

**Test method for measuring efficiency and  
pressure loss of drain water heat  
recovery units**



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# Preface

This is the second edition of CSA B55.1, *Test method for measuring efficiency and pressure loss of drain water heat recovery units*. It supersedes the previous edition published in 2012.

The intent of the test apparatus is to simulate conditions in which drain water heat recovery (DWHR) units are installed and to standardize these conditions between various laboratories that conduct this testing. This Standard is only intended to rate the performance of vertically installed, falling-film DWHR units with equal potable water and drain water flow rates.

This Standard was prepared by the Technical Committee on Drain Water Heat Recovery Systems, under the jurisdiction of the Strategic Steering Committee on Water Management Products, Materials, and Systems, and has been formally approved by the Technical Committee.

## Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to [inquiries@csagroup.org](mailto:inquiries@csagroup.org) and include “Request for interpretation” in the subject line:*
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  - b) *provide an explanation of circumstances surrounding the actual field condition; and*
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  - a) *Standard designation (number);*
  - b) *relevant clause, table, or figure number;*
  - c) *wording of the proposed change; and*
  - d) *rationale for the change.*

# CSA B55.1:15

## **Test method for measuring efficiency and pressure loss of drain water heat recovery units**

### **1 Scope**

#### **1.1**

This Standard specifies requirements for measuring the heat recovery efficiency and pressure loss for vertically installed, falling-film drain water heat recovery (DWHR) units.

#### **1.2**

This Standard applies to DWHR units

- a) of any diameter and length; and
- b) with a configuration where potable water and drain water flow rate is equal;

#### **1.3**

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (nonmandatory) to define their application.

### **2 Reference publication**

This Standard refers to the following publication, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

#### **NRC (Natural Resources Canada)**

*Testing Method for Measuring Efficiency of Drain Water Heat Recovery Units* (2008)

### **3 Definitions**

The following definitions shall apply in this Standard: