

Level 3 Advanced Technical Diploma in Painting and Decorating (450) (7907-30)

October 2017 Version 1.1

Guide to the examination

Who is this document for?

This document has been produced for centres who offer **City & Guilds Level 3 Advanced Technical Diploma in Painting and Decorating**. It gives all of the essential details of the qualification's external assessment (exam) arrangements and has been produced to support the preparation of candidates to take the exam/s.

The document comprises of four sections:

1. **Details of the exam.** This section gives details of the structure, length and timing of the exam.
2. **Content assessed by the exam.** This section gives a summary of the content that will be covered in each exam and information of how marks are allocated to the content.
3. **Guidance.** This section gives guidance on the language of the exam, the types of questions included and examples of these, and links to further resources to support teaching and exam preparation.
4. **Further information.** This section lists other sources of information about this qualification and City & Guilds Technical Qualifications.

Version and Date	Change Detail	Section
June 2019 v1.1	Amendment to number of resit opportunities	1. Details of the exam

1. Details of the exam

External assessment

City & Guilds Technical qualifications have been developed to meet national policy changes designed to raise the rigour and robustness of vocational qualifications. These changes are being made to ensure our qualifications can meet the needs of employers and Higher Education. One of these changes is for the qualifications to have an increased emphasis on external assessment. This is why you will see an external exam in each of our Technical qualifications.

An external assessment is an assessment that is set and/or marked by the awarding organisation (ie externally). All City and Guilds Technical qualifications include an externally set and marked exam. This must be taken at the same time by all candidates who are registered on a particular qualification. We produce an exam timetable each year. This specifies the date and time of the exam so you can plan your delivery, revision and room bookings/PC allocation in plenty of time.

The purpose of this exam is to provide assurance that all candidates achieving the qualification have gained sufficient knowledge and understanding from their programme of study and that they can independently recall and draw their knowledge and understanding together in an integrated way. Whilst this may not be new to you, it is essential that your learners are well prepared and that they have time to revise, reflect and prepare for these exams. We have produced a Teaching, Learning, and Assessment guide that is you should refer to alongside the present document ([Teaching, Learning and Assessment Guide](#)). If a learner does not pass the exam at their first attempt, there is only one opportunity to resit the exam, so preparation is essential.

Exam requirements of this qualification

- **Painting and Decorating** – Theory Exam (2 hours 15 minutes)

The exam is graded and a candidate must achieve at least a Pass grade in order to be awarded the qualification. (In addition to the exam, a synoptic assignment must also be completed and passed). You can find full details of the synoptic assignment in the *Qualification Handbook* and the *Synoptic Assessment Guide* – please see the link to the qualification page at the end of this document.

When does the exam take place?

The exam is offered on two fixed dates in March and June. The exact dates will be published at the start of the academic year in the *Assessments and Exam Timetable* <http://www.cityandguilds.com/delivering-our-qualifications/exams-and-admin>.

At the start of the programme of study, in order to effectively plan teaching and exam preparation, centres should know when the exam will be taking place and allocate teaching time accordingly. Section 2 of this document gives a summary of the content that needs to be covered

in order to prepare learners for the exam and full details of this are given in the Qualification Handbook.

Form of exam

The exam for this qualification can be taken either on paper (7907-501) or online (7907-001).

Can candidates resit the exam?

Candidates who have failed an exam or wish to retake it in an attempt to improve their grade, can do so **twice**. The third and final retake opportunity applied to Level 3 only. The best result will count towards the final qualification. If the candidate fails the exam three times then they will fail the qualification.

How the exam is structured

Each exam has a total of 70 marks and is made up of:

- 10 multiple choice questions
- approximately 12 - 15 short answer questions
- 1 extended response question.

Multiple choice and short answer questions are used to confirm **breadth of knowledge and understanding**.

The extended response question is to allow candidates to demonstrate **higher level and integrated understanding** through written discussion, analysis and evaluation. This question also ensures the exam can differentiate between those learners who are 'just able' and those who are higher achieving.

More details about and examples of question types are given in Section 3 of this document.

