assessment.

4.6.4 Assessor must seek feedback and ascertain candidates' understanding of the assessment requirements before the commencement of the assessment

## 4.7 Recording and Reporting of Assessment Outcome

4.7.1 All assessment outcomes must be accurately recorded in the assessment summary record form (see **Annex B**).

4.7.2 Assessment outcome will be communicated to the candidate at the end of the assessment.

4.7.3 The TP shall maintain a record of the assessment results for 2 years for audit purposes.

## 4.8 Issuance of Certificate

- 4.8.1 A Statement of Attainment (SOA) will be issued by SSG for candidates only for English language course who have been assessed as "Competent".
- 4.8.2 "Safety Pass/Card" is to be issued, in accordance with the format shown in Annex D, to candidate who is assessed "Competent" in this Competency Unit.
- 4.8.3 "Certificate of Successful Completion" is to be issued, in accordance with the format shown in Annex E, to candidate who is assessed "Competent" in this Competency Unit.
- 4.8.4 The issuance of the "Certificate of Successful Completion" is optional for LSPs/TPs who have already issued the "Safety Pass" to candidate who is assessed "Competent" in this Competency Unit.

# CHAPTER 5: ADULT EDUCATOR REQUIREMENTS

A developer / trainer / assessor for this module shall possess all of the following:

## 5.1 Trainer and Assessor Requirements

A trainer and assessor of this course should possess all the following:

- Specialist Diploma in Workplace Safety and Health
- Attended and passed the MOM accredited Work-At-Heights (WAH) Train-The-Trainer course and/or Managing WAH course certificate issued by LSP certified to ISO 29990
- Advanced Certificate in Training and Assessment (ACTA)/ Advanced Certificate in Learning and Performance (ACLP)
- Advanced Certificate in Learning and Performance (ACLP) or Diploma in Adult Continuing Education (DACE) or Diploma in Design and Development of Learning for Performance (DDDLP).
- 3 or more years of working experience as Project Manager/Operations Manager or equivalent
- 3 or more years of relevant Work-at-Height experience
- All trainers/adult educators are required to attain 10 hours (minimum) annually by attending Continuing Professional and Development (CPD) courses conducted by appointed training providers. For more details, refer to Train-the-Trainer (T<sup>3</sup>) Programme in WSH Council website ([www.wshc.sg](http://www.wshc.sg))
- The trainer for the course is not permitted to be the assessor for the same course learners during the assessment.

## 5.2 Developer Requirements

In addition to the requirements for trainer and assessor above, the developer should possess all the following:

- WSQ curriculum developer pedagogic requirement: The developer must have attained a WSQ Advanced Certificate in Training and Assessment (ACTA) or its equivalent. With effect from 1 October 2015, a WSQ Diploma in Adult and Continuing Education (DACE) or Diploma in Design and Development of Learning for Performance (DDDLP). is required;
- WSQ curriculum developer experience: The developer should preferably possess a minimum of one year experience in WSQ-related courseware development; **AND**
- Language proficiency: WPL level 7 or equivalent.

A qualified and experienced developer can work with a Subject Matter Expert with relevant domain qualifications and work experience in developing the courseware.

## CHAPTER 6: SUMMARY OF MANDATORY SECTIONS / INFORMATION

This chapter summarises all the mandatory sections and required information, for easy reference. TPs / Adult Educators are expected to note the information indicated in the following Sections and to comply with the stated requirements, where appropriate:

<u>Section</u>	<u>Title</u>
2.5	Recommended Learning Hours (RLH)
2.6	Recommended Class Size and Learner-Trainer Ratio
2.7	Recommended Assessor to Candidate Ratio
4.1	Content Coverage <i>(On percentage of items under Range and Application and Evidence Sources to be covered)</i>
4.5	Training Resources
4.6	Training Venue Requirements
5.2	Industry Requirements
5.4	Assessment Plan
5.5	Conduct of Assessment
6.1	Trainer and Assessor Requirements
6.2	Developer Requirements

# CHAPTER 7: RESOURCE INFORMATION

This chapter indicates the various literatures, journals, articles and researched information on the competency unit "Manage Work At Height".

