

Curriculum for Excellence

N4 N5

Graphic communication

Building Drawings

Building Drawings

Introduction

A building or construction project requires a complete set of specialist drawings (called a project set) that are used by the local planning department and building control, as well as by builders, joiners, plumbers, electricians and water, gas and telephone engineers.

The buildings are designed by an architect with a team of technicians and surveyors to help plan and produce the drawings. These drawing are submitted to the local planning department who decide if the building will be given the go ahead. Then the drawings will be used by the builders to create the building.

The drawing types that you need to know about are:

- **Location Plans**
- **Site Plans**
- **Floor Plans**
- **Elevations**
- **Sectional Views**

You need to understand these drawings and be prepared to answer questions about them. You may be expected to name/recognise different types of plans, and British Standard symbols and signs that may be included in the plans. Scales that the different building drawings are commonly drawn at may also be questioned in an exam.

Location (Block) Plan

Location plan



The location plan identifies the location of the building or construction site in relation to its surroundings.

Location Plans Include:

- All neighbouring buildings and their plot boundaries
- Street names
- Roads, pavements, footpaths etc.
- A north direction arrow
- The scale of the drawing.

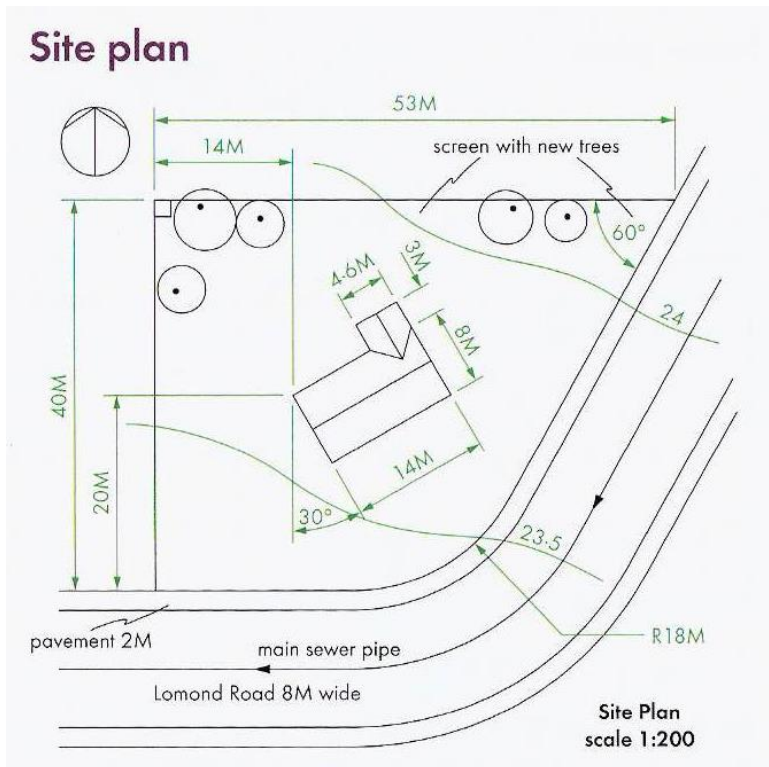
The scale of a Location plan is normally **1:1250**

Site Plan

Site plans show a larger view of a plot, normally highlighted in the location plan. The builder needs to know exactly where the plot of the building is to be constructed.

A site plan may include:

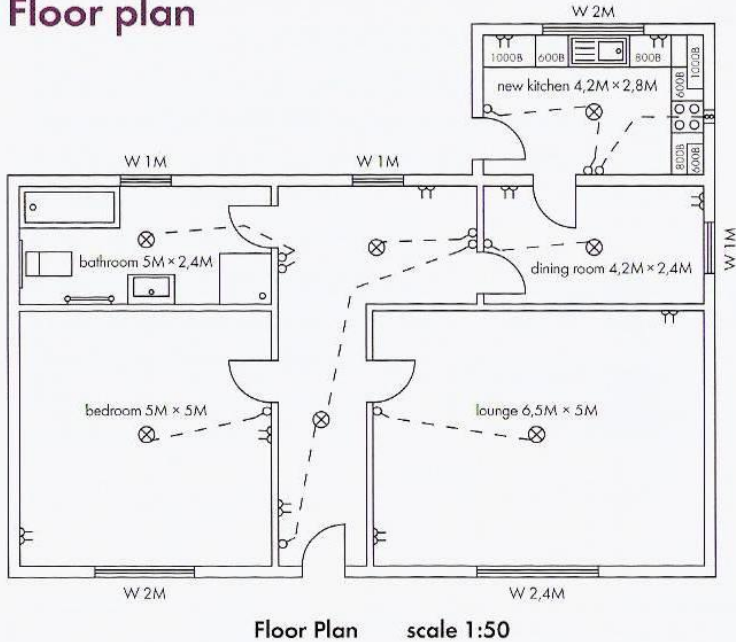
- Boundaries of the plot
- The position of the building within the plot
- Access paths
- Trees (existing or proposed)
- Drainage information; pipe runs, manholes etc.
- Contour lines, indicating the slope of the ground
- A north direction arrow
- The scale of the drawing



The scale of a site plan is normally **1:200**

Floor Plan

Floor plan



The floor plan is an internal view of a house from above. It is used by all trades to plan their work.