Assessment Objectives

The exams are based on the following set of assessment objectives (AOs). These are designed to allow the candidate's responses to be assessed across the following three categories of performance:

- **Recollection** of knowledge.
- **Understanding** of concepts, theories and processes.
- **Integrated application** of knowledge and understanding.

In full, the assessment objectives covered by the exam for this qualification are:

Assessment objective	Mark allocation (approx %)
<i>The candidate..</i>	
AO1 Recalls knowledge from across the breadth of the qualification	37%
AO2 Demonstrates understanding of concepts, theories and processes from a range of learning outcomes.	46%
AO4 Applies knowledge, understanding and skills from across the breadth of the qualification in an integrated and holistic way to achieve specified purposes.	17%

Booking and taking the exam

All assessments for City & Guilds Technical Exams must be booked through Walled Garden. There is a deadline for booking exams, synoptic assessments and any other centre marked assessments, please refer to the time line to check these dates.

The exam must be taken under the supervision of an invigilator who is responsible for ensuring that it is conducted under controlled conditions. Full details of the conditions under which the exam must be taken can be found in the Joint Council for Qualifications (JCQ) document, [Instructions for Conducting Examinations \(ICE\)](#).

Special consideration

Candidates who are unable to sit the exam owing to temporary injury, illness or other indisposition at the scheduled time may qualify for special consideration. This is a post-examination adjustment that can, in certain circumstances, be made to a candidate's final grade. The Joint Council for Qualifications' guide to the special consideration process can be found at www.jcq.org.uk.

To make a request for special consideration, please contact: policy@cityandguilds.com

Access arrangements

Access arrangements are arrangements that allow candidates with particular requirements, disabilities or temporary illness to take assessments, where appropriate, using their normal way of working. The Joint Council for Qualifications document, *Access Arrangements and Reasonable Adjustments* gives full details and can be downloaded [here](#).

For further information and to apply for access arrangements please see:

[Access arrangements - When and how applications need to be made to City & Guilds](#)
[Applying for access arrangements on the Walled Garden](#)

2. Content assessed by the exam

Painting and Decorating

The exam assesses:

- **Unit 301: Principles of organising, planning and pricing construction work**
- **Unit 302: Erecting and dismantling access equipment and working platforms**
- **Unit 304: Producing specialist finishes for painted decorative work**
- **Unit 306: Applying water-borne paint systems using airless equipment**

Each exam assesses a sample of the content of these units. This means that a single exam will **not** cover 100% of the unit content. The full range of content will be assessed over a number of examination series. Details of the coverage of a particular exam paper will **not** be released in advance of the exam itself. Centres should **not** make assumptions about what will be assessed by a particular exam based on what has been covered on previous occasions. In order to be fully prepared for the exam, learners **must** be ready to answer questions on **any** of the content outlined below.

The table below provides an overview of how the qualification's Learning Outcomes are covered by each exam and the number of **marks** available per Learning Outcome (ie **not** the number of *questions* per Learning Outcome). In preparing candidates for the exam, we recommend that centres take note of the number of marks allocated to Learning Outcomes and to assign teaching and preparation time accordingly.

In preparing candidates for the exam, centres should refer to the Qualification Handbook which gives full details of each Learning Outcome.

The following is a summary of only that qualification content which is assessed by the exam and **not** a summary of the full content of the qualification.

Unit	Learning outcome	Topics	Number of MC Questions	Number of marks per section
301 Principles of organising, planning and pricing construction work	L01 Understand the way the construction industry is regulated	1.1: Health and safety regulations 1.2: Planning permission and building control	3	12
	L03 Understand how to estimate quantities and price work for construction	3.1: Tendering process 3.2: Calculate quantities of building materials 3.3: Prepare a quote		

