

METHOD B13

THE DETERMINATION OF THE FINENESS MODULUS OF FINE AGGREGATES

SCOPE

The fineness modulus is a measure of the average grain size of a fine aggregate and is computed by adding the cumulative percentages retained on the sieves mentioned in paragraph 3, and dividing the sum by 100.

2 APPARATUS

The same as for Method B4.

3 METHOD

Determine the sieve analysis of the aggregate as described in Method B4 using the following series of sieves: 4,75 mm, 2,36 mm, 1,18 mm, 0,600 mm, 0,300 mm and 0,150 mm.

4 CALCULATIONS

- 4.1 The fraction retained on each sieve is expressed as a percentage of the mass of the test sample. (As a check, the percentage passing the 0,150 mm sieve can also be calculated as this percentage, and the percentages retained on the sieves should add up to 100.)
- 4.2 Calculate the cumulative percentages retained on each sieve.
- 4.3 Determine the sum of the cumulative percentages retained on the sieves.
- 4.4 Calculate the Fineness Modulus (FM) to the first decimal place as follows:

$$FM = \frac{\textit{sum of cumulative percentages retained}}{100}$$

and record it to the nearest first decimal place on Form B4/2 (or a similar form).

REFERENCE

SABS Method 829