

What the heck do those letters stand for?

Published: June 26, 2014 - by Dan Holohan

Categories: Heating Acronyms (</systems-help-center/category/heating-acronyms>)



"A" Dimension= distance water will rise in the drip at the end of the steam main, when there is left-over steam pressure at the drip.

AAV = automatic air vent (UK)

ABS = Acrylonitrile-Butadiene-Styrene pipe - a plastic pipe used for water distribution, drain, waste

ABS = Absolute

ACCA = Air Conditioning Contractors of America

ACTU = Air Conditioning Tune Up

AF = Attic fan

AFF = Above Finished Floor

FFFF = Aqueous Film-Forming Foam

AFUE = annual fuel utilization efficiency, a measure of fuel in to heat out over the course of a typical heating season, including any off-cycle losses. Roughly equivalent to Miles per Gallon on a car.

AGA = American Gas Association

AHU = Air-Handling Unit

AMU = Air Make Up Unit

ANSI = American National Standards Institute

ASME = American Society of Mechanical Engineers

ASPE = American Society of Plumbing Engineers

ASHRAE = American Society of Heating Refrigeration and Air Conditioning Engineers

ASL - Above Sea Level

ASTM = American Society for Testing of Materials

ATC = Automatic Temperature Control

ATM = Atmosphere

AWH = Automatic Water Heater

AV = air vent (UK)

AWW = American Water Works

"B" Dimension = distance water will rise in the drip at the end of the steammain, when there is NO left-over steam pressure at the drip (pressureblocked by a trap, water seal, orifice or motorized valve)

B4 = Before

BAS = Building Automation System/DDC

BCI = Black Cast Iron

BER = Beyond Economic Repair (UK)

BFF = Below Finished Floor: uses floor elevation for setting sewer inverts

BFP = Backflow Preventor

BHP = Brake Horsepower

BHN = Brinell Hardness Number

BIP = Black Iron Pipe

BMI = Black Malleable Iron

BMS = Building Management System/DDC

B.O.C.A. = Building Officials and Code Administrators

BOE = bottom opposite ends (re radiator connections) (UK)

BP = Boiling Point

BPVC = Boiler & Pressure Vessel Code

Btu = British Thermal Unit

BSI = British Standards Institute (UK)

BSN = Black Short Nipple

BSP = British Standard Pipe Thread (UK)

BSP = Black Steel Pipe

BTFPTM = Beat To Fit - Paint To Match: used by engineers to shift responsibility to contractor.

BV = Ball Valve

BWE = Butt Weld Ends

C or Cel = Celsius

CA = Compressed Air

CAD = Computer-Aided Design

CAD = Combustion-Air Damper

CAE = Computer-Aided Engineering

CAP = Customer Assured Pricing or Flat Rate Price (add price)

CB = Call Back

CC = Credit Card

CCF = 100 Cubic Feet

CSST = Corrugated Stainless Steel Tubing

CEC = California Energy Commission

CGA = Canadian Gas Association

CFactor = The amount of heat, in BTU, conducted through one square foot of a material of a specified thickness, per hour, per degree temperature difference

CFH = Air or gas flow, cubic feet per hour

CFM = Air or gas flow, cubic feet per minute

CFS = Cubic Feet Per Second

CH = Central Heating

CHWR = Chilled water return

CHWS = Chilled water supply

CI = Cast Iron

CIBSE = Chartered Institute of Building Services Engineers (UK equivalent of ASHRAE)

CIPE = Certified in Plumbing Engineering

CITE = Connect to Existing

CNG = Compressed Natural Gas

CO = Carbon monoxide

CO = Cleanout

COB = Circuit Balance Valve

COD = Cash on delivery

CO₂ = Carbon dioxide

COP = Coefficient of performance

COV = Cutoff Valve

CPD = Certified in Plumbing Design

CR13 = 13% Chromium Stainless Steel

CRES = Corrosion Resistant Steel

CSA = Canadian Standards Institute

CTS = Copper Tube Size

CUH = Cabinet Unit Heater

Cv = The amount of water in Gallons per minute at 70 degrees F that will cause a 1 psi drop in pressure across a piece of equipment (typically a valve)