	LO4 Understand how to plan work activities for construction	4.1: Planning construction works 4.2: Statutory safety documentation		
	LO5 Understand how to communicate effectively in the workplace	5.1: Written and oral communication		
	LO2 Understand energy efficiency and sustainable materials for construction	2.1: Sustainable development 2.2: Thermally insulated materials 2.3: Construction methods for insulation 2.4: Energy saving measures	1	2
	LO6 Understand and use drawings and associated software	6.1: Manual drafting 6.2: Computer Aided Design (CAD) 6.3: Building Information Modelling (BIM)		
302 Erecting and dismantling access equipment and working platforms	LO1 Check and prepare access equipment and working platforms	1.1: Select access equipment and working platforms 1.2: Inspect and identify suitability of access equipment	1	6
	LO2 Erect, access, dismantle and store access equipment and working platforms	2.1: Erect access equipment and working platforms 2.2: Dismantle and store access equipment components		
304 Producing specialist finishes for painted decorative work	LO1 Prepare and apply multi-plate stencils	1.1: Stencil types and plate materials 1.2: Stencil production and planning 1.3: Applying stencils	3	14
	LO2 Replicate different types of wood using graining methods	2.1: Preparation of surfaces and ground coats 2.2: Tools, equipment and brushes		

		2.3: Prepare and apply graining materials		
	LO3 Replicate marble	3.1: Preparation of surfaces and ground coats 3.2: Tools, equipment and brushes 3.3: Prepare and apply marbling materials		
	LO4 Apply metal leaf	4.1: Preparation of surfaces and ground coats 4.2: Tools, equipment and brushes 4.3: Prepare and apply metal leaf		
306 Applying water-borne paint systems using airless equipment	LO1 Perform preparation and protection of work areas	1.1: Preparing domestic and commercial work area 1.2: Local Exhaust Ventilation (LEV) and natural ventilation for work area	2	14
	LO2 Demonstrate safe use of a functioning airless spray unit with water-borne coatings	2.1: Parts and functions of an airless spray set up 2.2: Preparation of materials 2.3: Produce a working airless spray unit 2.4: Apply coatings using an airless unit		
	LO3 Understand how to rectify faults and defects in equipment and applied coatings	3.1: Equipment faults 3.2: Application faults		
	LO4 Perform cleaning, maintenance and storage of airless spray equipment and materials	4.1: Cleaning and storage of components and equipment 4.2: Safe disposal of materials		
Total marks for sections:			10	48 marks

Integration across units*:	12 marks
Total marks for exam:	70 Marks

* *Integration across units*. These marks relate to Assessment Objective 4. These marks are awarded to differentiate between levels of performance by candidates taking the exam. The marks are given for how well a candidate has applied their knowledge, understanding and skills from across the units that make up the qualification in an integrated way to meet the requirements of the exam questions.

3. Guidance

Vocabulary of the exam: use of 'command' verbs

The exam questions are written using 'command' verbs. These are used to communicate to the candidate the type of answer required. Candidates should be familiarised with these as part of their exam preparation.

The following guidance has been produced on the main command verbs used in City & Guilds Technicals exams.

A more detailed version of this table, which also includes the command verbs used in the assignments is published in *City & Guilds Technical Qualifications Teaching, Learning and Assessment* guide.

Command verb	Explanation and guidance
Analyse	Study or examine a complex issue, subject, event, etc in detail to explain and interpret, elements, causes, characteristics etc
Calculate	Work out the answer to a problem using mathematical operations
Compare (...and contrast) (or describe the similarities/differences)	Consider and describe the similarities (and differences) between two or more features, systems, ideas, etc
Define	Give the meaning of, technical vocabulary, terms, etc.
Describe	Give a detailed written account of a system, feature, etc (..the effect of...on...) the impact, change that has resulted from a cause, event, etc (..the process..) give the steps, stages, etc
Differentiate between	Establish and relate the characteristic differences between two or more things, concepts, etc
Discuss	Talk/write about a topic in detail, considering the different issues, ideas, opinions related to it
Distinguish between	Recognise and describe the characteristic differences between two things, or make one thing seem different from another
Evaluate	Analyse and describe the success, quality, benefits, value, etc (of an end product, outcome, etc)
Explain	Make (a situation, idea, process, etc) clear or easier to understand by giving details (..how..) Give the stages or steps, etc in a process, including relationships, connections, etc between these and causes and effects.
Give example(s) illustrate/	Use examples or images to support, clarify or demonstrate, an explanation, argument, theory, etc

