

8202-25 Level 2 Technical Certificate in Plumbing

2022

Qualification Report

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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.

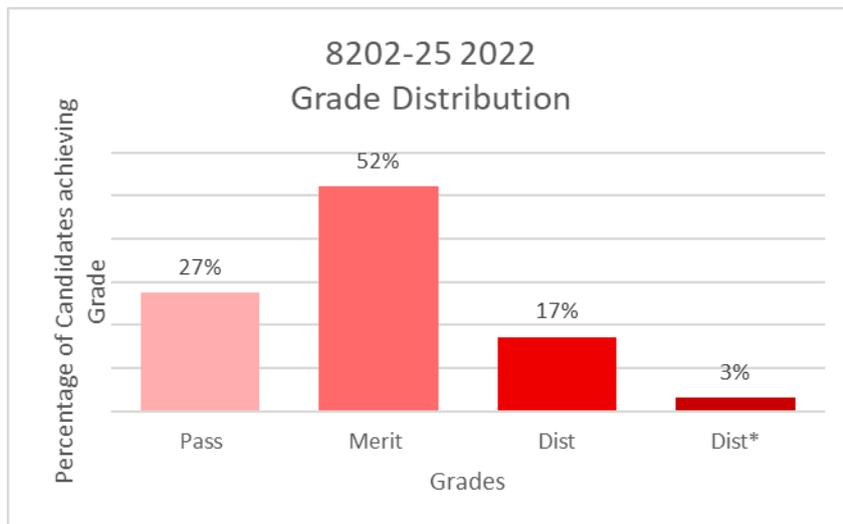
This report provides general commentary on candidate performance in both the synoptic assignment and theory exam. It highlights common themes in relation to the technical aspects explored within the assessment, giving areas of strengths and weakness demonstrated by the cohort of candidates who sat assessments 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:

- 8202-025/525 Level 2 Plumbing – Theory exam
 - March 2022 (Spring)
 - June 2022 (Summer)
- 8202-026 Level 2 Plumbing – Synoptic Assignment

Qualification Grade Distribution

The grade distribution for this qualification is shown below:



This data is based on the distribution as of 1 September 2022. Figures are rounded to the nearest whole number.

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. The grade distribution shown above could include performance from previous years.

Theory Exam

Grade Boundaries

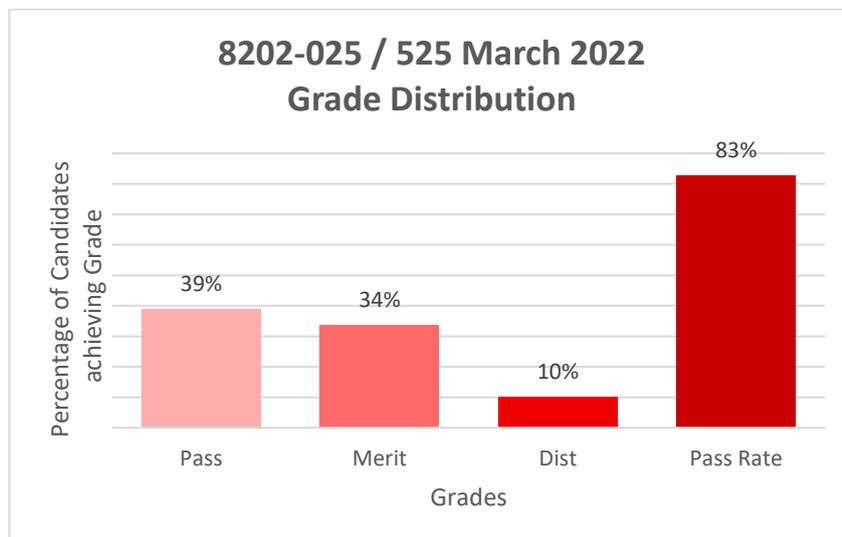
Assessment: 8202-025/525
Series: March 2022 (Spring)

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

Total marks available	60
Pass mark	24
Merit mark	33
Distinction mark	43

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 for any marks that have been amended due to generosity:

