



STANDARDISATION GUIDE 006:

RULES FOR THE STRUCTURE AND DRAFTING OF AUSTRALIAN STANDARDS

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Introduction

1 Purpose and introduction

1.1 Purpose

This Guide specifies rules for the structure and drafting of Australian Standards and joint Australian/New Zealand Standards, Interim Standards and Technical Specifications where the secretariat is held by Standards Australia (SA). These rules may be applied to Miscellaneous Publications, Technical Reports and Handbooks. All these are referred to collectively as documents unless otherwise necessary (see Clause 3.1.1).

These rules have been updated and aligned with the ISO / IEC Directives, Part 2, *Principles and rules for the structure and drafting of ISO and IEC documents - 2018* (8th edition) (ISO/IEC Directives Part 2).

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It is not the intention that this Guide follows the same structure and drafting rules as Australian Standards and associated publications.

This Guide is not intended to provide guidance with regard to presentation or typography. Standards Australia's templates and House Style guide provide additional guidance as to presentation of documents.

This Guide refers to and should be used in conjunction with the other [Standardisation Guides](#). Of particular note are:

- (a) [Preparing Standards \(SG-001\)](#), describes the general policies and processes for developing Australian and joint Australian/New Zealand Standards.
- (b) [Standards and Other Publications \(SG-003\)](#), which defines the range of publications and their purpose.
- (c) [Adoption of International Standards \(SG-007\)](#) for the Adoption of international standards. Appendix F and Appendix G of this Guide provide further rules for the publication of adoptions of international documents.
- (d) [Preparation of Standards for Legislative Adoption \(SG-009\)](#) which contains additional rules for developing Australian Standards® which are specifically intended for reference in legislation, or those Standards that may be considered for legislative reference in the future.

1.2 Introduction

This Guide states the general principles by which Standards Australia's documents are drafted and stipulates the rules for drafting documents to ensure that they are clear, precise and unambiguous. These rules are also important for ensuring that each document contributes effectively to the consistent and interdependent body of knowledge that Standards Australia produces.

It is recognised that the ever-increasing range of subject matter covered by Standards Australia's documents reflects an increasingly diverse range of users of their documents, both geographical and in



terms of the level and type of technical expertise that it can be expected to have. Those drafting Standards Australia's documents should try to be aware of the particular needs of their intended users and to write in a style that is likely to be readily understood.

Advice on applying the [Standardisation Guides](#) is readily available from Standards Australia's Standards Development staff, and it should be sought whenever any difficulties are encountered.

To implement a more flexible approach in the application of drafting rules, flags have been added to indicate which clauses are considered mandatory either on the bases of policy or drafting rules relating to document structure, elements or clarity of expression. Non-flagged clauses are considered voluntary.

The flags are:

SG-006 MANDATORY SG 006 MANDATORY – drafting rules concerning document and clause structure, minimum required content, and use of approved verb forms.

POLICY MANDATORY POLICY MANDATORY flags – rules relating to conformity assessment, roles and responsibility, intellectual property, references to legislation.

RED FLAG WORDS RED FLAG WORDS – words which indicate policy breaches or vague and unenforceable terms.

2 Referenced documents

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this Standardisation Guide. Copies of these documents are available in Standards Australia's online catalogue.

AS 1100.101, *Technical drawing, Part 101: General principles*

AS 1100.201, *Technical drawing, Part 201: Mechanical engineering drawing*

AS 1100.301, *Technical drawing, Part 301: Architectural drawing*

AS 1100.401, *Technical drawing, Part 401: Engineering survey and engineering survey design drawing*

AS/NZS 1100.501, *Technical drawing, Part 501: Structural engineering drawing*

AS ISO 128.1, *Technical drawings — General principles of presentation, Part 1: Introduction and index*

AS ISO 128.20, *Technical drawings — General principles of presentation, Part 20: Basic conventions for lines*

AS ISO 128.21, *Technical drawings — General principles of presentation, Part 21: Preparation of lines by CAD systems*

AS ISO 128.22, *Technical drawings — General principles of presentation, Part 22: Basic conventions and applications for leader lines and reference lines*

AS ISO 128.23, *Technical drawings — General principles of presentation, Part 23: Lines on construction drawings*

AS ISO 128.24, *Technical drawings — General principles of presentation, Part 24: Lines on mechanical engineering drawings*

AS ISO 128.25, *Technical drawings — General principles of presentation, Part 25: Lines on shipbuilding drawings*

AS ISO 1000, *The international system of units (SI) and its application*

ISO 128-30, *Technical drawings — General principles of presentation — Part 30: Basic conventions for views*

ISO 128-34, *Technical drawings — General principles of presentation — Part 34: Views on mechanical engineering drawings*

ISO 128-40, *Technical drawings — General principles of presentation — Part 40: Basic conventions for cuts and sections*

ISO 128-44, *Technical drawings — General principles of presentation — Part 44: Sections on mechanical engineering drawings*

ISO 690, *Information and documentation — Guidelines for bibliographic references and citations to information resources*

ISO 5807, *Information processing — Documentation symbols and conventions for data, program and system flowcharts, program network charts and system resources charts*

ISO 7000, *Graphical symbols for use on equipment — Index and synopsis*

ISO 7001, *Graphical symbols — Public information symbols*

ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

ISO 10241-1, *Terminological entries in standards — Part 1: General requirements and examples of presentation*

ISO 14617 (all parts), *Graphical symbols for diagrams*

ISO 80000 (all parts), *Quantities and units*

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60417, *Graphical symbols for use on equipment*

IEC 60617, *Graphical symbols for diagrams*

IEC 61082-1, *Preparation of documents used in electrotechnology — Part 1: Rules*

IEC 61175, *Industrial systems, installations and equipment and industrial products — Designation of signals*

IEC 80000 (all parts), *Quantities and units*

IEC 81346 (all parts), *Industrial systems, installations and equipment and industrial products — Structuring principles and reference designations*

ISO/IEC Directives, Part 1, *Procedures for the technical work*

ISO/IEC Directives, Part 1, *Consolidated ISO Supplement*

ISO/IEC Directives, Part 2, *Principles and rules for the structure and drafting of ISO and IEC documents*

ISO/IEC Directives, Supplement — *Procedures specific to IEC*

ISO/IEC Guide 21 (all parts), *Regional or national adoption of International Standards and other International Deliverables*

Quality management systems — *Guidance and criteria for the development of documents to meet needs of specific product and industry/economic sectors, ISO/TC 176*

Standards Australia, Standardisation Guide No. 1, [Preparing Standards \(SG-001\)](#)

Standards Australia, Standardisation Guide No. 3, [Standards and Other Publications \(SG-003\)](#)

Standards Australia, Standardisation Guide No.7, [Adoption of International Standards \(SG-007\)](#)

Standards Australia, Standardisation Guide No. 9, [Preparation of Standards for Legislative Adoption \(SG-009\)](#)

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

(a) IEC Electropedia: available at <http://www.electropedia.org/>

(b) ISO Online browsing platform: available at <http://www.iso.org/obp>



For more detailed definitions and guidance on terms and definitions and the range of Standards Australia publications, refer to Standardisation Guide No. 3, [Standards and Other Publications \(SG-003\)](#).

3.1 Document type

3.1.1

Australian Standard

standard issued by Standards Australia and developed in accordance with the processes described in the series of [Standardisation Guides](#)

Note 1 to entry: The name “Australian Standard” is a registered trademark.

Note 2 to entry: The Standards Development and Accreditation Committee (SDAC) may also accredit other bodies to develop Australian Standards.

3.1.2

Australian/New Zealand Standard

standard jointly developed by Standards Australia and Standards New Zealand which applies in both Australia and New Zealand

3.1.3

document

Standards Australia or Joint Standards Australia / Standards New Zealand standardization draft or publication, where the secretariat is held by Standards Australia

EXAMPLE

Australian Standards, Australian/New Zealand Standards, Handbooks, Miscellaneous Publications, Technical Specifications and Technical Reports.

3.1.4

interim standard

lower consensus document which can be either an Interim Australian Standard or an Interim Australian/New Zealand Standard with a provisional two-year life

Note 1 to entry: For further details refer to Standardisation Guide No. 3, Standards and Other Publications (SG-003)

3.1.5

international standard

standard that is adopted by an international standardizing/standards organization and made available to the public

[SOURCE: ISO/IEC Guide 2:2004, 3.2.1.1]

3.1.6

International Standard

international standard (see Clause 3.1.5) where the international standards organization is ISO or IEC



3.1.7

standard

document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context

Note 1 to entry: Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits.

[SOURCE: ISO/IEC Guide 2:2004, 3.2]

3.1.8

technical specification

lower consensus document that is a normative document that has been subject to a limited form of transparency and does not have the support of the full consensus process normally associated with an Australian Standard

Note 1 to entry: For further details refer to Standardisation Guide No. 3, [Standards and Other Publications \(SG-003\)](#)

3.2 Elements of a document

3.2.1

conditional element

element that is present depending on the provisions of the particular document

EXAMPLE

The symbols and abbreviated terms clause is an example of a conditional element.

3.2.2

informative element

element intended to assist the understanding or use of the document or provides contextual information about its content, background or relationship with other documents

3.2.3

mandatory element

element that has to be present in a document

EXAMPLE

The scope clause is an example of a mandatory element.

3.2.4

normative element

element that describes the scope of the document or sets out provisions



3.2.5

optional element

element which the writer of a document may choose to include or not

EXAMPLE

The introduction is an example of an optional element

3.3 Provisions

3.3.1

capability

expression in the content of a document conveying the ability, fitness, or quality necessary to do or achieve a specified thing

Note 1 to entry: Capability is expressed using the verbal forms specified in Table 7.3.3.2

external constraint

constraint or obligation on the user of the document, typically due to one or more legal requirements or laws of nature, that is not stated as a provision of the standard

Note 1 to entry: External constraints are referred to using the verbal form specified in Table 8.

Note 2 to entry: Use of the word "must" does not imply that the external constraint referred to is a requirement of the document.

3.3.3

permission

expression in the content of a document conveying consent or liberty (or opportunity) to do something

Note 1 to entry: Permissions are expressed using the verbal forms specified in Table 6.

Note 2 to entry: The verb "may" is also used to express an option.

3.3.4

possibility

expression in the content of a document conveying expected or conceivable material, physical or causal outcome

Note 1 to entry: Possibility is expressed using the verbal forms specified in Table 7.

3.3.5

provision

expression in the content of a normative document that takes the form of a statement, an instruction, a recommendation or a requirement

Note 1 to entry: These forms of provision are distinguished by the type of wording they use; for example instructions are expressed in the imperative mood, recommendations by the use of the auxiliary "should" and requirements by the use of the auxiliary "shall".

[SOURCE: ISO/IEC Guide 2:2004, 7.1]



3.3.6

recommendation

expression in the content of a document conveying a suggested possible choice or course of action deemed to be particularly suitable without necessarily mentioning or excluding others

Note 1 to entry: Recommendations are expressed using the verbal forms specified in Table 5.

Note 2 to entry: In the negative form, a recommendation is the expression that a suggested possible choice or course of action is not preferred but it is not prohibited.

3.3.7

requirement

expression in the content of a document conveying objectively verifiable criteria to be fulfilled and from which no deviation is permitted if conformance with the document is to be claimed

Note 1 to entry: Requirements are expressed using the verbal forms specified in Table 4.

3.3.8

statement

expression in the content of a document conveying information

Note 1 to entry: Table 6 specifies the verbal forms for indicating a course of action permissible within the limits of the document. Table 7 specifies the verbal forms to be used for statements of possibility and capability.

3.4 Verbal forms

3.4.1

may

indicates the existence of an option

3.4.2

shall

indicates that a statement is mandatory

3.4.3

should

indicates a recommendation

3.5 Other

3.5.1

comply

to fulfil a legal obligation

3.5.2

conform

to fulfil the requirements of a normative document



3.5.3

state-of-the-art

developed stage of technical capability at a given time as regards products, processes and services, based on the relevant consolidated findings of science, technology and experience

[SOURCE: ISO/IEC Guide 2:2004, 1.4]



General Principles

4 Objective of standardization

The objective of documents is to specify clear and unambiguous provisions in order to help trade and communication. To achieve this objective, documents shall:

- (a) be complete within the limits specified by their scope;

NOTE 1 When a document provides requirements or recommendations, these are either written explicitly, or made by reference to other documents (see Clause 10).

- (b) be consistent, clear and accurate;
- (c) be accessible for visually impaired users (see Clause 5.10);
- (d) be written using all available knowledge about the state of the art;
- (e) take into account the current market conditions;

NOTE 2 There is sometimes a tension between what is technically feasible and what the market actually requires and is prepared to pay for.

- (f) provide a framework for future technological development;
- (g) ensure the sustainability of any state of the global system; present and future (see Clause 5.12);
- (h) be comprehensible to qualified people who have not participated in their preparation;
- (i) reflect physical differences and gender roles (see Clause 5.11);
- (j) include acknowledgement of the First Nations People (see Clause 5.11);
- (k) be flexible to incorporate experiences from different ages, races, cultures and education levels (see Clause 5.11); and
- (l) conform to the Standards Australia [Standardisation Guides](#).

A document does not in itself impose any obligation upon anyone to follow it. However, an obligation can be imposed, for example, by legislation or by a contract which makes reference to the document.

A document shall not include contractual requirements (e.g. concerning claims, guarantees, covering of expenses) and legal or statutory requirements.

NOTE 3 Any new principles that are added to this Guide are **not** to be applied retrospectively into standards.

5 Principles

5.1 Planning and preparation

The rules given in the [Standardisation Guides](#) shall be applied throughout all stages of the development of documents.

In order to ensure the timely publication of a document or of a series of associated documents, the following shall be determined before drafting begins:

- (a) the intended structure;

- (b) any interrelationships; and
- (c) the organization and subdivision of the subject matter (see [Section 6](#)).

In the case of a multipart document, a list of the intended parts should be drawn up (preferably including their titles and scopes).

5.2 Performance principle

Whenever possible, requirements shall be expressed in terms of performance rather than design or descriptive characteristics. This principle allows maximum freedom for technical development and reduces the risk of undesirable market impacts (e.g. restriction of innovative solutions).

EXAMPLE

Different approaches are possible in the specification of requirements concerning a table:

Design requirements: The table shall have four wooden legs.

Performance requirements: The table shall be constructed such that when subjected to ... [stability and strength criteria].

When the performance principle is adopted, care shall be taken to ensure that important features are not inadvertently omitted from the performance requirements.

If it is impossible to determine the necessary performance characteristics, the material or product may be specified. However, in such a case the following phrase should be included "... or any other material or product proved to be equally suitable."

Requirements concerning the manufacturing process shall usually be omitted in favour of tests to be made on the final product. There are, nevertheless, some fields in which reference to the manufacturing process is needed (e.g. hot rolling, extrusion) or even in which an inspection of the manufacturing process is necessary (e.g. pressure vessels).

However, the choice between specifying by description or by performance needs consideration because specification by performance can lead to complicated, costly and lengthy testing procedures.

RED FLAG
WORDS

5.3 Verifiability

Requirements shall be objectively verifiable. Only those requirements which can be verified shall be included.

Phrases such as "sufficiently strong" or "of adequate strength" shall not be used because they are subjective statements.

The stability, reliability or lifetime of a product shall not be specified if no test method is known which can verify the claim in a reasonably short time. A guarantee by the manufacturer is not a substitute for such requirements. Guarantee conditions shall not be included, because they are a commercial or contractual concept, not technical.

5.4 Consistency

Consistency should be maintained within each document, and within a series of associated documents:

- (a) The structure of associated documents and the numbering of their clauses should, as far as possible, be identical.



(b) Identical wording should be used to express identical provisions.

(c) The same terminology should be used throughout. The use of synonyms should be avoided.

Consistency is particularly important to help the user understand documents or series of associated documents. It is also important when using automated text processing techniques and computer-aided translation.

5.5 Avoidance of duplication and unnecessary deviations

Documents should avoid duplication. This is particularly important in test methods which are often applicable to more than one product, or type of product.

Before standardizing any item or subject, the writer shall determine whether an applicable standard already exists. If it is necessary to invoke a requirement that appears elsewhere, this should be done by reference, not by repetition, see Clause 10.

If a test method is, or is likely to be, applicable to two or more types of products, a document shall be prepared on the method itself, and each document dealing with a given product shall refer to it (indicating any modifications that could be necessary). This will help to prevent unnecessary deviations.

As far as possible, the requirements for one item or subject should be confined to one document.

In some fields it can be desirable to write a document specifying generic requirements applicable to a group of items or subjects.

If it is considered necessary to repeat a requirement from an exterior source, its source shall be referenced precisely (see Clause 10.1).

5.6 Accommodation of more than one product size

If the aim of a document is standardization of a single size for a product, but there is more than one widely accepted size in international use, a committee may decide to include alternative product sizes in the document. However, in such cases, every effort shall be made to reduce the number of alternatives to a minimum, taking the following points into account:

- (a) the volume of international trade in the sort of product involved shall serve as a criterion for "international use", not the number of countries or the volume of production in those countries;
- (b) only sizes that are likely to be in international use in the reasonably foreseeable future (e.g., five years or more) shall be included in the document.

Whenever alternative solutions are to be adopted internationally, they shall all be included in the same document and preferences for the different alternatives shall be provided. The reasons for the preferences shall be explained in the introduction to the document.

When agreed by the committee and approved by SDAC, a transitional period may be indicated during which the use of non-preferred values is permitted.

5.7 Aim-oriented approach

Not all characteristics of an item or a subject can be or need to be standardized. The choice of characteristics to be standardized depends on the aims of the document (e.g. health, safety, protection of the environment, interface, interchangeability, compatibility or interworking, and variety control). A functional analysis of the product can help to identify the characteristics to be included in the document.

It is permitted but not necessary to give an explanation for the inclusion of individual characteristics. More general background information can be given in the introduction (see Clause 13).

5.8 Characteristics not specified in a document

In some cases, a document may list characteristics which can be chosen freely by the supplier. The characteristics chosen shall be stated, for example on a name-plate, label or accompanying document.

For most kinds of complex item, it is impractical to specify exhaustive performance requirements. Instead, it is preferable to require that the item be supplied with a list of performance data.

This approach is not acceptable in the case of health and safety requirements.

Documents listing characteristics for which suppliers or purchasers are required to state values or other data not specified by the document shall specify how such values are to be measured and stated.

5.9 Adopted text documents

Style requirements for adopted text documents are given in Appendix E, which deals with the content and structure of adopted text documents, and the inclusion of a national Preface.

5.10 Accessibility

In accordance with the provisions of the Disability Discrimination Act 1992 (refer to the [Federal Register of Legislation](#)) and to meet the requirements of the [Web Content Accessibility Guidelines \(WCAG\) 2.0 Level AA](#), all normative information within a document shall be described in words, even where tables, formulas, and figures are also included. This will allow for any screen readers to be utilised to transmit text displayed on the computer screen into a form that a visually impaired user can process.

5.11 Gender responsiveness and diversity

All documents shall reflect the understanding of physical differences and gender roles, and equally address the needs of women and men.

NOTE Refer to the UNECE's [Guidelines on Developing Gender-Responsive Standards](#).

All documents shall recognise and address First Nations People including the different experiences of age, race, culture and level of education.

NOTE For general guidance, refer to AS ISO 30415: Human resource management - Diversity and inclusion.

5.12 Sustainability

In the development of a document, all experts shall include consideration of sustainability in their technical work, either directly (where they specifically address sustainability issues) or indirectly (e.g., where they relate to testing, products, procedures, services, terminology, management systems or auditing). This shall ensure the sustainability of any state of the global system in which the needs of the present are met without compromising the ability of future generations to meet their own needs.

NOTE Refer to ISO Guide 82: Guidelines for addressing sustainability in standards.

6 Organization and subdivision of the subject matter

6.1 Names of the main subdivisions

The terms which shall be used to designate the divisions and subdivisions of subject matter are given in Table 1.

Table 1 — Names of divisions and subdivisions

Term	Example of numbering Multi-section document	Example of numbering Single section document
Part	12345.1	12345.1
Section	Section 1	not used
Clause	1.1	1
Subclause	1.1.1	1.1
Subclause	1.1.1.1	1.1.1
Paragraph	not numbered	not numbered
Appendix	A	A
Clause (in Appendix)	A.1	A.1

6.2 Subdivision into documents

Documents are so diverse that no universally acceptable rules can be established for the subdivision of the subject matter.

However, as a general principle, an individual document shall be prepared for each subject to be standardized, and published either as a single standard or a single part of a series.

EXAMPLE 1

Examples of reasons for the subdivision into parts under the same number are:

(a) the document is likely to become too long;

subsequent parts of the content are interlinked;

portions of the document could be referred to in regulations; and

portions of the document are intended to serve for certification purposes.

Such subdivision has the advantage that each part can be revised separately as necessary.

In particular, the aspects of a product which will be of separate interest to different parties (e.g. manufacturers, certification bodies, legislative bodies or other users) shall be clearly distinguished, preferably as parts of a document or as individual documents.

EXAMPLE 2

Examples of such individual aspects are:

- (a) health and safety requirements,
- (b) performance requirements,
- (c) maintenance and service requirements,
- (d) installation rules, and
- (e) quality assessment.

6.3 Subdivision of the subject matter within a series of parts

There are two main ways of subdividing subject matter within a series of parts.

- (a) Each part deals with a specific aspect of the subject and can stand alone.

EXAMPLE 1

Part 1: Vocabulary

Part 2: Requirements

Part 3: Test methods

Part 4: ...

EXAMPLE 2

Part 1: Vocabulary

Part 2: Harmonics

Part 3: Electrostatic discharge

Part 4: ...

- (b) There are both common and specific aspects to the subject. The common aspects shall be given in Part 1. Specific aspects (which can modify or supplement the common aspects and therefore cannot stand alone) shall be given in separate individual parts.

EXAMPLE 3

Part 1: General requirements

Part 2: Thermal requirements

Part 3: Air purity requirements

Part 4: Acoustical requirements

EXAMPLE 4

Part 1: General requirements

Part 2.30: Particular requirements for deep fat fryers, frying pans and similar appliances

Part 2.105: Particular requirements for multifunctional shower cabinets

Part 2.109: Particular requirements for UV radiation water treatment appliances

Where the system described in (b) is used, care shall be taken that the references from one part to another are valid. There are two ways of achieving this.

If reference is made to a particular element, the reference shall be dated (see Clause 10.5).

When undated references (see Clause 10.4) are used, the committee responsible shall validate the references at the time of review of the document.

Each part of a multipart document shall be drafted in accordance with the same rules as those used for an individual document.

The number of a part shall be in Arabic numerals, starting with 1, following the document number and preceded by a full stop.

EXAMPLE 5

AS 1234.1

AS 1234.2

Parts can be subdivided down to two levels. See the examples in Clause 11.4.

EXAMPLE 6

AS 1428.4.2

If a document is subdivided in a number of separate parts, the first part should include an explanation of the intended structure in its introduction. When developing a series, consider reserving Part 1 for general aspects such as a vocabulary.

In the Preface of each part in the series, a reference may be made to the titles of all other parts that have been or are planned to be published. This should be in the format of Example 7.

EXAMPLE 7

A list of all the parts in the AS 1234 series, can be found in the Standards Australia Online Catalogue.

6.4.1 Sections

A section is a clause or group of clauses with a common purpose. Multi-section documents shall comprise two or more sections. Section one shall comprise the normative general clauses, i.e. Scope

and Normative references, and normative technical clauses, such as Terms and Definitions, which apply to the whole document.

The sections in each document shall be numbered with Arabic numerals beginning with 1. The numbering shall be continuous up to but excluding any appendix (see Clause 4.2.6).

Each section shall have a title.

6.4.2 Arrangement of a single section documents

An example of a typical arrangement in a single section document is given in Table 2.

Table 2 — Overview of the major subdivisions of a single section document (including Adoptions) and their arrangement in the text

Major subdivision	Mandatory/Optional/ Conditional
Title	Mandatory
Preface	Mandatory
Foreword	Optional/ Conditional ^a
Introduction	Optional/ Conditional
Scope	Mandatory
Normative references	Mandatory ^b
Terms and definitions	Mandatory
Symbols and abbreviated terms	Conditional
Technical content	Mandatory/Optional/Conditional
Annexes	Conditional/Optional ^c
Appendices	Optional
Bibliography	Conditional
Index	Optional

^a Adoptions may contain both a national Preface and the Foreword of the adopted text.

^b When no normative references or terms are listed, use the introductory texts provided in Clause 15.5.1.

^c Annexes are used in ISO and IEC documents and are included in adopted texts only.

6.4.3 Multi-section documents

Documents may be subdivided into Sections. An example of a typical arrangement in a multi-section document is given in Table 3.

