# Award, Certificate and Diploma in Basic Construction Skills at SCQF Level 3 and 4 (6619)

September 2014 Version 1.3



## Qualifications at a glance



Subject area	Construction Skills
City & Guilds number	6619
Age group approved	All
Entry requirements	None
Assessment	Task manual (practical and written)
Fast track	Available
Support materials	Centre handbook Task manual
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number
Award in Construction Skills at SCQF Level 3	6619-01
Certificate in Construction Skills at SCQF Level 3	6619-02
Extended Certificate in Construction Skills at SCQF Level 3	6619-03
Award in Construction Skills at SCQF Level 4	6619-04
Certificate in Construction Skills at SCQF Level 4	6619-05
Extended Certificate in Construction Skills at SCQF Level 4	6619-06
Diploma in Construction Skills at SCQF Level 4	6619-07
Award in Construction Skills (Carpentry And Joinery) at SCQF Level 4	6619-08
Certificate in Construction Skills (Carpentry And Joinery) at SCQF Level 4	6619-08
Award in Construction Skills (Plastering)	6619-08
Certificate in Construction Skills (Plastering) at SCQF Level 4	6619-08
Award in Construction Skills (Electrical) at SCQF Level 4	6619-08
Certificate in Construction Skills (Electrical) at SCQF Level 4	6619-08
Award in Construction Skills (Plumbing) at SCQF Level 4	6619-08

Certificate in Construction Skills (Plumbing) at SCQF Level 4	6619-08
Award in Construction Skills (Bricklaying) at SCQF Level 4	6619-08
Certificate in Construction Skills (Bricklaying) at SCQF Level 4	6619-08
Award in Construction Skills (Construction Operations) at SCQF Level 4	6619-08
Certificate in Construction Skills (Construction Operations) at SCQF Level 4	6619-08
Award in Construction Skills (Painting and Decorating) at SCQF Level 4	6619-08
Certificate in Construction Skills (Painting and Decorating) at SCQF Level 4	6619-08
Award in Construction Skills (Wall and Floor Tiling) at SCQF Level 4	6619-08
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### 1 Introduction



This document tells you what you need to do to deliver the qualification:

Area	Description
Who are the qualifications for?	These qualifications are for candidates wishing to gain some understanding and some practical experience of the variety of trades in the Construction industry.
What do the qualifications cover?	The qualifications cover a range of hand-skills and practical tasks in the following trade areas:
	Bricklaying
	Carpentry and Joinery
	Plastering
	Wall and Floor Tiling
	Painting & Decorating
	Construction Operations
	Plumbing
	• Electrical
Are the qualifications part of a framework or initiative?	No
Who did we develop the qualification with?	These qualifications are unique to City & Guilds.
What opportunities for progression are there?	Candidates may wish to progress to full VRQ Diplomas in a particular trade area.

### Structure

To achieve the **Award in Construction Skills at SCQF Level 3 (6619-01)**, learners **must** achieve a minimum of **9** credits from the units listed below. At least **6** credits **must** come from units 001-011.

City & Guilds unit no.	Unit title	Credit value
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
101	Introduction to health and safety in construction	3
102	Introduction to the construction industry	3

To achieve the **Certificate in Construction Skills at SCQF Level 3 (6619-02)**, learners **must** achieve a minimum of **15** credits from the units listed below.

City & Guilds unit no.	Unit title	Credit value
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
101	Introduction to health and safety in construction	3
102	Introduction to the construction industry	3

To achieve the **Extended Certificate in Construction Skills at SCQF Level 3 (6619-03)**, learners **must** achieve a minimum of **27** credits from the units listed below. At least **15** credits **must** be from units 001-011.

City & Guilds unit no.	Unit title	Credit value
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
101	Introduction to health and safety in construction	3
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4
104	Constructing angled halving joints	4
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4

City & Guilds unit no.	Unit title	Credit value
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting skirting	4
114	Painting a panel door	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4
122	Laying block paving	4
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4

City & Guilds unit no.	Unit title	Credit value
127	Producing components from moulds	4
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

To achieve the **Award in Construction Skills at SCQF Level 4 (6619-04)**, learners **must** achieve a minimum of **9** credits, **3** credits from the mandatory unit and a minimum of **6** credits from the optional units, **3** of which **must** come from units 103-137.

City & Guilds unit no	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4
104	Constructing angled halving joints	4

City & Guilds unit no	Unit title	Credit value
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting skirting	4
114	Painting a panel door	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4
122	Laying block paving	4

City & Guilds unit no	Unit title	Credit value
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4
127	Producing components from moulds	4
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

To achieve the **Certificate in Construction Skills at SCQF Level 4 (6619-05)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which **6** credits **must** come from units 102-137.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4
104	Constructing angled halving joints	4

City & Guilds unit no.	Unit title	Credit value
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting skirting	4
114	Painting a panel door	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4
122	Laying block paving	4

City & Guild៖ unit no.	Unit title	Credit value
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4
127	Producing components from moulds	4
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

To achieve the **Extended Certificate in Construction Skills at SCQF Level 4 (6619-06)**, learners **must** achieve a minimum of **27** credits, **3** credits from the mandatory unit and a minimum of **24** credits from the optional units, of which **15** credits much come from units 102-137.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4

City & Guilds unit no.	Unit title	Credit value
104	Constructing angled halving joints	4
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting skirting	4
114	Painting a panel door	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4

City & Guilds unit no.	Unit title	Credit value
122	Laying block paving	4
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4
127	Producing components from moulds	4
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

To achieve the **Diploma in Construction Skills at SCQF Level 4 (6619-07)**, learners **must** achieve a minimum of **37** credits, **3** credits from the mandatory unit, and a minimum of **34** credits from the optional units, of which **18** credits must come from units 102-137.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
001	Constructing halving joints	3
002	Constructing housing joints	3
003	Painting techniques	4
004	Tiling a plain wall	4
005	Constructing half brick walling	3
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
008	Preparing background surfaces and applying render coats	3
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
011	Connecting flex to common apparatus	1
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4
104	Constructing angled halving joints	4

City & Guilds unit no.	Unit title	Credit value
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting skirting	4
114	Painting a panel door	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4
122	Laying block paving	4

City & Guilds unit no.	Unit title	Credit value
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4
127	Producing components from moulds	4
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

To achieve the **Award in Construction Skills (Carpentry and Joinery) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **9** credits, **3** credits from the mandatory unit and a minimum of **6** credits from the optional units, of which at least **3** credits must come from units 103-110.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
001	Constructing halving joints	3
002	Constructing housing joints	3
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4
104	Constructing angled halving joints	4
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4

To achieve the **Certificate in Construction Skills (Carpentry and Joinery) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which at least **6** credits must come from units 102-110.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
001	Constructing halving joints	3
002	Constructing housing joints	3
102	Introduction to the construction industry	3
103	Constructing through mortice and tenon joints	4
104	Constructing angled halving joints	4
105	Constructing bridle joints	4
106	Constructing haunched mortice and tenon joints	4
107	Constructing stub mortice and tenon joints	4
108	Fixing architraves and skirtings	4
109	Constructing and fixing hatch linings	4
110	Fitting locks and latches	4

To achieve the **Award in Construction Skills (Plastering) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **9** credits, **3** credits from the mandatory unit and a minimum of **6** credits from the optional units, of which at least **3** credits must come from units 125-127.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
008	Preparing background surfaces and applying render coats	3
102	Introduction to the construction industry	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4
127	Producing components from moulds	4

To achieve the **Certificate in Construction Skills (Plastering) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which at least **6** credits **must** come from units 102, 125-127.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
008	Preparing background surfaces and applying render coats	3
102	Introduction to the construction industry	3
125	Preparing background surfaces and applying finishing coats	4
126	Mixing materials and applying floating coats	4
127	Producing components from moulds	4

To achieve the **Award in Construction Skills (Electrical) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **9** credits, **3** credits from the mandatory unit and a minimum of **6** credits from the optional units, of which **3** credits must come from units 133-137.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
011	Connecting flex to common apparatus	1
102	Introduction to the construction industry	3
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

The Award and Certificate in Construction Skills (Electrical) at SCQF Level 4 (6619-08) qualifications are an introduction to the industry only, and should be used to demonstrate types of electrical activities. Those learners interested in developing their skills and understanding further should be encouraged to progress onto full qualification options. To become a qualified electrician, learners are required to achieve an industry recognised qualification. To achieve the **Certificate in Construction Skills (Electrical) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which **6** credits **must** come from 102, 133-137.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
011	Connecting flex to common apparatus	1
102	Introduction to the construction industry	3
133	Assembling 13amp switched sockets wired in ring final circuit	4
134	Constructing PVC wiring systems	4
135	Cutting, bending, joining and threading conduit	4
136	Installing one way lighting circuits	3
137	Installing two way lighting circuits	4

#### The Award and Certificate in Construction Skills (Electrical) at SCQF

**Level 4 (6619-08)** qualifications are an introduction to the industry only, and should be used to demonstrate types of electrical activities. Those learners interested in developing their skills and understanding further should be encouraged to progress onto full qualification options. To become a qualified electrician, learners are required to achieve an industry recognised qualification.

To achieve the **Award in Construction Skills (Plumbing) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **9** credits, **3** credits from the mandatory unit and a minimum of **6** credits from the optional units, of which **3** credits must come from units 128-132.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
009	Removing and refitting water- filled radiators	2
010	Working with non- manipulative fittings	2
102	Introduction to the construction industry	3
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4

To achieve the **Certificate in Construction Skills (Plumbing) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which **6** credits **must** come from 102, 128-132.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
009	Removing and refitting water-filled radiators	2
010	Working with non- manipulative fittings	2
102	Introduction to the construction industry	3
128	Bending and jointing copper pipes	3
129	Connecting pipes and fittings to appliances	3
130	Constructing combined frames	4
131	Installing rain water goods	3
132	Working with low carbon steel pipes and fittings	4

To achieve the **Award in Construction Skills (Bricklaying) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **9** credits, **3** from the mandatory unit and a minimum of **6** credits from the optional units, of which **3** credits **must** be from units 118-121.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
005	Constructing half brick walling	3
102	Introduction to the construction industry	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4

To achieve the **Certificate in Construction Skills (Bricklaying) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which **6** credits must come from units 102, 118-121.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
005	Constructing half brick walling	3
102	Introduction to the construction industry	3
118	Constructing block walling	3
119	Constructing half brick return corners	4
120	Constructing cavity walls in brickwork and block work	4
121	Constructing one brick walling	4

To achieve the **Award in Construction Skills (Construction Operations) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **9** credits, **3** credits from the mandatory unit and a minimum of **6** credits from the optional units, of which **3** credits **must** come from units 122-124.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
102	Introduction to the construction industry	3
122	Laying block paving	4
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3

To achieve the **Certificate in Construction Skills (Construction Operations) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **14** credits, **3** credits from the mandatory unit and a minimum of **11** credits from the optional units, of which **6** credits **must** be from units 102, 122-123.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
006	Laying paving using slabs	3
007	Setting out and laying gravel paths	3
102	Introduction to the construction industry	3
122	Laying block paving	4
123	Laying underground domestic drainage	4
124	Mixing and using concrete	3

To achieve the Award in Construction Skills (Painting and Decorating) at SCQF Level 4 (6619-08), learners must achieve a minimum of 9 credits, 3 credits from the mandatory unit and a minimum of 6 credits from the optional units, of which 3 credits must come from units 111-114.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
003	Painting techniques	4
102	Introduction to the construction industry	3
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting	4

#### skirting

114 Painting a panel door 3

To achieve the **Certificate in Construction Skills (Painting and Decorating) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **15** credits, **3** credits from the mandatory unit and a minimum of **12** credits from the optional units, of which **6** credits **must** come from units 102, 111-114.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
003	Painting techniques	4
102	Introduction to the construction industry	3
111	Painting and wallpapering	4
112	Applying decorative effects	4
113	Applying wallpaper to internal and external angles and painting skirting	4
114	Painting a panel door	3

To achieve the Award in Construction Skills (Wall and Floor Tiling) at SCQF Level 4 (6619-08), learners must achieve a minimum of 9 credits, 3 from the mandatory unit and a minimum of 6 credits from the optional units, of which 3 credits must come from units 115-117.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
004	Tiling a plain wall	4
102	Introduction to the construction industry	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3

To achieve the **Certificate in Construction Skills (Wall and Floor Tiling) at SCQF Level 4 (6619-08)**, learners **must** achieve a minimum of **14** credits, **3** credits from the mandatory unit and a minimum of **11** credits from the optional units, of which **6** credits **must** come from units 102, 115-117.

City & Guilds unit no.	Unit title	Credit value
Mandatory		
101	Introduction to health and safety in construction	3
Optional		
004	Tiling a plain wall	4
102	Introduction to the construction industry	3
115	Cutting and fixing decorative panels	3
116	Cutting and fixing tiles to wet areas	4
117	Tiling floors with a border	3

# 2 Centre requirements



#### Approval

#### Centres not already offering City & Guilds qualifications

To offer these qualifications, new centres will need to gain both centre and qualification approval. Please refer to the *Centre Manual - Supporting Customer Excellence* for further information.

Centre staff should familiarise themselves with the structure, content and assessment requirements of the qualifications before designing a course programme.

#### **Resource requirements**

#### Physical resources and site agreements

Centres must ensure that learners have access to the equipment, resources and space required to successfully complete the tasks detailed in the practical task manuals.

Centres must ensure that learners are familiar with and act according to health and safety requirements.

#### **Centre staffing**

All staff who assess (tutor/deliver) these qualifications must:

- have recent relevant experience in the specific area they will be teaching;
- be technically competent in the area for which they are delivering training and/or have experience of providing training;
- have a CV available demonstrating relevant experience and any qualifications held.

All staff who quality assure these qualifications must:

- have a good working knowledge and experience within the construction industry;
- have an established strategy and documentary audit trail of internal quality assurance;
- have a good working knowledge of quality assurance procedures;
- have a CV available demonstrating relevant experience and any qualifications held.

