

City & Guilds Level 2 Diploma in Painting and Decorating (6707-22/23)

March 2022 Version 2.5



Qualification at a glance

Subject area	Construction
City & Guilds number	6707
Age group approved	16-18, 19+
Assessment	Assignment, Multiple Choice
Support materials	Centre handbook Assessor guidance Task manual
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

Title and level	City & Guilds number	GLH	TQT	Accreditation number
Level 2 Certificate in Preparation and Application of Paint Systems	6707-22	100	130	600/8053/X
Level 2 Diploma in Painting and Decorating	6707-23	445	520	600/8584/8
Level 2 Extended Diploma in Painting and Decorating	6707-50	777	860	600/9224/5

Version and date	Change detail	Section
1.1 July 2013	Amendments made to the ranges and some wording within the assessment criterion for units 218 and 230.	Introduction
2.0	Range added to Unit 230 (AC3 and AC4)	Units
2.1 July 2014	Centre staffing amended	Centre requirements
2.2 January 2015	Amendments to the test specification for unit 215	Test specification
2.3 Dec 15	Updated range for LO 1, 3 and 4 in unit 201/601	Units
2.4 Jan 2019	Updated range for LO 5 in unit 220	Units

2.5 March 22	TQT CLH clarification	Addition of TQT and GLH tables
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1 Introduction

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

Area	Description
Who are the qualifications for?	They are for learners who work or want to work as a Painter and Decorator in the Construction sector.
What do the qualifications cover?	<p>They allow learners to learn, develop and practise the skills required for employment and/or career as a painter and decorator.</p> <p>They cover the following skills:</p> <ul style="list-style-type: none"> • Erecting and Dismantling Access Equipment and Working Platforms • Preparing Surfaces for Decoration • Applying Paint Systems by Brush and Roller to complex areas • Applying standard wallpapers and hangings Foundation • Producing Specialist finishes for decorative work • Applying and Creating Colour
Are the qualifications parts of a framework or initiative?	The Diploma is a technical certificate within the Construction Building Apprenticeship Framework.
What opportunities for progression are there?	<p>It allows learners to progress into employment or to the following City & Guilds qualifications:</p> <p>Level 2 NVQ Diploma in Painting and Decorating</p> <p>Level 3 Diploma in Painting and Decorating</p>

Structure

To achieve the **Level 2 Certificate in Preparation and Application of Paint Systems (6707-22)**, learners must achieve **13** credits from the mandatory units in the table below.

Unit accreditation number	City & Guilds unit no.	Unit title	Credit value	Guided Learning Hours (GLH)
Mandatory				
A/504/7000	215	Preparing surfaces for decoration	7	50
K/505/0927	216	Applying paint systems by brush and roller to complex areas	6	50

To achieve the **Level 2 Diploma in Painting and Decorating (6707-23)**, learners must achieve **52** credits from the mandatory units listed in the table below.

Unit accreditation number	City & Guilds unit no.	Unit title	Credit value	Guided Learning Hours (GLH)
Mandatory				
A/504/6719	201/601	Health, safety and welfare in construction	7	70
Y/504/6999	202/602	Principles of building construction, information and communication	6	55
A/504/7000	215	Preparing surfaces for decoration	7	50
K/505/0927	216	Applying paint systems by brush and roller to complex areas	6	50
F/504/7001	217	Applying standard papers to walls and ceilings	11	90
H/505/0926	218	Producing specialist finishes for decorative work	8	70
M/505/0928	220	Erecting and dismantling access equipment and working platforms	3	30
T/505/0929	230	Creating and applying colour	4	30

To achieve the **Level 2 Extended Diploma in Painting and Decorating (6707-50)**, learners must achieve all **86** credits from the mandatory units listed in the table below.

Unit accreditation number	City & Guilds unit no.	Unit title	Credit value	Guided Learning Hours (GLH)
Mandatory				
A/504/6719	201/601	Health, safety and welfare in construction	7	70
Y/504/6999	202/602	Principles of building construction, information and communication	6	55
A/504/6722	101/501	Principles of building construction, information and communication	6	52
J/504/8442	116	Erecting and dismantling access equipment and working platforms	2	20
D/504/6728	117	Preparing surfaces for decoration	7	70
H/504/6827	118	Applying paint systems by brush and roller to non-complex areas	9	90
Y/504/6727	119	Applying foundation and plain papers	7	70
R/504/6726	120	Producing specialist decorative finishes	3	30
A/504/7000	215	Preparing surfaces for decoration	7	50
K/505/0927	216	Applying paint systems by brush and roller to complex areas	6	50
F/504/7001	217	Applying standard papers to walls and ceilings	11	90
H/505/0926	218	Producing specialist finishes for decorative work	8	70
M/505/0928	220	Erecting and dismantling access equipment and working platforms	3	30
T/505/0929	230	Creating and applying colour	4	30

Please Note the Extended Diploma is for learners starting an Apprenticeship at Level 2.

Information for the level 1 units can be found in the Level 1 Painting and Decorating handbook.

Total Qualification Time

Total Qualification Time (TQT) is the total amount of time, in hours, expected to be spent by a Learner to achieve a qualification. It includes both guided learning hours (which are listed separately) and hours spent in preparation, study and assessment.

Title and level	GLH	TQT
Level 2 Certificate in Preparation and Application of Paint Systems (6707-22)	100	130
Level 2 Diploma in Painting and Decorating (6707-23)	445	520
Level 2 Extended Diploma in Painting and Decorating (6707-50)	777	860



2 Centre requirements

Approval

The approval process for construction qualifications is available at our website. Please visit www.cityandguilds.com/construction for further information.

Resource requirements

Physical resources and site agreements

Centres will have well equipped workshops with a comprehensive range of hand and portable power tools that meet current industry standards. All powered equipment should be well maintained and PAT certified. Facilities for grinding and sharpening hand tools will be available. Centres will have special designated areas within Painting and Decorating workshop (cubicles or project areas) allowing candidates to practice the requirements of the units and carry out the Practical Assignments.

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 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.

Learner entry requirements

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

Age restrictions

City & Guilds cannot accept any registrations for learners under 16 as these qualifications are not approved for under 16s.



3 Delivering the qualification

Initial assessment and induction

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

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

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

Support materials

The following resources are available for this qualification:

Description	How to access
Assessor guidance	www.cityandguilds.com
Task manual	www.cityandguilds.com
Qualification approval form	www.cityandguilds.com/construction
SmartScreen	www.smartscreen.co.uk



4 Assessment

Unit	Title	Assessment method	Where to obtain assessment materials
201/601	Health, safety and welfare in construction	City & Guilds e-volve multiple choice test or on demand externally marked paper. The test covers all of the knowledge in the unit.	Examinations provided on e-volve, or question papers ordered via Walled Garden.
202/602	Principles of building construction, information and communication	City & Guilds e-volve multiple choice test or on demand externally marked paper. The test covers all of the knowledge in the unit.	Examinations provided on e-volve, or question papers ordered via Walled Garden.
215	Preparing surfaces for decoration	Multiple choice question paper, covering knowledge outcomes. Practical assignment, covering performance outcomes.	www.cityandguilds.com
216	Applying paint systems by brush and roller to complex areas	Multiple choice question paper, covering knowledge outcomes. Practical assignment, covering performance outcomes.	www.cityandguilds.com
		Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.	
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Unit	Title	Assessment method	Where to obtain assessment materials
217	Applying standard papers to walls and ceilings	<p>Multiple choice question paper, covering knowledge outcomes.</p> <p>Practical assignment, covering performance outcomes.</p> <p>Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.</p>	www.cityandguilds.com
218	Producing specialist finishes for decorative work	<p>Multiple choice question paper, covering knowledge outcomes.</p> <p>Practical assignment, covering performance outcomes.</p> <p>Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.</p>	www.cityandguilds.com
220	Erecting and dismantling access equipment and working platforms	<p>Multiple choice question paper, covering knowledge outcomes.</p> <p>Practical assignment, covering performance outcomes.</p> <p>Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out.</p>	www.cityandguilds.com

Unit	Title	Assessment method	Where to obtain assessment materials
230	Creating and applying colour	<p>Multiple choice question paper, covering knowledge outcomes.</p> <p>Practical assignment, covering performance outcomes.</p> <p>Both assessments are set by City & Guilds, delivered and marked by the tutor/assessor, and will be externally verified by City & Guilds to make sure they are properly carried out</p>	www.cityandguilds.com

Test specifications

The way the knowledge is covered by each test is laid out in the tables below:

Test 1: Unit 201/601 Health, safety and welfare in construction

Duration: 60 minutes

Unit	Outcome	Number of questions	%
201/601	1 Know the health and safety regulations, roles and responsibilities	7	17.5
	2 Know accident and emergency reporting procedures and documentation	5	12.5
	3 Know how to identify hazards in the workplace	7	17.5
	4 Know about health and welfare in the workplace	3	7.5
	5 Know how to handle materials and equipment safely	2	5
	6 Know about access equipment and working at heights	3	7.5
	7 Know how to work with electrical equipment in the workplace	4	10
	8 Know how to use personal protective equipment (PPE)	5	12.5
	9 Know the cause of fire and fire emergency procedures	4	10
	Total	40	100

Test 2: Unit 202/602 Principles of building construction, information and communication

Duration: 80 minutes

Unit	Outcome	Number of questions	%
202/602	1 Understand how to select types of building information	5	12.5
	2 Know about environmental considerations in relation to construction	5	12.5
	3 Understand the construction of foundations	7	17.5
	4 Understand construction of internal and external walls	9	22.5
	5 Know about construction of floors	4	10
	6 Know about construction of roofs	3	7.5
	7 Understand how to communicate in the workplace	7	17.5
	Total	40	100

Test 3: Unit 215 Preparing surfaces for decoration

Duration: 45 minutes

Unit	Outcome	Number of questions	%
215	1 Know how to prepare timbers and timber sheet products ready to receive finishing systems	5	17
	3 Know how to prepare metal surfaces ready to receive finishing systems	3	10
	5 Know how to prepare trowelled finishes and plasterboard ready to receive finishing systems	3	10
	7 Understand how to remove previously painted and prepared surfaces ready to receive finishing systems	6	20
	9 Know how to rectify surface conditions and defects	6	20
	11 Understand how to repair and make good surfaces	7	23

Total **30** **100**

Test 4: Unit 216 Applying paint systems by brush and roller to complex areas

Duration: 40 minutes

Unit	Outcome	Number of questions	%
216	1 Understand how to prepare domestic and commercial work areas and protect surrounding areas	6	24
	3 Understand how to prepare and apply water-borne and solvent-borne coatings by brush and roller in line with manufacturer's instructions	13	52
	5 Understand how to clean, maintain and store brushes and rollers in line with manufacturer's instructions	2	8
	7 Understand how to store materials	4	16
Total		25	100