Related WSH legislations, industrial code of practice and other references (list is not exhaustive)

- Workplace Safety and Health Act
- WSH (WAH) Regulations
- WSH (WAH) Regulations Amendment
- WSH (General Provision) Regulations
- WSH (Construction) Regulations
- WSH (Shipbuilding and Ship-repairing) Regulations
- WSH (Scaffold) Regulations
- WSH (Risk Management) Regulations
- WSH Approved Code of Practice for Working Safely at Height
- Code of Practice for Workplace Safety and Health (WSH) Risk Management – 3<sup>RD</sup> revision
- Singapore Standards SS 528 – Personal Fall Arrest Systems
- Singapore Standards SS 570 – Specification for personal protective equipment for protection against falls from a height
- Singapore Standards SS588 – Personal Equipment for Protection against Falls – Rope Access Systems
- WSH Guidelines: Working Safely on Roofs
- WSH Guidelines: Anchorage, Lifelines, and Temporary Edge Protection Systems
- WSH Guidelines: Personal Protective Equipment for Working at Height
- Ladder Safety Kit

**PART II**  
**WSQ**  
**&**  
**Supporting**  
**Resources**



## Glossary

TP	TPs are training organisations accredited under the WSQ to offer training programmes and assessment services leading to WSQ certification
Assessment	A systematic process of collecting evidence and making judgements as to whether an individual has achieved a certain level of competency.
Assessment Criteria and marking scheme	Provides the context and conditions, under which the assessment will be conducted, what evidence the assessor must collect and the grading criteria used.
Assessment method	The process or technique used to gather evidence. (Bresciano & Fackler, 2005)
Assessment plan	A document which outlines when the evaluation will take place and how it will be conducted. An assessment plan includes the " programme mission or course/activity purpose, goals as appropriate, in/ended outcomes, methods for gathering, analysing data, and interpreting data for providing evidence to inform decision making." (Bresciano & Fackler, 2005)
Assessment process	The series of steps which a candidate undertakes within the enrolment, assessment, recording and reporting cycle of assessment.
Assessment tool	An instrument or resource used in association with a given assessment method. It may include a questionnaire, test paper, interview questions, structured report template and record sheet.
Assumed skills and knowledge	Assumed skills and knowledge are what learners ought to have and are assumed to have before they attend the training programme.
Competency	A competency is a measurable set of knowledge, skills and attitudes that drives and individual's performance to perform at his/her job effectively.
Competency category	A competency category refers to broad occupational or industry area or function, competency units (CU) that are inter-related are grouped by competency categories.
Competency elements	A competency element is the sub-division of a CU. Competency elements encompasses performance criteria, underpinning knowledge, range and context as well as evidence sources.
Competency level	The competency level reflects the level of complexity and depth of learning required by the competencies in the standard. It is outlined in the competency standards.
Competency Map (CM)	A document that captures the type of competencies needed in an industry. The competencies are expressed as CU and these are grouped into competency categories and pegged to occupational levels.

Competency Standards (CS)	A competency standard documents expected work performance outcomes, expected level of performance, knowledge that supports the delivery of work performance
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	outcomes and work contexts under which the work performance outcomes are to be delivered.
Competency Unit (CU)	A CU describes a particular work role, duty or function, which forms the smallest group of skills, knowledge and abilities set able to be recognized separately for certification. The certification requirements of a CU are detailed in a CS.
Continuing Education and Training (CET)	Continuing Education and Training (CET) refers to educational programmes for adults, usually at the post-secondary level and offered as a part-time or short courses in occupational subject areas. Also see Pre-employment Training (PET).
Credit	A unit of measure assigned to courses or course of equivalent learning.
Curriculum, Training and Assessment Guide (CTAG)	The CTAG is a document that provides training and assessment advice to achieve effective training and assessment leading to WSQ certification of a CU.
Dimensions of competency	The dimensions of competency cover all aspects of work performance. The five dimensions of competency are: <ul style="list-style-type: none"> <li>- TASK skills</li> <li>- TASK management skills</li> <li>- Contingency management skills</li> <li>- Job and role management skills</li> <li>- Transfer skills</li> </ul>
Evidence sources	The evidence source section in a CS gives examples of tasks, observations, documents etc. that can be used as evidence for assessing the particular competency element or list of performance statements.
Learning outcomes	The work performance that a learner should be able to demonstrate as a result of having undertaken training and/or assessment. It must be measurable, clear and observable.
Performance criteria / statements (PC / PS)	Performance criteria or performance statements refer to the expected work performance or behaviours and expected level of performance to be demonstrated by a competent individual.
Pre-employment Training (PET)	Pre-employment Training (PET) refers to educational programmes that prepare individuals for entry into the workforce. This includes secondary, pre-university, polytechnic and university education.
Qualifications	Qualifications are formal certifications issued by a relevant approved body, in recognition that an individual has achieved learning outcomes identified by the industry.

