



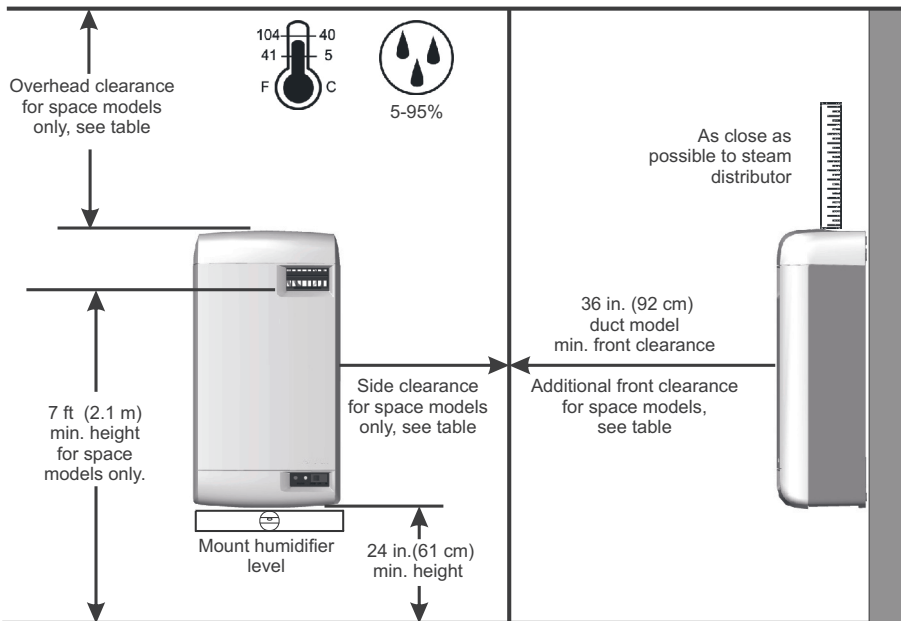
Quick Start Installation Guide

Condair WH



Mounting
Plumbing
Electrical
Steam Distribution

Mounting



Mounting Procedure

1. The Condair WH humidifier is wall mounted using a keyhole located on the back of the humidifier.
2. Use #8 x 2 in. (5 cm) screws mounted into 2x4 studs or better if there is drywall or other spacers. 2 screws are needed, one for hanging the unit and one for securing it so it will not lift off the keyhole.
3. Install the top screw so that 1/4 in. (6 mm) is exposed. Raise the unit and place the screw head through the keyhole.
4. Make sure the unit is level and then insert and tighten the second screw through the bottom hole. Tighten the top screw.

