

Unit 210: How to communicate with others

Outcome 1

Members of the construction team and their role within the building services industry

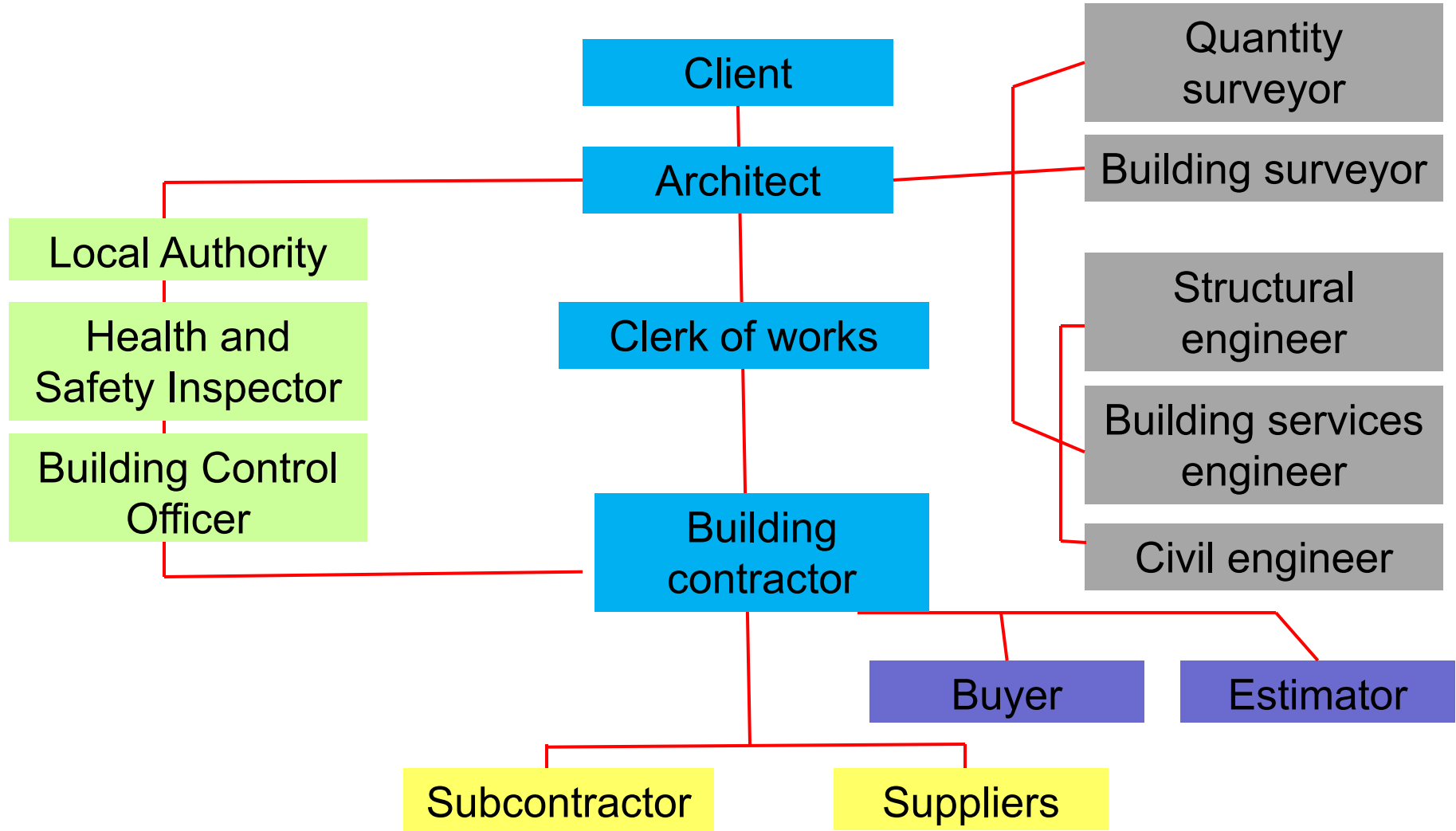
Communicating

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.



Site management team



Construction team members

Client

- This is probably the most important person, as **they are the reason the project is going ahead**. It could be an individual, a company or an organisation
- Employ contractors directly or indirectly
- Under the Construction Design and Management Regulations, they have responsibility for the health and safety of those on site

Construction team members

Architect

- The **designer** of the project and considered the leader of the management team
- They convert clients' ideas and requirements into a building design and working drawings
- They liaise with the client regularly at the early stages, and throughout the project



Construction team members

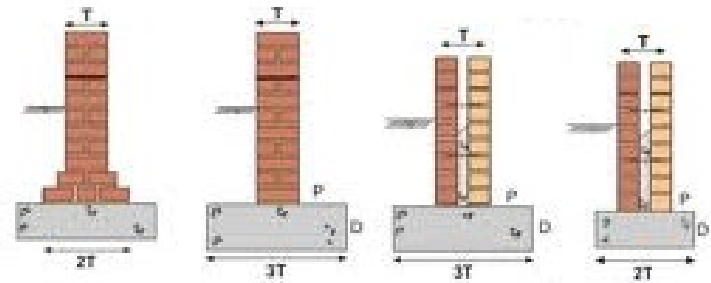
Clerk of works (project manager)