While the Assessor/Verifier (A/V) units/TAQA are valued as qualifications for centre staff, they are not currently a requirement for these SCQF qualifications. However, we encourage trainers and assessors to qualify to the current TAQA standard.

#### **Continuing professional development (CPD)**

Centres must support their staff to ensure that they have current knowledge of the occupational area, that delivery, mentoring, training, assessment and verification is in line with best practice, and that it takes account of any national or legislative developments.

#### **Candidate entry requirements**

City & Guilds does not set entry requirements for these qualifications. However, centres must ensure that candidates have the potential and opportunity to gain the qualifications successfully.

#### Age restrictions

There is no age restriction for these qualifications unless this is a legal requirement of the process or the environment.

# **3** Delivering the qualification



#### Initial assessment and induction

An initial assessment of each candidate should be made before the start of their programme to identify:

- if the candidate has any specific training needs,
- support and guidance they may need when working towards their qualifications,
- any units they have already completed, or credit they have accumulated which is relevant to the qualifications,
- the appropriate type and level of qualification.

We recommend that centres provide an induction programme so the candidate fully understands the requirements of the qualification, their responsibilities as a candidate, and the responsibilities of the centre. This information can be recorded on a learning contract.

#### 4

# Assessment



### Assessment of the qualification

Candidates must:

- successfully complete one assignment for each mandatory unit
- successfully complete one assignment for each chosen optional unit

### **Recognition of Prior Learning (RPL)**

Recognition of prior learning means using a person's previous experience or qualifications which have already been achieved to contribute to a new qualification.

RPL is allowed and is not sector specific.





#### Structure of units

These units each have the following:

- City & Guilds reference number
- title
- level
- credit value
- information on assessment
- learning outcomes which are comprised of a number of assessment criteria

Level:	Level 3
Credit value:	3

The learner will:

1. know how to construct halving joints.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing halving joints
- 1.2 identify **types** of halving joints
- 1.3 identify **materials** required to construct halving joints
- 1.4 state the process required to mark out halving joints
- 1.5 identify **tools and equipment** required to construct halving joints.

#### Range

Personal Protective Equipment (PPE)

Boots.

#### Types

Corner, tee, cross.

#### Materials

European redwood, PVA adhesive, screws.

#### **Tools and equipment**

Try square, marking gauge, rule, tenon saw, bevel-edged chisel, drill, screwdriver, bench hook, G-cramp.

The learner will:

2. be able to construct halving joints.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing halving joints
- 2.2 select **materials** required to construct halving joints
- 2.3 select **tools and equipment** required to construct halving joints
- 2.4 construct halving joints to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots.

#### Materials

European redwood, PVA adhesive, screws.

#### **Tools and equipment**

Try square, marking gauge, rule, tenon saw, bevel-edged chisel, drill, screwdriver, bench hook, G-cramp.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

Level:	Level 3
Credit value:	3

Lear	rning outcome	
The	learner will:	
1. k	now how to construct housing joints.	
Ass	Assessment criteria	
The	learner can:	
1.1	identify <b>Personal Protective Equipment (PPE)</b> appropriate to constructing housing joints	
1.2	identify <b>types</b> of housing joints	

- 1.3 identify **materials** required to construct housing joints
- 1.4 state the process required to mark out housing joints
- 1.5 identify **tools and equipment** required to construct housing joints.

#### Range

**Personal Protective Equipment (PPE)** Boots.

Types

Through, stopped, tongued.

#### Materials

European redwood, PVA adhesive, screws.

#### **Tools and equipment**

Try square, marking gauge, rule, tenon saw, bevel-edged chisel, drill, screwdriver, bench hook, G-cramp, hand router.

The learner will:

2. be able to construct housing joints.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing housing joints
- 2.2 select materials required to construct housing joints
- 2.3 select **tools and equipment** required to construct housing joints
- 2.4 construct housing joints to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots.

#### Materials

European redwood, PVA adhesive, screws.

#### **Tools and equipment**

Try square, marking gauge, rule, tenon saw, bevel-edged chisel, drill, screwdriver, bench hook, G-cramp, hand router.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

Level:	Level 3
Credit value:	4

The learner will:

1. know how to prepare and paint surfaces.

#### Assessment criteria

The learner can:

- 1.1 identify the **Personal Protective Equipment (PPE)** appropriate to preparing and painting surfaces
- 1.2 identify the **materials** required to prepare and paint surfaces
- 1.3 identify the **tools and equipment** required to prepare and paint surfaces
- 1.4 state different types of **water based paints**.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, protective gloves, goggles or safety glasses, dust masks, high visibility jackets, hard hat and overalls.

#### Materials

Aluminium oxide paper, silicon carbide paper, cellulose filler, ready mixed fillers, tack cloth, masking tape.

#### **Tools and equipment**

Flexible filling knifes/blades, filling board, scrapers, dust brush, paint kettles, brushes (pure bristle and synthetic types, foam and mohair rollers), chalk lines, measuring tape, steel rule, spirit, levels, trammels.

#### Water based paints

Primer, vinyl matt, vinyl silk, soft sheen, acrylic eggshell, gloss.

Learners can paint a panel or a wall.

The learner will:

2. be able to prepare and apply paint to surfaces.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing and applying paint to surfaces
- 2.2 select the **materials** required to prepare and apply paint to a surface
- 2.3 select the **tools and equipment** required to prepare and apply paint to a surface
- 2.4 prepare background surface to given specifications
- 2.5 prepare the paint to manufacturer's instructions
- 2.6 **apply base coat** to surfaces to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, protective gloves, goggles or safety glasses, dust masks, high visibility jackets, hard hat, and overalls.

#### Materials

Aluminium oxide paper, silicon carbide paper, cellulose filler, ready mixed fillers, tack cloth, masking tape.

#### **Tools and equipment**

Flexible filling knifes/blades, filling board, scrapers, dust brush, paint kettles, brushes (pure bristle and synthetic types, foam and mohair rollers), chalk lines, measuring tape, steel rule, spirit, levels, trammels.

#### **Prepare surface**

Bare surfaces to be primed and filled if required. De nib between coats.

#### **Prepare paint**

Stir paint thoroughly, decant paint, thin and strain paint to the correct viscosity.

#### Base coat

Primer, vinyl matt, soft sheen, acrylic eggshell.

#### Application

Brush, roller.

The learner will:

3. be able to transfer and paint designs to prepared surfaces.

#### Assessment criteria

The learner can:

- 3.1 select the **tools and equipment** required to mark out designs
- 3.2 set out designs to surfaces to given specifications
- 3.3 paint in the designs by brush to the given specifications.

#### Range

#### **Tools and equipment**

Chalk line, tape measure, pencil, ruler, trammel.

#### Learning outcome

The learner will:

4. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus materials and debris on completion of the jobs
- 4.4 clean all tools and equipment ready for re-use.

# Unit 003 Painting techniques

Supporting information

### Guidance

It is recommended that learners are made aware of colour specification to enable knowledge of colour codes.

Level:	Level 3
Credit value:	4

Lear	ning outcome	
The l	learner will:	
1. k	1. know how to prepare and tile wall surfaces.	
Assessment criteria		
The	learner can:	
1.1	identify <b>Personal Protective Equipment (PPE)</b> appropriate to preparing and tiling wall surfaces	
1.2	identify <b>materials</b> required to prepare and tile wall surfaces	
1.3	identify <b>tools and equipment</b> required to prepare and tile wall surfaces	
1.4	state methods to prepare walls for tiling.	

#### Range

#### Personal Protective Equipment (PPE)

Boots, overalls, high visibility jackets, dust mask and safety glasses, gloves.

#### Materials

Adhesive (ready mix, powdered), tile (clay press) grout (cement based).

#### **Tools and equipment**

Hand cutters, spirit level, trowels (gauging notch), grout float, sponge, bucket, tile spacers, joint finishing tool.

The learner will:

2. be able to prepare surfaces for wall tiles.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing surfaces for wall tiles
- 2.2 select materials required to prepare surfaces for wall tiles
- 2.3 select **tools and equipment** required to prepare surfaces for wall tiles
- 2.4 prepare surfaces for wall tiles to given specifications.

#### Range

#### Personal Protective Equipment (PPE)

Boots, gloves, overalls, high visibility jackets, dust mask and safety glasses.

#### Materials

Adhesive (ready mixed, powdered), tile (clay press), grout (cement based).

#### **Tools and equipment**

Tools hammer bolster, scraper and wire brush.

#### Learning outcome

The learner will:

3. be able to set out and fix wall tiles.

#### Assessment criteria

The learner can:

- 3.1 use the **Personal Protective Equipment (PPE)** required for the setting out and fixing of wall tiles
- 3.2 select **tools and equipment** required to set out and fix wall tiles
- 3.3 hand mix adhesive to manufacturer's instructions
- 3.4 set out a datum line to given specifications
- 3.5 apply adhesive ready to receive wall tiles to given specifications
- 3.6 fix wall tiles to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses.

#### **Tools and equipment**

Trowel, spirit level, spacer pegs, gauger rod, straight edge, pencil, tape measure, 6mm trowel, gauging trowel, bucket trowel, sponge, hammer, screws, screwdriver, lathe.

The learner will:

4. be able to finish wall tiles.

#### Assessment criteria

The learner can:

- 4.1 apply wall grout to tiled areas
- 4.2 clean and polish tiles ready for use.

#### Learning outcome

The learner will:

5. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 5.1 set up the work area safely
- 5.2 maintain a clean and safe working area following health and safety guidelines
- 5.3 clear work area of surplus materials and debris on completion of the jobs
- 5.4 clean all tools and equipment ready for re-use.

Level:	Level 3
Credit value:	3

Learning outcome		
The learner will:		
1. know how to set out and build brick walls.		
Assessment criteria		
The	learner can:	
1.1	identify the <b>Personal Protective Equipment (PPE)</b> appropriate to building half brick thick walls	
1.2	identify the <b>materials</b> required to build half brick thick walls	
1.3	identify the <b>tools and equipment</b> required to build half brick thick walls	

1.4 state the **number of bricks** required to build a 1m<sup>2</sup> brick walls.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, facing bricks, mortar.

#### **Tools and equipment**

Brick trowel, line and pins, brick hammer, level, tape measure, mortar board, profiles X 2.

#### Number of bricks

Learners should know; 60 bricks =  $1m^2 \frac{1}{2}$  brick and 120 bricks =  $1m^2 1$  brick.

The learner will:

2. be able to prepare, set out and build half brick thick walls.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to building half brick thick walls
- 2.2 select the **tools, equipment** and **materials** required to build half brick thick walls
- 2.3 calculate the number of bricks required to build the wall to given specifications
- 2.4 measure and set up profiles to given specifications
- 2.5 dry bond brickwork to set profiles
- 2.6 set up a mortar board and stack the required number of bricks
- 2.7 build half brick thick wall.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, facing bricks, mortar.

#### **Tools and equipment**

Brick trowel, line and pins, brick hammer, level, tape measure, mortar board, profiles X 2.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

Level:	Level 3
Credit value:	3

The learner will:

1. know how to prepare for and lay short lengths of path using paving slabs.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to preparing bases for footpath
- 1.2 identify **materials** required to prepare bases for footpath
- 1.3 identify **tools and equipment** required to prepare bases for footpath
- 1.4 state methods to set out and level areas to receive footpath
- 1.5 state methods used to lay and finish paving slabs.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Basic types of flagstones, sub-base, sand, cement.

#### **Tools and Equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, box rule, tape measure, building line.

The learner will:

2. be able to prepare an area to receive short lengths of paving slabs.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing bases for footpath
- 2.2 select **materials** required to prepare bases for footpath
- 2.3 select **tools and equipment** required to prepare bases for footpath
- 2.4 prepare areas to receive paving.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Flagstones, sub-base, sand, cement.

#### **Tools and Equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, box rule or tape measure, building line.

#### Learning outcome

The learner will:

3. be able to lay a short length of footpath on a prepared base.

#### Assessment criteria

The learner can:

- 3.1 identify the **materials** required to lay short lengths of footpath
- 3.2 select the **tools and equipment** required to lay short lengths of footpath
- 3.3 lay a short length of footpath to the given specifications.

#### Range

#### Materials

Basic types of flagstones, sub base, sand, cement.

#### **Tools and Equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, box rule, tape measure, building line.

The learner will:

4. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus materials and debris on completion of the jobs
- 4.4 clean all tools and equipment ready for re-use.

# Unit 006 Laying paving using slabs

Supporting information

## Guidance

Learners should have an awareness of kinetic lifting techniques (max 25kilos).

# Unit 007 Setting out and laying gravel paths

Level:	Level 3
Credit value:	3

Learning outcome		
The learner will:		
1. know how to prepare for and lay short lengths path edging.		
Assessment criteria		
The learner can:		
1.1 identify <b>Personal Protective Equipment (PPE)</b> appropriate to preparing areas to receive short lengths path edging		
1.2 identify <b>materials</b> required to prepare areas to receive short lengths of path edging		
1.3 identify <b>tools and equipment</b> required to prepare areas to receive short lengths of path edging		
1.4 state methods to set out and level areas to receive path edging and a gravel footpath		
1.5 state methods used to bed, peg and haunch path edging.		
Range		

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Basic types of path edging in concrete and timber, sub base, concrete mixes suitable for bedding path edging.

### Tools and equipment

Shovel, wheelbarrow, pegs, trowel, straight edge, mallet, level, tape measure, building line.

The learner will:

2. be able to prepare areas to lay path edging.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing areas to lay path edging
- 2.2 select materials required to prepare areas to lay path edging
- 2.3 select **tools and equipment** required to prepare areas to lay path edging
- 2.4 prepare areas to receive path edging.

#### Range

#### Personal Protective Equipment (PPE)

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Concrete or timber path edging, concreting sand, gravel, cement or pegs as appropriate.

#### **Tools and equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, tape measure, building line.

#### Learning outcome

The learner will:

3. be able to lay path edging in concrete or timber.

