

Australian/New Zealand Standard™

Conduit systems for cable management

**Part 21: Particular requirements—Rigid
conduit systems**



AS/NZS 61386.21:2015

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The following are represented on Committee EL-004:

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Australian Industry Group
Consumer Electronics Suppliers Association
Consumers Federation of Australia
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Engineers Australia
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Part 21: Particular requirements—Rigid conduit systems

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories. This Standard will run in parallel with AS/NZS 2053.2:2001, *Conduits and fittings for electrical installations, Part 2: Rigid plain conduits of insulating materials*, AS/NZS 2053.6:2001, *Rigid conduit and fittings for electrical installations, Part 6: Profile-wall, smooth-bore conduits and fittings of insulating material* and AS/NZS 2053.7:2002, *Conduits and fittings for electrical installations, Part 7: Rigid metal conduits and fittings*. It is the intention of Committee EL-004 that AS/NZS 2053.2, AS/NZS 2053.6 and AS/NZS 2053.7 will be withdrawn at some appropriate future time.

The objective of this Standard is to provide Australian and New Zealand electrical industries with requirements for rigid conduit systems for cable management.

The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment that could be applicable to cable management systems* are covered by this Standard.

This Standard is based on but not equivalent to IEC 61386-21, Ed.1.0 (2002), *Conduit systems for cable management, Part 21: Particular requirements—Rigid conduit systems*.

The main areas of variation from IEC include the following:

- (a) Requirements for profile wall smooth bore conduit and fittings.
- (b) Marking requirements.
- (c) Dimensional requirements.

This Standard is Part 21 of the AS/NZS 61386 series of Standards on conduit systems. It specifies particular requirements for rigid conduit systems and is to be used in conjunction with AS/NZS 61386.1, which specifies general requirements for conduit systems.

This Part 21 supplements or modifies the corresponding clauses of AS/NZS 61386.1. Where a particular clause or subclause of Part 1 is not mentioned in the Part 21, that clause applies as far as is reasonable. Where this Part 21 states ‘*addition*’, ‘*modification*’ or ‘*replacement*’, the relevant text of Part 1 is to be adapted accordingly.

Subclauses, tables and figures, which are in addition to those in Part 1 are numbered starting with 201.

This series comprises of the following:

AS/NZS

- 61386 Conduit systems for cable management
- 61386.1 Part 1: General requirements
- 61386.21 Part 21: Particular requirements—Rigid conduit systems (this Standard)
- 61386.22 Part 22: Particular requirements—Pliable conduit systems
- 61386.23 Part 23: Particular requirements—Flexible conduit systems

Statements expressed in mandatory terms in footnotes to tables are deemed to be required of this Standard.

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

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Australian/New Zealand Standard
Conduit systems for cable management

Part 21: Particular requirements—Rigid conduit systems

1 SCOPE

This Clause of Part 1 is applicable, except as follows:

Addition:

This Standard specifies the requirements for rigid conduit systems and smooth bore profile wall conduit systems.

2 NORMATIVE REFERENCES

This Clause of Part 1 is applicable except as follows:

Addition:

AS

1014 Gauging of metric screw threads

1721 General purpose metric screw threads

AS/NZS

1462 Methods of test for plastics pipes and fittings

1462.1 Method 1: Method for determining the dimensions of pipes and fittings

1477 PVC pipes and fittings for pressure applications

4130 Polyethylene (PE) pipes for pressure applications

ISO

9969 Thermoplastics pipes—Determination of ring stiffness

3 DEFINITIONS

This Clause of Part 1 is applicable, as follows:

*Addition:***3.201 Profile-wall, smooth-bore conduits**

Conduits that have a smooth bore and a profile wall (which may be hollow), and that are not normally bent.

4 GENERAL REQUIREMENTS

This Clause of Part 1 is applicable.

5 GENERAL CONDITIONS FOR TESTS

This Clause of Part 1 is applicable.