Give a rationale	Provide a reason/reasons/basis for actions, decisions, beliefs, etc
Identify	Recognise a feature, usually from a document, image, etc and state what it is
Justify	Give reasons for, make a case for, account for, etc decisions, actions, conclusions, etc, in order to demonstrate why they suitable for or correct or meet the particular circumstances, context
Label	Add names or descriptions, indicating their positions, on an image, drawing, diagram, etc
List	Give as many answers, examples, etc as the question indicates (candidates are not required to write in full sentences)
Name	Give the (technical) name of something
Propose	Present a plan, strategy, etc (for consideration, discussion, acceptance, action, etc).
Select	Choose the best, most suitable, etc, by making careful decisions
State	Give the answer, clearly and definitely
Summarise	Give a brief statement of the main points (of something)

Question types

The following explains, and gives examples of, types of questions used in City & Guilds Technical exams. In preparing candidates to take the exam, it is recommended that you familiarise them with the requirements of each question type so that they can be effective and make best use of the time available when sitting the exam.

- An effective candidate will gauge the type and length of response required from the question and the number of marks available (which is given for each question on the exam paper).
- Short answer questions may not require candidates to write in complete sentences. Extended response questions will require a more developed response.
- Candidates should read the exam paper before attempting to answer the questions and should allocate time proportionate to the number of marks available for each question or section.

Question type	Example question	Mark Scheme
<p>Multiple Choice questions These are objective questions with a predetermined answer. These consist of a question (or stem) and four options. The candidate should select the correct option (the key). The other 3 options (the distractors) will be plausible but incorrect in some significant respect so that the candidate is required to consider and reject these in order to identify the correct option.</p>	<p>What is the purpose of a Gantt chart when planning construction work?</p> <p>a) To list all costings of individual tasks. b) To record information of repetitive tasks. c) To illustrate task start and finish times and their duration. d) To control operations and highlight all hazardous tasks on site.</p>	<p>Correct answer: C</p>
<p>Short answer questions - Knowledge</p>	<p>Identify three methods for reducing energy use and the impact of buildings on the environment. (3 marks)</p>	<p>Answers may include; Renewable energy sources; solar, wind turbines, photovoltaic, ground or air source (1 mark). Design features; air tightness, lighting, water harvesting (1 mark). Locally sourced and sustainable materials (1 mark).</p>

Short answer questions - Understanding

Explain why a permit to work is used. (2 marks)

Answers

1 mark for each of the following; (maximum two marks)

- To authorise certain personnel to carry out work within a specified time frame **(1 mark)**
 - To set out precautions required to complete work safely based on risk assessment **(1 mark)**
 - To control work to prevent major accidents **(1 mark)**
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Extended response questions

Extended response questions are those that require the candidate to write a longer written response using sentences and paragraphs. These usually require candidates to discuss, explain, etc. a topic in some detail. The question is often based on a short case study, scenario or other prompt. The level of detail should be gauged from the question and the number of marks available.

Example question

The dining area in a local restaurant requires re-decoration. The ceiling has three plain plaster centrepieces around the light fittings. Three of the walls in the restaurant are brush painted brickwork. The base of one of the external brickwork walls has a white powdery substance on it. The remaining papered large wall has a stained hardwood fire surround on it. The centrepieces require a replacement with a more ornate look. The three brickwork walls must have a spray finish. The papered wall is to be finished with a flock wallcovering and the fire surround marbled in Rouge Royale. The restaurant aims to be closed for only five days during the redecoration. All work must be completed before the fully booked reopening.

Measurements: the dining room is 6 m x 10 m and a ceiling height of 3 m.

