Use vernier calipers for accurate measurement. There are many different kinds of vernier calipers. For most uses in small scale building material production, we recommend one that reads in millimeters (mm) and can read to .05 mm.

**HOW TO READ VERNIER CALIPERS**

1. When the 0 mark on the vernier scale is 2 lines past the 50 mark on the millimeter scale: read it as 52 millimeters. At the same time, there is one line on the vernier scale that lines up with one line on the millimeter scale. In this example, the 1 on the vernier scale lines up with a line on the millimeter scale. We read 52.10 millimeters.

2. The vernier scale 0 mark is between 100 and the next mark on the millimeter scale; Read it as 100 mm. At the same time, the mark between the 6 and the 7 on the vernier scale lines up with a mark on the millimeter scale. Read it as .65 mm. Read the complete measurement as 100.65 mm.

3. The vernier scale 0 mark is past the 30 mark 3 short lines on the millimeter scale; read it as 33 mm. At the same time, the 6 mark on the vernier scale lines up with a line on the millimeter scale; read it as .60 mm. Read the complete measurement as 33.60 mm.