Table 3 — Overview of the major subdivisions of a multi-section document and their arrangement in the text

Major subdivision	Mandatory/Optional/ Conditional
-------------------	---------------------------------

Title	Mandatory
Preface	Mandatory
Introduction	Optional/ Conditional
Section 1 Scope and General	Mandatory
Scope	Mandatory
Normative references	Mandatory ^a
Terms and definitions	Mandatory
Symbols and abbreviated terms	Conditional
Section 2 and following	Mandatory
Technical content divided into Sections	Mandatory/Optional/Conditional
Appendices	Optional
Bibliography	Conditional
Index	Optional
^a When no normative references or terms are listed, use the introductory texts provided in Clause 15.5.1.	

7 Verbal forms for expressions of provisions

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7.1 General

Users of the document need to be able to identify the requirements they are obliged to satisfy in order to claim compliance with a document. The user also needs to be able to distinguish these requirements from other types of provision where there is a choice (i.e., recommendations, permissions, possibilities and capabilities).

It is essential to follow rules for the use of verbal forms so that a clear distinction can be made between requirements, recommendations, permissions, possibilities and capabilities.

The first column of Tables 4 to 8 shows the preferred verbal form to be used to express each type of provision.

Only singular forms are shown in Tables 4 to 8.

7.2 Requirement

See the definition given in Clause 3.3.3.

The verbal forms shown in Table 4 shall be used to express requirements. They shall not be used in the same sentence as the word “should”. They shall not appear in an informative element of the document; this includes footnotes and notes to text and informative tables, figures and appendices.

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MANDATORY
Table 4 — Requirement

Verbal form	Meaning
-------------	---------

shall	is to is required to is required that has to only ... is permitted it is necessary
shall not	is not allowed (permitted) (acceptable) (permissible) is required to be not is required that ... be not is not to be do not
EXAMPLE 1 Connectors shall conform to the electrical characteristics specified by IEC 60603-7-1.	
Imperative mood: The imperative mood is frequently used in English to express requirements in procedures or test methods. Where there is a list of procedures, the list is preceded by an introductory sentence such as the following example.	
EXAMPLE 2 The procedure shall be as follows: Switch on the recorder. Open ...	
EXAMPLE 3 Do not activate the mechanism before...	
Do not use “must” as an alternative for “shall”. (This will avoid any confusion between the requirements of a document and external constraints – see Clause 7.6). Do not use “may not” instead of “shall not” to express a prohibition.	

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7.3 Recommendation

See the definition given in Clause 3.3.4.

The verbal forms shown in Table 5 shall be used to express recommendations.

Table 5 — Recommendation

Verbal form	Meaning
should	it is recommended that ought to
should not	it is not recommended that ought not to
<p>EXAMPLE</p> <p>Wiring of these connectors should take into account the wire and cable diameter of the cables defined in IEC 61156.</p>	

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7.4 Permission

See the definition given in Clause 3.3.5.

The verbal forms shown in Table 6 shall be used to express permission.

Table 6 — Permission

Verbal form	Meaning
may	is permitted is allowed is permissible is optional
may not	it is not required that no ... is required
<p>EXAMPLE 1</p> <p>IEC 60512-26-100 may be used as an alternative to IEC 60512-27-100 for connecting hardware that has been previously qualified to IEC 60603-7-3:2008.</p> <p>EXAMPLE 2</p> <p>Within an EPB document, if the quantity is not passed to other EPB documents, one or more of the subscripts may be omitted provided that the meaning is clear from the context.</p>	

Do not use “possible” or “impossible” in this context.

Do not use “can” instead of “may” in this context.

Do not use “might” instead of “may” in this context.

“May” signifies permission expressed by the document, whereas “can” refers to the ability of a user of the document or to a possibility open to him/her.

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7.5 Possibility and capability

See the definitions given in Clauses 3.3.6 and 3.3.7.

The verbal forms shown in Table 7 shall be used to express possibility and capability.

Table 7 — Possibility and capability

Verbal form	Meaning
can	be able to
	there is a possibility of
	it is possible to
cannot	be unable to
	there is no possibility of
	it is not possible to

EXAMPLE 1

Use of this connector in corrosive atmospheric conditions can lead to failure of the locking mechanism.

EXAMPLE 2

These measurements can be used to compare different sprayer setups on the same sprayer.

EXAMPLE 3

Only the reverse calculation approach given in Clause E.3 can be used for calculated energy performance.

EXAMPLE 4

The sum over time can be related either to consecutive readings or to readings on different time slots (e.g. peak versus off-peak).

Do not use “may” instead of “can” in this context.

“May” signifies permission expressed by the document, whereas “can” refers to the ability of a user of the document or to a possibility open to him/her.

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7.6 External constraint

See the definition given in Clause 3.3.8.

External constraints are not requirements of the document. They are given for the information of the user.

The verbal form shown in Table 8 shall be used to indicate constraints or obligations defined outside of the document.

NOTE Typically documents do not reproduce external constraints such as those stipulated in legislation or other legal documents. If they are included, do so in a note.

Table 8 — External constraint

Verbal form
Must
<p>EXAMPLE 1 A legal requirement</p> <p>Australian legislation states that opaque eye protection must be worn in these environments</p> <p>EXAMPLE 2 A law of nature</p> <p>diadromous</p> <p>All fish must maintain a balance of salt and water in their bodies to stay healthy.</p>
Do not use “must” as an alternative for “shall”. (This will avoid any confusion between the requirements of a document and external constraints – see Clause 7.2).

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7.7 Defining verb forms

Where definitions of the verb forms are used in a Terms and definitions clause the definitions of “shall”, “should” and “may” shall be in the form used in Clause 3.4 Verbal forms.

NOTE It is recommended that the definitions of “shall”, “should” and “may” should be added to all documents.

8 Language, spelling, abbreviated terms, style and basic reference works

8.1 Spelling and reference works

The reference work for spelling is The Macquarie Dictionary: <https://www.macquariedictionary.com.au/>.

NOTE Where spelling variants are made in the dictionary, *choose* the first listed in the entry.

For words for which there is an alternative “s” or “z” spelling (e.g. organize, standardization), the “z” spelling shall be used if that spelling is offered as an alternative in the *Macquarie Dictionary*.

8.2 Spelling and abbreviation of names of organizations

The names of organizations, and their abbreviations, shall be written as used by those organizations, in English.

8.3 Abbreviated terms

The use of abbreviated terms shall be consistent throughout the document.

If a list of abbreviated terms is not given in the document (see Clause 17), then the first time that an abbreviated term is used, the full term shall be given with the abbreviated term following in brackets.

EXAMPLE 1

...the weighted root mean square (RMS) width of the active output interface optical spectrum ...

Any abbreviated term should be in upper case letters, without a full-stop after each letter.

EXAMPLE 2

“RH” for “relative humidity”.

Occasionally, abbreviated terms in common use are written differently, either for historical or for technical reasons.

EXAMPLE 3

"a.c." for alternating current.

Technical specifications regarding marking may impose other requirements.

8.4 Linguistic style

To help users understand and use the document correctly, the linguistic style shall be as simple and concise as possible. This is particularly important for those users whose first language is not English.

9 Numbers, quantities, units and values

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9.1 Representation of numbers and numerical values

To express values of physical quantities, Arabic numerals followed by the international symbol for the unit shall be used (refer to ISO 80000, IEC 80000 and IEC 60027).

If the magnitude (absolute value) of a number less than 1 is written in decimal form, the decimal sign shall be preceded by a zero. The decimal point shall be indicated with a full point.

NOTE ISO and IEC documents follow the European tradition of using a comma for the decimal. In adopted texts text is added to the Preface to advise users about this. See Appendix E.

EXAMPLE 1

0.001

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Each group of three digits shall be separated by a space from the preceding digits. This also applies to digits following the decimal sign. This does not apply to binary and hexadecimal numbers, numbers designating years or the numbering of standards.

EXAMPLE 2

23 456 2 345 2.345 2.345 6 2.345 67 but the year 2011

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The multiplication symbol (×) shall be used to indicate the multiplication of numbers and numerical values written in decimal form, in vector products and in cartesian products.

EXAMPLE 3

$$A = 80 \text{ mm} \times 25 \text{ mm}$$

EXAMPLE 4

$$l = 2.5 \times 10^3 \text{ m}$$

EXAMPLE 5

$$\vec{l}_G = \vec{l}_1 \times \vec{l}_2$$

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The half-high dot (·) shall be used to indicate a scalar product of vectors and comparable cases, and may also be used to indicate a product of scalars and in compound units.

EXAMPLE 6

$$U = R \cdot I$$

EXAMPLE 7

$$\text{rad} \cdot \text{m}^2/\text{kg}$$

In some cases, the multiplication sign may be omitted.

EXAMPLE 8

$$4c - 5d \quad 6ab \quad 7(a + b) \quad 3 \ln 2$$

ISO 80000-2 gives an overview of multiplication symbols for numbers.

9.2 Values, dimensions and tolerances

9.2.1 General

Values and dimensions shall be indicated as being minimum or maximum. Their tolerances (if applicable) shall be specified in an unambiguous manner.

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EXAMPLE 1

80 mm × 25 mm × 50 mm (not 80 × 25 × 50 mm)

EXAMPLE 2

80 μF ± 2 μF or (80 ± 2) μF

EXAMPLE 3

$\lambda = 220 \times (1 \pm 0.02) \text{ W/(m} \cdot \text{K)}$

EXAMPLE 4

80^{+2}_0 (not 80^{+2}_{-0})

EXAMPLE 5

$80 \text{ mm}^{+50}_{-25} \mu\text{m}$

EXAMPLE 6

10 kPa to 12 kPa (not 10 to 12 kPa or 10 – 12 kPa)

EXAMPLE 7

0 °C to 10 °C (not 0 to 10 °C or 0 – 10 °C)

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In order to avoid misunderstanding, tolerances on values expressed in percent shall be expressed in a mathematically correct form.

EXAMPLE 8

Write “from 63 % to 67 %” to express a range.

EXAMPLE 9

Write “(65 ± 2) %” to express a centre value with tolerance.

The form “65 ± 2 %” shall not be used.

The degree should be divided decimally.

EXAMPLE 10

Write 17.25° rather than 17°15′.



Any value or dimension that is mentioned for information only shall be clearly distinguishable from requirements.

9.2.2 Limiting values

For some purposes, it is necessary to specify limiting values (maximum and/or minimum). Usually one limiting value is specified for each characteristic. In the case of several widely used categories or levels, several limiting values are required.

9.2.3 Selected values

For some purposes, values or series of values may be selected, particularly for variety control and interface purposes. They may be selected according to the series of preferred numbers given in ISO 3 (see also ISO 17 and ISO 497), or according to some modular system or other determining factors. For the electrotechnical field, recommended systems of dimensional sizes are given in IEC Guide 103.

Documents that have been established to specify selected values for equipment or components that may be referred to in the provisions of other documents, shall be regarded, in this respect, as basic standards.

EXAMPLE 1

For electrotechnical work, IEC 60063 specifies series of preferred values for resistors and capacitors.

EXAMPLE 2

For chemical testing, ISO/TC 48 has developed standards for laboratory equipment.

If a series of preferred numbers is used, difficulties can arise if fractions (such as 3.15) are introduced: these can sometimes be inconvenient or require unnecessarily high accuracy. In such cases, they should be rounded in accordance with ISO 497. The specification of different values for use in different countries (whereby both the precise value and the rounded value are contained in the document) shall be avoided.

9.3 Quantities, units, symbols and signs

The International System of units (SI) as set out in ISO 80000 and IEC 80000 shall be used.

The units in which any values are expressed shall be indicated.

The unit symbols for degree, minute and second for plane angle shall immediately follow the numerical value; all other unit symbols shall be preceded by a space.

Symbols for quantities shall be chosen, wherever possible, from the various parts of IEC 60027, ISO 80000 and IEC 80000.

Language-specific abbreviated terms such as ppm should not be used if possible. If it is necessary to use language-specific abbreviated terms such as ppm, their meaning shall be explained.

Mathematical signs and symbols shall be in accordance with ISO 80000-2.

Use Appendix B as a checklist of the quantities and units which shall be used.

Where a document makes extensive use of quantity symbols, a notation clause may be used in the format of either of the following examples.

EXAMPLE 1

1.5 Notation

The following quantity symbols are used in this document:

Quantity symbol	Term	Unit and unit symbol
h	Line current	ampere, A

EXAMPLE 2

1.5 Notation

The symbols used in this document, including their definitions, are listed below.

Symbol Definition

A_b	= cross-sectional area of a reinforcing bar
$A_{b.fit}$	= cross-sectional area of the fitment

Refer to ISO 3898 for requirements and information on the usage of different types of letters for symbols.

10 Referencing

10.1 Purpose or rationale

The entire collection of Australian Standards and Australian/New Zealand Standards published by Standards Australia is interrelated and forms a system whose integrity has to be preserved.

Therefore, references to particular pieces of text should be used instead of repetition of the original source material. Repetition introduces the risk of error or inconsistency and increases the length of the document. However, if it is considered necessary to repeat such material, its source shall be referenced precisely.

References can be made:

- (a) to other parts of the document (e.g. a clause, table or figure, see Clause 10.6); or
- (b) to other documents or publications (see Clause 10.2).

References can be:

- (a) informative (see Clause 21); or
- (b) normative (see Clause 15).

References can be:

- (a) dated (see Clause 10.5); or
- (b) undated (see Clause 10.4).

EXAMPLE 1

It is often useful to copy relevant terminological entries into the terms and definitions clause in which case the source is cited:

3.1

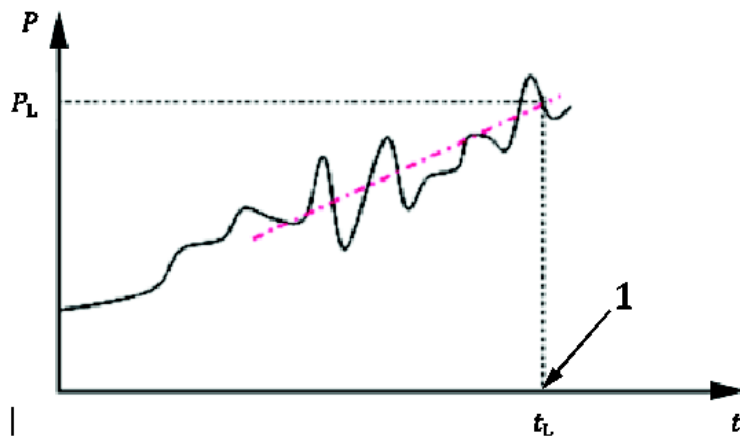
asset

item, thing or entity that has potential or actual value to an organization

[SOURCE: ISO 55500:2014, 3.2.1]

EXAMPLE 2

Material copied from an external document:



Key

1 life; maintenance time

[SOURCE: DISSADO, L.A., FOTHERGILL, J.C., *Electrical Degradation and Breakdown in Polymers*, Peter Peregrins, London, 1992, reproduced with the permission of the authors.]

Figure A.6 — Property versus time behaviour, detection of threshold (end point, P_L) and maintenance time

POLICY
MANDATORY

For management system standards, the rules of ISO/IEC Directives, Part 1, Consolidated ISO Supplement apply.

Copyright permissions shall be sought for the reproduction of any material which is not owned or already licensed by Standards Australia.

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10.2 Permitted referenced documents

Normatively referenced documents shall be documents published by Standards Australia or other standards development organisations, or regional or international standards development organisations such as ISO and/or IEC. In the absence of appropriate documents published by these organisations, those published by other bodies may be listed as normative references provided that:

- (a) the referenced document is recognised by the committee as having wide acceptance and authoritative status;

- (b) the committee has the agreement of the authors or publishers (where known) of the referenced document for its inclusion as a reference;
- (c) the authors or publishers (where known) have also agreed to inform the committee of their intention to revise the referenced document and what points the revision will affect;
- (d) the document is available under commercial terms which are fair, reasonable and non-discriminatory; and
- (e) any patented item required for the implementation of the deliverable in the referenced document is available to be licensed in accordance with the Standards Australia Patent Policy.

Informative reference may be made to any other type of document. Informative references shall be listed in the bibliography.

The committees shall validate all referenced documents when a document is revised.

The normative references list shall not include the following:

- (i) referenced documents which are not publicly available (in this context, “publicly available” means published documents which are available free of charge, or available commercially under reasonable and non-discriminatory terms to any user);
- (ii) referenced documents which are cited only informatively as bibliographic or background material, or source documents that may specify requirements but which are not in themselves referenced normatively; and
- (iii) public comment drafts of standards or their international equivalents.

NOTE It is possible to refer to a withdrawn standard so long as it meets the above criteria and no current replacement is available or the use of a withdrawn standard is necessary for the maintenance of equipment built to that document.

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10.3 Presentation of references

Documents shall be referred to by their number, and if applicable, date of publication and title.

Referenced documents shall be listed in numerical order, in the following sequence:

- (a) Australian Standards.
- (b) Australian/New Zealand Standards.
- (c) IEC and ISO Standards.
- (d) Standards from Regional Standards Development Organizations (e.g. CEN).
- (e) Other national Standards in alphabetical order.
- (f) Industry Standards.
- (g) Non-Standards documents produced by standards development organizations.
- (h) Other reference materials.

EXAMPLE 1

AS 1074, *Steel tubes and tubulars for ordinary service*

AS 1281, *Cement mortar lining of steel pipes and fittings*

AS 4118 (all parts), *Fire sprinkler systems*

AS 4428.6, *Fire detection, warning, control and intercom systems, Part 6: Control and indicating equipment—Alarm signalling equipment*

AS/NZS 3013, *Electrical installations—Classification of the fire and mechanical performance of wiring system elements*

AS/NZS 3500.1, *Plumbing and drainage, Part 1: Water services*

ISO 14044:2006, *Environmental management — Life cycle assessment — Requirements and guidelines*

ISO 17101-2:2012, *Agricultural machinery — Thrown-object test and acceptance criteria — Part 2: Flail mowers*

ISO 14617 (all parts), *Graphical symbols for diagrams*

ISO/IEC 17025:2005, *General requirements for the competence of testing and calibration laboratories*

IEC 61175, *Industrial systems, installations and equipment and industrial products — Designation of signals*

SA HB 19.31:2018, *Reference materials, Part 31: Contents of certificates, labels and accompanying documentation*

ISO/TR 12353-3:2013, *Road vehicles — Traffic accident analysis — Part 3: Guidelines for the interpretation of recorded crash pulse data to determine impact severity*

For other referenced documents and information resources (printed, electronic or otherwise), the style as presented in ISO 690 is a guide only.

EXAMPLE 2

Book or monograph:

AYMARD M. Dutch Capitalism and World Capitalism. In: *Studies in Modern Capitalism*, (AYMARD M., ed.). Cambridge University Press, 1982

HALL J.R. *Intrinsic Safety in British Coal Mines*. Marylebone Press, 1985

HARRISON H.B. *Structural Analysis and Design*. Pergamon Press, Second Edition, 1990

INTERNET ENGINEERING TASK FORCE (IETF). *Intellectual Property Rights in IETF Technology*, (BRADNER S., ed.). 2005. <http://www.ietf.org/rfc/rfc3979.txt>

Website or webpage reference:

ASTM INTERNATIONAL. *Standardization News*. <https://www.astm.org/standardization-news>

IEEE. <https://www.ieee.org>

Journal article:

AMAJOR, L.C. The Cenomanian hiatus in the Southern Benue Trough, Nigeria. *Geological Magazine*. 1985, **122**(1), 39-50

BRADFORD M.A. Inelastic Local Buckling of Fabricated I-Beams. *J. Construct. Steel Res.* 1987, **7**(5) pp. 317–334

DAVISON G.W. Three Phase Transformers — Past, Present Future. *Engineering Review*. 2001, **6** pp. 71–75

SCALLY G., AND DONALDSON L.J. Clinical governance and the drive for quality improvement in the new NHS in England. *British Medical Journal*. 1998, **317** pp. 61–65. <https://www.bmj.com/content/317/7150/61>

Report:

AUSTRALIAN LAW REFORM COMMISSION. *Guardianship*. Report No. 141, 2016

Handbook:

COLUMN RESEARCH COMMITTEE OF JAPAN. *Handbook of Structural Stability*. Corona, 1971

Thesis:

RUSSELL J. *Australian Limit State Design Rules for the Stability of Steel Structures*. Sydney University, Thesis, 2017

Conference:

MARCER J.R. *Design Aspects Significantly Affecting Rating and Fatigue Life of Railway Underbridges*. Asia Pacific Conference on Bridge Loading and Fatigue, Monash University, 1996

Legislation:

Trade Practices Act 1974 (Cth)

Work Health and Safety Regulation 2017 (NSW)

Building Act 2004 (NZ)



For online referenced documents, information sufficient to identify and locate the source shall be provided. Preferably, the primary source of the referenced document should be cited, in order to ensure traceability.

The information shall include the method of access to the referenced document and the full network address, with the same punctuation and use of upper case and lower case letters as given in the source, refer to ISO 690.

Furthermore, the referenced document should be expected to remain valid for the expected life of the referring document.

<p>EXAMPLE 3</p> <p>ISO/IEC Directives, IEC Supplement. International Electrotechnical Commission. Available at http://www.iec.ch/members_experts/refdocs/</p> <p>Statutes and directives. International Electrotechnical Commission, ©2004-2010 [viewed 2011-02-09]. Available at http://www.iec.ch/members_experts/refdocs/</p> <p>ISO 7000/IEC 60417 [online database], Graphical symbols for use on equipment [viewed 2016-04-18]. Available at http://www.graphical-symbols.info/</p>
--

10.4 Undated references

Undated references may be made:

- (a) only to a complete document;
- (b) if it will be possible to use all future changes of the referenced document for the purposes of the referring document; and
- (c) when it is understood that the reference will include all amendments to and revisions of the referenced document.

The date of publication or dash (see Clause 10.5) shall not be given for undated references. When an undated reference is to all parts of a document, the standard identifier shall be followed by “(all parts)”. In the normative references clause or bibliography, use the following forms to list undated references.

<p>EXAMPLE 1</p> <p>IEC 60335 (all parts), <i>Household and similar electrical appliances — Safety</i></p> <p>IEC 60335-1, <i>Household and similar electrical appliances — Safety — Part 1: General requirements</i></p>	<p>Reference to all parts</p> <p>Referenced to a single part</p>
--	--

In the text, use the following forms to make undated references to a document.

<p>EXAMPLE 2</p> <p>“... use the methods specified in ISO 128-20 and ISO 80000-1 ...”;</p> <p>“... IEC 60417 shall be used...”.</p>
--



10.5 Dated references

Dated references are references to:

- (a) a specific edition, indicated by the date of publication; or
- (b) a specific enquiry or final draft, indicated by a dash.

For dated references, each shall be given with its year of publication.

The date of publication shall be indicated by the year or, for documents for which more than one edition of the document or an element within the document will be published in the same calendar year, the year of publication and the month (and where necessary the day). If the referenced document is amended or revised, the dated references to it will need to be reviewed to assess whether they should be updated or not.

In this context a part is regarded as a separate document.

SG-006 MANDATORY Within the text, references to specific clauses or subclauses, tables and figures of a referenced document shall always be dated, because subsequent editions could result in the renumbering of such elements within the referenced document.

In the text, use the standard identifier rather than the title when referring to an Australian or Joint Australian or New Zealand, ISO or IEC publication. The titles are usually only written out in full in the normative references clause and in the bibliography.

In the text, use the following forms to make dated references to a document.

<p>EXAMPLE 1</p> <p>... perform the tests given in IEC 60068-1:1988 ...</p> <p>... in accordance with ISO 1234:–² Clause 3 ...</p> <p>-----</p> <p>... Under revision. Stage at the time of publication: ISO/DIS 1234:2014.</p> <p>... as specified in IEC 64321-4:1996 Table 1 ...</p> <p>... use symbol IEC 60417-5017:2002-10...</p> <p>... according to IEC 62271-1:2007/AMD1:2011 ...</p>	<p>Dated reference to a published document</p> <p>Dated reference to an enquiry or final draft</p> <p>Dated reference to a specific table in another published document</p> <p>Dated reference to an entry within a database standard</p> <p>Dated reference to an amendment (using IEC conventions)</p>
<p>EXAMPLE 2</p> <p>Dated versus undated references:</p> <p>The test methods of IEC 61300-2-2 shall be used.</p> <p>The dimensions shall be in accordance with IEC 60793-2-50:2012 Table B.1.</p>	<p>This is a reference to a complete document and it is therefore undated</p> <p>This is a reference to a specific element in the referenced document and it is therefore dated</p>

SG-006 MANDATORY **10.6 References in a document to itself**

References shall not be made to page numbers, since pagination can change if the referenced document is published in different formats, or if the document is revised.