#### Assessment criteria

The learner can:

- 3.1 use **Personal Protective Equipment (PPE)** appropriate to laying short lengths of path edging in concrete or timber
- 3.2 select **materials** required to lay short length of path edging in concrete or timber
- 3.3 select **tools and equipment** required to lay short length of path edging in concrete or timber
- 3.4 mix concrete for use to bed and haunch path edging to given specifications
- 3.5 bed path edging to given specifications.

#### Range

#### Personal Protective Equipment (PPE)

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Concrete or timber path edging, concreting sand, gravel, cement or pegs as appropriate.

#### **Tools and Equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, tape measure, building line.

Practical task consisting of laying timber or concrete path edging to form a 600mm wide 1.2m long footpath.

#### Learning outcome

The learner will:

4. be able to lay a short length of gravel footpath.

#### Assessment criteria

The learner can:

- 4.1 lay **sub base** to receive gravel footpath
- 4.2 lay gravel to form footpath to given specifications.

#### Range

#### Sub base: membrane

Make up sub base to leave min 30 mm thick gravel footpath. Lay a gravel footpath between timber or concrete path edges.

#### Learning outcome

The learner will:

5. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 5.1 set up the work area safely
- 5.2 maintain a clean and safe working area following health and safety guidelines
- 5.3 clear work area of surplus materials and debris on completion of the jobs
- 5.4 clean all tools and equipment ready for re-use.

# Unit 007 Setting out and laying gravel paths

Supporting information

# Guidance

Learners should have an awareness of kinetic lifting techniques (max 25 kilos).

# Unit 008 Preparing background surfaces and applying render coats

Level:	Level 3
Credit value:	3

Learning outcome	
The	learner will:
1.	know how to prepare background surfaces and apply render coats.
Assessment criteria	
The	learner can:
1.1	identify <b>Personal Protective Equipment (PPE)</b> for preparing background surfaces and applying render coats
1.2	identify <b>tools and equipment</b> required to prepare background surfaces and apply render coats
1.3	identify <b>materials</b> required to prepare background surfaces and apply render coats
1.4	identify <b>types</b> of background surfaces
1.5	identify <b>methods</b> for preparing background surfaces required before applying render coats

1.6 state the importance of a mechanical key and its depth.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, goggles, boots, high visibility jackets, barrier cream.

#### **Tools and equipment**

Spot board and stand, plasterer's hawk (hand board), feather edge, plasterer's trowel, gauging trowel, scratcher/scarifier, Scutch Hammer, stiff brush, soft brush, scraper, bolster, lump hammer.

#### Materials

Sand, cement, lime, additives.

#### Types

Block, brick, concrete.

#### Methods

Scutching the surface with a brick hammer, proprietary adhesive, dampening down, cleaning the surface.

The learner will:

2. be able to prepare background surfaces and apply render coats.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** for preparing background surfaces and applying render coats
- 2.2 select **materials** required to prepare background surfaces and apply render coats
- 2.3 select **tools and equipment** required to prepare background surfaces and apply render coats
- 2.4 prepare background surfaces and apply render coats to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, goggles, boots, High visibility jackets, Barrier cream.

#### **Tools and equipment**

Spot board and stand, plasterer's hawk (hand board), feather edge, plasterer's trowel, gauging trowel, scratcher/scarifier, Scutch Hammer, stiff brush, soft brush, scraper, bolster, lump hammer.

#### Materials

Sand, cement, lime, additives.

Learning outcome		
The learner will:		
3. be able to set up and maintain a clean and safe working environment.		
Assessment criteria		
The learner can:		
3.1 set up the work area safely		
3.2 maintain a clean and safe working area following health and safety guidelines		
3.3 clear work area of surplus materials and debris on completion of the job		
3.4 clean all tools and equipment ready for re-use.		

# Unit 009 Removing and refitting waterfilled radiators

Level:	Level 3
Credit value:	2

#### Learning outcome

The learner will:

1. know how to drain, remove and refit water-filled radiators.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to draining, removing and refitting water-filled radiators
- 1.2 identify **materials** required to drain, remove and refit water-filled radiators
- 1.3 identify **tools and equipment** required to drain, remove and refit water-filled radiators
- 1.4 state reasons for draining, removing and refitting water-filled radiators
- 1.5 state the **process** required to prepare for draining, removing and refitting of water-filled radiators.

#### Range

#### Personal Protective Equipment (PPE)

Boots, protective clothing.

#### Materials

Jointing compound, PTFE tape.

#### **Tools and equipment**

Adjustable spanner, water pump pliers, radiator vent key, hose pipe.

#### Process

Isolate radiator, protect work area, remove water from radiator, dispose of waste water, refit radiator, refill radiator, bleed, checking defects and carrying out any remedial treatments.

The learner will:

2. be able to drain, remove and refit water-filled radiators.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to draining, removing and refitting water filled radiators
- 2.2 select **materials** required to drain, remove and refit water-filled radiators
- 2.3 select **tools and equipment** required to drain and remove waterfilled radiators
- 2.4 drain, **remove** and refit water-filled radiators as per given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing.

#### Materials

Jointing compound, PTFE tape.

#### **Tools and equipment**

Adjustable spanner, water pump pliers, radiator vent key, hose pipe.

#### Remove

Learner to safely remove the radiator following the process detailed above.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 010 Working with non-manipulative fittings

Level:	Level 3
Credit value:	2

Lea	Learning outcome		
The	The learner will:		
<ol> <li>know how to prepare and joint copper pipes with non-manipulative fittings</li> </ol>			
Assessment criteria			
The	learner can:		
1.1	identify <b>Personal Protective Equipment (PPE)</b> appropriate to preparing and jointing copper pipes with non manipulative fittings		
1.2	identify <b>materials</b> required to prepare and joint copper pipes with non-manipulative fittings		
1.3	identify <b>tools and equipment</b> required to prepare and joint copper pipes with non-manipulative fittings		
1.4	state the <b>process</b> required to prepare and fit copper pipes with non- manipulative fittings		
1.5	state the health and safety <b>risks and hazards</b> related to cutting copper pipes and using non-manipulative fittings.		

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing.

#### Materials

Copper pipe, compression fittings.

#### **Tools and equipment**

Pipe slice/ junior hacksaw, tape measure, adjustable spanner, water pump pliers.

#### Process

Including measuring and recording pipe requirements, cutting pipe to length, preparing pipe ends for joining, assembling non-manipulating joints, tightening all joints, pressure testing, decommission frame and recycle components.

#### **Risks and hazards**

Personal injuries eg cuts and abrasions.

The learner will:

2. be able to prepare and joint copper pipes with non-manipulative fittings

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing and jointing copper pipes with non-manipulative fittings
- 2.2 select **materials** required to prepare and joint copper pipes with nonmanipulative fittings
- 2.3 select **tools and equipment** required to prepare and joint copper pipes with non-manipulative fittings
- 2.4 prepare and joint copper pipes with non-manipulative fittings to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing.

#### Materials

Copper tubing, compression fittings.

#### **Tools and equipment**

Pipe slice/ junior hacksaw, tape measure, adjustable spanner, water pump pliers.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 011 Connecting flex to common apparatus

Level:	Level 3
Credit value:	1

#### Learning outcome

The learner will:

1. know how to connect flex to common apparatus.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to connecting **flex** to common apparatus
- 1.2 identify **materials** required to connect **flex** to common apparatus
- 1.3 identify **tools and equipment** required to connect **flex** to common apparatus
- 1.4 state the health and safety **hazards** related to connecting **flex** to common apparatus
- 1.5 state the **process** required to connect **flex** to a 13amp fused plug, ceiling rose and lamp holder.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, goggles, gloves.

Flex

Flex or flexible cord.

#### Materials

Flexible cable, ceiling rose, plug.

#### **Tools and equipment**

Electricians knife, terminal screwdrivers, wire stripper, pliers, side cutters.

#### Hazards

Working at heights – step ladders, working platforms, damp/wet working conditions, live power supply/ electrical shock/ burns cuts and abrasions, slip, trips and falls.

The learner will:

2. be able to connect flex to common apparatus.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to connecting **flex** to common apparatus
- 2.2 select materials required to connect flex to common apparatus
- 2.3 select **tools and equipment** required connect **flex** to common apparatus
- 2.4 connect **flex** to a 13amp fused plug, ceiling rose and lamp holder to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, goggles, gloves.

#### Flex

Flex or flexible cord.

#### Materials

Flexible cable, ceiling rose, plug.

#### **Tools and equipment**

Electricians knife, terminal screwdrivers, wire stripper, pliers, side cutters.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 101 Introduction to health and safety in construction

Level:	Level 4
Credit value:	3

# Learning outcome

The learner will:

1. know the importance of health and safety in the construction industry.

## Assessment criteria

The learner can:

- 1.1 state the **importance** of health and safety in the construction industry
- 1.2 state the **roles** of Health and Safety Executive (HSE)
- 1.3 state the **main regulations** covered under the Health and Safety act 1974
- 1.4 state the responsibilities of **individuals** within the construction industry.

## Range

## Importance

Reduce accidents and loss of life, minimise insurance costs, minimise lost output.

## Roles

Enforce the health and safety laws set out by the act by: Carrying out investigations, checking records required by legislation. Provide information and guidance. Issue prohibition notices. Prosecute all parties that fail to comply.

# **Main regulations**

The Control of Substances Hazardous to Health (COSHH), The Noise at Work regulations, the Work at Height regulations, Reporting of Injuries Diseases and Dangerous Occurrences regulations (RIDDOR), The Personal Protective Equipment at Work regulations, The Provision and Use of Work Equipment Regulations (PUWER).

# Individuals: employee and employer

Employer: Provide a safe workplace, safety training, safety policy, risk assessments, provide and maintain safe machines and equipment, provide personal protective equipment (PPE)

Employee: Not to put themselves or others at risk, co-operate with employers on health and safety matters, use safety equipment provided by employer and not to misuse or interfere with anything provided for health and safety.

The learner will:

2. know how to minimise the risk of accidents caused by hazards.

# Assessment criteria

The learner can:

- 2.1 list **common causes** of accidents in construction
- 2.2 define the term 'risk'
- 2.3 define the term 'hazard'
- 2.4 state the purpose of a risk assessment.

# Range

## **Common causes**

Trips, falls from heights, slips, trips and falls, lack of risk assessments, poor housekeeping, lack of training, horseplay, poor or no maintenance of equipment, incorrect manual handling techniques, blunt tools.

### Learning outcome

The learner will:

3. know safety signs and their categories.

## Assessment criteria

The learner can:

- 3.1 identify safety sign **categories**
- 3.2 identify safety signs
- 3.3 identify **Control of Substances Hazardous to Health (COSHH) signs**.

## Range

## Categories

Mandatory, prohibition, information and warning.

## Signs

Mandatory: wear hand, head, foot, ear and eye protection. Prohibition: do not smoke, enter, not drinking water.

Information: fire exit, emergency stop, fire assembly point and first aid. Warning: electric shock, flammable, toxic and general risk.

## **COSHH** signs

Poisonous, harmful, irritant, environmentally damaging, explosive.

The learner will:

4. know Personal Protective Equipment (PPE).

# Assessment criteria

The learner can:

4.1 identify the **types** and purposes of Personal Protective Equipment (PPE).

# Range

# Types

Goggles, mask, boots, ear defenders, gloves, high visibility clothing (high visibility jackets), helmets, barrier cream.

# Unit 102 Introduction to the construction industry

Level:	Level 4
Credit value:	3

## Learning outcome

The learner will:

1. know types of construction methods used.

#### Assessment criteria

The learner can:

- 1.1 identify **traditional** types of construction
- 1.2 identify **modern** types of construction methods used.

#### Range

#### Traditional

Timber frame, concrete, steel frame, masonry structures, low rise, mid rise, high rise.

#### Modern

Pre-fabricated, sectional, modular.

#### Learning outcome

The learner will:

2. know sustainable construction.

#### Assessment criteria

- 2.1 state **reasons** why sustainable construction is used
- 2.2 identify design features used in sustainable construction
- 2.3 identify **materials** used in sustainable construction.

# Range

Reasons

Environmental impact, limited resources, costs, legislation.

# **Design features**

Thermal insulation, water economy, renewable energy.

#### Materials

Sustainable sourced timber. Recycled materials; locally sourced materials. Insulation (wall, floor and roof).

# Learning outcome

The learner will:

3. know types of activities and job opportunities in the construction industry.

# Assessment criteria

The learner can:

- 3.1 identify **types of activities** undertaken by the construction industry
- 3.2 identify **job opportunities** in the construction industry.

## Range

# **Types of activities**

Residential building construction, Industrial building construction, commercial building construction, civil engineering.

# **Job Opportunities**

Architect, clerk of works, quantity surveyor, carpenter/joiner, bricklayer, painter and decorator, plasterer, building operative.

# Unit 103 Constructing through mortice and tenon joints

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to construct frames using through mortice and tenon joints.

#### Assessment criteria

The learner can:

- 1.1 identify Personal **Protective Equipment (PPE)** appropriate to constructing frames using through mortice and tenon joints
- 1.2 identify **materials** required to construct frames using through mortice and tenon joints
- 1.3 state the process required to mark out frames using through mortice and tenon joints
- 1.4 identify **tools and equipment** required to construct frames using through mortice and tenon joints.

#### Range

**Personal Protective Equipment (PPE)** Boots.

#### Materials

European redwood, PVA adhesive.

# **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane, hammer and mallet.

The learner will:

2. be able to construct frames using through mortice and tenon joints.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing frames using through mortice and tenon joints
- 2.2 select **materials** required to construct frames using through mortice and tenon joints
- 2.3 select **tools and equipment** required to construct frames using through mortice and tenon joints
- 2.4 **construct and finish** frames using through mortice and tenon joints to given specifications.

#### Range

# Personal Protective Equipment (PPE)

Boots.

## Materials

European redwood, PVA adhesive.

## **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane, hammer and mallet.

## **Construct and finish**

Remove surplus material.

## Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 104 Constructing angled halving joints

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to construct frames using halving joints.

## Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing frames using halving joints
- 1.2 identify **materials** required to construct frames using halving joints
- 1.3 identify **types** of halving joints
- 1.4 state the process required to mark out frames using halving joints
- 1.5 identify **tools and equipment** required to construct frames using halving joints.

# Range

**Personal Protective Equipment (PPE)** Boots.

## Materials

European redwood, PVA adhesive, screws.

## Types

Dovetail, raking.

## **Tools and equipment**

Try square, sliding bevel, marking gauge, rule, abrasive paper, tenon saw, bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, smoothing plane, block plane, mallet, drill and screwdriver.

The learner will:

2. be able to construct frames using halving joints.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing frames using halving joints
- 2.2 select **materials** required to construct frames using halving joints
- 2.3 select **tools and equipment** required to construct frames using halving joints
- 2.4 **construct and finish** frames using halving joints to given specifications.

## Range

### **Personal Protective Equipment (PPE)**

Boots.

#### Materials

European redwood, PVA adhesive, screws.

## **Tools and equipment**

Try square, sliding bevel, marking gauge, rule, abrasive paper, tenon saw, bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, smoothing plane, block plane, mallet, drill and screwdriver.

## **Construct and finish**

Remove surplus material.

## Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 105 Constructing bridle joints

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to construct frames using bridle joints.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing frames using bridle joints
- 1.2 identify **materials** required to construct frames using bridle joints
- 1.3 identify **types** of bridle joints
- 1.4 state the process required to mark out frames using bridle joints
- 1.5 identify **tools and equipment** required to construct frames using bridle joints.

#### Range

# **Personal Protective Equipment (PPE)**

Boots.

#### Materials

European redwood, PVA adhesive, screws.

#### Types

T bridle, corner bridle.

#### **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, coping saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane, mallet, drill and screwdriver.

The learner will:

2. be able to construct frames using bridle joints.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing frames using bridle joints
- 2.2 select **materials** required to construct frames using bridle joints
- 2.3 select **tools and equipment** required to construct frames using bridle joints
- 2.4 **construct and finish** frames using bridle joints to given specifications.

## Range

### **Personal Protective Equipment (PPE)**

Boots.

#### Materials

European redwood, PVA adhesive, screws.

## **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, coping saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane, mallet, drill and screwdriver.

## **Construct and finish**

Remove surplus material.

## Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### **Assessment criteria**

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 106 Constructing haunched mortice and tenon joints

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to construct frames using haunched mortice and tenon joints.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing frames using haunched mortice and tenon joints
- 1.2 identify **materials** required to construct frames using haunched mortice and tenon joints
- 1.3 state the process required to mark out frames using haunched mortice and tenon joints
- 1.4 identify **tools and equipment** required to construct frames using haunched mortice and tenon joints.

#### Range

**Personal Protective Equipment (PPE)** Boots.

#### Materials

European redwood, PVA adhesive.

#### **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane, hammer and mallet.

The learner will:

2. be able to construct frames using haunched mortice and tenon joints.

#### Assessment criteria

The learner can:

- use Personal Protective Equipment (PPE) appropriate to 2.1 constructing frames using haunched mortice and tenon joints
- 2.2 select materials required to construct frames using haunched mortice and tenon joints
- select **tools and equipment** required to construct frames using 2.3 haunched mortice and tenon joints
- construct and finish frames using haunched mortice and tenon joints 2.4 to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)** Boots.

## Materials

European redwood, PVA adhesive.

## **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane, hammer and mallet.

## **Construct and finish**

Remove surplus material.

## Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### **Assessment criteria**

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- clear work area of surplus materials and debris on completion of the 3.3 iobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 107 Constructing stub mortice and tenon joints

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to construct frames using stub mortice and tenon joints.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing frames using stub mortice and tenon joints
- 1.2 identify **materials** required to construct frames using stub mortice and tenon joints
- 1.3 state the process required to mark out frames using stub mortice and tenon joints
- 1.4 identify **tools and equipment** required to construct frames using stub mortice and tenon joints.

#### Range

**Personal Protective Equipment (PPE)** Boots.

#### Materials

European redwood, PVA adhesive.

## **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane and mallet.

The learner will:

2. be able to construct frames using stub mortice and tenon joints.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing frames using stub mortice and tenon joints
- 2.2 select **materials** required to construct frames using stub mortice and tenon joints
- 2.3 select **tools and equipment** required to construct frames using stub mortice and tenon joints
- 2.4 **construct and finish** frames using stub mortice and tenon joints to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)** Boots.

BOOLS.

#### Materials

European redwood, PVA adhesive.

#### **Tools and equipment**

Try square, mortice gauge, rule, abrasive paper, tenon saw, mortice and bevel-edged chisel, bench hook, G-cramp, sash cramp, bench bearers, squaring rod, smoothing plane, block plane and mallet.

#### **Construct and finish**

Remove surplus material.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

Level:	Level 4
Credit value:	4

Learning outcome
The learner will:
1. know how to mark out, cut and fix architraves and skirting.
Assessment criteria
The learner can:
1.1 identify <b>Personal Protective Equipment (PPE)</b> appropriate to marking out, cutting and fixing architraves and skirting
1.2 state the purpose of architraves and skirting
1.3 identify <b>materials</b> required to mark out, fix and cut architraves and skirting
1.4 identify architraves and skirting <b>profiles</b>
1.5 identify <b>tools and equipment</b> required to mark out, cut and fix architraves and skirting
1.6 state the purpose of using margins
1.7 state the <b>joints</b> used
1.8 state the process required to mark out, cut and fix sets of architraves and skirting.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, high visibility jackets, safety goggles, knee pads.

#### Materials

European redwood, MDF, adhesives, nails.

### Profiles

Bull nose, splayed, torus, ogee.

# **Tools and equipment**

Combination square, rule, sliding bevel mitre saw/box, handsaw and coping saw, nail punch, claw hammer, block plane.

# Joints

Mitred, scribed, heading (using bisection for external obtuse angles).

The learner will:

2. be able to mark out, cut and fix architraves and skirting.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to fixing architraves and skirting
- 2.2 select materials required to fix architraves and skirting
- 2.3 select **tools and equipment** required to fix architraves and skirting
- 2.4 mark out, cut and fix architrave and skirting to given specifications.

# Range

# **Personal Protective Equipment (PPE)**

Boots, safety goggles, knee pads.

# Materials

European redwood, adhesives, nails.

# Profiles

Bull nose, splayed, torus, ogee.

# **Tools and equipment**

Combination square, rule, sliding bevel mitre saw/ box, handsaw and coping saw, nail punch, claw hammer, block plane.

# Joints

Mitred, scribed, heading (using bisection for external obtuse angles).

## Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

## Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 109 Constructing and fixing hatch linings

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to construct and fix hatch linings.

## Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing and fixing hatch linings
- 1.2 identify **materials** required to construct and fix hatch linings
- 1.3 identify **tools and equipment** required to construct and fix hatch linings
- 1.4 state the process required to construct and fix hatch linings.

# Range

# Personal Protective Equipment (PPE)

Boots, high visibility jackets, safety goggles.

## Materials

European redwood, adhesives, nails, screws.

# **Tools and equipment**

Combination square, marking gauge, rule, tenon saw, bevel-edge chisel, bench hook, G-cramp, sash cramp, squaring rod, smoothing plane, block plane, mallet, drill and screwdriver, hammer and nail punch.

The learner will:

2. be able to construct and fix hatch linings.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing and fixing hatch linings
- 2.2 select **materials** required to construct and fix hatch linings
- 2.3 select **tools and equipment** required to construct and fix hatch linings
- 2.4 construct and fix **hatch linings** to given specifications.

# Range

# **Personal Protective Equipment (PPE)**

Boots, safety goggles.

# Materials

European redwood, adhesives, nails, screws.

# **Tools and equipment**

Combination square, marking gauge, rule, tenon saw, bevel-edge chisel, bench hook, G-cramp, sash cramp, squaring rod, smoothing plane, block plane, mallet, drill and screwdriver, hammer and nail punch.

# Guidance

# **Hatch linings**

Hatch lining can refer to loft, serving, etc.

## Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

## Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 110 Fitting locks and latches

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to fit locks and latches.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to fitting locks and latches
- 1.2 identify types of locks and latches
- 1.3 identify **tools and equipment** required to fit locks and latches
- 1.4 state the process required to fit different **types** of locks and latches.

#### Range

# Personal Protective Equipment (PPE)

Boots, high visibility jackets, safety goggles.

#### Types

Mortice lock, cylinder night latch, mortice latch, lever handles.

## **Tools and equipment**

Mortice/ marking gauge, combination square, rule, auger bits, chisel, carpenter/ swing brace, mallet, screw driver, bradawl.

#### Learning outcome

The learner will:

2. be able to fit locks and latches.

#### Assessment criteria

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to fitting locks and latches
- 2.2 select **tools and equipment** required to fit locks and latches
- 2.3 mark out, cut and fit **locks** and **latches** to given specifications and manufactures instructions.

#### Range

#### Personal Protective Equipment (PPE)

Boots, safety goggles, high visibility jackets.

### **Tools and equipment**

Marking gauge, combination square, rule, auger bits, chisel, carpenter/swing brace, mallet, screw driver, bradawl

#### Locks

Mortice lock

#### Latches

Cylinder night latch, mortice latch, lever handles.

**Guidance note:** a battery drill can be used for these tasks if the centre wished.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 111 Painting and wallpapering

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to prepare and decorate wall surfaces.

#### Assessment criteria

The learner can:

- 1.1 identify the **Personal Protective Equipment (PPE)** appropriate to preparing and decorating wall surfaces
- 1.2 identify the **materials** required to prepare and decorate wall surfaces
- 1.3 identify the **tools and equipment** required to prepare and decorate wall surfaces
- 1.4 state **methods** used to prepare a previously decorated wall surface
- 1.5 know different **types** of wallpaper and paint.

## Range

## Personal Protective Equipment (PPE)

Appropriate to the environment; glasses, dust mask, gloves, boots, overalls, high visibility jacket.

#### Materials

Aluminium oxide, cellulose filler, ready mix filler, stripping agents, decorator's caulk.

## **Tools and equipment**

Scrapers, buckets, tiger perforator, flexible filling knifes, filling board, wall brush, sponges, dust brush, mastic gun. Access equipment (steps, hop-ups).

#### Methods

Water and brush, steam, liquid stripper. Preparation: sanding, filling defects, wall sizing.

## Types

Paint: Vinyl soft sheen, vinyl silk, acrylic eggshell, vinyl matt. Wallpaper: Embossed (blown) vinyl/anaglypta, lining papers.

The learner will:

2. be able to prepare and decorate wall surfaces.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing and decorating wall surfaces
- 2.2 select the **materials** required to prepare and decorate wall surfaces
- 2.3 select the **tools and equipment** required to prepare and decorate wall surfaces
- 2.4 **prepare** previously decorated wall surfaces for wallpapering to given specifications.

# Range

# **Personal Protective Equipment (PPE)**

Appropriate to the environment; glasses, dust mask, gloves, boots, overalls, high visibility jacket.

# Tools

Tape measure, pencil, spirit level, plum bob.

# Materials

Aluminium oxide, cellulose filler, ready mixed filler, stripping agents, decorator's caulk.

# **Tools and equipment**

Scrapers, buckets, tiger perforator, flexible filling knifes, filling board, wall brush, sponges, dust brush, mastic gun. Access equipment (steps, hop-ups).

## Prepare

To include: stripping existing wall paper, washing down, sanding, filling and sizing the wall area.

# Learning outcome

The learner will:

3. be able to apply wallpaper to prepared wall surfaces.

## Assessment criteria

- 3.1 select the paperhanging tools and equipment
- 3.2 calculate the wall surface area
- 3.3 calculate the quantities of wallpaper required
- 3.4 select the **materials** required to apply wallpaper to prepared wall surfaces
- 3.5 prepare, measure and cut lengths of wallpaper to given specifications
- 3.6 prepare and paste **wallpaper** in accordance with manufacture's instructions
- 3.7 hang wallpaper to given specifications.

#### Range

## **Tools and equipment**

Paperhanging brush, plumb bob, spirit level, pencil, tape measure, paste brush, paste table, scissors, bucket, sponge. Access equipment (steps, hop ups, working platforms).

#### Materials

Cellulose paste.

#### Wallpaper

One from the following: Foundation/preparatory paper, Semi relief wallpaper, Blown vinyl.

# Learning outcome

The learner will:

4. be able to paint the wallpapered surfaces.

#### Assessment criteria

The learner can:

- 4.1 select tools and equipment for painting
- 4.2 prepare the paint to manufacturer's instructions
- 4.3 calculate the quantities of paint required
- 4.4 **apply paint** using different **painting techniques**.

#### Range

# **Tools and equipment**

Synthetic and natural bristle brushes, roller frame, medium pile roller, scuttle, tray, extension pole, dust sheets, access equipment.

### Paint

Select one from the following: vinyl soft sheen, acrylic eggshell, vinyl silk, vinyl matt.

## Manufacturer's instructions

Eg: Stir paint thoroughly, decant paint, thin and strain paint to the correct viscosity.

#### Apply paint

Brush, roller.

#### **Painting techniques**

Mist coating, picture framing (cutting in by brush and infill with roller).

The learner will:

5. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 5.1 set up the work area safely
- 5.2 maintain a clean and safe working area following health and safety guidelines
- 5.3 clear work area of surplus materials and debris on completion of the jobs
- 5.4 clean all tools and equipment ready for re-use.

# Unit 112 Applying decorative effects

Level:	Level 4
Credit value:	4

Lear	Learning outcome		
The	learner will:		
1. know how to apply decorative effects.			
Assessment criteria			
The	learner can:		
1.1	identify <b>Personal Protective Equipment (PPE)</b> appropriate to applying decorative effects		
1.2	identify the <b>materials</b> required to apply decorative effects		
1.3	identify the <b>tools and equipment</b> required to apply decorative effects		
1.4	state methods to prepare and paint ground coat to panels		
1.5	state the different types <b>decorative effects</b>		
1.6	state methods of applying decorative effects to panels		
1.7	state the process for cutting and applying stencils.		

