

# Level 3 Advanced Technical Diploma in Architectural Joinery (7906-31)(450)

**Qualification Report 2022** 

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### Foreword

#### **Results August 2022**

As you will likely be aware, Ofqual has announced that grading for General Qualifications this summer will be more generous than prior to the pandemic. This is partly due to managing the impact of disruption and learning loss on learner performance and also managing fairness between learners in different years who had different methods of determining their grades. Therefore, for A levels and GCSEs, grading will seek a midway position between 2019 and 2021, meaning, in general, results will be somewhat higher than prior to the pandemic. This year, 2022, is a transitional year and outcomes and standards will likely return to pre-pandemic levels in 2023.

Similarly, for Vocational and Technical Qualifications (VTQs), this summer will be a transitional year and Ofqual has now been clear that for VTQs "we should expect that this summer's results will look different, despite exams and assessments taking a big step towards normality." Ofqual has published a blog What's behind this summer's VTQ results

In acknowledgement of the disruption to learning and to support fairness for all learners certificating this summer (some of whom will be competing against learners taking General Qualifications for the same progression and higher education opportunities), we will be taking loss of learning into consideration, whilst still acknowledging the need to uphold the validity of the qualifications. On this basis, we have made the decision to apply a form of 'safety net' through some additional 'generosity' to both the theory examinations and synoptic assignments within our Technical Qualifications wherever appropriate, (noting that it may not be appropriate to apply where there is a clear impact on knowledge and skills to practice, particularly health and safety requirements or other relevant legislation). We are therefore also reviewing candidate work a few marks below (equivalent to 5% of maximum marks) the Pass and Distinction notional boundaries – the boundaries used during the awarding process as the best representation of maintaining the performance standard from 2019.

The reason for lowering boundaries, where appropriate, by 5% of the maximum marks available, is that it is broadly commensurate with the level of generosity learners are likely to see in General Qualifications at level 2 and level 3. Providing that senior examiners can support the quality of learners' work seen below the notional boundaries and agree it is sufficient to maintain the integrity, meaning and credibility of the qualifications, the grade boundaries will be lowered across the full set of grades – e.g Pass, Merit, Distinction and Distinction Star.

Given the circumstances, this is the best approach to take into account the disruption to teaching and learning across every learner in a fair and transparent way, and at the same time maintain the integrity and meaning of qualifications. This approach helps to level our Technical Qualifications awarding approach with that adopted for General Qualifications and other qualifications awarded in England and in the wider UK.

#### Spring examination series 2022

Having taken this decision, we are also mindful of learners who have taken components in **Spring 2022** and believe they should also have access to the same level of generosity. For these learners, we wish to adopt a similar approach. Therefore, for learners taking Technical Qualification assessments in spring there will be similar generosity, through the addition of 5% of the maximum mark available for the assessment. It is a different mechanism to that we are using for the summer assessments but provides the same level of generosity to those learners taking assessments in the summer.

## Introduction

This document has been prepared by the Chief Examiner and Principal Moderator; it is designed to be used as a feedback tool for centres in order to enhance teaching and preparation for assessment. It is advised that this document is referred to when planning delivery and when preparing candidates for City & Guilds Technical assessments.

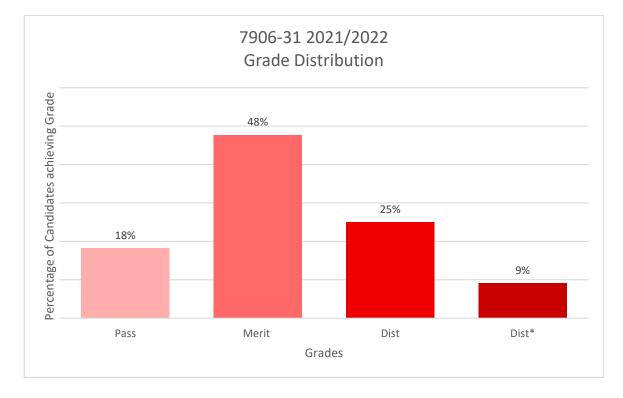
This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments in the 2022 academic year. It will explain aspects which caused difficulty and potentially why the difficulties arose.

The document provides commentary on the following assessments;

- 7905-003/503 Level 3 Architectural Joinery Theory Exam
  - March 2022 (Spring)
  - o June 2022 (Summer)
- 7906-004 Level 3 Architectural Joinery Synoptic Assignment

# **Qualification Grade Distribution**

The grade distribution for this qualification during the 2021/2022 academic year is shown below.



