

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

METHODS OF SAMPLING AND TESTING MORTAR FOR
MASONRY CONSTRUCTION

AS 2701.2
METHODS OF SAMPLING

1 SCOPE. This standard sets out methods of sampling mortar and mortar materials, and their subsequent reduction to a quantity suitable for testing in the laboratory. It also includes directions for packaging and labelling of the samples. Reference is made to the more complex problems of sampling hardened mortar on which it is considered no mandatory requirements can be laid down.

2 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

- AS 1141 Methods for Sampling and Testing Aggregates
AS 1478 Chemical Admixtures for Use in Concrete
AS 2701 Methods of Sampling and Testing Mortar for Masonry Construction
Part 3—Method of Preparation of Fresh Mortar for Testing.

3 GENERAL REQUIREMENT FOR SAMPLES. Each sample shall consist of a part or parts, as appropriate, selected at random from an identifiable location and the test results shall apply to that sample.

4 FRESH MORTAR.

4.1 General. Samples of fresh mortar shall be obtained by taking uniformly distributed portions (preferably from material in motion, provided that this can be carried out in safety), mixed to form a thoroughly combined bulk sample. The number of portions and size of bulk sample necessary will depend upon the quality and variability of the material and the accuracy required of the test results.

4.2 Batch mixers. The mortar shall be sampled at the discharge point of a batch from the mixer. At least three portions shall be taken, one each at about the time when one-quarter, one-half and three-quarters of the batch have been discharged. If more than three portions are taken, they shall be at correspondingly shorter, equally spaced, intervals. The portions shall be taken by passing a dry, clean, metal receptacle across the stream of mortar in such a manner as will ensure the collection of a thoroughly representative sample.

4.3 Conveyors, etc. It is preferable that portions be taken at the discharge of a conveyor. This shall be done by passing a dry, clean, metal receptacle across the stream of mortar, if possible so as to catch the whole of the stream, until the receptacle is completely filled. If it is not possible to catch the whole stream at once, the receptacle should be passed through the stream at varying rates to obtain the best representative sample.

Where it is not possible to sample at the discharge point, portions shall be taken from the full width and thickness of the stream of mortar on the conveyor. The scoop used shall sweep the surface of the conveyor.

Not less than 12 portions shall be taken at regularly spaced intervals from the mortar which is being sampled. The portions shall be combined to form one bulk sample.

4.4 Hoppers, bins or heaps. Mortar shall be sampled when hoppers, etc, are being filled or emptied. The procedures given in Clause 4.1 shall be followed.

Small hoppers and bins and very small heaps shall be sampled as follows:

- (a) *Small hoppers, bins or heaps.* The mortar shall be sampled by means of a scoop at regular spacings throughout the batch. Portions shall be taken from well below the surface in at least 12 different places, distributed in a regular manner, to ensure, when mixed, a thoroughly representative combined sample.
- (b) *Very small heaps.* When sampling from very small heaps, e.g. mortar turned out from a site mixer onto a mortar board, the heap shall be carefully turned over with a clean dry shovel and samples taken by means of a scoop at regular spacings.