#### Range

## **Personal Protective Equipment (PPE)**

Safety boots, protective gloves, goggles or safety glasses, dust masks, high visibility jackets, hard hat and overalls.

#### Materials

Aluminium oxide paper, silicon carbide paper, cellulose filler, ready mixed fillers, tack cloth, masking tape, acrylic glaze, colourants, lint free rag, stencil material (centres can decide what they use).

#### **Tools and equipment**

Flexible filling knives/blades, filling board scrapers, dust brush, natural and synthetic brushes, hair stipplers, mohair/sponge rollers, dragging brushes, plastic combs, natural sponges, palettes, kettles, plastic pots, stencil brushes and stencil knives, cutting mats.

#### **Decorative effects**

Sponge stipple, rag rolling, bagging, straight graining, stencilling.

The learner will:

2. be able to prepare panels for application of decorative effects.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing and decorating wall surfaces
- 2.2 select **tools and equipment** for painting panels
- 2.3 select the **materials** required to prepare and decorate wall surfaces
- 2.4 prepare and paint ground coat to panels for application of decorative effects.

# Range

# Personal Protective Equipment (PPE)

Safety boots, protective gloves, goggles or safety glasses, dust masks, high visibility jackets, hard hat and overalls.

# **Tools and equipment**

Paint kettles, brushes (pure bristle and synthetic types), rollers (foam and mohair), dust brush.

# Materials

Aluminium oxide paper, silicon carbide paper, cellulose filler, ready mixed fillers, tack cloth, masking tape, dust sheets.

# Learning outcome

The learner will:

3. be able to produce decorative effects.

## Assessment criteria

The learner can:

- 3.1 measure and set out areas for application of decorative effects to given specifications
- 3.2 apply protective tape and masking where required
- 3.3 prepare **materials** for application of decorative effects to manufacturers instructions
- 3.4 select **tools and equipment** to produce decorative effects to given specifications
- 3.5 produce **decorative effects** on panels to the given specifications.

## Range

# Masking

Low tack, plastic film, brown paper.

## Materials

Acrylic glaze, proprietary colourants, lint-free rag, chamois leather, plastic film.

## Tools and equipment

Natural and synthetic brushes, hair stipplers, mohair/sponge rollers,

dragging brushes, plastic combs, natural sponges, palettes, kettles, plastic pots.

# **Decorative effects**

Straight grained border.

Two effects from the following should be selected: sponge, stipple, rag rolling, bagging.

#### Learning outcome

The learner will:

4. be able to produce a single colour stencil.

# Assessment criteria

The learner can:

- 4.1 select tools, equipment and materials to make and size stencils
- 4.2 apply design and cut out stencil
- 4.3 apply paint to create stencil design.

## Range

# Tools and equipment

Stencil knifes, cutting mat, chalk line, tape measure, stencil brushes, palette, bucket, sponge.

# Materials

Oiled card, tracing paper, grid paper, knotting, chalk, laminated card, acrylic paint, blotting paper, masking tape, adhesive spray.

## Application

Stencil brush, spray, air brush.

**Guidance**: Learners can design their own stencil; however it must be at least A4 size with a minimum of three characters.

## Learning outcome

The learner will:

5. be able to set up and maintain a clean and safe working environment.

## Assessment criteria

- 5.1 set up the work area safely
- 5.2 maintain a clean and safe working area following health and safety guidelines
- 5.3 clear work area of surplus materials and debris on completion of the jobs
- 5.4 clean all tools and equipment ready for re-use.

# Unit 113 Applying wallpaper to internal and external angles and painting skirting

Level:	Level 4
Credit value:	4

## Learning outcome

The learner will:

1. know how to prepare and decorate wall surfaces and skirting.

# Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to preparing and decorating wall surfaces and skirting
- 1.2 identify **materials** required to prepare and decorate wall surfaces and skirting
- 1.3 identify **tools and equipment** required to prepare and decorate wall surfaces and skirting
- 1.4 state **methods** used to prepare a previously decorated wall surface and painted skirting
- 1.5 state different **types** of wallpaper and paint.

## Range

# **Personal Protective Equipment (PPE)**

Appropriate to the environment; glasses, dust mask, gloves, boots, overalls, high visibility jacket.

## Materials

Aluminium oxide, cellulose fillers, stripping agents, decorators caulk.

# **Tools and equipment**

scrapers, buckets, flexible filling knifes scissors, filling board, cellulose filler, ready mixed filler, wall brush, sponges, dust brush, mastic gun. Access equipment (steps, hop-ups, working platforms).

# Methods

Sand surfaces, filing defects and sizing walls.

# Types

Paint: acrylic eggshell, acrylic undercoat, acrylic gloss. Solvent based, undercoat, gloss, eggshell, satinwood. Wallpaper: vinyls, washables, pre pasted papers, paste the wallpapers, finished blown vinyl.

The learner will:

2. be able to prepare and decorate wall surfaces.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing and decorating wall surfaces
- 2.2 select **materials** required to prepare and decorate wall surfaces
- 2.3 select **tools and equipment** required to prepare and decorate wall surfaces
- 2.4 **prepare** wall surface for wallpapering.

# Range

# Personal Protective Equipment (PPE)

Appropriate to the environment; glasses, dust mask, gloves, boots, overalls, high visibility jacket.

## Materials

Aluminium oxide, cellulose fillers, stripping agents, decorators caulk, cellulose paste.

# **Tools and equipment**

Scrapers, buckets, tiger perforator, flexible filling knifes scissors, filling board, cellulose filler ,ready mixed filler, wall brush, sponges, dust brush, access equipment (steps, hop-ups, platforms).

## Prepare

Sand surfaces, filing defects and sizing walls.

## Learning outcome

The learner will:

3. be able to apply random match wallpaper to internal and external angles.

# Assessment criteria

- 3.1 select paperhanging **tools and equipment** required to apply wallpaper to internal and external angles
- 3.2 calculate wall surface area
- 3.3 calculate quantities of wallpaper required
- 3.4 select **materials** required to apply wallpaper to internal and external angles
- 3.5 prepare, measure and cut lengths of wallpaper to given specifications
- 3.6 prepare and paste wallpaper in accordance with manufacturer's instructions
- 3.7 hang wallpaper to a given specification.

#### Range

#### **Tools and equipment:**

Paperhanging brush, plumb bob, spirit level, pencil, tape measure, paste brush, paste table, scissors, bucket, sponge, access equipment (steps, hopups, platforms).

# Materials:

Cellulose paste.

Wallpaper - one from the following: vinyl finished paper, washable finished paper, blown vinyl finished paper.

# Learning outcome

The learner will:

4. be able to prepare and paint skirting board.

## Assessment criteria

The learner can:

- 4.1 use **Personal Protective Equipment (PPE)** appropriate to prepare and paint skirting
- 4.2 select the **materials** required to prepare skirting boards
- 4.3 select **tools** required to prepare and paint skirting boards
- 4.4 prepare skirting boards for painting
- 4.5 **prepare paint** to manufacturer's instructions
- 4.6 apply **paint** by brush to skirting.

## Range

## Personal Protective Equipment (PPE)

Appropriate to the environment; glasses, dust mask, gloves, boots, overalls, high visibility jacket.

## Materials

Aluminium oxide, silicon carbide, cellulose fillers, decorators caulk.

## Tools

Dust brush, synthetic brushes, natural bristle brushes, flexible filling knifes, filling board, mastic gun.

## **Prepare paint**

Stir paint thoroughly, decant paint, thin and strain paint to the correct viscosity.

## Paint

One system from the following:

Acrylic undercoat and gloss, acrylic eggshell, solvent based undercoat and gloss, solvent based eggshell/satinwood

NB: The use of solvent based paints is at the discretion of the centre where the unit is being delivered.

The learner will:

5. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 5.1 set up the work area safely
- 5.2 maintain a clean and safe working area following health and safety guidelines
- 5.3 clear work area of surplus materials and debris on completion of the jobs
- 5.4 clean all tools and equipment ready for re-use.

# Unit 114 Painting a panel door

Level:	Level 4
Credit value:	3

## Learning outcome

The learner will:

1. know how to prepare panel doors for painting.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to preparing panel doors for painting
- 1.2 identify **materials** required to prepare panel doors for painting
- 1.3 identify **tools and equipment** required to prepare panel doors for painting
- 1.4 identify the components of a panel door
- 1.5 state the correct sequences to painting panel doors
- 1.6 state different **methods** used for the removal of paint
- 1.7 state methods of **surface preparation** available
- 1.8 state the types of **primer** required for the panel
- 1.9 state the types of **paint** suitable to paint the door.

## Range

## **Personal Protective Equipment (PPE)**

Glasses, dust mask, gloves, boots, overalls, high visibility jacket.

## Materials

Aluminium oxide paper, silicon carbide paper, cellulose filler, ready mixed fillers, tack cloth, masking tape, shellac knotting.

## Tools

Scrapers, shave hooks, sanding block, flexible filling knives/blades, filling board, dust brush.

## Equipment

Hot air gun, infrared technology, electric sander.

## Methods

Hot air gun, infrared heat technology, environmentally friendly chemical strippers eg Peelaway or Biostrip.

## Surface preparation

Dry sanding, wet flatting, mechanical sanding.

## Primers

Acrylic, solvent, shellac.

# Paint

Solvent based undercoat and gloss, solvent based eggshell, acrylic undercoat and gloss, acrylic eggshell.

#### Learning outcome

The learner will:

2. be able to remove paint from panels and prepare door for painting.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing panel doors for painting
- 2.2 select materials required to prepare panel doors for painting
- 2.3 select **tools and equipment** required to prepare panel doors for painting
- 2.4 prepare the panel doors to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Glasses, dust mask, gloves, boots, overalls, high visibility jacket.

#### Materials

Aluminium oxide paper, silicon carbide paper, cellulose filler, ready mixed fillers, tack cloth, masking tape, shellac knotting, environmentally friendly chemical strippers (eg Peelaway, Biostrip).

#### Tools

Scrapers, shave hooks, sanding block, flexible filling knives/blades, filling board, dust brush.

#### Equipment

Hot air gun, infrared technology, electric sander.

#### Guidance

Learners will only be expected to remove existing paint from one panel of the door but will have to prepare the whole door eg sanding.

The learner will:

3. be able to paint panel doors.

# Assessment criteria

The learner can:

- 3.1 use **Personal Protective Equipment (PPE)** appropriate to painting the panel doors
- 3.2 select **tools** required to paint panel doors
- 3.3 **prepare paint** to manufacture's instructions
- 3.4 apply **paint** to panel door to given specifications.

# Range

# **Personal Protective Equipment (PPE)**

Glasses, dust mask, gloves, boots, overalls, high visibility jacket.

# Prepare paint

Stir paint thoroughly, decant paint, thin and strain paint to the correct viscosity.

# Tools

Dust brush, synthetic brushes, natural brushes, kettles, dust brush, foam rollers, mohair rollers, paint trays.

# Paint

Acrylic undercoat, acrylic gloss, solvent based undercoat, solvent based gloss.

## Learning outcome

The learner will:

4. be able to set up and maintain a clean and safe working environment.

## Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus materials and debris on completion of the jobs
- 4.4 clean all tools and equipment ready for re-use.

# Unit 115 Cutting and fixing decorative panels

Level:	Level 4
Credit value:	3

## Learning outcome

The learner will:

1. know how to prepare and tile surfaces.

## Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to preparing and tiling surfaces
- 1.2 identify **materials** required to prepare and tile surfaces
- 1.3 identify **tools and equipment** required to prepare and tile surfaces
- 1.4 state process to prepare walls for tiling.

## Range

# **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses, gloves/barrier cream.

## Materials

Adhesive (ready mix, epoxy, powdered), tile (clay press), grout.

# **Tools and equipment**

Hand cutters, spirit level, trails (gauging notch), grout flow, sponge, bucket, tile spacers.

The learner will:

2. be able to set out, cut and fix tiles to pattern.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to setting out, cutting and fix tiles to pattern
- 2.2 select materials required to set out, cut and fix tiles to pattern
- 2.3 select **tools and equipment** required to set out, cut and fix tiles to pattern
- 2.4 set out and mark decorative wall tiles to given specifications
- 2.5 cut and shape decorative tiles to given specifications
- 2.6 mix adhesive as per manufacturers instructions
- 2.7 set out datum line to given specification
- 2.8 apply adhesive to receive tiles
- 2.9 fix decorative tiles to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses.

#### Materials

Adhesive (ready mixed, epoxy, powdered), tile (clay press), grout.

#### **Tools and equipment**

Tile cutter, tile file, tile nibblers and tile saw (no electric cutting equipment). Use of a 6mm wall trowel.

#### Learning outcome

The learner will:

3. be able to finish wall tiles.

#### Assessment criteria

The learner can:

- 3.1 apply grout to tiled area
- 3.2 **clean and polish** tiles ready for use.

#### Range

#### Apply grout

Wall grout mixed by hand. Use of grouting tools.

#### **Clean and polish**

Use of washing and polishing equipment.

The learner will:

4. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus materials and debris on completion of jobs
- 4.4 clean all tools and equipment ready for re-use.

# Unit 116 Cutting and fixing tiles to wet areas

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to set out and cut wall and floor tiles for wet areas.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to setting out and cutting wall and floor tiles for wet areas
- 1.2 identify **materials** required to set out and cut wall and floor tiles for wet areas
- 1.3 identify **tools and equipment** required to set out and cut wall and floor tiles for wet areas
- 1.4 state methods of preparing wet areas.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses.

#### Materials

Wall and floor tiles (no greater than  $150 \times 150$  mm for wall tiles and  $250 \times 250$  mm for floor tiles).

#### **Tools and equipment**

Hand cutters, spirit level, trails (gauging notch), grout flow, sponge, bucket, tile spacers, floor spreader.

The learner will:

2. be able to prepare areas to receive wall and floor tiles for wet areas.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing areas to receive floor and wall tiles for wet areas
- 2.2 select **materials** required to prepare areas to receive floor and wall tiles for wet areas
- 2.3 select **tools and equipment** required to prepare areas to receive floor and wall tiles for wet areas
- 2.4 prepare areas to receive floor and wall tiles for wet areas to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses.

