

Measuring Guidelines — Floor Plans

Recommended Tools

- **25-foot metal tape:** A standard tape measure—rigid, retractable, lockable. This is especially useful for measuring room interiors.
- **50 or 100-foot cloth or vinyl tape:** This is the best tape for measuring exteriors and other spaces that have a corner on which you can hook the end of the tape. Unlike the metal tape, this one will not automatically retract; you have to wind it in.
- **Clipboard:** A standard 8-1/2" x 11" clipboard is sufficient for most projects.
- **Graph paper:** The grid makes it much easier to sketch an accurate plan. Paper with faint lines is preferred because penciled lines stand out better on it.
- **Drafting tools:** Pencils with erasers, architect's scale, T-square, and triangles.

Measuring techniques

Having a partner who can hold the end of the tape is helpful, but most buildings can be measured solo.

Sketch the basic floor plan—wall, window, and door placements—before measuring.

Sketch the exterior first, then the interior. Don't worry too much about it being proportional at this point.

Measure the outside first, filling in dimensions on your sketch for the key features—window and door openings, projections (chimneys, porches, bay windows, etc.), joints between the original building and additions, etc. Do not worry about minor features such as wood trim and moldings, changes in materials (unless it reflects an addition), etc.

Measure in running dimensions whenever possible. Fix the tape at one corner and run the tape along the side of the building, reading the measurement at each measurable feature. This will greatly reduce the accumulation of errors caused by measuring each feature separately. Vegetation and other factors may force you to take individual measurements on occasion.

Keep the tape level for more accurate measurements. Be sure to start at a level that allows you to get measurements for the key features. For example, don't start so low on the wall that your tape runs below the level of the windows.

On the interior, measure each room's overall dimensions in addition to placing interior doorways, closets, etc. This will help resolve discrepancies that may

arise when drawing up the plan. Interior measurements do not need to include windows and doors along the exterior walls that have already been measured from the outside.

Measure wall thickness, since it will have to be drawn.

Make additional measurements and notes on the drawing as you see fit. These might include the ceiling height, trim width, flooring or wall materials, etc. You will probably be photographing the building as well, so let the camera do as much of this “descriptive” work as possible.

Label the field drawing with the name and/or address of the building, the names of those who measured it, and the date. The field drawing with all of your dimensions should be kept along with your finished drawing.

The October 1984 issue of *Old-House Journal* has an excellent article entitled “[Measuring Up](#)” that focuses primarily on measuring building interiors.

Drawing techniques

Use 8-1/2” x 11” drawing paper whenever possible (so it fits in a standard file). Any type of paper will suffice; choose a quality commensurate with your purpose (simple documentation, presentation, publication, etc.). You may wish to trace the final drawing using ink on mylar.

A scale of 1/4” = 1 foot will accommodate most residential size buildings. Larger buildings may need to be reduced even further in order to fit them on the paper, so a 1/8” scale would be appropriate.

Differentiate additions by shading the walls differently. The recommended shading patterns are as follows:

- Original building—black-in walls
- Oldest addition—diagonal lines
- Next oldest addition— speckle shading
- Most recent addition—unshaded

Labels and legend: The building name and address should be on the drawing, as well as a North arrow, a graphic scale bar, and a legend of the shading used to distinguish additions along with the corresponding dates. Dimensions and room names are not required, though they can be helpful.