



Construction and the Built Environment – Unit 3

3.6 and 3.8 Preparing for construction tasks & removing and disposing of materials

PREPARING FOR CONSTRUCTION TASKS

‘Preparation is the key to success’ and ‘failure to prepare is preparing to fail’ are two sayings often repeated in the construction industry.

Thorough preparation is necessary when undertaking any construction task. It is important that sufficient time is allowed for gathering resources and preparing the materials required to proceed with the selected trade tasks.

The type of the preparation will depend on the trade area in which the task is taking place and will typically involve several activities, including:

- **Selecting** – choosing the most appropriate materials for the task in terms of their qualities in a range of properties, for example durability, finish, and cost.
- **Checking quantity** – calculating the quantities that will be needed and checking that the correct quantities are available.
- **Checking for defects** – ensuring that the available materials are of the necessary standard.
- **Organising materials** – so that they can be used effectively during the construction task. This can involve activities such as gathering different components for an electrical or plumbing task, or stacking bricks close to the location of a wall-building task.
- **Measuring** – the dimensions of materials are measured to ensure that they are correct for the task in hand.
- **Marking out** – this should be done by carefully following the design drawings before cutting materials to size. It’s important to make the most efficient use of the available material to reduce waste and ensure accuracy.
- **Cutting** – using hand tools or machine tools to cut materials as accurately as possible to the required sizes. This may include tasks such as cutting pieces of fabric from different rolls, trimming copper pipes to length, or reducing large plywood sheets to usable sizes.
- **Setting out** – this is the process of laying out materials in their intended position as a ‘practice run’ before they are located or fixed permanently.

REMOVING AND DISPOSING OF MATERIALS

All construction activities, whatever their scale, result in the creation of waste materials. It is the responsibility of every person involved to deal with the waste created in a safe and environmentally sustainable manner.

Whichever three trade options you choose to carry out as part of your controlled assessment for Unit 3, the methods involved in recycling and reusing, or removing and safely disposing of materials, should follow the same general principles:

Minimising waste

- much less waste is produced when the whole process is carefully planned, including calculating material quantities, marking out, and carrying out the work accurately.
- Allocating insufficient time and attention to the planning of tasks leads to mistakes and an unnecessary waste of materials. Common errors are the overestimation of materials needed and rushing to complete tasks due to poor time management.
- The accurate calculation, measurement and estimation of materials is vital; not only does this make the process cost effective, but it also helps to protect the environment by minimising waste and reducing world production costs.
- Non-reusable waste should be handled, stored and disposed of appropriately.

Reusing or recycling

- Working sustainably requires the disposal of waste materials in ways that avoid sending them straight to landfill. This means recycling and reusing materials where possible, and following correct waste management procedures.
- Opportunities to recycle or reuse should be considered when working in any of the course trade areas.