Range and context	Range and context provides the type of situations under which the performance criteria / statements apply. Range and context cover items that are achievable or to be performed across by competent individuals, such as types of equipment, products and services, types of customers.
Underpinning knowledge	Underpinning knowledge states the knowledge that an individual needs to know and understand in order for him/her to perform competently at work.

**Version Control**

<b>Version</b>	<b>Effective Date</b>	<b>Changes</b>	<b>Author</b>	<b>Approved By</b>
1.0	31 Oct 2019	Initial version	SSG-MOM	SSG-MOM
2.0	21 Jan 2022	Updates	WSH Council	WSH Council
3.0	1 Sep 2023	Next Review Date	WSH Council	WSH Council

## Annex A

### Instructional Strategy Selection Chart

<b>Instructional Strategy</b>	<b>Cognitive Domain</b> (Bloom, 1956)	<b>Affective Domain</b> (Krathwohl, Bloom, & Masia, 1973)	<b>Psychomotor Domain</b> (Simpson, 1972)
Lecture, reading, audio/visual, demonstration, or guided observations, question and answer period	1. Knowledge	1. Receiving phenomena	1. Perception 2. Set
Discussions, multimedia CBT, Socratic didactic method, reflection. Activities such as surveys, role playing, case studies, fishbowls, etc.	2. Comprehension 3. Application	2. Responding to phenomena	3. Guided response 4. Mechanism
On-the-Job-Training (OJT), practice by doing (some direction or coaching is required), simulated job settings (to include CBT simulations)	4. Analysis	3. Valuing	5. Complex response
Use in real situations. Also may be trained by using several high level activities coupled with OJT.	5. Synthesis	4. Organise values into priorities	6. Adaptation
Normally developed on own (informal learning) through self- study or learning through mistakes, but mentoring and coaching can speed the process.	6. Evaluation	5. Internalising values	7. Origination

The chart does not cover all possibilities, but most activities should fit in. For example, self-study could fall under reading, audio visual, and/or activities, depending upon the type of program you design.

(Extracted from <http://www.nwlink.com/~donclark/hrd/strategy.html>, accessed 19 Sep 2010)

## Annex B

### Cross Reference Matrix for WSQ Competency Unit

Performance Statement	Underpinning Knowledge & Range & Application	Assessment Criteria <i>(State what is expected and required from the candidate)</i>	Assessment Methods			Assessment Instruments/Tools	Reference		
			Oral Questioning	Written Assessment	Practical Performance		Trainer's	Learner's	Slides
PS1 Identify the needs and expectations of customer populations to develop customer profiles.									
PS 1 Identify the needs and expectations of customer populations to develop customer profiles.	<b>UK 1</b> <i>1.1 techniques for conducting</i>	<b>Tell Me (Knowledge)</b> List three techniques for conducting customer							
<b>Sample Format for reference to develop the Cross Reference Matrix</b>									
	<p><b>Range &amp; Context</b> <b>Research techniques may include:</b></p> <ul style="list-style-type: none"> <li>o interviews;</li> <li>o observations;</li> <li>o surveys;</li> </ul> <p><b>Research may focus on areas which may include:</b></p> <ul style="list-style-type: none"> <li>o individual influences on customer behavior;</li> <li>o social influences on customer behavior; &amp;</li> <li>o Lifestyle influences on customer behavior.</li> </ul>	<ul style="list-style-type: none"> <li>o surveys;</li> <li>o questionnaires;</li> <li>o database analysis;</li> <li>o interpreting third party research output; and</li> <li>o Use of business excellence tools such as Voice of Customer, Quality Function Deployment (QFD).</li> </ul> <p>Identify the needs and expectations of your customers.</p> <p><b>Show Me (Process)</b> Research the demography of your customers by:</p>	X				10 - 28	9 - 32	10 - 62

## I Overview of Assessment for the Competency Unit

Competency unit:

<b>Purpose of assessment</b>

<b>Context of assessment</b>	<b>Details</b>
Organisational requirement	
Operational environment	
Industry requirement	
Legal requirements	

Assessment venue:

Description of candidates: (at least four characteristics)

Special needs of candidates (at least one special need)

Any other special requirements :( at least one special requirement)

Stakeholders in AP development team and their role:

<b>Title</b>	<b>Name</b>	<b>Support in Developing Assessment Plan</b>

<b>Competency Elements</b>	<b>Methods</b>

<b>Method</b>	<b>Duration</b>	<b>Ratio of assessor to candidate</b>	<b>Remarks</b>
<b>Total</b>		--	--



## II Assessment Matrix

### Mapping of Assessment Methods with Performance and Knowledge Requirements

Content	Lecture (Hour)	Practical (Hour)	Assessment Mode	Total (Hour)
<b>Day 1</b>				
UK1. Legal requirements, Approved Code of Practice and Standards for WAH <ul style="list-style-type: none"> <li>• Workplace Safety and Health Act</li> <li>• WSH (Work-at-Heights) Regulations</li> <li>• WSH(Work-at-Heights) (Amendments) Regulations</li> <li>• WSH (Risk Management)</li> <li>• WSH (Construction) Regulations</li> <li>• WSH (Shipbuilding and Ship-Repairing) Regulations</li> <li>• WSH (General Provision) Regulations</li> <li>• Code of Practice for Working Safely at Height</li> </ul>	1			1
UK2. Roles and Responsibilities of various stakeholders <ul style="list-style-type: none"> <li>• Occupier</li> <li>• Employer</li> <li>• Principal</li> <li>• Self Employed</li> <li>• Persons at work (Employee)</li> <li>• WAH Manager</li> <li>• WAH Assessor</li> <li>• WAH Supervisor</li> <li>• WAH Worker</li> </ul>	1			1
UK3. * Risk Management <ul style="list-style-type: none"> <li>• Identification of Work at height</li> <li>• Tools for the identification of hazardous conditions involving Work at height</li> <li>• Identification of hazardous conditions relating to Work at height</li> <li>• Evaluation of WAH risks</li> <li>• Consideration for control measures</li> <li>• Principle of Hierarchy of control</li> <li>• Monitor, review and record keeping of RA</li> <li>• Practical approach in risk management involving Work at height</li> </ul>	2			2

<ul style="list-style-type: none"> <li>• PTW application process (Flow chart)</li> <li>• Consideration for revocation of PTW</li> <li>• Incompatible work</li> </ul> <p>*The Risk Assessment/Management process should consider the management of infectious disease outbreak, employees' health (including mental well-being) and terrorist threats. Training Provider should take reference from the 3rd revision of the Code of Practice on Risk Management.</p>				
<p>UK4. Fall control measures</p> <ul style="list-style-type: none"> <li>• Fall Prevention Systems</li> <li>• Types of Edge Protection (permanent/temporary)</li> <li>• Specifications for Edge Protection</li> <li>• Customized / Engineering fall prevention solutions</li> <li>• Maintenance &amp; Inspection of Edge Protection</li> <li>• Effective covers for floor openings / hatch</li> <li>• Means of safe access – Scaffold Access</li> <li>• Safe use of equipment – Scaffold Access</li> <li>• Means of safe access - MEWP</li> <li>• Safe use of equipment – MEWP</li> <li>• Maintenance &amp; Inspection of equipment – MEWP</li> <li>• Means of safe access – Ladders</li> <li>• Safe use of equipment – Ladders</li> <li>• Maintenance &amp; Inspection of equipment – Ladders</li> <li>• Evaluation between Fall Prevention and Personal Fall Arrest System</li> <li>• Situation requiring Fall Arrest Systems</li> <li>• ABC's of fall arrest system</li> <li>• Types of anchorage systems / points</li> <li>• Travel Restraint Systems</li> <li>• Work Positioning Systems</li> <li>• Difference between Travel Restraint and Fall Arrest</li> <li>• Fall Arrest Systems</li> <li>• Considerations for Fall Arrest</li> <li>• Selection of suitable Personal Protective Equipment for Work at height</li> <li>• Pre and post check on Personal Fall Protection Equipment</li> </ul>	3			3

