

USING THE CONWAY-CLEVELAND LUMBER SCALING RULE

A lumber scaling ruler, commonly referred to as a lumber rule or board rule, is used to determine the quantity of wood in terms of board feet in individual boards. A board foot is the measure of wood in a board one inch thick by twelve inches wide by twelve inches long.

The first step in determining the board footage in a board is to find the length of the board in feet. This can be accomplished easily with the standard lumber rule, as it is three feet long. Round off to the next lower footage figure—for example, if a board measures 14-3/4 feet, use the fourteen foot value. The standard “four-line” rule has scales (lengthwise groups of footage values) for 12’-10’-14’-16’ on one side and 9’-11’-13’-15’ on the other, while the “three-line” rule has scales for 12’-14’-16’ and 8’-10’-18’. The board footage values for the various lengths are linear, so that, for example, a seven-foot board can be measured with the fourteen-foot scale using half the reading or a twenty-foot board with double the footage on the ten-foot scale.

Next, the rule is placed with the proper length scale face up across the width of the board and pulled so that the rule head is against the board’s edge. The rule is bent slightly by pushing down so that the rule is flat against the board. The number corresponding to the board footage is then read from the rule at the point where the edge crosses the rule. This board footage reading is taken from the scale corresponding to the length of the board. There are delineation marks half-way between the numbers defining the plus or minus cut-off points for each value. Thus, a particular board footage value is used whenever the width of the board falls within its range which is half-way to the next value either up or down.

The figure read is the board footage for that board assuming the board is one inch thick (4/4 lumber). Adjustment of the figure is required for other thicknesses. As examples, the footage read must be doubled when measuring two-inch thick (8/4) boards or multiplied by 1-1/2 when measuring 1-1/2 inch boards (6/4). When many boards of the same thickness are measured, usually this adjustment is made using the total.

Specific information on all aspects of hardwood grading and measuring can be obtained from the National Hardwood Lumber Association, P.O. Box 34518, Memphis, TN 38134.