CHW = chilled water (UK)

CPVC = Chlorinated Polyvinyl Chloride

CS = commissioning station/set (flow measuring device & double regulating valve) (UK)

CSD-1 = Controls and Safety Devices for Automatically Fired Boilers (ASME)

CTM = Call to Meet (add phone number) Call the customer 30-60 minutes before tech arrival.

CWP = cold working pressure, the maximum allowable pressure under non-shock conditions at ambient temperature (-20-degrees F to +100-degrees F. Note: This means in plain English that if a valve rated for 600

WOG-CWP is installed on a hot water pipe, it may not live up to the 600-psi rating as it was only tested and approved for cold (ambient) temperature.

CWDS = cold water down service (from a high-level storage tank) (UK)

CWM = cold water main (UK)

CWS/CWR = Condenser Water Supply and Return for cooling towers

DAR = Department of Air Resources (New York City)

DA = direct acting (control valve)

DA = Deaerator

DCI = Ductile cast iron

DD = Degree Day (relative measurements of outdoor air temperature used as an index for heating energy requirements. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F.)

DDC = Direct Digital Control

Delta-T = Change in temperature across a device or system

Δ PC = Delta Pressure Constant

Delta-P = Change in pressure across a device or system

Δ PT = Temperature Guided Head Setpoint

Δ PV = Delta Pressure Variant

DC = drain cock (UK)

DCW = Domestic Cold water

DHW = Domestic Hot Water

DHWH = Domestic Hot Water Heater

DHWR = Domestic Hot water return

DIN = Deutsche Industrie Norm (German Standard)

DN = Diameter Nominal (Metric)

DNC = Do Not Collect

DOE Heating Capacity or Gross Output = amount of heat delivered to the outlet pipe of the boiler.

DP = Double pole

DPC = Differential pressure control

DRV = double regulating valve (UK)

DWV = Drain, Waste, Vent

DX = Direct expansion

DZR = de-zincification resistant (corrosion resistant brass) (UK)

EAC = Electronic Air Cleaner

ECM = Electronically Commutated Motor

ECO = energy cut

EDB = Entering Drybulb (Temperature)

EDR = heat output, equivalent direct radiation, measured in square feet. Actual output will vary according to what is being circulated through the radiator.

EDT = Entering Drybulb Temperature

EER = Energy Efficiency Ratio; the cooling capacity (in Btu/hour) of the electrically-driven cooling unit divided by its electrical input (in Watts) at the Air Conditioning and Refrigeration Institute's (ARI) standard peak rating condition of 95F. This is a measurement of equipment cooling "efficiency" at a given operating point, where a larger value is better. In big cooling equipment, the idea gets flipped over and kW/ton is often used with a lower value being better.

EF = Exhaust fan

EFTU = Electric Furnace Tune Up

EMF = Electromotive Force; voltage

EMS = Energy Management System/DDC

EPACT = Energy Policy Act

EPDM = Ethylene Propylene Diene Monomer

ERV = Energy Recovery Ventilator, term generally used in mixed/cooling climates (see HRV)

EVOH = an oxygen-diffusion barrier, used on radiant tubing (ethylene vinyl alcohol)

F or Far = Fahrenheit

FA = Forced Air

FA = From Above (UK)

FB = From Below (UK)

FD = Fire Damper

FD - Floor Drain

FF = Flat Faced

FGR = Flue Gas Recirculation (a method used to reduce NO_x Levels exiting a heating appliance)

FIP = Female Iron Pipe

FLA = Full Load Amperage, the current draw of a motor under full load.

