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Water efficiency labelling programmes – Requirements with guidance for implementation

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Project Committee ISO/PC 316, *Water efficient products - Rating*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The purpose of ISO 31600 is to provide a set of best practices and guidance for the preparation and implementation of a water efficiency labelling programme for plumbing products and water using appliances. A key focus is to provide the criteria for developing countries to establish an effective water efficiency labelling standard that will save water resources.

This project was approved on the basis that consumer empowerment through the communication of a product's water efficiency is a proven way of saving both water and energy. Several countries around the world already have well-established and effective water efficiency labelling programmes which empower consumers to make choices favouring more water efficient fixtures and appliances without compromising on human hygiene and sanitation. These existing labelling programmes were consulted in the development of this document.

ISO 31600 aims to globally encourage the development of national standards for water efficiency labelling, which will further lead to development and marketing of water efficient products, and enable consumers to make an informed choice, positively influencing manufacturers to improve the performance of their products through consumer demand. This document does not seek to establish ways to use water efficiency labelling in policies or programmes. The intention is to provide an understanding of the essential requirements for the development of an effective water efficiency labelling programme.

This document refers to existing national standards for the determination of water consumption and other important test procedures and requirements that form the critical underpinnings of a water efficiency labelling programme. Countries without national standards for products may formulate their own national standard either by adopting a national standard from a supporting country or by preparing an indigenous standard, to meet the requirements in Clause 4.

NOTE National regulations can also apply.

This document contains five informative annexes, with Annex A providing suggested universal tests for the determination of water consumption and Annexes B to E providing descriptions of a number of existing schemes/programmes. Countries that do not have an existing water efficiency labelling programme may consider these examples to select and adopt those best suited for their markets and conditions when developing their own water efficiency labelling programme.

Application of this document presupposes awareness of water efficiency programmes and regulations in the applicable country.

An overview of how to use this document, including the pathway to demonstrate conformance, is provided in Figure 1.