<p>UK5. Fall Prevention Plan (FPP)</p> <ul style="list-style-type: none"> <li>• Understand the elements of Fall Prevention Plan <ul style="list-style-type: none"> <li>- Policy for Fall Prevention</li> <li>- Responsibilities of key stakeholders</li> <li>- Risk Assessment and Control Measures for WAH</li> <li>- Safe Work Procedures</li> <li>- WAH Equipment</li> <li>- Inspection and Maintenance of WAH equipment</li> <li>- Training requirements</li> <li>- Incident Investigations</li> <li>- Emergency Preparedness for fall rescue</li> <li>- First Response</li> </ul> </li> <li>• Evaluate the adequacy and effectiveness of Fall Prevention Plan</li> </ul>	2			2
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UK6. WAH Implementation and Monitoring Programme <ul style="list-style-type: none"> <li>• Design out WAH risk</li> <li>• Stakeholders responsible for Work at height</li> <li>• Effective Implementation of FPP</li> <li>• Monitoring regime for Work at height</li> <li>• Maintenance of FPE</li> </ul>	0.5			0.5
UK7. Individual Fall Protection equipment and First line Response in emergency  Station 1: Inspecting fall prevention and fall protection equipment Station 2: Donning, checking and correcting harness Fitting Station 3: Using twin lanyard to maintaining 100% tie-off Station 4: Traversing using Horizontal Lifeline Station 5: Identification of fragile surface (skylight) and avoidance Station 6: Ascending vertical lifeline using Fall Arrestor Station 7: Using Travel/Work Restraint System Station 8: Descending with Self-Retractable Lifeline (SRL) Station 9: Harness Suspension & Use of self-relief technique Station 10: Responding to a Fall Emergency Station 11: Gaining access into a simulated pits and tanks using a twin lanyard to ascend a vertical ladder (First-man out) Station 12: Installation of temporary anchor point using work positioning system (Demonstration) Station 13: Safe use of A-frame ladders. Station 14: Safe use of Step platform ladder		6		6
<b>WRITTEN/PRACTICAL ASSESSMENT</b>				
TOTAL (Hours) – Written Assessment				2
TOTAL (Hours) – Practical Assessment				3
<b>TOTAL (Hours)</b>				<b>20.5</b>

WA = Written Assessment

## I Assessment Specifications for Written Assessment

These instructions concern the written assessment of the Learner's competency.

Specification Item	Details on Specifications
Learning outcome	Fulfil the course learning objectives for all topics to be assessed
Duration	2 hours
Venue	Classroom
Set up	<ul style="list-style-type: none"> <li>• Classroom setup for 20 Learners.</li> <li>• Tables &amp; chairs for individual seating</li> </ul>
	<ul style="list-style-type: none"> <li>• Projector and monitor</li> <li>• Whiteboard &amp; markers of different colours</li> <li>• Whiteboard duster</li> <li>• Blue or black pens</li> <li>• A4 paper</li> <li>• Assessment papers</li> <li>• Answer sheet</li> </ul>
Conduct of the Written Test	<ul style="list-style-type: none"> <li>• Brief learners to check if they have been given the right assessment paper</li> <li>• Inform learners on the time given for the assessment.</li> <li>• Remind them it is an close book assessment.</li> <li>• Sharing of materials and communication between/among candidates during the assessment is strictly NOT ALLOWED</li> <li>• TPs are to provide the following official references to each Learner:               <ol style="list-style-type: none"> <li>a. Code of practice for working safely at heights</li> <li>b. Anchorage, Lifelines and Temporary Edge Protection Systems</li> <li>c. Personal protective equipment for work at height</li> <li>d. Working safely on roofs</li> <li>e. Resource Kit                   <ol style="list-style-type: none"> <li>i. H01 ACOP PTW Template.</li> <li>ii. H03 SWP Sample - Roof Works</li> <li>iii. H04 ACOP FPP Template</li> <li>iv. H02 RA Sample - Roof Installation_v2.0</li> <li>v. H05 - Method Statement for Roof Works</li> <li>vi. S03 Risk Assessment Form</li> </ol> </li> </ol> </li> </ul> <p>** TPs shall make available sufficient copies of</p>

	<p>the Code of Practice for Working at Heights for the learners to refer to. TPs are to retrieve the collaterals after each course and assessment and ensure that all collaterals shall be clean and free of any markings or answers.</p> <ul style="list-style-type: none"><li>• Candidates are allowed to ask the Assessor to explain the question.</li><li>• In order to be considered competent, the candidate must achieve at least a 70% pass rate for the theory component.</li></ul>
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## II Assessment Record for Written Assessment