#### Materials

Acrylic, premier, bonder.

#### **Tools and equipment**

Hammer bolster, scraper and wire brush, ruler, tray, brush.

#### Learning outcome

The learner will:

3. be able to set out, cut and fix wall and floor tiles for wet areas.

#### Assessment criteria

- 3.1 select **Personal Protective Equipment (PPE)** required setting out, cutting and fixing wall and flooring tiles for wet areas
- 3.2 select **materials** required to set out, cut and fix wall and floor tiles for wet areas
- 3.3 select **tools and equipment** required to set out, cut and fix wall and floor tiles for wet areas
- 3.4 set out wall and floor area to given specifications
- 3.5 cut and fix wall and floor tiles for wet areas to given specifications
- 3.6 apply even bed of adhesive ready to receive tiles
- 3.7 fix wall and floor tiles to wet areas and keep in line.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses.

#### Materials

Spacers, adhesive, pegs, tiles.

#### **Tools and equipment**

Scribe, wall trowel, wall spreader, manual cutter, ruler, tray, brush, sponge, gauging trowel, tile file.

Use of a 6mm wall trowel and 10mm floor trowel.

#### Learning outcome

The learner will:

4. be able to complete tiling.

#### Assessment criteria

The learner can:

- 4.1 mix and apply grout to wall and floor tiles
- 4.2 clean and polish tiles ready for use.

#### Guidance

Floor grout should be mixed by hand.

Learners will need the use of grouting tools.

Learners will need the use of washing and polishing equipment.

#### Learning outcome

The learner will:

5. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

The learner can:

- 5.1 set up the work area safely
- 5.2 maintain a clean and safe working area following health and safety guidelines
- 5.3 clear work area of surplus **materials** and debris on completion of the jobs
- 5.4 clean all **tools and equipment** ready for re-use.

#### Range

#### Materials

Spacers, adhesive, pegs, tiles.

#### **Tools and equipment**

Scribe, wall trowel, wall spreader, manual cutter, ruler, tray, brush, sponge, gauging trowel, tile file. Use of a 6mm wall trowel and 10mm floor trowel.

## Unit 117 Tiling floors with a border

Level:	Level 4
Credit value:	3

# Learning outcome The learner will: 1. know how to lay floor tiles to include borders. Assessment criteria The learner can: 1.1 identify Personal Protective Equipment (PPE) appropriate to laying floor tiles to include borders 1.2 identify materials required to lay floor tiles to include borders 1.3 identify tools and equipment required to lay floor tiles to include borders 1.4 state methods to fix floor tiles to different surfaces.

#### Personal Protective Equipment (PPE)

Boots, overalls, high visibility jackets, dust mask and safety glasses, knee pads, gloves/barrier cream.

#### Materials

Tiles and pattern sheet.

#### **Tools and equipment**

Tile cutter, tile file, tile nibblers and tile saw (no electric cutting equipment).

#### Surfaces

Screed, timber, previously tiled.

The learner will:

2. be able to lay floor tiles to include borders.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to setting out, cutting and laying floor tiles to include borders
- 2.2 select **materials** required to set out, cut and lay floor tiles to include borders
- 2.3 select **tools and equipment** required to set out, cut and lay floor tiles to include borders
- 2.4 select tiles required to complete the given patterns
- 2.5 set out, cut and lay floor tiles to patterns and to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, high visibility jackets, dust mask and safety glasses, knee pads, gloves/barrier cream.

#### Materials

Tiles: Floor and boarder, adhesive, spacers.

#### **Tools and equipment**

Tile cutter, tile file, tile nibblers and tile saw (No Electric cutting equipment), gauge rod, gauging trowel, floor spreader 10mm, builders square, spirit level.

#### Learning outcome

The learner will:

3. be able to finish tiles.

#### Assessment criteria

The learner can:

- 3.1 apply grout to tiled areas
- 3.2 clean and polish tiles ready for use.

#### Learning outcome

The learner will:

4. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus materials and debris on completion of the jobs
- 4.4 clean all tools and equipment ready for re-use.

## Unit 118 Constructing block walling

Level:	Level 4
Credit value:	3

#### Learning outcome

The learner will:

1. know how to prepare for, set out and build 100mm thick lightweight walls.

#### Assessment criteria

The learner can:

- 1.1 identify the **Personal Protective Equipment (PPE)** appropriate to building 100mm thick lightweight block walls
- 1.2 identify the **materials** required to build 100mm thick lightweight block walls
- 1.3 identify the **tools and equipment** required to build 100mm lightweight block walls
- 1.4 state the number of blocks required to build a 1m<sup>2</sup> wall.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Lightweight blocks, concrete blocks, mortar.

#### **Tools and equipment**

Brick trowel, line and pins, hammer and bolster, brick hammer, level, tape measure, hand saw (suitable for cutting lightweight blocks, mortar board, profiles X 2).

Blocks per square metre =10.

The learner will:

2. be able to prepare, set out and build 100mm thick lightweight block walls.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to building 100mm thick block walls
- 2.2 select the **tools, equipment** and **materials** required to build lightweight block walls
- 2.3 measure and set up profiles to given specifications
- 2.4 set up mortar boards and stack with the required number of blocks to build 100mm thick block walls
- 2.5 dry bond blockwork between profiles
- 2.6 build 100mm thick lightweight block wall to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Lightweight blocks, concrete blocks, mortar.

#### **Tools and equipment**

Brick trowel, line and pins, hammer and bolster, brick hammer, level, tape measure, hand saw (suitable for cutting lightweight blocks, mortar board, profiles x 2).

#### Learning outcome

#### The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 119 Constructing half brick return corners

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to set out and build half brick return corners in stretcher bond.

#### Assessment criteria

The learner can:

- 1.1 identify the **Personal Protective Equipment (PPE)** appropriate to building half brick return corners
- 1.2 identify the **materials** required to build half brick thick return corners in stretcher bond
- 1.3 identify the **tools and equipment** required to build half brick thick return corners in stretcher bond.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, facing bricks, mortar.

#### **Tools and equipment**

Brick trowel, level, hammer and bolster, brick hammer, half round jointing key, gauge rod, builders square, chalk, mortar board, tape measure.

The learner will:

2. be able to set out and build half brick thick return corners.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to building half brick thick return corners
- 2.2 select the tools, equipment and **materials** required to build half brick thick return corners
- 2.3 set up a mortar board and stack the required number of bricks
- 2.4 set out and build half brick thick return corners to given specifications
- 2.5 finish the brick work to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### **Tools and equipment**

Brick trowel, level, hammer and bolster, brick hammer, half round jointing key, gauge rod, builders square, chalk, mortar board, tape measure.

#### Materials

Common bricks, facing bricks, mortar

#### Guidance

Learners should have an awareness of how to calculate quantities of required bricks.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

# Unit 120 Constructing cavity walls in brickwork and block work

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to set out and build cavity walls.

#### Assessment criteria

The learner can:

- 1.1 identify the **Personal Protective Equipment (PPE)** appropriate to building cavity walls
- 1.2 identify the **materials** required to build cavity walls
- 1.3 identify the **tools and equipment** required to build cavity walls
- 1.4 state the purpose of cavity walling
- 1.5 state the purpose of wall ties used in cavity walling
- 1.6 state the purpose of a damp proof course.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, lightweight blocks, damp proof course, wall ties, chalk, mortar.

#### **Tools and equipment**

Brick trowel, level, hammer and bolster, brick hammer, half round jointing key, gauge rod, builders square, chalk, tape measure, mortar board, profiles x2, hand saw (suitable for cutting lightweight blocks).

The learner will:

2. be able to set out and build cavity walls.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to building cavity walls
- 2.2 select the **tools, equipment** and **materials** required to build cavity walls
- 2.3 set up a mortar board and stack the number of bricks and blocks required to complete the walls
- 2.4 build cavity walls to given specifications
- 2.5 finish the brick work to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, lightweight blocks, damp proof course, wall ties, chalk, mortar.

#### **Tools and equipment**

Brick trowel, level, hammer and bolster, brick hammer, half round jointing key, gauge rod, builders square, chalk, tape measure, mortar board, profiles x2, hand saw (suitable for cutting lightweight blocks).

#### Learning outcome

The learner will:

3. be able to maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

## Unit 121 Constructing one brick walling

Level:	Level 4
Credit value:	4

Lea	rning outcome
The	learner will:
1. 1	know how to prepare, set out and build one brick walls in English Bond.
Ass	essment criteria
The	learner can:
1.1	identify the <b>Personal Protective Equipment (PPE)</b> appropriate to building one brick thick walls
1.2	identify the <b>materials</b> required to build one brick thick walls
1.3	identify the <b>tools and equipment</b> required to build one brick thick walls
1.4	state the <b>number of bricks</b> required to build a 1m <sup>2</sup> wall
1.5	state the method to set out and build one brick thick walls in English Bond.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, facing bricks, mortar.

#### Tools and equipment

Brick trowel, line and pins,  $\,$  brick hammer, level, tape measure, mortar board, profiles X 2.

Use of English Bond, know the purpose of a Queen closer.

#### Number of bricks

Learners should know: 60 bricks =  $1m^2 \frac{1}{2}$  brick and 120 bricks =  $1m^2 1$  brick.

The learner will:

2. be able to prepare, set out and build one brick thick walls.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to building one brick thick walls
- 2.2 select the **tools, equipment** and **materials** required to build one brick thick walls
- 2.3 measure and set up profiles to given specifications
- 2.4 dry bond brickwork to set profiles
- 2.5 calculate the number of bricks required to build the wall to given specifications
- 2.6 set up a mortar board and stack the required number of bricks
- 2.7 build one brick thick walls to given specifications.

#### Range

#### Personal Protective Equipment (PPE)

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Common bricks, Facing bricks, mortar.

#### **Tools and equipment**

Brick trowel, line and pins, brick hammer, level, tape measure, mortar board, profiles X 2. Use of English Bond, know the purpose of a Queen closer.

Use of plastic bag (or similar) for achieving bag rubbed finish.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the jobs
- 3.4 clean all tools and equipment ready for re-use.

## Unit 122 Laying block paving

Level:	Level 4
Credit value:	4

Learning outcome
The learner will:
1. know how to prepare for and lay areas of block paving.
Assessment criteria
The learner can:
1.1 identify <b>Personal Protective Equipment (PPE)</b> appropriate to preparing areas to receive block paving
1.2 identify <b>materials</b> required to prepare areas to receive block paving
1.3 identify <b>tools and equipment</b> required to prepare areas to receive block paving
1.4 state the basic <b>patterns</b> used to lay block paviours
1.5 state methods to set out and level areas to receive areas of block paving
1.6 state methods used to cut, lay and finish block paving.
Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Types of block paviour, types of paviour edging, sub base, sharp sand for bedding paviours, kiln dried sand as space filler.

#### **Tools and equipment**

Shovel, wheelbarrow, pegs, trowel, straight edge, mallet, level, tape measure, building line vibrating plate.

#### Patterns

Half-lap, basketweave, herringbone.

The learner will:

2. be able to prepare areas to receive block paving.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to preparing a base for block paviours
- 2.2 select materials required to prepare areas to receive block paving
- 2.3 select **tools and equipment** required to prepare areas to receive block paving
- 2.4 prepare areas to receive block paving.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Concrete path edging, concreting sand, gravel, cement.

#### **Tools and equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, tape measure, building line, plate vibrator.

#### Learning outcome

The learner will:

3. be able to set out and lay areas of block paving.

#### Assessment criteria

The learner can:

- 3.1 use **Personal Protective Equipment (PPE)** appropriate to setting out and laying areas of block paving
- 3.2 select **materials** required to set out and lay areas of block paving
- 3.3 select **tools and equipment** required to set out and lay areas of block paving
- 3.4 lay bedding material to install areas of block paving to given specifications
- 3.5 bed block paving to given specifications
- 3.6 cut paviours to create pattern
- 3.7 compact areas of block paving
- 3.8 fill paving joints.

#### Range

#### Personal Protective Equipment (PPE)

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### Materials

Types of block paviour, types of paviour edging, sub base, sharp sand for bedding paviours, kiln dried sand as space filler.

#### Tools and equipment

Shovel, wheelbarrow, pegs, trowel, straight edge, mallet, level, tape measure, building line, vibrating plate.

#### Learning outcome

The learner will:

4. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus **materials** and debris on completion of the jobs
- 4.4 clean all **tools and equipment** ready for re-use.

# Unit 123 Laying underground domestic drainage

Level:		Level 4
Credit value: 4		4
Lea	rning outcome	
The	learner will:	
<ol> <li>know how to prepare, lay and test short lengths of underground domestic drainage.</li> </ol>		
Ass	essment criteria	
The	learner can:	
1.1	identify <b>Personal Protective Equipment (PPE)</b> appropriate to laying underground domestic drainage	
1.2	identify <b>tools and eq</b> drainage	<b>uipment</b> required to lay underground domestic
1.3	identify the purpose	of underground domestic drainage systems
1.4	identify <b>components</b> drainage system	used to install a simple underground domestic
1.5	state types of manhol domestic drainage sys	e construction used in simple underground stems
1.6	state the types of <b>bed</b> domestic drainage.	lding material used to lay a simple underground

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### **Tools and equipment**

Shovel, wheelbarrow, pegs, pipe cutter, saw, level, tape measure.

#### Purpose

Combined and separate drainage systems.

#### Components

Clay pipes, plastic pipes, bends and collars. Pre-fabricated plastic and concrete manholes, brick manholes.

#### **Bedding material**

Gravel, sand, concrete.

The learner will:

2. be able to lay and test short lengths of underground domestic drainage.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to laying and testing short lengths of underground domestic drainage
- 2.2 select **materials** and components required to lay and test short lengths of underground domestic drainage
- 2.3 select **tools and equipment** required to lay and test short lengths of underground domestic drainage
- 2.4 prepare the base between two manholes to receive length of underground domestic drainage
- 2.5 lay length of underground domestic drainage between two manholes including the provision of a rodding eye
- 2.6 carry out and pass standard **water tightness test** on completed drainage.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots hard hat, high visibility jackets, goggles, gloves.