Test 5: Unit 217 Applying standard papers to walls and ceilings

Duration: 50 minutes

Unit	Outcome	Number of questions	%
217	1 Understand methods used in wallpaper production	7	23
	2 know how to select and prepare adhesives	4	13
	4 Understand how to apply papers to ceilings and walls	18	58
	6 understand how to store materials	2	6
Total		31	100

Test 6: Unit 218 Producing specialist finishes for decorative work
Duration: 45 minutes

Unit	Outcome	Number of questions	%
218	2 Understand how to produce broken colour effect using water-borne and solvent-borne scumbles	11	39
	4 Understand how to prepare stencil plates from given design and apply stencils	6	22
	6 Understand how to produce wood and marble effects using basic techniques	11	39
Total		28	100

Test 7: Unit 220 Erecting and dismantling access equipment and working platforms
Duration: 30 minutes

Unit	Outcome	Number of questions	%
220	1 Understand the preparation required for using access equipment and working platforms	4	20
	3 Understand how to check access equipment and identify faults	8	40
	5 Understand how to erect access equipment and working platforms	6	30
	7 Understand how to dismantle and store components	2	10
Total		20	100

Test 8: Unit 230 Creating and applying colour

Duration: 40 minutes

Unit	Outcome	Number of questions	%
230	1 Understand the colours required to create a colour wheel	10	39
	3 Understand colour organisational systems and terminology used in industry	11	42
	4 Understand the effects that artificial light has on colour	5	19
	Total	26	100



5 Units

Structure of units

These units each have the following:

- City & Guilds reference number
- unit accreditation number (UAN)
- title
- level
- credit value
- guided learning hours
- unit aim
- learning outcomes which are comprised of a number of assessment criteria

Range explained:

Range gives further scope on what areas within assessment criteria must be covered. The range in a unit **must** be taught to learners and parts of the range will be assessed.

Glossary of terms:

The following key words and terms are used in the units.

Term	Definition
Ball-pien hammer	Small hand held hammer used with nail punches and when placing sprigs in window frames etc
Broom	Sweeping brush
Caulking blades	Refers to caulk boards plastic/stiff rubber
Cherry Pickers	Motor vehicle which has an extendable boom with cage where operatives stand in when painting high points/areas on buildings/bridges etc
Chisel knife	Small 1inch/25mm scraper used to assist operatives removing small drawing pins, staples etc during preparation of surfaces
Curtains	Heavy build up of paint/coating sliding down surface
Drop sheets	Large dust sheets
Making good	Preparing surfaces ready for decoration etc
Paper hanging shears	Paperhanging scissors

Pop ups	Small podium scaffold which can be collapsed down when not in use
Outriggers	Stabilisers on mobile tower scaffolds
Scuttle	Roller bucket
Skid marks	Roller head slides across surface during application of coatings
Starting lines	Starting lines
Swingbacks	Back frame of a step ladder
Wood ingrain	Woodchip paper

Unit 201/601 Health, safety and welfare in construction

UAN:	A/504/6719
Level:	2
Credit value:	7
GLH:	70
Endorsement by a sector or regulatory body:	This unit is endorsed by Construction Skills, the Sector Skills Council for the construction industry.
Aim:	The aim of this unit is to provide the learner with the knowledge to carry out safe working practices in construction, in relation to sourcing relevant safety information and using the relevant safety procedures at work

Learning outcome
The learner will:
1. know the health and safety regulations, roles and responsibilities
Assessment criteria
The learner can:
1.1 identify health and safety legislation relevant to and used in the construction environment
1.2 state employer and employee responsibilities under the Health and Safety at Work Act (HASWA)
1.3 state roles and responsibilities of the Health and Safety Executive (HSE)
1.4 identify organisations providing relevant health and safety information
1.5 state the importance of holding on-site safety inductions and toolbox talks.

Range

Health and safety legislation

Health and Safety at Work Act, Reporting Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), Control of Substances Hazardous to Health (COSHH), Construction, Design and Management (CDM) regulations, Provision and Use of Work Equipment Regulations (PUWER), manual handling operations Regulations, Personal Protective Equipment (PPE) at Work Regulations, Work at Height Regulations, Control of Noise at Work Regulations, Control of Vibration at Work Regulations, Electricity at Work Regulations, Lifting operations and Lifting Equipment Regulations (LOLER)

Employer responsibilities

Safe working environment, adequate staff training, health and safety information, site inductions, toolbox talks, risk assessment, supervision, PPE, reporting hazards, accidents and near misses, sections 2 to 9 of Health and Safety at Work Act, CDM reg's, construction phase plans, welfare, display public liability Insurance and health and safety law poster.

Employee responsibilities

Working safely, working in partnership with the employer, reporting hazards, accidents and near misses, following organisational procedures as per Sections 2 to 9 of Health and Safety at Work Act.

Roles and responsibilities:

Enforcement (including fees for intervention), legislation and advice, inspection, investigation eg site investigations.

Organisations

Health and Safety Executive (HSE) website, Institute of Occupational Safety and Health, British Safety Council, 'manufacturer', ROSPA.

Learning outcome

The learner will:

2. know accident and emergency reporting procedures and documentation

Assessment criteria

The learner can:

- 2.1 state legislation used for reporting accidents
- 2.2 state major **types of emergencies** that could occur in the workplace
- 2.3 identify reportable injuries, diseases and dangerous occurrences as per RIDDOR
- 2.4 state main types of **records** used in the event of an accident, emergency and near miss and reasons for reporting them
- 2.5 identify **authorised personnel** involved in dealing with accident and emergency situations

2.6 state **actions** to take when discovering an accident.

Range

Types of emergencies

Fires, security incidents, gas leaks.

Records:

Accident book, first aid records, organisational records and documentation.

Authorised personnel

First aiders, supervisors/managers, health and safety executive, emergency services, safety officer.

Actions

Area made safe, call for help, emergency services.

Learning outcome

The learner will:

3. know how to identify hazards in the workplace

Assessment criteria

The learner can:

3.1 state the importance of **good housekeeping**

3.2 state reasons for risk assessments and method statements

3.3 identify **types of hazards** in the workplace

3.4 state the importance of the correct storage of combustibles and chemicals on site

3.5 identify different **signs and safety notices** used in the workplace.

Range

Good housekeeping:

Cleanliness, tidiness, use of skips and chutes, segregation of materials, clear access to fire escapes, clear access to fire extinguishers.

Types of hazards:

Fires, slips, trips and falls, hazardous substances (relating to inhalation, absorption, exposure, ingestion, cross-contamination), electrical, asbestos, manual handling, plant and vehicle movement, adverse weather.

Signs and safety notices:

Prohibition, mandatory, warning, safe condition, supplementary.

Learning outcome

The learner will:

4. know about health and welfare in the workplace
Assessment criteria
The learner can:
4.1 identify requirements for welfare facilities in the workplace as per Construction Design Management (CDM)
4.2 state health effects of noise and precautions that can be taken
4.3 state risks associated with drugs, alcohol and medication which could affect performance in the workplace.

Range
Precautions Reducing noise at source, PPE, isolation, exposure time.
Risks Reduced risk perception, loss of concentration, balance problems, absenteeism and reduced productivity.

Learning outcome
The learner will:
5. know how to handle materials and equipment safely
Assessment criteria
The learner can:
5.1 identify legislation relating to safe handling of materials and equipment
5.2 state procedures for safe lifting and manual handling activities in accordance with guidance and legislation
5.3 state the importance of using lifting aids when handling materials and equipment.

Range
Lifting aids Wheelbarrow, sack barrow, mechanical lifting aids, pallet truck.

Learning outcome
The learner will:
6. know about access equipment and working at heights
Assessment criteria
The learner can:
6.1 identify legislation relating to working at heights
6.2 identify types of access equipment
6.3 state safe methods of use for access equipment
6.4 identify dangers of working at height.

Range
<p>Access equipment: Stepladders, ladders (pole, extension), trestles, hop-ups, proprietary scaffolding, podium, stilts</p> <p>Safe methods Regular inspection, check for broken, damaged or missing components, responsible use, consideration of adverse weather conditions, good housekeeping</p> <p>Dangers Falling tools, falling equipment, falling materials, persons falling from height (injuries to themselves and others).</p>

Learning outcome
The learner will:
7. know how to work with electrical equipment in the workplace
Assessment criteria
The learner can:
7.1 state precautions to take to avoid risks to self and others when working with electrical equipment
7.2 state dangers of using electrical equipment
7.3 identify voltages and voltage colour coding that are used in the workplace
7.4 state methods of storing electrical equipment.

Range
<p>Precautions Check leads, check plugs, use of cable hangers, check tools and equipment, current valid PAT certificate</p> <p>Dangers: Burns, electrocution, fire.</p> <p>Voltages Battery powered, 110/115 volts, 230/240 volts and 415 volts.</p> <p>Methods Components present, equipment cleaned, checked for damage, stored in a clean and secure location.</p>

Learning outcome
The learner will:
8. know how to use Personal Protective Equipment (PPE)
Assessment criteria

The learner can:	
8.1	state the legislation governing use of Personal Protective Equipment (PPE)
8.2	state types of PPE used in the workplace
8.3	state the importance of PPE
8.4	state why it is important to store, maintain and use PPE correctly
8.5	state the importance of checking and reporting damaged PPE.

Range
PPE: Head protection, eye protection, ear protection, face/dust masks, breathing apparatus, high visibility clothing, safety footwear, gloves, sun protection, barrier cream, water proofs, knee pads, overalls/disposable clothing

Learning outcome
The learner will:
9. know the cause of fire and fire emergency procedures
Assessment criteria
The learner can:
9.1 state elements essential to creating a fire
9.2 identify methods of fire prevention
9.3 state actions to be taken on discovering a fire
9.4 state types of fire extinguishers and their uses.

Range
Elements Oxygen, fuel, heat.
Types of fire extinguishers: Water, foam, CO ₂ , dry powder.

Unit 202/602 Principles of building construction, information and communication

UAN:	Y/504/6999
Level:	2
Credit value:	6
GLH:	55
Endorsement by a sector or regulatory body:	This unit is endorsed by Construction Skills, the Sector Skills Council for the construction industry.
Aim:	<p>The aim of this unit is to provide the learner with the knowledge of building methods and construction technology in relation to:</p> <ul style="list-style-type: none"> • understanding a range of building materials used within the construction industry and their suitability to the construction of modern buildings. • source relevant information and apply it to relevant tasks • calculating the resources from required drawings and specifications.

Learning outcome
The learner will:
10. understand how to select types of building information.
Assessment criteria
The learner can:
10.1 interpret information sources used in construction
10.2 interpret scale, symbols and hatchings on a working drawing
10.3 explain the purpose of benchmarks used in construction.

Range
Information sources:
Drawings , schedules, specifications, programme of work, organisational chart, method statements, risk assessment, manufacturers' technical information, bill of quantities, order requisitions, delivery notes, variation orders, permits to work, signs and notices.
Symbols
WC, sink, bath, door, window

Hatchings

Brickwork, timber (wrot and unwrot), blockwork, concrete, hardcore, sub soil, insulation, damp proof course (DPC), damp proof membrane (DPM)

Benchmarks

Site datums, temporary bench marks (TBM), ordnance bench marks (OBM).

Learning outcome

The learner will:

11. know about environmental considerations in relation to construction.

Assessment criteria

The learner can:

- 11.1 describe thermally insulated **materials**
- 11.2 describe **methods** of making buildings water efficient
- 11.3 describe **methods** of making buildings energy efficient
- 11.4 state environmental-friendly **building materials**
- 11.5 state **procedures** for waste management.

Range**Materials**

Polyisocyanurate (PIR), Expanded Polystyrene (EP), fibre glass, mineral wool, double glazed units, multi-foil insulation.

Methods (2.2)

Efficient sanitary ware, water harvesting.

Methods (2.3)

Low energy lighting, automatic movement sensors, solar panels, wind turbines, heat source, biomass heating.

Building materials:

Locally sourced, managed timber (FSC), lime, sheep wool, recycled materials, straw.

Procedures:

Segregation and recycling of waste, safe disposal of hazardous materials, Local Exhaust Ventilation (LEV).

Learning outcome

The learner will:

12. understand the construction of foundations.

Assessment criteria

The learner can:

- 12.1 describe **factors** to be considered when selecting **foundations**

- 12.2 describe **materials** and mix-ratios used in concrete foundations
- 12.3 explain how to **set out** foundations
- 12.4 explain **factors** to consider when excavating foundations
- 12.5 describe methods of transferring datums
- 12.6 calculate the volume of concrete used in pile foundation.

Range

Factors (3.1)

Ground conditions (subsoil), strength, types of building .

Foundations

Strip, raft, pile, pad.

Materials:

Course aggregate, fine aggregate, cement, water, steel reinforcement, sulphate-resisting cement, ordinary portland cement, frost proofing, accelerators, retardants.

Set out:

3:4:5 method, diagonals, profiles, builder’s square.

Factors (3.4)

Underground services, proximity to neighbouring buildings, tree roots, ground conditions.

Methods:

Optical/laser level, straight edge and spirit level

Learning outcome

The learner will:

- 13. understand construction of internal and external walls.

Assessment criteria

The learner can:

- 13.1 describe **wall components**
- 13.2 explain the importance of a Damp Proof Course (DPC)
- 13.3 calculate the area of a gable
- 13.4 identify **additives** used in mortar
- 13.5 identify different types of **bonding**
- 13.6 describe the differences between load-bearing and non-load-bearing internal walls
- 13.7 calculate the volume of paint required to cover a wall area.

Range

Wall components

Brick, block, insulation, Damp Proof Course (DPC), lintels, wall ties, airbrick and liner, cavity closures, stud partition, light density blocks, plasterboard, plaster.

<p>Additives: Retardant, accelerant, frost inhibitor, cement dyes, plasticiser.</p> <p>Bonding: Stretcher, English, Flemish.</p>
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Learning outcome
The learner will: 14. know about construction of floors.
Assessment criteria
The learner can: 14.1 describe floor components 14.2 calculate the linear quantity of floor boarding to cover an irregular shaped area 14.3 calculate additional quantities of wastage using percentage.

Range
<p>Floor components: Hard core, blinding sand, Damp Proof Membrane (DPM), insulation, oversite concrete, block and beam, pre-cast floor panels, screed (dry, self-levelling) sleeper walls, wall plates, DPC, joists, joist hangers, floor covering.</p>

Learning outcome
The learner will: 15. know about construction of roofs.
Assessment criteria
The learner can: 15.1 describe types of roofs 15.2 describe roof components .

Range
<p>Types Gable-ended, flat, hipped, lean-to.</p> <p>Roof components: Purlins, rafters, truss rafters, ridge, batten/lathe, fascia, soffit, barges, valleys, wall plate, flashings, felt, slate/tile, insulation, joists, wall plate straps.</p>

Learning outcome
The learner will: 16. understand how to communicate in the workplace.
Assessment criteria
The learner can: 16.1 describe job roles within building teams 16.2 explain key personnel involved in day to day communication 16.3 state information needed when requesting materials 16.4 identify methods of communication used to relay information to colleagues and others 16.5 describe advantages and disadvantages of methods of communication 16.6 state occasions when clear communication is vital in the workplace 16.7 explain benefits of positive communication with colleagues and others.

Range
Job roles Professional, technician, trade, general operative.
Key personnel Site manager, supervisors, fellow operatives.
Information Dimensions, quantities, type, when and where required, contact name and details.
Methods of communication (7.4) Letters, emails, telephone, memos, verbal, posters, signs, meetings, radio, text messages
Methods of communication (7.5) Written, verbal
Occasions Changes to risk assessments, work restrictions, changes to method statement, permits to work, changes to legislation.
Benefits Improved motivation, avoid conflict, complying with equality and diversity, meeting deadlines.

UAN:	A/504/7000
Level:	2
Credit value:	7
GLH:	50
Aim:	To provide the learner with the skills and knowledge required to prepare surfaces for decoration

Learning outcome
The learner will:
1. know how to prepare timbers and timber sheet products ready to receive finishing systems.
Assessment criteria
The learner can:
1.1 identify types of timbers and timber sheet products used in construction
1.2 describe the common found defects in timbers and timber sheet products
1.3 describe surface and physical properties of timbers and timber sheet products
1.4 describe terminology relating to the properties of timber and timber sheet products
1.5 describe the correct preparation process for rectifying defects in untreated and treated timbers and timber sheet products
1.6 state the appropriate abrasive and grade, for the preparation of untreated and treated timbers and timber sheet products
1.7 state the appropriate solvent-borne and water-borne primer for timbers and timber sheet products for the finishing systems to be applied
1.8 describe the advantages and disadvantages of solvent-borne and water-borne primers .

Range
Timbers Softwood (pine, cedar, spruce) and hardwoods (oak, beech, mahogany).
Timber sheet products Medium density fibreboard, plywood, hardboard, blockboard.

Construction

Structural, first fix, second fix, decorative

Defects

Knots, resin exudation, end grain, cracks, moisture content, open joints, glue residue, protruding nail heads nail holes.

Surface properties

Tactility, porosity, aesthetics.

Physical properties

Insulation, hardness, strength, flexibility.

Terminology

Absorption, adhesion, capillarity.

Preparation processes

Solvent wiping, dry abrading, knotting, priming, stopping and filling.

Abrasive

Glasspaper, garnet paper, aluminium oxide.

Primers

Solvent borne- alkali, white and pink wood primers, universal-wood/metal, shellac knotting, aluminium wood, water borne – alkali resistance, acrylic, stabilising.

Learning outcome

The learner will:

2. be able to prepare timbers and timber sheet products ready to receive finishing systems.

Assessment criteria

The learner can:

- 2.1 carry out a **risk assessment**
- 2.2 select **timber and timber sheet products**
- 2.3 select correct **tools, equipment and materials** for the method of preparation
- 2.4 prepare untreated and treated **timbers and timber sheet products** using the correct **processes**
- 2.5 follow current **environmental and relevant health and safety regulations**.

Range**Risk assessment**

Manual handling, correct access equipment, materials, COSHH, waste and storage of materials, access and egress, PPE, ventilation.

Timbers

Softwood (pine, cedar, spruce) and hardwoods (oak, beech, mahogany).

Timber sheet products

Medium density fibreboard, plywood, hardboard, blockboard.

Tools and equipment

Scrapers, putty knives, chisel knife, knotting brush, punch, hammer, rubbing blocks (rubber, cork, wood), natural and synthetic brushes, short pile and foam rollers, dusting brush, paint pots/kettles, roller trays.

Materials

Solvents, shellac/patent/white knotting, stoppers, single-pack fillers, two-pack fillers.

Processes

Solvent wiping, dry abrading, knotting, priming, stopping and filling.

Environmental and health and safety regulations

Control of Substances Hazardous to Health (COSHH), Volatile Organic Compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE).

Learning outcome

The learner will:

3. know how to prepare metal surfaces ready to receive finishing systems.

Assessment criteria

The learner can:

- 3.1 identify types of metal used in **construction**
- 3.2 describe **surface** and **physical properties** of different **metal types**
- 3.3 describe **causes** of **corrosion** on **metal types**
- 3.4 describe the protective and destructive effects of **corrosion** on metal surfaces
- 3.5 describe terminology relating to **corrosion** of **metal types**
- 3.6 describe the **preparation processes** for ferrous and non-ferrous metals
- 3.7 state the appropriate **primer** for **metal types**
- 3.8 state the function that **primers** perform on **metal types**.

Range**Construction**

Structural, first fix, second fix, decorative.

Surface properties

Ferrous, non-ferrous, colour, hardness, porosity, toxicity.

<p>Physical properties Ferrous and non-ferrous.</p> <p>Metal types Ferrous (cast iron, wrought iron, mild sheet, steel) and non-ferrous (copper, aluminium, lead, galvanised steel).</p> <p>Causes Oxygen, hydrogen, moisture, atmospheric pollution.</p> <p>Corrosion: Surface corrosion, pitting, oxides, millscale, galvanic action, cathodic protection.</p> <p>Preparation processes Descaling, degreasing, priming.</p> <p>Primer Zinc phosphate, metal primer, etch primer .</p>

<p>Learning outcome</p> <p>The learner will:</p> <p>4. be able to prepare metal surfaces ready to receive finishing systems.</p>
<p>Assessment criteria</p> <p>The learner can:</p> <p>4.1 identify different metal types used in construction</p> <p>4.2 select correct tools, equipment and materials for method of preparation</p> <p>4.3 prepare ferrous and non-ferrous metal</p> <p>4.4 prime ferrous and non-ferrous metal</p> <p>4.5 follow current environmental and relevant health and safety regulations.</p>

<p>Range</p> <p>Metal types Ferrous: cast iron, wrought iron, mild sheet, steel) Non-ferrous: (copper, aluminium, lead, galvanised steel)</p> <p>Preparation Hand tools: descaling, degreasing, Power tools: orbital sanders, belt sanders, rotary disc, rotary brush, needle descaling gun.</p> <p>Tools and equipment Scrapers, putty knives, chisel knife, knotting brush, punch, hammer, rubbing blocks (rubber, cork, wood), natural and synthetic brushes, short pile and foam rollers, dusting brush, paint pots/kettles, roller trays.</p>
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Materials

Degreasing agents, rust removers, mordant solutions, aluminium oxide, emery paper, steel wool, primers (zinc phosphate, single and two-pack etch primers, water-borne primers).

