



**City & Guilds Level 2
Certificate in Preparation and
Application of Paint Systems
(6707-22)**

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

**City & Guilds Level 2
Extended Diploma in Painting
and Decorating (6707-50)**

Version 2.6 (September 2024)

Qualification Handbook

Qualification at a glance

Subject area	Building and construction
City & Guilds number	6707
Age group approved	16 or above
Entry requirements	City & Guilds does not set entry requirements for these qualifications. Extended Diploma is for learners starting at Apprenticeship Level 2
Assessment	Practical assignments/Online tests
Grading	Pass/Fail
Approvals	Full approval required
Support materials	Assessor guidance, Practical task manual, Sample tests, Smartscreen, Learning Assistant
Registration and certification	Consult the Walled Garden/Online Catalogue for last dates

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

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.	Error! Reference source not found.
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 December 2015	Updated range for LO 1, 3 and 4 in unit 201/601	Units
2.4 January 2019	Updated range for LO 5 in unit 220	Units
2.5 March 2022	TQT CLH clarification	Addition of TQT and GLH tables
2.6 September 2024	Handbook reviewed and updated to new template	Throughout

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1 Introduction

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

Area	Description
Who are the qualifications for?	These qualifications are for those individuals who work or want to work as a Painter and Decorator in the construction sector.
What do the qualifications cover?	The qualifications allow learners to learn, develop and practise the skills required for employment and/or career as a painter and decorator. They cover the following skills: <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
What opportunities for progression are there?	These qualifications allow learners to progress into employment or to the following City & Guilds qualifications: Level 2 NVQ Diploma in Painting and Decorating Level 3 Diploma in Painting and Decorating
Are the qualifications parts of a framework or initiative?	The Diploma is a technical certificate within the Construction Building Apprenticeship Framework.

Structure

To achieve the **City & Guilds Level 2 Certificate in Preparation and Application of Paint Systems (6707-22)**, learners must achieve:

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	GLH
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Mandatory units:

The learners must achieve 13 credits from these mandatory units

A/504/7000	6707-215	Preparing surfaces for decoration	7	50
K/505/0927	6707-216	Applying paint systems by brush and roller to complex areas	6	50

To achieve the **City & Guilds Level 2 Diploma in Painting and Decorating (6707-23)**, learners must achieve:

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	GLH
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Mandatory units:

The learners must achieve 52 credits from these mandatory units

A/504/6719	6707-201 OR 6707-601	Health, safety and welfare in construction	7	70
Y/504/6999	6707-202 OR 6707-602	Principles of building construction, information and communication	6	55
A/504/7000	6707-215	Preparing surfaces for decoration	7	50
K/505/0927	6707-216	Applying paint systems by brush and roller to complex areas	6	50

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	GLH
F/504/7001	6707-217	Applying standard papers to walls and ceilings	11	90
H/505/0926	6707-218	Producing specialist finishes for decorative work	8	70
M/505/0928	6707-220	Erecting and dismantling access equipment and working platforms	3	30
T/505/0929	6707-230	Creating and applying colour	4	30

To achieve the **City & Guilds Level 2 Extended Diploma in Painting and Decorating (6707-50)**, learners must achieve:

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	GLH
Mandatory units:				
The learners must achieve 86 credits from these mandatory units				
A/504/6719	6707-201 OR 6707-601	Health, safety and welfare in construction	7	70
Y/504/6999	6707-202 OR 6707-602	Principles of building construction, information and communication	6	55
A/504/6722	6707-101 OR 6707-501	Principles of building construction, information and communication	6	52
J/504/8442	6707-116	Erecting and dismantling access equipment and working platforms	2	20
D/504/6728	6707-117	Preparing surfaces for decoration	7	70

Unit accreditation number	City & Guilds unit number	Unit title	Credit value	GLH
H/504/6827	6707-118	Applying paint systems by brush and roller to non-complex areas	9	90
Y/504/6727	6707-119	Applying foundation and plain papers	7	70
R/504/6726	6707-120	Producing specialist decorative finishes	3	30
A/504/7000	6707-215	Preparing surfaces for decoration	7	50
K/505/0927	6707-216	Applying paint systems by brush and roller to complex areas	6	50
F/504/7001	6707-217	Applying standard papers to walls and ceilings	11	90
H/505/0926	6707-218	Producing specialist finishes for decorative work	8	70
M/505/0928	6707-220	Erecting and dismantling access equipment and working platforms	3	30
T/505/0929	6707-230	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 (TQT)

Total Qualification Time (TQT) is the number of notional hours which represents an estimate of the total amount of time that could reasonably be expected for a learner to demonstrate the achievement of the level of attainment necessary for the award of a qualification.

TQT comprises of the following two elements:

- 1) the number of hours that an awarding organisation has assigned to a qualification for guided learning
- 2) an estimate of the number of hours a learner will reasonably be likely to spend in preparation, study or any other form of participation in education or training, including assessment, which takes place as directed by – but, unlike guided learning, not under the immediate guidance or supervision of – a lecturer, supervisor, tutor or other appropriate provider of education or training.

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

2 Centre requirements

Approval

Full approval

To offer this qualification, new centres will need to gain both centre and qualification approval. Please refer to the document [Centre Approval Process: Quality Assurance Standards](#) for further information.

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

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 practise the requirements of the units and carry out the Practical Assignments.

Centre staffing

Staff delivering these qualifications must be able to demonstrate that they meet the following occupational expertise requirements. They should:

- be occupationally competent or technically knowledgeable in the area(s) for which they are delivering training and/or have experience of providing training (this knowledge must be to the same level as the training being delivered)
- have recent relevant experience in the specific area they will be assessing
- have credible experience of providing training
- have a CV available demonstrating relevant experience and any qualifications held.

Continuing professional development (CPD)

Centres are expected to support their staff in ensuring that their knowledge remains current of the occupational area and of best practice in delivery, mentoring, training, assessment and quality assurance, and that it takes account of any national or legislative developments.

Quality assurance

Approved centres must have effective quality assurance systems to ensure optimum delivery and assessment of qualifications. Quality assurance includes initial centre approval, qualification approval and the centre's own internal procedures for monitoring quality. Centres are responsible for internal quality assurance and City & Guilds is responsible for external quality assurance. All external quality assurance processes reflect the minimum requirements

for verified and moderated assessments, as detailed in the Centre Assessment Standards Scrutiny (CASS), section H2 of Ofqual's General Conditions. For more information on both CASS and City and Guilds Quality Assurance processes visit: the [What is CASS?](#) and [Quality Assurance Standards](#) documents on the City & Guilds website.

Standards and rigorous quality assurance are maintained by the use of:

- Internal quality assurance
- City & Guilds external quality assurance.

In order to carry out the quality assurance role, Internal Quality Assurers must:

- have appropriate teaching and vocational knowledge and expertise in the construction industry
- have experience in quality management/internal quality assurance
- hold or be working towards an appropriate teaching/training/assessing qualification
- be familiar with the occupation and technical content covered within the qualification
- have a CV available demonstrating relevant experience and any qualifications held.

External quality assurance for the qualification will be provided by City & Guilds EQA process. EQAs are appointed by City & Guilds to approve centres, and to monitor the assessment and internal quality assurance carried out by centres. External quality assurance is carried out to ensure that assessment is valid and reliable, and that there is good assessment practice in centres.

The role of the EQA is to:

- provide advice and support to centre staff
- ensure the quality and consistency of assessments and marking/grading within and between centres by the use of systematic sampling
- provide feedback to centres and to City & Guilds.

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.

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

Age restrictions

This qualification is approved for learners aged 16 or above.

Access arrangements and reasonable adjustments

City & Guilds has considered the design of this qualification and its assessments in order to best support accessibility and inclusion for all learners. We understand however that individuals have diverse learning needs and may require reasonable adjustments to fully participate. Reasonable adjustments, such as additional time or alternative formats, may be provided to accommodate learners with disabilities and support fair access to assessment.

Access arrangements are adjustments that allow candidates with disabilities, special educational needs, and temporary injuries to access the assessment and demonstrate their

skills and knowledge without changing the demands of the assessment. These arrangements must be made before assessment takes place.

Equality legislation requires City & Guilds to make reasonable adjustments where a disabled person would be at a substantial disadvantage in undertaking an assessment.

It is the responsibility of the centre to ensure at the start of a programme of learning that candidates will be able to access the requirements of the qualification.

Please refer to the Joint Council for Qualifications (JCQ) access arrangements and reasonable adjustments and access arrangements - when and how applications need to be made to City & Guilds. For more information documents are available on the City & Guilds website.

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 qualification, their responsibilities as a learner and the responsibilities of the centre. This information can be recorded on a learning contract.

Inclusion and diversity

City & Guilds is committed to improving inclusion and diversity within the way we work and how we deliver our purpose which is to help people and organisations develop the skills they need for growth.

More information and guidance to support centres in supporting inclusion and diversity through the delivery of City & Guilds qualifications can be found here:

[Inclusion and diversity | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com)

Sustainability

City & Guilds are committed to net zero. Our ambition is to reduce our carbon emissions by at least 50% before 2030 and develop environmentally responsible operations to achieve net zero by 2040 or sooner if we can. City & Guilds is committed to supporting qualifications that support our customers to consider sustainability and their environmental footprint.

More information and guidance to support centres in developing sustainable practices through the delivery of City & Guilds qualifications can be found here:

[Our Pathway to Net Zero | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com)

Centres should consider their own carbon footprint when delivering this qualification and consider reasonable and practical ways of delivering this qualification with sustainability in mind. This could include:

- reviewing purchasing and procurement processes (such as buying in bulk to reduce the amount of travel time and energy, considering and investing in the use of components that can be reused, instead of the use of disposable or single use consumables)
- reusing components wherever possible
- waste procedures (ensuring that waste is minimised, recycling of components is in place wherever possible)
- minimising water use and considering options for reuse/salvage as part of plumbing activities wherever possible.

Support materials

The following resources are available for this qualification:

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

4 Assessment

Assessment of the qualification

The following table provides the assessment requirements for each unit within the qualifications:

Assessment types			
Unit	Title	Assessment method	Where to obtain assessment materials
6707-201 OR 6707-601	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.
6707-202 OR 6707-602	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.
6707-215	Preparing surfaces for decoration	Multiple choice question paper, covering knowledge outcomes. Practical assignment, covering performance outcomes. 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.	www.cityandguilds.com

Assessment types			
Unit	Title	Assessment method	Where to obtain assessment materials
6707-216	Applying paint systems by brush and roller to complex areas	<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
6707-217	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
6707-218	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

Assessment types			
Unit	Title	Assessment method	Where to obtain assessment materials
6707-220	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
6707-230	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

Assessment strategy/

City & Guilds has written the following assessments to use with this qualification:

- live assignments/practical tasks and on demand multiple choice knowledge tests that can be downloaded from the City & Guilds website
- sample multiple choice knowledge tests for units 6707-201 or 6707-601 and 6707-202 or 6707-602 that can be downloaded from the City & Guilds website.

Test specifications

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

Multiple Choice Papers

Each unit is assessed by an externally marked online test or an internally marked paper-based test. The assessments are set by City and Guilds. Detail on the delivery and marking of these assessments can be found in the Assessor Guidance document and the End of Units Knowledge Test document.

Test 1: Health, safety and welfare in construction

Test 1	Duration: 60 minutes		
Unit	Outcome	Number of questions	Percentage %
6707-201 OR 6707-601	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: Principles of building construction, information and communication

Test 2	Duration: 80 minutes		
Unit	Outcome	Number of questions	Percentage %
6707-202 OR 6707-602	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: Preparing surfaces for decoration

Test 3	Duration: 45 minutes		
Unit	Outcome	Number of questions	Percentage %
6707-215	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: Applying paint systems by brush and roller to complex areas

Test 4		Duration: 40 minutes	
Unit	Outcome	Number of questions	Percentage %
6707-216	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: Applying standard papers to walls and ceilings

Test 5		Duration: 50 minutes	
Unit	Outcome	Number of questions	Percentage %
6707-217	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: Producing specialist finishes for decorative work

Test 6		Duration: 45 minutes	
Unit	Outcome	Number of questions	Percentage %
6707-218	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: Erecting and dismantling access equipment and working platforms

Test 7		Duration: 30 minutes	
Unit	Outcome	Number of questions	Percentage %
6707-220	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: Creating and applying colour

Test 8	Duration: 40 minutes		
Unit	Outcome	Number of questions	Percentage %
6707-230	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%

Practical Tasks

All of the practical tasks for the programme are contained in the Practical Task Manual. This manual contains candidate records for each task and must therefore be held securely by the centre between assessments and for 3 years following certification (see the Centre Manual for details).