- Generally appointed by the architect; act as their representative on site
- Ensure the building is constructed as per the drawings, standard of work and quality of materials
- Liaise regularly with the architect and the construction teams on site
- Can sign a variation order

Construction team members

Structural engineer (specialist engineer)

- They work closely with the architect to find the most efficient method of construction
- They calculate loads, forces, variances from wind and rain, looking at structural safety
- They are sometimes involved in insurance claims, repair work and alterations to properties



Construction team members

Surveyor

- Sometimes known as the **Building Surveyor**
- They have to position the building on the land, and ensure Building Regulations are followed throughout the process
- They will discuss problems on the way and try to resolve difficulties
- They will visit the site regularly to ensure the building process is being carried out correctly



Construction team members

Building services engineer (specialist engineer)

- Design the internal services within the building which will be cost effective, environmentally sensitive, and with good maintenance access:
 - Heating and ventilation
 - Hot water and cold water
 - Air conditioning
 - Drainage
- May also be responsible for electrical distribution, fire protection, lifts, escalators, acoustics etc

Construction team members

Quantity surveyor

- Suggest construction methods within the client's budget
- 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
- Visits the site to measure work carried out, to produce interim payments and final accounts

Construction team members

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

Construction team members

Buyer

(works for the contractor)

- Sources the materials needed to complete a project by obtaining quotations from suppliers for materials, with delivery times and quality assurance

Estimator

(works for the contractor)

- Breaks down the bill of quantities into unit parts, which represent the amount it will cost a contractor to complete each stage
- Add company overheads and profit margin

Construction team members

Contracts manager

(works for the contractor)

- Supervises the contract – creation, planning and building
- Liaises with head office and the site agent

Site agent

- Sometimes known as the **construction manager**, they are responsible for running the site
- Plan ahead and make sure the work is carried out safely

Construction team members

The people we have looked at so far are mainly off-site workers; now we will look at on-site workers.



Construction team members

Subcontractors

They enter into a contract with the main building contractor to carry out a specific or specialist area of work:

- Plumbing
- Heating and ventilation
- Air conditioning
- Electrical installation
- Plastering
- Bricklaying
- Joinery etc

Construction team members

Site supervisor

- Sometimes also the **construction manager** – the building contractors' main representative on site
- Responsible for the day-to-day running of the site; budgets, hiring, deliveries, construction duties etc



Construction team members

Trade supervisor

The different trades will have their own supervisor who is responsible for the running of their part of the contract.

- Allocation of duties
- Coordinate with other trades
- Attendance records
- Explaining and enforcing regulations
- Overseeing workforce
- Resolving problems and grievances

Construction team members

Bricklayer (craft)

- Construct building to the architect's specification using bricks, blocks and stone



Carpenter (craft)

- Also known as **joiner**
- First fix: doorways, window frames, joists and trusses
- Second fix: doors, skirting and architraves



Plumber (craft)

- Install hot and cold water, heating and gas
- First fix: pipe carcasses
- Second fix: appliances



Construction team members

Electrician (craft)

- Install and test electrical installations for lights, sockets, fire alarms, intruder alarms
- First fix: cable, conduit and trunking
- Second fix: appliances



Heating and ventilation (craft)

- Also SAC engineers
- Large diameter pipework and ducting



Gas fitter (craft)

- On commercial sites, gas fitter may be required to install the gas pipes and appliances



Construction team members

Plasterer (craft)

- Responsible for wall and ceiling finishes, dry lining, rendering
- Using modern and traditional methods



Painter (craft)

- Also known as a **decorator**
- Paint and wallpaper walls, ceilings, woodwork



Tiler (craft)

- Responsible for tiling floors and walls in properties
- Specialists may be needed to tile swimming pools and wet rooms



Construction team members

Groundworker

- Sometimes known as a **general operative** or **labourer**
- Mix concrete, lay drains, offload materials and generally assist craft operatives

Specialists

- These can include scaffolders, glaziers, suspended ceiling installers etc

Construction team members

Inspectors

- There are several visitors to site who have specific roles to play, quite often concerning health and safety
- They inspect to make sure the building project is complying to the rules and regulations, and that the workers and eventual occupants will be safe



Construction team members

Inspectors

Health and safety inspector

- Usually works for the HSE but can be employed by the local authority
- Can arrive unannounced to ensure health and safety law is being implemented by the building contractor

Building control officer (BCO)

- Works for local authority in the planning office and makes sure Building Regulations are being observed in planning and construction
- Have power to reject plans but can also offer advice
- Visit site at different stages and finally sign off the work

Construction team members

Inspectors

Water inspector

- Employed by the water undertaker
- Key role is to reduce the risk of contamination in the public water supply
- They enforce Water Regulations by randomly inspecting occupied properties and all new builds
- May also inspect in cases of contamination or problems

Electrical services inspector

- Employed by the local electricity supplier
- They inspect new electrical installations to ensure they comply with all IEE wiring regulations

Test yourself

- Who would fit lintels?

Answer: Bricklayer

- To improve working relationships what could you organise?

Answer: Social events outside of work

- Which trade installs conduit?

Answer: Electricians

- Who is responsible for ensuring build complies with L1a

Answer: Building control officer (BCO)

Test yourself

- Who would design a heating system for a new restaurant?

Answer: Architect (with the building services engineer)

- Once a new office block is built, who would be responsible for the facilities?

Answer: Facilities manager

- Which regulation covers contamination?

Answer: Water Regulations 1999