



Luminaires

Part 2.18: Particular requirements— Luminaires for swimming pools and similar applications (IEC 60598-2-18 (ED.2.0) MOD)



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The following are represented on Committee EL-041:

- Australian Industry Group
 - Consumers' Federation of Australia
 - Department of the Environment and Energy (Australian Government)
 - Electrical Compliance Testing Association of Australia
 - Electrical Regulatory Authorities Council
 - IES: The Lighting Society
 - Joint Accreditation System of Australia and New Zealand
 - Lighting Council Australia
 - Master Electricians Australia
 - NSW Fair Trading
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This Standard was issued in draft form for comment as DR AS 60598.2.18:2018.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard®

Luminaires

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Originated as AS/NZS 60598.2.18:1998.
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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee EL-041, Lamps and Related Equipment, to supersede AS/NZS 60598.2.18:1998.

AS/NZS 60598.2.18:1998 will also remain current for 24 months after the date of publication of this Standard and after this time it will be superseded by AS 60598.2.18:2019. Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

After consultation with stakeholders, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to specify requirements for fixed luminaires intended for use in the water, or in contact with the water, in, for example, the basins of swimming pools, fountains, paddling pools, and garden pools.

This Standard is an adoption with national modifications; it has been reproduced from IEC 60598-2-18:1993 (ED. 2.0) *Luminaires — Part 2: Particular requirements — Section 18: Luminaires for swimming pools and similar applications*, and its Amendment No. 1 (2011) and Corrigendum 1 (2013). The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

IEC 60598-2-18 is equivalent to IEC 598-2-18:1993 as IEC applied a new numbering system to the 60000 series, to all its existing and future publications, including amendments to existing Standards.

The essential safety requirements of AS/NZS 3820, *Essential safety requirements for electrical equipment*, which could be applicable to lighting products within the scope of AS 60598.2.18, are covered by AS 60598.2.18.

This Standard is structured as follows:

- (a) Preface.
- (b) IEC 60598-2-18:1993, (ED. 2.0), including Amendment No. 1 (2011) and Corrigendum 1 (2013) unedited from the first clause to the Bibliography.
- (c) Appendix ZZ — Australian variations to the source document.

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

- (i) In the source text ‘this section of Part 2 of IEC 598’ should read ‘this Australian Standard’.
- (ii) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

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

CORRIGENDUM 1

18.1 Scope

Delete, in the first sentence, the words "and for use with tungsten filament lamps".

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.

This part of International Standard IEC 598 has been prepared by sub-committee 34D: Luminaires, of IEC technical committee 34: Lamps and related equipment. It is one section of the multi-section IEC 598.

This second edition of IEC 598-2-18 replaces the first edition (1984), Amendment No. 1 (1987) and Amendment No. 2 (1990).

The text of this standard is based on the following documents:

Six Months' Rule	Reports on Voting
34D(CO)111	34D(CO)128
34D(CO)169	34D(CO)185
34D(CO)225	34D(CO)243

Full information on the voting for the approval of this standard can be found in the reports on voting indicated in the above table.

This publication shall be read in conjunction with IEC 598-1: *Luminaires, Part 1: General requirements and tests*.

AUSTRALIAN STANDARD

Luminaires

Part 2.18:

Particular requirements—Luminaires for swimming pools and similar applications (IEC 60598-2-18 (ED.2.0) MOD)

18.1 Scope

This section of Part 2 of IEC 598 specifies requirements for fixed luminaires intended for use in the water, or in contact with the water, in, for example, the basins of swimming pools, fountains, paddling pools, and garden pools, and for use with tungsten filament lamps.

NOTE – Electrical installation rules for swimming pools are given in IEC 364-7-702: *Electrical installations of buildings – Part 7: Requirements for special installations or locations – Section 702: Swimming pools.*

This section does not cover luminaires not in contact with the water (e.g. mounted behind a glass panel which is separate from the luminaire) or hand-held or portable luminaires. It is to be read in conjunction with those sections of Part 1 to which reference is made.

18.2 General test requirements

The provisions of Section Zero of IEC 598-1 apply. The tests described in each appropriate section of Part 1 shall be carried out in the order listed in this section of Part 2; reference to other sections of Part 1 should be made as necessary.

18.3 Definitions

For the purposes of this section the definitions of Section One of IEC 598-1 apply.

18.4 Classification of luminaires

Luminaires shall be classified in accordance with the provisions of Section Two of IEC 598-1 together with the requirements of sub-clauses 18.4.1 to 18.4.3.

18.4.1 Luminaires shall be Class III for protection against electric shock and shall have external and internal circuits which operate on voltages not exceeding 12 V.

18.4.2 Luminaires shall be classified according to the degree of protection against the ingress of moisture and dust as follows:

18.4.2.1 For those parts of luminaires which are in contact with the water of the pool, fountain, etc., the classification shall be pressure watertight (IPX8).

18.4.2.2 For those parts of luminaires which are not in contact with the water of the pool, fountain, etc., the classification shall be at least dustproof and splashproof (IP54).