These tasks require candidates to demonstrate their practical skills. Most practical tasks are assessed by observation of the candidate carrying out the tasks and/or an assessment of the final outcome/product. Details of how to mark and grade each practical task are contained within the assessment criteria and grading rules contained in the Practical Task Manual. Further information about the delivery of these tasks is contained in this Assessor Guidance document.

5 Units

Structure of the units

These units each have the following:

- City & Guilds reference number
- title
- level
- credit value
- guided learning hours (GLH)
- unit aim
- endorsement by a sector or regulatory body
- learning outcomes, which are comprised of a number of assessment criteria
- range statements.

Guidance for delivery of the units

This qualification comprises a number of **units**. A unit describes what is expected of a competent person in particular aspects of their job.

Each **unit** is divided into **learning outcomes** which describe in further detail the skills and knowledge that a candidate should possess.

Each **learning outcome** has a set of **assessment criteria** (performance and knowledge and understanding) which specify the desired criteria that must be satisfied before an individual can be said to have performed to the agreed standard.

Range statements define the breadth or scope of a learning outcome and its assessment criteria by setting out the various circumstances in which they are to be applied. 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

Term	Definition
Ball-pien hammer	Small handheld 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

Level:	2
Credit value:	7
GLH:	70
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.
Endorsement by a sector or regulatory body:	This unit is endorsed by Construction Skills, the Sector Skills Council for the construction industry.

Learning outcome

The learner will:

LO1 Know the health and safety regulations, roles and responsibilities

Assessment criteria

The learner can:

AC1.1 Identify **health and safety legislation** relevant to and used in the construction environment

AC1.2 State **employer and employee responsibilities** under the Health and Safety at Work Act (HASWA)

AC1.3 State **roles and responsibilities** of the Health and Safety Executive (HSE)

AC1.4 Identify **organisations** providing relevant health and safety information

AC1.5 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 regulations, 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:

LO2 Know accident and emergency reporting procedures and documentation

Assessment criteria

The learner can:

AC2.1 State legislation used for reporting accidents

AC2.2 State major **types of emergencies** that could occur in the workplace

AC2.3 Identify reportable injuries, diseases and dangerous occurrences as per RIDDOR

AC2.4 State main types of **records** used in the event of an accident, emergency and near miss and reasons for reporting them

AC2.5 Identify **authorised personnel** involved in dealing with accident and emergency situations

AC2.6 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:

LO3 Know how to identify hazards in the workplace

Assessment criteria

The learner can:

AC3.1 State the importance of **good housekeeping**

AC3.2 State reasons for risk assessments and method statements

AC3.3 Identify **types of hazards** in the workplace

AC3.4 State the importance of the correct storage of combustibles and chemicals on site

AC3.5 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:

LO4 Know about health and welfare in the workplace

Assessment criteria

The learner can:

AC4.1 Identify requirements for welfare facilities in the workplace as per Construction Design Management (CDM)

AC4.2 State health effects of noise and **precautions** that can be taken

AC4.3 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:

LO5 Know how to handle materials and equipment safely

Assessment criteria

The learner can:

AC5.1 Identify legislation relating to safe handling of materials and equipment

AC5.2 State procedures for safe lifting and manual handling activities in accordance with guidance and legislation

AC5.3 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:

LO6 Know about access equipment and working at heights

Assessment criteria

The learner can:

AC6.1 Identify legislation relating to working at heights

AC6.2 Identify types of **access equipment**

AC6.3 State **safe methods** of use for **access equipment**

AC6.4 Identify **dangers** of working at height

Range

Access equipment

Stepladders, ladders (pole, extension), trestles, hop-ups, proprietary scaffolding, podium, stilts.

Safe methods

Regular inspection, check for broken, damaged or missing components, responsible use, consideration of adverse weather conditions, good housekeeping.

Dangers

Falling tools, falling equipment, falling materials, persons falling from height (injuries to themselves and others).

Learning outcome

The learner will:

LO7 Know how to work with electrical equipment in the workplace

Assessment criteria

The learner can:

AC7.1 State **precautions** to take to avoid risks to self and others when working with electrical equipment

AC7.2 State **dangers** of using electrical equipment

AC7.3 Identify **voltages** and voltage colour coding that are used in the workplace

AC7.4 State **methods** of storing electrical equipment

Range

Precautions

Check leads, check plugs, use of cable hangers, check tools and equipment, current valid PAT certificate.

Dangers

Burns, electrocution, fire.

Voltages

Battery powered, 110/115 volts, 230/240 volts and 415 volts.

Methods

Components present, equipment cleaned, checked for damage, stored in a clean and secure location.

Learning outcome

The learner will:

LO8 Know how to use Personal Protective Equipment (PPE)

Assessment criteria

The learner can:

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City & Guilds Level 2 Extended Diploma in Painting and Decorating (6707-50)

- AC8.1 State the legislation governing use of Personal Protective Equipment (PPE)
AC8.2 State **types of PPE** used in the workplace
AC8.3 State the importance of PPE
AC8.4 State why it is important to store, maintain and use PPE correctly
AC8.5 State the importance of checking and reporting damaged PPE
-

Range

Types of 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:

LO9 Know the cause of fire and fire emergency procedures

Assessment criteria

The learner can:

- AC9.1 State **elements** essential to creating a fire
AC9.2 Identify methods of fire prevention
AC9.3 State actions to be taken on discovering a fire
AC9.4 State **types of fire extinguishers** and their uses
-

Range

Elements

Oxygen, fuel, heat.

Types of fire extinguishers

Water, foam, CO2, dry powder.

Unit 202/602

Principles of building construction, information and communication

Level:	2
Credit value:	6
GLH:	55
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.
Endorsement by a sector or regulatory body:	This unit is endorsed by Construction Skills, the Sector Skills Council for the construction industry.

