



STANDARD

ANSI/ASHRAE Standard 134-2005 (RA 2014)
(Reaffirmation of ANSI/ASHRAE Standard 134-2005)

Graphic Symbols for Heating, Ventilating, Air-Conditioning, and Refrigerating Systems

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Includes Web-based access to DraWinG (*.dwg) files of the graphic symbols used in the standard.
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NOTE

Approved addenda, errata, or interpretations for this standard can be downloaded free of charge from the ASHRAE Web site at www.ashrae.org/technology.

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FOREWORD

This standard provides a comprehensive set of symbols for use in drawings and other documents relating to the design of heating, ventilating, air-conditioning, and refrigerating (HVAC&R) systems. The symbols are intended to be usable in both the manual and automatic (CAD system) creation of drawings.

To develop this standard, the project committee surveyed symbols solicited from governments, standards organizations, and consultants from around the world. While the committee found general agreement in some areas of symbol usage and symbolic practice, it discovered wide variation in others. This standard therefore intends to establish a common symbol language for use in HVAC&R drawings, thereby facilitating the understanding of these documents and making them accessible to a wider variety of users. It is anticipated that as the use and understanding of these symbols increase, the accuracy and efficiency with which engineering drawings are translated into actual systems will also increase.

This standard is intended for international use. The text, fonts associated with a symbol, and description box in the tables should be translated into the language of the standard. The filename alpha character should not be changed. The use of I-P (inch-pound) or SI (Standard International) metric units should be used where dual units are shown in the text or with a symbol.

This is a reaffirmation of Standard 134-2005. This standard was prepared under the auspices of ASHRAE. It may be used, in whole or in part, by an association or government agency with due credit to ASHRAE. Adherence is strictly on a voluntary basis and merely in the interests of obtaining uniform guidelines throughout the industry. This version of the reaffirmation has no changes.

Online access is provided to the DraWinG (.dwg) files of the graphic symbols used in the standard. To download, visit www.ashrae.org/Standard134_DWG. An applicable CAD program is required to view the files.*

1. PURPOSE

The purpose of this standard is to define graphic symbols for heating, ventilating, air-conditioning and refrigerating systems.

2. SCOPE

2.1 This standard covers graphic symbols for heating, ventilating, air-conditioning, and refrigerating systems and equipment, including related controls.

2.2 This standard identifies graphic symbols by name, configuration, and description.

2.3 The graphic symbols in this standard are intended for use in manual drawings and drawings produced by computer-aided drafting (CAD).

3. DEFINITIONS

3.1 Definitions of terms used in this standard may be found in *ASHRAE Terminology of Heating, Ventilation, Air Conditioning, and Refrigeration*.¹

3.2 Additional terms used in this standard but not found in *ASHRAE Terminology* are defined in this section.

accessories (controls): equipment such as air compressors, air line dryers, compressed air filters, and indicating devices (pressure and temperature) to facilitate monitoring of control system activity.

auxiliary devices (controls): equipment such as relays and switches to manipulate signals.

filename: an alphanumeric designation assigned to each symbol for ease in referencing.

tag: an acronym or abbreviation for identifying equipment.

ACU:	air-conditioning unit
AD:	access door
AHU:	air-handling unit
AP:	access panel
AS:	air separator
CAV:	constant air volume terminal
CC:	cooling coil
CH:	chiller
CP:	condensate pump
CSG:	clean steam generator
CUH:	cabinet unit heater
EAHU:	exhaust air-handling unit
EAV:	exhaust air valve
EFC:	evaporative fan cooler
ET:	expansion tank
EX:	exhaust fan
F:	air filter
FCU:	fan coil unit
FT:	flash tank or fin tube
FTR:	finned tube radiation
H:	humidifier
HC:	heating coil
HRC:	heat recovery unit
HVU:	heating and ventilating unit
HX:	heat exchanger
P:	pump
PRV:	pressure reducing valve
RAF:	return air fan
RHC:	reheat coil
SA:	sound attenuator (trap)
SAV:	supply air valve