

T Level Technical Qualification in Building Services Engineering for Construction

8710-355 Heating Engineering

Grade standard exemplification material

Pass - Summer 2024

Version and date	Change detail	Section	Question
v1-0 October 2024			

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Introduction

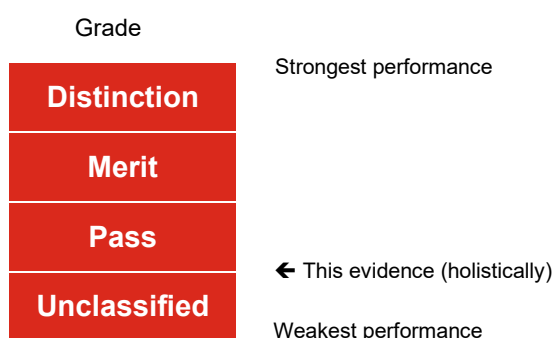
Summer 2024 Results

This document is aimed at providers and learners to help understand the standard that was required in the summer 2024 assessment series to achieve a pass grade for the 8710-355 Heating Engineering Occupational Specialism (OS).

The grade standard exemplification evidence (Grade SEM) provided for the pass grade displays the holistic standard required across the tasks to achieve the pass grade boundary in the summer 2024 series.

The aim of these materials is to provide examples of knowledge, skills and understanding that attested to pass standard (threshold competence) in summer 2024. It is important to note that in live assessments a candidate's performance is very likely to exhibit a spikey profile and standard of performance will vary across tasks.

The Occupational Specialism is graded Distinction, Merit, Pass or Unclassified.



The pass grade boundary is based on a synoptic mark across all tasks. The materials in this Grade SEM are separated into two sections as described below. Materials are presented against a number of tasks from the assignment.

Task

This section details the tasks that the candidate has been asked to carry out. What needs to be submitted for marking and any additional evidence required including any photograph/video evidence. Candidate evidence that was or was not included in this Grade SEM has also been identified within this section.

In this Grade SEM there is candidate evidence from:

- Task 1
- Task 2
- Task 3

Candidate evidence

This section includes exemplars of candidate work, photographs of the work in production (or completed) and practical observation records of the assessment completed by provider assessors. This was evidence that was captured as part of the assessment and then internally marked by the provider assessor.

The Occupational Specialism brief and tasks can be downloaded from here: [8710-355 heating engineering os summer24 v1-0](#)

Important things to note:

- 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-vtgsand-technical-qualifications-within-t-levels-in-the-academic-year-2023-to-2024](#)), whilst also recognising the standards required for these qualifications.
- The evidence presented, as a whole, was sufficient to achieve the pass grade. However, performance across the tasks may vary (i.e. some tasks completed to a higher/lower standard than pass grade).

Grade descriptors

To achieve a pass (threshold competence), a candidate will be able to:

Demonstrate an acceptable performance that meets the requirement of the brief and that is required to enter the industry to begin to work in the occupational area.

Demonstrate the adequate technical skills in cutting, bending, fixing pipework and installing components that is in line with industry standards.

Interpret information, demonstrate planning, assess risk and follow safe working methods when applying practical skills to an acceptable standard as recognised by industry.

Demonstrate basic knowledge and understanding of the principles and processes required for heating engineering.

Work safely showing an understanding in the selection and use of tools and equipment and demonstrate a basic awareness of straightforward preparation and application processes.

Attempt some complex tasks and the level of performance mostly meets an acceptable level.

Identify causes of heating faults and have some knowledge and skills in how to rectify them.

Mostly use industry terminology accurately in both written and verbal contexts.

Task 1 – Planning the installation

Assessment number (eg 1234-033)	8710-355
Assessment title	Heating Engineering Occupational Specialism

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	1
Evidence title / description	<ul style="list-style-type: none">• A materials list• A method statement• A risk assessment• An installation diagram
Date submitted by candidate	DD/MM/YY

Task

Assessment themes:

- Health and safety
- Design and planning
 - Documents
 - Drawings and diagrams
- Systems and components
 - Installation
 - Decommissioning

The purpose of this task is for you to demonstrate you can correctly plan the installation, produce a detailed materials list, complete a detailed method statement, assess the risks involved in the installation activity and produce an accurate installation diagram showing the pipework layout, pipe clips and control components.

You will be provided with the assignment brief and given time to plan the installation of the central heating pipework and associated components in the apartment.

a) Plan the installation of the boiler pipework, S Plan Plus heating system and system controls, magnetic filter, radiator, and underfloor heating circuit in the apartment, following the client brief.

You should produce the following:

- Materials list
- Method statement to include planning your sequence of work and associated risks (to include justifications)
- Risk assessment
- Installation diagram with pipework layout, pipe clips and associated components

Templates for the materials list, method statement, risk assessment and drawing grid are provided and must be used.

The installation diagram should be applicable to the location you are being assessed in and completed to a commercially acceptable standard. The diagram should include all fixed services and the proposed installation layout.

You should use the installation diagram to carry out the installation. The diagram will also be used by your tutor/assessor for checking the dimensional tolerances of the installed system and pipework.

b) Measure and mark out proposed working area.

You will be provided with a specific working area that has been set up according to **Figure 1**.

