

TECHNICAL NOTE

TECHNICAL INFORMATION FROM THE CONCRETE PIPE ASSOCIATION OF AUSTRALASIA

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UPDATING SPECIFICATIONS FOR CONCRETE PIPE

In 2007 Standards Australia and Standards New Zealand revised and released two important documents – **AS/NZS4058 “Precast concrete pipes—pressure and non pressure”** and **AS/NZS3725 “Design for installation of buried concrete pipe”**. Details of these two Standards can be found in CPAA Technical Note “Specifying for 100 years”.

Following the introduction of these standards CPAA member companies have made significant changes to their quality systems and processes to ensure that reinforced concrete pipe is manufactured in accordance to the requirements of these benchmarks. However the same cannot be said for a number of specifications throughout Australia and New Zealand. The previous concrete pipe standards, AS4058-1992 (Australia) and NZS3107-1977(New Zealand), are now obsolete and should be replaced by AS/NZS4058-2007. Similarly, AS3725-1989 “Loads on buried concrete pipes” was revised and replaced by AS/NZS3725-2007. Many specifications still refer to the previous standards, and in some cases, documents prior to these. The industry has seen some major changes over the years and failing to update specification can have an impact on any project.

Some of the major changes from the previous Standards are:

AS/NZS4058—2007 v AS4058-1992 & NZS3107

- All concrete pipe classes are numerical (i.e. Class 2,3,4,6 etc). This is a significant change in NZ where NZS3107 classified pipe by letter (i.e. Class X,Y,Z etc). All manufacturers in Australia and New Zealand make pipe and mark it in accordance to the classification outlined in the new Standard.
- More stringent requirements are outlined for the manufacturer with respect to: water absorption, cover to steel, performance testing, workmanship and finish.
- Exposure classifications have changed and are now considered normal, marine and other (see TN004 for a detailed definition of the exposure classes and what they mean).
- In New Zealand the allowable crack width under load has increased from 0.125mm to 0.15mm (for 10mm cover).
- A more comprehensive list of requirements for both purchasers and suppliers is presented.
- The Preface states that by using this standard appropriately in conjunction with AS/NZS3725 you can expect to achieve a service life of 100 years.

AS/NZS3725—2007 v AS/NZS3725-1989

- Vehicle traffic design loads have been updated to reflect the latest requirements from Austroads (Australia) and NZ Transport Agency (formally Transit NZ).
- Greater awareness placed on short term construction loads and how to design.
- Changes in embedment geometry with less excavation and backfill required and improved installation detailing for H and HS supports. This is extremely important for contractors to be aware of.

To update your standards visit the SAI Global or Standards NZ web site today and order a copy for your office.



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