

Australian/New Zealand Standard™

**Mechanical jointing fittings for use with  
crosslinked polyethylene (PE-X) for  
pressure applications**

**Part 3: Plastics piping systems for hot  
and cold water installations—  
Crosslinked polyethylene (PE-X)—  
Fitness for purpose of the system (ISO  
15875-5:2003, MOD)**



### **AS/NZS 2537.3:2011**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee PL-006, Polyolefin Pipe Systems. It was approved on behalf of the Council of Standards Australia on 23 March 2011 and on behalf of the Council of Standards New Zealand on 18 March 2011.

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The following are represented on Committee PL-006:

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Engineers Australia  
Master Plumbers, Gasfitters and Drainlayers New Zealand  
National Plumbing Regulators Forum  
New Zealand Water and Waste Association  
Plastics Industry Pipe Association of Australia  
Plastics New Zealand  
Plumbing Products Industry Group  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee PL-006, Polyolefin Pipe Systems to supersede, in part, AS 2537—1994, *Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) pipe for hot and cold water applications*.

This Standard is an adoption with national modifications and has been reproduced from ISO 15875-5:2003, *Plastics piping systems for hot and cold water installations—Crosslinked polyethylene (PE-X), Part 5: Fitness for purpose of the system*. The modifications and additional requirements are set out in Appendix ZZ.

The objective of this Standard is to specify the general requirements to demonstrate fitness for purpose of mechanical jointing fittings made for use with crosslinked polyethylene pipes in hot and cold water applications.

Other parts of AS/NZS 2537 are:

## AS/NZS

- 2537.1 Part 1: Plastics piping systems for hot and cold water installations—Crosslinked polyethylene (PE-X)—General (ISO 15875-1, MOD)
- 2537.2 Part 2: Plastics piping systems for hot and cold water installations—Crosslinked polyethylene (PE-X)—Fittings (ISO 15875-2:2003, MOD)
- 2537.4 Part 4: Plastics piping systems for hot and cold water installations—Crosslinked polyethylene (PE-X)—Guidance for the assessment of conformity (ISO/TS 15875-7:2003, MOD)
- 2537.5 Part 5: Plastics pipes and fittings—Crosslinked polyethylene (PE-X) pipe systems for the conveyance of gaseous fuels—Metric series—Specifications—Fittings for mechanical jointing (including PE-X/metal transitions) (ISO 14531-3:2006, MOD)

As this Standard is reproduced from an international Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘this part of EN ISO 15875’ should read ‘this part of AS/NZS 2537’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

The term ‘normative’ has been used in this Standard to define the application of the annex or appendix to which it applies. A ‘normative’ annex or appendix is an integral part of a Standard.

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## AUSTRALIAN/NEW ZEALAND STANDARD

**Mechanical jointing fittings for use with crosslinked polyethylene (PE-X) pipe for pressure applications****Part 3:****Plastics piping systems for hot and cold water installations—  
Crosslinked polyethylene (PE-X)—Fitness for purpose of the system  
(ISO 15875-5:2003, MOD)****1 Scope**

This Part of EN ISO 15875 specifies the characteristics of the fitness for purpose of crosslinked polyethylene (PE-X) piping systems, intended to be used for hot and cold water installations within buildings for the conveyance of water whether or not intended for human consumption (domestic systems) and for heating systems, under design pressures and temperatures according to the class of application (see Table 1 of EN ISO 15875-1:2003).

This standard covers a range of service conditions (application classes) and design pressure classes. For values of  $T_D$ ,  $T_{max}$  and  $T_{mal}$  in excess of those in Table 1 of Part 1, this standard does not apply.

NOTE It is the responsibility of the purchaser or specifier to make the appropriate selections from these aspects, taking into account their particular requirements and any relevant national regulations and installation practices or codes.

It also specifies the test parameters for the test methods referred to in this standard.

In conjunction with the other parts of EN ISO 15875:2003 (see Foreword) it is applicable to PE-X pipes, fittings, their joints and to joints with components of other plastics and non-plastics materials intended to be used for hot and cold water installations.

**2 Normative references**

This standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments or revisions of, any of these publications apply to this standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 712, *Thermoplastics piping systems — End-load bearing mechanical joints between pressure pipes and fittings — Test method for resistance to pull-out under constant longitudinal force*

EN 713, *Plastics piping systems — Mechanical joints between fittings and polyolefin pressure pipes — Test method for leak-tightness under internal pressure of assemblies subjected to bending*