You must measure and mark out your work area as detailed in your diagram, and this activity must be completed prior to carrying out the installation.

If you provide plans that are not fit for purpose, it is expected that your tutor/assessor will intervene and provide necessary feedback and corrections to the plans prior to you carrying out the installation. However, this will be commented on in the marking documentation and reflected in marks awarded.

Additional evidence of your performance that must be captured for marking:

Tutor/assessor's observations of:

- Accuracy of measurements and marking out (of space allocation/work area checked against installation drawing).
- Marking out in comparison with the proposed plan and completed drawing including the accuracy of the recording of key dimensions.

Photographs taken by your tutor/assessor at various stages of the task.

Candidate evidence

Completed Materials list

Equipment/Materials	Quantity
15mm copper pipe 3 m lengths	X2
15mm blue clips	X4
15mm red clips	X5
22mm red clips	X15
22mm elbows	X6
15mm elbows	X7
22mm T	X4
22m T-15mm	X3
2 port zone valve	X3
22m compression T	X2
Automatic air vent	X1
Automatic bypass	X1
Expansion vessel	X1
Pump	X1
5 core cable	X1m
2 core cable	2xm
3 core cable	X2m
Thermostat	X2
Wiring centre	X1
Programmer	X1

Switch	X1
Electric isolator	X1
Screws	X45
Isolation valves	X2
Underfloor heating manifold	X1
Cable clips	X47
Radiator	X1
Radiator brackets	X2

Solder

Wire wool

Flux

Blowtorch

Eye protection

Heat proof mat

Pipe slice 15mm + 22mm

Tupee measure

Level

Boat level

Wire cutters/strippers

Hammer

Screwdriver (flathead + pozi)