Learning outcome

The learner will:

LO10 Understand how to select types of building information

Assessment criteria

The learner can:

AC10.1 interpret **information sources** used in construction

AC10.2 interpret scale, **symbols and hatchings** on a working drawing

AC10.3 explain the process and 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:

LO11 Know about environmental considerations in relation to construction

Assessment criteria

The learner can:

AC11.1 describe thermally insulated **materials**

AC11.2 describe **methods** of making buildings water efficient

AC11.3 describe **methods** of making buildings energy efficient

AC11.4 state environmental-friendly **building materials**

AC11.5 state **procedures** for waste management

Range

Materials

Polyisocyanurate (PIR), expanded polystyrene (EP) fibre glass, sheep wool, mineral wool, double glazed units, multi-foil insulation.

Methods (AC 11.2)

Efficient sanitary ware, water harvesting.

Methods (AC11.3)

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:

LO12 Understand the construction of foundations

Assessment criteria

The learner can:

AC12.1 describe **factors** to be considered when selecting **foundations**

AC12.2 describe **materials** and mix-ratios used in concrete foundations

AC12.3 explain how to **set out** foundations

AC12.4 explain **factors** to consider when excavating foundations

AC12.5 describe **methods** of transferring datums

AC12.6 calculate the volume of concrete used in pile foundation

Range

Factors (AC12.1)

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 (AC12.4)

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

Methods

Optical/laser level, straight edge and spirit level.

Learning outcome

The learner will:

LO13 Understand construction of internal and external walls

Assessment criteria

The learner can:

AC13.1 describe **wall components**

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- AC13.2 explain the importance of a Damp Proof Course (DPC)
AC13.3 calculate the area of a gable
AC13.4 identify **additives** used in mortar
AC13.5 identify different types of **bonding**
AC13.6 describe the differences between load-bearing and non-load-bearing internal walls
AC13.7 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.

Additives

Retardant, accelerant, frost inhibitor, cement dyes, plasticiser.

Bonding

Stretcher, English, Flemish.

Learning outcome

The learner will:

LO14 Know about construction of floors

Assessment criteria

The learner can:

AC14.1 describe **floor components**

AC14.2 calculate the linear quantity of floor boarding to cover an irregular shaped area

AC14.3 calculate additional quantities of wastage using percentage

Range

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.

Learning outcome

The learner will:

LO15 Know about construction of roofs

Assessment criteria

The learner can:

AC15.1 describe **types** of roofs

AC15.2 describe **roof components**

Range

Types

Gable-ended, flat, hipped, lean-to.

Roof components

Purlins, rafters, truss rafters, ridge, batten/lathe, fascia, soffit, barges, valleys, wall plate, flashings, felt, slate/tile, insulation, joists, wall plate straps.

Learning outcome

The learner will:

LO16 Understand how to communicate in the workplace

Assessment criteria

The learner can:

AC16.1 describe **job roles** within building teams

AC16.2 explain **key personnel** involved in day to day communication

AC16.3 state **information** needed when requesting materials

AC16.4 identify **methods of communication** used to relay information to colleagues and others

AC16.5 describe advantages and disadvantages of **methods of communication**

AC16.6 state **occasions** when clear communication is vital in the workplace

AC16.7 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 (AC16.4)

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Letters, emails, telephone, memos, verbal, posters, signs, meetings, radio, text messages.

Methods of communication (AC16.5)

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.

Unit 215

Preparing surfaces for decoration

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:

LO1 Know how to prepare timbers and timber sheet products ready to receive finishing systems

Assessment criteria

The learner can:

AC1.1 identify types of **timbers** and **timber sheet products** used in **construction**

AC1.2 describe the common found **defects** in **timbers** and **timber sheet products**

AC1.3 describe **surface** and **physical properties** of **timbers** and **timber sheet products**

AC1.4 describe **terminology** relating to the properties of **timber** and **timber sheet products**

AC1.5 describe the correct **preparation process** for rectifying **defects** in untreated and treated **timbers** and **timber sheet products**

AC1.6 state the appropriate **abrasive** and grade, for the preparation of untreated and treated **timbers** and **timber sheet products**

AC1.7 state the appropriate solvent-borne and water-borne primer for timbers and timber sheet products for the finishing systems to be applied

AC1.8 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:

LO2 Be able to prepare timbers and timber sheet products ready to receive finishing systems

Assessment criteria

The learner can:

AC2.1 carry out a **risk assessment**

AC2.2 select **timber** and **timber sheet products**

AC2.3 select correct **tools, equipment** and **materials** for the method of preparation

AC2.4 prepare untreated and treated **timbers** and **timber sheet products** using the correct **processes**

AC2.5 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:

LO3 Know how to prepare metal surfaces ready to receive finishing systems

Assessment criteria

The learner can:

AC3.1 identify types of metal used in **construction**

AC3.2 describe **surface** and **physical properties** of different **metal types**

AC3.3 describe **causes** of **corrosion** on **metal types**

AC3.4 describe the protective and destructive effects of **corrosion** on metal surfaces

AC3.5 describe terminology relating to corrosion of **metal types**

AC3.6 describe the **preparation processes** for ferrous and non-ferrous metals

AC3.7 state the appropriate **primer** for **metal types**

AC3.8 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.

Physical properties

Ferrous and non-ferrous.

Metal types

Ferrous (cast iron, wrought iron, mild sheet, steel) and non-ferrous (copper, aluminium, lead, galvanised steel).

Causes

Oxygen, hydrogen, moisture, atmospheric pollution.

Corrosion

Surface corrosion, pitting, oxides, millscale, galvanic action, cathodic protection.

Preparation processes

Descaling, degreasing, priming.

Primer

Zinc phosphate, metal primer, etch primer.

Learning outcome

The learner will:

LO4 Be able to prepare metal surfaces ready to receive finishing systems

Assessment criteria

The learner can:

AC4.1 identify different **metal types** used in construction

AC4.2 select correct **tools, equipment** and **materials** for method of **preparation**

AC4.3 prepare **ferrous** and **non-ferrous** metal

AC4.4 prime **ferrous** and **non-ferrous** metal

AC4.5 follow current **environmental and relevant health and safety regulations**

Range

Metal types

Ferrous: cast iron, wrought iron, mild sheet, steel)

Non-ferrous: (copper, aluminium, lead, galvanised steel)

Preparation

Hand tools: descaling, degreasing,

Power tools: orbital sanders, belt sanders, rotary disc, rotary brush, needle descaling gun.

