

(2) A Bhme apparatus may be used. In this case the moulds shall be filled with about 4-10ths of a lb. of mortar, prepared as in (a), and shall be placed in the machine; 150 strokes shall then be applied to the core with a hammer of about 4.4 lbs. in weight (2 killog). After removing the mould and the core the briquettes shall be smoothed off, taken off the subjacent plate and treated as in (a).

By care in following the instructions given in (a) and (b) it will be found that hand work and machine work will give fairly uniform results. Doubtful cases, however, should be invariably decided by machine made briquettes.

(8) TESTING MACHINES.

Testing machines shall be of the positive lever automatic type, so arranged as to apply the loads quietly and uniformly at the rate of two hundred pounds per minute.

(9) CLIPS.

The style of clips shall be such as will break the briquette at the line of least section. Clips with adjustable rubber or paper composition rollers are found to work satisfactorily and should be used.

(10) CHEMICAL TESTS.

Chemical tests and full quantitative analyses are strongly recommended, and preference will be given to cements, of which analyses are furnished by the manufacturers.

(11) ADULTERATIONS, ETC.

Any cement containing adulteration shall not be accepted as a Portland cement. There are also certain ingredients which should be strictly limited in their amount. If there is found to be more than two percent of sulphuric acid, or three percent of magnesia, the cement should be rejected. It is understood that Portland cements only are being specified for. The Silica, or sand cements, are in a class by themselves, need special specifications, and are not intended to be included in the present one.