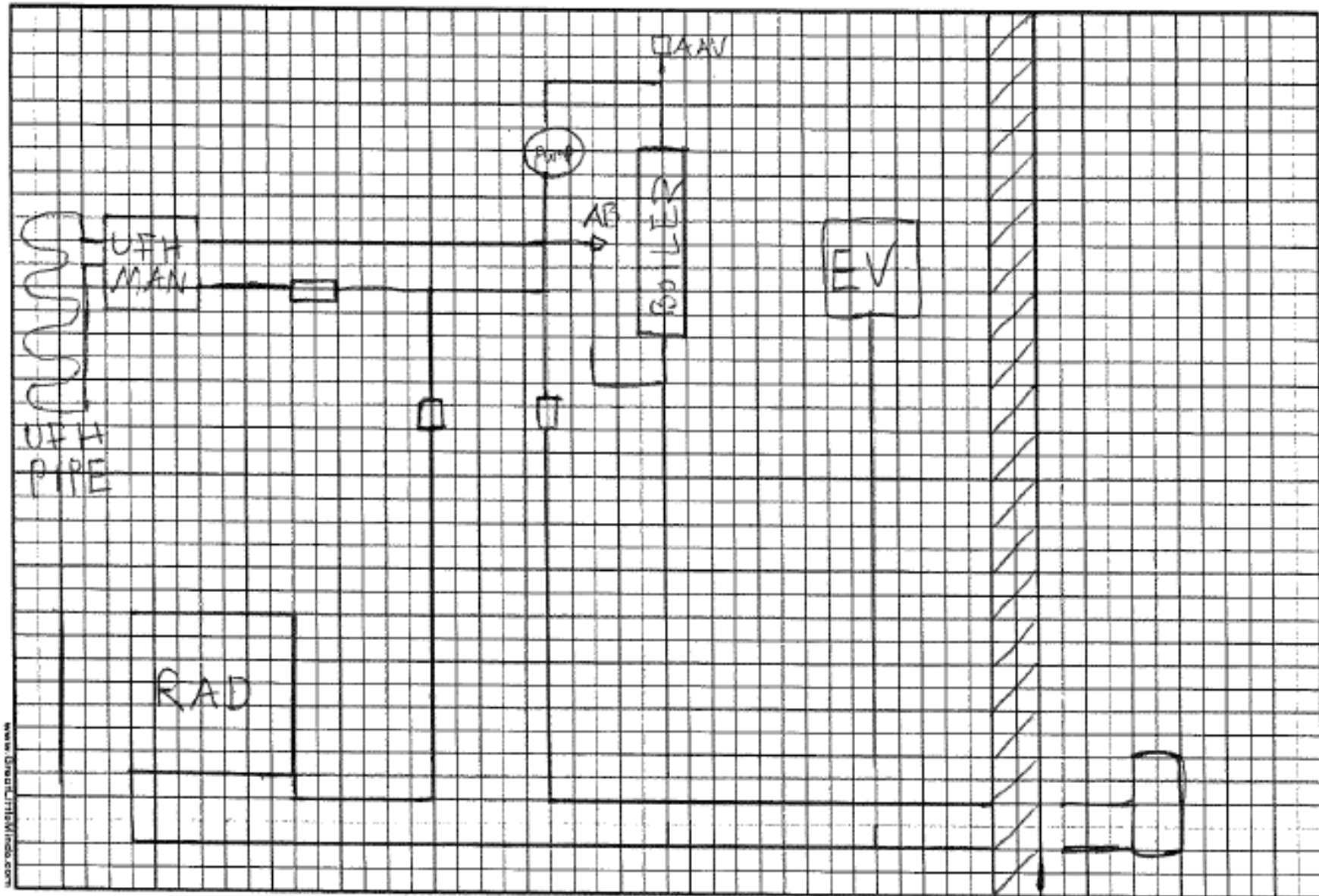
Completed method statement

- Firstly I would manufacture instructions and specifications. I would also go over the regulations.
- I would then get all my clips on the wall ready for my pipework to go straight in.
- Next, I would get all the components on the wall making sure they are level.
- Using my soldering equipment I would solder all the pipework and tighten all the nuts.
- I would then mark my electrical components and get them screwed on the wall
- Wire up all the components to each other and junction box making sure no copper is exposed.
- After checking I have done all of the above I would fill my system up to an appropriate pressure.
- Then safely turn my electrics on if necessary using a voltmeter to test which component isn't working.
- I would resolve any issues if appropriate by draining down pipework and adding more solder.
- Then I would commission the parts on the system
- Safely turn the electrics off locking the power supply and isolating the pipework.
- Drain the system down
- Decommission the system.

Completed risk assessment

SEVERITY (S): Degree of harm which may be caused (including numbers affected) 1 Minor Injury 2 Major Injury 3 Fatality LIKELIHOOD (L): Probability that event will occur 1 Remote 2 Possible 3 Likely					RISK RATING (RR): Severity x Likelihood 1-2 Low 3-5 Medium 6-9 High			
Item No:	Activity	Hazard	Persons at Risk	Existing Controls (Mitigation)	S 1-3	L 1-3	RR	Are the Risks Controlled?
1	Cutting pipe	Cutting yourself	Installer	Keep hands away from blade and any sharp edges	3	1	4	Yes
2	Soldering	Burn yourself	Installer	Wear gloves and glasses Use a heat proof mat	4	1	5	Yes
3	Leaks	Slipping	Everyone near	Make sure to mop up straight away so there is no risk	2	2	4	Yes
4	Working at height	Falling	Installer	Always make sure ladder is stable and never stand on top step	1	2	3	Yes
5	Working with tools	Hurting yourself	Installer	Always be sensible and make sure tools are ready for them	2	1	3	Yes

Completed drawing grid



Completed PO Form

Practical Observation (PO) Form (Task 1)

8710-35/36 T Level Technical Qualification in Building Services Engineering for Construction

8710-355 Heating Engineering (Summer 2024)

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234
Date	DD/MM/YY

Provider name	<provider name>
City & Guilds Provider No.	999999a

Task 1 assessment themes:

- Health and safety
- Design and planning
 - Documents
 - Drawings and diagrams
- Systems and components
 - Installation
 - Decommissioning

Record observation notes below to inform internal marking and external moderation. Notes must be detailed, accurate and differentiating which use terminology from the mark grid along with specific examples observed. Notes must identify areas of strength and weakness, distinguish between different qualities of performance and to facilitate accurate allocation of marks once all evidence has been submitted.

Assessment Themes	Assessor observation notes
Health and safety <ul style="list-style-type: none">• Risk assessment• Risk mitigation• Harm and probability factors• Adherence to health and safety	[candidate name] displayed a high level of understanding relating to health and safety. They completed a detailed risk assessment to current industry standards. They wore the correct PPE and ensured their bay was safe and ready to conduct the work task. They read and understood the appeals procedure. A very confident start displayed from [candidate name], a good start for success.

Design and planning (documents) <ul style="list-style-type: none"> • Quality of documentation • Adherence to brief 	<p>[candidate name] displayed a confident level of planning and designing. They used a ruler and spirit level to mark out pipework runs and positioned the heating components following the manufacturers' instructions. They produced a good level of ability when producing diagrams and system drawings. They ensured that clipping was to 300 mm centres, as per assessment criteria.</p>
Design and planning (drawings and diagrams) <ul style="list-style-type: none"> • Accuracy • Positioning 	<p>Installation pipework was to within the 100 mm centres and clipped every 300 mm as per assignment brief.</p>
Systems and components (installation) <ul style="list-style-type: none"> • Marking out • Measurements • Sequencing • Tolerances • Tools • Skills 	<p><i>Planning stage (Task 1) only</i></p> <p>[candidate name] selected all the correct tools and materials from the stores, for them to conduct the assessment. [candidate name] displayed a confident level of planning and designing. They used a ruler and spirit level to mark out pipe work runs and positioned the heating components following the manufacturers' instructions. [candidate name] demonstrated a good, consistent level of industrial vocabulary; they reused sections of pipework to reduce their copper pipe consumption. [candidate name] took time to plan and design where pipework and components were going to be installed. They ensured the clipping was to 300 mm centres as per the assessment criteria.</p>
Systems and components (decommissioning) <ul style="list-style-type: none"> • Sequencing • Disposal • Waste removal • Techniques and finish 	<p><i>As detailed in method statement</i></p> <p>[candidate name] displayed a high level of understanding relating to health and safety. They completed a detailed risk assessment to current industrial standards. They wore correct PPE and ensured their bay was safe and ready to conduct the work task. They read and understood the appeals procedure. A very confident start displayed from [candidate name], a good start for success. A strong consistent competence level was witnessed during the initial stages of their assessment process. [candidate name] selected a suitable drain off point and drained the system water. They demonstrated a good, consistent level of electrical safe isolation practical ability. They were able to use the testing equipment well and to current industrial standards. All pipework and components that were decommissioned were stored aside in a safe and tidy manner. A good consistent level of decommissioning sequences displayed and witnessed during this process.</p>

Any other aspects

Internal assessor signature	Date
<div data-bbox="129 427 647 479"> X </div>	<div data-bbox="1197 439 1362 479">DD/MM/YY</div>

If completing electronically, double click next to the 'X' to add an electronic signature once the record is **finalised**.