This data is based on the distribution as of 16 August 2022.

Please note City & Guilds will only report qualification grades for candidates who have achieved all of the required assessment components, including Employer Involvement, optional units and any other centre assessed components as indicated within the Qualification Handbook.

# **Theory Exam**

### **Grade Boundaries**

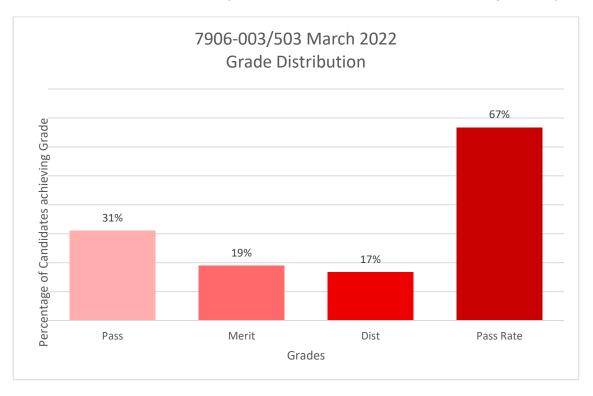
Assessment: 7906-003/503 Series: March 2022 (Spring)

Below identifies the final grade boundaries for this assessment, as agreed by the awarding panel.

Total marks available	70
Pass mark	27
Merit mark	37
Distinction mark	48

The generosity applied to the summer assessments will also retrospectively be applied to candidates who achieved their best result in spring. 5% of the base mark of the assessment will be added to their score rather than applied to boundaries.

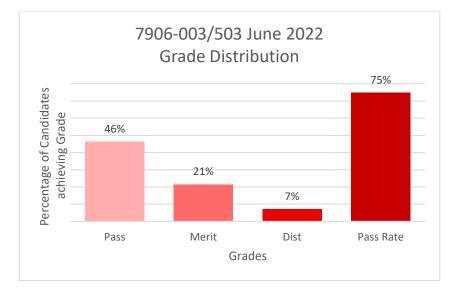
The graph below shows the approximate distributions of grades and pass rate for this assessment, it does not account of any marks that have been amended due to generosity.



Below identifies the final grade boundaries for this assessment.

Total marks available	70
Pass mark	24
Merit mark	34
Distinction mark	45

The graph below shows the approximate distributions of grades and pass rate for this assessment using the above boundary marks.



### **Chief Examiner Commentary**

#### Qualification Title: 7906-003/503 Level 3 Architectural Joinery – Theory exam

#### Series 1: March 2022 (Spring)

43 candidates sat the exam this series, which is the most to have taken it to date, with previous years having very low numbers or no entrants at all.

Generally, the questions were reasonably well answered, with good breadth and depth of knowledge demonstrated across the paper. Most candidates attempted all the questions.

Most candidates did well with the multiple-choice questions, with no discernible patterns.

Strengths were seen around topics such as environmental issues, communication methods, CAD, and the set up and use of machinery, including topics:

- 301.06.02 Understand and use drawings and associated software
- 306.01.02 Understand and use legislation and documentation relating to the safe use of woodworking machinery

Weaknesses were seen with questions covering topics,

- 301.01.02 Understand the way the construction industry is regulated
- 301.03.01 Understand how to estimate quantities and price work for construction
- 306.02.02 Carry out the inspection and maintenance of fixed and transportable machinery
- 306.04.03 Use planing machines.

Another weakness was the calculation question, which was generally not well responded to, a few candidates made simple errors such as incorrect decimal point placement.

The extended response question was quite well answered; with some good responses regarding setting up a workshop. This question is designed to allow candidates to show breadth and depth of knowledge across units 301 and 306. The question allowed candidates to select from a list of machines that would be used in a joinery shop, with a budget in mind, allowing for priorities to be set by the candidate. Candidates who read the question carefully and took into consideration the scenario set, as well as the budget, were awarded most marks.

Some responses showed a cohesive attention to detail, with thorough justifications given to which machines are required, and these received the best marks. Lower marks were awarded where a brief list was given, or no attention to the budget was given.

To improve exam results, candidates would benefit from further teaching around the UK planning system, how jobs are tendered/quoted for, sawblades and ACOP. A particular area that would improve performance would be around how to work out material requirements.