FLG = Flanged

FM = Factory Mutual Laboratories

FMD = Flow Measuring Device (UK)

FOB = Free On Board (Shipping term)

FOB = Flat On Bottom, referring to a duct transition

FOG = Fats, Oil and Grease

FOT = Flat On Top, referring to a duct transition

FP = Freezing Point

FPM = Feet per Minute

FPS = Feet per Second

FPT = Female Pipe Thread

F & T = Float and Thermostatic

Ft-Lb = Foot/Pound

FTTG = Fitting

FTR = Fin Tube Radiation

FWA = Forced Warm Air

G = Gas

GAMA = Gas Appliance Manufacturers Association

GBTU = Gas Boiler Tune Up

GMMU = Glass Modified Mortar Unit (cement board)

GPH = liquid flow, Gallons per Hour, as used on oil burner nozzles and fuel units

GPM = Gallons Per Minute

GSN = Galvanized Short Nipple (Some say the "S" is for steel)

GSP = Galvanized Steel Pipe

GV = Gravity Vent

HAD = Home All Day

HEX and HX = Heat Exchanger

HF = Hard Faced

HHWR = Heating Hot Water Return

HHWS = Heating Hot water supply

HL = High Level (UK)

HP = Horsepower

HPTU = Heat Pump Tune Up

HRV = Heat Recovery Ventilator, a term generally used in heating climates (see ERV)

HSPF = Heating system (or seasonal) performance factor

HTG = Heating

HTHW = high-temperature hot water (heating above 120-deg C) (UK)

HUD = Department of Housing and Urban Development

Hum = Humidifier

HURL = Heat Recovery Unit

HVAC = Heating, Ventilation & Air Conditioning

HW = Handwheel

HWBB = Hot Water Baseboard

HWH = Hot water heater

HWS/DHWS = hot water service/domestic hot water service (UK)

HX = Heat Exchanger

I.A.P.M.O. = International Association of Plumbing/Mechanical Officianados

IAQ - Indoor Air Quality

IAW = In Accordance With (usually used regarding specifications)

IBBM = Iron Body Bronze Mounted

IBC = International Building Code

I=B=R = Institute of Boiler and Radiation Manufacturers

I.C.B.O. = International Conference of Building Officials

ID = Inside Diameter

IFGC = International Fuel Gas Code – natural gas in IFGC instead of IPC

IMC = International Mechanical Code

In-Lb = Inch/Pound

INPUT = amount of heat produced at the burner. Rating is GPH on oil boilers and MBH on gas units.

INT = Integral

IPC = International Plumbing Code

IPS = Iron Pipe Size

IR Drop = Voltage drop or loss; equal to amperage (I) times resistance (R)

ISO = International Standards Organization

ISRS = Inside Screw Rising Stem

ISNRS = Inside Screw Non-Rising Stem

IV = Isolating Valve (UK)

Kfactor = The ability of a material to conduct heat; expressed in BTU per hour, per square foot, per inch of thickness of the material.

kg = Kilograms

KISS = Keep It Simple, Stupid

kVA - Kilovolt ampere: the unit of electrical flow that is equal to volts multiplied by amperes and divided by 1000

kW - Kilowatt = One thousand watts

kWh = kilo Watt Hours

LAV = lavatory, sink

LH = Lefthand

LL = low level (UK)

LLT = low limit thermostat, often referred to as a "freezestat."

LM = Left Message

LONOX = Low levels of Nitrogen Oxides

LP = Liquified Propane

LPC - Low-pressure control

LPG = Liquified Petroleum Gas (the generic name for commercial propane and commercial butane. There are hydrocarbon products produced by the oil and gas industries. Commercial Propane predominantly consists of hydrocarbons containing three carbon atoms, mainly propane (C₃H₈))

LRA = Locked rotor amperage

LTHW = low-temperature hot water (heating at less than 100-deg C) (UK)

LWCO = Low-Water Cutoff

MAF = Media Air Filter

MAV = Motor-Activated Valve

MBH = rate of heat input or output, 1,000 BTU per hour. M was used because it is the Roman numeral for 1,000.