For an individual document, use the form “this document”.

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For a document published in separate parts, the Standard identifier followed by the phrase “(all parts)” shall be used to refer to the entire series.

EXAMPLE

The formulae in ISO 10300 (all parts) are intended to establish uniformly acceptable methods for calculating the pitting resistance and bending strength of...

Such undated references are understood to include all amendments and revisions to the referenced document.

10.7 References to elements of text

Cross references to elements of text in the same document should be in the form of the following examples:

EXAMPLE 1

“In accordance with Section 3”.

“According to Clause 3.1”.

“As specified in Item 3.1(b)”.

“Details as given in Clause 3.1.1”.

“See Appendix B”.

“The requirements given in Clause B2”.

“See the Note in Table 2”.

“See Clause 6.6.3 Example 2”.

“See Clause 3.1 Equation 3”.

NOTE “See” is used for cross references internal to the document, “Refer to” to other documents outside the document itself.

The term “subclause” shall not be used.

If there is a need to refer to an unordered list item in another document, the following formulation shall be used:

EXAMPLE 2

“as specified in ISO/IEC 15888:1996 Clause 3.1 second list item”.



Subdivisions of the document

11 Title

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11.1 Purpose or rationale

The title is a clear, concise description of the subject matter covered by the document. It is drafted so as to distinguish the subject matter from that of other documents, without going into unnecessary detail. Any necessary additional details are given in the scope.

11.2 Normative or informative?

The title is a normative element.

11.3 Mandatory, conditional or optional?

The title is a mandatory element.

11.4 Numbering and subdivision

The title is composed of separate elements, each as short as possible, proceeding from the general to the particular, for example:

- (a) an *introductory element* indicating the general field to which the document belongs (this can often be based on the title of the committee which prepared the document);
- (b) a *main element* indicating the principal subject treated within that general field;
- (c) a *complementary element* indicating the particular aspect of the principal subject or giving details that distinguish the document from other documents, or other parts of the same document.

No more than three elements shall be used. The main element shall always be included.

EXAMPLE 1

The introductory element is necessary to indicate the field of application.

Correct: *Raw optical glass — Grindability with diamond pellets — Test method and classification*

Incorrect: *Grindability with diamond pellets — Test method and classification*

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If the document covers several (but not all) aspects of the subject indicated in the main element, the aspects covered shall be referred to by a general term such as “specification” or “mechanical requirements and test methods” rather than be enumerated one by one.

If the main element of the title (together with the complementary element, where present) unequivocally covers the subject treated in the document, the introductory element shall be omitted.

EXAMPLE 2

Correct: *Sodium perborates for industrial use — Determination of bulk density*

Incorrect: *Chemicals — Sodium perborates for industrial use — Determination of bulk density*

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The title of a part shall be composed in the same way. All the individual titles in a series of parts shall contain the same introductory element (if present) and main element, while the complementary element shall be different in each case in order to distinguish the parts from one another. The complementary element shall be preceded in each case by the designation “Part ...”.

EXAMPLE 3

IEC 60947-1, *Low-voltage switchgear and controlgear — Part 1: General rules*

IEC 60947-2, *Low-voltage switchgear and controlgear — Part 2: Circuit-breakers*

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When a document is divided into subparts (in the IEC), the parts within each subseries shall have the same subseries title.

EXAMPLE 4

IEC 61300-1, *Fibre optic interconnecting devices and passive components — Basic test and measurement procedures — Part 1: General and guidance*

IEC 61300-2-1, *Fibre optic interconnecting devices and passive components — Basic test and measurement procedures — Part 2-1: Tests — Vibration (sinusoidal)*

IEC 61300-2-2, *Fibre optic interconnecting devices and passive components — Basic test and measurement procedures — Part 2-2: Tests — Mating durability*

IEC 61300-3-1, *Fibre optic interconnecting devices and passive components — Basic test and measurement procedures — Part 3-1: Examinations and measurements — Visual examination*

IEC 61300-3-2, *Fibre optic interconnecting devices and passive components — Basic test and measurement procedures — Part 3-2: Examinations and measurements — Polarization dependent loss in a single-mode fibre optic device*

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11.5 Specific principles and rules

11.5.1 Avoidance of unintentional limitation of the scope

The title shall not contain details that could imply an unintentional limitation of the scope of the document.

11.5.2 Wording

The terminology used in the titles of documents shall be consistent.

For documents dealing exclusively with terminology, the following expressions shall be used:

- (a) “Vocabulary” if both terms and definitions are included, or
- (b) “List of equivalent terms” if only equivalent terms in different languages are given.

For documents dealing with test methods, use the form

“Test method” or “Determination of ...”

instead of expressions such as

“Method of testing”, “Method for the determination of ...”, “Test code for the measurement of ...” and “Test on ...”.

The type or nature of the document (e.g. International Standard, Technical Specification, Publicly Available Specification, Technical Report or Guide) shall not be indicated in the title.

EXAMPLE 1

Correct: *Workplace air — Guidance for the measurement of respirable crystalline silica*

Incorrect: *Workplace air — Technical specification for the measurement of respirable crystalline silica*

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Expressions such as “International test method for ...”, “Technical Report on ...”, etc. shall therefore not be used.

EXAMPLE 2

Correct: *Test method on electromagnetic emissions — Part 1: [...]*

Incorrect: *International test method on electromagnetic emissions — Part 1: [...]*

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The complementary element shall be omitted if the document both:

- (a) covers all essential aspects of the subject indicated in the main element; and
- (b) is (and is intended to remain) the only document relating to this subject.

EXAMPLE 3

Correct: *Coffee grinders*

Incorrect: *Coffee grinders — Terminology, symbols, material, dimensions, mechanical properties, rated values, test methods, packaging*

12 Preface

12.1 Purpose or rationale

The Preface informs the user about:

- (a) whether the document is an Australian/New Zealand Standard or Australian Standard
- (b) the organization responsible for publishing the document;
- (c) the committee which developed the document;
- (d) the change of the document from an Australian/New Zealand Standard to an Australian Standard or the reverse;
- (e) relationships between the present document and other documents, including a statement if this document supersedes another in whole or in part;
- (f) the objective of the document;
- (g) principle differences between the new and old edition;
- (h) the details of any exemptions to Standards Australia's [Standardisation Guides](#) granted by the Standards Development and Accreditation Committee (SDAC);
- (i) the nature of particular text features such as commentary text; and

- (j) legal disclaimers.

It shall not contain background information on the subject area; this material belongs in an Introduction (see Clause 13).

See also Clause E.2.2 for further details for Prefaces where the publication is an adoption.

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12.2 Normative or informative?

The Preface is an informative element. It shall not contain requirements, permissions or recommendations.

12.3 Mandatory, conditional or optional?

The Preface is a mandatory element.

12.4 Numbering and subdivision

The Preface shall not be numbered and shall not be subdivided.

12.5 Specific principles and rules

The Preface shall include as many of the following as are appropriate. The examples below list the elements in the order in which they shall appear in the Preface. The Committee shall provide the objective of the document and statement of significant technical changes. The Standards Australia editor may complete or provide the other elements.

NOTE For additional requirements for the Preface of an adoption see Clause E.2.2.

- (a) The designation and name of the committee that developed the document (working groups and other temporary entities are not referred to in the Preface).

EXAMPLE 1

This document was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-014, Plumbing and Drainage.

- (b) A statement that the document supersedes other documents in whole or in part.

EXAMPLE 2

...to supersede AS/NZS 3200.2.16:1999, *Medical electrical equipment, Part 2.16: Particular requirements for safety—Haemodialysis, haemodiafiltration and haemofiltration equipment.*

NOTE There is no need to repeat the title if it has not changed.

- (c) Where a standard was previously an Australian/New Zealand Standard and has become an Australian Standard, a statement regarding this.

EXAMPLE 3

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.

- (d) The objective of the document.

EXAMPLE 4

The objective of this document is to provide uniform minimum requirements for the safety and performance of quick-connect devices.

- (e) The relationship of the document to other documents.

EXAMPLE 5

The particular requirements of this document supplement the general requirements specified in AS/NZS 60079.0. This document is intended to be read in conjunction with AS/NZS 60079.0:2012.

EXAMPLE 6

Where reference is made to a Standard by its number only, the reference applies to the current edition of the Standard. Where reference is made to a Standard by number, year and where relevant an amendment number, the reference applies to that specific document.

EXAMPLE 7

In the preparation of this document, reference was made to CIE Publication No. 62 (1984), *Lighting for swimming pools, and the recommendations of the International Swimming Federation (FINA)*.

EXAMPLE 8

A list of all parts in the AS(AS/NZS) 5100 series can be found in the Standards Australia online catalogue.

- (f) A statement of significant technical changes from any previous edition of the document and/or objective for the revision.

EXAMPLE 9

The major changes in this edition are as follows:

- (a) Introduction of a minimum level of body coverage required for clothing to display or claim a UPF rating.
- (b) A revised UPF classification scheme.
- (c) Introduction of minimum requirements for specified items of clothing including hats and gloves.

- (g) Where an exemption to the [Standardisation Guides](#) has been made by the Standards Development and Accreditation Committee (SDAC) or an approval given by the Standards Australia Production Management Group (PMG), provide details of that exemption or approval.

EXAMPLE 10

The inclusion of roles and responsibilities in <<Standard Designation>>, was approved by <<PMG or SDAC>> on DD/MM/YYYY.

- (h) Where the text contains one or more appendix, a statement explaining the terminology "normative" and "informative".

EXAMPLE 11

The terms "normative" and "informative" are used in Standards to define the application of the appendices to which they apply. A "normative" appendix is an integral part of a Standard, whereas an "informative" appendix is only for information and guidance.

- (i) When Commentary is used in a standard, this text should appear as the last paragraph of the Preface. It shall appear with the same presentation as used for Commentary itself.

EXAMPLE 12

This Standard includes a commentary on some of the clauses. The commentary directly follows the relevant clause, is designated by 'C' preceding the clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the Standard.

See Clause E.2.2 for additional elements required in a Preface of an adopted document.

13 Introduction

13.1 Purpose or rationale

The introduction provides specific information or commentary about the technical content of the document, and about the reasons prompting its preparation.

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13.2 Normative or informative?

The introduction is an informative element. It shall not contain requirements.

13.3 Mandatory, conditional or optional?

The introduction is an optional element. It is only mandatory if a specific patent right has been identified during the development of the document.

13.4 Numbering and subdivision

The introduction shall not be numbered unless there is a need to create numbered subdivisions. In this case, it shall be numbered 0, with subclauses being numbered 0.1, 0.2, etc. Any figure, table, displayed formula or footnote shall be numbered starting with 1.

13.5 Specific principles and rules

Whenever alternative solutions are offered in a document and preferences for the different alternatives provided, the reasons for the preferences shall be explained in the introduction.

Where patent rights have been identified in a document, the introduction shall include an appropriate notice. See Clause 32.

14 Scope

14.1 Purpose or rationale

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The scope clearly defines the subject of the document and the aspects covered, thereby indicating the limits of applicability of the document or particular parts of it.

If necessary, the scope should indicate subjects that might be reasonably inferred to be covered but actually excluded from the document.

EXAMPLE

This document excludes

In documents that are subdivided into parts, the scope of each part shall define the subject of that part of the document only.

The scope shall be succinct so that it can be used as a summary for bibliographic purposes, for example, as an abstract. If further details and background information are necessary, these shall be included in either the introduction or in an appendix.

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14.2 Normative or informative?

The scope is a normative element. It shall not contain requirements, permissions or recommendations.

14.3 Mandatory, conditional or optional?

The scope is a mandatory element.

14.4 Numbering and subdivision

The scope may be subdivided; however, this is not normally necessary as it is meant to be succinct.

14.5 Specific principles and rules

The scope shall only appear once in each single section document and shall be worded as a series of statements of fact. In a multi-section document there shall be a scope in the introduction for the whole document and specific scopes may be included for each section.

Forms of expression such as the following shall be used.

EXAMPLES

This document {or this section}

- (a) specifies the dimensions of ...
- (b) specifies a method of ...
- (c) specifies the characteristics of ...
- (d) establishes a system for ...
- (e) establishes general principles for ...
- (f) gives guidelines for ...
- (g) defines terms ...

Statements of applicability of the document shall be introduced by wording such as:

EXAMPLES

This document is applicable to ...

This document does not apply to...

15 Normative references

15.1 Purpose or rationale

The normative references clause lists, for information, those documents which are cited in the text in such a way that some or all of their content constitutes requirements of the document.

Information on how these references apply is found in the place where they are cited in the document, and not in the normative references clause.

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15.2 Normative or informative?

The normative references clause is an informative element.

The list of references it contains is given for the convenience of the user, who can then consult the place where they are cited in the document to understand and assess how they apply.

15.3 Mandatory, conditional or optional?

The normative references clause is a mandatory element, even if it contains no normative references.

15.4 Numbering and subdivision

The normative references clause shall not be subdivided.

Referenced documents listed are not numbered.

15.5 Specific principles and rules

15.5.1 General

The Normative references clause shall only appear once in each document.

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15.5.2 Introductory wording

The normative references shall be introduced by the following wording:

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

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

The note above is optional.

The above wording is also applicable to a part of a multipart document.

The following is optional text which may be added after the above initial sentence. It should only be used where the document is not intended for adoption in legislation where there is a risk that the policy of the legislation conflicts with this practice.

NOTE This is in conflict with the National Construction Code's approach to secondary references so the following text should be used in NCC referenced documents.

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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If no references exist, include the following phrase below the clause title:

There are no normative references in this document.

15.5.3 Referencing

Only references cited in the text in such a way that some or all of their content constitutes requirements of the document shall be listed in the Normative references clause.

EXAMPLE 1

In the following case, the citation is normative and the document shall be listed in the normative references clause:

Connectors shall conform to the electrical characteristics specified by IEC 60603-7-1.

In the following case, the citation is not normative but informative. The document cited shall be listed not in the normative references clause but in the bibliography:

Wiring of these connectors should take into account the wire and cable diameter of the cables defined in IEC 61156.

Table 4 provides the verbal forms and expressions that make a citation normative.

When citing other documents, avoid using potentially ambiguous expressions, where it is unclear whether a requirement or a recommendation is being expressed. For example, the expressions "see ..." and "refer to ..." should only be used informatively.

EXAMPLE 2

In the following cases, the references are informative.

For additional information on communication, refer to ISO 14063.

The types of document which may be referenced are given in 10.2.

References listed may be dated or undated. See Clause 10.4 and 10.5.

Cross references should inform the user sufficiently of the reason to go to the other reference.

EXAMPLE 3

The requirements for laces are given in ISO 22774.

EXAMPLE 4

In the following case, the reference is informative because the source Standard is only the vehicle for the requirement and the Standard itself is never referenced normatively in the document.

Isolation kennels shall be used to prevent spread of infectious diseases. Periods of isolation should be approved by a veterinarian. Isolation kennels with separate areas and cleaning equipment shall be provided when required.

NOTE: An isolation kennel may be at a separate location to the facility where the dog is normally housed.

[SOURCE: BS 8517-1:2016 Clause 5, modified.]

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Referenced documents shall be listed in numerical order, in the following sequence:

- (a) Australian Standards.
- (b) Australian/New Zealand Standards.
- (c) IEC and ISO Standards.
- (d) EN Standards.
- (e) Other national Standards in alphabetical order.
- (f) Industry Standards.
- (g) Non-Standards documents.

16 Terms and definitions

16.1 Purpose or rationale

The terms and definitions clause provides definitions necessary for the understanding of certain terms used in the document.

If necessary, terminological entries can be supplemented by information (including requirements) given in the notes to entry.

EXAMPLE

3.6

moisture content

loss of mass determined by the procedure described in this document

Note 1 to entry: The moisture content is expressed as a percentage by mass.

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Terminology may take the form of an independent terminology standard (a vocabulary, nomenclature, or list of equivalent terms in different languages) or be included in a “Terms and definitions” clause in a document that also deals with other aspects.

16.2 Normative or informative?

The terms and definitions clause is a normative element. It defines the way in which the listed terms shall be interpreted.

16.3 Mandatory, conditional or optional?

The terms and definitions clause is a mandatory element, even if it contains no terminological entries.

16.4 Numbering and subdivision

Terminological entries shall be numbered.

NOTE These numbers are not considered as subclause numbers.

EXAMPLE 1

3 Terms and definitions

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

NOTE ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- (a) IEC Electropedia: available at <http://www.electropedia.org/>
- (b) ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

management performance indicator

MPI

environmental performance indicator that provides information about the management efforts to influence an organization's environmental performance

[SOURCE: ISO 14031:1999, 2.10.1]

Subdivision of the terms and definitions clause is permitted.

Terms and definitions should be listed alphabetically.

EXAMPLE 2

3 Terms and definitions

[...]

3.2 Surface properties

3.2.1

abrasion

loss of material from a surface due to frictional forces

[...]

3.5 Optical properties

[...]

3.5.8

colour retention

degree of permanence of a colour

Note 1 to entry: Colour retention can be influenced by weathering.

For convenience, the symbols and abbreviated terms may be combined with the terms and definitions in order to bring together terms and their definitions, symbols and abbreviated terms under an appropriate composite title, for EXAMPLE “Terms, definitions, symbols and abbreviated terms”.

16.5 Specific principles and rules

16.5.1 General

The Terms and definitions clause shall only appear once in each document.

16.5.2 Rules for the development of terminological entries

Terminological entries shall be drafted in accordance with ISO 10241-1. Clause 16.5 contains only a summary of some of these rules. General principles and methods for terminology work are specified in ISO 704.

16.5.3 Introductory wording

If all the specific terms and definitions are provided in Clause 3, use the following introductory text:

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

The following text is optional:

NOTE ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- (a) IEC Electropedia: available at <http://www.electropedia.org/>
- (b) ISO Online browsing platform: available at <http://www.iso.org/obp>

If reference is given to an external document, use the following introductory text:

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For the purposes of this document, the terms and definitions given in [external document reference xxx] apply.

The following text is optional:

NOTE ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- (a) IEC Electropedia: available at <http://www.electropedia.org/>
- (b) ISO Online browsing platform: available at <http://www.iso.org/obp>

If terms and definitions are provided in Clause 3, in addition to a reference to an external document, use the following introductory text:

For the purposes of this document, the terms and definitions given in [external document reference xxx] and the following apply.

The following text is optional:

NOTE ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- (a) IEC Electropedia: available at <http://www.electropedia.org/>
- (b) ISO Online browsing platform: available at <http://www.iso.org/obp>

If there are no terms and definitions provided, use the following introductory text:

No terms and definitions are listed in this document.

The following text is optional:

NOTE ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- (a) IEC Electropedia: available at <http://www.electropedia.org/>
- (b) ISO Online browsing platform: available at <http://www.iso.org/obp>

NOTE The introductory text is not a hanging paragraph (see Clause 23.3), as the terms and definitions clause consists of a list of terminological entries and not subclauses.

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16.5.4 Referencing

Only terms which are used in the document shall be listed in the terms and definitions clause. This rule does not apply to terminology standards, whose terms are intended for wider use.

16.5.5 Terms

Common terms which a qualified user of the document will already know should not be defined.

Trade names (brand names) and archaic and colloquial terms shall be avoided.

Types of term:

- (a) **Preferred terms** are the primary terms for a given concept. The preferred term is the form which is used throughout the main body of the text. They are written in bold type (with the exception of symbols,



which shall be presented as used in running text). The preferred term should be used consistently throughout the document, whereas the admitted term should not be used within the body text.

(b) **Admitted terms** are accepted synonyms for the preferred term. They are written in bold type.

(c) **Deprecated terms** are synonyms of the preferred term which are no longer in use or whose use is discouraged. They are written in regular type.

There can be more than one term of each type. An abbreviation or a symbol can constitute a term.

<p>EXAMPLE 1</p> <p>Preferred term</p> <p>Admitted term</p> <p>Preferred term</p> <p>Deprecated term</p>	<p>3.1</p> <p>chart datum</p> <p>chart sounding datum</p> <p>reference level for soundings in navigation charts</p> <p>3.2</p> <p>adhesive</p> <p>DEPRECATED: glue</p> <p>substance capable of holding materials together by adhesion</p>
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Terms shall be written in lower case characters. Upper case characters, mathematical symbols, typographical signs and syntactic signs (e.g. punctuation marks, hyphens, parentheses, square brackets and other connectors or delimiters) as well as their character styles (i.e. fonts and bold, italic, bold italic, or other style conventions) shall be used in a term only if they constitute part of the normal written form of the term.

<p>EXAMPLE 2</p> <p>Correct use of parentheses:</p> <p>bis(dimethylthiocarbamyl) disulfide</p> <p>Incorrect use of parentheses:</p> <p>integrity (of system)</p>	<p>The parentheses are part of the term (which is a chemical name).</p> <p>The words in parentheses are not part of the term.</p>
--	--



<p>EXAMPLE 3</p> <p>Incorrect expression of equivalent terms:</p> <p>live working (work)</p> <p>Correct expression of equivalent terms:</p> <p>live working</p> <p>live work</p>	<p>It is incorrect to indicate a synonymous term using parentheses.</p> <p>The preferred term and any synonyms are written on separate lines.</p>
---	---

<p>EXAMPLE 4</p> <p>Correct use of capitalization:</p> <p>Reynolds number</p> <p>Incorrect use of capitalization:</p> <p>Planned outage</p>	<p>“Reynolds” is a proper noun and is capitalized.</p> <p>“Planned” is not a proper noun and does not need to be capitalized.</p>
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16.5.6 Definitions

The definition shall be written in such a form that it can replace the term in its context. It shall not start with an article (“the”, “a”) nor end with a full stop. A definition shall not take the form of, or contain, a requirement.

Only one definition per terminological entry is allowed. If a term is used to define more than one concept, a separate terminological entry shall be created for each concept and the domain shall be included in angle brackets before the definition.

<p>EXAMPLE</p> <p>2.1.17</p> <p>die</p> <p><extrusion> metal block with a shaped orifice through which plastic material is extruded</p> <p>2.1.18</p> <p>die</p> <p><moulding> assembly of parts enclosing the cavity from which the moulding takes its form</p>
--

Circular definitions which repeat the term being defined are not allowed.

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16.5.7 Examples

Examples provide information that illustrates the concept. Examples shall not contain requirements (use of “shall”) or any information considered indispensable for the use of the document, for Example instructions (imperative mood), recommendations (use of “should”) or permission (use of “may”). Examples should be written as a statement of fact.

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Examples to terminological entries are designated “EXAMPLE” and shall be numbered starting with “1” within each terminological entry. A single example in a terminological entry shall not be numbered.

Examples may also be in the form of a figure, in which instance the figure is referenced in a note.

EXAMPLE

Note 1 to entry: For an illustration of the elements of a door, see Figure X.

Note 2 to entry: For an example of xxxxx xxxx, see Figure Y.

16.5.8 Non-verbal representation

Figures and formulae may be included within a terminological entry. The definition may take the form of a formula. Refer to ISO 10241-1.

16.5.9 Notes to entry

Notes to entry follow different rules from notes integrated in the text (see Clause 25). They provide additional information that supplements the terminological data, for example:

- (a) provisions (statements, instructions, recommendations or requirements) relating to the use of a term;
- (b) information regarding the units applicable to a quantity; or
- (c) an explanation of the reasons for selecting an abbreviated form as preferred term.

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Notes to entry are designated “Note # to entry:” and shall be numbered starting with “1” within each terminological entry. A single note to entry shall be numbered.

EXAMPLE

3.1.4

continuous scale

scale with a continuum of possible values

EXAMPLE Interval scale and ratio scale.

Note 1 to entry: A continuous scale can be transformed into a discrete scale, by grouping “values”. This inevitably leads to some loss of information. Often the resulting discrete scale will be ordinal.

Note 2 to entry: Scale resolution can be adversely affected by measurement system limitations. Such measurement limitations can, sometimes, give rise to measurements being represented on a discrete, ordinal, scale.

[SOURCE: ISO 3534-2:2006, 1.1.4]

EXAMPLE 2

3.6

moisture content mass by volume

mass of evaporable water divided by volume of dry material

Note 1 to entry: The method of evaporating water from a moist material shall be stated when this term is used.

16.5.10 Source

If a terminological entry is reproduced from another document, the source shall be given at the end of the entry. If any changes are made to the original terminological entry, this shall be indicated, along with a description of what has been modified. A document given as a source of a terminological entry is informative. If this is the only mention of the document, it should be added to the Bibliography.

Within a terminological entry, cross-references can also be made to terms defined elsewhere. The Example (3.1.2) shows how this is done.