**Candidate's**

**Name:** \_\_\_\_\_ **End Time :** \_\_\_\_\_

**Candidate's ID**

**Number :** \_\_\_\_\_ **Start Time :** \_\_\_\_\_

**Assessor's Name:** \_\_\_\_\_

<b>KNOWLEDGE CHECKLIST</b>				
<b>Underpinning Knowledge</b>	<b>Assessment Criteria</b>	<b>Tick</b>		<b>Evidence of 'C' and 'NYC' must be recorded</b>
		<b>C</b>	<b>NYC</b>	
<b>UK 1 ...</b>	<ul style="list-style-type: none"> <li>• Sample Questions.....</li> <li>• Suggested Answers...</li> </ul>			
<b>UK 2 ...</b>	<ul style="list-style-type: none"> <li>• Sample Questions.....</li> <li>• Suggested Answers...</li> </ul>			
<b>UK 3 ...</b>	<ul style="list-style-type: none"> <li>• Sample Questions.....</li> <li>• Suggested Answers...</li> </ul>			
<b>UK 4 ...</b>	<ul style="list-style-type: none"> <li>• Sample Questions.....</li> <li>• Suggested Answers...</li> </ul>			

## I SUMMARY ASSESSMENT RECORD

<b>Assessment Centre :</b>		
<b>Competency Unit :</b>		
<b>Candidate Name :</b>		
<b>Candidate ID No. :</b>		
<b>Assessor Name :</b>		
<b>Assessment Method :</b>	<b>Practical Performance (PP)</b>	<b>Written Assessment (WA)</b>
<b>Assessment Date :</b>		
<b>Start Time :</b>		
<b>End Time :</b>		

### Summary

<b>Performance Statement</b>	<i>Assessment Method</i>		<i>Result</i>
	<i>PP</i>	<i>WA</i>	

This candidate has been assessed as:

- COMPETENT  
 NOT YET COMPETENT

Assessor signature: \_\_\_\_\_

Candidate signature: \_\_\_\_\_



**Feedback on outcome by assessor/feedback by candidate:**

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**In the event of "NYC" result:**

- Candidate does not wish to appeal
- Candidate wishes to appeal

Candidate signature:

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## II Assessment Tools Required and other Related Documents

- **Other required Assessment Tools for this assessment plan**  
e.g. case studies, role play scenarios, written test papers, logistics checklist

- **Pre-Assessment Briefing Checklist**

- **Appeal Process**

- **Version Control Record**

Version	Effective Date	Changes	Author
1.0		New release	

- **Other required Assessment Tools for this assessment plan**  
e.g. case studies, role play scenarios, written test papers, logistics checklist