Discuss how the dining area should be re-decorated to meet customer requirements. **(12 marks)**

Mark scheme

Indicative content

- Health and Safety
 - List of tools
-

- Ceiling
- Brick walls
- Papered wall
- Fire surround
- Sequence of work

Band 1 (1 – 4 marks)

Response is basic and explanations of how the tasks needed to be carried out are not clear. Lists stages of decoration without much detail. No description of safety implications. Possibly misinterprets tasks, stages out of sequence and lists some tools, materials and finishes – but no explanation of how they are connected and why they are used. No acknowledgement of efflorescence.

In order to access higher marks, the response will include;
Brief description of basic safety implications and items of PPE.

Example band 1 response

First clear and prepare the area, moving furniture to middle of room. Strip the wall using hot water and stripping with a knife.
Mask the wall area using masking tape and paper and spray walls with airless spray gun, starting at the top.
Marble the fireplace with stains and glazes using a feather and softener.
Paint wall with roller.
Cut out stencil and apply stencil sticking it with tape and using a stencil brush below ceiling.
Put furniture back in place.

Band 2 (5 – 8 marks)

Response shows some description of the tasks needed to be carried out. Provides some details of stages of decoration, masking, tools, materials and finishes, but does not make links between them. Description of basic safety implications. Some description on fixing methods and applications. Description on type of spray to be used.

In order to access higher marks, the response will include;

Details of stages of decoration, tools, materials and finishes with some links between them. Acknowledges treatment required of efflorescence but does not recognise cause and how to rectify. Explanation of basic safety implications, LEV, RPE and access equipment, material storage, tools and colours.

Example band 2 response

First, do a risk assessment and plan out the work, then clear the area to prevent furniture getting damaged.

Start stripping the papered wall using a steam stripper and stripping knife. Make sure floor is protected with plastic. Clean wall after of all paste with sugar soap.

The powder on the wall is called efflorescence and needs to be sealed with an Alkali Resisting Primer before painting.

Mask off area to be sprayed using plastic and masking tape. Spray walls and ceiling using an airless spray. Spray ceiling first then walls. Make sure you use PPE, e.g. a respirator and keep others away whilst spraying and keep ventilated.

Cut in and roller wall.

Cut out stencil and apply the stencil level to a line placed on the wall. Make sure stencil is flat to stop 'creep' using a stencil brush.

Prepare fireplace, apply basecoats and mix glazes using reds, browns and white. Apply a 'Rouge Royale' marble effect with brushes and feathers and soften using a badger hair softener.

Clean area and replace all furniture.

Band 3 (9 – 12 marks)

Response shows good understanding of the tasks needed to be carried out. Evaluates and analyses stages of decoration, tools, materials and finishes by discussing advantages and disadvantages. Adequately discusses links between them. Makes a recommendation but without justification. An in-depth detailed description of safety implications for centrepiece replacement and airless spray use. Linked to stages of decoration, tools, masking, spray setup, materials and finishes. Use of correct PPE/ RPE and addresses LEV with recommendations.

In order to access higher marks, the response will include;

Strong attention to detail through a cohesive and thorough discussion. Response shows clear understanding of the integration of decorating components. Incorporates and justifies recommendation.

Example band 3 response

Carry out a risk assessment of the job, taking special account of the use of an airless spray unit and the local exhaust ventilation requirements, making the area safe for the workers and members of the public.

Prepare a plan of the work, to maximise the efficiency of the workforce and ensure the safety of the workforce, ensuring that the job is finished within 5 days.

As the room is only 3 m high, stepladders, trestles and lightweight staging, or a small mobile tower are appropriate to use as access equipment.