EXAMPLE

3.1.2

terminological entry

part of a terminological data collection which contains the terminological data (3.1.3) related to one concept (3.2.1)

Note 1 to entry: A terminological entry prepared in accordance with the principles and methods given in ISO 704 follows the same structural principles whether it is monolingual or multilingual.

[SOURCE: ISO 1087-1:2000, 3.8.2, modified – Note 1 to entry has been added.]

16.5.11 Symbol

Terms which contain a symbol should set the symbol on a new line. Refer to ISO 10241-1:2011 Table 1.

EXAMPLE

1.4.4

flow

Q

volume flow rate in L/min

16.5.12 Footnotes

Footnotes to any part of a terminological entry are not allowed.

16.6 Overview of the main elements of a terminological entry

Figure 1 gives an overview of the main elements of a terminological entry.

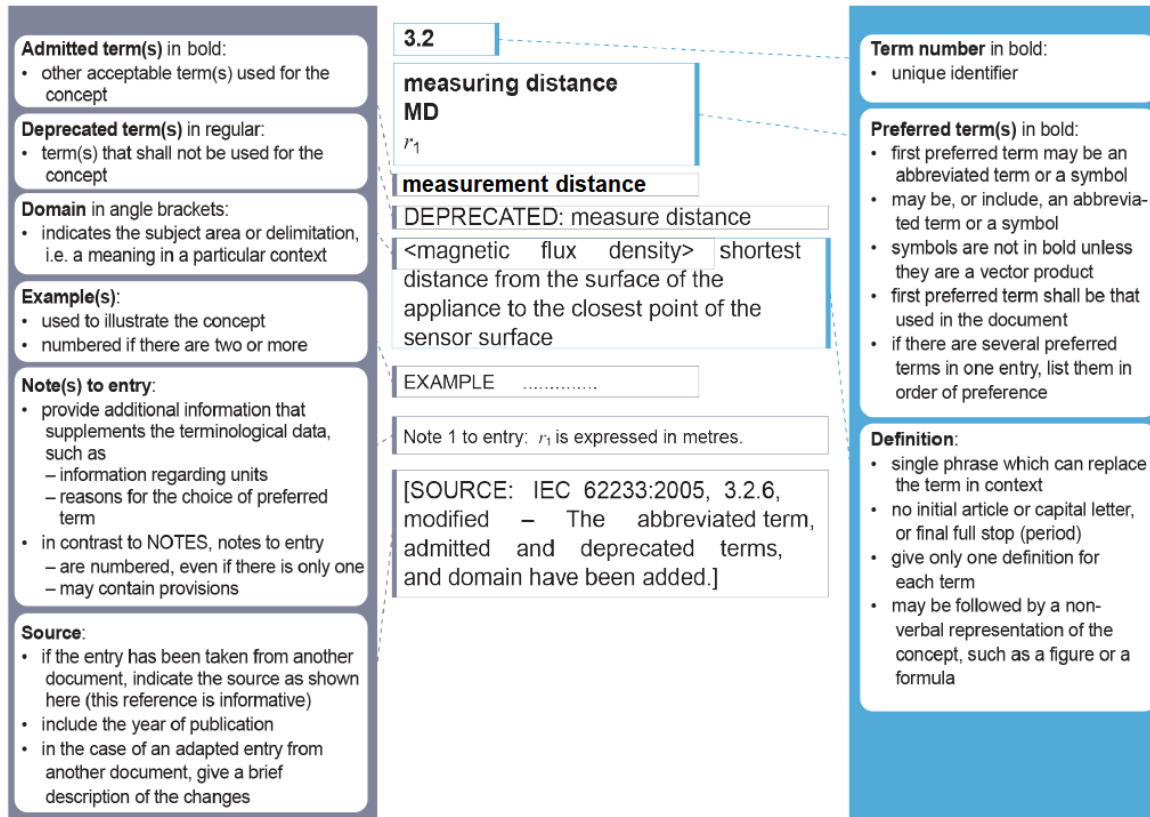


Figure 1 — Overview of the main elements of a terminological entry

16.7 Other elements of a terminological entry

Other data categories may be included in a terminological entry, such as:

- (a) country codes;
- (b) grammatical information;
- (c) pronunciation.

Refer to ISO 10241-1 for the general requirements and examples.

17 Symbols and abbreviated terms

17.1 Purpose or rationale

The symbols and abbreviated terms clause or subclause provides a list of the symbols and abbreviated terms used in the document, along with their definitions.

17.2 Normative or informative?

The symbols and abbreviated terms clause is a normative element.

17.3 Mandatory, conditional or optional?

The symbols and abbreviated terms clause is a conditional element.

17.4 Numbering and subdivision

The symbols need not be numbered. For convenience, the symbols and abbreviated terms may be combined with the terms and definitions in order to bring together terms and their definitions, symbols and abbreviated terms under an appropriate composite title, for example "Terms, definitions, symbols and abbreviated terms".

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17.5 Specific principles and rules

Only symbols used in the text shall be listed.

Unless there is a need to list symbols in a specific order to reflect technical criteria, all symbols should be listed in alphabetical order in the following sequence:

- (a) upper case Latin letter followed by lower case Latin letter (*A, a, B, b*, etc.);
- (b) letters without indices preceding letters with indices, and with letter indices preceding numerical ones (*B, b, C, C_m, C₂, c, d, d_{ext}, d_{int}, d₁*, etc.);
- (c) Greek letters following Latin letters (*Z, z, A, α, B, β, ..., Λ, λ* etc.);
- (d) any other special symbols.

18 Measurement and test methods

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18.1 Purpose or rationale

Measurement and test methods specify the procedure for determining the values of characteristics or for checking conformity to stated requirements. Using a standardized test method ensures comparability of the results (see Appendix D).

Measurement and test methods may be presented as separate clauses, or be incorporated in the requirements, or be presented as appendices (see Clause 20) or as separate parts (see Clause 6.3). A measurement and test method shall be prepared as a separate document if it is likely to be referred to in a number of other documents.

18.2 Normative or informative?

The measurement and test methods clause is a normative element.

18.3 Mandatory, conditional or optional?

The measurement and test methods clause is a conditional element.

18.4 Numbering and subdivision

Measurement and test methods may be subdivided in the following order (where appropriate):

- (a) principle;
- (b) reagents and/or materials (see Clause 18.5.3);
- (c) apparatus (see Clause 18.5.4);
- (d) preparation and preservation of test samples and test pieces;
- (e) procedure;
- (f) expression of results, including method of calculation and precision of the test method, and, in ISO, the measurement uncertainty;

(g) test report.

When health, safety or environmental warnings are needed, these should be placed next to the relevant content in the test method. General warnings should be placed at the beginning of the test method.

EXAMPLE 1

Example of a general warning:

WARNING — Using this part of IEC 69999 may involve working with hazardous materials, operations and equipment. It does not purport to address all of the safety or environmental problems associated with its use. It is the responsibility of users of this document to take appropriate measures to ensure the safety and health of personnel and the environment prior to application of the standard, and fulfil statutory and regulatory requirements for this purpose.

EXAMPLE 2

Examples of specific warnings:

WARNING — Cyanide solutions are highly toxic. Appropriate measures shall be taken to avoid ingestion. Care should be taken in the disposal of these solutions.

WARNING — Too high a temperature increase may cause a vigorous, exothermic reaction in the digestion solution with a high pressure increase and blow-off of the security valve. Losses of analytes are possible.

WARNING — This test involves handling of hot apparatus. In addition, for some iron ores, spitting may occur when loading the sample into the hot container.

WARNING — The reagents used in this method are strongly corrosive and partly very toxic. Safety precautions are absolutely necessary, not only due to the strong corrosive reagents, but also to high temperature and high pressure.

18.5 Specific principles and rules

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18.5.1 General

If appropriate, tests shall be identified as type tests, performance tests, sampling tests, routine tests, etc.

The document shall specify the sequence of testing if the sequence can influence the results.

Requirements, sampling and test methods are interrelated elements of product standardization and should be considered together even though the different elements may appear in separate clauses in a document, or in separate documents.

When a specific sampling method is necessary, this shall be clearly stated in the test method.

When drafting test methods, it is important to take into account documents for general test methods and of related tests for similar characteristics in other documents.

Non-destructive test methods shall be chosen whenever they can replace, within the same level of confidence, destructive test methods.

Test methods should conform to the metrological principles concerning validation, measurement traceability and estimation of measurement uncertainty described in AS ISO/IEC 17025:2017, Clause 7.2, 7.6 and 7.7. Other documents may be applicable: ISO/IEC Guide 98-3 (GUM:1995) and ISO/IEC Guide 99 (VIM). Requirements related to testing equipment should conform to the provisions concerning accuracy and calibration specified in AS ISO/IEC 17025:2017, Clause 6.5.



For guidance on the drafting of methods of chemical analysis, refer to ISO 78-2. Much of ISO 78-2 is also applicable to test methods for products other than chemical products.

Documents specifying test methods involving the use of hazardous products, apparatus or processes shall include a general warning and appropriate specific warnings. For recommended wording, refer to ISO/IEC Guide 51. For guidance on the appropriate location of such warnings, refer to ISO 78-2.

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A document which specifies test methods shall not imply any obligation to perform any kind of test. It shall merely state the method by which the test, if required and referred to (e.g. in the same or another document, in a regulation, or in contracts), is to be performed.

If a statistical method for the assessment of the conformity of a product, process or service is specified in the document, any statements of conformance with the document only relate to the conformity of the population or the lot.

If it is specified in the document that every single item is to be tested in accordance with the document, any statements concerning the conformity of the product to the document mean that every single item has been tested and that each has fulfilled the corresponding requirements.

If test methods are in use which differ from that most acceptable for general application, this shall not be a reason for not specifying the most acceptable in a document.

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18.5.2 Numbering

In order to facilitate cross-referencing, individual reagents, materials and apparatus shall be numbered, even if there is only one.

18.5.3 Reagents and/or materials

The reagents and/or materials subclause is a conditional element giving a list of the reagents and/or materials used in the document.

The content of a reagents and/or materials clause will usually comprise an optional introductory text together with a list detailing one or more reagents and/or materials.

The introductory text shall be used only to specify general provisions to which cross-reference is not made. Any cross-referred item shall not be included in this text but shall be listed as a distinct entry as described below.

The introductory text explaining the general provisions is not a hanging paragraph as described in 22.3 since the list detailing the reagents and/or materials is not a series of subclauses but a list.

The following example shows the presentation style used (for further examples of drafting, refer to ISO 78-2).

EXAMPLE

3 Reagents

3.1 General

Only reagents of recognized analytical grade and only distilled water or water of equivalent purity shall be used.

(a) *Cleaning medium* — for example methanol or water containing a few drops of liquid detergent.

18.5.4 Apparatus

The apparatus subclause is a conditional element giving a list of the apparatus used in the document. Wherever possible, equipment produced by a single manufacturer should not be specified. Where such



equipment is not readily available, this clause shall include such specifications for the equipment as to ensure that comparable testing can be conducted by all parties. See also Clause 31 regarding the use of trade names and trademarks.

The content of an apparatus clause will usually comprise an optional introductory text together with a list detailing one or more pieces of apparatus.

The introductory text shall be used only to specify general provisions to which cross-reference is not made. Any item cross-referred to shall not be included in this text but shall be listed as a distinct entry as described below.

The introductory text explaining the general provisions is not a hanging paragraph as described in Clause 22.3 since the list detailing the apparatus is not a series of subclauses but a list.

The following example shows the presentation style used (for further examples of drafting, refer to ISO 78-2).

EXAMPLE

A.2 Apparatus

The usual laboratory apparatus and, in particular, the following.

- (a) *Sample divider* — consisting of a conical sample divider or multiple-slot sample divider with a distribution system, e.g. “Split-it-right” sample divider, such as that shown in Figure A.1.
- (b) *Sieve* — with round perforations of diameter 1.4 mm.
- (c) *Tweezers*.
- (d) *Scalpel*.
- (e) *Paintbrush*.
- (f) *Steel bowls* — of diameter 100 mm ± 5 mm; seven per test sample.
- (g) *Balance* — which can be read to the nearest 0.01 g.

18.5.5 Alternative test methods

If more than one adequate test method exists for a characteristic, only one shall in principle be specified. If, for any reason, more than one test method is to be specified, a referee test method (often called reference test method) may be identified in the document to resolve doubts or dispute.

18.5.6 Choice of test methods according to accuracy

When choosing a test method, consider the accuracy of the method relative to the required value and tolerance of the characteristic being assessed.

The chosen test method shall provide an unambiguous determination of whether the sample meets the specified requirement.

When it is technically necessary, each test method shall incorporate a statement as to its limit of accuracy.

18.5.7 Test equipment

If, in preparing a document related to a product, it is necessary to standardize some kind of testing equipment that is likely to be used for testing other products as well, it shall be dealt with in a separate document, prepared in consultation with the committee dealing with such equipment.

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18.5.8 Test report

This clause specifies which information is to be included in the test report. The clause shall require information to be given on at least the following aspects of the test:

- (a) The sample.
- (b) The test method used.
- (c) The method used (if the Standard includes several).
- (d) The result(s), including a reference to the clause which explains how the results were calculated.
- (e) Any deviations from the procedure.
- (f) Any unusual features observed.
- (g) The date of the test.

19 Marking, labelling and packaging

19.1 Purpose or rationale

Marking, labelling and packaging are important aspects related to product manufacturing and procurement that frequently need a standardized approach, particularly in safety critical applications.

19.2 Normative or informative?

Marking, labelling and packaging clauses are usually normative elements although exceptions can exist (e.g. when only recommendations are made concerning marking, labelling and packaging).

19.3 Mandatory, conditional or optional?

Marking, labelling and packaging clauses are conditional elements.

19.4 Specific principles and rules

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19.4.1 General

Marking, labelling and packaging are complementary aspects that shall be included wherever relevant, particularly for product standards concerning consumer goods.

If necessary, the means of marking shall also be specified or recommended.

This element shall not specify or recommend marks of conformity. Such marks are normally applied under the rules of a certification system, refer to ISO/IEC Guide 23. Information on the marking of products with reference to a standards body or its documents is given in ISO/IEC 17050-1 and ISO/IEC 17050-2.

Information on safety standards and aspects related to safety is given in ISO/IEC Guide 51.

This element may be supplemented by an informative appendix giving an example of information necessary for the purposes of procurement.

19.4.2 Requirements concerning marking, labelling and packaging of products

Documents containing a reference to the marking of the product shall specify the following, where applicable:

- (a) The content of any marking that is used to identify the product, for example:



- (i) the manufacturer (name and address);
- (ii) responsible supplier (trade name, trademark or identification mark);
- (iii) the marking of a product itself [for example, manufacturer's or supplier's trademark, model or type number, designation];

NOTE 1 For further details on designations of internationally standardized items, refer to ISO/IEC Directives Part 2, Annex C.

- (iv) the identification of different sizes, categories, types and grades.
- (b) The means of presentation of such marking, for example by the use of plates (sometimes called "name-plates"), labels, stamps, colours, threads (in cables), as appropriate.
- (c) The location on the product, or in some cases on the packaging, where the marking is to appear.
- (d) Requirements for the labelling and/or packaging of the product (e.g. handling instructions, hazard warnings, date of manufacture).
- (e) Other information as required.

If the document requires the application of a label, the document shall also specify the nature of the labelling and how it is to be attached, affixed or applied to the product or its packaging.

Symbols specified for marking shall conform to relevant documents published by Standards Australia, ISO and IEC.

NOTE 2 Documents relating to *packaging* can be found under the ICS classification 55 in the ISO and IEC Catalogues.

19.4.3 Requirements concerning documentation accompanying the product

Documents may require that the product be accompanied by some kind of documentation (e.g. test report, handling instructions, other information appearing in the product packaging). When relevant, the content of such documentation shall be specified.

NOTE A classification and designation system of such documentation for plant, systems and equipment is provided in IEC 61355-1. Rules for such documentation in administration, commerce and industry can be found under the ICS classification 01.140.30.

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19.4.4 Warning notices and instructions

In some product standards, it is necessary to specify that the product shall be accompanied by warning notices or by instructions to the installer or user, and to specify their nature. Requirements concerning installation or use shall be included in a separate part of the series or a separate document, because they are not requirements applicable to the product.

20 Appendices

20.1 Purpose or rationale

Appendices are used to provide additional information to the main body of the document and are developed for several reasons, for example:

- (a) when the information or table is very long and including it in the main body of the document would distract the user;
- (b) to set apart special types of information (e.g. software, example forms, results of interlaboratory tests, alternative test methods, tables, lists, data); or
- (c) to present information regarding a particular application of the document.



20.2 Normative or informative?

Appendices can be normative or informative elements.

Normative appendices provide additional normative text to the main body of the document.

Informative appendices provide additional information intended to assist the understanding or use of the document. The status of the appendix (informative or normative) shall be made clear by the way in which it is referred to in the text and shall be stated under the heading of the appendix.

Informative appendices may contain optional requirements. For example, a test method that is optional may contain requirements but there is no need to conform to these requirements to claim conformance with the document. The status of the appendix (informative or normative) shall be made clear by the way in which it is referred to in the text and shall be stated under the heading of the appendix.

<p>EXAMPLE</p> <p>[...] see Appendix A for additional information [...]</p> <p>[...] the test method shall be carried out as specified in Appendix B [...]</p>	<p>The status of Appendix A is informative.</p> <p>The status of Appendix B is normative.</p>
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20.3 Mandatory, conditional or optional?

Appendices are optional elements.

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20.4 Numbering and subdivision

Each appendix shall be designated by a heading comprising the word “Appendix” followed by a capital letter, starting with “A”, for example “Appendix A”. The appendix heading shall be followed by the indication “(normative)” or “(informative)”, and by the title.

<p>EXAMPLE 1</p> <p style="text-align: center;">Appendix A (informative) Example form</p>
--

Appendices may be subdivided into clauses, subclauses, paragraphs and lists.

Numbers given to the clauses, subclauses, tables, figures and mathematical formulae of an appendix shall be preceded by the letter designating that appendix followed by a full-stop. The numbering shall start afresh with each appendix.

<p>EXAMPLE 2</p> <p>In the case of Appendix A, the first clause would be numbered A.1, the first figure would be Figure A.1, the first table would be Table A.1 and the first formula would be Formula (A.1).</p>
--

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20.5 Specific principles and rules

Each appendix shall be explicitly referred to within the text.

EXAMPLE

“Appendix B provides further information...”;
“Use the methods described in Appendix C”;
“See Figure A.6”;
“Clause A.2 describes...”;
“...as specified in Clause C.2.5.”.

SG-006 MANDATORY The way an appendix is referenced shall be consistent with its normative or informative purpose.

EXAMPLE

Referencing an informative appendix.

Incorrect: The system shall comprise three objects in sequence, see Appendix C.

Correct: The system shall comprise three objects in sequence. Appendix C provides guidance on the connection of the objects and commissioning of the system.

21 Bibliography

21.1 Purpose or rationale

The bibliography lists, for information, those documents which are cited informatively in the document, as well as other information resources.

SG-006 MANDATORY 21.2 Normative or informative?

The bibliography is an informative element. It shall not contain requirements, permissions or recommendations.

21.3 Mandatory, conditional or optional?

The bibliography is a conditional element. Its inclusion is dependent on whether informative references are present in the document.

21.4 Numbering and subdivision

The bibliography shall not have a clause number. It may be subdivided in order to group the referenced documents under descriptive headings. Such headings shall not be numbered.

The order of referenced documents in the bibliography should follow Clause 10.3.

Referenced documents and information resources listed may be numbered. Generally bibliographic references in Australia are not numbered.

21.5 Specific principles and rules

SG-006 MANDATORY The bibliography, if present, shall appear after the last Appendix.

Referenced documents and information resources listed can be dated or undated. See Clauses 10.4 and 10.5.



Bibliographic entries should use the style as presented in ISO 690 as a guide only. However, international adoptions may have the bibliography styled as in ISO 690.

See Section 10 examples 1 and 2 for guidance on how to style bibliography references.

For example, in the following case, the citation is not normative but informative. Therefore, the document cited shall be listed not in the normative references clause but in the bibliography:

- (a) Wiring of these connectors should take into account the wire and cable diameter of the cables defined in IEC 61156.

However, in the following case, the citation is normative and the document shall be listed in the normative references clause:

- (b) Connectors shall conform to the electrical characteristics specified by IEC 60603-7-1.

22 Indexes

Indexes, if present, shall appear as the last element.

Components of the text

23 Clauses and subclauses

23.1 Purpose or rationale

Clauses and subclauses serve as the basic components in the subdivision of the content of a document. A document may also group clauses into Sections. See Clause 6.4.1.

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23.2 Title

Each clause shall have a title.

Each first level subclause (e.g. 5.1, 5.2, etc.) should be given a title. Within a clause or subclause, the use of titles shall be uniform for subclauses at the same level, for example if Clause 10.1 has a title, Clause 10.2 shall also have a title. Figure 2 shows examples of correct and incorrect use of subclause titles.

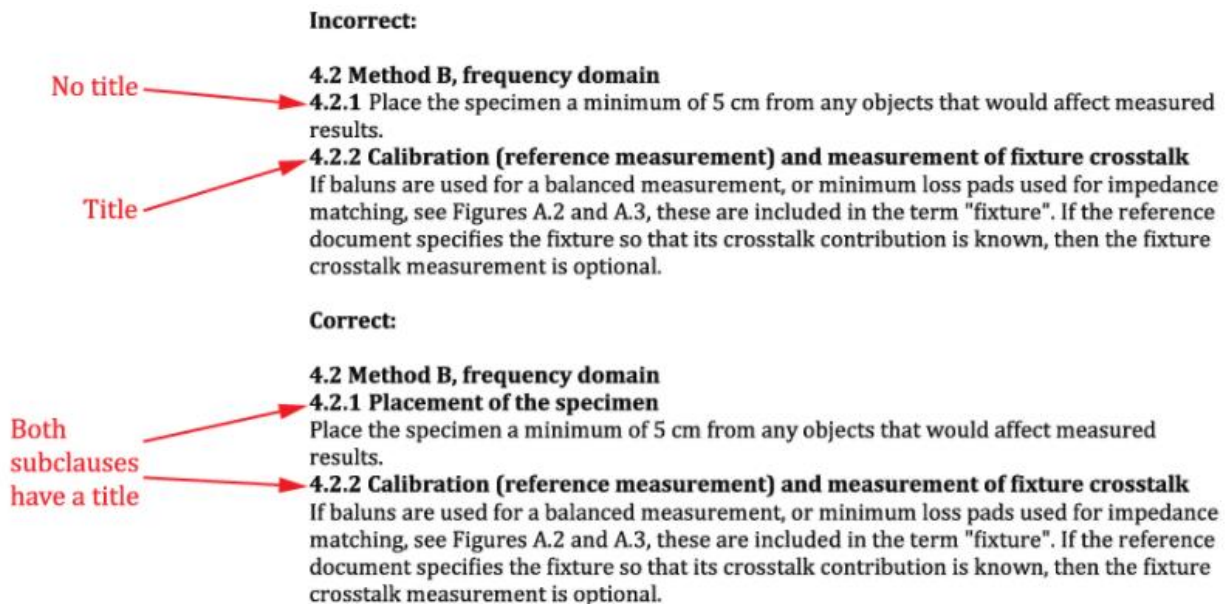


Figure 2 — Correct and incorrect use of subclause titles

In a Method of Test, clauses that list apparatus, reagents, equipment may list each item without a heading.

23.3 Numbering, subdivision and hanging paragraphs

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23.3.1 Numbering

In a single section document, the clauses in each document or part shall be numbered with Arabic numerals, starting with 1 for the "Scope" clause (see Figure 3). The numbering shall be continuous up to but excluding any Appendices (see Clause 20).

In a multi-section document, the clauses shall be numbered with Arabic numerals, such that the section number appears first, followed by sequential numbering beginning with 1 so that the "Scope" clause is 1.1. The numbering shall be continuous up to the end of the section.



23.3.2 Subdivision

A subclause is a numbered subdivision of a clause. A clause may be subdivided into subclauses as far as the fifth level (e.g. 5.1.1.1.1, 5.1.1.1.2, etc.).

Too many levels of subdivision should be avoided, as this can make it hard for the user to understand the document.

Table 9 provides an example of numbering of divisions and subdivisions.

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Table 9 — Example of numbering of divisions and subdivisions

Name	Example of numbering	
	Multi-section	Single-section
Section	1	
Clause	1.1	1
Subclause	1.1.1	1.1
Subclause	1.1.1.1	1.1.1
Subclause	1.1.1.1.1	1.1.1.1
paragraph	[no number]	[no number]
Appendix	A	A
Clause	A.1	A.1
Subclause	A.1.1	A.1.1
Subclause	A.1.1	A.1.1
paragraph	[no number]	[no number]
Appendix	B	B
Clause	B.1	B.1
Subclause	B.1.1	B.1.1
Subclause	B.1.1	B.1.1
paragraph	[no number]	[no number]

A subclause shall not be created unless there is at least one further subclause at the same level. For example, text in Clause 10 shall not be designated subclause “10.1” unless there is also a subclause “10.2”.

