

Australian Standard[®]

Formwork for concrete

Part 1: Documentation and surface finish



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The following are represented on Committee BD-043:

- Association of Consulting Engineers Australia
 - Australian Aluminium Council
 - Australian Industry Group
 - Concrete Institute of Australia
 - Engineers Australia
 - Master Builders Australia
 - National Precast Concrete Association of Australia
 - Engineered Wood Products Association of Australasia
 - University of Technology, Sydney
 - University of Western Sydney
 - WorkCover New South Wales
-

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Part 1: Documentation and surface finish

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PREFACE

This Standard was prepared by the Standards Australia Committee BD-043, Formwork, to supersede, in part, AS 3610—1995, *Formwork for concrete*.

The objective of this Standard is to provide formwork architects; engineers; builders and construction contractors; and formwork designers, suppliers and contractors with requirements for the documentation, fabrication, erection and stripping of formwork, as well as for the assessment and evaluation of completed surface quality and repairs.

The full review of AS 3610 has not been completed and it was considered desirable to issue the Standard in two Parts:

- (a) AS 3610.1, *Formwork for concrete*, Part 1: *Documentation and surface finish* (this Standard), which focuses on surface finish and covers various types of documentation applicable to formwork.
- (b) Part 2, when published, will cover aspects of design and testing.

Prior to the publication of Part 2, AS 3610 and AS 3610.1 will coexist. Sections 2, 3, 4 and 5 in this Standard (Part 1) supersede Sections 2, 3 and 5, as well as Clause 4.7 of AS 3610—1995.

A Commentary has been added to Table 3.5.3 to clarify the intent of tonal ranges.

Photographic charts for the assessment of colour and surface finish are provided in the appendices. Additional copies of these charts are available as AS 3610 Supp 1, *Formwork for concrete—Blowhole and colour evaluation charts (Supplement to AS 3610—1995)*.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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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STANDARDS AUSTRALIA

Australian Standard
Formwork for concrete**Part 1: Documentation and surface finish**

SECTION 1 GENERAL

1.1 SCOPE

This Standard sets out the requirements for project, formwork and proprietary documentation, as well as the specification, evaluation of the off-form or as-repaired in situ or precast concrete surface. It also sets out the requirements for the fabrication, erection, inspection and stripping of formwork.

1.2 APPLICATION

The requirements in the project documentation, construction documentation, formwork documentation and proprietary documentation shall comply with Section 2.

The concrete surface finish shall comply with Section 3.

The fabrication, erection, inspection and stripping of formwork shall comply with the requirements and procedures set out in Section 4.

Procedures for evaluation of the off-form or repaired concrete surface shall comply with Section 5.

This Standard has limited applications for unformed concrete surfaces (e.g., tops of slabs).

1.3 NORMATIVE REFERENCES

The following are normative documents referenced in this Standard.

AS

1657 Fixed platforms, walkways, stairways and ladders—Design, construction and installation

3600 Concrete structures

3610 Formwork for concrete

AS/NZS

1576 Scaffolding

1576.1 Part 1: General requirements

1576.3 Part 3: Prefabricated and tube-and-coupler scaffolding

1576.6 Part 6: Metal tube-and-coupler scaffolding—Deemed to comply with AS/NZS 1576.3

1892 Portable ladders

1892.1 Part 1: Metal

1892.2 Part 2: Timber

1.4 ALTERNATIVE CONCEPTS AND MATERIALS

Alternative concepts, materials, designs, methods of assembly and procedures, which are not mentioned in this Standard, may be used provided it can be demonstrated that the resulting formwork satisfies the requirements specified in this Standard.

1.5 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

1.5.1 Administrative definitions

1.5.1.1 *Acceptable*

Complies with the criteria set out in this Standard.

1.5.1.2 *Authorities*

Bodies having statutory powers to regulate the design and erection of formwork.

1.5.1.3 *May*

Indicates the existence of an option.

1.5.1.4 *Construction documentation*

Documents that set out information on the planned construction method for the permanent structure, which are required for the formwork design and construction.

1.5.1.5 *Project documentation*

Drawings, specifications and associated documents that set out the information required for the construction of the permanent structure.

1.5.1.6 *Proprietary documentation*

Brochures, catalogues, drawings, specifications and associated documents that detail proprietary formwork.

1.5.1.7 *Shall*

Indicates a mandatory statement, which has to be strictly followed for compliance with this Standard.

1.5.1.8 *Should*

Indicates a recommendation.

1.5.2 Technical definitions

1.5.2.1 *Access platform*

A platform that is only used or intended to be used to provide access for persons, or for persons carrying material moving to and from places of work.

1.5.2.2 *Action*

Set of concentrated or distributed forces acting on a structure (direct action), or deformation imposed on a structure or constrained within it (indirect action).

NOTE: The term load is also often used to describe direct actions.

1.5.2.3 *Backpropping*

A process by which adjustable supports are placed to give support to the cast in situ concrete during the removal of the soffit formwork, which may also remain in position to act as multistorey shoring (see Figure 1.5.1).