

# **T Level Heating Engineering Occupational Specialism**

## **8710-355 Occupational Specialism Report (Summer 2024)**

Version and date	Change detail	Section	Question
V1-0 August 2024			

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# Foreword

## Summer 2024 Results

The occupational specialism qualification is made up of one component, which needs to be successfully achieved to attain the T Level Heating Engineering Occupational Specialism.

We discussed the approach to standard setting/maintaining with Ofqual and the other awarding organisations before awarding this year. We have agreed to take account of the newness of qualifications in how we award this year to recognise that students and teachers are less familiar with the assessments ([grading-arrangements-for-vtqsand-technical-qualifications-within-t-levels-in-the-academic-year-2023-to-2024](#)), whilst also recognising the standards required for these qualifications.

## Introduction

This document has been prepared to be used as a feedback tool for providers in order to support and enhance teaching and preparation for assessment. It is advised that this document is referred to when planning delivery and when preparing candidates for the T Level Technical Qualification (TQ) in Building Services Engineering for Construction **Occupational Specialisms**.

This report provides general commentary on candidate performance in the occupational specialism assignment. 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 summer 2024 assessment series.

The grade boundaries that were used to determine candidate's final summer 2024 results are also provided. **For summer 2024, as per Ofqual guidance, the approach to grading recognises that these are new qualifications.**

# 8710-355 Heating Engineering Occupational Specialism

## Candidate performance by task

### Task 1

Risk assessments lacked depth and failed to explore key safety hazards. Despite this, marks were generally high and did not reflect the limited content of the risk assessments submitted.

Materials lists were generally good and covered most key components. Method statements were limited in places and failed to address some key areas such as decommissioning, waste disposal and considerations for the specific location in which the task was to be completed.

Many drawings were basic, in presentation and content.

Marking out was mostly accurate and method used was correct, resulting in only minor inaccuracies.

### Task 2

Generally good detail provided for the candidates' practical performance.

Installations followed logical sequencing throughout the tasks in line with the method statement which resulted in a timely completion of the task. There was a range of completed tolerances.

Use of tools was good and most candidates had very few wasted materials.

Photographic evidence was strong, and reports were generally detailed. Further detail could have been added in consideration to some assessment themes to assist the moderation process. Provider observers commented upon strengths and weaknesses with regards to the installation but very few weaknesses identified relating to decommissioning. Commissioning records generally good.

PO forms were generally detailed, however assessors should be encouraged to use terminology contained in the marking band and explained how they have come to award the marks given.

Candidates followed manufacturer's instructions at most stages of the task. Not all providers followed the guidance in relation to the assessment. There was some evidence of making good to the building fabric, but this was not always included.

### **Task 3**

Health and safety practices were followed during preparation and throughout tasks and all work completed safely.

Maintenance reports at times lacked detail around the fault-finding process and tended to focus only on the practicality of replacing one component for another.

Communication: discussion with customer was mostly clear and most questions asked were relevant to the task. Fault-finding techniques were carried out with some success demonstrating knowledge of fault-finding techniques that was appropriate

PO forms were generally detailed, however assessors should be encouraged to use terminology contained in the marking band and explained how they have come to award the marks given.

Candidates followed manufacturer's instructions at most stages of the fault diagnosis and rectification of fault followed a logical process and was completed efficiently with only minor mistakes.

# Best practice and guidance to providers on potential areas for improving performance in assessment

It is recommended that providers utilise and deliver the sample assessments and past series assessments as formative assessment to support candidates in preparation for summative assessment.

## Task 1

- Allow learners to practice completing material and equipment lists in reference to an installation diagram.
- Spend time completing risk assessments for a range of tasks ensuring all hazards are identified and control measures are put in place.
- Work with learners on writing detailed method statements with justifications for installation tasks
- Plan time to complete a range of installation diagrams for a range of heating systems. These should include measurements, BS symbols and correct layouts.
- Encourage candidate to use rulers, include key measurements and BS symbols and also make sure the drawing reflects the assessment area.

## Task 2

- Allow learners time to practice installing a range of heating components.
- Practice various joining methods on a range of heating pipework materials.
- Correctly demonstrate the decommissioning of systems, highlighting the correct waste disposal methods.
- Providing training and guidance on the correct commissioning of a range of heating systems including equipment used and industry documentation.
- Carry out a range of timed discussions with learners on the hand over requirements of systems and components including explanations of service requirements, demonstration of system operation and discussing maintenance requirements.
- Provide training and guidance on making good to the building fabric. This includes filling and painting of a range of surfaces.



### Task 3

- Carry out a range of simulated fault diagnosis scenarios including customer discussions, reference to manufacturer instructions and methods of repairing faults.
- Spend time completing written maintenance reports for a range of tasks detailing:
  - Details of the fault.
  - Method chosen for repair.
  - Detailed process of how they will repair the system.
- Providing training and guidance on the correct Commissioning following maintenance on a range of heating systems including equipment used and industry documentation.

## Support materials

### **Sample and Past Occupational Specialism (OS) Assessments:**

It is recommended that Providers utilise and deliver the **sample OS** as well as **past OS** (if available) as formative assessment to support candidates in preparation for summative assessment.

Sample and past OS: [T Level Technical Qualification in Building Services Engineering for Construction qualifications and training courses | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

### **Guide Standard Exemplification Material (GSEM) Assessments:**

It is also recommended that Providers utilise the **GSEMs** to help understand the standard required to achieve a Distinction and Pass grade.

8710-355 OS Distinction GSEM: [Heating Engineering Distinction Guide SEM](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

8710-355 OS Pass GSEM: [Heating Engineering Threshold Competence Guide SEM](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

### **Grade Standard Exemplification Material (Grade SEM) Assessments:**

It is also recommended that Providers utilise the **Grade SEMs** to help understand the standard that was required in the summer 2023 assessment series to achieve a Distinction and Pass grade.

8710-355 OS Distinction Grade SEM: [Heating Engineering Distinction Grade SEM](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

8710-355 OS Pass Grade SEM: [Heating Engineering Pass Grade SEM](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

### **TQ Occupational Specialism Assessment Process Guide:**

The guide gives support to Providers in preparing for and delivering T Level Occupational Specialism assessments.

Link: [TQ Occupational Specialism Assessment process guide \(cityandguilds.com\)](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

### **Events and Webinars:**

City & Guilds run free webinars and events throughout the year on preparing for and delivering the T Level Employer Set Projects. The below link provides details on upcoming in person events, live webinars, on-demand webinars and preparation for the ESP assessment.

Link: [Events and webinars - T Levels | City & Guilds \(cityandguilds.com\)](https://www.cityandguilds.com/~/media/2023/07/17/13626676/13626676.pdf)

## Grade boundaries

The table below shows the grade mark ranges for the Occupational Specialism **for the summer 2024 series**.

<b>Grade</b>	<b>Mark range</b>
Distinction	69 - 90
Merit	53 - 68
Pass	38 - 52
Unclassified (U)	0 - 37

## Get in touch

The City & Guilds Quality team are here to answer any queries you may have regarding your T Level Technical Qualification delivery.

Should you require assistance, please contact us using the details below:

Monday - Friday | 08:30 - 17:00 GMT

T: 0300 303 53 52

E: [technicals.quality@cityandguilds.com](mailto:technicals.quality@cityandguilds.com)

W: <http://www.cityandguilds.com/tlevels>

Web chat available [here](#).

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