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23.3.3 Hanging paragraphs

“Hanging paragraphs” such as those shown in Figure 3 shall be avoided since reference to them is ambiguous.

In the example given in Figure 3, the hanging paragraph indicated cannot be uniquely identified as being in “Clause 5” since the paragraphs in 5.1 and 5.2 also form part of Clause 5. To avoid this problem it is necessary to identify the hanging paragraph as subclause “5.1 General” (or other suitable title) and to renumber the existing 5.1 and 5.2 accordingly (as shown), or to move the hanging paragraph elsewhere, or to delete it.

Incorrect	Correct
<p>5 Uncertainty of the certified value</p> <p>The combined expanded uncertainty of the measurement is calculated... } hanging paragraph</p> <p>5.1 Budget of uncertainty</p> <p>[...]</p>	<p>5 Uncertainty of the certified value</p> <p>5.1 General</p> <p>The combined expanded uncertainty of the measurement is calculated...</p> <p>5.2 Budget of uncertainty</p> <p>[...]</p>

Figure 3 — Example of a hanging paragraph (left) and one way to avoid it (right)

23.4 Referencing

Clauses and subclauses need not be specifically referred to in the text.

Use, for example, the following forms for references to clauses and subclauses:

- (a) “in accordance with Clause 4”;
- (b) “details as given in Clause 4.1.1”;
- (c) “the requirements given in Table B.2”;
- (d) “the methods described in Clause 5.3 provide further information on...”.

24 Lists

24.1 Purpose or rationale

A list serves to subdivide information to aid understanding.

24.2 Title

Lists do not have a title. They may, however, be preceded by a title or introductory phrase.

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24.3 Numbering and subdivision

Each item in a list shall be preceded by a lower case letter within parentheses {(a), (b), (c)}. List items shall not be preceded by a dot point, dash point or similar unnumbered style.

Lists can be subdivided. If it is necessary to subdivide further an item in the latter type of list, or if more than one list appears in a clause, Preface or Introduction, up to three additional levels may be used, in the following order:

- (a) Lower case Roman numbering {(i), (ii), (iii)}.



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(b) Upper case letters {(A), (B), (C)}.

(c) Arabic numerals {(1), (2), (3)}.

If it is necessary to subdivide an item further, the following three levels shall be used, in the following order:

(i) Lower case Roman numbering [(i), (ii), (iii)].

(ii) Upper case letters [(A), (B), (C)].

(iii) Arabic numerals [(1), (2), (3)].

Numbering restarts at each new clause or subclause.

NOTE The principles of plain writing emphasise that multi-level lists can impede the comprehension of the text. To improve readability, deeply nested lists should be reviewed for clarity, and simpler structures used instead.

EXAMPLE 1

No switch is required for any of the following categories of apparatus —

- (a) apparatus having a power consumption not exceeding 10 W under normal operating conditions;
- (b) apparatus having a power consumption not exceeding 50 W, measured 2 min after the application of any of the fault conditions; or
- (c) apparatus intended for continuous operation.

EXAMPLE 2

The following basic principles shall apply to drafting definitions.

- | | |
|-----|--|
| (a) | The definition shall have the same grammatical form as the term — |
| | <ul style="list-style-type: none"> (i) to define a verb, a verbal phrase shall be used; or (ii) to define a singular noun, the singular shall be used. |
| (b) | The preferred structure of a definition is a basic part stating the class to which the concept belongs, and another part enumerating the characteristics that distinguish the concept from other members of the class. |

24.4 Referencing

The purpose of a list should be made clear by its context. For example, an introductory proposition or a subclause title can serve to introduce the list. Lists need not be specifically referred to in the text.

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To facilitate cross-references to list items, numbered list shall be used. Within a subdivision, each list item in a numbered list shall have a unique identifier.

Use, for example, the following forms for references to lists:

EXAMPLE 3

- “as specified in Clause 3.1(b)”;
- “the requirements given in Clause B.2(c)”.

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24.5 Content in lists

If the verb “shall” is used in the introduction to a list, that list shall contain requirements only; a recommendation may be included in a note only, inserted under the appropriate list item or at the end of the list.

If a list comprises recommendations and requirements, that list shall have a non-restrictive introduction, for example, “the following provisions apply:”.

25 Notes

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25.1 Purpose or rationale

Notes are used for giving additional information intended to assist the understanding or use of the text of the document. The document shall be usable without the notes.

For rules on notes to figures, see Clause 29.5.4.

For rules on notes to tables, see Clause 30.5.1.

Notes to entry (in terminological entries) follow different rules from those for notes, see Clause 16.5.6.

25.2 Title

Notes do not have a title.

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25.3 Numbering and subdivision

Within a given clause or subclause, all notes shall be numbered sequentially, including any notes to list items. The numbering restarts at each new subdivision. A single note in a subdivision need not be numbered.

25.4 Referencing

Notes need not be specifically referred to in the text.

If notes are referred to, use for example, the following forms for references:

EXAMPLE

“an explanation is provided in Clause 7.1, Note 2”;

“see Clause 8.6, Note 3”.

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25.5 Specific principles and rules

Notes shall not contain requirements (e.g. use of “shall”, see Table 4) or any information considered indispensable for the use of the document, for example instructions (imperative mood).

25.6 Examples

EXAMPLE 1

Correct example of the use of a note:

“Each label shall have a length of between 25 mm and 40 mm and a width of between 10 mm and 15 mm.

NOTE The size of the label was chosen so that it will fit most sizes of syringe without obscuring the graduation marks.”



<p>EXAMPLE 2</p> <p>Incorrect examples of the use of a note:</p> <p>NOTE In this context a part shall be regarded as a separate document ...</p> <p>NOTE Alternatively, test at a load of ...</p>	<p>“shall” constitutes a requirement</p> <p>“test” constitutes a requirement, expressed here in the form of an instruction using the imperative</p>
--	---

<p>EXAMPLE 3</p> <p>Recommendations may be included in a note. This practice is widely used in documents intended for incorporation in legislation. For example:</p> <p>Wherever practicable, the form, articulation and span lengths of a bridge structure shall be selected to ensure that bearings are subject to a compressive force under all loading conditions.</p> <p>NOTE Where uplift occurs at bearings, separate hold-down devices, rather than bearings to resist uplift forces, should be provided.</p> <p>See further Standardisation Guide No. 9, Preparation of Standards for Legislative Adoption (SG-009).</p>	<p>requirements here are expressed in the text</p> <p>recommendations are presented using "should"</p>
--	--

26 Examples

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MANDATORY

26.1 Purpose or rationale

Examples illustrate concepts presented in the document. The document shall be usable without the examples.

26.2 Title

Examples do not need to have a title, but they can, if necessary, be grouped into a clause or subclause entitled “Examples” or “Examples”. See examples in Clause 26.6.

26.3 Numbering and subdivision

Within a given clause or subclause, examples shall be numbered sequentially. The numbering restarts at each new subdivision. A single example in a subdivision need not be numbered.

26.4 Referencing

Examples need not be specifically referred to in the text.

If examples are referred to, use for example, the following forms for references:

<p>“see Clause 6.6.3 Example 5”;</p> <p>“Clause 4 Example 2 lists ...”.</p>

See 16 Terms and definitions for the use of examples in definitions.

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26.5 Specific principles and rules

Examples shall not contain requirements (use of “shall”) or any information considered indispensable for the use of the document, for example instructions (imperative mood), recommendations (use of “should”) or permission (use of “may”). Examples should be written as a statement of fact.

26.6 Examples

EXAMPLE 1

The generic model can be applicable to other possible manufacturing operations categories or for other operations areas within the enterprise.

EXAMPLE A company could apply the model to receiving operations management and associated services.

EXAMPLE 2

In national implementation of International Standards, the international designation shall be used without change. However, the national standard identification may be inserted between the Description block and the International Standard number block.

EXAMPLE If the international designation of a screw is:

Slotted pan screw ISO 1580-M5 × 20-4,8

its national designation can be:

Slotted pan screw VN 4183-ISO 1580-M5 × 20-4,8

if VN 4183 is the identification of the national standard corresponding to ISO 1580 which has been adopted without change.

27 Footnotes

SG-006
MANDATORY

27.1 Purpose or rationale

Footnotes are not used in the body of a document but may be used with figures and tables. Any text that could be in a footnote is set as a note under the relevant text in the document and written as a statement of fact.

This Section applies to footnotes to text only, not footnotes to tables or figures.

Footnotes to text only appear in legacy content. Standards drafted in the Simplified Drafting Template do not use footnotes to text.

For rules on footnotes to figures, see Clause 29.5.5.

For rules on footnotes to tables, see Clause 30.5.2.

28 Mathematical formulae

28.1 Purpose or rationale

A mathematical formula uses symbols to express the relationship between quantities.



This is the first formula in Section 9 of the document.

$t_i = \sqrt{\frac{S_{ME,i}}{S_{MR,i}}}$	9.1
--	-----

(c) Clause-based numbering uses the number of the clause in which it is located. Where more than one formula appears in a clause, (A), (B), (C) etc. shall be used to identify each subsequent formula. No other form of identification shall be used.

<p>EXAMPLE 3</p> <p>These two formulae appear in Clause 2.8 of the document:</p> $x^2 + y^2 < z^2$ $V = \frac{l}{t}$	2.8(A)
	2.8(B)

When mathematical formulae in Appendices are numbered, the numbering restarts and is preceded by the Appendix letter. See Example 4. Other than the prefix letter(s), the same numbering schema shall be used in the Appendix as in the body of the document.

<p>EXAMPLE 4</p> $x^2 + y^2 < z^2$	A.1
---	-----

28.4 Referencing

If a formula is numbered, it should be referred to in the text. The purpose of a formula should be made clear by its context, for example, with an introductory proposition.

Use, for example, the following forms for references to mathematical formulae/equations:

- (a) Where clause-based numbering is used:

See Equation 13(A).

- (b) Where simple numbering or section then simple numbering is used:

- (i) See Clause 15 Equation 3.
- (ii) See Clause 15.3 Equation 15.1.

SG-006
MANDATORY

28.5 Specific principles and rules

Mathematical formulae shall be expressed in mathematically correct form.

The variables shall be represented by letter symbols. The meanings of the symbols shall be explained in connection with the mathematical formulae, unless they appear in a “Symbols and abbreviated terms” clause. The meanings may be set out in a Table as in Example 1 or as a sentence as in Example 2.

EXAMPLE 1

$$V = \frac{l}{t}$$

where

V = the speed of a point in uniform motion

l = the distance travelled

t = the duration

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MANDATORY

However, the same symbol shall never be used within a document both for a quantity and for its corresponding numerical value. For example, use of the formula in Example 1 and of the formula in Example 2 in the same context would imply that $1 = 3.6$ which obviously is not true.

If, exceptionally, a formula between numerical values is used, the style shown in Example 2 shall be followed.

EXAMPLE 2

$$V = 3.6 \times \frac{l}{t}$$

where

V is the numerical value of the speed, expressed in kilometres per hour (km/h), of a point in uniform motion;

l is the numerical value of the distance travelled, expressed in metres (m);

t is the numerical value of the duration, expressed in seconds (s).

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Descriptive terms or names of quantities shall not be arranged in the form of a mathematical formula. Names of quantities or multiletter abbreviated terms, for example presented in italics or with subscripts, shall not be used in the place of symbols.

<p>EXAMPLE 3</p> <p>Correct:</p> $t_i = \sqrt{\frac{S_{ME,i}}{S_{MR,i}}}$ <p>where</p> <p>t_i = the statistical value for the system i</p> <p>$S_{ME,i}$ = the residual mean square for the system i</p> <p>$S_{MR,i}$ = the mean square due to regression for the system i</p>	<p>Incorrect:</p> $t_i = \sqrt{\frac{MSE_i}{MSR_i}}$ <p>where</p> <p>t_i is the statistical value for the system i;</p> <p>MSE_i is the residual mean square for the system i;</p> <p>MSR_i is the mean square due to regression for the system i.</p>
---	--

<p>EXAMPLE 4</p> <p>Correct:</p> $\rho = \frac{m}{V}$	<p>Incorrect:</p> $density = \frac{mass}{volume}$
---	---

<p>EXAMPLE 5</p> <p>Correct:</p> $\dim(E) = \dim(F) \cdot \dim(l)$ <p>where</p> <p>E = energy</p> <p>F = force</p> <p>l = length</p>	<p>Incorrect:</p> $\dim(\text{energy}) = \dim(\text{force}) \cdot \dim(\text{length})$ <p>or</p> $\dim(\text{energy}) = \dim(\text{force}) \cdot \dim(\text{length})$
---	---

The same symbol should not be used to represent different quantities within the same document. Subscripts can be useful to distinguish symbols for related concepts. Where possible, having more than one level of subscripts should be avoided. Use subscripts on the same line separated by a comma or full point without spaces either side.

Unit symbols shall not be used within mathematical formulae.

Where brackets within brackets are required in formulae, the normal order of use is $\{ () \}$.

Further examples are presented in Appendix B.

29 Figures

29.1 Purpose or rationale

Figures are a graphical means of representation used when they are the most efficient means of presenting information in an easily comprehensible form.

Photographs and other media may be used if it is not possible to represent the concept as a line drawing.

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MANDATORY

29.2 Title

All figures shall have a concise figure title.

Figures titled “typical” show one method of conforming to the requirements set by the clause(s) that refer to them. Other arrangements are not precluded, provided they conform to the referring clause(s). “Typical” figures do not necessarily illustrate all requirements that may apply.

29.3 Numbering and subdivision

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MANDATORY

29.3.1 Figure designation

All Figures shall be numbered. There are three possible numbering schemas which may be used:

- (a) Simple numbering.
- (b) Section prefix simple numbering.
- (c) Clause-based numbering.

Use (A), (B), (C) etc. when applying clause-based numbering to figures, tables and equations to signify multiple elements in a clause.

NOTE Further subdivision is discouraged and separate figures for each element/component part is recommended.

In appendices, the figure numbering restarts, and the number is preceded by the Appendix letter (e.g. Figure A.1, etc.).

When a figure is continued over several pages, repeat the figure designation followed by “(1 of #)”, where # is the total number of parts into which the figure is split, followed by the figure title.

EXAMPLE

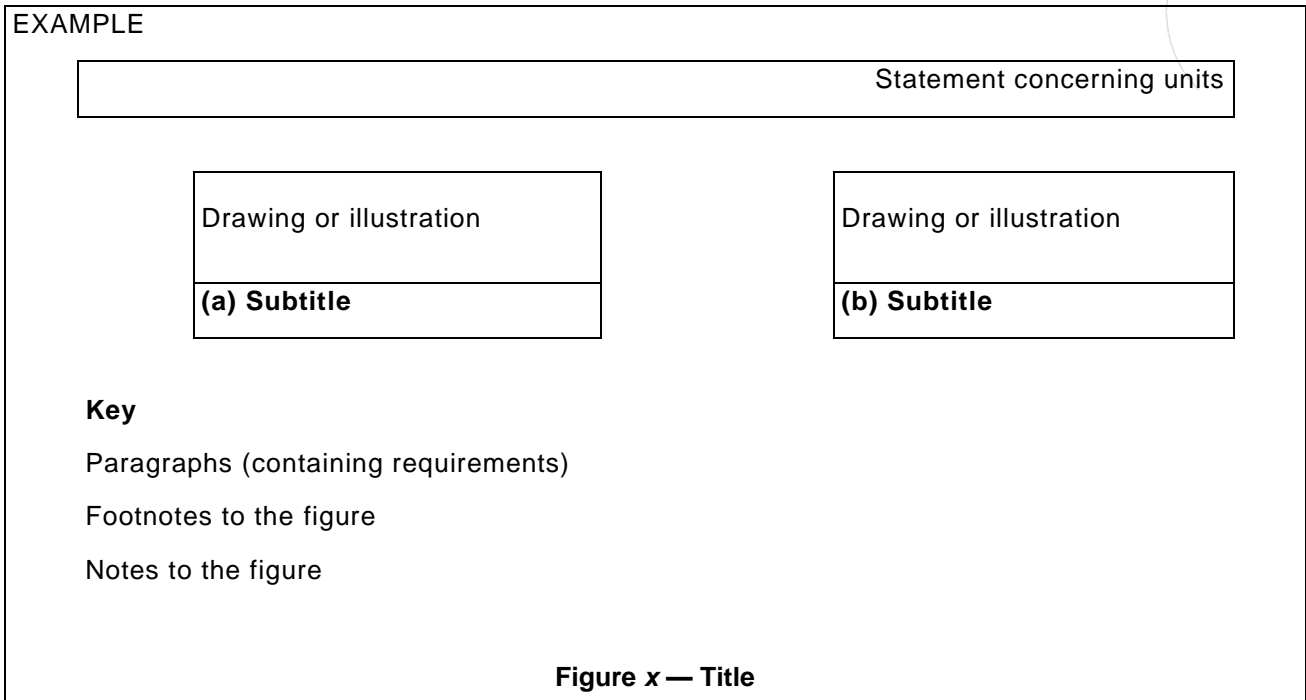
Figure X (1 of #)

29.3.2 Subfigures

In general, the use of subfigures should be avoided as it complicates document layout and management.

Only one level of subdivision of a figure is permitted. Subfigures shall be identified by a lower case letter [for example Figure 1 may comprise subfigures (a), (b), (c), etc.]. Other forms of identification of the subfigures such as 1.1, 1.2, ..., 1-1, 1-2, ..., etc. shall not be used.

Separate keys for sub-figures are not permitted.



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MANDATORY

29.4 Referencing

Each figure shall be explicitly referred to within the text.

Use, for example, the following forms for references to figures and subfigures:

EXAMPLES	
shall be ..., as shown in Figure 8.	normative reference
“Figure 3 illustrates...”;	informative reference
“See Figure 6 (b)”.	informative reference
A typical example is shown in Figure 3.2.	informative reference

Cross-references within a figure to clauses in the document should be avoided wherever possible.

Notes are not permitted within a figure. All notes shall appear below the figure.

29.5 Specific principles and rules

29.5.1 Standards used in the creation of graphical content

The following standards provide information regarding the creation of graphical content.

Subject	Standard	Title
General	AS 1100.101	<i>Technical drawing, Part 101: General principles</i>
	AS 1100.201	<i>Technical drawing, Part 201: Mechanical engineering drawing</i>

Subject	Standard	Title
	AS 1100.301	<i>Technical drawing, Part 301: Architectural drawing</i>
	AS 1100.401	<i>Technical drawing, Part 401: Engineering survey and engineering survey design drawing</i>
	AS/NZS 1100.501	<i>Technical drawing, Part 501: Structural engineering drawing</i>
	IEC 61082-1	<i>Preparation of documents used in electrotechnology — Part 1: Rules</i>
Graphical symbols	IEC 62648	<i>Graphical symbols for use on equipment — Guidelines for the inclusion of graphical symbols in IEC publications</i>
	IEC 80416-1	<i>Basic principles for graphical symbols for use on equipment — Part 1: Creation of graphical symbols for registration</i>
	ISO/IEC 81714-1	<i>Design of graphical symbols for use in the technical documentation of products — Part 1: Basic rules</i>
Line types	AS ISO 128.20	<i>Technical drawings — General principles of presentation — Part 20: Basic conventions for lines</i>
	AS ISO 128.21	<i>Technical drawings — General principles of presentation, Part 21: Preparation of lines by CAD systems</i>
	AS ISO 128.22	<i>Technical drawings — General principles of presentation, Part 22: Basic conventions and applications for leader lines and reference lines</i>
	AS ISO 128.23	<i>Technical drawings — General principles of presentation, Part 23: Lines on construction drawings</i>
	AS ISO 128.24	<i>Technical drawings — General principles of presentation, Part 24: Lines on mechanical engineering drawings</i>
	AS ISO 128.25	<i>Technical drawings — General principles of presentation, Part 25: Lines on shipbuilding drawings</i>
Dimensioning	ISO 129 (all parts)	<i>Technical drawings — Indication of dimensions and tolerances</i>
Dimensional and geometrical product specifications	ISO 1101	<i>Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out</i>
Projection	ISO 128-30	<i>Technical drawings — General principles of presentation — Part 30: Basic conventions for views</i>

Subject	Standard	Title
Flowcharts and organigrams	ISO 5807	<i>Information processing — Documentation symbols and conventions for data, program and system flowcharts, program network charts and system resources charts</i>

29.5.2 Choice of letter symbols, style of lettering

Letter symbols used in figures to represent general cases of angular or linear quantities shall be in accordance with ISO 80000-3. Subscripts can be used where necessary to distinguish between different applications of a given symbol.

For a series of symbols indicating various lengths on a drawing use l1, l2, l3, etc. and not, for instance, A, B, C, etc. or a, b, c, etc. The main symbols used in drawings from ISO 80000-3 are given in Table 10 below.

Table 10 — Main symbols used in drawings from ISO 80000-3

Name	Symbols
Length	<i>l, L</i>
Breadth	<i>b, B</i>
Height	<i>h, H</i>
Thickness	<i>d, δ</i>
Radius	<i>r, R</i>
Radial distance	<i>r_Q, ρ</i>
Diameter	<i>d, D</i>
Length of path	<i>s</i>
Distance	<i>d, r</i>
Cartesian coordinates	<i>x, y, z</i>
Position vector	<i>r</i>
Displacement	<i>Δr</i>
Radius of curvature	<i>ρ</i>

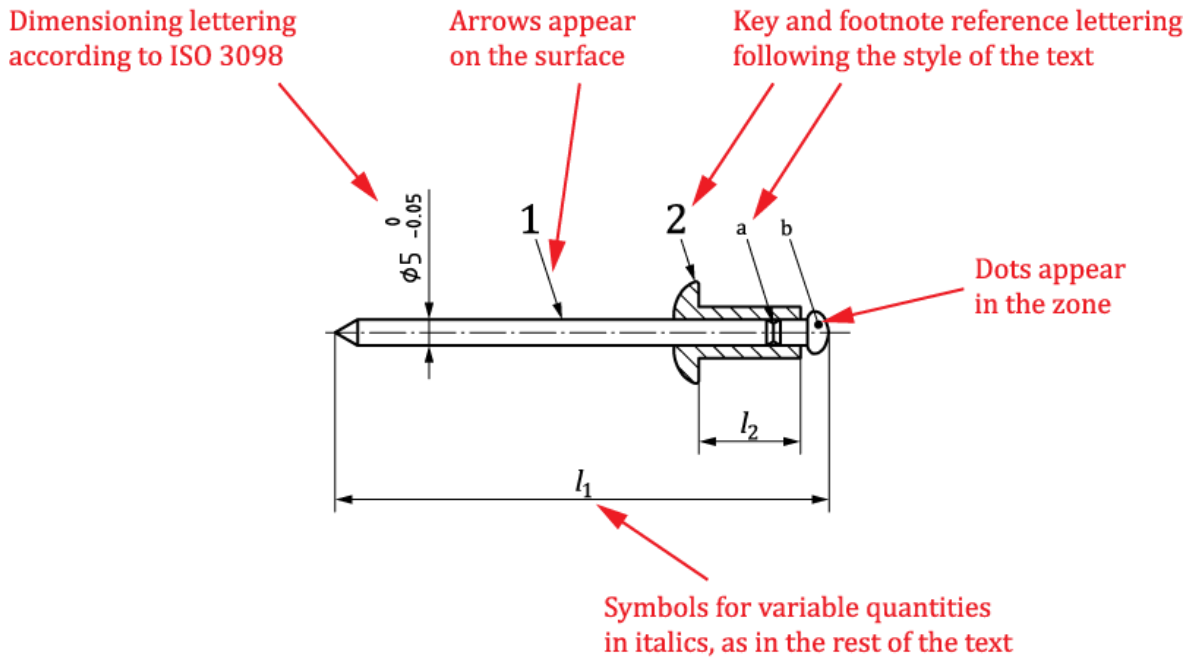
Lettering on technical product documentation shall be in accordance with the ISO 3098 series. Italic letters shall be used for variable quantities.

The vertical (upright) style shall be used for all other lettering.

When all units for a quantity are the same, a suitable statement (e.g. “Dimensions in millimetres”) shall be placed above the right-hand corner of the figure.

See Figure 4 for an example of these elements and the order in which the other related information shall be listed.

Dimensions in millimetres



l_1	l_2
50	10.5
70	15
90	19

Key

- 1 mandrel shank
- 2 blind rivet head

The mandrel shall be designed such that the blind rivet end deforms during installation, and the shank can expand.

