

**USING THE CONWAY-CLEVELAND #450 BMU LUMBER SCALING RULE**

**DEFINITION** The #450 BMU Lumber Scaling Rule is used to determine the amount of Board Metric Units (BMU) within a given board. The BMU is defined as a unit of surface measure of lumber equaling 1000 square centimeters.

**USAGE** First, determine the length of the board in meters. This can be accomplished with the aid of the #450 BMU Rule, as it is one meter in length and also has a centimeter scale along one edge. The length of the board defines which of the eight standard length scales of the rule is to be used...2.7, 3.3, 3.9, 4.5 meters on one side or 3.0, 3.6, 4.2, 4.8 meters on the other. Generally, if the length is shorter than a standard length, the length measured is rounded off to the next lower length...for example, if the board measures 3.7 meters, the 3.6 scale would be used.

Next, the rule is placed with the proper length scale flat-side up across the board with the metal head against the edge of the board. With the rule bent flat against the board, the BMU content is read where the opposite edge of the board crosses the rule, using the scale corresponding to the board length. Random width pieces measuring under the half BMU are tallied as the lower whole BMU, and those measuring on or above the half BMU are tallied as the higher whole BMU.

**VOLUMETRIC CONVERSION** The basic unit of volumetric measurement is the cubic meter. To convert BMU to cubic meters, multiply the BMUs tallied by the nominal thickness in centimeters and divide by 1000.

$$\text{Cubic Meters} = (\text{BMU} \times \text{thickness in centimeters}) / 1000$$

**EXAMPLES:**

<u>BMU</u>				<u>Square Feet</u>		
<u>Length</u>	<u>Width</u>	<u>BMU</u>		<u>Length</u>	<u>Width</u>	<u>Square Feet</u>
3.6 m	30.5 cm	11 BMU	<----->	12 ft.	12 inches	12 SqFt
4.8 m	46 cm	22 BMU	<----->	16 ft.	18 inches	24 SqFt
3.3 m	46 cm	15 BMU	<----->	10 ft.	18 inches	15 SqFt
4.5 m	25 cm	11 BMU	<----->	14 ft.	10 inches	12 SqFt