#### **Tools and equipment**

Shovel, wheelbarrow, pegs, pipe cutter, saw, level, tape measure.

#### Purpose

Combined and separate drainage systems.

#### Materials and components

Clay pipes, plastic pipes, bends and collars. Pre-fabricated plastic and concrete manholes. brick manholes.

#### Water tightness test

Air or water.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

## Unit 124 Mixing and using concrete

Level:	Level 4
Credit value:	3

#### Learning outcome

The learner will:

1. know how to prepare and mix concrete to be used in moulds.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to mixing concrete to be used in moulds
- 1.2 identify **materials** required to mix concrete to be used in moulds
- 1.3 identify **tools and equipment** required to mix concrete to be used in moulds
- 1.4 state methods to prepare a mould to receive a concrete.

#### Range

#### Personal Protective Equipment (PPE)

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Basic concrete mixes suitable for casting path edging, flagstones or coping stones, mould oil

#### **Tools and equipment**

Shovel, wheelbarrow, pegs, trowel, straight edge, mallet, level, tape measure, moulds.

The learner will:

2. be able to prepare moulds to receive concrete.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to mixing concrete to be used in moulds
- 2.2 select **materials** required to mix concrete to be used in moulds
- 2.3 select **tools and equipment** required to mix concrete to be used in moulds
- 2.4 select suitable moulds
- 2.5 prepare moulds to receive concrete mix.

#### Range

#### **Personal Protective Equipment (PPE)**

Safety boots, hard hat, high visibility jackets, goggles, gloves.

#### Materials

Timber moulds, concreting sand, gravel, cement, mould oil.

#### **Tools and equipment**

Shovel, wheelbarrow, trowel, straight edge, mallet, level, tape measure.

#### Learning outcome

The learner will:

3. be able to mix concrete to cast products.

#### Assessment criteria

The learner can:

- 3.1 mix concrete by hand
- 3.2 fill moulds, compact and finish concrete.

#### Learning outcome

The learner will:

4. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 4.1 set up the work area safely
- 4.2 maintain a clean and safe working area following health and safety guidelines
- 4.3 clear work area of surplus **materials** and debris on completion of the jobs
- 4.4 clean all **tools and equipment** ready for re-use.

### Unit 125 Preparing background surfaces and applying finishing coats

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to prepare background surfaces and apply finishing coats.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** for preparing backgrounds and applying finishing plaster
- 1.2 identify **tools and equipment** required to prepare background surfaces and apply finishing coats
- 1.3 identify the **materials** required to prepare background surfaces and form a finishing coat
- 1.4 identify types of background surfaces
- 1.5 state the process of preparing backgrounds to receive finishing coats
- 1.6 state the process of applying a finishing coat.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, goggles, boots, high visibility jackets, barrier cream.

#### **Tools and equipment**

Spot board and stand, plasterers hawk (hand board), finishing trowel, gauging trowel, gauging trowel, bucket, plunger, mixing drill, dust sheets, scraper stiff brush.

#### Materials

Multi finish, board finish. Proprietary bonding agents, scrim tape bonding.

The learner will:

2. be able to prepare background surfaces and apply finishing coats.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** for preparing background surfaces and applying finishing coats
- 2.2 select **tools and equipment** required to prepare background surfaces and apply finishing coats
- 2.3 select **materials** required to prepare background surfaces and apply finishing coats
- 2.4 prepare background surfaces and apply finishing coats to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, goggles, boots, high visibility jackets, barrier cream.

#### **Tools and equipment**

Spot board and stand, plasterers hawk (hand board), finishing trowel, gauging trowel, gauging trowel, bucket, brush, paddle, dust sheets, scraper.

#### Materials

Multi finish, board finish.

Proprietary bonding agents, scrim tape bonding.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 126 Mixing materials and applying floating coats

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to mix materials and apply floating coats.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** for mixing **materials** and applying floating coats
- 1.2 identify the **materials** required to apply floating coats
- 1.3 identify **tools and equipment** required to mix **materials** and apply floating coats
- 1.4 identify different ratios of mixing plastering **materials** for application of floating coats
- 1.5 state the importance of material depths
- 1.6 identify **methods** of forming plumb surfaces.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, goggles, boots, high visibility jackets, barrier cream.

#### **Tools and equipment**

Spot board and stand, plasterers hawk (hand board), feather edge, plasterers trowel, gauging trowel, scratcher/scarifier gauging trowel, bucket, brush, shovel, paddle, gauging box, dust sheets.

#### Materials

Sand, cement, lime, additives.

#### Methods

Box, vertical and horizontal screeds.

The learner will:

2. be able to mix **materials** and apply floating coats.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** for mixing and applying floating coats
- 2.2 select **tools and equipment** required to mix and apply floating coats
- 2.3 select materials required to mix and apply floating coats
- 2.4 mix **materials** and apply floating coats to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, goggles, boots, high visibility jackets, barrier cream.

#### **Tools and equipment**

Spot board and stand, plasterers hawk (hand board), feather edge, plasterers trowel, gauging trowel, scratcher/scarifier, gauging trowel, bucket, brush, shovel, paddle, gauging box, dust sheets.

#### Materials

Sand, lime, cement.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 127 Producing components from moulds

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to produce casts from moulds.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** required for producing casts from moulds
- 1.2 identify tools and equipment required to produce casts from moulds
- 1.3 identify materials required to form casts from moulds
- 1.4 state the purpose of using a mould
- 1.5 state processes for producing casts from moulds.

#### Range

#### **Personal Protective Equipment (PPE)**

Hard hat, dust mask, gloves, barrier cream, goggles, boots, high visibility jackets.

#### **Tools and equipment**

Small tool, joint rule, splash brush, mixing bowls, buckets, mould.

#### Materials

Casting plaster, cement, lath, hessian, jute, canvas, steel, release agents, sand.

The learner will:

2. be able to produce casts from moulds.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** for casting from moulds
- 2.2 select **tools and equipment** required to cast from moulds
- 2.3 select **materials** required to cast from moulds
- 2.4 produce casts from moulds to given specifications
- 2.5 release and tidy cast to rectify imperfections to given specifications.

#### Range

#### Personal Protective Equipment (PPE)

Hard hat, dust mask, gloves, barrier cream, goggles, boots, high visibility jackets.

#### **Tools and equipment**

Small tool, joint rule, splash brush, mixing bowels buckets, mould.

#### Materials

Casting plaster, cement, lath, steel, hessian, jute, canvas release agents, sand.

#### **Produce casts**

Methods - firsting, seconds, reinforcements, imperfections, air bubbles.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus **materials** and debris on completion of the job
- 3.4 clean all **tools and equipment** ready for re-use.

# Unit 128 Bending and jointing copper pipes

Level:	Level 4
Credit value:	3

#### Learning outcome

The learner will:

1. know how to cut, bend and joint copper pipes.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to cutting, bending and jointing copper pipes
- 1.2 identify **materials** required to cut, bend and joint copper pipes
- 1.3 identify **tools and equipment** required to cut, bend and joint copper pipes
- 1.4 state the **types** of capillary fittings used to joint copper pipes
- 1.5 state the **process** required to cut, bend and joint copper pipes
- 1.6 state the health and safety **regulations** related to cutting, bending and jointing copper pipes.

#### Range

#### **Personal Protective Equipment (PPE)**

Steel toe cap boots, protective clothing, goggles.

#### Materials

Copper pipes, end feed fittings, flux and solder.

#### **Tools and equipment**

Pipe-slice, junior hacksaw, pipe bender, blow torch, soldering mat, tape measure, wire wool/abrasive cloth.

#### Types

End feed, soldering.

#### Process

Measuring and recording pipe requirements, cutting copper pipe to length, preparing pipe ends for joining, bending copper pipe to form right angles, join copper pipe, tightening all joints, pressure testing.

#### Regulations

COSHH, PPE, Manual Handling, Risk Assessment.

#### Guidance

Learners should be aware of safe use of gas heating equipment.

#### Learning outcome

The learner will:

2. be able to cut, bend and joint copper pipe.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to cutting, bending and jointing copper pipes
- 2.2 select **materials** required to cut, bend and joint copper pipes
- 2.3 select **tools and equipment** required to cut, bend and joint copper pipes
- 2.4 cut, bend and joint copper pipes to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Steel toe-cap boots, protective clothing, goggles.

#### Materials

Copper pipes, end feed fittings, flux and solder.

#### **Tools and equipment**

Pipe-slice, junior hacksaw, pipe bender, blow torch, soldering mat, tape measure, wire wool/abrasive cloth.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus **materials** and debris on completion of the job
- 3.4 clean all **tools and equipment** ready for re-use.

# Unit 129 Connecting pipes and fittings to appliances

Level:	Level 4
Credit value:	3

#### Learning outcome

The learner will:

1. know how to connect pipes and fittings to appliances.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to connecting pipes and fittings to appliances
- 1.2 identify **materials** required to connect pipes and fittings to appliances
- 1.3 identify **tools and equipment** required to connect pipes and fittings to appliances
- 1.4 state **types** of fittings and pipe work
- 1.5 state the **process** required to connect pipes and fittings to appliances
- 1.6 state the health and safety **risks and hazards** related to connecting pipes and fittings to appliances.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing, goggles.

#### Appliance

Sink or basin.

#### Materials

Copper or plastic pipe, push fit plastic or copper end feed fittings, pipe fixings, waste pipe work, trap.

#### **Tools and Equipment**

Heat proof mat, blow torch, pipe slice, water pump pliers, adjustable spanner, basin wrench, box spanner, plastic pipe cutter, plastic pipe reamer, screw driver, tape measure, spirit level.

#### Types

Compression, capillary, push fit.

#### Process

Connection of pipe work from live water supply to appliance, disposal of wastewater from appliance, fitting pipes to appliance using either push fit or mechanical fit connections, checking defects and carrying out any remedial treatments.

#### **Risks and hazards**

COSHH, PPE, risk assessment, water regulations, code of practice.

#### Learning outcome

The learner will:

2. be able to connect pipes and fittings to appliances.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to connecting pipes and fittings to appliances
- 2.2 select **materials** required to connect pipes and fittings to appliances
- 2.3 select **tools and equipment** required to connecting pipes and fittings to appliances
- 2.4 connect pipes and fittings to appliances to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing, goggles.

#### Materials

Copper or plastic pipe, push fit plastic or copper end feed fittings, pipe fixings, waste pipe work, trap.

#### **Tools and Equipment**

Heat proof mat, blow torch, pipe slice, water pump pliers, adjustable spanner, basin wrench, box spanner, plastic pipe cutter, plastic pipe reamer, screw driver, tape measure, spirit level.

#### Guidance

Learners should use push fit or compression fittings.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

## Unit 130 Constructing combined frames

Level:	Level 4
Credit value:	4

#### Learning outcome

The learner will:

1. know how to construct combined frames.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to constructing combined frames
- 1.2 identify materials required to construct combined frames
- 1.3 identify **tools and equipment** required to construct combined frames
- 1.4 state the **process** required to construct combined frames
- 1.5 state the health and safety **regulations** related to cutting and jointing pipes.

#### Range

#### **Personal Protective Equipment (PPE)**

Protective clothing, gloves, boots.

#### Materials

Low carbon steel pipe, copper pipe, plastic pipe and push fit, compression fit, malleable iron fittings, plastic clips.

#### **Tools and equipment**

Bending machine/hand bender, tape measure, hacksaw, stocks and dies, pipe vice, plastic pipe cutter, pipe slice, screw driver, water pump pliers, adjustable spanner.

#### Process

Including measuring and recording pipe requirements, cutting pipe to length, removing the burr, bending tubes, cutting threads, jointing fittings, clipping frame to timber board, soundness testing, remedial action, decommission frame and recycle components.

#### Regulations

COSHH, PPE, Manual Handling, Risk Assessment.

The learner will:

2. be able to construct combined frames.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing combined frames
- 2.2 select **materials** required to construct combined frames
- 2.3 select **tools and equipment** required to construct combined frames
- 2.4 prepare and joint combined frames to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Protective clothing, gloves, boots.

#### Materials

Low carbon steel pipe, copper pipe, plastic pipe and relevant pipe fittings, plastic clips.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

## Unit 131 Installing rain water goods

Level:	Level 4
Credit value:	3

#### Learning outcome

The learner will:

1. know how to install rain water goods.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to installing rain water goods
- 1.2 identify **materials** required to install rain water goods
- 1.3 identify **tools and equipment** required to install rain water goods
- 1.4 state the **process** required to install rain water goods
- 1.5 state the health and safety **regulations** related to fixing rain water goods.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing.

#### Materials

Gutter, union, downpipe, swan neck, shoe, brackets, clips, running outlet, stopped end, suitable fixings (screws/rawplugs).

#### **Tools and equipment**

Hand tools: line, plumb bob, battery drill, tape measure, hand saw, screwdriver, line level.

#### Process

Levelling, measuring and recording, assembling gutter/pipe requirements, cutting gutter/pipe to length, fitting gutter/pipe to fascia using fittings and test for leaks and free flow of water.

#### Regulations

Manual handling, PPE, risk assessment, Working at Heights.

The learner will:

2. be able to install rain water goods.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to installing rain water goods
- 2.2 select **materials** required to installing rain water goods
- 2.3 select **tools and equipment** required to installing rain water goods
- 2.4 install rain water goods to given specifications.

#### Range

#### **Personal Protective Equipment (PPE)**

Boots, protective clothing.

#### Materials

Gutter, union, downpipe, swan neck, shoe, brackets, clips, running outlet, stopped end, suitable fixings (screws/rawplugs).