It gives information to trades people but also used to show the client or customer the layout and dimensions of the house before it is built.

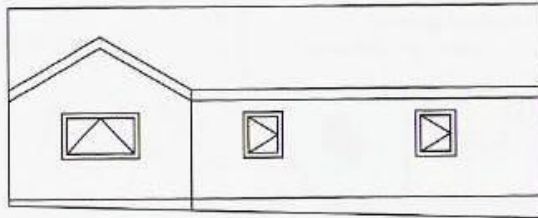
A floor plan may include:

- The layout and dimensions of rooms
- Positions and sizes of windows and doors.
- Layout of the kitchen and bathroom fixtures and fittings
- Lamps, switches, sockets etc.
- The scale of the drawing

The scale of a floor plan is normally **1:100** or **1:50**

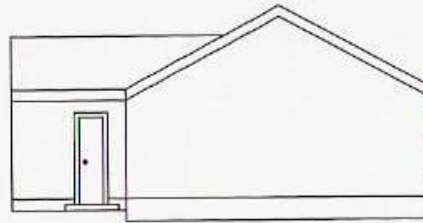
Elevations

Elevations



Rear Elevation

scale 1:100



West Elevation

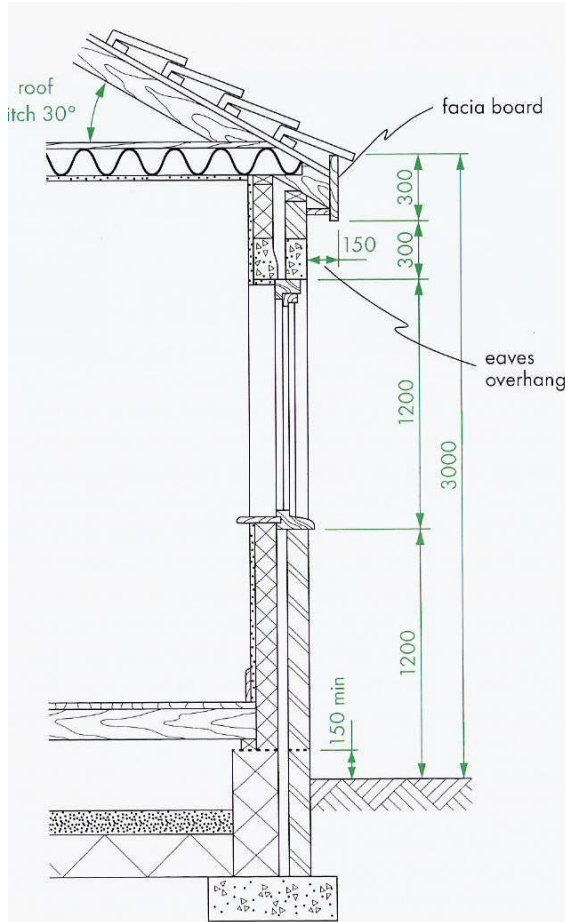
Elevations are orthographic views of the outside of the building that enable clients and customers to see what the finished building will look like.

Elevations show:

- The style of the building
- The external proportions of the building
- The external features of the building; windows styles and wall finishes.
- The type of roof
- The position of the doors and windows from the outside.

The scale of an elevation is normally **1:100** or **1:50**

Sectional Views







Sectional views are detailed technical drawings showing a slice through a wall. The section is normally taken through a part of the building that will show most detail.




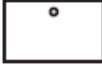

Sections show:


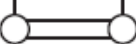
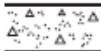

- The materials used: brick, timber, concrete etc.
- Construction details.
- Dimensions
- The scale of the drawing.





The scale of a section is normally **1:20**





Building symbols and signs

Lamp	Switch	Socket	Radiator
			





Shower tray	Bath	Wash basin	Sink	WC
				

Sinktop	Heated towel rail	Concrete	Brickwork
			

Door	Sawn timber	Insulation board	Blockwork
			

Fixed window	Window-hinged at side	Window-hinged at top	Window-hinged at bottom
			

Building symbols and signs

Pivot-centre window	Window – sliding horizontally	Drainage	North sign
			
Existing tree	Existing tree – to be removed	Proposed tree	Contours
