STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF

AS/NZS 1462.13:2006

Methods of test for plastics pipes and fittings

Method 13: Method for the determination of elastomeric seal joint contact width and pressure

RECONFIRMATION NOTICE

Technical Committee PL-021 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 27 April 2017.

Approved for reconfirmation in New Zealand on behalf of the Standards Council of New Zealand on 10 August 2017.

The following are represented on Technical Committee PL-021:

Association of Accredited Certification Bodies
Australian Building Codes Board
Chemistry Australia
Energy Networks Australia
Engineers Australia
Local Government New Zealand
New Zealand Employers and Manufacturers Association (Central)
Plastics Industry Pipe Association of Australia
Plastics New Zealand
Water New Zealand
Water Services Association of Australia

NOTES

AS/NZS 1462.13:2006
Reconfirmed 2017

Australian/New Zealand Standard™

Methods of test for plastics pipes and fittings

Method 13: Method for the determination of elastomeric seal joint contact width and pressure

1 SCOPE

This Standard sets out a procedure for determining the contact width and contact pressure profile of an elastomeric seal joint. It allows for both spigot-mounted and socket-mounted elastomeric seal joints.

2 PRINCIPLE

A socket with an elastomeric seal is placed over a spigot with a small hole, or a spigot with an elastomeric seal is placed over a socket with a small hole. In each case, the hole is just covered by the elastomeric seal. Pressure is applied at a uniform rate through the hole until leaking occurs. The leak pressure and relative location of the seal is noted. The pressure is then released and the spigot or socket moved by a small increment and the procedure repeated until the contact pressure profile is completed.

3 RELEVANCE OF TEST

A minimum interface pressure and contact width between the elastomeric seal and the spigot of the pipe or fitting is necessary to minimize the risk of tree root intrusion and liquid infiltration or exfiltration.

4 APPARATUS

The following apparatus is required:

(a) *Hydraulic system*—capable of producing a pressure in excess of the expected interface pressure and capable of maintaining an accuracy of ±2% over the range 0.3–0.8 MPa.

(b) *Test rig*—with, as a minimum, the following features:

(i) Sufficient travel to allow testing of the full contact width of the elastomeric seal.

(ii) Construction that shall maintain the elastomeric joint square to the axis of the spigot during testing.

(iii) Construction that shall not apply radial pressure to the spigot or socket during testing.

(iv) A dial gauge or equivalent means, to determine the relative longitudinal position to ±0.1 mm.

(c) *For spigot-mounted seals*—a socket of the maximum inside diameter as shown in the manufacturer's product drawing –0, +0.02 mm, with a 0.75 ±0.3 mm diameter hole connected to the source of hydraulic pressure.

(d) *For socket-mounted seals*—a spigot of minimum outside diameter, as shown in the appropriate product Standard, +0.0,–0.02 mm, with a 0.75 ±0.3 mm diameter hole, connected to the source of the hydraulic pressure.

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