Environmental and health and safety regulations

Control of Substances Hazardous to Health (COSHH), Volatile Organic Compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE).

Learning outcome

The learner will:

5. know how to prepare trowelled finishes and plasterboard ready to receive finishing systems.

Assessment criteria

The learner can:

- 5.1 identify **defects** associated with **surface types**
- 5.2 describe **physical** and **chemical properties** of **surface types**
- 5.3 describe **applications** of different **surface types**
- 5.4 describe effects of moisture on different **surface types**
- 5.5 describe the **process** for rectifying **defects**
- 5.6 describe the preparation of surfaces, according to the finish required
- 5.7 state the appropriate **primers**, to be used on different **surface types** prior to applying paper.

Range**Defects**

Settlement cracks, dry out, shrinkage, cracks, nail heads, open joints, efflorescence.

Surface types

Gypsum plaster, plasterboards (square and feather edged), blockwork, brickwork.

Physical properties

Tactility, porosity, capillarity, adhesion.

Chemical properties

Alkalinity, acidity, inertness, soluble salt content.

Applications

Dry lining, structural, surface finishing, internal/external.

Process

Raking out, wetting in, making good, abrading, scraping, caulking, taping, proud filling, flush filling, degreasing.

Primers

Alkali Resisting Primer (ARP), primer sealer, emulsion.

Learning outcome
The learner will: 6. be able to prepare trowelled finishes and plasterboard ready to receive finishing systems.
Assessment criteria
The learner can: 6.1 select correct processes for rectifying defects of trowelled finishes 6.2 select correct preparation processes for surface types 6.3 select appropriate tools, equipment and materials for the method of preparation 6.4 prepare different surface types , to receive finishes 6.5 follow current environmental and relevant health and safety regulations .

Range
Defects Cracks, dry out, shrinkage, cracks, nail heads, open joints, defective pointing.
Preparation process Raking out, wetting in, making good, abrading, scraping, caulking, taping, proud filling, flush filling, degreasing.
Surface types Gypsum plaster, new or existing plasterboards (square and feather edged), blockwork, brickwork.
Tools and equipment Scrapers, filling knives, filling board, hawk and trowel, caulking blades, roller trays, natural and synthetic brushes, woven fabric rollers, buckets.
Materials Plaster-based fillers, joint fillers, joint tapes, reinforced corner tapes, abrasives, degreasing agents, stabilising solutions, water-borne primers, sizes, solvent-borne primers (alkali resisting primer).
Finishes Paint (solvent-borne, water-borne), paper.
Environmental and relevant health and safety regulations Control of Substances Hazardous to Health (COSHH), Volatile Organic Compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE).

Learning outcome
The learner will: 7. understand how to remove previously painted and papered surfaces ready to receive finishing systems.
Assessment criteria
The learner can: 7.1 explain reasons for protecting the work area prior to removing paper 7.2 explain the importance of removing defective paint and papers, prior to redecoration 7.3 state the correct removal method of surface coating from substrates 7.4 describe the reason for decontaminating surfaces following the use of liquid paint removers 7.5 describe safety precautions required when carrying out removal processes 7.6 state health and safety factors relating to hot work 7.7 describe the different methods of removing over-painted and peelable papers 7.8 explain the significance of the starting point and soaking time when removing papers 7.9 describe correct method of stripping and disposing of paper contaminated with mould 7.10 explain correct method of storing tools and equipment .

Range
Defective Blistering, cracking or crazing, flaking, excessive film thickness, peeling, mould, redecoration.
Removal method/processes Liquid paint removing, electric hot-air, LPG burning off, hand soaking, steam stripping.
Substrates Timbers, ferrous metals, non-ferrous metals, plaster, plasterboard, glazed products.
Health and safety factors Water, steam, electricity, naked flame.
Tools and equipment Scrapers, chisel knife, shave hooks, metal containers, fibre brush, wall brush, electric, hot-air gun, transformer, extension cable, steam stripper, fire extinguisher, non-combustible panel, LPG burning-off equipment, polythene sheets, dust sheets.

Learning outcome
The learner will: 8. be able to remove previously painted and papered surfaces ready to receive finishing systems.
Assessment criteria
The learner can: 8.1 select, set up and check electric hot-air guns and steam strippers 8.2 protect work area prior to and during removal of paint and paper 8.3 remove previously applied coatings using liquid paint removers and hot air steam strippers 8.4 remove over-painted papers and peelable papers using steam stripping and hand soaking methods 8.5 check stripped surfaces are free from liquid paint remover, paint, paper and paste 8.6 dispose of removed paint and paper 8.7 follow current environmental and relevant health and safety regulations .

Range
Liquid paint removers and hot air steam strippers Water-based and solvent-based. Environmental and relevant health and safety regulations Control of Substances Hazardous to Health (COSHH), Volatile Organic Compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE), lead paint regulations.

Learning outcome
The learner will: 9. know how to rectify surface conditions and defects.
Assessment criteria
The learner can: 9.1 identify types of surface conditions 9.2 state the causes of surface defects 9.3 describe how to rectify surface conditions 9.4 state how surface defects and conditions can be avoided 9.5 describe cleaning agents and methods used for removing contamination 9.6 state methods of testing for solvent-borne or water-borne coating 9.7 state defects for which wet abrading is a suitable process of preparation 9.8 identify defects of paint systems on timber and timber product sheets 9.9 state causes of paint defectives on timber and timber product

- 9.10 describe possible reasons for unsound paint on ferrous and non-ferrous **metals**
- 9.11 describe health and safety precautions to be applied when preparing unsound surface conditions.

<p>Range</p> <p>Surface conditions (AC9.1, 9.4) Efflorescence, moss and lichen, moulds and fungi, contamination (dirt, grease, silicone, wax polish, carbon/smoke), friable</p> <p>Causes Efflorescence, moss and lichen, moulds and fungi, contamination (dirt, grease, silicone, wax polish, carbon/smoke), friable.</p> <p>Surface defects Saponification, cissing, discolouration, slow or non-drying surface coating, bleeding (resin, nicotine, bitumen), chalking and powdering, loss of gloss, wrinkling or shrivelling, cracking or crazing, flaking, blistering, bittiness, runs, sags or curtains, missing facing putties.</p> <p>Surface conditions (AC9.3) Scraping, wet and dry abrading, brushing, washing down, degreasing, solvent wiping, washing down for a finish, face putty, hand tools, powered tools.</p> <p>Cleaning agents Solvents (white spirit, methylated spirit, acetone), detergents, sugar soap.</p> <p>Timber Softwood (pine, cedar, spruce) and hardwoods (oak, beech, mahogany).</p> <p>Timber product Medium density fibreboard, plywood, hardboard, blockboard.</p> <p>Metals Ferrous (cast iron, wrought iron, mild sheet, steel) and non-ferrous (copper, aluminium, lead, galvanised steel).</p>
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<p>Learning outcome</p> <p>The learner will:</p> <ul style="list-style-type: none"> 10. be able to rectify surface conditions.
<p>Assessment criteria</p> <p>The learner can:</p> <ul style="list-style-type: none"> 10.1 select correct tools, equipment and materials for the rectification processes 10.2 select appropriate cleaning agent for contaminated surfaces 10.3 rectify surface conditions

10.4 follow current **environmental and relevant health and safety regulations**.

Range

Tools and equipment:

Scrapers, wire brushes, stiff scrubbing brushes, buckets, sponges, orbital sander, lint-free cloths, palm sander, dusting brush, rubbing blocks (rubber, cork wood), knotting brush, wall brush.

Materials

Sterilising fluids, fungicidal washes, sugar soap, primers and sealers (alkali resisting, aluminium wood, acrylic, stabilising solutions), solvents (white spirit, methylated spirits), shellac and patent knotting, stain blocks (proprietary and non-proprietary).

Rectification processes

Scraping, wet and dry abrading, brushing, washing down, degreasing, solvent wiping, washing down for a finish, face putty, hand tools, powered tools.

Cleaning agent

Solvents (white spirit, methylated spirit, acetone), detergents, sugar soap.

Surface

Dirt, grease, silicone, wax polish.

Environmental and health and safety regulations

Control of Substances Hazardous to Health (COSHH), Volatile Organic Compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE).

Learning outcome

The learner will:

11. know how to repair and make good surfaces.

Assessment criteria

The learner can:

- 11.1 describe reasons for cracks in plaster and how they occur
- 11.2 explain the stages involved in the process of **repairing and making good cracks in plaster**
- 11.3 describe the effects of heat and moisture on plaster
- 11.4 state filler used for making good open grained timber
- 11.5 describe the method for making good open grained timber and the correct abrasive to use
- 11.6 state tools required when using stoppers
- 11.7 describe how to use **stoppers and fillers**
- 11.8 describe safety precautions required when applying stoppers.

Range
<p>Repairing and making good cracks in plaster Scraping, raking out, undercutting, wetting in, back filling, proud filling, flush filling, dry abrading.</p> <p>Stoppers and fillers Putty, plastic woods, two-pack, coloured stoppers, flexible fillers, powdered filler, interior/exterior filler, ready-mixed filler.</p>

Learning outcome
The learner will:
12. be able to repair and make good surfaces.
Assessment criteria
The learner can:
12.1 protect work area prior to and during repairing and making good surfaces
12.2 prepare materials required for repairing and making good surfaces
12.3 select correct tools, equipment and materials for repairing and making good surfaces
12.4 prepare defective areas for repairing and making good surfaces
12.5 apply and finish materials for repairing and making good surfaces
12.6 follow current environmental and relevant health and safety regulations .

