Australian Standard™

AS 1012.19.1

Methods of testing concrete

Method 19.1: Accelerated curing of concrete compression test specimens— Hot water method

1 SCOPE

This Standard sets out the hot water (82°C) method for the accelerated curing of compression test specimens of concrete, made in the laboratory or in the field, and prepared in accordance with AS 1012.8.1. The method allows for the transportation of test specimens from the field to a curing tank in a laboratory. Specimens are tested between 23 h and 27 h from the time of batching.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS		
1012	Methods of testing concrete	
1012.1	Method 1:	Sampling of fresh concrete
1012.8.1	Method 8.1:	Method of making and curing concrete—Compression and indirect tensile test specimens
1012.9	Method 9:	Determination of 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 sealed; and

(b) 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 be provided with a seal and a clamping device, so that specimens may be transported at an early stage. 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;

(ii) have a grill that is located within 150 mm from the bottom of the tank and strong enough to support the specimens and allow adequate circulation of water throughout the tank;