

Australian/New Zealand Standard™

**Design for installation of buried
concrete pipes**



AS/NZS 3725:2007

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS-006, Concrete Pipes. It was approved on behalf of the Council of Standards Australia on 07 September 2006 and on behalf of the Council of Standards New Zealand on 15 December 2006.

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The following are represented on Committee WS-006:

Australasian Railway Association
Australian Chamber of Commerce and Industry
Brisbane City Council
Business New Zealand
Cement & Concrete Association of New Zealand
Engineers Australia
Main Roads Department, QLD
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Design for installation of buried concrete pipes

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-006, Concrete Pipes, to supersede AS 3725—1989, *Loads on buried concrete pipes* by a Joint Australian/New Zealand Standard that incorporates current best practice.

The objective of the Standard is to enable an appropriate class of concrete pipe, manufactured in accordance with AS 4058, *Precast concrete pipes—pressure and non-pressure* or AS 4139, *Fibre reinforced concrete pipes*, to be selected for use in below-ground installations.

NOTE: At the time of publication of this Standard, AS 4058 is under review by the Committee and intended to be replaced by a Joint Australian/New Zealand Standard in due course (to become AS/NZS 4058). In the meantime, for New Zealand applications, all references to AS 4058 throughout this Standard should be deemed to include references to NZS 3107, *Specification for precast concrete drainage and pressure pipes*, as appropriate and applicable.

The Standard provides rules for calculating the working loads on concrete pipes due to fill and superimposed loads and a range of installation options. It relates these to the test loads applied to sample pipes in accordance with the methods of test set out in the product standards.

Where a choice is given between an Australian Standard and a New Zealand Standard (for example AS 1289, *Methods of testing soils for engineering purposes* and the equivalent NZS 4402, *Methods of testing soils for civil engineering purposes*), the Australian Standard will apply in Australia and the New Zealand Standard will apply in New Zealand.

The procedures in the Standard also apply to the calculation of external working loads on concrete pressure pipes. In this case, however, the loads due to internal pressures need to be considered in conjunction with the external loads. The method of assessing the required strength of a pipe under this combination of loads is included in the Standard.

AS/NZS 3725 Supp 1 is a Commentary on this Standard. The Commentary contains additional information and explanations of particular technical aspects of the Standard. It includes, as an appendix, examples of calculations in accordance with this Standard, particularly with reference to the selection of a pipe class from AS 4058, *Precast concrete pipes—Pressure and non-pressure* and AS 4139, *Fibre reinforced concrete pipes*. The Commentary is an informative document and does not form part of the Standard.

Statement expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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