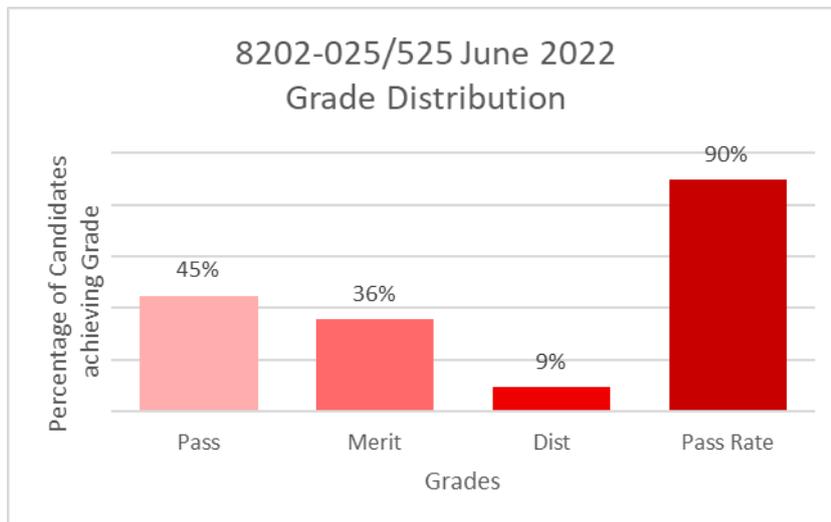


Assessment: 8202-025/525
Series: June 2022 (Summer)

Below identifies the final grade boundaries for this assessment:

Total marks available	60
Pass mark	21
Merit mark	30
Distinction mark	40

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



Chief Examiner Commentary

8202-025/525 Level 2 Plumbing - Theory exam

Series 1 – March 2022

This exam covers units 211, 212, 213, 214, 215, 216 and 217. The exam is designed to allow candidates to demonstrate a broad range of subject knowledge within the qualification.

The questions are broken down into a mixture of assessment objectives, AO1 (Recall of knowledge) and AO2 (Understanding) across the breadth of units examined, with some stretch and challenge scenario-based questions to capture depth of understanding of the plumbing concepts.

1213 candidates sat this exam, which was a large increase on previous series.

Notably this year, candidates showed good understanding of the scenario-based questions that allowed them to show true understanding of concepts within some of the more challenging topic areas.

Candidates demonstrated good knowledge and understanding in the following areas:

- Health and Safety.
- Plumbing processes, particularly questions which contained images and those linked to use of materials.

Areas where candidate responses were not consistent focused around:

- Principles.
- Technical terminologies.

This is expected and demonstrates the differences in depth of learning and understanding of technical knowledge, concepts and principles across the cohort. It is recommended that centres reinforce learning of these.

The performance of candidates was consistent with expectations across all boundaries. For example candidates that met the pass criteria performed reasonably well on AO1 Recall questions, with less of a depth of understanding and ability to answer AO2 questions correctly.

A good range of the subjects from the qualification are contained in the exam, including installation application, knowledge and understanding. Most candidates submitted responses to all of the questions within the exam.

In conclusion, candidates and centres would benefit from reinforcing understanding of some generic health and safety practices, including access arrangements. Alongside this, candidates would benefit from developing some deeper learning of the Installation principles for pipework layouts, for example material selection and sleeving requirements when going through walls.

There was considerable lack of understanding of fulcrums and levers displayed in lower performing candidates. Additional areas where performance of candidates could have been improved were linked to sanitation installations and the layout of components functions.

Furthermore, lower performing candidates displayed gaps in knowledge in the operation of heating systems components and design layout, including basic principles of electrical systems and power.

Series 2 – June 2022

This exam paper was set with a mixture AO1 knowledge, AO2 understanding questions which were used across the breadth of units examined. Notably this year there was a good response to the AO2 (Understanding) scenario-based question, particularly among the higher-scoring candidates. These questions allowed for candidates to show true understanding of concepts. The paper allowed for candidates to demonstrate a broad range of subject knowledge within the qualification.

The overall performance of candidates has improved as centres are becoming more familiar with the content and the delivery. A particular area of strength for the majority of candidates were the questions focussed on Health and Safety, Working Processes and installation Practices. Questions around Hot Water Principles and Material Identification were also answered particularly well by the majority of candidates.

Areas where candidates scored lower marks included understanding and applied knowledge questions associated with:

- Sanitation
- Drainage
- Cold water
- Understanding technical terminologies.