Task 2 – Installation, commission and decommission

Assessment number (eg 1234-033)	8710-355
Assessment title	Heating Engineering Occupational Specialism

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	2
Evidence title / description	Commissioning checklist Photographic evidence
Date submitted by candidate	DD/MM/YY

Task

Assessment themes:

- Health and safety
- Systems and components:
 - Installation
 - Decommissioning
- Reports and information (commissioning checklist)
- Inspecting and testing of systems and components
- Handover and communication

You will have access to your drawing and plans from Task 1.

Your tutor/assessor will ensure that systems are fully decommissioned, and walls prepared, prior to you beginning installation.

a) Install the boiler pipework, the S Plan Plus heating system and system controls, magnetic filter, radiator, and underfloor heating circuit, in accordance with your drawing and as agreed by your tutor/assessor.

All central heating flow and return pipework to the radiator should be 100 mm centre to centre.

All pipework should be clipped directly to the wall surface with the pipe brackets at a maximum 300 mm spacing to demonstrate the ability to clip competently.

Marking out and final measuring of installed components and pipework should be within +/- 2 mm.

All pipework should be installed level and plumb.

There should be no burns, scorches or excessive marking to walls/property.

The finished product should be aesthetically pleasing.

Good housekeeping should be maintained throughout assessment.

Pipe insulation must be installed on primary pipework supplying the cylinder as per current Building Regulations.

b) Connect the electrical supply to the boiler from a suitably supplied fused spur connection, following the safe isolation procedure.

You must connect the electrical supply to the system controls from a suitably supplied isolator.

The safe isolation procedure should be followed and must be directly observed by your tutor/assessor.

All power, interconnecting and control wiring must be in accordance with manufacturer's requirements and meet current UK regulations.

c) Commission the system (pipework only) and hand over to customer.

Once the installation has been completed, you must commission the system and hand over to the customer.

The system will be commissioned as per the Commissioning Checklist template provided, with all the data recorded in full.

Your tutor/assessor must observe you carrying out the commissioning checks detailed in the Commissioning Checklist template.

You must record all data in full on the Commissioning Checklist template.

Following commissioning and testing, you will hand over to the customer. The handover should include:

- Demonstration of system operation and controls.
- Boiler service requirements.
- Maintenance requirements.

Your tutor/assessor will act as the customer during the handover and will capture notes on your performance.

d) Decommission the system.

Once your tutor/assessor has checked and verified the system and handover is complete, you must decommission the system.

Decommissioning procedure:

- Isolate fuel/electricity supply to the system as appropriate.
- Isolate water supply.
- Apply warning notices and signs.
- Drain system to a suitable location.
- Remove required pipework, radiators and controls.
- Cap pipework sections as required.
- Repair and paint wall surfaces as required.

Additional evidence of your performance that must be captured for marking:

Tutor/assessor observations of:

- Health and safety.
- Installation of system and components.
 - Whether tolerances have been met for the measurement of pipework.
 - Whether there are excess/waste materials caused by inaccurate measurements.
 - Use of tools (bending and cutting equipment) and piping skills.
 - Results of tool usage.
 - The use of heat mats whilst soldering and the quality of pipework fabrication.
- Safe isolation
- Commissioning.

- Handover to customer.
- Decommissioning.

Photographs taken by your tutor/assessor at various stages of the task.