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

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:

LO5 Know how to prepare trowelled finishes and plasterboard ready to receive finishing systems

Assessment criteria

The learner can:

AC5.1 identify **defects** associated with **surface types**

AC5.2 describe **physical** and **chemical properties** of **surface types**

AC5.3 describe **applications** of different **surface types**

AC5.4 describe effects of moisture on different **surface types**

AC5.5 describe the **process** for rectifying **defects**

AC5.6 describe the preparation of **surfaces**, according to the finish required

AC5.7 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:

LO6 Be able to prepare trowelled finishes and plasterboard ready to receive finishing systems

Assessment criteria

The learner can:

AC6.1 select correct processes for rectifying **defects** of trowelled finishes

AC6.2 select correct **preparation processes** for **surface types**

AC6.3 select appropriate **tools, equipment** and **materials** for the method of preparation

AC6.4 prepare different **surface types**, to receive **finishes**

AC6.5 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:

LO7 Understand how to remove previously painted and papered surfaces ready to receive finishing systems

Assessment criteria

The learner can:

- AC7.1 explain reasons for protecting the work area prior to removing paper
- AC7.2 explain the importance of removing **defective** paint and papers, prior to redecoration
- AC7.3 state the correct **removal method** of surface coating from **substrates**
- AC7.4 describe the reason for decontaminating surfaces following the use of liquid paint removers
- AC7.5 describe safety precautions required when carrying out **removal processes**
- AC7.6 state **health and safety factors** relating to hot work
- AC7.7 describe the different methods of removing over-painted and peelable papers
- AC7.8 explain the significance of the starting point and soaking time when removing papers
- AC7.9 describe correct method of stripping and disposing of paper contaminated with mould
- AC7.10 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:

LO8 Be able to remove previously painted and papered surfaces ready to receive finishing systems

Assessment criteria

The learner can:

- AC8.1 select, set up and check electric hot-air guns and steam strippers
 - AC8.2 protect work area prior to and during removal of paint and paper
 - AC8.3 remove previously applied coatings using **liquid paint removers and hot air steam strippers**
 - AC8.4 remove over-painted papers and peelable papers using steam stripping and hand soaking methods
 - AC8.5 check stripped surfaces are free from liquid paint remover, paint, paper and paste
 - AC8.6 dispose of removed paint and paper
 - AC8.7 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:

LO9 Know how to rectify surface conditions and defects

Assessment criteria

The learner can:

- AC9.1 identify types of **surface conditions**
 - AC9.2 state the **causes** of **surface defects**
 - AC9.3 describe how to rectify **surface conditions**
 - AC9.4 state how **surface** defects and **conditions** can be avoided
 - AC9.5 describe **cleaning agents** and methods used for removing contamination
 - AC9.6 state methods of testing for solvent-borne or water-borne coating
 - AC9.7 state **defects** for which wet abrading is a suitable process of preparation
 - AC9.8 identify defects of paint systems on **timber** and **timber product sheets**
 - AC9.9 state causes of paint defectives on **timber** and **timber product**
 - AC9.10 describe possible reasons for unsound paint on ferrous and non-ferrous **metals**
-

AC9.11 describe health and safety precautions to be applied when preparing unsound surface conditions

Range

Surface conditions

Efflorescence, moss and lichen, moulds and fungi, contamination (dirt, grease, silicone, wax polish, carbon/smoke), friable

Causes

Efflorescence, moss and lichen, moulds and fungi, contamination (dirt, grease, silicone, wax polish, carbon/smoke), friable.

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.

Surface conditions

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

Cleaning agents

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

Timber

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

Timber product

Medium density fibreboard, plywood, hardboard, blockboard.

Metals

Ferrous (cast iron, wrought iron, mild sheet, steel) and non-ferrous (copper, aluminium, lead, galvanised steel).

Learning outcome

The learner will:

LO10 Be able to rectify surface conditions

Assessment criteria

The learner can:

AC10.1 select correct **tools, equipment** and **materials** for the **rectification processes**

AC10.2 select appropriate cleaning agent for contaminated surfaces

AC10.3 rectify surface conditions

AC10.4 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:

LO11 Know how to repair and make good surfaces

Assessment criteria

The learner can:

AC11.1 describe reasons for cracks in plaster and how they occur

AC11.2 explain the stages involved in the process of **repairing and making good cracks in plaster**

AC11.3 describe the effects of heat and moisture on plaster

AC11.4 state filler used for making good open grained timber

AC11.5 describe the method for making good open grained timber and the correct abrasive to use

AC11.6 state tools required when using stoppers

AC11.7 describe how to use **stoppers and fillers**

AC11.8 describe safety precautions required when applying stoppers

Range

Repairing and making good cracks in plaster

Scraping, raking out, undercutting, wetting in, back filling, proud filling, flush filling, dry abrading.

Stoppers and fillers

Putty, plastic woods, two-pack, coloured stoppers, flexible fillers, powdered filler, interior/exterior filler, ready-mixed filler.

Learning outcome

The learner will:

LO12 Be able to repair and make good surfaces

Assessment criteria

The learner can:

AC12.1 protect work area prior to and during **repairing and making good surfaces**

AC12.2 prepare **materials** required for **repairing and making good surfaces**

AC12.3 select correct **tools, equipment** and **materials** for **repairing and making good surfaces**

AC12.4 prepare **defective areas** for **repairing and making good surfaces**

AC12.5 apply and finish **materials** for repairing and **making good surfaces**

AC12.6 follow current **environmental and relevant health and safety regulations**

Range

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.

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.

Materials

Fill, stop, caulk.

Surfaces

Types: timber, brickwork, plaster, plasterboard; and areas: ceilings, walls, doors, windows (frames and glazed units), timber trim (skirting / architrave).

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.

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).

