210: Understand how to communicate with others within building services engineering  
**Handout 1: Site management team**

**Learning outcome**

The learner will:

1. know the members of the construction team and their role within the building services industry.

**Assessment criteria**

The learner can:

* 1. Identify the key roles of the site management team:
* architect
* project manager/clerk of works
* structural engineer
* surveyor
* building services engineer
* quantity surveyor
* buyer
* estimator
* contracts manager
* construction manager.

**Site management team**

The construction of a building is a complex process that requires many professionals – **‘the construction team’** – to work together.

We need to have an understanding of the role and responsibility of the members of the construction team.

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| 01 Site management team.png |

**The client**

They are probably the most important person, as they are the reason the project is going ahead. The client will be an individual, company or organisation and they will employ contractors directly or indirectly.

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| **The architect**  The architectis the designer of the project and considered the leader of the management team.  They convert the clients’ ideas and requirements into a building design and working drawings.  They liaise regularly with the client at the early stages, and throughout the project. | 02 Architect.png |
| **The clerk of works** **(project manager)**  Generally appointed by the architect. The clerk of works acts as their representative on site.  They ensure that the building is constructed according to the drawings, as well as checking the standard of work and quality of materials.  They liaise regularly with the architect and the construction teams on site.  They can sign a variation order. | 03 Clerk of Works.jpg |
| **The structural engineer**  They work closely with the architect to find the most efficient method of construction.  They calculate loads, forces, and variances from wind and rain, looking at structural safety.  They are sometimes involved in insurance claims, repair work and alterations to properties. | 04 Structural engineer small.png |
| **The surveyor**  Sometimes known as the building surveyor, they have to position the building on the land and ensure that Building Regulations are followed throughout the process.  They will discuss problems on the way and try to resolve difficulties.  They will visit site regularly to ensure that the building process is being carried out correctly. | 05 Surveyor.png |

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| **The building services engineer**  They design the internal services within the building, which will be cost effective, environmentally sensitive and with good maintenance access.  They will be responsible for: heating and ventilation, plumbing, electrical distribution, fire protection, lifts, escalators, acoustics, etc. | 06 Building Services Engineer.jpg |
| **The quantity surveyor**  They suggest construction methods that are within the clients’ budget.  They also calculate the amount of labour and materials required to complete the project. These details are then collated in the Bill of Quantities which is used by contractors to produce an estimate/quotation.  The quantity surveyor will visit site to measure work carried out in order to produce interim payments and final accounts. | 07 Quantity Surveyor.jpg |
| **The building contractor**  The contractor will enter into a contract with the client to carry out the work in accordance with the drawings, Bill of Quantities and specification.  Each contractor will tender for jobs.  They will need to employ specialists within the trade to undertake key roles. | 08 Building Contractor.jpg |
| **The contracts manager**  Construction contracts managers oversee projects from the start through to completion, ensuring that work is completed on time and within its budget.  At all times, and for as long as the contract lasts, they are the first point of contact for members of the public, clients, site managers and sub-contractors.  Health and safety issues are a top priority in this role, as is managing client expectations. | 09 Contract Manaer.jpg |

The role includes negotiating sub-contract orders and monitoring sub-contractors, planning critical dates or organising labour. They would also be responsible for agreeing extra work to be done on a contract, helping to resolve any disputes which come up and identifying areas for improvement in your company’s contracting processes.

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| **The buyer**  They will source all the materials needed to complete a project by obtaining quotations from suppliers for materials, with delivery times and quality assurance. | 09 Buyer.jpg |
| **The estimator**  The estimator will break down the Bill of Quantities into unit parts which represent the amount it will cost a contractor to complete each stage.  To this they will add company overheads and profit margins. | 10 Estimator.jpg |