Candidate evidence

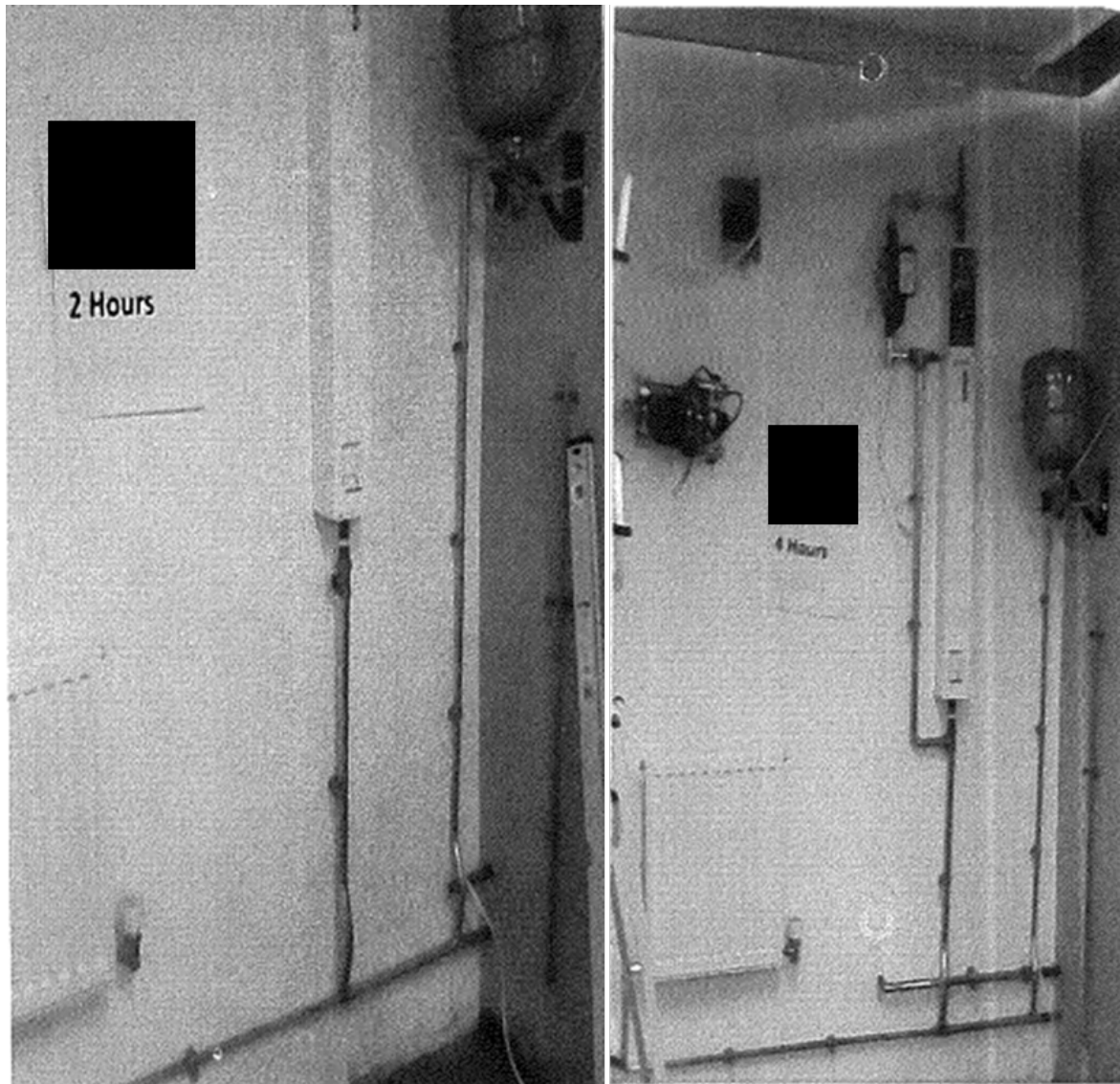
Completed commissioning checklist

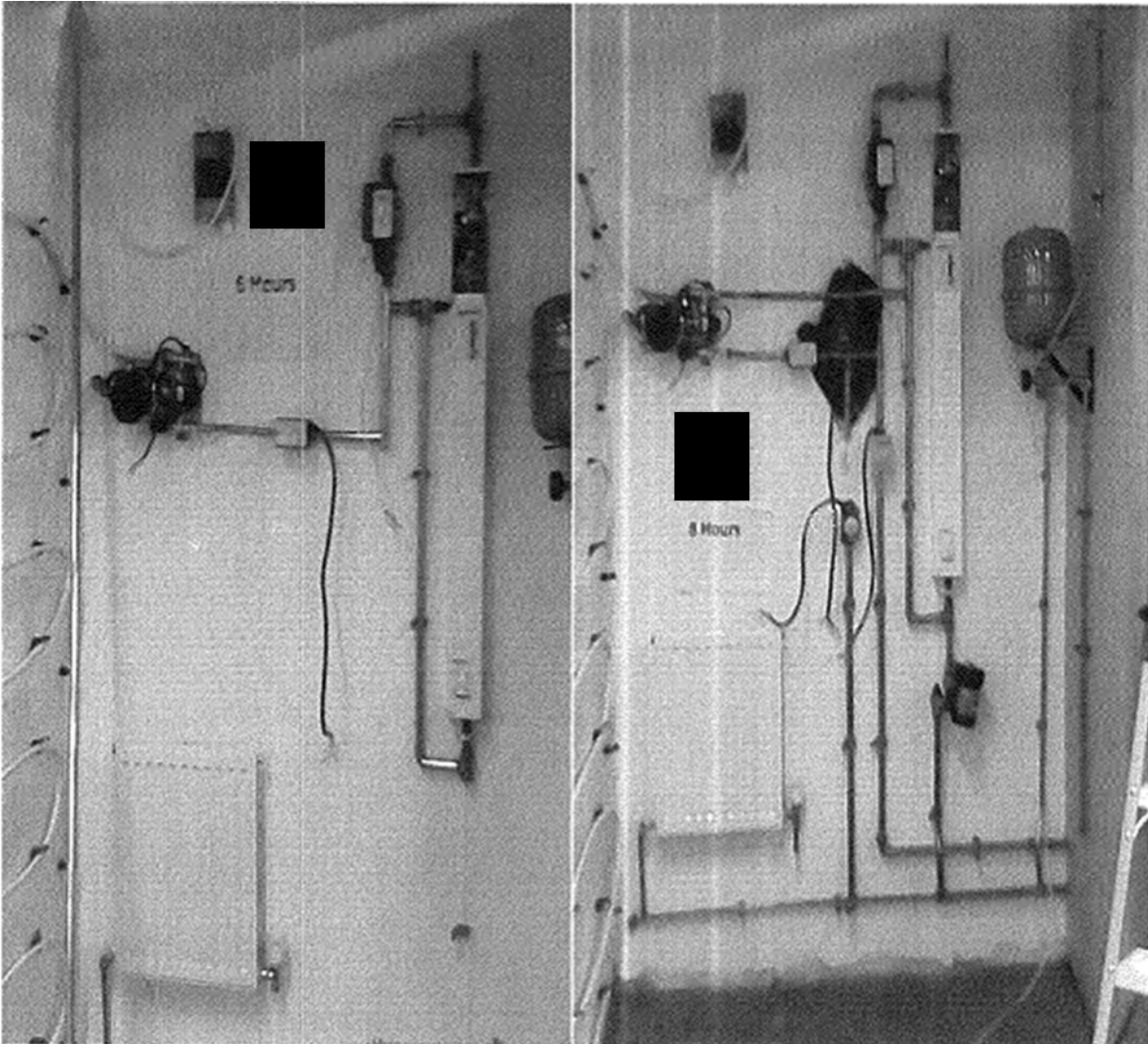
Heating Commissioning Sheet	
Address	[centre name]
Engineer's Name	[candidate name]
Date	DD/MM/YY
Boiler Manufacturer	Heatra sadia
Model	Ampel boiler E600
Serial Number	[serial number]
Rating in kW	6kW
Type of system	Sealed
Type of control system	Fully pumped splan plus
Type of cylinder installed	Unvented
TRVs fitted	Yes
Magnetic filter fitted	Yes