Unit 216

Applying paint systems by brush and roller to complex areas

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:

- LO1 Understand how to prepare domestic and commercial work areas and protect surrounding areas

Assessment criteria

The learner can:

- AC1.1 describe factors to consider when preparing **domestic** and **commercial** work areas
AC1.2 explain the importance of protecting surrounding areas
AC1.3 compare types of **masking tape** and their use
AC1.4 describe the process for applying and removing **masking tape**
AC1.5 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:

LO2 Be able to prepare domestic and commercial work areas and protect surrounding areas

Assessment criteria

The learner can:

AC2.1 select **correct materials, tools and equipment** needed to protect work and **surrounding area**

AC2.2 **prepare domestic** and **commercial** work and **surrounding areas**

AC2.3 protect **surrounding areas**, furniture and fittings and surfaces ready for painting

AC2.4 remove furniture and fittings

AC2.5 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:

LO3 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:

AC3.1 describe **component parts** of brushes and rollers

AC3.2 explain reasons for selecting **application tools** for **surface coatings**

AC3.3 describe reasons for preparing **surface coatings**

AC3.4 state **properties** of **surface coatings**

AC3.5 describe **drying processes** and **stages**

AC3.6 describe how **atmospheric conditions** may affect the drying process

AC3.7 describe the sequence of painting a **room area and components** and reasons for the sequence

AC3.8 describe causes and remedies of **application defects**

AC3.9 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.

Drying processes

Water-borne

Evaporation, coalescence, oxidation.

Solvent-borne

Vaporation, oxidation, polymerisation.

Stages

Flow, set, tack, touch dry, hard dry, thorough dry.

Atmospheric conditions

Hot air, cold air, draughts, direct sunlight, lack of light, humidity.

Room areas and components

Broad areas, ceilings, flush doors, panel door, windows, linear work.

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.

Post-application defects

Retarded drying, cratering, bleeding, blooming, loss of gloss, fading, discolouration, yellowing, cracking/crazing, flaking/peeling.

Learning outcome

The learner will:

LO4 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

Assessment criteria

The learner can:

AC4.1 Select **application tools and equipment** appropriate to work

AC4.2 prepare **surface coatings**

AC4.3 apply **surface coatings** in the correct sequence, to **complex areas**

AC4.4 cut in by brush to angles and obstructions correctly and accurately to **complex areas**

AC4.5 follow current **environmental and relevant health and safety regulations**

Range

Application tools

Brushes: (must use): natural bristle, synthetic filament.

Select two of the following measurements:

- 12mm

- 25mm
- 50mm
- 75mm
- 100mm

Select two of the following rollers:

- rollers with sleeves of synthetic filament
- woven pile
- woven fabric
- mohair
- lambswool
- short
- medium
- long pile

Equipment

Roller cages, paint stirrers, strainers, paint pots, extension poles, buckets, scuttles, trays, dust sheets.

Personal Protective Equipment (PPE)

As per organisation requirements.

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

Surface coatings

Water-borne

Primers and undercoats, glosses, egg-shells, emulsions, stains and varnishes.

Solvent-borne

Primers and undercoats, glosses, stains and varnishes.

Complex Areas

Ceilings, broad areas, linear work, panel door, ferrous, non-ferrous metal, windows, flush doors.

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:

LO5 Understand how to clean, maintain and store brushes and rollers in line with manufacturer's instructions

Assessment criteria

The learner can:

AC5.1 describe different methods of cleaning **tools and equipment**

AC5.2 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:

LO6 be able to clean, maintain and store brushes and rollers in line with manufacturer's instructions

Assessment criteria

The learner can:

AC6.1 clean tools, equipment, **brushes and rollers**

AC6.2 maintain and store **brushes and rollers** in line with manufacturer's instructions

AC6.3 follow current **environmental and health and safety regulations**

Range

Brushes and rollers

Brushes: (must use): natural bristle, synthetic filament.

Select two of the following measurements:

- 12mm
- 25mm
- 50mm
- 75mm
- 100mm

Select two of the following rollers:

- 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:

LO7 Understand conditions for storing paint materials

Assessment criteria

The learner can:

AC7.1 describe the correct storage conditions for **paint materials**

AC7.2 explain the purpose of stock rotation

AC7.3 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:

LO8 Be able to store materials in accordance with COSHH data sheets

Assessment criteria

The learner can:

AC8.1 store **materials** in accordance with COSHH data sheets

AC8.2 check stock rotation of materials

AC8.3 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).

Unit 217

Applying standard papers to walls and ceilings

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:

LO1 Understand methods used in wallpaper production

Assessment criteria

The learner can:

AC1.1 describe **methods** of wallpaper production

AC1.2 describe **printing methods**

AC1.3 describe **patterns** and **paper types**

AC1.4 state the suitability of different **paper types** for different locations

AC1.5 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, moderate light 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:

LO2 Know how to select and prepare adhesives

Assessment criteria

The learner can:

AC2.1 describe different **adhesives** when applying papers to walls and ceilings

AC2.2 describe **advantages and disadvantages of adhesives**

AC2.3 state how **factors** may affect the consistency of **adhesives**

AC2.4 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:

LO3 Be able to select and prepare adhesives

Assessment criteria

The learner can:

AC3.1 select correct type of **adhesive** to suit **paper type**

AC3.2 prepare **adhesives** in accordance with manufacturers' instructions

AC3.3 adjust consistency of **adhesives** to suit **paper type**

AC3.4 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:

LO4 Understand how to apply papers to ceilings and walls

Assessment criteria

The learner can:

- AC4.1 explain **factors** to be considered when planning to apply papers
 - AC4.2 specify the use of different **papers**
 - AC4.3 explain why lining is advisable in certain **circumstances**
 - AC4.4 explain the use of girthing and area methods of calculating quantity of paper for different **pattern types**
 - AC4.5 explain **factors** to consider when **cutting papers**
 - AC4.6 explain the reason for '**marking lines**'
 - AC4.7 state the correct sequence for pasting paper
 - AC4.8 describe **faults** caused by careless pasting
 - AC4.9 explain reasons for selecting concertina and end-to-end/lap folds, for horizontal and vertical lengths
 - AC4.10 explain different **pasting methods**
 - AC4.11 identify different cutting equipment used when paper hanging
 - AC4.12 state appropriate cutting equipment for various **paper types**
 - AC4.13 explain types of **cutting equipment** which should be used for different types of papers
 - AC4.14 explain processes used for **hanging papers**
 - AC4.15 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, mis-match, tearing, dry edges, springing joints, polished joints, blistering, shrinking and stretching contamination, flattened edges, paste staining.