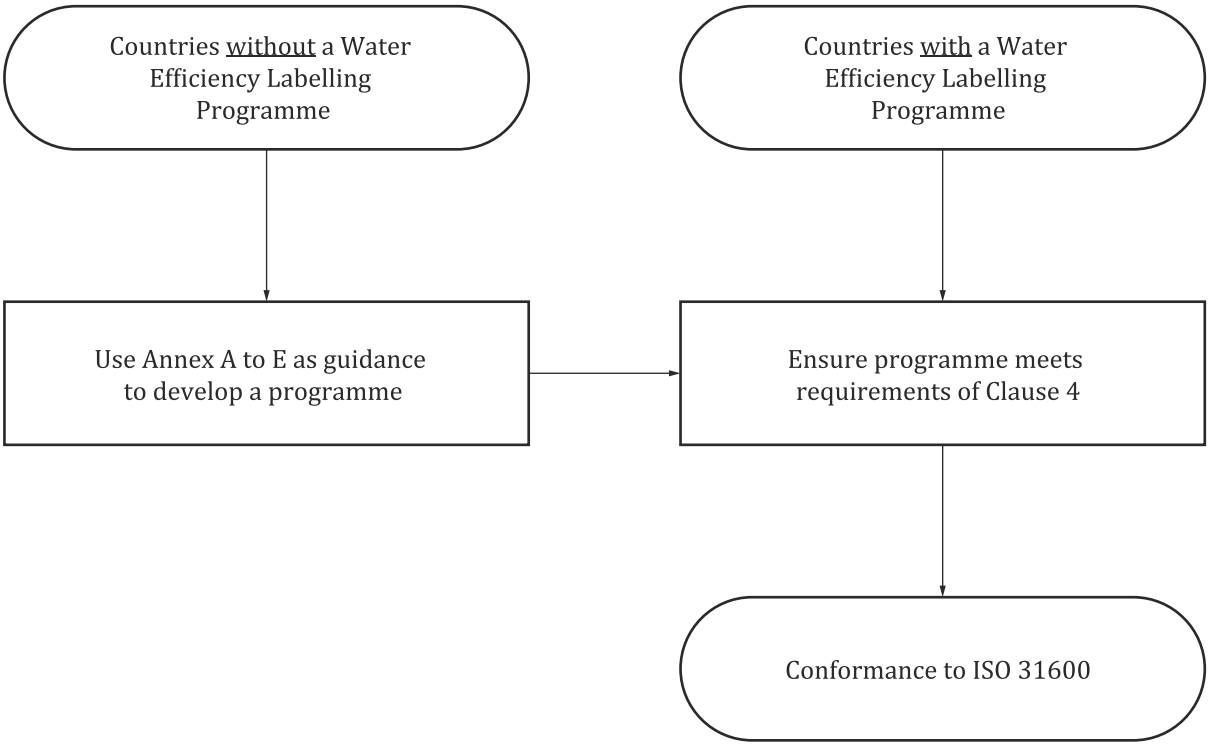

Figure 1 — Pathway to ISO 31600 conformance

Water efficiency labelling programmes – Requirements with guidance for implementation

1 Scope

This document specifies requirements for a water efficiency labelling programme for plumbing products and water using appliances along with guidance for their implementation.

This document applies to the following products:

a) showers;

b) tap (faucet) equipment;

c) flow regulators (flow controllers);

d) water closet (toilet) equipment;

e) urinal equipment;

f) dishwashers;

g) clothes washing machines;

h) the dryer function of combination washer/dryers, where they use water to dry a load.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1 General terms

3.1.1
water efficiency
accomplishment of a function, task, process, service or result, with the minimum amount of water needed for the safe operation of the product

[SOURCE: ISO 24513:2019, 3.4.7, modified — At the end of the definition, "practicable" has been replaced by "needed for the safe operation of the product".]

3.1.2
banded (tiered) labelling programme
programme that allows products to be labelled with various rated levels of water consumption

Note 1 to entry: Products can be differentiated by various visual means, e.g. stars or other markings, for identifying incremental levels of *water efficiency* (3.1.1). See Annex E for examples of existing water efficiency programme labels.

3.1.3
single threshold labelling programme
programme that requires all labelled products to meet a single water consumption requirement, typically expressed as a maximum

Note 1 to entry: Labelled products may or may not include the product's *water efficiency* (3.1.1) rating. See Annex E for examples of existing water efficiency programme labels.

3.1.4
shower assembly
combination of a shower control (valve) complete with shower hose (flexible or rigid) and shower outlet

3.1.5
shower outlet device
device through which water is intended to pass to form spray for bathing purposes

EXAMPLE showerheads, handheld showerheads, body sprays and rain shower outlet devices

Note 1 to entry: A shower outlet device can be sold separately or as part of a shower assembly.

3.1.6
tap(s)
faucet(s)
device through which water is intended to pass with an inlet and connection, and a control (valve) for drawing or regulating the flow of water

Note 1 to entry: A typical application for a tap (faucet) is over a *basin (lavatory)* (3.2.6), sink or laundry tub.

3.1.7
flow regulator
flow controller
flow control device used to control the rate of water flow in a *tap (faucet)* (3.1.6), *shower outlet device* (3.1.5) or *shower assembly* (3.1.4)

Note 1 to entry: Device can be sold separately or located within (upstream of the outlet) or at the very end (forming part of the outlet) of the water flow passage through a product.

Note 2 to entry: When sold separately, they are typically sold as part of an aerator subassembly or as a stand-alone component intended to be installed in a shower outlet device or shower assembly solution.

3.1.8
water closet
toilet
sanitary plumbing fixture that consists typically of a water-flushed bowl connected to a drainage system and fitted with a device for flushing water to cleanse the bowl after defecation and urination

3.1.9
urinal
sanitary plumbing fixture typically connected to a water flushing device for the reception and flushing away of urine into a drainage system