AS 1839:2021

Australian STANDARD®

STANDARDS Australia

Swimming pools — Premoulded fibre-reinforced plastics — Installation

AS 1839:2021

This Australian Standard® was prepared by PL-041, Glass Reinforced Swimming Pools. It was approved on behalf of the Council of Standards Australia on 1 March 2021.

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The following are represented on Committee PL-041:

Australian Fibreglass Manufacturers Group
Australian Institute of Building Surveyors
Composites Australia
Engineers Australia
Swimming Pool and Spa Association of Australia
University of Southern Queensland

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Swimming pools — Premoulded fibre-reinforced plastics — Installation

Originated as AS 1839—1975.
Second edition 1989.
Jointly revised and designated as AS/NZS 1839:1994.
Revised and redesignated as AS 1839:2021.

Preface

This Standard was prepared by Standards Australia Committee PL-041, Glass Reinforced Swimming Pools, to supersede AS/NZS 1839:1994.

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

The objective of this document is to set out procedures for the installation of premoulded fibre-reinforced plastics (FRP) swimming pools conforming to AS 1838.

The major changes in this edition are as follows:

(a) Amendments and additions to Section 1.

(b) References to hydrodynamic pressure, see Sections 3 and 6.

(c) Provision for the installation of pools in reactive clay soils, see Section 8.

(d) Addition of new installation of pools in reactive clay soils information including tolerances, see Appendix A.

(e) Inclusion of new Figures 6.6, 8.3(A) and 8.3(B).

(f) References to installation tolerance and seasonal movement and information on how both can independently affect a pool installation.

The terms “normative” and “informative” are used in Standards 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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Section 1 Scope and general

1.1 Scope

This document sets out procedures for the installation of premoulded fibre-reinforced plastics (FRP) swimming pools conforming to the requirements of AS 1838.

NOTE For design and fabrication of fibre-reinforced plastic pools conforming to this document, refer to AS 1838.

1.2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements in this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 1838, *Swimming pools — Premoulded fibre-reinforced plastics — Design and fabrication*

AS 1926.3, *Swimming pool safety, Part 3, Water reticulation systems*

AS/NZS 1477, *PVC pipes and fittings for pressure applications*

AS/NZS 3000, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*

1.3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

1.3.1
backfill
free-draining material or nominated blends of sand and cement

1.3.2
bedding
sand or similar free draining material

1.3.3
bond beam
structural member that supports the coping

1.3.4
competent person
person who has acquired, through education, training, qualification or experience or a combination of these, the knowledge and skill enabling that person to perform the task required

Note to entry: An example would be a professional engineer who is —

(i) a corporate member of the Institution of Engineers Australia;

(ii) eligible to become a corporate member of the Institution of Engineers, Australia, and has appropriate experience and competence in the relevant field;

(iii) a Chartered Professional Engineer (CPEng) or equivalent qualifications recognized by Engineers Australia with experience in a relevant area of practice; or

(iv) a person who is eligible for the grade of Member (MIEAust) of Engineers Australia with experience in the relevant area of practice.