Range
<p>Repairing and making good scraping, sinking nail heads, raking out, undercutting, wetting in, back filling, proud filling, flush filling, stopping, applying caulk and sealants, spot prime and seal, wet and dry abrading, wash down.</p> <p>Tools and equipment Scraper, putty knife, chisel knife, shavehooks, filling knife/blade, filling board, dusting brush, craft knife, cartridge gun/cage, sponge, bucket, wetting-in brush, nail punch, ball pein hammer, caulking blades, rubbing blocks, pole sander.</p> <p>Materials Fill, stop, caulk.</p> <p>Surfaces Types – timber, brickwork, plaster, plasterboard and areas – ceilings, walls, doors, windows (frames and glazed units), timber trim (skirting / architrave).</p> <p>Defective areas Open joints in joinery, splits, indentations, open grained timber, defective putties, holes, cracks (settlement, shrinkage), defective plasterboard joints, blown plaster and render, gaps, defective pointing.</p>

Environmental and health and safety regulations

Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE).

UAN:	K/505/0927
Level:	2
Credit value:	6
GLH:	50
Aim:	To provide the learner with the skills and knowledge required to apply paint systems by brush and roller for complex areas .

Learning outcome
The learner will:
1. understand how to prepare domestic and commercial work areas and protect surrounding areas.
Assessment criteria
The learner can:
1.1 describe factors to consider when preparing domestic and commercial work areas
1.2 explain the importance of protecting surrounding areas
1.3 compare types of masking tape and their use
1.4 describe the process for applying and removing masking tape
1.5 state the correct maintenance and storage requirements for protective sheeting .

Range
Domestic Room furniture, floor/carpets, door and window furniture, wall-mounted fixtures and fittings, Television, media.
Commercial Public access to premises, lighting, climate/weather, temperature, ventilation, workstations, machinery, equipment, furniture.
Masking tape Exterior, interior, low-tack, 7-day.
Protective sheeting Polythene sheets, dust sheets (lightweight, protective backing, heavy duty), drop sheets, tarpaulin, adhesive, plastic covering.

Learning outcome

The learner will:

2. be able to prepare domestic and commercial work areas and protect surrounding areas.

Assessment criteria

The learner can:

- 2.1 select correct **materials, tools and equipment** needed to protect work and **surrounding area**
- 2.2 **prepare domestic and commercial work and surrounding areas**
- 2.3 protect **surrounding areas**, furniture and fittings and surfaces ready for painting
- 2.4 remove furniture and fittings
- 2.5 follow current **environmental and relevant health and safety regulations**.

Range**Materials**

Dust sheets (lightweight, protective backing, heavy duty), polythene sheets, tarpaulin, drop sheets, tapes, adhesive.

Tools and equipment

Signs, barriers, pliers, screwdrivers (slotted, cross-head, posidrive), claw hammer, brushes, broom, shovels, security bits.

Personal protective equipment (PPE)

Protective gloves, dust masks, goggles, boots, hard hat, high visibility jacket, barrier cream.

Surrounding areas

Door and window furniture, wall/ceiling mounted fixtures and fittings, floor/carpets, office equipment, television, media, furniture and fittings.

Prepare

Clear area, clean area, place protective materials.

Domestic

Room furniture, floor/carpets, door and window furniture, wall-mounted fixtures and fittings, Television, media.

Commercial

Public access to premises, lighting, climate/weather, temperature, ventilation, workstations, machinery, equipment, furniture.

Environmental and Health and Safety Regulations

Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis,

dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, personal protective equipment (PPE).

Learning outcome

The learner will:

3. understand how to prepare and apply water-borne and solvent-borne coatings by brush and roller in line with manufacturer's instructions to complex areas.

Assessment criteria

The learner can:

- 3.1 describe **component parts** of brushes and rollers
- 3.2 explain reasons for selecting **application tools** for **surface coatings**
- 3.3 describe reasons for preparing **surface coatings**
- 3.4 state **properties** of **surface coatings**
- 3.5 describe **drying processes** and **stages**
- 3.6 describe how **atmospheric conditions** may affect the drying process
- 3.7 describe the sequence of painting a **room area and components** and reasons for the sequence
- 3.8 describe causes and remedies of **application defects**
- 3.9 explain causes and remedies of **post-application defects**.

Range

Component parts

Handle, stock, ferrule, setting, filling, frame/yoke, sleeve, extension pole.

Application tools

Rollers with sleeves of synthetic filament, woven pile, woven fabric, mohair, lambswool, short, medium, long pile; brushes in natural bristle, synthetic filament.

Surface coatings

(Interior, exterior, pigmented, non-pigmented) with finishes in matt, mid-sheen, silk, eggshell, gloss; solvent-borne types matt, eggshell, semi-gloss, gloss; systems (interior and exterior) for timber, metal (ferrous, non-ferrous micro-porous, thixotropic, wood treatments (water-borne and solvent-borne): stains, preservatives.

Properties

Water-borne

Film former, pigment and extender, dispersant/emulsifier, additives (anti-frothing agent, water, biocides), solvent/thinner.

Drier solvent-borne

Film former, pigment, solvent/thinner, driers, additives micro-porous, thixotropic.

<p>Drying processes Water-borne Evaporation, coalescence, oxidation.</p> <p>Solvent-borne Vaporation, oxidation, polymerisation.</p> <p>Stages Flow, set, tack, touch dry, hard dry, thorough dry.</p> <p>Atmospheric conditions Hot air, cold air, draughts, direct sunlight, lack of light, humidity.</p> <p>Room areas and components Broad areas, ceilings, flush doors, panel door, windows, linear work.</p> <p>Application defects Bittiness, misses, grinning, runs and, sags, excessive brushmarks and ropiness, fat edges and wet edge build-up, paint on adjacent surfaces, roller edge marks and roller skid marks, irregular cutting in.</p> <p>Post-application defects Retarded drying, cratering, bleeding, blooming, loss of gloss, fading, discolouration, yellowing, cracking/crazing, flaking/peeling.</p>
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<p>Learning outcome</p> <p>The learner will:</p> <p>4. be able to prepare and apply water-borne and solvent-borne coatings by brush and roller to complex areas in line with manufacturer’s instructions.</p>
<p>Assessment criteria</p> <p>The learner can:</p> <p>4.1 Select application tools and equipment appropriate to work</p> <p>4.2 prepare surface coatings</p> <p>4.3 apply surface coatings in the correct sequence, to complex areas</p> <p>4.4 cut in by brush to angles and obstructions correctly and accurately to complex areas</p> <p>4.5 follow current environmental and relevant health and safety regulations.</p>

<p>Range</p> <p>Application tools Brushes: (must use): natural bristle, synthetic filament. Select two of the following measurements:</p> <ul style="list-style-type: none"> • 12mm • 25mm • 50mm • 75mm • 100mm.
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<p>Select two of the following rollers:</p> <ul style="list-style-type: none"> • rollers with sleeves of synthetic filament • woven pile • woven fabric • mohair • lambswool • short • medium • long pile. <p>Equipment Roller cages, paint stirrers, strainers, paint pots, extension poles, buckets, scuttles, trays, dust sheets.</p> <p>Personal Protective Equipment (PPE) As per organisation requirements. Protective gloves, dust masks, goggles, boots, hard hat, high visibility jacket, barrier cream.</p> <p>Surface coatings Water-borne Primers and undercoats, glosses, egg-shells, emulsions, stains and varnishes. Solvent borne Primers and undercoats, glosses, stains and varnishes.</p> <p>Complex Areas Ceilings, broad areas, linear work, panel door, ferrous, non-ferrous metal, windows, flush doors.</p> <p>Environmental and Health and Safety Regulations Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, personal protective equipment (PPE).</p>
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Learning outcome
The learner will:
5. understand how to clean, maintain and store brushes and rollers in line with manufacturer's Instructions.
Assessment criteria
The learner can:
5.1 describe different methods of cleaning tools and equipment
5.2 explain the difference in cleaning and storage requirements for roller sleeves and brushes.

Range
Tools and equipment Rollers with sleeves of synthetic filament, woven pile, woven fabric, mohair, lambswool, short, medium, long pile; brushes in natural bristle,

synthetic filament.
Roller sleeves Sheepskin/lambswool, woven fabric, mohair, short/medium/long pile, foam.

Learning outcome
The learner will: 6. be able to clean, maintain and store brushes and rollers in line with manufacturer's instructions.
Assessment criteria
The learner can: 6.1 clean tools, equipment, brushes and rollers 6.2 maintain and store brushes and rollers in line with manufacturer's instructions 6.3 follow current environmental and health and safety regulations .

Range
Brushes: (must use): natural bristle, synthetic filament. Select two of the following measurements: <ul style="list-style-type: none"> • 12mm • 25mm • 50mm • 75mm • 100mm. Select two of the following rollers: <ul style="list-style-type: none"> • rollers with sleeves of synthetic filament • woven pile • woven fabric • mohair • lambswool • short, medium, long pile • foam. Environmental and Health and Safety Regulations Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, personal protective equipment (PPE).

Learning outcome
The learner will: 7. understand conditions for storing paint materials.
Assessment criteria
The learner can:

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|--|
| 7.1 describe the correct storage conditions for paint materials |
| 7.2 explain the purpose of stock rotation |
| 7.3 describe the appearance, causes and remedies of storage defects . |

Range
Paint materials Water-borne coatings, solvent-borne coatings, two-packs.
Defects Fattening, livering, settling, skinning.

Learning outcome
The learner will: 8. be able to store materials in accordance with COSHH data sheets.
Assessment criteria
The learner can: 8.1 store materials in accordance with COSHH data sheets 8.2 check stock rotation of materials 8.3 follow current environmental and health and safety regulations .

Range
Materials Water-borne coatings, solvent-borne coatings, two- packs.
Environmental and Health and Safety regulations Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, personal protective equipment (PPE).

UAN:	F/504/7001
Level:	2
Credit value:	11
GLH:	90
Aim:	To provide the learner with the skills and knowledge required to apply standard papers to walls and ceilings.

Learning outcome
The learner will:
1. understand methods used in wallpaper production.
Assessment criteria
The learner can:
1.1 describe methods of wallpaper production
1.2 describe printing methods
1.3 describe patterns and paper types
1.4 state the suitability of different paper types for different locations
1.5 explain the meaning of international performance symbols .

Range
Methods Wet embossing, dry embossing, heat expansion.
Printing methods Block, screen, machine, wet, dry, embossing.
Patterns Set/straight match, drop/offset match, random/free match.
Paper types Pulps, embossed, washable, vinyl, duplex, simplex, ready-pasted, blown vinyl, wood ingrain
International performance symbols Spongeable, washable, super washable, scrubbable, moderatelight fastness, good light fastness, strippable, peelable, ready-pasted, paste-the-wall, free match, straight match, design/distance repeat, offset

match, direction of hanging, co-ordinated fabric available, reverse alternate lengths.