#### **Tools and equipment**

Hand tools: line, plumb bob, battery drill, tape measure, hand saw, screwdriver, line level.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 132 Working with low carbon steel pipes and fittings

Level:	Level 4
Credit value:	4

# Learning outcome

The learner will:

1. know how to cut, thread and joint low carbon steel pipe.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to cutting, threading and jointing low carbon steel pipe
- 1.2 identify **materials** required to cut, thread and joint low carbon steel pipe
- 1.3 identify **tools and equipment** required to cut, thread and joint low carbon steel pipe
- 1.4 state common sizes of stocks and dies
- 1.5 state the process required to cut, thread and joint low carbon steel pipe
- 1.6 state the health and safety regulations and hazards related to cutting, threading and jointing carbon steel pipe.

# Range

#### Personal Protective Equipment (PPE)

Boots, protective clothing, gloves.

#### Materials

Low carbon steel, malleable iron fittings, suitable jointing compound.

#### **Tools and Equipment**

Pipe vice, stock and die, hacksaw, tape measure, stilsons, file, tape measure, hand threader should be used.

# **Common sizes**

1⁄2, 3⁄4 inch.

#### Process

Including measuring and recording pipe requirements, cutting low carbon pipe to length, preparing pipe ends for jointing, threading pipe ends, joint low carbon steel pipe, tightening all joints, pressure testing, checking for defects and taking remedial action, decommission frame and recycle components.

#### Regulations

COSHH, PPE, manual handling, risk assessment.

The learner will:

2. be able to cut, thread and joint low carbon steel pipe.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to cutting, threading and jointing low carbon steel pipe
- 2.2 select **materials** required to cut, thread and joint low carbon steel pipe
- 2.3 select **tools and equipment** required to cutting, threading and jointing low carbon steel pipe
- 2.4 cut, thread and joint low carbon steel pipe to given specifications.

# Range

# Personal Protective Equipment (PPE)

Boots, protective clothing, gloves.

# Materials

Low carbon steel, malleable iron fittings, suitable jointing compound.

# **Tools and equipment**

Pipe vice, stock and die, hacksaw, tape measure, stilsons, file, tape measure, hand threader should be used.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 133 Assembling 13amp switched sockets wired in ring final circuit

Level:	Level 4
Credit value:	4

# Learning outcome The learner will: 1. know how to assemble 13amp switched sockets wired in ring final circuit. Assessment criteria The learner can: 1.1 identify **Personal Protective Equipment (PPE)** appropriate to assembling 13 amp switched sockets wired in ring final circuit identify materials required to assemble 13amp switched sockets 1.2 wired in ring final circuit 1.3 identify **tools and equipment** required to assemble 13amp switched sockets wired in ring final circuit 1.4 state the health and safety **regulations** related to assembling 13amp switched sockets wired in ring final circuit 1.5 state use of a meter for testing continuity of ring circuits 1.6 state the process required to assemble 13amp switched sockets wired in ring final circuit. Range

# **Personal Protective Equipment (PPE)**

Boots, overalls, goggles, gloves.

#### Materials

Twin and CPC, cable clips, back box, single socket, green/ yellow sleeving, appropriate screws.

# **Tools and equipment**

Electrician's knife, terminal screwdrivers, wire stripper, side cutters, pliers, hammer, cross-head screw driver, tape measure/steel rule.

#### Regulations

Health & Safety at Work Act, COSHH, BS7671:2008 IET Wiring Regulations, Electricity at Work Regulations 1989.

The learner will:

2. be able to assemble 13amp switched sockets wired in ring final circuit.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to assembling 13amp switched sockets wired in ring final circuit
- 2.2 select **materials** required to assemble 13amp switched sockets wired in ring final circuit
- 2.3 select **tools and equipment** required to assemble 13amp switched sockets wired in ring final circuit
- 2.4 assemble 13amp switched sockets wired in ring final circuit to given specifications
- 2.5 use meter to **test continuity** of circuits.

# Range

# **Personal Protective Equipment (PPE)**

Boots, overalls, goggles, gloves.

#### Materials

Twin and CPC/twin and earth, cable clips, socket box, green/yellow sleeving, appropriate screws.

# **Tools and equipment**

Electrician's knife, terminal screwdrivers, wire stripper, side cutters, pliers, hammer, cross-head screw driver, tape measure/ steel rule.

# **Test continuity**

The circuit should be operated at 12v when testing.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

#### Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 134 Constructing PVC wiring systems

Level:	Level 4
Credit value:	4

rning outcome
learner will:
know how to construct PVC wiring systems.
essment criteria
learner can:
identify <b>Personal Protective Equipment (PPE)</b> appropriate to constructing PVC wiring systems
identify <b>materials</b> required to construct PVC wiring systems
identify <b>tools and equipment</b> required to construct PVC wiring systems
state the health and safety <b>regulations</b> related to constructing PVC wiring systems

- 1.5 state the need for mechanical protection
- 1.6 state the process required to construct PVC wiring systems.

# Range

#### **Personal Protective Equipment (PPE)**

Boots, overalls, goggles, gloves.

#### Materials

PVC conduit, PVC trunking, plastic bushes and adapters, manufacturers tee, single PVC box, saddles, fixing screws, end caps.

# **Tools and equipment**

Bending spring, 20mm cutter, file, tape measure, hacksaw, cross-head screwdriver, flat blade screwdriver, set square.

# Regulations

Health & Safety at Work Act, COSHH, BS7671:2008 IET Wiring Regulations, Electricity at Work Regulations 1989.

The learner will:

2. be able to construct PVC wiring systems.

#### Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to constructing PVC wiring systems
- 2.2 select **materials** required to construct PVC wiring systems
- 2.3 select **tools and equipment** required to construct PVC wiring systems
- 2.4 construct PVC wiring systems to given specifications.

# Range

# Personal Protective Equipment (PPE)

Boots, overalls, goggles, gloves.

# Materials

PVC conduit, PVC trunking, plastic bushes and adapters, manufacturer's tee, single PVC box, saddles, fixing screws, end caps.

# **Tools and equipment**

Bending spring, 20mm cutter, file, tape measure, hacksaw, cross-head screwdriver, flat blade screwdriver, set square.

# Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 135 Cutting, bending, jointing and threading conduit

Level:	Level 4
Credit value:	4

The	learner will:
1. know how to cut, bend, join and thread conduit.	
Assessment criteria	
The	learner can:
1.1	identify <b>Personal Protective Equipment (PPE)</b> appropriate to cutting, bending, joining and threading conduit
1.2	identify <b>materials</b> required to cut, bend, join and thread conduit
1.3	identify <b>tools and equipment</b> required to cut, bend, join and thread conduit
1.4	state the health and safety <b>regulations</b> related to cutting, bending, joining and threading conduit
1.5	state the process required to cut, bend, join and thread conduit.

#### Range

# **Personal Protective Equipment (PPE)**

Boots, overalls, goggles, gloves.

# Materials

Coupler, milled lock nut.

# **Tools and equipment**

Conduit benders, hacksaw, files, stocks and dies, cutting paste, rule/tape measure, set square, pipe grips.

# Regulations

Health & Safety at Work Act, COSHH, BS7671:2008 IET Wiring Regulations, Electricity at Work Regulations 1989.

The learner will:

2. be able to cut, bend, join and thread conduit.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to cutting, bending, joining and threading conduit
- 2.2 select **materials** required to cut, bend, join and thread conduit
- 2.3 select **tools and equipment** required to cut, bend, join and thread conduit
- 2.4 cut, bend, join and thread conduit to given specifications.

# Range

# Personal Protective Equipment (PPE)

Boots, overalls, goggles, gloves.

# Materials

Coupler, milled lock nut.

# **Tools and equipment**

Conduit benders, hacksaw, files, stocks and dies, cutting paste, rule/tape measure, set square, pipe grips.

# Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 136 Installing one way lighting circuits

Level:	Level 4
Credit value:	3

# Learning outcome

The learner will:

1. know how to install one way lighting circuits.

#### Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to installing one way lighting circuits
- 1.2 identify materials required to install one way lighting circuits
- 1.3 identify **tools and equipment** required to install one way lighting circuits
- 1.4 state the health and safety **regulations** related to installing one way lighting circuits
- 1.5 state **types** of fixing methods
- 1.6 state the process required to install a one way lighting circuit.

#### Range

#### Personal Protective Equipment (PPE)

Boots, overalls, goggles, gloves.

#### Materials

Twin and CPC/twin and earth, cable clips, ceiling rose, switch box, one way switch, green/yellow sleeving, brown sleeving, appropriate screws, lampholder, flexible cable.

#### **Tools and equipment**

Electricians knife, terminal screwdrivers, wire stripper, side cutters, pliers, hammer, cross-head screw driver, tape measure/steel rule.

#### Regulations

Health & Safety at Work Act, COSHH, BS7671:2008 IET Wiring Regulations, Electricity at Work Regulations 1989.

# Types

Wood screws for base and box, cable clips for cables.

# Guidance

Although it is not a requirement for this unit, it is recommended that learners have an awareness of working at heights safely.

The learner will:

2. be able to install one way lighting circuits.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to installing one way lighting circuits
- 2.2 select materials required to install one way lighting circuits
- 2.3 select **tools and equipment** required to install one way lighting circuits
- 2.4 install one way lighting circuits to given specifications
- 2.5 **test continuity** of one way lighting circuits.

# Range

# Personal Protective Equipment (PPE)

Boots, overalls, goggles, gloves.

# Materials

Twin and CPC/ twin and earth, cable clips, ceiling rose, switch box, one way switch, green/yellow sleeving, brown sleeving, screws.

# **Tools and equipment**

Electricians knife, terminal screwdrivers, wire stripper, side cutters, pliers, hammer, cross-head screw driver, tape measure/steel rule, bradawl.

# **Test continuity**

The circuit should be operated at 12v when testing.

# Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

# Unit 137 Installing two way lighting circuits

Level:	Level 4
Credit value:	4

# Learning outcome

The learner will:

1. know how to install two way lighting circuits.

# Assessment criteria

The learner can:

- 1.1 identify **Personal Protective Equipment (PPE)** appropriate to installing two way lighting circuits
- 1.2 identify **materials** required to install two way lighting circuits
- 1.3 identify **tools and equipment** required to install two way lighting circuits
- 1.4 state the health and safety **regulations** related to installing two way lighting circuits
- 1.5 state types of fixing methods
- 1.6 state the process required to install a two way lighting circuit.

# Range

# Personal Protective Equipment (PPE)

Boots, overalls, goggles, gloves.

# Materials

Twin and CPC, three core earth and cable, cable clips, ceiling rose, ceiling rose base, switch box, two way switch, green/yellow sleeving, brown sleeving, screws.

# **Tools and equipment**

Electricians knife, terminal screwdrivers, wire stripper, pliers, side cutters, hammer, cross-head screwdriver.

# Regulations

Health & Safety at Work Act, COSHH, BS7671:2008 IET Wiring Regulations, Electricity at Work Regulations 1989.

# Guidance

Although it is not a requirement for this unit, it is recommended that learners have an awareness of working at heights safely.

The learner will:

2. be able to install two way lighting circuits.

# Assessment criteria

The learner can:

- 2.1 use **Personal Protective Equipment (PPE)** appropriate to installing two way lighting circuits
- 2.2 select materials required to install two way lighting circuits
- 2.3 select **tools and equipment** required to install two way lighting circuits
- 2.4 install two way lighting circuits to given specifications
- 2.5 **test continuity** of two way lighting circuits.

# Range

# Personal Protective Equipment (PPE)

Boots, overalls, goggles, gloves.

# Materials

Twin and CPC, three core earth and cable, cable clips, ceiling rose, ceiling rose base, switch box, two way switch, green/yellow sleeving, brown sleeving, screws.

# **Tools and equipment**

Electricians knife, terminal screwdrivers, wire stripper, pliers, side cutters, hammer, cross-head screwdriver.

# Test continuity

The circuit should be operated at 12v when testing.

#### Learning outcome

The learner will:

3. be able to set up and maintain a clean and safe working environment.

# Assessment criteria

- 3.1 set up the work area safely
- 3.2 maintain a clean and safe working area following health and safety guidelines
- 3.3 clear work area of surplus materials and debris on completion of the job
- 3.4 clean all tools and equipment ready for re-use.

Appendix 1





# Links to other qualifications

Centres are responsible for checking the different requirements of all qualifications they are delivering and ensuring that candidates meet requirements of all units/qualifications.



The following documents contain essential information for centres delivering City & Guilds qualifications. They should be referred to in conjunction with this handbook. To download the documents and to find other useful documents, go to the **Centres and Training Providers homepage** on **www.cityandguilds.com**.

**Centre Manual - Supporting Customer Excellence** contains detailed information about the processes which must be followed and requirements which must be met for a centre to achieve 'approved centre' status, or to offer a particular qualification, as well as updates and good practice exemplars for City & Guilds assessment and policy issues. Specifically, the document includes sections on:

- The centre and qualification approval process
- Assessment, internal quality assurance and examination roles at the centre
- Registration and certification of candidates
- Non-compliance
- Complaints and appeals
- Equal opportunities
- Data protection
- Management systems
- Maintaining records
- Assessment
- Internal quality assurance
- External quality assurance.

**Access to Assessment & Qualifications** provides full details of the arrangements that may be made to facilitate access to assessments and qualifications for candidates who are eligible for adjustments in assessment.

The **centre homepage** section of the City & Guilds website also contains useful information such on things as:

- Walled Garden: how to register and certificate candidates on line
- Events: dates and information on the latest Centre events
- **Online assessment**: how to register for e-volve assessments.

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# **Useful contacts**

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<b>Centres</b> Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam <b>materials</b> , Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: <b>centresupport@cityandguilds.com</b>
Single subject qualifications Exam entries, Results, Certification, Missing or late exam materials, Incorrect exam papers, Forms request (BB, results entry), Exam date and time change	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 F: +44 (0)20 7294 2404 (BB forms) E: <b>singlesubjects@cityandguilds.com</b>
International awards Results, Entries, Enrolments, Invoices, Missing or late exam materials, Nominal roll reports	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: <b>intops@cityandguilds.com</b>
Walled Garden Re-issue of password or username, Technical problems, Entries, Results, e-assessment, Navigation, User/menu option, Problems	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: walledgarden@cityandguilds.com
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<b>Publications</b> Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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