- a The break area shall be milled.
- b The mandrel head is commonly chromium plated.

NOTE Figure # illustrates a type A rivet head.

Figure 4 — Example illustrating the elements of a figure

29.5.3 Key and labels to figures

Labels in figures shall not contain requirements that are not otherwise stated in the text of the document.

NOTE 1 Normative content may be repeated in Figures which serves as an example or to assist comprehension of a Figure.

Any text in a Figure shall be consistent with the language used in the text of the document.

Labels within the Figure may be included in English.

NOTE 2 For ISO and IEC, Figures are created in a way that is language neutral in order to facilitate translation. They use key references or figure footnotes (see Figure 5) instead of textual descriptions (in accordance with ISO 6433).

SG-006 MANDATORY In graphs, labelling on the axes shall not be replaced by key references to avoid any possible confusion between the number representing a key reference and a number representing a value on the axis. Labelling of curves, lines, etc. on the graph shall be replaced by key references.

In flowcharts and organigrams, the use of textual descriptions is permitted (see Clause 28.6.4).

29.5.4 Notes to figures

A single note to a figure shall be preceded by “NOTE”, placed at the beginning of the first line of the text of the note. See Figure 5. When several notes occur in the same figure, they shall be designated “NOTE 1”, “NOTE 2”, “NOTE 3”, etc. The numbering restarts for each new figure.

SG-006 MANDATORY Notes to figures shall not contain requirements or any information considered indispensable for the use of the document. Notes to figures need not be referred to.

Any requirements relating to the content of a figure shall be given in the text, in a footnote to the figure or as a paragraph between the figure and its title.

29.5.5 Footnotes to figures

Footnotes to figures are numbered independently from footnotes to the text.

SG-006 MANDATORY Footnotes to figures shall be distinguished by superscript lower case letters, starting with “a”. The footnotes shall be referred to in the figure by inserting the same superscript lower case letter. See Figure 5.

Footnotes to figures may contain requirements.

29.6 Types of figures

29.6.1 Mechanical engineering drawings

Mechanical engineering drawings shall be prepared in accordance with relevant ISO standards (listed in 29.5.1). Different views, details and sections of a component or multicomponent object shall be presented in conformity with ISO 128-30, ISO 128-34, ISO 128-40 and ISO 128-44. Different views, details and sections of a component or multicomponent object shall not be presented as subfigures.

See Figure 5.

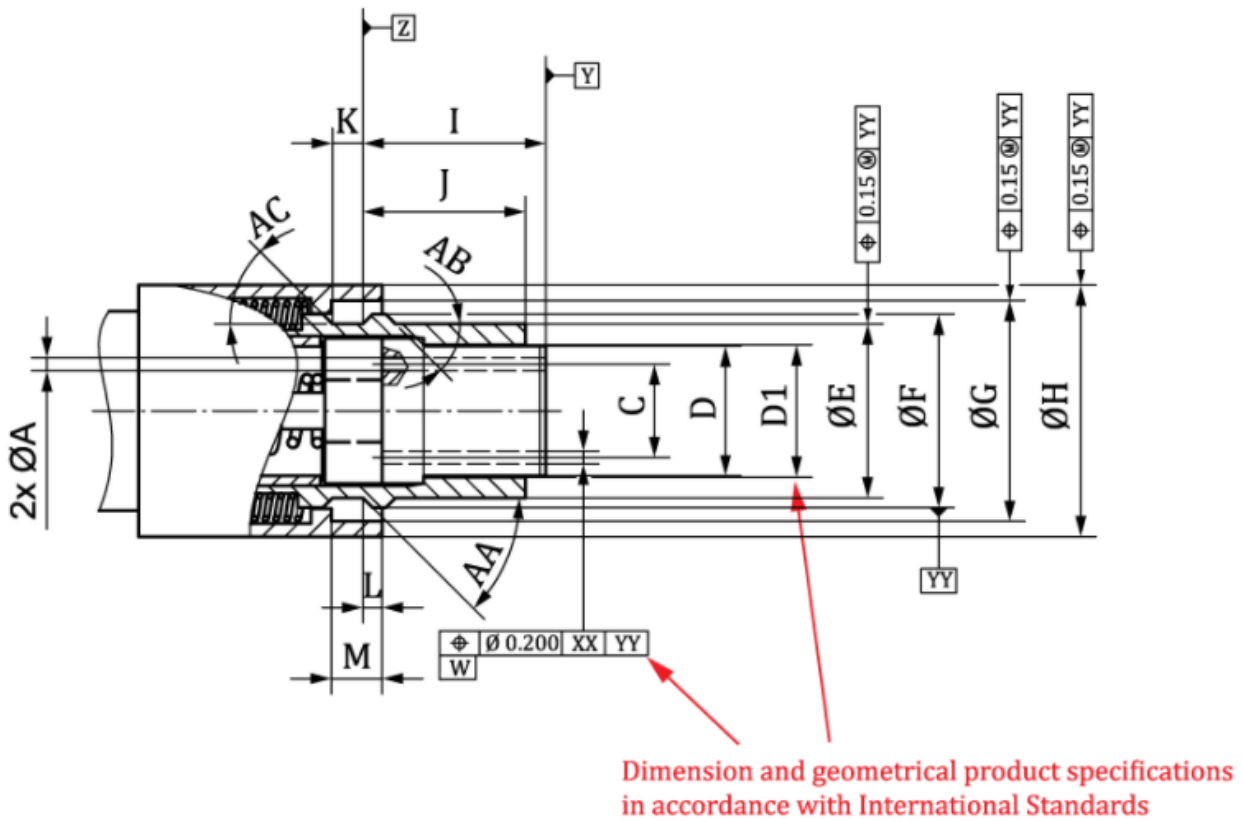


Figure 5 — Example of a mechanical engineering drawing

29.6.2 Graphical symbols

Graphical symbols for use on equipment shall be in accordance with IEC 60417 and ISO 7000. Public information symbols shall be in accordance with ISO 7001. Safety signs shall be in accordance with ISO 7010.

For purposes of consistency and coherence, IEC TC 3, IEC SC 3C and ISO/TC 145 are responsible for the standardization of graphical symbols and safety signs. If an adequate symbol or safety sign does not exist in the IEC and ISO databases, contact IEC TC 3, IEC SC 3C and ISO/TC 145 in order to register a standardized symbol.

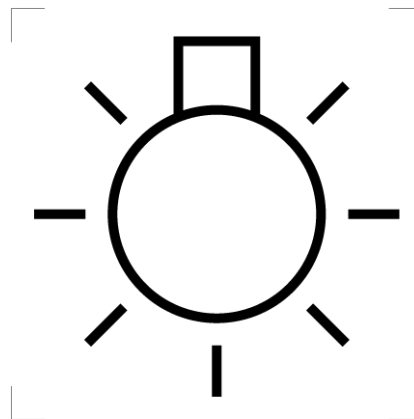
Table 11 gives an overview of the categories of graphical symbol.

Table 11 — Categories of graphical symbol

Category of graphical symbol	Basic message	Location	Design principles	Overview
Public information symbols	Location of service or facility	In public areas	ISO 22727	ISO 7001
Safety signs (symbols)	Related to safety and health of persons	In workplaces and public areas	ISO 3864-1 ISO 3864-3	ISO 7010

Category of graphical symbol	Basic message	Location	Design principles	Overview
Product safety labels	Related to safety and health of persons	On products	ISO 3864-2 ISO 3864-3	-
Graphical symbols for use on equipment	Related to equipment	On equipment	IEC 80416-1 ISO 80416-2 IEC 80416-3	ISO 7000 IEC 60417
Technical product documentation symbols	(Product representation)	Technical product documentation (drawings, diagrams, etc.)	ISO 81714-1	ISO 14617 IEC 60617

See Figure 6.

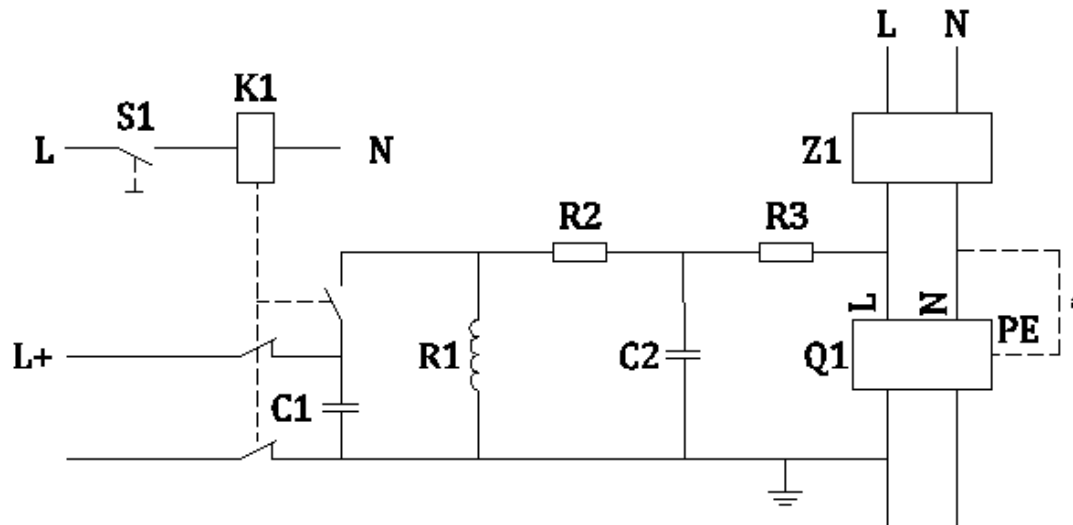


IEC 60417-5012

Figure 6 — Example of a graphical symbol

29.6.3 Circuit diagrams and connection diagrams

Diagrams, such as circuit diagrams and connection diagrams, for example for test circuits, shall be prepared in accordance with IEC 61082-1. Graphical symbols used in schematic diagrams shall be in accordance with IEC 60617 and ISO 14617. Reference designations shall be in accordance with IEC 81346. Signal designations shall be in accordance with IEC 61175. See Figure 7.



Key

Components

- C1 capacitor $C = 0.5 \mu\text{F}$
- C2 capacitor $C = 0,5 \text{ nF}$
- K1 relay
- Q1 RCCB under test (with terminals L, N and PE)
- R1 inductor $L = 0.5 \mu\text{H}$
- R2 resistor $R = 2.5 \Omega$
- R3 resistor $R = 25 \Omega$
- S1 manual control switch
- Z1 filter
- a Connection to be made if the tested object has a terminal for PE.

Connections and supplies

- L, N supply voltage with neutral
- L+, L- DC supply voltage for the test circuit

Figure 7 — Example of a circuit diagram

29.6.4 Flowcharts

Flowcharts shall be prepared in accordance with ISO 5807. See Figure 8.

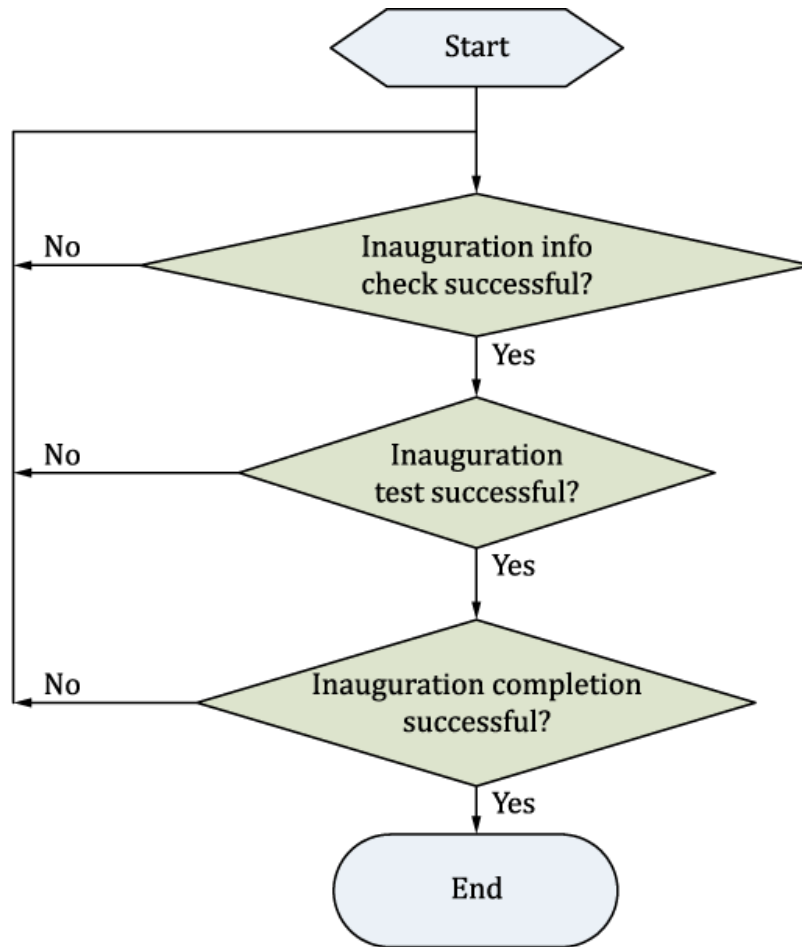


Figure 8 — Example of a flowchart

30 Tables

30.1 Purpose or rationale

Tables are used when they are the most efficient means of presenting information in an easily comprehensible form.

30.2 Title

Tables should have a concise Table title.

30.3 Numbering and subdivision

Tables should be numbered. There are three possible numbering schemas which may be used:

- (a) Simple numbering.
- (b) Section prefix simple numbering.
- (c) Clause-based numbering.

Use (A), (B), (C) etc. when applying clause-based numbering to figures, tables and equations to signify multiple elements in a clause.

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Further subdivision [e.g. Table 1(a)] is not permitted. A table within a table is not permitted. Subdivision of a table into subsidiary sections with new column headings is not permitted.

It is often better to create several tables rather than trying to consolidate too much information into one table. The simpler the presentation, the better.

If a very complex table is necessary, it can be better to include it as a software supplement to the document.

In Appendices, the table numbering restarts, and the number is preceded by the Appendix letter (e.g. Table A.1, etc.).

When a table is continued over several pages, it can be useful to indicate the continuation.

The column headings together with any statement concerning units can be repeated on all pages after the first.

30.4 Referencing

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MANDATORY

Each table shall be explicitly referred to within the text.

Use, for example, the following forms for references to tables or items within Tables:

EXAMPLES	
“Table 3 lists...”;	informative reference
“See Table B.1”.	informative reference
... shall be in accordance with Table 3.	normative reference
shall conform to Table 20 Item 1.	normative reference
shall be limited as per Table 20 Item 3.	normative reference

30.5 Specific principles and rules

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MANDATORY

30.5.1 Notes to tables

Notes to tables are general and apply to the entire table. Use footnotes for information that is specific to a cell or a range of cells. Notes to tables shall be located within the frame of the relevant table and shall not precede table footnotes. A single note in a table shall be preceded by “NOTE”, placed at the beginning of the first line of the text of the note. When several notes occur in the same table, they shall be designated “NOTE 1”, “NOTE 2”, “NOTE 3”, etc. The numbering restarts for each new table. Each note shall be in a separate row.

Notes to tables shall not contain requirements or any information considered indispensable for the use of the document. Any requirements relating to the content of a table shall be given in the text, in a footnote to the table or as a paragraph within the table. Notes to tables need not be referred to.

30.5.2 Footnotes to tables

Footnotes to tables are numbered sequentially. They shall be located in the first row at the end of the table and each subsequent footnote shall be in a separate row.

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Footnotes to tables shall be distinguished by superscript lower case letters, starting with “a”. The footnotes shall be referred to in the table by inserting the same superscript lower case letter.

Footnotes to tables may contain requirements.

30.5.3 Keys to tables

In tables, it is sometimes necessary to abbreviate words or references in order to save space or to improve readability. The meaning of such abbreviated terms shall be explained in a key. See Table 12.

Table 12 — Example of a table with a key

Data object name	Common data class	Explanation	T	M/O/C
LNName		The name shall be composed of the class name, the LN-Prefix and LN-Instance-ID according to IEC 61850-7-2:2010, Clause 22.		
Data objects				
Status information				
Op	ACT	Level of action required	T	M
Settings				
StrVal	ASG	Start level set-point		C
OpDITmms	ING	Operate delay time [ms]		O
Key				
T = Transient data objects				
M/O/C = The data object is mandatory (M) or optional (O), or conditional (C).				

30.6 Examples

EXAMPLE 1

The layout of the different elements that can appear in a table and their order of appearance.

Type	Length	Dimensions in millimetres	
		Inside diameter	Outside diameter
	l_1^a	d_1	
	l_2	$d_2^{b,c}$	
A paragraph containing a requirement. ^a Table footnote. ^b Table footnote. ^c Table footnote. NOTE 1 Table note. NOTE 2 Table note.			

EXAMPLE 2

When there are several different units.

Type	Linear density Kg/m	Inside diameter mm	Outside diameter mm

EXAMPLE 3

When all the units are the same.

Dimensions in millimetres			
Type	Length	Inside diameter	Outside diameter

EXAMPLE 4

Correct and incorrect table headers. Table cells shall not be split diagonally.

Correct:

Dimension	Type		
	A	B	C

Incorrect:

Type	A	B	C
Dimension			

31 Commentaries

31.1 Purpose or rationale

Commentaries are a means of providing additional guidance. The document shall be useable without the commentaries.

31.2 Title

Commentaries do not have a title as the commentary is relevant to the **section, clause or appendix** in which it is located.

All Commentaries shall be numbered, starting with a C then followed by the number of the clause in which it is located.

The text of the Commentary shall start with the word "Commentary".

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31.3 Numbering and subdivision

All Commentary texts shall be numbered starting with a C then using the number of the clause to which they relate.

31.4 Referencing

Commentaries need not be specifically referred to in the text.

If Commentaries are referred to, use for example, the following form for references:

see Commentary C6.6.3

31.5 Specific principles and rules

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MANDATORY

Commentaries shall not contain requirements (use of "shall") or any information considered indispensable for the use of the document, for example instructions (imperative mood). They may contain Figures and Tables.

Commentaries normally appear after the clause to which they relate, but may also appear before the first numbered clause of a Section if they apply to the whole Section.

When Commentaries are included in a document, add text to the Preface as indicated in Clause 12.5.

Policy

POLICY
MANDATORY

32 Patent rights

For patented items, the rules given in Standardisation Guide No. 3, [Standards and Other Publications \(SG-003\)](#) and the ISO/IEC Directives, Part 1, shall be followed.

Where patent rights have been identified during the preparation of the document, they shall be included in the introduction.

POLICY
MANDATORY

33 Copyright

Copyright in documents is governed by Standardisation Guide No. 1, [Preparing Standards \(SG-001\)](#).

Documents may require references to and acknowledgment of copyright material. Copyright references may be informative (see EXAMPLE) or normative.

EXAMPLE

In the following case, the reference is informative because the source Standard is only the vehicle for the requirement and the Standard itself is never referenced normatively in the document.

This clause has been reproduced and modified with permission granted by BSI Standards Limited.

Isolation kennels shall be used to prevent spread of infectious diseases. Periods of isolation should be approved by a veterinarian. Isolation kennels with separate areas and cleaning equipment shall be provided when required.

NOTE: An isolation kennel may be at a separate location to the facility where the dog is normally housed.
[SOURCE: BS 8517-1:2016 Clause 5, modified.]

POLICY
MANDATORY

34 Aspects of conformity assessment

34.1 Documents containing requirements for products, processes, services, persons, systems and bodies

All documents containing requirements for products, processes, services, persons, systems and bodies shall be written in accordance with the “neutrality principle”, such that conformity can be assessed by a manufacturer or supplier (first party), a user or purchaser (second party), or an independent body (third party).

NOTE 1 First-party, second-party and third-party conformity assessment activities are defined in ISO/IEC 17000.

NOTE 2 The term “document” is defined in 3.1.3.

Such documents shall not include requirements related to conformity assessment other than requirements which are necessary to provide repeatable and reproducible conformity assessment results.

For performance-based requirements in standards, the following elements shall be identified and addressed:

- (a) Specified performance measure: Once the objectives of the standard have been established, the quantifiable performance measure associated with these objectives needs to be defined.

- (b) Test method(s): Used to provide the means of verification whether the product has passed or failed the performance based requirements.
- (c) Acceptance criteria: Whether the results of the initial assessment of the production process and initial testing meet the specified requirements.

Where a committee agrees that testing provisions and associated sampling are to be included, the committee should take into account Clause 18, and can set out its product conformity acceptance criteria in a manner that follows the example given in Appendix D.

There may be some exceptional situations where there is a preference to include conformity assessment requirements within a product standard. Standardisation Guide No. 9, [Preparation of Standards for Legislative Adoption \(SG-009\)](#) provides further guidance on standards writing for use in regulation.

Committees wishing to specify additional conformity assessment requirements for the product, process, service, persons, systems or bodies may only do so in a separate document or in a separate part of the series provided that the separate parts can be applied independently. Prior to commencing work on a separate document or separate part, a committee shall seek the approval of the Standards Development and Accreditation Committee (SDAC).

No document containing requirements for products, processes, services, persons, systems and bodies shall make conformity dependent on a quality management system standard, (e.g., it shall not make normative reference to AS/NZS ISO 9001).

34.2 Conformity assessment schemes and systems

Committees shall not develop documents providing general requirements for conformity assessment schemes and systems. Development of such documents is the responsibility of the ISO policy committee ISO/CASCO in liaison with the IEC Conformity Assessment Board (IEC/CAB).

Committees wishing —

- (a) to propose the establishment of a conformity assessment scheme or system; or
- (b) to prepare documents specifying conformity assessment systems or schemes or sector-specific operating procedures for use by conformity assessment bodies and others for conformity assessment purposes,

shall consult with the Standards Development and Accreditation Committee (SDAC) or the secretariat of ISO/CASCO or IEC/CAB or both as appropriate, prior to commencement of the work to ensure that any documents developed are in line with the conformity assessment policies and rules approved by ISO/CASCO and IEC/CAB as relevant.

34.3 References to ISO/IEC conformity assessment documents

When a committee develops a document relating to conformity assessment systems or schemes, or any other document addressing conformity assessment aspects, the document shall make normative reference to the relevant published ISO/IEC documents for conformity assessment procedures, including AS ISO/IEC 17000 and AS ISO/IEC 17025. The committee may include verbatim text from the ISO/IEC documents for conformity assessment procedures but the committee shall not delete, change or interpret them. Committees shall consult with the Standards Development and Accreditation Committee (SDAC), ISO/CASCO or the IEC/CAB secretary or both, as appropriate, for advice on correctly referencing the ISO/IEC conformity assessment documents. Any request for addition, deletion, change or interpretation shall be submitted to the SDAC or the secretariats of ISO/CASCO and IEC/CAB for decision.

POLICY
MANDATORY

35 Assignment of roles and responsibilities

The person or organisation that is implementing a document is responsible for ensuring the requirements in the document are fulfilled. Requirements should not assign an action to a specific party, i.e. a requirement should state what, but not who.

EXAMPLE

Incorrect: “The mine supervisor shall keep accurate records of all stages of the remote control mining equipment’s life cycle.”

Correct: “Accurate records shall be kept of all stages of the remote control mining equipment’s life cycle.”

[AS/NZS 4240.3:2013]

Any request to assign an action to a specific party requires approval from the Standards Australia Production Management Group (PMG).

NOTE 1 Roles and responsibilities are acceptable within informative statements.

Requirements that set out responsibilities for specific roles may be included if the following conditions are met:

- (a) there is a documented justification that the inclusion of responsibilities for specific roles is necessary for the management of adverse risks to health and safety, property or the environment, including a description of possible outcomes if the responsibilities for the specific roles are not specified;
- (b) the responsibilities are clearly articulated in mandatory statements (i.e. ‘shall’);
- (c) the specific roles are clearly identified, including the specific knowledge and skills that the person holding the specific role must demonstrate;

NOTE 2 A list of the areas of knowledge that the person undertaking a specific role shall have, as well as the types of skills that person shall demonstrate to show the correct application of their knowledge in practice. Reference may be made to Units of Competence recognised in the Australian Government’s [National Register on Vocational Education and Training](#) (VET). Reference to specific credentials, qualifications or years of experience should be avoided as persons may be competent in a specific role based on their demonstrated knowledge and skill even though they do not have formal qualifications or a prescribed number of years of work experience.

