Scaled Drawings

Erika Mendez
Definition: Scaled Drawing

A drawing that shows a real object with **accurate sizes reduced or enlarged** by a certain amount (called the scale).

In **architecture** and **building engineering**, a **floor plan** is a drawing to **scale**, showing a view from above, of the relationships between rooms, spaces and other physical features at one level of a structure.

In its most basic understanding, floor plans (scaled drawings) are a set of instructions used to build the space (object).
Architectural Scales & Engineering Scales

The scale is shown as the length in the drawing, then a colon ("\":"), then the matching length on the real thing.
Step 1: Sketch and Measure

Sketch your design and measure the length of the longest dimension.

- Roughly sketch your design
- Use it to record your measurements.
Step 2: Determine Scale

**Scale this measurement down so that it will fit onto your sheet.**

Be careful not to choose a tiny scale. You want it large enough so others can easily read your instructions.

Possible Scales:
1” = 1”
½” = 1”
3” = 1”
Which views should one choose for a multiview drawing? **The views that reveal every detail about the object.** Three views are not always necessary; we need only as many views as are required to describe the object fully.

Step 3: Set up your Views

![Diagram showing various views of an object](image)
Step 3: Continued

- **ISOMETRIC VIEW**
- **ORTHOGONAL VIEW**
Step 4: Draw Using Your Tools

Using your preferred method, begin to draw your design.

- **By Hand:** Using graph paper, pencil, and scale/ruler
- **Computer Software:** BIM (Building Information Modeling), Revit, AutoCAD, Sketchup, Rhino, etc.
Architectural Examples

Floor Plans
What is SketchUp?

Sketchup, is a 3D modeling computer program for a wide range of drawing applications such as architectural, interior design, landscape architecture, civil and mechanical engineering, film and video game design.
Thank You

Erika Mendez
emendez13@msn.com