

Australian Standard®

Methods of testing soils for engineering purposes

Method 1.4.1: Sampling and preparation of soils—Selection of sampling or test sites—Random number method

1 SCOPE This Standard sets out the method for selecting—

- (a) the location of sampling or test sites for testing of soils;
- (b) the time at which a sample is to be taken; and
- (c) the tonnage or volume of material at which a sample is to be taken.

The method uses random numbers obtained from a random number table (see Table 1) or generated using a suitable electronic calculator or algorithm.

The method is based on ASTM D 3665.

2 REFERENCED DOCUMENT The following document is referred to in this Standard:

ASTM

D 3665 Standard practice for random sampling of construction materials

3 PROCEDURE

3.1 Selection of a random number A random number shall be selected using either of the following methods:

- (a) *Using Table 1* The procedure shall be as follows:
 - (i) Obtain a row number (R) corresponding to the first two digits of a number found by blindly pointing to Table 1. Either page of the Table may be used but alternate between successive uses.

NOTE: The digits 0.001 to 0.009 are invalid for choosing a row number. The number 1.000 is used for row number 100.
 - (ii) Obtain a column number (C) corresponding to the first digit of a number found by blindly pointing a second time to the Table.
 - (iii) Obtain a random number (r) corresponding to the intersection of Row (R) and Column (C) in the Table.

Example:

First number selected is 0.548 which gives Row (R) 54

Second number selected is 0.457 which gives Column (C) 4

Row 54 Column 4 gives $r = 0.223$

NOTE: If more than one number is required, continue down the selected column to obtain the numbers.