Unit 690 Repairing membrane roofing systems in the workplace

16 credits

Level: 2
UAN: Y/506/2622

Unit aim:
This unit aims to provide the learner with the necessary skills and knowledge to:

- interpret information
- adopt safe and healthy working practices
- select materials, components and equipment
- identify and repair defects in membrane roofing systems.

*PER – Portfolio evidence reference SO – Site observation OQ – Oral question WQ – Written question WT – Witness testimony
PS – Product supplementary PD – Professional discussion

Assessment criteria that are practical activities are highlighted in bold.

1. Interpret the given information relating to the work and resources when repairing membrane roofing systems.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
1.1 interpret and extract relevant information from drawings, specifications, schedules, method statements, risk assessments, manufacturers' information and oral/written instructions							
1.2 comply with information and/or instructions derived from risk assessments and method statements							
1.3 describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented							
1.4 describe different types of information, their source and how they are interpreted in relation to:							
a. drawings							
b. specifications							

c. schedules							
d. method statements							
e. risk assessments							
f. manufacturers' information							
g. electronic data							
h. oral/written procedures							
i. current regulations.							

2. Know how to comply with relevant legislation and official guidance when repairing membrane roofing systems.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
2.1 Describe their responsibilities regarding potential accidents, health hazards and the environment, whilst working:							
a. in the workplace							
b. below ground level							
c. at height							
d. in confined spaces							
e. with tools and equipment							
f. with materials and substances							
g. with movement/storage of materials							
h. by manual handling and mechanical lifting							
2.2 describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative							
2.3 explain what the accident reporting procedures are and who is responsible for making reports							
2.4 describe the types of fire extinguishers available when repairing membrane roofing systems and describe how and when they are used.							

3. Maintain safe and healthy working practices when repairing membrane roofing systems.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
3.1 use health and safety control equipment safely and comply with the methods of work to carry out the activity in accordance with current legislation and organisational requirements when repairing membrane roofing systems							
3.2 demonstrate compliance with given information and relevant legislation when repairing membrane roofing systems in relation to:							
a. safe use of access equipment							
b. safe use and handling of materials, tools and equipment							
c. safe storage and distribution of materials, tools and equipment							
d. specific risks to health							
3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used relating to repairing membrane roofing systems, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to:							
a. collective protective measures							
b. personal protective equipment (PPE)							
c. respiratory protective equipment (RPE)							
d. local exhaust ventilation (LEV)							
3.4 describe how the relevant health and safety control equipment should be used in accordance with the given working instructions							
3.5 describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related activities.							

4. Select the required quantity and quality of resources for the methods of work to repair membrane roofing systems.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
4.1 select resources associated with own work in relation to materials, components, fixings, tools and equipment							
4.2 describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to:							
a. relevant membrane system materials, upstands, pipes, vents, rainwater outlets and associated materials, components, fixings and fittings							
b. access equipment							
c. hand and/or power tools and equipment							
4.3 describe how the resources should be used correctly and how problems associated with the resources are reported							
4.4 explain why the organisational procedures have been developed and how they are used for the selection of required resources							
4.5 describe any potential hazards associated with the resources and methods of work							
4.6 describe how to calculate quantity, length, area and wastage associated with the method/procedure to repair membrane roofing systems.							

5. Minimise the risk of damage to the work and surrounding area when repair membrane roofing systems.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
5.1 protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures							
5.2 minimise damage and maintain a clean work space							
5.3 dispose of waste in accordance with current legislation							
5.4 describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions							
5.5 explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance.							

6. Complete the work within the allocated time when repairing membrane roofing systems.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
6.1 demonstrate completion of the work within the allocated time							
6.2 describe the purpose of the work programme and explain why deadlines should be kept in relation to:							
a. types of progress charts, timetables and estimated times							
b. organisational procedures for reporting circumstances which will affect the work programme.							

7. Comply with the given contract information to repair membrane roofing systems to the required specification.							
You must be able to:	*PER	SO	OQ	WQ	WT	PS	PD
7.1 demonstrate the following work skills when repairing membrane roofing systems:							
a. removing							
b. measuring							
c. marking out							
d. cutting							
e. fitting							
f. applying							
g. positioning							
h. securing							
7.2 use and maintain hand tools, power tools and ancillary equipment							
7.3 repair reinforced bitumen and/or single ply and/or liquid applied membrane roofing systems to given working instructions relating to one of the following:							
a. damaged membrane							
b. edges and upstands							
c. penetrations, pipes and vents							
d. perimeters, rainwater outlets							
7.4 describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to:							
a. identify and evaluate defects in the membrane and inspect condition of sub-strata							
b. record and report findings							
c. take account of the local environment							
d. remove debris and blockages							

e. repair damaged reinforced bitumen membrane system, single ply membrane system or liquid membrane system							
f. carry out appropriate repair to edges, upstands, penetrations, pipes, vents, perimeters and rainwater outlets							
g. repair/replace damaged insulation/decking							
h. repair/replace damaged associated materials and components							
i. work at height							
j. use access equipment							
7.5 describe the needs of other occupations and how to effectively communicate within a team when repairing membrane roofing systems							
7.6 describe how to maintain the tools and equipment used when repairing membrane roofing systems.							

Unit 690 Repairing membrane roofing systems in the workplace

Declaration

I confirm that the evidence supplied for the above unit is authentic and a true representation of my own work. The work logged is my own work carried out during my normal work duties.

Candidate name:	
Candidate signature:	
Date:	

I confirm that this candidate has achieved all the requirements of this unit with the evidence listed. Assessment was conducted under the specified conditions and context, and is valid, authentic, reliable, current and sufficient.

Assessor name:	
Assessor signature:	
Date:	

IQA name:	
IQA signature:	
Date:	