ME = Mechanical Engineer

MEA = Material and Equipment Acceptance (Department of Buildings, New York City)

MEG = mono-ethylene glycol (anti-freeze) (UK)

MIP = Male Iron Pipe

mm = millimeter

MMBtu = Energy input or output in 1,000,000 Btu per hour. MM is used because it represents a thousand X 1,000.

Modcon = Modulating Condensing boiler

MPT = Male Pipe Thread

MS = mild steel (UK)

MSS = Manufacturers Standardization Society of the Valve and Fitting Industry

MT = Magnetic-Particle Test

MTHW = medium-temperature hot water (heating at 100-deg C to 120-deg C) (UK)

MUA = Make-up air

MV = motorized valve (UK)

NAC = No Air Conditioning

NACE = National Association of Corrosion Engineers

NAOHSM = National Association of Oil Heat Service Managers

NBIC = National Boiler Inspection Code

NC = National coarse thread (a measure of the number of threads on a fastener, measured in threads per inch. ie; 1/2 x 13, a 1/2" bolt with 13 threads per inch)

NC = Normally closed; a switch contact that is closed until operated or energized. Also applies to valve or damper actuators as the "failsafe" position.

NEC = National Electric Code NFPA 70

NEFI = New England Fuel Institute

NEMA = National Electrical Manufacturers Association

Net (or IBR)= amount of heat available at the radiators, after deducting the pick-up factor (heat needed to warm the pipes). This is the rating you use to match the boiler's capacity to the heating load.

NF = National fine 1/2 x 20, 1/2 bolt 20 threads per inch, and all the metric equivalents

NFPA = National Fire Protection Association

NF = National fine thread

NFG = National Fuel Gas

NG = Natural Gas

NH = No Heat

NHCI = No-Hub Cast Iron

NHW = No Hot Water

NIC = Not In Contact

NO = Normally open; a switch contact that is open until operated or energized. Also applies to valve or damper actuators as the "fail safe" position.

NOX = Nitrogen Oxide

NORA = National Oil Heat Research Alliance

NPS = National Pipe Thread Straight

NPSH = Net Positive Suction Head

NPT = National Pipe Thread Taper

NRS = Non-Rising Stem

NRV = Non-return Valve (check valve) (UK)

NSF = National Sanitary Foundation

NSPC = National Standard Plumbing Code

NTS = Not to Scale

O₂ = Oxygen

OAHU = Air Handling Unit

OBTU = Oil Boiler Tune Up

OD = Outside Diameter

OEM = Original Equipment Manufacturer

OF = Oil-fired

OFB = Oil-fired boiler

OFCIB = Oil-fired cast iron boiler

OFF = Oil-fired furnace

OFTU = Oil Furnace Tune Up

OFWH = Oil-fired water heater

OSA = Or Similar and Approved (UK)

OS&Y = Outside Screw and Yoke

OWG = Oil, Water & Gas

OWH = Oil water heater

Pa = Pascal (SI unit of pressure) (UK)

P.E. = Plain end

P.E. = Professional Engineer: the person that the contractor kneels before and addresses as Your Majesty

PEX = Cross-linked Polyethylene pipe

PE-AL-PE = Polyethylene/Aluminum/Polyethylene pipe (three layers sandwiched together)

PEX-AL-PEX = PEX/Aluminum/PEX pipe (three layers sandwiched together)

PG = pressure gauge (UK)

P&T = Pressure & Temperature (relief valve)

pH = the measure of acid or alkalinity

PI = proportional & integral controller

PID = proportional, integral & derivative controller

PO = Purchase Order

POCK = Point of Connection

PONPC = Point of No Pressure Change

PN = Pressure Nominal (Metric)

PPM = Part Per Million

PRV = Pressure Reducing Valve

PSC = Permanent Split Capacitor

PSI = pressure, pounds per square inch, usually "gauge"