Clear the area of as much furniture and equipment as possible, what can't be removed must be protected.
Isolate any electrical sockets and protect the floor area with plastic and dust sheets before stripping the paper.
Depending on the type of paper, a steam stripper may be required. Remove and dispose of paper. Wash down wall with sugar soap to remove any paste residue.
The powdery substance on the wall is efflorescence, (soluble salts drawn to the surface) which needs to be brushed off dry with a stiff brush and then sealed with an Alkaline Resisting Primer.
Prepare all other areas (filling and abrading where necessary).
Mask the ceiling lights, along with any surfaces and fittings not required to be painted, using masking tape, and thin plastic sheeting or masking paper.
Set up the airless spray unit and ensure there is sufficient ventilation, taking care not to contaminate other areas.
Using appropriate PPE and RPE, spray the ornate centrepieces first, then the ceiling, followed by the walls.
After spraying the final coats, remove and dispose of properly, the masking materials and clean the spray unit.
Cut in, then roller the previously papered wall.
Cut out the stencil and apply a chalk or laser line across the smooth wall. Using the registration marks on the stencil, centralise and stick flat the stencils to avoid creep and create a balanced effect.
Prepare the fireplace and apply an aluminium primer to prevent discolouration of the paint, then apply 2-3, light warm grey base coats, and using stains of white, black, raw umber, and red and yellow ochres create glazes and produce a 'Rouge Royale' marble, softening with a badger haired softener to blend effect and protect with a varnish.
Clean the area of all rubbish, check for defects and rectify. Replace furniture and fitting back in Dining room.

Examination technique

Candidates with a good understanding of the subject being assessed can often lose marks in exams because they lack experience or confidence in exams or awareness of how to maximise the time available to get the most out of the exam. Here is some suggested guidance for areas that could be covered in advance to help learners improve exam performance.

Before the exam

Although candidates cannot plan the answers they will give in advance, exams for Technical qualifications do follow a common structure and format. In advance of taking the exam, candidates should:

- be familiar with the structure of the exam (ie number and type of questions).
- be aware of the amount of time they have in total to complete the exam.
- have a plan, based on the exam start and finish time for how long to spend on each question/section of the exam.
- be aware of how many marks are available for each question, how much they should expect to write for each question and allow most time for those questions which have the most marks available.

At the start of the exam session

At the start of the exam, candidates:

- should carefully read through the instructions before answering any questions.
- may find it helpful, where possible, to mark or highlight key information such as command words and number of marks available on the question paper.
- identify questions which require an extended written answer and those questions where all or part of the question may be answered by giving bullets, lists etc rather than full sentences.

Answering the questions

Candidates do not have to answer exam questions in any particular order. They may find it helpful to consider, for example:

- tackling first those questions which they find easiest. This should help them get into the 'flow' of the exam and help confidence by building up marks quickly and at the start of the exam.
- tackling the extended answer question at an early stage of the exam to make sure they spend sufficient time on it and do not run out of time at the end of the exam.

Candidates should avoid wasting time by repeating the question either in full or in part in their answer.

Candidates should **always** attempt every question, even questions where they may be less confident about the answer they are giving. Candidates should be discouraged however, from spending too long on any answer they are less sure about and providing answers that are longer and give more detail than should be necessary in the hope of picking up marks. This may mean they have less time to answer questions that they are better prepared to answer.

Extended answer questions

Before writing out in full their answer to extended questions, candidates may find it helpful to identify the key requirements of the question and jot down a brief plan or outline of how they will answer it. This will help clarify their thinking and make sure that they don't get 'bogged down' or provide too much detail for one part of the question at the expense of others.

Towards the end of the exam

Candidates should always set aside time at the end of the exam to read back through and review what they have written in order to make sure this is legible, makes sense and answers the question in full.

If a candidate finds they are running out of time to finish an answer towards the end of the exam, they should attempt to complete the answer in abbreviated or note form. Provided the content is clear and relevant, examiners will consider such answers and award marks where merited.

Further guidance on preparing candidates to take the exam is given in the City & Guilds publication, [Technical Qualifications, Teaching, Learning and Assessment](#) which can be downloaded free of charge from City & Guilds website.

4. Further information

For further information to support delivery and exam preparation for this qualification, centres should see:

City & Guilds

Qualification homepage: <https://www.cityandguilds.com/qualifications-and-apprenticeships/construction/construction/7907-painting-decorating> which includes:

- Qualification handbook
- Synoptic Assignment
- Sample assessments

Technical Qualifications, Resources and Support: www.cityandguilds.com/techbac/technical-qualifications/resources-and-support

Joint Council for Qualifications

Instructions for Conducting Examinations: <http://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations>