ANSI/AHRI Standard 610 (I-P)

2014 Standard for

Performance Rating of Central System Humidifiers for Residential Applications

Approved American National Standard

ANSI

Approved by ANSI on 19 November 2014

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Note:

This standard supersedes ANSI/AHRI Standard 610-2004.
For SI ratings, see ANSI/AHRI Standard 611 (SI)-2014.

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Figure C2. By-pass (Return) Humidifier Test Section for Airflow Rate Measurement 10

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PERFORMANCE RATING OF RESIDENTIAL CENTRAL SYSTEM HUMIDIFIERS FOR RESIDENTIAL APPLICATIONS

Section 1. Purpose

1.1 *Purpose*. The purpose of this standard is to establish for Residential Central System Humidifiers: definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.

1.1.1 *Intent*. This standard is intended for the guidance of the industry, including manufacturers, engineers, installers, contractors and users.

1.1.2 *Review and Amendment.* This standard is subject to review and amendment as technology advances.

Section 2. Scope

2.1 *Scope.* This standard applies to factory-made Central System Humidifiers, as defined in Section 3.

2.1.1 *Energy Source.* This standard applies to electrically operated Central System Humidifiers that depend on the air stream of a central air system for moisture evaporation and distribution.

2.1.2 *Installation.* Central System Humidifiers are intended for installation in central air systems.

2.2 *Exclusions.* This standard does not apply to the following:

2.2.1 Self-contained Humidifiers as defined in ANSI/AHRI Standard 620

2.2.2 Portable Humidifiers as defined in ANSI/AHAM HU-1

2.2.3 Humidifiers for commercial and industrial applications as defined in ANSI/AHRI Standard 640

Section 3. Definitions

All terms in this document shall follow the standard industry definitions in the current edition of ASHRAE Terminology website (https://www.ashrae.org/resources--publications/free-resources/ashrae-terminology) unless otherwise defined in this section.

3.1 *Humidification Capacity*. The capacity of a Central System Humidifier to add moisture to air expressed in gal/day of continuous operation.

3.2 *Humidifier*. A device designed to add moisture to air.

3.2.1 *Central System Humidifier (Humidifier).* A class of Humidifier intended to be installed in or to discharge into the air stream of a central air system. It may be mounted in or on one of the following:

3.2.1.1 *Return Air Duct (RD).* A Humidifier that is connected to a horizontal duct and has the function of returning humidified air to the central system.

3.2.1.2 *Return Air Plenum (RP).* A Humidifier that is connected to a vertical duct and has the function of returning humidified air to the central system.

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