Candidates should also be reminded to read the questions fully and carefully and align their answers to the marks available to access all the marks given, particularly at middle and higher band response levels. Candidates need to be reminded of the need to demonstrate their full depth/ breadth and range of knowledge and understanding across all topics. During the extended response questions candidates should demonstrate they understand and have analysed the scenario fully and show a confident understanding, giving justifiable reasoning behind their answers to fully access the marks available.

#### Series 2: June 2022 (Summer)

The paper covered the syllabus well, with a good range of question styles. Generally, questions are reasonably well responded to without any significant gaps in knowledge or understanding seen.

14 candidates sat the exam this series, which was lower than the up take in March 2022 which had 39 candidates taking this test (the largest cohort for this assessment to date). Previous years have seen very low numbers or no entrants at all.

Generally, the questions were reasonably answered, with good breadth and depth of knowledge demonstrated across the paper. Most candidates attempted all the questions.

Candidates performed reasonably well with the multiple-choice questions, with no discernible patterns.

Generally, most questions were responded to, indicating that they were accessible and that also there was sufficient time allowed for the exam. However, the extended response question was generally poorly responded to with marks tending to sit within the lower band. Some candidates did provide a reasonable response to the question which could well indicate it was a good discriminator between the candidates with varying ability.

Strengths were seen around topics such as CAD, the use of morticers and maintenance logs including topics:

- 301.06.02 Understand and use drawings and associated software
- 306.01.02 Understand and use legislation and documentation relating to the safe use of woodworking machinery.

Weaknesses were seen with questions covering topics such as use of planers and the way quotes are prepared, including topics:

- 301.01.02 Understand the way the construction industry is regulated
- 301.03.01 Understand how to estimate quantities and price work for construction
- 306.02.02 Carry out the inspection and maintenance of fixed and transportable machinery
- 306.04.03 Use planing machines.

Candidates tended to miss marks on the extended response question; with one or two reasonably good responses regarding setting up a workshop. This question is designed to allow candidates to show breadth and depth of knowledge over units 301 and 306. The question allowed candidates to plan ahead for the adaptation of an existing work area for different kind of joinery product, thinking about different machines and the layout of the shop.

Some responses showed a reasonable attention to detail, with justifications given as to which machines are required – these question responses received the best marks. Lower marks were awarded where the description did not mention workshop layout, additional tooling required or staff training.

To improve exam results, teaching around workshop layouts, different machines available and their uses, and the process/requirements of preparing quotes

Candidates should also be reminded to **read the questions fully and carefully** and align their answers question requirements to ensure that they give a full and relevant response. Candidates who do not do this are likely to miss the marks they need to score to access the middle and higher-grade bands. Candidates need to be reminded of the need to demonstrate their full depth/ breadth and range of knowledge and understanding across all topics. During the extended response questions candidates should demonstrate they understand and have analysed the scenario fully and show a confident understanding, giving justifiable reasoning behind their answers to maximise marks scored.

# **Synoptic Assignment**

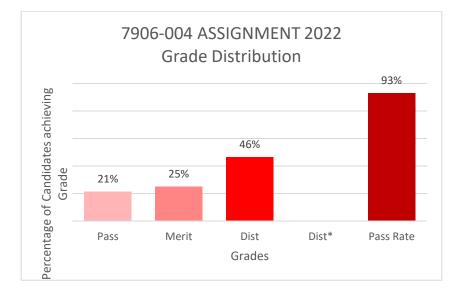
### **Grade Boundaries**

Below identifies the final grade boundaries for this assessment.

Assessment: 7906-004 Level 3 Architectural Joinery – Synoptic Assignment Series: 2022

Total marks available	60
Pass mark	23
Merit mark	32
Distinction mark	41

The graph below shows the approximate distributions of grades and pass rate for this assessment using the above boundary marks.



### **Principal Moderator Commentary**

The synoptic assignment is designed to assess the units of the qualification not included within the theory test.

For this academic year it was broken down into two distinct parts

- unit 307 Manufacturing curved joinery (practical tasks 2 a), b) and c) and task 3)
- unit 308 Manufacture stairs with turns (knowledge task 1)

Both tasks are based around a Joinery contractor winning the contract for replacing some joinery products for an Edwardian Residence, simulating what could happen in a real situation.