Learning outcome
The learner will: 2. know how to select and prepare adhesives.
Assessment criteria
The learner can: 2.1 describe different adhesives when applying papers to walls and ceilings 2.2 describe advantages and disadvantages of adhesives 2.3 state how factors may affect the consistency of adhesives 2.4 describe how defects can occur owing to incorrect consistency of adhesives .

Range
Adhesives Cellulose paste, starch/starch ether, overlap, ready-mixed (medium weight), PVA. Advantages and disadvantages of adhesives Ease of application, adhesive properties, marking quality, mould inhibitor. Factors Incorrect preparation, paper type, paper weight, room/air temperature, porosity of surface. Defects Blisters, delamination, stretching.

Learning outcome
The learner will: 3. be able to select and prepare adhesives.
Assessment criteria
The learner can: 3.1 select correct type of adhesive to suit paper type 3.2 prepare adhesives in accordance with manufacturers' instructions 3.3 adjust consistency of adhesives to suit paper type 3.4 follow current environmental and relevant health and safety regulations .

Range
Adhesive Starch /starch ether overlap, ready-mixed (medium weight), PVA. Paper types Pulps, embossed, washable, vinyl, duplex, simplex, ready-pasted, blown vinyl, wood ingrain

Environmental and relevant health and safety regulations

Control of Substances Hazardous to Health (COSHH), Volatile Organic Compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, burns, electrical safety, work at heights regulations, risk assessment, Personal Protective Equipment (PPE).

Learning outcome

The learner will:

4. understand how to apply papers to ceilings and walls.

Assessment criteria

The learner can:

- 4.1 explain **factors** to be considered when planning to apply papers
- 4.2 specify the use of different **papers**
- 4.3 explain why lining is advisable in certain **circumstances**
- 4.4 explain the use of girthing and area methods of calculating quantity of paper for different **pattern types**
- 4.5 explain **factors** to consider when **cutting papers**
- 4.6 explain the reason for '**marking lines**'
- 4.7 state the correct sequence for pasting paper
- 4.8 describe **faults** caused by careless pasting
- 4.9 explain reasons for selecting concertina and end-to-end/lap folds, for horizontal and vertical lengths
- 4.10 explain different **pasting methods**
- 4.11 identify different cutting equipment used when paper hanging
- 4.12 state appropriate cutting equipment for various **paper types**
- 4.13 explain types of **cutting equipment** which should be used for different types of papers
- 4.14 explain processes used for **hanging papers**
- 4.15 explain the causes of hanging **defects** and how they can be prevented.

Range**Factors**

Ceilings, walls, starting point, finishing point, centring, doors, features/obstacles internal and external angles, sockets/switches/ceiling rose, borders, window reveals.

Papers

Standard lining, linen backed lining, embossed, blown vinyl, standard (washable, vinyl), ready-pasted, borders, non woven lining, wood ingrain

Circumstances

Solvent-painted wall, excessive making good, type of finishing paper, movement, absorbency

Pattern types

Set/straight match, drop/offset

match, random/free match.

Cutting papers

Pattern type (bold with prominent repeat, small or indefinite pattern), pattern match (set/straight, offset/drop), batches, wastage, shading.

Marking lines

Occasions: first drop on wall, after internal/external angle, over and around reveals

position (horizontal, vertical) method: (spirit level, plumb bob).

Faults

Dry edges, blistering, staining, tearing.

Pasting methods

Pasting machine, brush, roller, ready-pasted.

Paper types

Pulps, embossed, washable, vinyl, duplex, simplex, ready-pasted, blown vinyl, wood ingrain.

Cutting equipment:

Shears, knife and straight edge and casing wheel.

Hanging papers

Areas: Ceilings

Cross lining

Complexities: internal and external angles, sockets/switches, ceiling rose

pattern types: set/straight match, drop/offset match and random/free match

Cutting methods: star and half star cuts, borders to walls with mitre cuts.

Areas: Walls

Horizontal/cross lining and vertical application

complexities: internal and external angles, sockets/switches, window reveals

pattern types: set/straight match, drop/offset match and random/free match

cutting methods: star and half star cuts, borders to walls with mitre cuts

Defects

Creasing, inaccurate angle cutting, loss of emboss, overlapping, mismatch, , tearing, dry edges

springing joints, polished joints, blistering, shrinking and stretching contamination, flattened edges, paste staining

Learning outcome
The learner will: 5. be able to apply papers to ceilings and walls.
Assessment criteria
The learner can: 5.1 plan the position of paper hangings taking into account different factors 5.2 select, position and erect access equipment 5.3 select tools and equipment to apply papers to ceilings and walls 5.4 calculate quantities of wall papers 5.5 measure and cut paper lengths with the minimum of waste 5.6 plan, measure and mark starting lines, taking into account a. occasions b. position c. methods d. considerations 5.7 paste paper in accordance with manufacturer's instructions 5.8 apply set and drop pattern papers with minimum defects 5.9 cut papers to top, bottom and around obstacles, maintaining cleanliness 5.10 follow current environmental and relevant health and safety regulations .

Range
Factors Ceilings, walls, starting point, finishing point, centring, doors, features/obstacles internal and external angles, sockets/switches/ceiling rose, borders, window reveals.
Access equipment select from the following: steps, podiums, hop-up's, staging, trestle, spilt head.
Tools and equipment Tape measure, folding rule, plumb bob, spirit level, paperhanging shears, sponges, paperhanging brush, trimming knives, caulker, pencil, spatulas, access equipment, paste brush, buckets, rubbish containers/bags, metal straight edge, trimming knife, chalk and line, troughs, paste table.
Calculate Girthing and area methods.
Occasions First drop on wall, after internal/external angle, over and around reveals, fittings
Position Horizontal, vertical.
Methods

(select appropriate method) spirit level, plumb bob, laser level, chalk line

Considerations

access required, light source, room dimensions, economy.

Paste

Without misses, fold lengths using appropriate fold and soak, surface paste, excess paste

Papers

Lining, embossed, blown vinyl, standard (washable, vinyl) ready-pasted and borders, wood ingrain

Defects

Creasing overlaps, blisters, tears, delamination, polished edges, open joints, loose edges, irregular cutting, inaccurate matching, flattening of emboss, staining and surface marking, corners incorrectly negotiated, inaccurate plumbing.

Environmental and relevant health and safety regulations

Electrical safety, sharp blades, COSHH, the work at height regulations, disposal of waste.

Learning outcome

The learner will:

- 6. understand how to store materials.

Assessment criteria

The learner can:

- 6.1 explain the effects of **physical** and **atmospheric considerations**, relating to storage of **papers** and **adhesives**.

Range

Physical considerations

Racks, wrapping, dust.

Atmospheric considerations

Temperature, dampness and direct sunlight.

Papers

Lining, embossed, blown vinyl, standard (washable, vinyl) ready-pasted and borders, wood ingrain

Adhesive

Cellulose paste, starch/starch ether, overlap, ready-mixed (medium weight), PVA.

Learning outcome

The learner will:

- 7. be able to store materials.

Assessment criteria

The learner can:

7.1 reclaim unused standard **papers** and **adhesives**

7.2 store standard **papers** and **adhesives**.

Range

Papers

Lining, embossed, blown vinyl, standard (washable, vinyl) ready-pasted and borders, wood ingrain

Adhesive

Starch/starch ether, overlap, ready-mixed (medium weight), PVA.

UAN:	H/505/0926
Level:	2
Credit value:	8
GLH:	70
Aim:	To provide the learner with the skills and knowledge required to produce specialist finishes for decorative work.

Learning outcome
The learner will:
1. be able to produce quality finish ground coats for painted decorative work.
Assessment criteria
The learner can:
1.1 prepare surfaces to produce quality finish ground coats for painted decorative work using abrasives and preparation processes
1.2 select tools and equipment to produce quality ground coat finishes
1.3 prepare and apply materials to produce quality ground coat finishes correctly as per given specifications
1.4 follow current environmental and relevant health and safety regulations .

Range
Surfaces Previously painted timber, previously painted plaster or plasterboard.
Preparation processes Wet abrading, dry abrading, making good, spot priming.
Abrasives Silicon carbide, glass paper, aluminium oxide.
Tools and equipment stipple brush, rollers, rubbing blocks, buckets, sponges, dusting brush, paint brushes (natural bristle and synthetic filament), tack rags, stirrers, paint strainers, kettles, hanging brush, shears/knife, pasting table.

Materials

Water-borne eggshell, solvent-borne eggshell, fillers, paste, embossed paper.

Environmental and relevant Health and Safety Regulations

Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, electrical safety, work at heights regulations, risk assessment, personal protective equipment (PPE).

Learning outcome

The learner will:

2. understand how to produce broken colour effect using water-borne and solvent-borne scumbles.

Assessment criteria

The learner can:

- 2.1 state **materials** used for producing **broken colour effects**
- 2.2 state the main ingredients of water-borne and solvent-borne scumbles
- 2.3 explain reasons for extending and reducing the drying time of water borne and solvent-borne scumbles
- 2.4 explain the **benefits** of preparing more than the calculated quantity of scumble for a piece of work
- 2.5 state methods of producing uniform **broken colour effects** when working on broad areas
- 2.6 describe how **application faults** may result in an uneven pattern effect
- 2.7 describe problems which may occur from careless **application and removal of masking material**
- 2.8 describe how to clean and store **tools and equipment**.

Range**Materials**

Acrylic glaze, solvent-borne glaze, oil colourant, acrylic colourant, white spirit, linseed oil, driers, scumble, chamois leather, lint-free cloth, barrier cream.

Broken colour effects

Rag rolling (additive and subtractive) sponge stippling, dragging, glaze and wipe.

Benefits

Matching, defects, maintenance. Repairs, re-doing.

Application faults

Loss of wet edge, banding/tracking, slip/skid marks, damage to decorative effect, removal of ground coat, paint brushes, hair stiplers, mohair roller, lint-free rag, chamois leather, dragging brushes, palettes, kettles.

Application and removal of masking material

Application

Selection of appropriate tape, duration, positioning, crisp edges, prevention of creepage, protection of surrounding area.

Removal

Timing of removal, damage/lifting of surface coatings, disposal of waste tape.

Tools and equipment

Paint brushes, stippling brush, mohair roller, lint-free rag, chamois leather, dragging brushes, natural sponges, palettes, kettles, plastic pots.

Learning outcome

The learner will:

3. be able to produce broken colour effects using water-borne scumbles.