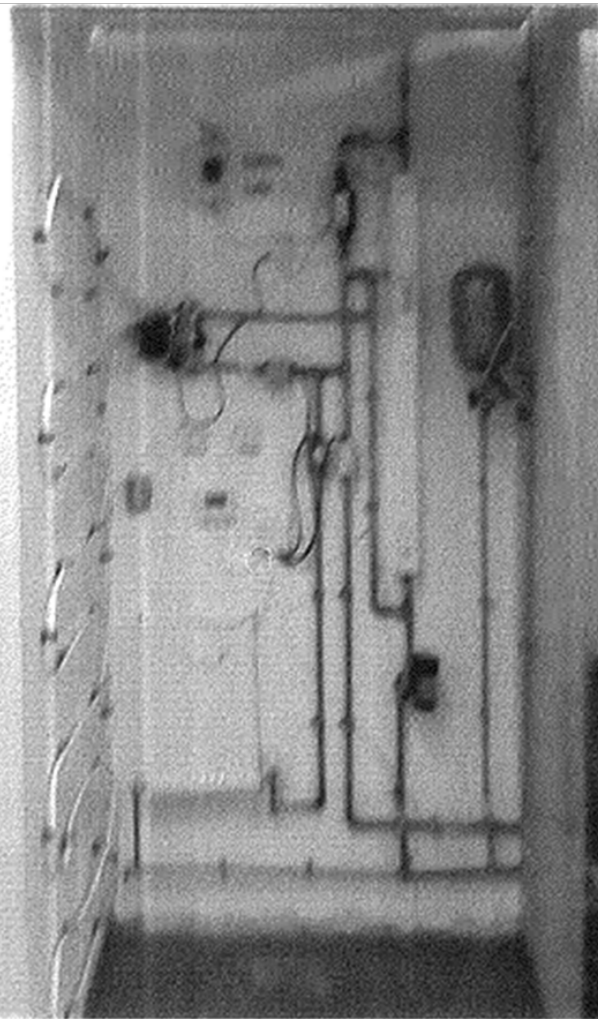
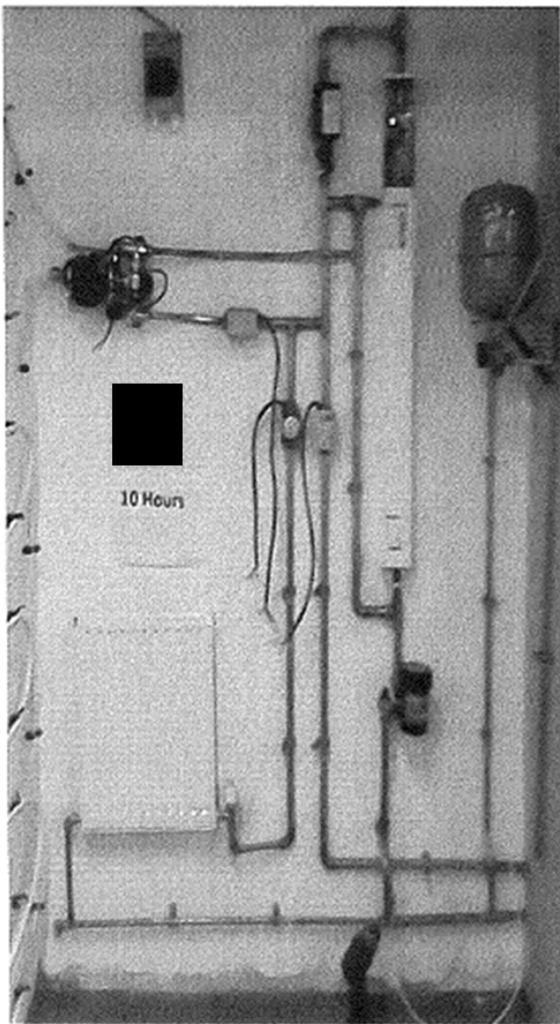
Commissioning Information	
Has the system been flushed	Yes
Has inhibitor been added to the system	Yes
What inhibitor was added to the system?	X100
Boiler flow temperature	68°
Boiler return temperature	57°
Hot water temperature at nearest outlet	58°
Hot water flow rate at the nearest outlet	16 Lites per min
Does the system comply with current regulations	Yes
Has the system been installed and commissioned in compliance with manufacturer instructions	Yes
Have instruction been left with the customer and have they received a demonstration of system controls	Yes

Candidate signature	Date
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Photographic evidence







Completed PO Form

Practical Observation (PO) Form (Task 2)

8710-35/36 T Level Technical Qualification in Building Services Engineering for Construction

8710-355 Heating Engineering (Summer 2024)

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234
Date	DD/MM/YY

Provider name	<provider name>
City & Guilds Provider No.	999999a

Task 2 assessment themes:

- Health and safety
- Systems and components:
 - Installation
 - Decommissioning
- Reports and information (commissioning checklist)
- Inspecting and testing of systems and components
- Handover and communication

Record observation notes below to inform internal marking and external moderation. Notes must be detailed, accurate and differentiating which use terminology from the mark grid along with specific examples observed. Notes must identify areas of strength and weakness, distinguish between different qualities of performance and to facilitate accurate allocation of marks once all evidence has been submitted.

Assessment theme	Assessor observation notes
Health and safety <ul style="list-style-type: none">• Risk assessment• Risk mitigation• Harm and probability factors• Adherence to health and safety (including safe isolation)	<i>Adhering to risk assessment during installation</i> [candidate name] read all risk assessments relating to the task. They ensured that their work bay was safe and free from any hazards. They wore the correct PPE requirements before they commenced any practical activity. Appeals procedure read and understood.

<p>Systems and components (installation)</p> <ul style="list-style-type: none"> • Measurements • Sequencing • Tolerances • Tools • Skills <p>Systems and components (decommissioning)</p> <ul style="list-style-type: none"> • Sequencing • Disposal • Waste removal • Techniques and finish 	<p>[candidate name] selected all the correct tools and materials from the stores, for them to conduct their assessment. [candidate name] displayed a confident level of planning and designing. They used a ruler and spirit level to mark out pipe work runs and positioned the heating components following the manufacturers' instructions. [candidate name] demonstrated a good, consistent level of industrial vocabulary. They reused sections of pipework to reduce their copper pipe consumption. [candidate name] took time to plan and design where pipework and components were going to be installed. They ensured that clippings were to 300 mm centres as per assessment criteria. Consistently good pipe bending methods observed by [candidate name]. Their bending skills were accurate and tidy. [candidate name] soldering and jointing skills were to a good, consistent level. They displayed a strong practical ability and applied their positive attitude and confident work ethic. Installation pipework was to within the 100 mm centres and clipped every 300 mm as per assignment brief.</p> <p>[candidate name] displayed a high level of understanding relating to health and safety. They completed a detailed risk assessment to current industrial standards. They wore the correct PPE and ensured their bay was safe and ready to conduct the work task. They read and understood the appeals procedure. A very confident start displayed from [candidate name], a good start for success. A strong, consistent competence level was witnessed during the initial stages of their assessment process. [candidate name] selected a suitable drain off point and drained the system water. They demonstrated a good, consistent level of electrical safe isolation practical ability. They were able to use the testing equipment well and to current industrial standards. All pipework and components that were decommissioned, were stored aside in a safe and tidy manner. A good, consistent level of decommissioning sequences displayed and witnessed during the process.</p>
<p>Inspecting and testing of systems and components</p> <ul style="list-style-type: none"> • Commissioning tests • Commissioning checks • Reference to / follows manufacturer's instructions 	<p>[candidate name] displayed a good level of commissioning skills and ability. They filled the system up to 1.5 times working pressure for 1 hour. They selected the correct tooling to conduct the commissioning process. They were able to use the digital clamps to take both the flow and return temperatures. A weir cup and thermometer were used to take both the hot and cold-water flow rates and temperatures. All readings were taken and documented to the current industrial standards. [candidate name] dosed the system with a system cleaner (X300) then drained to a suitable drain off point and refilled using X100 centre heating inhibitor. A sufficient level of customer hand over skills demonstrated and hand over to the end user.</p>
<p>Handover and communication</p> <ul style="list-style-type: none"> • Customer Care • Demonstration of system • Communication 	<p>A sufficient level of customer hand over skills demonstrated and had over to the end user. A reasonable effort to demonstrate the operation of the CH system. Limited description of how to set the CH programmer. Limited yet sufficient communication skills displayed by [candidate name].</p>

Any other aspects**Internal assessor signature****Date**

X

DD/MM/YY

If completing electronically, double click next to the 'X' to add an electronic signature once the record is **finalised**.

Task 3 – Carry out maintenance

Assessment number (eg 1234-033)	8710-355
Assessment title	Heating Engineering Occupational specialism

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234

Provider name	<provider name>
City & Guilds provider No.	999999a

Task(s)	3
Evidence title / description	A written report of the maintenance activity.
Date submitted by candidate	DD/MM/YY

Task

Assessment themes:

- Health and safety
- Reports and information (written report of the maintenance activity)
- Handover and communication
- Working with faults

You must:

a) Discuss the fault with the customer, investigate and diagnose.

You must discuss the central heating fault with your tutor/assessor to determine the cause of the fault and suggest appropriate methods for repair. You will be assessed on your ability to ask relevant questions to determine fault and to select a suitable solution.

Your tutor/assessor will act as the customer during the maintenance discussion and record any feedback on the tutor/assessor feedback form.

You will inspect a pre-installed operational central heating system with faults placed on various components within the system for you to diagnose and locate.

You will carry out testing to identify one fault as given by your tutor/assessor and replace the faulty component. If you do not initially identify the faulty component, you are allowed to be prompted by your tutor/assessor, but this will be reflected in the marking.

Once you have diagnosed the fault, you should check with your tutor/assessor to ensure this has been done correctly. If you require additional feedback and guidance, this will be reflected in the marking.

b) Produce a written report detailing the maintenance activity.

Once fault diagnosis is confirmed, you must produce a written report detailing the maintenance activity to include:

- Details of the fault.
- How to repair the fault.
- Details of how to reinstate the system.

c) Repair and rectify fault.

This task requires you to:

- Isolate and/or drain down the heating system safely.
- Apply temporary continuity bonding as required.
- Install replacement component as required.
- Wire the component.
- Refill system and commission in line with manufacturer's instructions.

Additional evidence of your performance that must be captured for marking:

Tutor/assessor observations of:

- Health and safety.
- Communication with customer.
- Working with faults.
 - Results of tool usage, taking into consideration any tooling marks.
 - Re-commissioning of the system following component replacement.
- Handover.

Photographs taken by your tutor/assessor at various stages of the task.

Candidate evidence

Completed Report of Maintenance Activity

Fault:
Description of fault diagnosis Central heating not coming on when on demand.
Possible solutions Possible faulty programmer, roomstat or two port zone valve
Actions taken to rectify fault Using a multimeter I checked the wiring centre for correct wiring all okay. Checked operational room stat all okay. Checked central heating two port zone valve, found the schro motor was defective. I isolated the system and replaced the schro motor. Reinstated system. Ran and test was all okay

Candidate signature	Date
[candidate signature]	DD/MM/YY

Assessor signature	Date
[assessor signature]	DD/MM/YY

Completed PO Form

Practical Observation (PO) Form (Task 3)

8710-35/36 T Level Technical Qualification in Building Services Engineering for Construction

8710-355 Heating Engineering (Summer 2024)

Candidate name	<first name> <surname>
City & Guilds candidate No.	ABC1234
Date	DD/MM/YY

Provider name	<provider name>
City & Guilds Provider No.	999999a

Task 3 assessment themes:

- Health and safety
- Reports and information (written report of the maintenance activity)
- Handover and communication
- Working with faults

Record observation notes below to inform internal marking and external moderation. Notes must be detailed, accurate and differentiating which use terminology from the mark grid along with specific examples observed. Notes must identify areas of strength and weakness, distinguish between different qualities of performance and to facilitate accurate allocation of marks once all evidence has been submitted.

Assessment theme	Assessor observation notes
Health and safety <ul style="list-style-type: none">• Risk assessment• Risk mitigation• Harm and probability factors• Adherence to health and safety	<i>Adhering to risk assessment whilst carrying out maintenance</i> [candidate name] read all risk assessments relating to the task. They ensured that their work bay was safe and free from any hazards. They wore the correct PPE requirements before they commenced with the practical activity. Appeals procedure read and understood.
Handover and communication <ul style="list-style-type: none">• Customer Care• Communication	<i>Discussing the fault with the customer</i> Reasonable customer relations skills displayed by [candidate name]. Some industrial vocabulary used and limited terminology demonstrated.

Working with faults <ul style="list-style-type: none"> • Systematically / logically • Knowledge of fault-finding techniques • Reference to / follows manufacturer's instructions • Fault rectification • Efficiency / accuracy • Use of tools 	<p>[candidate name] was fairly confident when faced with a CH fault. Their fault was no heating when calling for heating demand. They checked the programmer, and it was calling for heat. They used a systematic fault-finding flow process. They then went onto checking if the room stat was operating, which it was. They then checked if the CH 2 port zone valve was switching over and the level arm was not moving. They isolated the electrics and replaced the synchro motor, reinstated the electrics, fired the system up and system now operational. A good level of ability displayed by [candidate name].</p> <p>Fault rectification processes documented on paperwork.</p>
--	--

Any other aspects

Internal assessor signature	Date
X 	DD/MM/YY

If completing electronically, double click next to the 'X' to add an electronic signature once the record is **finalised**.

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

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

Web chat available [here](#).

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