Learning outcome

The learner will:

LO5 Be able to apply papers to ceilings and walls

Assessment criteria

The learner can:

- AC5.1 plan the position of paper hangings taking into account different **factors**
- AC5.2 select, position and erect **access equipment**
- AC5.3 select **tools and equipment** to apply papers to ceilings and walls
- AC5.4 **calculate** quantities of wall papers
- AC5.5 measure and cut paper lengths with the minimum of waste
- AC5.6 plan, measure and mark starting lines, taking into account
 - a. **occasions**
 - b. **position**
 - c. **methods**
 - d. **considerations**
- AC5.7 **paste paper** in accordance with manufacturer's instructions
- AC5.8 apply set and drop pattern **papers** with minimum **defects**
- AC5.9 cut **papers** to top, bottom and around obstacles, maintaining cleanliness
- AC5.10 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-ups, 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:

LO6 Understand how to store materials

Assessment criteria

The learner can:

AC6.1 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:

LO7 Be able to store materials

Assessment criteria

The learner can:

AC7.1 reclaim unused standard **papers** and **adhesives**

AC7.2 store standard **papers** and **adhesives**

Range

Papers

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

Adhesives

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

Unit 218

Producing specialist finishes for decorative work

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:

LO1 Be able to produce quality finish ground coats for painted decorative work

Assessment criteria

The learner can:

AC1.1 prepare **surfaces** to produce quality finish ground coats for painted decorative work using **abrasives** and **preparation processes**

AC1.2 select **tools and equipment** to produce quality ground coat finishes

AC1.3 prepare and apply **materials** to produce quality ground coat finishes correctly as per given specifications

AC1.4 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:

LO2 Understand how to produce broken colour effect using water-borne and solvent-borne scumbles

Assessment criteria

The learner can:

AC2.1 state materials used for producing **broken colour effects**

AC2.2 state the main ingredients of water-borne and solvent-borne scumbles

AC2.3 explain reasons for extending and reducing the drying time of water borne and solvent-borne scumbles

AC2.4 explain the **benefits** of preparing more than the calculated quantity of scumble for a piece of work

AC2.5 state methods of producing uniform **broken colour effects** when working on broad areas

AC2.6 describe how **application faults** may result in an uneven pattern effect

AC2.7 describe problems which may occur from careless **application and removal of masking material**

AC2.8 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 stipplers, 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:

LO3 Be able to produce broken colour effects using water-borne scumbles

Assessment criteria

The learner can:

AC3.1 check the **suitability** of ground coat and rectify if required

AC3.2 set out areas for application of **broken colour** and previous effects using **protection** and allowing for drying times

AC3.3 prepare **materials** to produce **broken colour effects**

AC3.4 select a colourant for **broken colour effect** using water-borne scumbles

AC3.5 select **tools and equipment** to produce **broken colour effects**

AC3.6 produce uniform **broken colour effects** to given specifications

AC3.7 remove types of **protection** correctly and dispose of waste products in accordance with legislation and official guidance

AC3.8 clean, maintain and store **tools and equipment**

AC3.9 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:

LO4 Understand how to prepare stencil plates from given design and apply stencils

Assessment criteria

The learner can:

AC4.1 explain differences between positive and negative stencil types

AC4.2 describe **methods** of transferring a design onto stencil sheet materials

AC4.3 state **materials** used when manufacturing a stencil plate

AC4.4 explain why the whole plate should be treated

AC4.5 describe the suitability of **base materials** used for cutting stencil plates

AC4.6 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:

LO5 Be able to prepare stencil plates from given design and apply stencils

Assessment criteria

The learner can:

AC5.1 select appropriate **tools and equipment and materials** to manufacture a stencil

AC5.2 prepare **stencil plate materials**

AC5.3 transfer designs using **methods** given to stencil plate materials

AC5.4 cut out positive and negative stencils demonstrating **cutting considerations**

AC5.5 set and mark out stencil locations for linear runs and borders, demonstrating the relevant **planning considerations**

AC5.6 apply pre-cut positive and negative stencil types with sharp outlines

AC5.7 clean, maintain and store **tools and equipment**

AC5.8 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:

LO6 Understand how to produce wood and marble effects using basic techniques

Assessment criteria

The learner can:

AC6.1 state British Standard 4800 colours of ground coats for **wood effects**

AC6.2 outline the importance of using the appropriate colour when producing **marble effects**

AC6.3 state ingredients used in **oil-based and water-borne scumbles** for different **effects**

AC6.4 state **materials** which will prevent cissing when applying water colour

AC6.5 list the tools and their uses to produce **wood** and **marble effects**

AC6.6 explain processes for applying **wood** and **marble effect** to **structural components**

AC6.7 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.

Structural components

Panelled doors, windows, dado rails, narrow linear runs (ie architraves and skirtings), small wall panels.

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.

Learning outcome

The learner will:

LO7 Be able to produce wood and marble effects using basic techniques

Assessment criteria

The learner can:

AC7.1 check **factors** relating to the suitability of the ground coat, and rectify if required

AC7.2 select **colourants and pigments** appropriate to the given wood or marble effect

AC7.3 prepare **graining and marbling materials**

AC7.4 select **tools, brushes and equipment**

AC7.5 produce **wood and marble effects** using **processes**

AC7.6 clean, maintain and store **tools and equipment and brushes**

AC7.7 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

Artist's 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

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:

LO1 Understand the preparation required for using access equipment and working platforms

Assessment criteria

The learner can:

AC1.1 explain **factors** to be considered when selecting **access equipment** and **working platforms**

AC1.2 identify **suitable access equipment and working platforms** for types of internal and external work.