## CODE OF PRACTICE FOR ASSESSORS

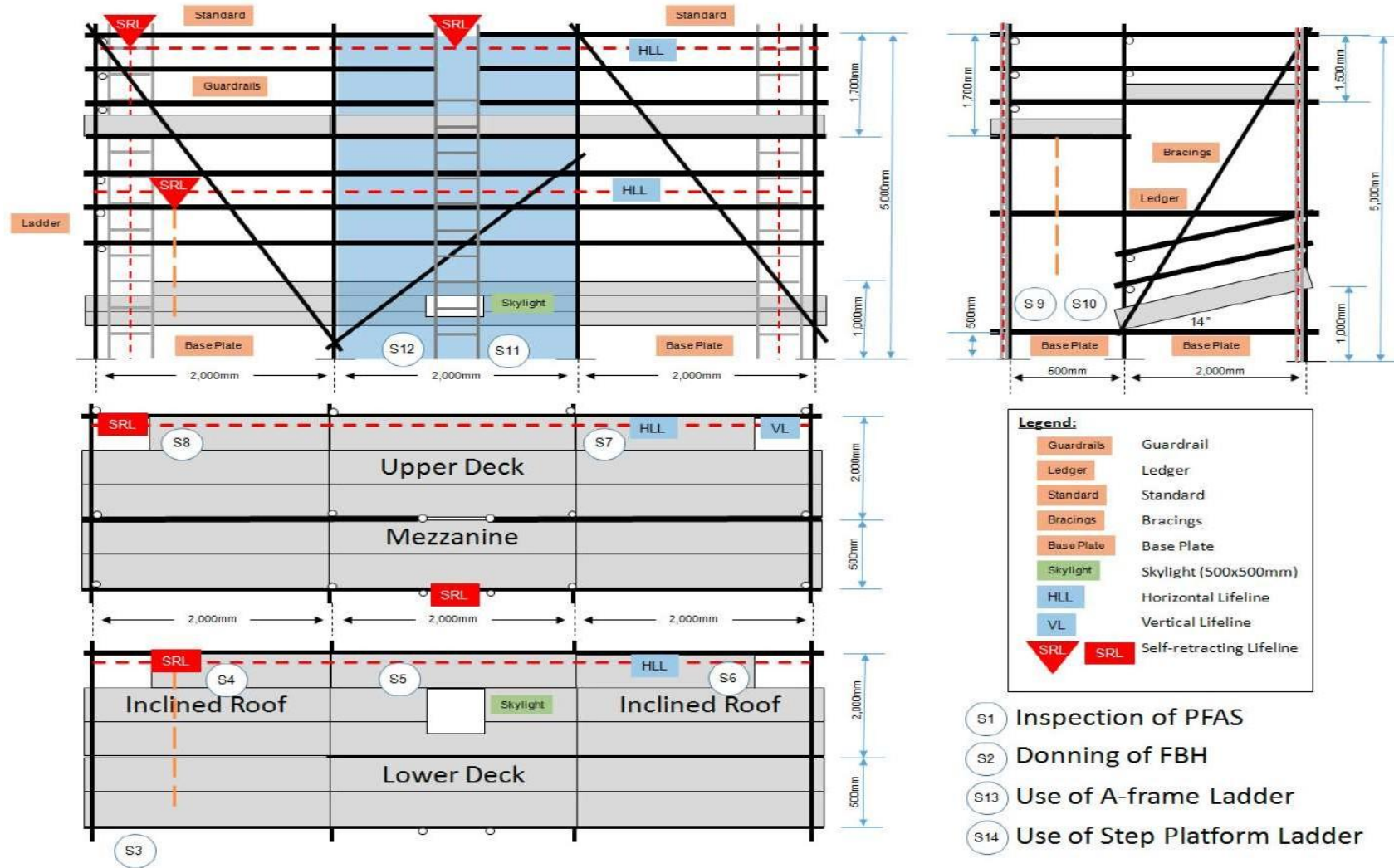
Assessment specialists have developed an international code of ethics and practice (The National Council for Measurement in Education (NCME)). The Code of Practice below is based on the international standards.

1. The differing needs and requirements of the person(s) being assessed, the local enterprise(s) and/or industry are identified and handled with sensitivity.
2. Potential forms of conflict of interest in the assessment process and/or outcomes are identified and appropriate referrals are made, if necessary.
3. All forms of harassment are avoided throughout the planning, conduct, reviewing and reporting of the assessment outcomes.
4. The rights of the candidates (s) are protected during and after the assessment.
5. Personal or interpersonal factors that are not relevant to the assessment of competency must not influence the assessment outcomes.
6. The candidate(s) is made aware of rights and processes of appeal.
7. Evidence that is gathered during the assessment is verified for validity, reliability, authenticity, sufficiency and currency.
8. Assessment decisions are based on available evidence that can be produced and verified by another assessor.
9. Assessments are conducted within the boundaries of the assessment system policies and procedures.
10. Formal agreement is obtained from both the candidate(s) and the assessor that the assessment was carried out in accordance with agreed procedures.
11. Assessment tools, systems, and procedures are consistent with equal opportunity legislation.
12. The candidate(s) is informed of all assessment reporting processes prior to the assessment.
13. The candidate(s) is informed of all known potential consequences of decisions arising from an assessment, prior to the assessment.
14. Confidentiality is maintained regarding assessment result.

15. Results are only released with the written permission of the candidate(s).
16. The assessment results are used consistently with the purposes explained do the candidate.
17. Self-assessments are periodically conducted to ensure current competencies against the assessment and Workplace Training Competency Standards.
18. Professional development opportunities are identified and sought.
19. Opportunities for networking amongst assessors are created and maintained.
20. Opportunities are created for technical assistance in planning, conducting and reviewing assessment procedures and outcomes.

