

Clay Bricks - Determination of Dimensions

Lab Test Reference 334
British Standard Reference
BS 3921 : 1985

Principal Apparatus

Measuring Tape - Lab Inventory No. xxx (BS4372/4484)
Vernier Callipers - Lab Inventory No. xxx (BS3123)
Steel Rule - Lab Inventory No. xxx (BS4035/4372)
External Callipers - Lab Inventory No. xxx

1. Preliminaries
 - 1.1 The concrete laboratory shall be used to carry out this test and a clear area of floor space shall be prepared.
 - 1.2 Check the sample number and test schedule correspond.
 - 1.3 Check the measuring tape and callipers are clean, serviceable and that the calibration certificates are valid. Check for end damage on the tape.
 - 1.4 Obtain a test worksheet from the Cabinet.
 - 1.5 Ensure there are 24 bricks for the test.
2. Standard Test Procedure
 - 2.1 The sample of bricks shall first be examined to remove blisters, small projections or loose particles of clay adhering to the bricks.
 - 2.2 The bricks are now placed in contact with each other in a straight line along the floor, using the appropriate arrangement for length, width and height as required., Figure 1 in BS 3921 shows the arrangement.
 - 2.3 The overall dimension of the row is measured with the steel measuring tape from end for length, width and height in turn and the reading noted to the nearest millimetre. Assistance will be provided by another technician to hold one end of the tape when these measurements are made.
 - 2.4 Alternatively, the set can be sub divided in 2 sub sets of 12 and the measurements taken in the same way and added together to give the dimension for 24 specimens.
 - 2.5 The readings are then compared with Table 2 of BS 3921 for compliance.
 - 2.6 Each brick is now checked for compliance with the coordinating size by placing the callipers or steel rule at the mid-point of the brick and measuring the length, width and height for all 24 bricks. These are recorded to the nearest millimetre and checked for compliance with Table 1 of BS 3921.