AC1.3 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:

LO2 Be able to prepare for using access equipment and working platforms

Assessment criteria

The learner can:

AC2.1 select suitable **access equipment and working platforms** for types of internal and external work

AC2.2 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:

LO3 Understand how to check access equipment and identify faults

Assessment criteria

The learner can:

AC3.1 describe the function of **access equipment components**

AC3.2 identify **hazards** associated with the use of access equipment and working platforms

AC3.3 explain the reasons for **inspections** and **inspection time periods**

AC3.4 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:

LO4 Be able to check access equipment

Assessment criteria

The learner can:

AC4.1 select suitable **access equipment components**

AC4.2 check **access equipment components**

AC4.3 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:

LO5 Understand how to erect access equipment and working platforms

Assessment criteria

The learner can:

AC5.1 explain the benefits of a risk assessment for **access equipment and working platforms**

AC5.2 identify suitable **personal protective equipment (PPE)** for erecting **access equipment and working platforms**

AC5.3 explain the reasons for correct manual handling of components when erecting **access equipment and working platforms**

AC5.4 state the main implications of the Work at Height Regulations in relation to use of **access equipment and working platforms**

AC5.5 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

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

Learning outcome

The learner will:

LO6 Be able to erect access equipment and working platforms

Assessment criteria

The learner can:

AC6.1 use personal protective equipment (PPE) when erecting **access equipment and working platforms**

AC6.2 erect **access equipment and working platforms** in the correct sequence to ensure it is safe for use

AC6.3 secure **access equipment and working platforms** where required

AC6.4 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.

Learning outcome

The learner will:

LO7 Understand how to dismantle and store components

Assessment criteria

The learner can:

AC7.1 explain the correct sequence of dismantling **access equipment and working platforms**

AC7.2 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:

LO8 Be able to dismantle and store components

Assessment criteria

The learner can:

AC8.1 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.

Unit 230

Creating and applying colour

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:

LO1 Understand the colours required to create a colour wheel

Assessment criteria

The learner can:

AC1.1 explain the **purpose** of a colour wheel

AC1.2 identify **primary, secondary** and **tertiary colours** in a colour wheel

AC1.3 explain what a **primary** colour is

AC1.4 explain what a **secondary** colour is and how it is created

AC1.5 explain what a **tertiary** colour is and how it is created

AC1.6 describe **analogous colours** and what position they are on the colour wheel

AC1.7 describe **complementary colours** and what position they are on the colour wheel

AC1.8 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.

Primary

Pure colours.

Secondary

Mixing two primary colours.

Tertiary

Mixing primary colour with a secondary colour (ratio 2:1).

Analogous colours

Colours occupying any three consecutive colour segments on the wheel; they share strong undertones, creating a pleasing harmony.

Complementary colours

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

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.

Learning outcome

The learner will:

LO2 Be able to create a colour wheel on a broad surface

Assessment criteria

The learner can:

AC2.1 select **equipment** required to draw a colour wheel

AC2.2 plan, measure and draw a colour wheel to incorporate **primary and secondary colours**

AC2.3 apply **primary colours** in the correct position on the wheel using straight and curved lines

AC2.4 mix the correct **primary colours** to create the **secondary colours** and apply in the correct position

Range

Equipment

Pencils, compass, trammel, ruler, chalk line, spirit level, masking tape.

Primary colours

Red, yellow, blue.

Secondary colours:

Green, orange, purple (violet).

Learning outcome

The learner will:

LO3 understand colour organisational systems and terminology used in industry

Assessment criteria

The learner can:

AC3.1 state **colour organisational systems** used in industry

AC3.2 explain **reasons** why the BS 4800 series was developed

AC3.3 explain the terms **hue, value and chroma** and how to identify them within the **Munsell system**

AC3.4 explain the **natural order** of colour

AC3.5 explain **saturation** in relation to hues on a colour wheel

AC3.6 explain the term **achromatic**

AC3.7 explain the term **neutrals**

AC3.8 explain the **terms** warm and cool colours and their **uses**

AC3.9 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 greyiness 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.

Saturation

Brightness/intensity of colour.

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.

Neutrals

Black, grey, white (and sometimes brown and beige).

Terms

Warm colours: from red to yellow on the colour wheel.

Cool colours: from green to blue on the colour wheel.

Uses

Warm colours: advancing; giving the appearance of being closer to the eye.

Cool colours: receding, creating the appearance of space.

Shade

A hue with black added.

Tint

A hue with white added.

Learning outcome

The learner will:

LO4 Understand the effects that artificial light has on colour

Assessment criteria

The learner can:

AC4.1 state the difference between artificial and natural **light** sources and its effect on colour

AC4.2 describe the term **metameric effect**

AC4.3 state what will happen to colours if the light source is changed

AC4.4 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:

LO5 Be able to produce colour schemes for internal and external areas

Assessment criteria

The learner can:

AC5.1 produce specifications for **monochromatic colour schemes**

AC5.2 produce specifications for **analogous colour schemes**

AC5.3 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 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 [Centre document library](http://www.cityandguilds.com) on www.cityandguilds.com or click on the links below:

Centre Handbook: Quality Assurance Standards

This document is for all approved centres and provides guidance to support their delivery of our qualifications. It includes information on:

- centre quality assurance criteria and monitoring activities
- administration and assessment systems
- centre-facing support teams at City & Guilds/ILM
- centre quality assurance roles and responsibilities.

The Centre Handbook should be used to ensure compliance with the terms and conditions of the centre contract.

Centre Assessment: Quality Assurance Standards

This document sets out the minimum common quality assurance requirements for our regulated and non-regulated qualifications that feature centre-assessed components. Specific guidance will also be included in relevant qualification handbooks and/or assessment documentation.

It incorporates our expectations for centre internal quality assurance and the external quality assurance methods we use to ensure that assessment standards are met and upheld. It also details the range of sanctions that may be put in place when centres do not comply with our requirements or actions that will be taken to align centre marking/assessment to required standards. Additionally, it provides detailed guidance on the secure and valid administration of centre assessments.

Access arrangements: When and how applications need to be made to City & Guilds

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 document library](http://www.cityandguilds.com) also contains useful information on such things as:

- conducting examinations
- registering learners
- appeals and malpractice.

Useful contacts

Please visit the [Contact us](#) section of the City & Guilds website.

City & Guilds

For over 140 years, we have worked with people, organisations and economies to help them identify and develop the skills they need to thrive. We understand the life-changing link between skills development, social mobility, prosperity and success. Everything we do is focused on developing and delivering high-quality training, qualifications, assessments and credentials that lead to jobs and meet the changing needs of industry.

We partner with our customers to deliver work-based learning programmes that build competency to support better prospects for people, organisations and wider society. We create flexible learning pathways that support lifelong employability because we believe that people deserve the opportunity to (re)train and (re)learn again and again – gaining new skills at every stage of life, regardless of where they start.

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City & Guilds of London Institute
Giltspur House
5–6 Giltspur Street
London
EC1A 9DE

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