- (d) there is demonstrated support from the leadership of each relevant Nominating Organisation;
- (e) where the document is referenced in legislation, or is expected to be referenced in legislation, support from policy leaders of all relevant regulatory agencies, across all jurisdictions is demonstrated;
- (f) there is demonstrated support from any parties involved in the transition but which are not directly involved in the drafting of the Standard;
- (g) where a new role and responsibility is introduced into a new edition of the Standard, a detailed plan of the arrangements to transition to a new edition is required, e.g. whether contracts and regulations need to be updated to incorporate reference to the responsibilities for specific roles;
- (h) the Standards Australia PMG approves the inclusion of requirements for responsibilities for specific roles.



NOTE 3 Approval from PMG is required for each edition of a Standard to ensure all stakeholders are in agreement and the conditions are still being met. A submission for approval may be submitted at the time of proposal approval, or as soon as practical.

Notwithstanding the above conditions, the PMG may refer matters associated with responsibilities for specific roles in documents to the Standards Development and Accreditation Committee (SDAC) for consideration.

36 Aspects of quality management systems, reliability and sampling

POLICY
MANDATORY

General aspects are dealt with by ISO/TC 69 Applications of statistical methods, ISO/TC 176 Quality management and quality assurance and IEC TC 56 Dependability. Documents developed by those technical committees shall be consulted for guidance.

POLICY
MANDATORY

37 Management standards (MS) and management systems standards (MSS)

Guidance for the drafting of management standards and management systems standards (including sector-specific standards) are given in Annex SL of the ISO Supplement to the ISO/IEC Directives, Part 1. Specific note should be taken of Appendix 2 of Annex SL, which provides a harmonised structure for the development of MSS.

POLICY
MANDATORY

38 Use of trade names and trademarks

A correct designation or description of a product shall be given rather than a trade name or trademark.

Proprietary trade names or trademarks for a particular product should as far as possible be avoided, even if they are in common use.

If, exceptionally, trade names or trademarks cannot be avoided, their nature shall be indicated, for example by the symbol ® for a registered trademark (see Example 1) and by the symbol ™ for a trademark.

EXAMPLE 1

Instead of “Teflon™”, write “polytetrafluoroethylene (PTFE)”.

NOTE Trademarks have to be registered in each country and so trademark searches would be required to determine whether they are in fact registered. Use the general trademark TM symbol rather than the registered ® symbol for any other trademarked entity except for Standards Australia.

POLICY
MANDATORY

If it is known that only one product is currently available that is suitable for the successful application of the document, the trade name or trademark of the product may be given in the text of the document but shall be associated with a footnote as shown in Example 2.

EXAMPLE 2

... [trade name or trademark of product] ... is the [trade name or trademark] of a product supplied by ... [supplier] This information is given for the convenience of users of this document and does not constitute an endorsement by ... [Standards Australia, ISO or IEC] ... of the product named. Equivalent products may be used if they can be shown to lead to the same results.

POLICY
MANDATORY

If it is considered essential to give an example (or examples) of commercially available products suitable for successful application of the document because the product characteristics are difficult to describe in detail, trade names or trademarks may be given in a footnote as shown in Example 3.

EXAMPLE 3

... [trade name(s) or trademark(s) of product(s)] ... is (are) an example(s) of a suitable product(s) available commercially. This information is given for the convenience of users of this document and does not constitute an endorsement by ... [Standards Australia, ISO or IEC] ... of this (these) product(s).

Appendix A Drafting checklist

The following checklist is a tool to help writers and editors of documents.

Task	Assessment	Done	Comments
Structure	Check table of contents: (a) Is the top-level structure logical? (b) Is the subdivision consistent?		
	Hanging paragraphs: Check for and remove any hanging paragraphs.		
Use of plain language	Is the text clear and concise?		
	Are the sentences short? (Check punctuation)		
Title	Is the title organised going from the more general to the more particular?		
	Does the title unintentionally limit the scope of the document?		
	Is it as clear and concise as possible?		
	Make sure that the title does not contain more than three elements.		
	If there are several parts, are the titles aligned?		
Preface	Is the document a revision? If so, insert a revision statement including any amendments and technical corrigenda and a list of changes with respect to previous edition.		
Introduction	Is it purely informative?		
	Does it describe the content or give information on why the document is needed?		
Scope	Does it describe what the document does?		
	Does it only contain statements of fact?		
Application (where applicable)	Does it state where it is applicable?		
Normative references	Normative references clause: are all the references cited in the text actually normative?		
	Are the references dated or undated?		
	Are the references used Standards Australia, Joint Standards Australia/ Standards New Zealand, ISO and IEC standards? If not, do suitable Standards Australia, Joint Standards Australia/ Standards New Zealand, ISO and IEC standards exist which could be used instead?		

Task	Assessment	Done	Comments
	Are the normative references publicly available?		
	References cited in a normative manner in the text: are all such references listed in Clause 2?		
Terms and definitions	Are the listed used in the document?		
	Do suitable terms exist in the terminology databases? http://www.electropedia.org/ http://www.iso.org/obp		
	Are the definitions correctly drafted?		
Figures	Does each figure have a concise title?		
	Is each figure numbered correctly?		
	Is there a key if necessary?		
	Are all figures cross-referenced in the text?		
Graphical symbols	Where possible symbols should be common internationally. Are symbols used taken from the ISO and IEC databases?		
Tables	Does each table have a concise title?		
	Is each table numbered correctly?		
	Are all tables cross-referenced in the text?		
Appendices	Is there a reference to each Appendix in the main part of the text?		
	Is their status (normative or informative) correct? Is this made clear in the main part of the text?		
Bibliography	Is it formatted consistently?		
	Are all the entries correct and complete?		
	Are any of them normative references that should be listed in Clause 2?		
	Are any of the listed documents duplicated in Clause 2? NOTE When removing one of the duplicates, the normative reference is the primary reference and is to be kept.		
Drafting of provisions	Make sure that “shall”, “should” or “may” are not used in the Preface, Scope. Shall is not used in Notes.		
	Make sure that “shall”, is not used in the Introduction.		
	Are “may” and “can” used correctly?		

Task	Assessment	Done	Comments
	Is “must” used anywhere in the document? Is “must” used correctly to mean external constraints? NOTE External constraints as in, called into legislation. For example, 'must' is only used in our suite of contracts.		
	Make sure that no requirements specifying compliance with national/legal regulations are included.		
Potential legal problems	Copyrights		
	Trademarks		
	Patents		
Conformity assessment	Are there conformity assessment issues?		
Roles and Responsibilities	Are roles and responsibilities included?		
Cross-references	Are all cross-references correct?		
Common problems	Are symbols for variable quantities correctly formatted in the text and mathematical formulae?		
	Is a full point used as the decimal sign?		
Other issues			

Appendix B Quantities and units

Appendix B includes provisions that are specified elsewhere in this Guide, or in the particular standards dealing with quantities and units.

Aspect to be considered	Explanations and examples
Decimal sign	The decimal sign shall be a decimal point.
Permitted units	<p>Documents shall only use:</p> <ul style="list-style-type: none"> (a) SI units, as given in the various parts of ISO 80000 and IEC 80000. (b) A few additional units used with the SI, namely minute (min), hour (h), day (d), degree (°), minute (′), second (″), litre (L), tonne (t), electronvolt (eV) and unified atomic mass unit (u), as shown in ISO 80000-1. (c) The units neper (Np) and bel (B), which are given in ISO 80000-1 and ISO 80000-3, and octave, which is given in ISO 80000-8. (d) The units baud (Bd), bit (bit), octet (o), byte (B), erlang (E), hartley (Hart), natural unit of information (nat) and shannon (Sh), which are given in IEC 80000-13, and var (var) which is given in IEC 80000-6, for use in electrical technology and information technology. (e) The symbol “L” is used for litre (as given in ISO 80000-3).
Mixing symbols and names of units	<p>Do not mix symbols and names of units.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>EXAMPLE 1</p> <p>Correct: “kilometres per hour” and “km/h”</p> <p>Incorrect: “km per hour” and “kilometres/hour”.</p> </div>
Writing numerical values with unit symbols	<p>Use numerical values written in figures with unit symbols.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>EXAMPLE 2</p> <p>Correct: “5 m”</p> <p>Incorrect: “five m” and “5 metres”.</p> </div>
Space between numerical values and unit symbols	<p>There shall be a space between the numerical value and the unit symbol except in the case of superscript-type unit symbols used for plane angles. However, the degree should preferably be subdivided decimally.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>EXAMPLE 3</p> <p>5 mm 15 Ω 37 km/h 14 A 115° 27 °C 25 K</p> </div>



Aspect to be considered	Explanations and examples
Use of +, – and ± signs as a monadic operator	<p>When a plus, minus or a plus-minus (±) sign is used as a monadic operator there shall be no space between the sign and the number.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>EXAMPLE 4</p> <p>A Celsius temperature from –7 °C to +5 °C</p> <p>Tolerance ±5 cm on the length of the square.</p> </div>
Use of +, –, ±, =, > and < signs as dyadic operators or to express relations	<p>When signs and symbols are used as a dyadic operator or to show a relation (=, <, >), there shall be a space on both sides of the sign.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>EXAMPLE 5</p> <p>5 + 2 5 – 3 n ± 1.6 D < 2 mm > 5 mm</p> </div>
Abbreviated terms for units	<p>Do not use non-standardized abbreviated terms for units.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>EXAMPLE 6</p> <p>Correct: “s” Incorrect: “sec”</p> <p>Correct: “min” Incorrect: “mins”</p> <p>Correct: “h” Incorrect: “hrs”</p> <p>Correct: “cm³” Incorrect: “cc”</p> <p>Correct: “l” Incorrect: “lit”</p> <p>Correct: “A” Incorrect: “amps”</p> <p>Correct: “r/min” Incorrect: “rpm”</p> </div>

Aspect to be considered	Explanations and examples
Modification of internationally standardized unit symbols	<p>Internationally standardized unit symbols shall not be modified by adding subscripts or other information.</p> <div style="border: 1px solid black; padding: 5px;"> <p>EXAMPLE 7</p> <p>Correct: “$U_{\max} = 500 \text{ V}$” Incorrect: “$U = 500 V_{\max}$”</p> <p>Correct: “a mass fraction of 5 %” Incorrect: “5 % (m/m)”</p> <p>Correct: “a volume fraction of 7 %” Incorrect: “7 % (V/V)”</p> <p>Remember that % = 0.01 and ‰ = 0.001 are “pure” numbers.</p> <p>Do not mix information with unit symbols.</p> <p>EXAMPLE 8</p> <p>Correct: “the water content is 20 mL/kg” Incorrect: “20 ml H₂O/kg” or “20 ml of water/kg”.</p> </div>
Use of ambiguous terms	<p>Ambiguous terms such as “billion” shall not be used.</p>
Writing unit, quantity or variable symbols	<p>Unit symbols shall always be in upright type.</p> <p>Quantity or variable symbols shall always be in italic type.</p> <p>Symbols representing numerical values shall be different from symbols representing the corresponding quantities.</p> <div style="border: 1px solid black; padding: 5px;"> <p>EXAMPLE 9</p> <p>V is the symbol for the unit Volt. <i>U</i> is the symbol for the quantity electric tension or voltage</p> </div>
Writing subscripts	<p>A subscript that represents a quantity or a variable is printed in italic type. Other subscripts, such as those representing words or fixed numbers, are printed in upright type.</p>
Writing mathematical formulae	<p>Mathematical formulae involving quantities are preferred to formulae involving numerical values because mathematical formulae between quantities are independent of the choice of units whereas mathematical formulae between numerical values are not.</p>
Use of “weight” and “mass”	<p>The quantity “weight” is a force (gravitational force) and is measured in newtons (N).</p> <p>The quantity “mass” is measured in kilograms (kg).</p>

Aspect to be considered	Explanations and examples	
Use of the word “unit”	Quotient quantities shall not contain the word “unit” in the denominator. EXAMPLE 10 Correct: “mass per length” or “lineic mass”	Incorrect: “mass per unit length”.
Quantities describing objects	Distinguish between an object and any quantity describing the object. EXAMPLE 11 “surface” and “area” “resistor” and “resistance”	“body” and “mass” “coil” and “inductance”
Use of units when expressing ranges, tolerances or mathematical relationships	When expressing ranges, tolerances or mathematical relationships ensure that the use of the unit is unambiguous. EXAMPLE 12 Correct: “10 mm to 12 mm” Correct: “0 °C to 10 °C” Correct: “23 ± 2 °C” and “(23 ± 2) °C” Correct: “(60 ± 3) %” and “60 % ± 3 %”	Incorrect: “10 to 12 mm” and “10 – 12 mm” Incorrect: “0 to 10 °C” and “0 – 10 °C” Incorrect: “23 °C ± 2 °C” Incorrect: “60 ± 3 %”
Addition and subtraction of physical quantities	Two or more physical quantities cannot be added or subtracted unless they belong to the same category of mutually comparable quantities. EXAMPLE 13 Correct: “230 (1 ± 5 %) V” Correct: “(230 ± 11,5) V” Correct: “230 V, with a relative tolerance of ± 5 %”	Incorrect: 230 V ± 5 % Incorrect: (230 ± 5 %) V
Symbol for expressing logarithm	Do not write “log” in mathematical formulae if the base needs to be specified. Write “lg”, “ln”, “lb” or “log _α ”.	
Mathematical signs and symbols	Use the mathematical signs and symbols recommended in ISO 80000-2, for example “tan” and not “tg”.	

Aspect to be considered	Explanations and examples	
Line breaks in mathematical formulae	Line breaks in mathematical formulae and expressions shall be in accordance with ISO 80000-2. Any line break shall be after, and not before, the signs =, +, -, ± and ∓, or, if necessary, the signs ×, · or /.	
	EXAMPLE 14	
	Correct: $-\frac{\partial W}{\partial x} + \frac{d}{dt} \frac{\partial W}{\partial \dot{x}} =$ $Q \left[\left(-\mathbf{grad} V - \frac{\partial A}{\partial t} \right)_x + (\mathbf{v} \times \mathbf{rot} A)_x \right]$	Incorrect $-\frac{\partial W}{\partial x} + \frac{d}{dt} \frac{\partial W}{\partial \dot{x}} =$ $Q \left[\left(-\mathbf{grad} V - \frac{\partial A}{\partial t} \right)_x + (\mathbf{v} \times \mathbf{rot} A)_x \right]$
	Correct: 23 °C ± 2 °C	Incorrect: 23 °C ± 2 °C
Correct: 24 mm × 36 mm	Incorrect: 24 mm × 36 mm	

Appendix C Reference documents and sources for drafting

C.1 General reference documents and sources for drafting

Language reference works	<p><i>Macquarie Dictionary</i> (https://www.macquariedictionary.com.au/)</p> <p><i>Style manual for authors, editors and printers</i> (refer to https://www.stylemanual.gov.au/)</p>
Standardized terminology	<p>IEC 60050 (all parts), <i>International Electrotechnical Vocabulary</i>, available at http://www.electropedia.org</p> <p>ISO/IEC 2382 (all parts), <i>Information technology — Vocabulary</i></p> <p>ISO/IEC 17000, <i>Conformity assessment — Vocabulary and general principles</i></p> <p>ISO/IEC Guide 2, <i>Standardization and related activities — General vocabulary</i></p> <p>ISO/IEC Guide 99, <i>International vocabulary of metrology — Basic and general concepts and associated terms (VIM)</i></p> <p>ISO Online browsing platform, available at http://www.iso.org/obp</p>
Principles and methods of terminology	<p>ISO 704, <i>Terminology work — Principles and methods</i></p> <p>ISO 10241-1, <i>Terminological entries in standards — Part 1: General requirements and examples of presentation</i></p>
Quantities, units and their symbols	<p>ISO 80000 (all parts), <i>Quantities and units</i></p> <p>IEC 60027 (all parts), <i>Letter symbols to be used in electrical technology</i></p> <p>IEC 80000 (all parts), <i>Quantities and units</i></p>
Abbreviated terms	<p>AS/NZS 2632 (all parts), <i>Codes for the representation of names of countries and their subdivisions</i></p> <p>ISO 639 (all parts), <i>Codes for the representation of names of languages</i></p> <p>ISO 1951, <i>Presentation/representation of entries in dictionaries — Requirements, recommendations and information</i></p> <p>ISO 3166 (all parts), <i>Codes for the representation of names of countries and their subdivisions</i></p>
Bibliographic references	<p>ISO 690, <i>Information and documentation — Guidelines for bibliographic references and citations to information resources</i></p>

<p>Technical drawings and diagrams</p>	<p>AS/NZS 1100 (all parts), <i>Technical drawing</i></p> <p>ISO 128 (all parts), <i>Technical drawings — General principles of presentation</i></p> <p>ISO 129 (all parts), <i>Technical drawings — Dimensioning</i></p> <p>ISO 6433, <i>Technical drawings — Item references</i></p> <p>ISO 14405 (all parts), <i>Geometrical product specifications (GPS) — Dimensional tolerancing</i></p> <p>IEC 61082-1, <i>Preparation of documents used in electrotechnology — Part 1: Rules</i></p> <p>IEC 61175, <i>Industrial systems, installations and equipment and industrial products — Designation of signals</i></p> <p>IEC 81346 (all parts), <i>Industrial systems, installations and equipment and industrial products — Structuring principles and reference designations</i></p> <p>ISO Resource area, available at http://www.iso.org/iso/graphics_formats_and_tools.pdf</p> <p><i>Document preparation in the IEC</i>, IEC available at http://www.iec.ch/standardsdev/resources/docpreparation/</p>
<p>Technical Documentation</p>	<p>IEC 61355-1, <i>Classification and designation of documents for plants, systems and equipment — Part 1: Rules and classification tables</i></p> <p>IEC 61360 (all parts), <i>Standard data element types with associated classification scheme for electric components</i></p> <p>Technical documentation standards developed by individual ISO technical committees are listed in the ISO Catalogue under group 01.140.30 <i>Documents in administration, commerce and industry</i>.</p>

<p>Graphical symbols, public information symbols and safety signs</p>	<p>ISO 3864 (all parts), <i>Graphical symbols — Safety colours and safety signs</i></p> <p>ISO 7000, Database: <i>Graphical symbols for use on equipment — Index and synopsis</i></p> <p>ISO 7001, <i>Graphical symbols — Public information symbols</i></p> <p>ISO 7010, <i>Graphical symbols — Safety colours and safety signs — Safety signs used in workplaces and public areas</i></p> <p>ISO 9186 (all parts), <i>Graphical symbols — Test methods</i></p> <p>ISO 14617 (all parts), <i>Graphical symbols for diagrams</i></p> <p>ISO 22727, <i>Graphical symbols — Creation and design of public information symbols — Requirements</i></p> <p>ISO 81714-1, <i>Design of graphical symbols for use in the technical documentation of products — Part 1: Basic rules</i></p> <p>IEC 60417, <i>Graphical symbols for use on equipment</i></p> <p>IEC 60617, <i>Graphical symbols for diagrams</i></p> <p>IEC 80416 (all parts), <i>Basic principles for graphical symbols for use on equipment</i></p> <p>IEC 81714-2, <i>Design of graphical symbols for use in the technical documentation of products — Part 2: Specification for graphical symbols in a computer sensible form, including graphical symbols for a reference library, and requirements for their interchange</i></p> <p>ISO/IEC Guide 74, <i>Graphical symbols — Technical guidelines for the consideration of consumers' needs</i></p>
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C.2 Technical reference documents and sources for drafting

In order to achieve technical consistency within all the documents published by Standards Australia the text of every document should be drafted in accordance with the following documents. The following list of basic reference works is not exhaustive. For specific subjects not covered by the list below, writers should use documents published by ISO and IEC, as far as possible.

<p>Limits, fits and surface properties</p> <p>Tolerancing of dimensions and uncertainty of measurement</p>	<p>Documents developed by ISO/TC 213, Dimensional and geometrical product specifications and verification (refer to ISO Catalogue).</p>
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Preferred numbers	<p>ISO 3, <i>Preferred numbers — Series of preferred numbers</i></p> <p>ISO 17, <i>Guide to the use of preferred numbers and of series of preferred numbers</i></p> <p>ISO 497, <i>Guide to the choice of series of preferred numbers and of series containing more rounded values of preferred numbers</i></p> <p>IEC 60063, <i>Preferred number series for resistors and capacitors</i></p> <p>IEC Guide 103, <i>Guide on dimensional co-ordination</i></p>
Statistical methods	<p>ISO 3534 (all parts), <i>Statistics — Vocabulary and symbols</i></p> <p>ISO/IEC Guide 98-3, <i>Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)</i></p> <p>Documents developed by IEC TC 56, Dependability (see IEC Catalogue), and by ISO/TC 69, Applications of statistical methods (refer to ISO Catalogue).</p>
Environmental conditions and associated tests	<p>ISO Guide 64, <i>Guide for addressing environmental issues in product standards</i></p> <p>IEC Guide 106, <i>Guide for specifying environmental conditions for equipment performance rating</i></p> <p>Documents developed by IEC TC 104, Environmental conditions, classification and methods of test (see IEC Catalogue).</p>
Health and safety	<p>ISO/IEC Guide 50, <i>Safety aspects — Guidelines for child safety</i></p> <p>ISO/IEC Guide 51, <i>Safety aspects — Guidelines for their inclusion in standards</i></p> <p>IEC Guide 104, <i>The preparation of safety publications and the use of basic safety publications and group safety publications</i></p>
Chemistry	<p>ISO 78-2, <i>Chemistry — Layouts for standards — Part 2: Methods of chemical analysis</i></p>
EMC (electromagnetic compatibility)	<p>IEC Guide 107, <i>Electromagnetic compatibility — Guide to the drafting of electromagnetic compatibility publications</i></p>

<p>Conformity and quality</p>	<p>AS/NZS ISO 9000, <i>Quality management systems — Fundamentals and vocabulary</i></p> <p>AS/NZS ISO 9001, <i>Quality management systems — Requirements</i></p> <p>AS/NZS ISO 9004, <i>Managing for the sustained success of an organization — A quality management approach</i></p> <p>ISO/IEC 17050-1, <i>Conformity assessment — Supplier's declaration of conformity — Part 1: General requirements</i></p> <p>ISO/IEC 17050-2, <i>Conformity assessment — Supplier's declaration of conformity — Part 2: Supporting documentation</i></p> <p>HB 18.23, <i>Guidelines for third-party certification and accreditation, Guide 23: Methods of indicating conformity with Standards for third-party certification systems</i></p> <p>ISO/IEC Guide 23, <i>Methods of indicating conformity with standards for third-party certification systems</i></p> <p>IEC Guide 102, <i>Electronic components — Specification structures for quality assessment (Qualification approval and capability approval)</i></p>
<p>Environmental management</p>	<p>ISO 14040, <i>Environmental management — Life cycle assessment — Principles and framework</i></p> <p>ISO 14044, <i>Environmental management — Life cycle assessment — Requirements and guidelines</i></p>
<p>Packaging, protection and storage</p>	<p>Technical documentation standards developed by individual ISO technical committees are listed in the ISO Catalogue under ICS group 55 Packaging and distribution of goods.</p> <p>Technical documentation standards developed by individual IEC technical committees are listed in the IEC Catalogue under ICS group 55 Packaging and distribution of goods.</p>
<p>Consumer issues</p>	<p>ISO/IEC Guide 14, <i>Purchase information on goods and services intended for consumers</i></p> <p>ISO/IEC Guide 37, <i>Instructions for use of products of consumer interest</i></p> <p>ISO/IEC Guide 41, <i>Packaging — Recommendations for addressing consumer needs</i></p> <p>ISO/IEC Guide 46, <i>Comparative testing of consumer products and related services — General principles</i></p> <p>ISO/IEC Guide 74, <i>Graphical symbols — Technical guidelines for the consideration of consumers' needs</i></p> <p>ISO/IEC Guide 76, <i>Development of service standards — Recommendations for addressing consumer issues</i></p>

<p>International standardization</p>	<p>ISO/IEC Guide 21-1, <i>Regional or national adoption of International Standards and other International Deliverables — Part 1: Adoption of International Standards</i></p> <p>ISO/IEC Guide 21-2, <i>Regional or national adoption of International Standards and other International Deliverables — Part 2: Adoption of International Deliverables other than International Standards</i></p>
<p>Accessibility</p>	<p>ISO/IEC Guide 71, <i>Guide for addressing accessibility in standards</i></p> <p>ISO 17069, <i>Accessible design — Consideration and assistive products for accessible meeting</i></p>
<p>Sustainability</p>	<p>ISO Guide 82, <i>Guidelines for addressing sustainability in standards</i></p> <p>IEC Guide 109, <i>Environmental aspects — Inclusion in electrotechnical product standards</i></p>
<p>Sampling</p>	<p>AS 1199.0, <i>Sampling procedures for inspection by attributes, Part 0: Introduction to the ISO 2859 attribute sampling system</i></p> <p>AS 1199.1, <i>Sampling procedures for inspection by attributes, Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection</i></p> <p>ISO 2859 (all parts), <i>Sampling procedures for inspection by attributes</i></p> <p>ISO 3951 (all parts), <i>Sampling procedures for inspection by variables</i></p> <p>ISO 28590, <i>Sampling procedures for inspection by attributes — Introduction to the ISO 2859 series of standards for sampling for inspection by attributes</i></p>

Appendix D Example of how to set out product conformity requirements

D.1 Text for the body of the standard

The following clause can be included in the body of the standard.

