Australian/New Zealand Standard™

Concrete utility services poles

Standards Australia

STANDARDS NEW ZEALAND

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CE/19, Utility Service Poles. It was approved on behalf of the Council of Standards Australia on 31 March 2000 and on behalf of the Council of Standards New Zealand on 11 February 2000. It was published on 5 June 2000.

The following interests are represented on Committee CE/19:

Australian Aluminium Council
Bureau of Steel Manufacturers of Australia
Concrete Pipe Association
Electricity Engineers Association of New Zealand
Electricity Supply Association of Australia
National Precast Concrete Association of Australia
New Zealand Concrete Society
New Zealand Heavy Engineering Research Association
New Zealand Timber Industry Federation
University of Technology, Sydney

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Australian/New Zealand Standard™

Concrete utility services poles

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CE/19, Utility Services Poles, to supersede AS 4065, *Concrete poles for overhead lines and street lighting* and NZS 3115:1980, *Specification for concrete poles for electrical transmission and distribution.*

The objective of this Standard is to provide the designers manufacturers and purchasers of concrete utility services poles with a specification for their manufacture.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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Concrete utility services poles

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard specifies the minimum requirements for materials, design and manufacture of reinforced and prestressed concrete utility services poles.

The Standard applies to concrete poles and their component parts which support any one of street lights, floodlights, aerial conductors, electromotive-transport conductors, traffic signals, communication equipment, or similar utility services, or any combination of these services.

The Standard does not apply to concrete flag poles (see Note 2).

NOTES:

1 Methods for demonstrating compliance with this Standard are given in Appendix A.

2 Information on the additional loads induced by the temporary attachment of flags or banners to utility services poles is given in Appendix G of AS/NZS 4676.

1.2 APPLICATION

This Standard is not intended to serve as a complete technical specification for the supply of concrete poles, but may form the basis of such a specification. The Standard shall not be interpreted to prevent the use of materials or methods of design or construction not specifically referred to in the document.

For structural design requirements refer to AS/NZS 4676.

1.3 REFERENCED DOCUMENTS

The documents referred to in this Standard are listed in Appendix B:

1.4 DEFINITIONS

For the purpose of this Standard, the definitions given in AS/NZS 1158.1.1, AS 1798, AS/NZS 4676 and those below apply.

1.4.1 Along-line direction

The horizontal direction parallel to the direction of run of the aerial cables.

1.4.2 Deflection

The measured distance (in millimetres) between the nominated position of the pole under the influence of the test load and that prior to the commencement of loading.

1.4.3 Failure

The inability under test to meet specified limit state criteria.

1.4.4 Load at the serviceability limit state

The load corresponding to the maximum load the pole is expected to carry under service load, subject to serviceability requirements.