PSIA = pressure, pounds per square inch, absolute (disregarding atmospheric pressure)

PSIG = pressure, pounds per square inch, gauge (where zero on the gauge is atmospheric pressure)

PSIA = Pounds Per Square Inch Absolute

P-T = Pressure-Temperature

PU = Pressurization Unit (UK)

PVC = Polyvinyl Chloride

PW = pressurized water (UK)

PWM = Pulse Width Modulation

R - thermal resistance; refrigerant; Rankine

R1 = Customer was rescheduled - don't do it again

R2 = Customer was rescheduled 2 times -- really don't reschedule again

RA = Reverse Acting (control valve)

Rad = Radiator

RC = Return Call

RF = Raised Face

RH = Right Hand

RH = Relative Humidity

RPA = Radiant Panel Association

RPM = Revolutions per Minute

RPS = Revolutions per Second

RPZ = Reduced Pressure Zone (backflow prevention devices)

Q = VA (where Q = Flow, V = Velocity, A = Area)

RS = Rising Stem

RT = Radiographic Test

RT = Rooftop Unit

RTU = Roof Top Unit

RTJ = Ring-Type Joint

S = Steam

SA = Start Up

SAE = Society of Automotive Engineers

S.B.O.C.A. = Southern Building Officials Conference Association

SC = Swing Check Valve

SD = smoke detector

Sch. or Sched = Schedule (Pipe Wall Thickness)

SBS = Sick building syndrome

SC = stop-cock (UK)

SCR = silicon controlled rectifier

SCV = Self Contained Valve

SDR = size to dimension ratio, eg. for SDR 35 where size of pipe [S] is 8", [R] = .035 wall thickness [D] would be $.28" \times 8 \times .035 = .28$

SEER = Seasonal Energy Efficiency Ratio; the total cooling output (in Btu) provided by the unit during its normal annual usage period for cooling divided by the total energy input (in Watt-hours) during the same period; this measurement of seasonal cooling "efficiency" attempts to account for the variations in part load operation. Notes reader, Mark G. Loan, "The term SEER was used exclusively with air to air heat pumps because their efficiency varied according to the season and whether they were cooling or heating. For straight air-conditioning, the proper term was EER, the same thing but not seasonally adjusted. Some genius, probably a marketing guy, decided that SEER was sexier and easier to say, so when R410A was brought out, they started using the S."

SG = sight glass (UK)

SI System = The Metric system

SOV = Shutoff valve

SPDT = Single-pole, double throw; a switch with one movable contact and two stationary contacts

Sp Gr = Specific Gravity

Sp Ht = Specific Heat

SPST = Single-pole, single throw; a switch with one movable contact and one stationary contact.

SS = Stainless Steel

SSOV = Service Shut-Off Valve

STD = Standard Wall Thickness

STR = Street Fitting

SWCI = Service weight cast iron

SWE = Socket Weld End

SWP = Steam Working Pressure

T = Tee

T and P = Temperature and Pressure

TA = to above (UK)

TAB = Testing, adjusting, balancing

TB = to below (UK)

TBOE = top-and bottom, opposite ends (radiator connections) (UK)

T&C = Threaded & Coupled

TD = Temperature difference (also known as Delta T)

TDS = Total Dissolved Solids

TEV = Thermal expansion valve [aka TXV]

"T" Gauge = Gauge used to set "Z" Dimension on a Beckett oil burner

TBE = Thread Both Ends

Thd = Threaded

THI = Temperature-humidity index; a scale that combines dry bulb and wet bulb temperatures to estimate human comfort

TIR = Total Indicator Reading

TLA = Three-Letter Acronym. From reader, Scott Stroshane, P.E., LEED A.P., "A number of years ago, when I was first starting out in the HVAC industry I had a crusty old timer comment that my drawing set needed more "TLA's". I asked him what's a "TLA?" His response was that it was a "three letter acronym."