Assessment criteria

The learner can:

- 3.1 check the **suitability** of ground coat and rectify if required
- 3.2 set out areas for application of **broken colour** and previous effects using **protection** and allowing for drying times
- 3.3 prepare **materials** to produce broken colour effects
- 3.4 select a colourant for **broken colour effect** using water-borne scumbles
- 3.5 select **tools and equipment** to produce **broken colour effects**
- 3.6 produce uniform **broken colour effects** to given specifications
- 3.7 remove types of **protection** correctly and dispose of waste products in accordance with legislation and official guidance
- 3.8 clean, maintain and store **tools and equipment**
- 3.9 follow current **environmental and relevant health and safety regulations**.

Range

Suitability

Colour, finish, no visible coating defects (misses, ropiness, bits and nibs, brush marks, excessive orange peel, obliteration).

Broken colour effects

Rag rolling (additive and subtractive) sponge stippling, dragging, glaze and wipe.

Protection

Masking tape, low-tack tape, masking papers, films.

Materials

Glaze, colourant, scumble.

Tools and equipment

Paint brushes, stippling brush, mohair roller, lint-free rag, chamois

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

Environmental and Health and Safety Regulations

Control of Substances Hazardous to Health (COSHH), Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, dust inhalation, electrical safety, work at heights regulations, risk assessment, personal protective equipment (PPE).

Learning outcome

The learner will:

- 4. understand how to prepare stencil plates from given design and apply stencils.

Assessment criteria

The learner can:

- 4.1 explain differences between positive and negative stencil types
- 4.2 describe **methods** of transferring a design onto stencil sheet materials
- 4.3 state **materials** used when manufacturing a stencil plate
- 4.4 explain why the whole plate should be treated
- 4.5 describe the suitability of **base materials** used for cutting stencil plates
- 4.6 describe enlarging and reducing **methods** for stencil designs.

Range

Methods

Transferring: trace, pounce, photocopy.
Enlarging/reducing: accurate measurement, illuminated projection, photocopy, print.

Materials

Linseed oil, shellac knotting, paper and proprietary stencil materials (acetates, frisk film).

Base materials

Glass plate, proprietary cutting mat.

Learning outcome

The learner will:

- 5. be able to prepare stencil plates from given design and apply stencils.

Assessment criteria

The learner can:

- 5.1 select appropriate **tools and equipment and materials** to manufacture a stencil
- 5.2 prepare **stencil plate materials**
- 5.3 transfer designs using **methods** given to stencil plate materials

- 5.4 cut out positive and negative stencils demonstrating **cutting considerations**
- 5.5 set and mark out stencil locations for linear runs and borders, demonstrating the relevant **planning considerations**
- 5.6 apply pre-cut positive and negative stencil types with sharp outlines
- 5.7 clean, maintain and store **tools and equipment**
- 5.8 follow current **environmental and relevant health and safety regulations**

Range

Tools and equipment and materials

Ruler, tape measure, stencil knife, craft knife, glass plate, proprietary cutting mat, hot knife, Materials: drawing paper, linseed oil, shellac knotting, mineral oil.

Stencil plate materials

Select one of the following:

- paper
- card
- acetate
- frisk film.

Methods

Trace, photocopy.

Materials

Chalk, spare paper/card, tape, proprietary spray adhesive, water-borne paints.

Cutting considerations

Cleanliness, hand position, knife angle, direction of cutting, blade sharpness, repair of broken ties, size and sequence of pattern (small areas and vertical lines first), free movement of stencil plate, margin widths.

Planning considerations

Number of repeats/connections, location of doors, windows, corners, access requirements, room dimensions, stencil size, spacing.

Environmental and Health and Safety Regulations:

Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, inhalation, burns, electrical safety, risk assessment, personal protective equipment (PPE).

Learning outcome

The learner will:

- 6. understand how to produce wood and marble effects using basic techniques.

Assessment criteria	
The learner can:	
6.1	state British Standard 4800 colours of ground coats for wood effects
6.2	outline the importance of using the appropriate colour when producing marble effects
6.3	state ingredients used in oil-based and water-borne scumbles for different effects
6.4	state materials which will prevent cissing when applying water colour
6.5	list the tools and their uses to produce wood and marble effects
6.6	explain processes for applying wood and marble effect to structural components
6.7	describe the cleaning, maintenance and storage requirements for tools and equipment and brushes.

Range	
Wood effects Straight grain only – oak, mahogany.	
Marble effects Fantasy marble, Carrera.	
Oil-based scumbles Solvent-borne glaze, oil colourant, oil graining colour/medium, solvent-borne proprietary scumble, binders (fullers earth /whiting, stale beer, vinegar), varnish, white spirit, linseed oil, driers.	
Water-borne scumbles Acrylic glaze, acrylic colourants, dry pigments, (water, fullers earth/whiting, stale beer, vinegar) varnish, glycerine, retarding agents.	
Materials Fullers earth, detergent, whiting.	
Tools and equipment and brushes Tools and equipment: Metal/rubber/card combs, check/tick roller, natural sponges, feathers eg goose-wing, lint-free rag, palette knives, palettes, kettles, plastic pots. Brushes: Rubbing in' brushes, mixing brushes, fitches, floggers and dragging brushes, softeners (hog's hair, badger), sable pencils and writers, varnish brushes.	
Structural components Panelled doors, windows, dado rails, narrow linear runs (ie architraves and skirtings), small wall panels.	

Learning outcome	
The learner will:	

7. be able to produce wood and marble effects using basic techniques.

Assessment criteria

The learner can:

- 7.1 check **factors** relating to the suitability of the ground coat, and rectify if required
- 7.2 select **colourants and pigments** appropriate to the given wood or marble effect
- 7.3 prepare **graining and marbling materials**
- 7.4 select **tools, brushes and equipment**
- 7.5 produce **wood and marble effects** using **processes**
- 7.6 clean, maintain and store **tools and equipment and brushes**
- 7.7 follow current **environmental and relevant health and safety regulations**.

Range

Factors

No visible coating defects (misses, ropiness, bits and nibs, undue texture), colour.

Colourants and pigments

Artists oil, acrylics, gouache, powder pigment, universal stainers.

Graining and marbling materials

Solvent-borne glaze, acrylic glaze, oil colorant, acrylic colorant, dry pigments, glue size, white spirit, linseed oil, crayons, oil graining colour/medium, solvent-borne proprietary scumbles, water graining colour/medium, binders (fuller's earth/whiting, stale beer, vinegar), varnish (acrylic/solvent-borne).

Tools and equipment and brushes

Tools and equipment: Metal/rubber/card combs, check/tick roller, natural sponges, feathers eg goose-wing, lint-free rag, palette knives, palettes, kettles, plastic pots.

Brushes: 'Rubbing in' brushes, mixing brushes, fitches, floggers and dragging brushes, softeners (hog's hair, badger), sable pencils and writers, varnish brushes.

Wood effects

Straight grain only – oak, mahogany.

Marble effects

Fantasy marble and Carrera.

Processes

'Oil-in' or rubbing in, flogging, combing, veining, softening, glazing, cissing or opening out, stippling, wiping out.

Environmental and Health and Safety Regulations

Volatile organic compounds (VOCs), disposal of waste, cuts and abrasions, dermatitis, inhalation, electrical safety, risk assessment, personal protective equipment (PPE).

Unit 220

Erecting and dismantling access equipment and working platforms

UAN	M/505/0928
Level:	2
Credit value:	3
GLH:	30
Aim:	To provide the learner with the skills and knowledge required to erect and dismantle access equipment and working platforms.

Learning outcome
The learner will: 1. understand the preparation required for using access equipment and working platforms.
Assessment criteria
The learner can: 1.1 explain factors to be considered when selecting access equipment and working platforms 1.2 identify suitable access equipment and working platforms for types of internal and external work. 1.3 outline how manufacturers' specifications and legislative requirements relate to Work at Height regulations.

Range
Factors Ground conditions, height, type and duration of work, weather conditions, internal/external locations, access and egress.
Access equipment and working platforms Ladders, stepladders/platform steps, proprietary towers, trestle platforms, proprietary staging and podiums, scaffold board, Mobile Elevating Work Platforms (MEWP).
Manufacturers' specifications and legislative requirements British/European Standards for classifications of ladders.

Learning outcome
The learner will: 2. be able to prepare for using access equipment and working platforms.
Assessment criteria
The learner can: 2.1 select suitable access equipment and working platforms for types of internal and external work 2.2 produce risk assessments in line with manufacturer’s instructions and legislative requirements for access equipment and working platforms .

Range
Access equipment and working platforms Ladders, stepladders/platform steps, proprietary towers, trestle platforms, proprietary staging and podiums, scaffold board.

Learning outcome
The learner will: 3. understand how to check access equipment and identify faults.
Assessment criteria
The learner can: 3.1 describe the function of access equipment components 3.2 identify hazards associated with the use of access equipment and working platforms 3.3 explain the reasons for inspections and inspection time periods 3.4 state the procedure for carrying out visual checks on access equipment prior to use.

Range
Access equipment components Stiles, rungs, tie rods, ropes, treads, hinges, swingbacks, locking bars, non-slip inserts/rubber feet, scaffold boards, platform staging, tubes, boards, fittings, scaffold board. Tubes: Standard, transoms and boarded transoms, ledgers, bracers, rails. Fittings: Coupler, couplet, base plate.
Hazards Falls from heights – operatives, materials and tools, slips and trips, cuts and abrasions, faulty equipment.
Inspections Pre-erection, in-use.
Inspection time periods

Pre-erection, post erection, handing over, post accident and incident, inclement weather.

Learning outcome

The learner will:

4. be able to check access equipment.

Assessment criteria

The learner can:

- 4.1 select suitable **access equipment components**
- 4.2 check **access equipment components**
- 4.3 adjust defective **access equipment** components to ensure they are safe to use.

Range

Access equipment components

Scaffold tags, ladders (stiles, rungs, tie rods), treads, hinges, swingbacks, locking bars, non-slip inserts/rubber feet, clip-on platforms, access stairs, access hatches, braces, working platforms, stabilisers, outriggers, guide brackets, latching hooks.

Learning outcome

The learner will:

5. understand how to erect access equipment and working platforms.

Assessment criteria

The learner can:

- 5.1 explain the benefits of a risk assessment for **access equipment and working platforms**
- 5.2 identify suitable **personal protective equipment (PPE)** for erecting **access equipment and working platforms**
- 5.3 explain the reasons for correct manual handling of components when erecting **access equipment and working platforms**
- 5.4 state the main implications of the Work at Height Regulations in relation to use of **access equipment and working platforms**
- 5.5 explain the purpose of **regulation dimensions**.