The applied knowledge questions allowed candidates to display both their breadth and depth of knowledge, and this enabled clear differentiation between Distinction and Pass learners. More candidates were able to demonstrate their knowledge through the applied questions. These questions demonstrated differences in the depth of learning and understanding of concepts and principles amongst candidates. Higher scoring candidates were able to demonstrate knowledge across the breadth of the assessment, while there were significant gaps in understanding demonstrated by lower-scoring candidates.

Due to the summative nature of this assessment, candidates would benefit from revision sessions and formative assessments throughout the year to support the end point theory exam. It is a recommendation that delivery should ensure all aspects of the qualification are revisited prior to assessment and that centres should reinforce the principles of Cold Water, Sanitation and Drainage prior to assessment.

Centres are advised to utilise the support material available on the City & Guilds website such as guidance support and past papers so that candidates are familiar with the exam style. In particular, candidates should be encouraged to develop their understanding of how to respond to different command verbs (eg Explain, Describe, Evaluate, etc.).

Synoptic Assignment

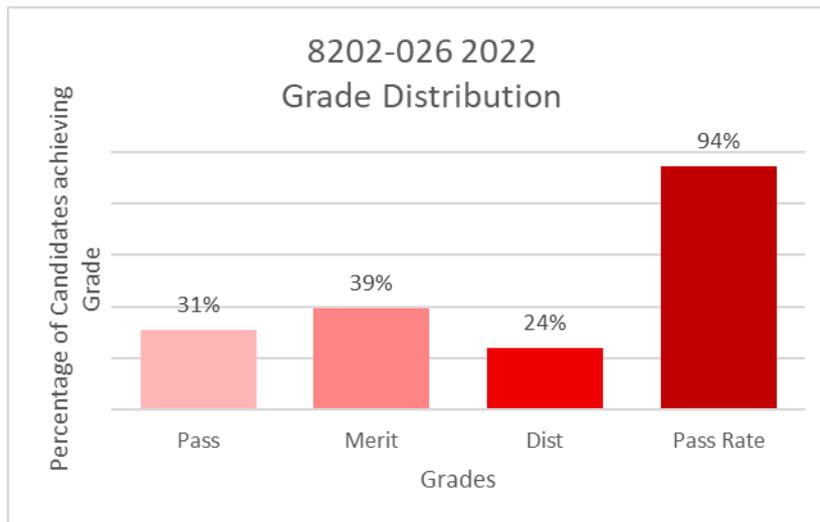
Grade Boundaries

Below identifies the final grade boundaries for this assessment:

Assessment: 8202-026
Series: 2022

Total marks available	60
Pass mark	21
Merit mark	33
Distinction mark	45

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



Principal Moderator Commentary

There was a considerable increase in number of centres completing the qualification and most centres worked well within the assignment guidelines. Centres in general achieved deadlines for uploading of materials and support evidence. The evidence supplied by the centres, for the candidates entered, was robust and generally provided good supporting evidence for the synoptic assessment taken. This included good use of photographic support materials

Centres, in the majority of cases, have performed very well in the conducting and recording of the assignment and associated evidence requirements. Some excellent practice regarding the recording and referencing of support photographs has been developed by the centres to accurately record the evidence and allow the ease of referencing for the moderators. This is excellent and has been highlighted as good practice.

The quality of the marking across the centres linked to marking bands demonstrated that centres have understood the synoptic assessment model and consistently applied marks across the range of Assessment Outcomes.

In the majority of cases, the supporting statements from the assessor justified the marks awarded across the synoptic. The centres provided quantifying statements on the candidates' performance that clearly support the marks awarded in the bands. Overall centres have a very good understanding of the delivery and assessment of the synoptic.

Candidate performance across the synoptic was generally good with candidates completing a range of activities that gauged their breath of knowledge and practical skills. The level of skills was accurately recorded in the marking scheme by the centre markers in the samples moderated.

Candidates produced work that clearly identified where skills and knowledge are aligned, resulting in good quality pieces of work submitted. Candidates performed well across all Assessment Objectives with only the student self-reflection activity for some learners highlighted as an area for development. In these cases, in order to improve, candidates should focus on what went well and how they could improve their own performance rather than recording the installation process they followed. Some pieces of written work would have benefited from typed formats as some learner and assessor handwriting made moderation of the content difficult at times.

Most candidates were able to complete the tasks within the time allowed to varying degrees of accuracy. Candidates supplied good supporting evidence and good quality method statements with higher performing candidates highlighting where clear understanding was evident.