The knowledge task 1 was to produce an annotated scale drawing of a section of a turning stair to include a plan view and an elevation of the cut well and closed string, showing dimensions and stating how the stairs meet compliance to the Building Regulation.

The practical task 2 a, b and c was to set out curved headed panelled door, complete a cutting list and produce the required templates for the door components and task 3 was to manufacture and finish the top 350 mm of the curved headed door, all to the specifications provided. Following completion and time for reflection, candidates had to complete a self-evaluation document (task 4).

#### Breakdown on each Assessment Objective (AO)

• **AO1** Recalls knowledge from across the breadth of the qualification.

Most candidates demonstrated good evidence of recalling knowledge across all tasks selecting the correct tools and equipment for producing the setting out rod and producing accurate cutting lists. Basic geometry was required to set out the curved sections. Most candidates had no difficulty in setting out the geometry, following the geometry requirement drawing provided.

• **AO2** Demonstrates understanding of concepts, theories, and processes from across the breadth of the qualification.

A basic drawing was provided showing an image of the complete curved head section required by the client; no detail was given on the type or location of joints to be used. Candidates selected a wide range of jointing and construction methods.

Some candidates included both joint and hidden detail within their setting out rod while the lower scoring candidates omitted this from their setting out detail and tended to produce mortices that failed to compensate for the panel grooves.

The higher quality candidate responses included production of templates during the setting out process, saving time not having to set up trammels twice and ensuring accuracy. They also selected joint types and locations that minimised the amount of shot grain in the finished item.

• AO3 Demonstrates technical skills from across the breadth of the qualification.

Most candidates completed the task in the recommended time with various degrees of success most could be classified as fit for purpose with only minor errors while others did not fully met this standard, the most common mistake being candidates not working to a

recognised sequence and making simple errors that required replacement timber, i.e. segmental sections not being equally divided, large wedges where mortices have been cut full width and breakout where short grain sections have been incorporated. Some excellent use of hand and power tools was observed, along with the setting up and using of static machines.

• **AO4** Applies knowledge, understanding and skills from across the breadth of the qualification in an integrated and holistic way to achieve specified purposes.

Candidates that achieved the higher marks within AO4 had familiarised themself with the assessment brief, fully understood what was required and devised a sequence of operations that would enable them to complete the task in a timely manner. The higher quality candidate work was completed to a standard that met the tolerances. Candidates that did not prepare and plan adequately tended to be marked lower within this AO.

• **AO5** Demonstrates perseverance in achieving high standards and attention to detail while showing an understanding of wider impact of their actions.

As Architectural joinery is very much process-driven, with tight tolerances required to meet the industry standard. Attention to detail is paramount from start to finish in the manufacture of any joinery item, and the candidates that regularly checked measurements throughout the setting out stage tended to produce working drawings that were clean, accurate and easy to follow. Using face side and edge marks correctly enabled the more organised candidates to mark all joints at the same time, again demonstrating a comprehension of what is required to produce an accurate piece of Architectural joinery.

#### Summary

Candidates that read and fully understood the brief, planned a sequence of operations and regularly checked their setting out detail tended to produce the most accurate work. Candidates with an accurate setting out rod and planned sequence of operations i.e. marking out in pairs, machining in a batch etc, completed the task comfortably within the time given, allowing them time to ensure the overall finish met the set tolerances. Candidates that did not work to a recognised sequence tended to make basic errors requiring replacement components and ended up rushing to finish producing a poorer overall finish that resulting in lower marks been awarded.

#### **Risks / Issues**

Task 1 was often viewed as an unimportant part of the synoptic with candidates producing sketches or drawings that contained no or minimum dimensions or annotation. It is critical that candidates and centres approach and carry out this task with the same importance as the practical task.

Task 3 some centres supplied European Redwood and not Poplar as stated within the resources list. While every effort is made to ensure the tasks are as cost effective to centres as possible, when a specific material is stated, it is to allow the candidates the best opportunity to showcase their skills and ability within the synoptic assessment. Centres that do not provide the correct materials and deviated from the specification are potentially disadvantaging their own candidates.

Task 4 the self-evaluation document is be used to reflect the overall performance of the candidate with a recommendation of 300 words. Some candidates struggled to produce a good reflection often writing a basic method statement and was often difficult to read, and uploaded on scraps of paper, while it is not mandatory to use the proformas supplied it would be advantageous if the candidates had the opportunity to word process these if they find articulating their thoughts using traditional handwriting challenging.