T-LEVELS | Institute for Apprenticeships & Technical Education

T Level Technical Qualification in Building Services Engineering for Construction (8710-30)

8710-033 Core: Employer-Set Project

Task 1.1 Research

Summer 2023

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Task 1.1 – Research

Review the Project Brief document carefully before you start any research.

The client is keen to utilise carbon neutral technologies to ensure the efficient use of energy and reduce operating costs. The client has expressed an interest in ground source heat pump technologies as a possible alternative, due to the government grants currently available to support them financially.

You should research the different types of ground source heat pumps and their suitability for this building and site. Your research should include how and where the collector pipework penetrates the building fabric and structure, as well as health and safety requirements such as excavations and trench requirements for the collector circuit.

Your research should also include:

- Best practice in using safe isolation procedures for existing building service systems.
- Removal and disposal of redundant services, including water and electricity.

As well as the above, the client wishes you to research the use, benefits, and individual costs of the following water conservation technologies:

- Non concussive taps
- Low-volume flush WCs
- Flow reducing valves
- Point of use infrared taps and WC flushing

Remember to keep a record of the different sources you have used.

You should collate your research notes and findings together, so that you can reference them as part of the next stages in this project. It is likely your research findings will be approximately three sides of A4.

Timing of assessment

You will have **three hours** to conduct your research.

Conditions of assessment

Your research must be completed independently and working alone under supervised conditions.

You will have access to the internet to conduct your research.

What you must submit on completion of this research task

- Research notes (approximately three sides of A4)
- Record of sources

Submitted as a hard copy or file saved securely as directed by your tutor/supervisor. You must ensure your work is saved as outlined in the ‘Presentation of work’ section of the Candidate Guidance document.

Additional evidence of your performance that will be captured for marking

N/A

Maths, English and digital skills

Through completion of this task, you will have the opportunity to generate evidence of your digital skills.

Get in touch

City & Guilds Technicals Quality Team

We 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:

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