Range

PPE

Hard hats, gloves, eye protection, steel toe capped boots, overalls, high visibility jacket/vest, fixed length and fall arrest.

Access equipment and working platforms

Ladders, proprietary towers, trestle platforms, stepladders and platform steps, proprietary staging and podiums, scaffold board.

Regulation dimensions

Hand rail location, guard rail location, toe boards, maximum working heights, platform widths, base to height ratios (ladders only)

Learning outcome

The learner will:

- 6. be able to erect access equipment and working platforms.

Assessment criteria

The learner can:

- 6.1 use personal protective equipment (PPE) when erecting **access equipment and working platforms**
- 6.2 erect **access equipment and working platforms** in the correct sequence to ensure it is safe for use
- 6.3 secure **access equipment and working platforms** where required
- 6.4 check **access equipment and working platforms** meet current **environmental and health and safety regulations**.

Range

Access equipment and working platforms

Ladders, proprietary towers, trestle platforms, stepladders and platform steps, proprietary staging and podiums, scaffold boards.

Environmental and health and safety regulations

Work at Height Regulations 2005.

Learning outcome

The learner will:

- 7. understand how to dismantle and store components.

Assessment criteria

The learner can:

- 7.1 explain the correct sequence of dismantling **access equipment and working platforms**
- 7.2 explain storage requirements for **access equipment and working platforms**.

Range

Access equipment and working platforms

Ladders, proprietary towers, trestle platforms, stepladders and platform steps, proprietary staging and podiums, scaffold boards.

Learning outcome

The learner will:

- 8. be able to dismantle and store components.

Assessment criteria

The learner can:

8.1 dismantle and store **access equipment and working platforms** in accordance with organisational requirements.

Range

Access equipment and working platforms

Ladders, proprietary towers, trestle platforms, stepladders and platform steps, proprietary staging and podiums.

UAN:	T/505/0929
Level:	2
Credit value:	4
GLH:	30
Aim:	To provide the learner with the skills and knowledge required to create and apply colour

Learning outcome
The learner will:
1. understand the colours required to create a colour wheel.
Assessment criteria
The learner can:
1.1 explain the purpose of a colour wheel
1.2 identify primary, secondary and tertiary colours in a colour wheel
1.3 explain what a primary colour is
1.4 explain what a secondary colour is and how it is created
1.5 explain what a tertiary colour is and how it is created
1.6 describe analogous colours and what position they are on the colour wheel
1.7 describe complementary colours and what position they are on the colour wheel
1.8 describe monochromatic colours and what position they are on the colour wheel.

Range
Purpose Tool for understanding how colours relate to each other.
Primary colours Red, yellow, blue.
Secondary colours Green, orange, purple (violet).
Tertiary colours Yellow-green, blue-green, blue-purple (violet), red-purple (violet), red-orange, yellow-orange.

<p>Primary Pure colours.</p> <p>Secondary Mixing two primary colours.</p> <p>Tertiary Mixing primary colour with a secondary colour (ratio 2:1).</p> <p>Analogous colours Colours occupying any three consecutive colour segments on the wheel; they share strong undertones, creating a pleasing harmony.</p> <p>Complementary colours Colours directly opposite each other on the wheel, these are contrasting and give off energy, vigour and excitement.</p> <p>Monochromatic colours All the colours (tints, tones, and shades) of a single hue. Monochromatic colour schemes are derived from a single base hue, and extended using its shades, tones and tints. The energy is more subtle due to a lack of contrast of hue.</p>
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<p>Learning outcome</p> <p>The learner will:</p> <p>2. be able to create a colour wheel on a broad surface.</p>
<p>Assessment criteria</p> <p>The learner can:</p> <p>2.1 select equipment required to draw a colour wheel</p> <p>2.2 plan, measure and draw a colour wheel to incorporate primary and secondary colours</p> <p>2.3 apply primary colours in the correct position on the wheel using straight and curved lines</p> <p>2.4 mix the correct primary colours to create the secondary colours and apply in the correct position.</p>

<p>Range</p> <p>Equipment Pencils, compass, trammel, ruler, chalk line, spirit level, masking tape.</p> <p>Primary colours Red, yellow, blue.</p> <p>Secondary colours: Green, orange, purple (violet).</p>

Learning outcome
The learner will: 3. understand colour organisational systems and terminology used in industry.
Assessment criteria
The learner can: 3.1 state colour organisational systems used in industry 3.2 explain reasons why the BS 4800 series was developed 3.3 explain the terms hue, value and chroma and how to identify them within the Munsell system 3.4 explain the natural order of colour 3.5 explain saturation in relation to hues on a colour wheel 3.6 explain the term achromatic 3.7 explain the term neutrals 3.8 explain the terms warm and cool colours and their uses 3.9 explain the terms shade and tint in relation to mixing colours.

Range
Colour organisational systems Munsell Colour System. BS 4800: Paint Colours for Building Purposes. RAL System. NCS System.
Reasons To ensure the standardisation of colour and to provide consistency in a specification, used for identification purposes.
Munsell System International system that gives a definite description of a colour using the properties of Hue, Value and Chroma, this system helped prepare the BS 4800 system.
Hue Uses ten principle Hues and describes the colour with a letter and so 5Y represents pure yellow etc.
Value Represents the lightness (whites) or darkness (blacks) of a colour and is identified by a number between 0-10.
Chroma Represents the greyness of a colour and is identified by a number between 0-14.
Natural order Helps us make sense of colour ie spectrum, reversal of the natural order.

<p>Saturation Brightness/intensity of colour.</p> <p>Achromatic Not technically classed as colours as they are without a hue. These range from black through to white and are sometimes known as sensations.</p> <p>Neutrals Black, grey, white (and sometimes brown and beige).</p> <p>Terms Warm colours: from red to yellow on the colour wheel. Cool colours: from green to blue on the colour wheel.</p> <p>Uses Warm colours: advancing; giving the appearance of being closer to the eye. Cool colours: receding, creating the appearance of space.</p> <p>Shade A hue with black added.</p> <p>Tint A hue with white added.</p>
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Learning outcome
The learner will:
4. understand the effects that artificial light has on colour.
Assessment criteria
The learner can:
4.1 state the difference between artificial and natural light sources and its effect on colour
4.2 describe the term metameric effect
4.3 state what will happen to colours if the light source is changed
4.4 state the changes artificial light has on colour.

Range
Light
Tungsten May cast a yellowing warm light which will dull down cool colours, but enhance warmer colours. Main form of light in domestic properties
Fluorescent Gives off a green tinge which can dull warm colours, some give off a pink tinge which are more colour friendly and can enhance warm colours.
Sodium

LPS (low pressure sodium) used for street lamps and security lights and give off a soft luminous glow, resulting in less glare. Also used in cafes and restaurants as it creates a good atmosphere due to the light giving off a pinkish orange light HPS (High Pressure Sodium).

LED

Stands for 'Light-Emitting Diode'. An LED is an electronic device that emits light when an electrical current is passed through it. Directional beam of light, used for task lighting. Fittings often use multiple LEDs for larger spread of light. Typically white light enhancing all colours.

Halogen

Produces a very attractive bright light that closely resembles sunlight. Halogen bulbs have a tungsten filament and are filled with a mixture of argon and halogen gas. As well as energy saving, halogen can be used in spotlights and other directional light fittings. Typically white light therefore enhancing all colours although various soft glow colours can be obtained to enhance either warm or cool colours.

ECO

ECO efficient, energy saving, long lasting, replacement for standard tungsten bulbs and fluorescent tubes.

Range:

CFC: compact fluorescent, range of colours, often warm glow from fluorescent type.

LED and Halogen, generally white light.

Metameric effect

If you try to match a colour under a particular lighting condition and then change the light source, the colour will generally no longer match.

Learning outcome

The learner will:

5. be able to produce colour schemes for internal and external areas.

Assessment criteria

The learner can:

- 5.1 produce specifications for **monochromatic colour schemes**
- 5.2 produce specifications for **analogous colour schemes**
- 5.3 produce specifications for **complementary colour schemes**.

Range

Monochromatic colours

All the colours (tints, tones, and shades) of a single hue. Monochromatic colour schemes are derived from a single base hue, and extended using its shades, tones and tints. The energy is more subtle due to a lack of contrast of hue.

Analogous colours

Colours occupying any three consecutive colour segments on the colour wheel.

Complementary colours

Colours directly opposite each other on the wheel, these are contrasting and give off energy, vigour and excitement.



Appendix 1 Appendix 1 Sources of general information

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.

Our Quality Assurance Requirements encompasses all of the relevant requirements of key regulatory documents such as:

- Regulatory Arrangements for the Qualifications and Credit Framework (2008)
- SQA Awarding Body Criteria (2007)

and sets out the criteria that centres should adhere to pre and post centre and qualification approval.

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 on such 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-assessments.

City & Guilds
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www.cityandguilds.com

Useful contacts

UK learners General qualification information	T: +44 (0)844 543 0033 E: learnersupport@cityandguilds.com
International learners General qualification information	T: +44 (0)844 543 0033 F: +44 (0)20 7294 2413 E: intcg@cityandguilds.com
Centres Exam entries, Certificates, Registrations/enrolment, Invoices, Missing or late exam materials, Nominal roll reports, Results	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413 E: centresupport@cityandguilds.com
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: singlesubjects@cityandguilds.com
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: intops@cityandguilds.com
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
Employer Employer solutions, Mapping, Accreditation, Development Skills, Consultancy	T: +44 (0)121 503 8993 E: business@cityandguilds.com
Publications Logbooks, Centre documents, Forms, Free literature	T: +44 (0)844 543 0000 F: +44 (0)20 7294 2413

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As the UK's leading vocational education organisation, City & Guilds is leading the talent revolution by inspiring people to unlock their potential and develop their skills. We offer over 500 qualifications across 28 industries through 8500 centres worldwide and award around two million certificates every year. City & Guilds is recognised and respected by employers across the world as a sign of quality and exceptional training.

City & Guilds Group

The City & Guilds Group operates from three major hubs: London (servicing Europe, the Caribbean and Americas), Johannesburg (servicing Africa), and Singapore (servicing Asia, Australia and New Zealand). The Group also includes the Institute of Leadership & Management (management and leadership qualifications), City & Guilds Licence to Practice (land-based qualifications), the Centre for Skills Development (CSD works to improve the policy and practice of vocational education and training worldwide) and Learning Assistant (an online e-portfolio).

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City & Guilds

5-6 Giltspur Street

London EC1A 9DE

T +44 (0)844 543 0000

F +44 (0)20 7294 2413

www.cityandguilds.com

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