X Evaluation of product conformity

In order to claim that a product is manufactured to this Australian Standard, the products shall meet the product conformity requirements.

Product conformity is demonstrated by:

- (a) initial type testing; and
- (b) factory production control that includes a minimum sampling and testing frequency plan.

Product conformity requirements are detailed in Appendix X.

If the evaluation of the product conformity is not completed, or the product does not fulfil the requirements stated in this document, claims shall not be made that products meet the requirements of this document.

D.2 Sample Appendix

<p>Appendix X (normative) Product conformity</p>

X.1 Scope

X.1.1 This appendix sets out the minimum requirements for evaluating product conformity to this document. Product conformity shall be evaluated through—

- (a) initial type testing; and
- (b) factory production control, including a minimum sampling and testing frequency plan.

X.1.2 These product conformity requirements enable conformity assessment to be undertaken by a manufacturer or supplier (first party), a user or purchaser (second party), or an independent body (third party).

X.2 Terms and definitions

X.2.1 Type testing (TT)

Testing performed to prove that the material, component, joint or assembly is capable of conforming to the requirements of the relevant standard.

X.2.2 Factory production control (FPC)

Operational techniques and all measures necessary to regulate and maintain the conformity of the product to the requirements of the relevant product standard. [Refer ISO 9229]

X.2.3 Sample

One of more units of product drawn from a batch or lot, selected at random without regard to quality.



NOTE The number of units of product in the sample is the sample size.

X.2.4 Batch

A clearly identifiable collection of units, manufactured consecutively or continuously under the same conditions, using material or compound to the same specification.

X.2.5 Batch release test (BRT)

A test performed by the manufacturer on a batch of components, which has to be satisfactorily completed before the batch can be released.

X.2.6 Lot

A clearly identifiable sub-division of a batch for inspection purposes.

X.2.7 Inspection by attributes

Inspection whereby either the item is classified simply as conforming or nonconforming with respect to a specified requirement or set of requirements, or the number of nonconformities in the item is counted. [See AS 1199.1 (ISO 2859.1)]

X.2.8 Inspection by variables

A method that consists of measuring a quantitative characteristic for each item of a population or a sample taken from this population. [Refer to ISO 3951]

X.2.9 Statistical process control (SPC)

Application of statistical methods to the monitoring and control of a process to ensure that it operates at its full potential to produce conforming product.

X.2.10 Process verification test (PVT)

A test performed by the manufacturer on materials, components, joints or assemblies at specific intervals to confirm that the process continues to be capable of producing components conforming to the requirements given in the relevant standard.

NOTE Such tests are not required to release batches and are carried out as a measure of process control.

X.2.11 Acceptance quality limit (AQL)

Quality level that is the worst tolerable process average when a continuous series of lots is submitted for acceptance sampling. [See AS 1199.1 (ISO 2859.1)]

NOTE The designation of an AQL does not imply that a manufacturer has the right knowingly to supply any non-conforming unit of product.

X.3 Initial type testing

X.3.1 The initial type testing program comprises intensive routine testing to establish the capabilities of the manufacturing process to produce the product(s) and component(s). Refer to Table X1 for minimum requirements.

Table X.1 — Products and components — Initial type testing

Characteristic	Clause	Requirement	Test Method	Frequency
Product Type Tests				
Material properties and composition				At any new material formulation or design or every five years, whichever occurs first.



Performance and other properties				
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X.4 Factory production control

X.4.1 The manufacturer shall establish, document and maintain a factory production control system to ensure that the products placed on the market consistently fulfil the product requirements of this document. The factory production control system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming material or components, equipment, the production process and the product.

X.4.2 The minimum sampling and testing frequency plan that shall form part of the factory production control system is detailed in Table X2.

Table X.2 — Products and components — Minimum sampling and testing frequency plan

Characteristic	Clause	Requirement	Test Method	Frequency
Product Batch Release Tests				
Dimensions				
Freedom from defects				
Material properties				
Marking				
Performance and other properties				
Coatings and linings				

* All batches (or lots) to be tested for material composition

X.5 Nonconforming product

X.5.1 Retesting

X.5.1.1 Further samples

In the event of a test failure, the products manufactured since the previous test(s) conforming to the requirements outlined in Table A1 shall be quarantined as a batch. A further set of samples shall be selected randomly from the quarantined batch using a sampling plan to AS 1199 for an acceptable quality level (AQL) of 2.5 and an inspection level of S3, unless otherwise specified.

X.5.1.2 Successful retest

If the retest requirements are met, the batch may be released and conformance to the standard(s) for the quarantined batch may be claimed.

X.5.2 Rejection after retest

X.5.2.1 Should a failure on retesting occur, then the quarantined batch shall be rejected and claims and/or marking indicating compliance to the standard(s) shall be suspended until the cause of the failure has been identified and corrected.



X.5.2.2 In the event of a quarantined batch being rejected after retesting, it may be 100% retested for the failed requirement(s) and only those items found to comply may be claimed and/or marked as conforming to the standard(s).

X.6 Statistical process control (SPC)

X.6.1 Application

X.6.1.1 SPC is used to control manufacturing lines, and control charts are the key tools.

X.6.1.2 Where a group of products is manufactured from the same materials, under the same conditions, and the product characteristics are normally distributed, then by application of SPC it may be possible to verify process acceptance of product.

X.7 Documentation

X.7.1 The results of the initial type testing program shall be recorded and such records shall be maintained and be made available for inspection for a period of at least 10 years after the date when that last product to which the test program refers was delivered.

X.7.2 Documentation shall include information to be supplied to the purchaser, plus manufacturing process, physical and mechanical properties, inspection and testing, and test procedures.

X.8 Referenced documents

AS 1199.0 (see Note), *Sampling procedures for inspection by attributes, Part 0: Introduction to the ISO 2859 attribute sampling system*

AS 1199.1 (see Note), *Sampling procedures for inspection by attributes, Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 3951 (all parts), *Sampling procedures for inspection by variables*

NOTE AS 1199.0 and AS 1199.1 are identical adoptions of ISO 2859-0 and ISO 2859-1, and may be used interchangeably.

Appendix E Adopted text documents

E.1 Introduction

Adopted text documents are those where the text of the Australian or Australian/New Zealand document is reproduced from an international document (without being re-keyed). See Standardisation Guide No. 7, [Adoption of International Standards \(SG-007\)](#) for policy guidelines.

SG-006
MANDATORY

The original text of the source document is preserved with the exception of the covers and non-English versions of the text. However, a national Preface shall be added, and certain editorial modifications shall be made, as set out in this Appendix.

E.2 Steps for adoption of standards

E.2.1 General

The main features which apply are:

- (a) replacement of adopted document covers. Care should be taken to use the appropriate cover for the base document that is being adopted, i.e. using the Institute of Electrical and Electronics Engineers (IEEE) logo, or European Committee for Standardization (CEN) disclaimer, or the Australian or Australian/New Zealand Standard cover;

NOTE 1 Refer to the agreements with IEC, IEEE or CEN and other relevant SDOs for the wording of disclaimers which they require to appear on covers of adoptions of their documents.

- (b) addition of a national Preface to the source document;
- (c) inclusion, in the Australian or Australian/New Zealand document, of any applicable source document amendments and corrigenda as separate pages following the source text, and an explanation of this in the national Preface (see Clause E.2.2, items (e) and (f));
- (d) addition of any Australian or Australian/New Zealand variations in an appendix, designated 'ZZ';
- (e) addition of information regarding normative references (see Clause E.2.2 and E.5); and
- (f) addition of Australian or Australian/New Zealand requirements or guidance in appendices, designated 'ZA', 'ZB', 'ZC', etc.

NOTE 2 For additional information and guidance, refer to ISO/IEC Guide 21.

E.2.2 National Preface

A Preface to the national edition, titled "Preface", shall appear in each adopted text publication, between the title page and the contents list. See Clause 12 for general rules for the writing of the Preface.

The national Preface shall include the same elements as specified in Clause 12.5. In addition, the Preface for an adopted text shall add as many of the following as are appropriate:

- (a) Identification of the source document which forms the basis of the adopted text standard (i.e. the ISO or IEC Standard) and the degree of alignment, i.e. whether it is identical (IDT) or modified (MOD), in accordance with Appendix F.

EXAMPLE 1

This document is identical with, and has been reproduced from ISO 10393:2013, *Consumer product recall — Guidelines for suppliers*.

EXAMPLE 2

This document is an adoption with national modifications and has been reproduced from ISO 16422:2014, *Pipes and joints made of oriented unplasticized poly(vinyl chloride) (PVC-O) for the conveyance of water under pressure — Specifications*. The modifications are additional requirements and are set out in Appendix ZZ/Appendices ZZ and ZA, which have been added at the end of the source text.

- (b) Where additional appendices with national modifications are included, provide a summary of the contents of each Appendix.

EXAMPLE 3

Appendix ZA provides guidance and examples on refrigerant charge limit delimitation for information only.

- (c) Where the source document has been amended, an explanation in the following form:

EXAMPLE 4

This document is identical with and has been reproduced from ISO XXXX:2009, <Title> and its Amendment No.1 (2012), which has been added at the end of the source text.

- (d) Where the source document includes the contents of a corrigendum, an explanation in the following form:

EXAMPLE 5

This document is identical with and has been reproduced from ISO XXXX:2009, <Title> and its Corrigendum 1 (2019), which has been added at the end of the source text.

- (e) For a modified text (MOD) adoption of an ISO adoption, the reasons for the need to modify the international standard and references to the national variations, introduced by the following statement:

EXAMPLE 6

Appendix ZZ lists the variations to <dated designation of ISO or IEC parent document> for the application of this document in Australia {and New Zealand}.

- (f) For a modified adoption of an IEC document, instructions on how the variations are presented and reasons for the need to modify the international standard.

EXAMPLE 7

This document is structured as follows:

- (a) Preface
- (b) IEC XXXXX (unedited from the contents page to the final clause of the source document)
- (c) Appendix ZZ—Australian/New Zealand variations to the source document.

- (g) For adoptions of IEC documents, the following text relating to AS/NZS 3820, if applicable:

EXAMPLE 8

The essential safety requirements in AS/NZS 3820, Essential safety requirements for electrical equipment, that could be applicable to <insert the name of the products> are covered by this document.

(h) For adoptions of IEC documents, the following text relating to AS/NZS 3100, if applicable:

EXAMPLE 9

This document is one of a series of approval and test specifications to be read in conjunction with AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*. The purpose of this series is to outline conditions that must be met to secure approval for the sale and use of electrical equipment. Only safety matters and related conditions are covered.

(i) For standards used in the IECEE CB Scheme, the following text:

EXAMPLE 10

The variations described in Appendix ZZ form the Australian and New Zealand variations for the purposes of the CB Scheme for recognition of testing to standards for safety of electrical equipment.

(j) The introductory statement below, followed by items dealing with general presentation, such as items (a) and (b):

EXAMPLE 11

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

(a) In the source text "this International Standard {or this part of ISO/IEC XXXXX}" should read "this Australian {or Australian/New Zealand} Standard".

(b) A full point substitutes for a comma when referring to a decimal marker.

If the source document uses generic terminology, i.e., "this document" then delete item (a) and run back item (b), i.e.,

As this Standard is reproduced from an International Standard, a full point substitutes for a comma when referring to a decimal marker.

(k) The following statement is included to cover the identical adoption of international standards in the normative references clause:

EXAMPLE 12

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.

SG-006
MANDATORY

The Preface shall not contain a list of equivalent national standards to the normative references in the adopted international standard. See further Clause E.5.

E.3 Structure

The text of the adopted text document shall include the full content of the source document. The content of the source document shall not be altered in any way (see Clause E.4). The cover page, title page and generic ISO/IEC information following the last annex or bibliography shall be removed.

E.4 Australian variations appendix

Where there are national variations to the source document, these shall be presented in an appendix, designated Appendix ZZ.

Variations shall not be applied to the text of the source document, i.e. in the form of additions, deletions, strikeouts, highlights or marginal bars.

The Australian variations appendix shall be identified as normative in accordance with Clause 20.2.

The text of the variations shall then follow the adoption template.

Numbers given to the clauses, formal tables, figures and equations of the Australian variation's appendix shall be preceded by "ZZ".

E.5 Normative references in the adopted text which have been adopted in Australia with modifications

If a normative reference in the adopted text is replaced by a non-identical Australian or Australian/New Zealand document, this constitutes a national variation to the international document. Committees shall review all normative references in texts proposed for adoption and determine if any shall be substituted with references to Australian or Australian/New Zealand documents that are not identical (IDT) adoptions. Where this is the case, the list of substituted references shall be included in Appendix ZZ.

The variation in Appendix ZZ shall be expressed as an amendment to the Normative Reference clause. There shall be an introductory sentence in one of these forms, adapted to the nature of the references being substituted:

The Australian Standards listed below are modified adoptions of, or not equivalent to, the ISO normative references and are required for the application of this document. All references in the source text to those ISO normative references shall be replaced by references to the corresponding Australian Standards. Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably.

NOTE 1 There are certain variations to this boilerplate text according to the international document that is being adopted. Refer to the adoption template for guidance.

NOTE 2 This is an example of an Australian only instruction for an ISO adoption.

SG-006
MANDATORY

Each specific entry shall be expressed as a deletion of the International Standard and a replacement by the adopted modified national standard. See the following example as a guide.

EXAMPLE 1

Delete the entry "IEC 62040-1, *Uninterruptible power systems (UPS) — Part 1: Safety requirements*" and replace with the following:

AS 62040.1:2019, *Uninterruptible power systems (UPS), Part 1: Safety requirements* (IEC 62040-1:2017 (ED 2.0) MOD)

E.6 Additional National appendices

These additional appendices shall be indicated in the preface after Appendix ZZ information.

Numbers given to the clauses, formal tables, figures and equations of the Australian variation's appendix shall be preceded by the letters designating that appendix, for example, "FIGURE ZA.1".

SG-006
MANDATORY

Appendix F Indication of alignment with international standards

F.1 Degrees of alignment

F.1.1 General

When describing the degree of alignment between an Australian and an international standard, the Australian Standard shall be described as either being identical (IDT), modified (MOD) or not equivalent (NEQ), in relation to the international standard. These terms shall be used with the meanings defined below, which are based on those of ISO/IEC Guide 21 (all parts).

SG-006
MANDATORY

F.1.2 IDT (Identical)

The expression "Identical" is used when a national standard is identical in technical content, and is either identical in presentation to the international standard, or includes only minimal editorial changes. The title need not be exactly the same.

The "vice versa principle" is fulfilled in that anything which is acceptable under the international standard is acceptable under the national standard and vice versa.

NOTE Replacing reference documents in an ISO or IEC Standard with Australian or Australian/New Zealand Standards that are not identical may not satisfy the "vice versa principle" so that the adoption cannot be regarded as "identical".

SG-006
MANDATORY

F.1.3 Fast tracked modified (MOD) adoption

Some of the normative references in the parent ISO, IEC or other International publications have been adopted BUT MODIFIED in Australia. As a result the projects will be changed from IDT to Fast Track Modified adoption, as modified references result in the adoption not being identical.

NOTE 1 Appendix ZZ will be attached to the end of the AS or AS/NZS publication to state the modifications of the normative references.

NOTE 2 The Standard designation will also be changed from AS ISO or IEC to AS only.

SG-006
MANDATORY

F.1.4 MOD (Modified)

The expression "Modified" is used where technical differences from the international standard (generally minor differences) exist and are clearly identified. The national standard reflects the structure of the international standard and permits easy comparison of the content.

The “vice versa principle” is not fulfilled with a “modified” standard.

F.1.5 NEQ (Not Equivalent)

The expression “Not Equivalent” is used where the national standard is not equivalent in technical content and structure and any changes have not been clearly identified and there is no clear correspondence with the international standard.

This category does not constitute an adoption and accordingly would not be the basis of an adopted text document.

SG-006
MANDATORY

F.2 Designation

Where an Australian Standard has a defined relationship (identical or modified) to an international standard, it is common to use the number of the international standard as the number of the Australian Standard. Care must be taken to avoid misunderstanding among users arising from the use of internationally related numbers. On the cover of Adoptions, for IDTs Standards Australia shall publish the dated designation of the international parent document underneath the national designation.

ISO/IEC Guide 21 suggests the use of the international identifier, including the prefix ISO or IEC, combined with the national identifier, either alone as shown in Example 1 (single line dual numbering) or together with a separate national identifier as shown in Example 2.

EXAMPLE 1

AS IEC 61234:2002

EXAMPLE 2

AS 5678:2002

IEC 61234:1998

(This being two line dual numbering.)

In both cases, because the use of the full international designation is used, (and thus the national standard is presented as being the actual international standard), Guide 21 only allows these forms of numbering to be used on identical adoptions of international standards.

Where some flexibility is required, it is appropriate to use a national number that is the same as the international number, usually without including the international prefix (ISO or IEC).

SG-006
MANDATORY

Where the adopted text is modified, the title of the standard shall include the dated designation of the adopted text and indicate the status of its international alignment. The use of abbreviations of the status is preferred.

Where there is no equivalence in technical content and structure between the Australian Standard and the International Standard, this is an NEQ standard.

EXAMPLE 3 of a modified ISO adoption

Designation: AS 61234:2017

Title: Tests for widgets (ISO 61234:2015, MOD)

EXAMPLE 4 (a) of a modified IEC adoption

Designation: AS/NZS 60076.3:2017

Title: Power transformers, Part 3: Insulation levels, dielectric tests and external clearances in air (IEC 60076-3:2013 (ED.3.0), MOD)

EXAMPLE 4 (b) of a modified IEC adoption with Amendment(s)

Designation: AS/NZS 60335.2.30:2015

Title: Household and similar electrical appliances - Safety, Part 2.30: Particular requirements for room heaters (IEC 60335-2-30 Ed 5.-2)

EXAMPLE 5 of ~~not~~ a non equivalent standard

Designation: AS 10002:2022

Title: Guidelines for complaint management in organizations (ISO 10002:2018, NEQ)

One application of the approach would be where a series or multi-part international standard is being adopted and it is desired to have internationally consistent numbering, though the degree of alignment may be different for different parts in the series.



DOCUMENT HISTORY

The following details the history of this document:

Date	Author	Amendment Details
29/10/09	Policies & Procedures Officer	v1.0 - First release. Converted Handbook (HB 162) into SG-006.
25/11/09	Policies & Procedures Officer	v1.1 - Update address on cover page & re-issued.
19/07/10	Policies & Procedures Officer	v1.2 - Clarified Conformity Assessment policy & re-issued
29/10/10	Process & Procedures Officer	v2.0 - Clarified the requirements for adopting International Standards & re-issued.
6/10/11	Process & Procedures Officer	v2.1 - Minor amendments throughout to reflect current practice & re-issued.
23/11/11	Process & Procedures Officer	v2.2 - Clarified product conformity requirements/exceptions, added Annex F & re-issued.
21/02/12	Process & Procedures Officer	v2.3 - Update hyperlinks after new corporate website released & re-issued
03/04/12	Process & Procedures Officer	v2.4 - Fix incorrect clause, replaced reference to Trade Practices Act with Competition & Consumers Act & re-issued.
11/07/12	Process & Procedures Officer	v2.5 - Clarified that conformity assessment should be considered as part of the project proposal process & re-issued.
17/10/12	Process & Procedures Coordinator	v2.6 - Added 'reference marks' to Clause 6.6.6.7 & re-issued.
16/01/13	Process & Procedures Coordinator	v2.7 - Reconfirmed/updated Document History & re-issued.
28/02/13	Process & Procedures Coordinator	v2.8 - Fix broken hyperlinks.
30/08/13	Process & Procedures Coordinator	v2.9 - Update invalid clause references.
24/09/13	Process & Procedures Coordinator	v2.10 - Fix corrupted/faulty Appendix lists & associated references & update Style Manual hyperlink in 6.6.2 & A2.
10/12/13	Process & Procedures Coordinator	v2.11 - Minor clarification in 6.2.4.1 re: cross references.
01/09/14	Process & Procedures Coordinator	v2.12 - Detailed review of Guide to ensure it reflects current practice and is aligned with Drafting Training content.
04/09/14	Process & Procedures Coordinator	v2.13 - Minor editorial & formatting amendments.
22/01/15	Process & Procedures Coordinator	v2.14 - Correction of minor editorial/grammar errors. No technical changes.

Date	Author	Amendment Details
29/01/16	Process & Procedures Coordinator	v2.15 - Updated SDC references to SDAC & updated ABSDO references.
25/05/16	Process & Procedures Coordinator	v2.16 - Remove reference to SG-009 as it has been withdrawn.
02/11/16	Process & Procedures Coordinator	v2.17 - Replace references to “clone” with adopted text document, amend 5.3.3 to clarify rule re: assigning actions to a specific party, add requirement to 5.1.2 to include SDAC exemptions in Preface, amend G2.1 & G2.2 re: policy for recognising normative references in adopted Standards.
06/03/17	Process & Procedures Coordinator	v2.18 - Replace references to SG-017: Drafting of Standards Referenced Under WHS Legislation with SG-009: Preparation of Standards for Legislative Adoption.
22/02/18	Publishing and Content Solutions Manager	v3.0 - Further alignment with ISO/IEC Directives Part 2. Restructure of content to align with ISO/IEC Directives Part 2. Move of Normative references for Adoptions into ZZ Appendix.
19/12/19	Process & Procedures Coordinator and Technical Writer	V4.0 - Editorial updates from JIRA tickets, additional comments on Confluence and minor updates to align with ISO/IEC Directives Principles and rules for the structure and drafting of ISO and IEC documents. SDAC approved wording for guidance on basis for exceptions for roles and responsibilities.
08/01/2020	Technical Writer	V4.1 – Minor editorial & formatting amendments. No technical changes.
28/08/2020	Editing Team Leader	V4.2 - Additional formatting to identify content as "SG-006 Mandatory", "Policy Mandatory" and "Red Flag Words". No technical changes.
29/4/2021	Editing Team Leader	V4.3 – Numerous editorial and formatting amendments.
10/9/2021	Policy Manager	V4.4 – Clause 35 updated with SDAC approved wording for guidance on assigning roles and responsibilities, additional text in Clause 10.2, and Fast tracked modified adoption information added to Clause F.1.3.
26/02/2022	Policy Manager	<p>V4.5 – The following updates have been made:</p> <ul style="list-style-type: none"> • Clause 12.5 - removal of EXAMPLE 12 as it relates to the old drafting template, and renumber EXAMPLE 13. • Clause 15.5.3 – addition of EXAMPLE 4. • Clause 16.5.5 – update to description of “Admitted terms” and Clause 16.6 update to Figure 1 with updated description of “Admitted terms”. • Clause 27.1 – addition of descriptive footnote text, deletion of Clauses 27.2 to 27.5 as these relate to legacy documents and an update to sentence in SG 006 Mandatory box: “Any text that could be in a footnote is set as a note under the relevant text in the document and written as a statement of fact”. • Clause 29.2 – addition of new term “typical” for figures.

Date	Author	Amendment Details
		<ul style="list-style-type: none"> • Clause 33 – addition of EXAMPLE.
23/08/2023	Policy Manager	<p>V5.0 – The following updates have been made:</p> <ul style="list-style-type: none"> • Clause 5 – added information on the following principles: accessibility, gender responsiveness and diversity, and sustainability. • Clause 12.5 – updated Item 7, EXAMPLE 10. • Clause 16.5.5 – updated Item 1 regarding the Preferred terms use vs Admitted terms use. • Clause 16.5.10 – updated last sentence to read where a source is only mentioned once in the document, it should be referenced in the Bibliography. • Clause 29.3.3 – clarified references to subdivision and parts. • Clause 29.4 – removed first line of EXAMPLES. • Clause 29.5.3 – updated to support improved accessibility of standards and Figure content. • Clause 34 Aspects of conformity assessment – clarified clause to align with ISO/IEC Directives, Part 2. • Clause 37 Management standards (MS) and management systems standards (MSS) – clarified clause to align with ISO/IEC Directives, Part 2 directing readers to Appendix 2 of Annex SL, which provides a harmonised structure for the development of MSS. • Appendix A – updated title/description and added a two of notes; one under 'Bibliography' and the other under 'Drafting of provisions'. • Appendix F.2 – updated EXAMPLE 4 to be 4 (a) and 4 (b) and added EXAMPLE 5.