



Lighting poles and bracket arms— Recommended dimensions



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- Astronomical Society of Australia
 - Australian Industry Group
 - Australian Local Government Association
 - CIE Australia
 - Consumers Federation of Australia
 - Department of Transport and Main Roads, Queensland
 - Energy Efficiency and Conservation Authority of New Zealand
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-

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Australian Standard[®]

**Lighting poles and bracket arms—
Recommended dimensions**

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PREFACE

This Standard was prepared by the Standards Australia Committee LG-002, Lighting for Roads and Public Spaces, to supersede AS 1798—1992, *Lighting poles and bracket arms—Preferred dimensions*.

The objective of this Standard is to provide designers of lighting poles and bracket arms for use in installations providing lighting to roads and other outdoor public spaces with a range of recommended dimensions to facilitate compatibility.

The most significant changes introduced in this edition are as follows:

- (a) The requirements have been relaxed. The document now contains recommendations only. This is reflected in the title, with the change from ‘preferred dimensions’ to ‘recommended dimensions’.
- (b) The Standard has been updated to align it with the Category V and Category P lighting schemes of AS/NZS 1158.1.1 and AS/NZS 1158.3.1.
- (c) An increase in the planting depth for certain sizes of buried poles.
NOTE: See Table 2.1.
- (d) Alterations to the provisions for door openings and cable entry holes.
NOTE: See Clauses 2.5 and 2.6, and Figure 2.1.
- (e) Alterations to the provisions for the dimensions and angle of luminaire fixing spigots.
NOTE: See Section 4.
- (f) The addition of an appendix detailing the recommended dimensions of the pole or bracket arm end in order for it to be dimensionally compatible with top-entry luminaires.
NOTE: See Appendix C.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is for information and guidance only.

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FOREWORD

The Standard provides a range of recommended dimensions for lighting poles and separate bracket arms. It will be necessary for the purchaser to select from the range the particular dimensions required to provide the desired luminaire mounting height and outreach, having regard to the actual site conditions.

For the application of this Standard, reference is made to the general lighting categories defined in AS/NZS 1158.0, *Lighting for roads and public spaces*, Part 0: *Introduction*. These categories may broadly be described as follows:

- (a) *Category V lighting* Applicable to arterial roads, including freeways.
- (b) *Category P lighting* Applicable to minor roads, including those used for residential purposes. Applicable to outdoor public spaces other than roads, e.g. shopping precincts, car parks.

STANDARDS AUSTRALIA

Australian Standard

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard provides recommendations for the dimensions of lighting poles and separate bracket arms designed for use in installations providing lighting for roads and other outdoor public spaces.

This Standard applies to the following:

- (a) Lighting poles designed to support luminaires and ancillary equipment.
- (b) Joint-use lighting poles and sections of joint-use mast arms designed to support luminaires.
- (c) Lighting poles of both the rigid and frangible type.
- (d) Bracket arms designed for mounting onto electricity distribution poles, walls or other supporting surfaces for use in installations providing—
 - (i) Category V lighting in accordance with AS/NZS 1158.1.1; and
 - (ii) Category P lighting in accordance with AS/NZS 1158.3.1.

NOTE: The Foreword provides further information on Category V and Category P lighting schemes.

This Standard also provides recommendations for the dimensions for luminaire fixing spigots.

This Standard does not cover—

- (i) aesthetic considerations of design or shape, except where these matters are controlled by the recommended dimensions;
- (ii) structural design, performance or testing; or
- (iii) the installation of the poles.

NOTES:

- 1 Advice should be sought on appropriate installation practices, particularly for poles of the slip-base design where special installation requirements apply to ensure the poles operate in the intended manner.
- 2 It is recognized that dimensions other than those provided in this Standard will sometimes be required to cater for special conditions or applications.
- 3 Appendix A provides guidance on the information which should be provided with an enquiry or order for lighting poles and bracket arms complying with this Standard.

1.2 APPLICATION

The nominal dimensions of lighting poles, bracket arms and luminaire fixing spigots should be in accordance with the appropriate recommendations of Sections 2, 3 and 4. The dimensions of individual lighting poles and bracket arms should be within the tolerances given in Section 5.