TLM = The Lovely Marianne (Dan Holohan's wife)

TOE = Thread One End

TON = Cooling power of one ton of ice in one day - roughly equivalent to 12,000 btu.

TPI = Threads per Inch

TRV = Thermostatic Radiator Valve

TS = Temperature Sensor (UK)

TU = Tune Up

TUV = A German acronym. It's short for Technischer Überwachungs-Verein, Technical Monitoring Association in English). These are German organizations that work to validate the safety of products of all kinds to protect humans and the environment against hazards.

TYP = Typical

TXV = Thermal expansion valve [aka TEV]

U Factor = The symbol representing the heat flow through various combinations of building materials

UB = Union Bonnet

UBC = Uniform Building Code

UEC = Uniform Electrical Code

UFH = Under-floor Heating

UH = Unit Heater

UMC = Uniform Mechanical Code

UL = Underwriters Laboratories, Inc.

UPC = Universal Plumbing Code

UST = Underground Storage Tank

UT = Ultrasonic Test

UV = Ultraviolet

V = Volt

VAV = Variable Air Volume

VFD = Variable-Frequency Drive

VE = Value Engineering - the act of redesigning the project after bid time to the contractor's advantage.

VIF = Verify in Field

W = Water

War = Warranty call

WC = Water Column

WC = Water Closet (Europe, and Canada, eh?)

WH = Water Heater (gas-fired)

WP = Water Panel

WHR = Watt/Hour

WSP = Working Steam Pressure

WWP = Working Water Pressure

XHCI = Extra heavy cast iron

XS = Extra Strong Wall Thickness

XXS = Double Extra Strong Wall Thickness

Y = Wye Valve, Fitting or Strainer

WOG = Water, Oil, Gas

"Z" Dimension = Setback of nozzle on Beckett burners

ZV = Zone Valve

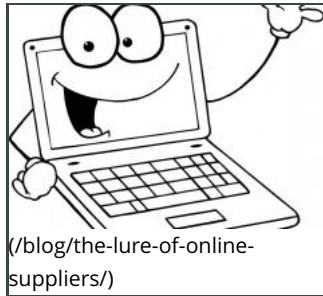


Comments by

(<http://vanillaforums.com>)

Sign up for weekly tips from Dan Holohan, industry news, and exclusive discounts.

[SIGN UP \(HTTPS://VISITOR.R20.CONSTANTCONTACT.C](https://visitor.r20.constantcontact.com)



FROM THE BLOG 9/13/16
The Lure of Online Suppliers
(</blog/the-lure-of-online-suppliers/>)

Heating Professionals: Get Listed on HeatingHelp.com

Get Listed on HeatingHelp.com and get found by thousands of people needing help in your area.

[LEARN MORE \(/FIND-A-CONTRACTOR/GET-LISTED/\)](/find-a-contractor/get-listed/)

[About Us \(/about-us/\)](/about-us/) [Contact \(/contact-us/\)](/contact-us/) [Terms & Conditions \(/terms-and-conditions/\)](/terms-and-conditions/)

[Advertise With Us \(/advertise-with-us/\)](/advertise-with-us/) [Sitemap \(/sitemap/\)](/sitemap/)

[Blog \(/blog/\)](/blog/) [Find a Contractor \(/find-a-contractor/\)](/find-a-contractor/)

[Systems Help Center \(/systems-help-center/\)](/systems-help-center/) [Heating Museum \(/heating-museum/\)](/heating-museum/)

[The Wall \(http://forum.heatinghelp.com/\)](http://forum.heatinghelp.com/) [Store \(http://astore.amazon.com/heatinghelp-20\)](http://astore.amazon.com/heatinghelp-20)

[Seminars \(https://heatinghelp.pivotshare.com\)](https://heatinghelp.pivotshare.com) [Industry News \(/industry-news/\)](/industry-news/)