# Annex C

## Scaffold Structure with External Ladder and Identification of Practical Stations



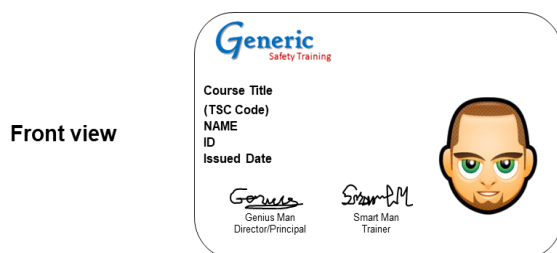
## Annex D Format of Safety Pass

The safety pass is to be issued by SSG Training Providers (TP) to all trainees who are certified competent.

Do note that the reference below is intended only to present the format of the pass and should not be used as an actual template for direct printing.

### Guidelines for the credit card size pass for MOM WSH courses by TPs

3 <sup>3</sup>/<sub>8</sub> × 2 <sup>1</sup>/<sub>8</sub> inch (85.60 × 53.98 mm)



Font Type: Arial  
Font size (Course title): Recommended 8pt or larger  
Font size (Others): Recommended 6pt or larger  
Photo size: 3.1cm X 2.4cm

- Pass should contain no less than the information depicted in the guide
- TP may use their own reference format for serial number
- Course Title should be the title as indicated in the WSQ Framework(CS/CTAG). The Technical Skills and Competency (TSC) Code and Title, should also be printed in parentheses ( ) aligned to the title reflected in either the Competency Standards (CS) or TSC. However, it is not required to print the TSC Course name if it is the same as the SC/CTAG title
- ID should be FIN, NRIC Passport Number or any unique official identifier
- Course Venue should reflect address of training centre (not business office, etc) which pass holder attended
- Trainer signature should reflect the trainer that conducted the course

## Back view

1. Use of card is governed by terms and conditions of < Name of Training Provider>
2. < Name of Training Providers> is a SkillsFuture Singapore Agency's Training Provider at the date of issuance of the pass
3. This card is not transferrable
4. The course is conducted @.< Course venue>
5. Holder of the card has been certified competent in the <Course Title> on the issued date as indicated in front.
6. This card will expire <xx> years from the date of issue.
7. This card is the property of < Name of Training Provider> and must be returned on request.
8. Card shall be retained if it has been tampered with, misused or replaced.
9. This card is issued by < Name of Training Provider>. If found, please return to < Name of Training Provider>. at <Address of < Name of Training Provider>..
10. For enquiries, please contact < Name of Training Provider>. > at <hotline>

Font Type: Arial

Font size : Recommended 6pt or larger

## Annex E Format of Certificate of Successful Completion

The issue of Certificate of Successful Completion by SSG Training Providers to all trainees who are certified competent, is Optional.

Do note that the reference below is intended only to present the format of the certificate and should not be used as an actual template for direct printing.

3 inch 10pt  
20pt  
10pt  
16pt 12pt  
10pt  
16pt  
10pt  
10pt  
12pt  
10pt  
10pt  
1 inch

<Official Logo/Name of TP>      Serial Number: <xxx>

**CERTIFICATE OF SUCCESSFUL COMPLETION**



is awarded to

**<Name of Trainee>**  
< ID >

for successful completion of the  
<Course Title>  
<TSC Title/Code>

< Name of TP >  
\*TP approved by SkillsFuture Singapore  
@ < Training venue >  
from  
<Training Date/s>

Validity: < x Years from last date of course/ NA>

**Genius Man**  
Director / Principal  
Training Division  
<Name of TP> /  
Company Stamp

**Smart Man**  
Trainer  
Training Division  
<Name of TP>

<Name of TP> | UEN: <XXX> | <Office Address>  
Tel: <xxx> Fax: <xxx> | Website: <xxx> | Email: <xxx>

- Certificate should contain no less than the information depicted in the guide
- TP may use their own reference format for serial number
- ID should be FIN, NRIC Passport Number or any unique official identifier
- For TP Course, Course Title should be the corresponding title as indicated in WSQ System Framework(CS/CTAG). The Technical Skills and Competency (TSC) Code and Title should be printed in parentheses ( ) aligned to the title reflected in either the Competency Standards (CS) or TSC. However, it is not required to print the TSC course name if it is the same as the CS/CTAG Title
- Course Venue should reflect address of training centre (not business office, etc) which pass holder attended
- Certificate should indicate that <<Name of TP>> is a Training Provider (TP) approved by SkillsFuture Singapore for <<Course Title of corresponding course>>
- Trainer signature should reflect the trainer that conducted the course
- Management of safety certificate should be in accordance to the requirements under TP scheme