## **Anatomy of a Standard**

**How to use this document:** The following sections are typically included in a technical standard. Some standards contain all of the sections listed, while others include only a subset. The terminology used for section headings may differ slightly, based on the standards issuing body. Some standards incorporate additional sections as needed to convey context and requirements.

The sections of a standard are displayed in this document in order of how they *typically* appear in a standard. However, it is not always the best strategy to approach reading a standard from beginning to end, especially with lengthy documents. Review the sections designated with an \* first to assess standard relevancy and applicability to projects.

\*Front matter/Cover page: Contains name, standard body, number and title. May also include a brief introduction/overview/rationale for the standard and a table of contents.

**Purpose of reading this section:** Confirm identity of standard and standard issuing body. Make sure the standard is published by a standards issuing body that is used widely in your industry, or is closely aligned with your project needs. The table of contents can help you quickly navigate lengthy documents.

\*Scope/Abstract: Clarifies applicability of standard

**Purpose of reading this section:** To understand, briefly, what the standard is about. A good way to quickly see if the standard is likely to be of interest...at least whether to read further.

\*(Normative) References/Referenced Documents: Other standards that are incorporated into this standard. They might also be alternative standards you might want to use, if their scope is more appropriate to your problem (e.g., the referenced standard is really the one that impacts the product you are working on.)

**Purpose of reading this section:** Identify other documents you might need to acquire to fully meet this standard, or alternate standards that are more appropriate for your product development.

\*<u>Definitions/Terminology</u>: Key terms used in the standards are defined in this section. It is important to consult this section, since it gives precise and unambiguous definitions to ensure the standard is used uniformly by all users.

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**Purpose of reading this section:** See if definitions match your understanding for different concepts. Looking at definitions can help you understand whether the standard is dealing with the same exact topic as your problem, as opposed to using a term in a different context.

<u>Marking:</u> Products may need to be marked in a certain way to meet the standard, for example, to indicate to the user the limitations or specifications for use or performance of the product.

**Purpose of reading this section:** Make sure you know how to indicate the performance/conditions/or other limitations or specifications of your product so others know how to use it appropriately.

\*Conditions for Use: Indicate what environments the product can (and cannot) be used for safe and/or designed performance.

**Purpose of reading this section:** See if the conditions match your situation. If there are temperature or environmental conditions (e.g., marine, high altitude) that don't match, you may need to find a different standard.

\*Requirements: The product must meet the requirements described in this section to be compliant with the standard.

**Purpose of reading this section:** This provides the core details of the standard. You can use the requirements to see either what performance or design specifications your product might need to meet to be interoperable with other items, or to see the specifications you can count on from other products you might want to use as components for your design.

<u>Tests</u>: Describes the procedures for conducting tests to determine performance relative to the requirements of the standard.

**Purpose of reading this section:** Read this section to determine how you will determine compliance of your product. Do you have the appropriate apparatus/facilities to conduct these tests? Do you need to modify your setup to be compliant with the test parameters in this section?

<u>Annexes/Appendices</u>: Supplementary information that is useful (or necessary) to know to for adhering to the standard. There are two types of annexes. Some standards issuing bodies provide supplementary information in sections labeled "Appendices," rather than "Annexes."

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**Purpose of reading this section:** When all the information isn't in the core body of the standard, look here for missing details.

**Normative Annexes:** Typically other standards or procedures that describe requirements

**Purpose of reading this section:** You will likely be referred to the annex for details not contained in the main body of the standard, but which you need to know in order to be compliant.

<u>Informative Annexes</u>: Typically, provide guidance, clarification, or background information to help the reader understand the purpose of the standard or rationale for its existence.

**Purpose of reading this section:** To find additional contextual information to help you understand the background or use of the standard. May be helpful in determining whether this is an appropriate standard to use.

<u>Indexes</u>: For lengthy and/or complex standards, indexes can help one locate relevant parts of the standard.

**Purpose of reading this section:** If you are having difficulty locating the part of the standard you are particularly interested in, the index can help you find it.