

Fineness

The fineness of cement is a property, which must be carefully controlled during the manufacturing process. The total specific surface of the cement represents the surface area available for hydration. Various methods are in use to measure the specific surface of cements. For most purposes air permeability methods produce accurate, repeatable results.

Determination of Particle Size
Rigden's Flow Meter

BS 4359-2, BS 6463-103

Ordering Information

EL38-0500

Rigden's Flow Meter comprising a case, calibrated U-tube, connecting assembly and isolating taps. An aspirator is supplied with the apparatus together with bung to accept EL38-0600 Permeability Cell.
Supplied without cell. Weight 5.5 kg

Accessories

- EL38-0600** **Permeability Cell** made of stainless steel. Weight 500 g
- EL38-0620** **Manometer Liquid** (Dibutylphthalate) 500 ml bottle.
- EL38-0630** **Filter Papers**, 32 mm diameter. Box of 100.
- EL38-0640** **Reference Cement**. 10 g sachet.

Determination of Fineness Blaine
Apparatus

EN 196-6, 459-2, 13286-44; BS 4359-2; ASTM C204

This method has been adopted in Europe as the definitive means of determining the fineness of cement and other 'powder' materials.

The system is supplied complete with stainless steel cell, perforated disc and plunger; manometer U-tube, aspirator, bottle of manometer liquid and a box of filter papers.

Ordering Information

EL38-1000

Blaine Air Permeability Apparatus Weight 2.8 kg

Accessories

- EL38-0650** **Filter Papers**, 12.7 mm diameter. Box of 100.
- Manometer Liquid** (Dibutylphthalate) see EL38-0620
- Reference Cement** see EL38-0640

Spares

- EL38-1000/10** **Manometer U-tube**
- EL38-1000/15** **Blaine Air Permeability Cell** stainless steel with a perforated disc and plunger.

Specific Gravity (relative density) of
Hydraulic Cement

ASTM C188; AASHTO T133

It is necessary to know the specific gravity of cement for various reasons related to its quality and use. In particular it will be necessary to determine the specific gravity as part of the determination of the specific surface of a cement.

Ordering Information

EL38-1200

Le Chatelier Flask for determining the density of hydraulic cement and lime. Capacity 250 ml. Graduated from 0 to 1 ml and from 18 to 24 ml graduations. Accurate to 0.05 ml. Weight 0.5 kg

EL38-0500 Rigden's Apparatus with EL38-0600 Permeability Cell



EL38-1000 Blaine Apparatus



EL38-1200 Le Chatelier Flask

