

Methods of testing concrete

Method 19.2: Accelerated curing of concrete compression test specimens— Warm water method

1 SCOPE

This Standard sets out the warm water (55°C) method for the accelerated curing of compression test specimens of concrete, made in the laboratory, and moulded in accordance with AS 1012.8.1. Specimens are tested between 26 h and 28 h from time of batching.

The method requires that the specimens be prepared adjacent to the curing tank.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

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| 1012 | Methods of testing concrete |
| 1012.1 | Method 1: Sampling of fresh concrete |
| 1012.8.1 | Method 8.1: Method for making and curing concrete—Compression and indirect tensile specimens |
| 1012.9 | Method 9: Determination of the compressive strength of concrete specimens |

3 ACCEPTANCE OF SPECIMENS

Concrete specimens shall be accepted for accelerated curing only if they—

- (a) are received at the curing tank in their steel moulds with cover plates secured; and
- (b) have been prepared adjacent to the curing tank; and
- (c) have been moulded in accordance with Section 7 of AS 1012.8.1.

4 APPARATUS

The following apparatus shall be required:

- (a) *Cover plate* The cover plate shall be rigid and shall fit securely on the mould so as to isolate the concrete from the water of the curing tank. The material used for the plate shall not interact with the concrete or the mould.
- (b) *Accelerated curing tank* The accelerated curing tank shall—
 - (i) be of corrosion-resistant material, of a size to hold a number of concrete cylinder specimens in their moulds standing in an upright position with the tank filled with water to a level of not less than 25 mm above the top of the moulds;