

# CHAPTER 4

## Working Drawings

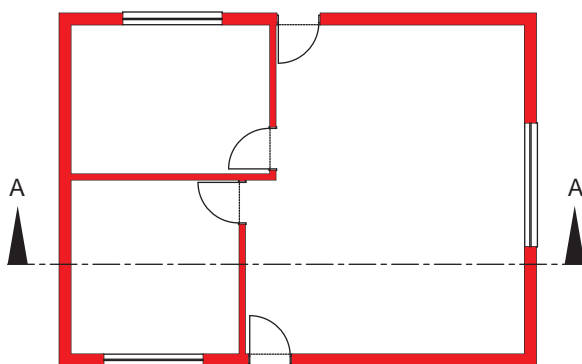


## WORKING DRAWINGS (PLANS)

The owner, or person who wants to build the house, decides how he wants it built. He makes rough sketches from which special drawings (plans) are made. These plans show the exact position and size of each room. The material needed and the cost of the house is also worked out from these plans before building operations are started.

### The Plan - Fig 4.1

The word 'plan', besides including all the drawings of a house, also means a special part of a drawing. It shows the house as it would look from above but without roof.



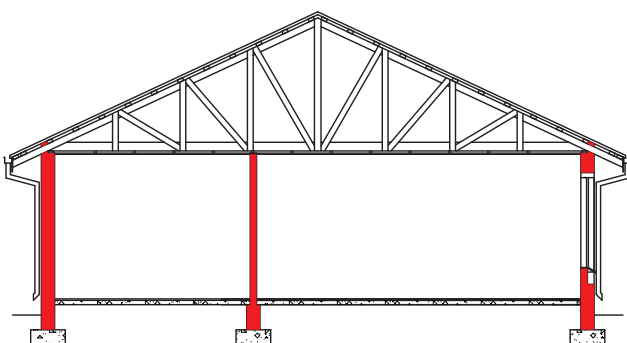
4.1 - Plan of a house

### A-Section - Fig 4.2

If one could take a big saw and cut right through a building, starting at the roof and cutting through vertically to the foundation, and then removing the portion that has been cut off, the portion that remains would represent a section of the house. This section will indicate:

- How high the doors, windows and walls should be
- What happens to the walls under the floor
- The size of the foundations
- How the roof should be constructed

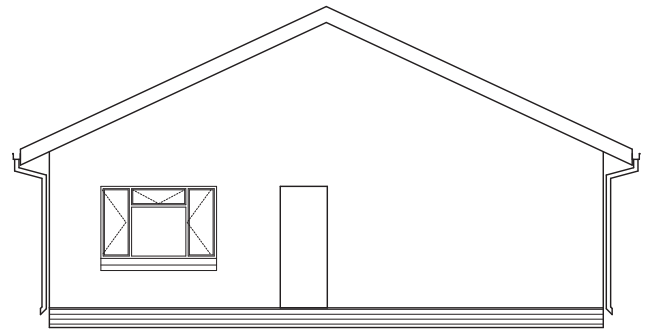
Marks like those in Figure 8 appearing on a plan, indicate where the section has been cut. They also indicate the angle from which the section should be viewed.



4.2 - Section

### Elevation - Fig. 4.3

This is a drawing of one side of a house. A house usually has four sides; thus, there are four elevations which can be shown on the plans - the front, back and end elevations. This is usually enough to show what the building will look like.



4.3 - Elevation

### Scale

The plan, section and elevations of a house can obviously not be drawn to full size, so they are made very much smaller. This means that every metre length of the real building is represented by a proportionately shorter length on the drawing. The drawing is then said to be 'drawn to scale'.

### Dimensions of the house.

Any dimensions required when building the house can be taken off the drawing with a scale rule. This method is not recommended, as the measurements may not be exact. In order to eliminate any errors, all the important dimensions are written on the plan. One need only read the dimensions correctly.



#### IMPORTANT NOTE:

All building plans by law need to be drawn up by a registered architectural professional. Architectural professionals need to be registered by SACAP (South African Council of Architectural Professionals)