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Measured Drawings

The first step in any alteration work is to obtain an accurate set of drawings of the existing building. If the original drawings are not available, measured drawings must be made. This should be done even when contemplating such apparently minor additions as, for instance, a screened porch. To the trained eye of the architect a set of measured drawings will often disclose unforeseen difficulties, such as a poor circulation pattern, or unexpected solutions which would not have occurred to the owner. Even if the original drawings do exist, they may not be “as-built” drawings and should be checked for their accuracy. Modifications are often made during the construction phase of a house, and the original working drawings may not have been changed accordingly.

An architect can usually measure a house in a few hours, and he can record the key dimensions on a 1/8-inch scale “sketch plan” in a day. Whether an architect or the owner does the measured drawings, certain conventions should be followed so the drawings can be interpreted by anyone referring to them.

How to Measure a House

Get yourself a clipboard and a couple of sharp pencils, a 6-foot folding rule (preferably one with an extension on one end), a 50-foot metal tape (one with feet and inches), a 6-inch architect’s scale (or some 1/8-inch graph paper), and some paper. Try to find someone to hold the “dumb” end of the tape. (When my children were only three years old, they could manage this job!)

First measure the entire perimeter-the masonry foundation-and draw it to 1/8-inch scale. Then hold the end of the tape at each corner and measure the openings in each wall. Measure the actual size of the window sashes and doors. You can reduce the margin of error by extending the 50-foot tape the full length of the wall and reading off the distance from the corner. (Be sure to hold the end of the tape slightly beyond the edge of the building so that it lines up with the corner of the foundation.)

After recording the distance from the finished floor to the bottom of the siding, check the distance from the bottom of the siding to the finish grade at each corner of the house. The vertical dimensions of the windows and doors are more easily measured on the inside.

Measure all the interior spaces-finish wall to finish wall (not the baseboards) - and record all pertinent data. Be sure to indicate the thickness of each wall, which can easily be measured at the door jambs: show the height of the ceiling and the distance from finish floor to finish floor in a two-story house. This can best be measured at the stairwell.

Careful note should be made of any unusual structural and mechanical features that would be difficult to change, such as steel beams, major electrical conduits, masonry, duct shafts, and radiators. Photographs (inside and out) are extremely helpful and should always be made with a 6-foot ruler placed against the wall for scale.

Once the measured drawings (including a site plan showing trees, driveway, and garden areas) are made, the process of programming and design can begin.

Excerpt from:

How to Build a House With an Architect
by John Milnes Baker, J.B. Lippincott Co., 1977



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