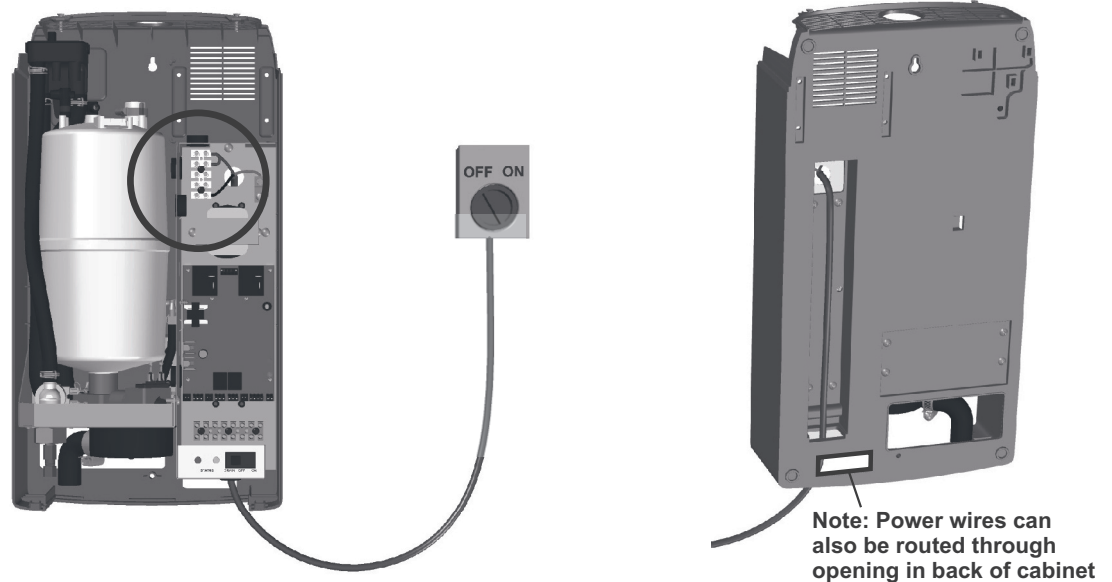
Mounting Requirements

Condair does not accept responsibility for installation code violations.

1. Install as close as possible to the steam distributor.
2. Minimize the use of turn or bends in the steam line as much as feasibly possible.
3. Mount on a suitable wall or vertical surface. Do not sit the on the floor, where freezing can occur, or on vibrating surfaces.
4. Allow clearances for plumbing and electrical connections. Consult local and national codes prior to final location and installation.
5. Install only in areas with ambient temperature 41-104°F (5 – 40°C), and relative humidity 5 - 95% (non-condensing).
6. When possible, mount the Condair WH humidifier at a height convenient for servicing.

Humidifier Output lb (kg)	Additional Clearance for Space Models Only		
	Side in. (cm)	Overhead in. (cm)	Front in. (cm)
<4 (1.8)	12 (30)	12 (30)	36 (92)
6 (2.7)	16 (40)	18 (46)	42 (107)
8 (3.6)	18 (46)	18 (46)	48 (120)

Electrical



Install Requirements

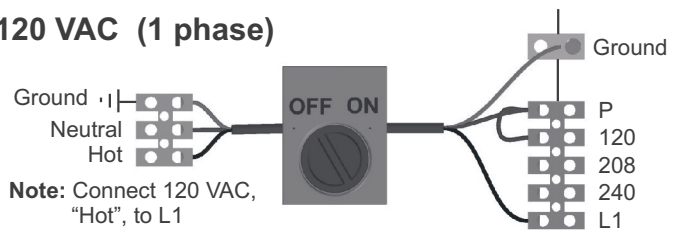
Condaire does not accept responsibility for installation code violations.

1. All electrical connections to the humidifier are to be done while the unit is switched off, and the external disconnect is open.
2. Wiring should be done by a licensed electrician.
3. Install a labeled disconnect switch within view of the humidifier.

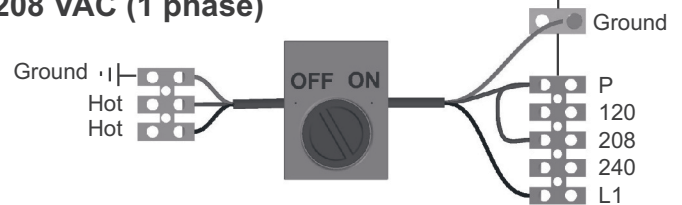
Note:

1. Install jumper between P and terminal that corresponds to supply voltage.
2. Dedicated external fused disconnect must be installed. Fusing must not exceed max circuit protection as indicated on the specification label.
3. Ensure that adequate power is available to carry full humidifier amp draw as indicated on the specification label.
4. Do not use neutral wire as a ground, connect to ground lug.
5. All Wiring to be in accordance with national and local electrical codes.

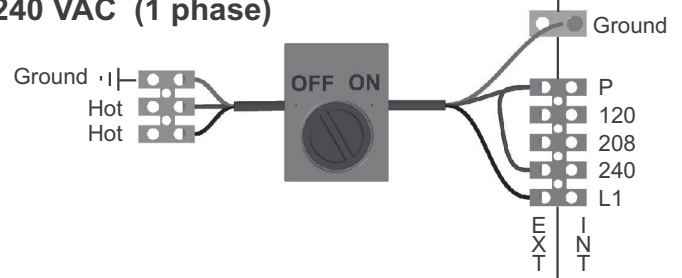
120 VAC (1 phase)



208 VAC (1 phase)



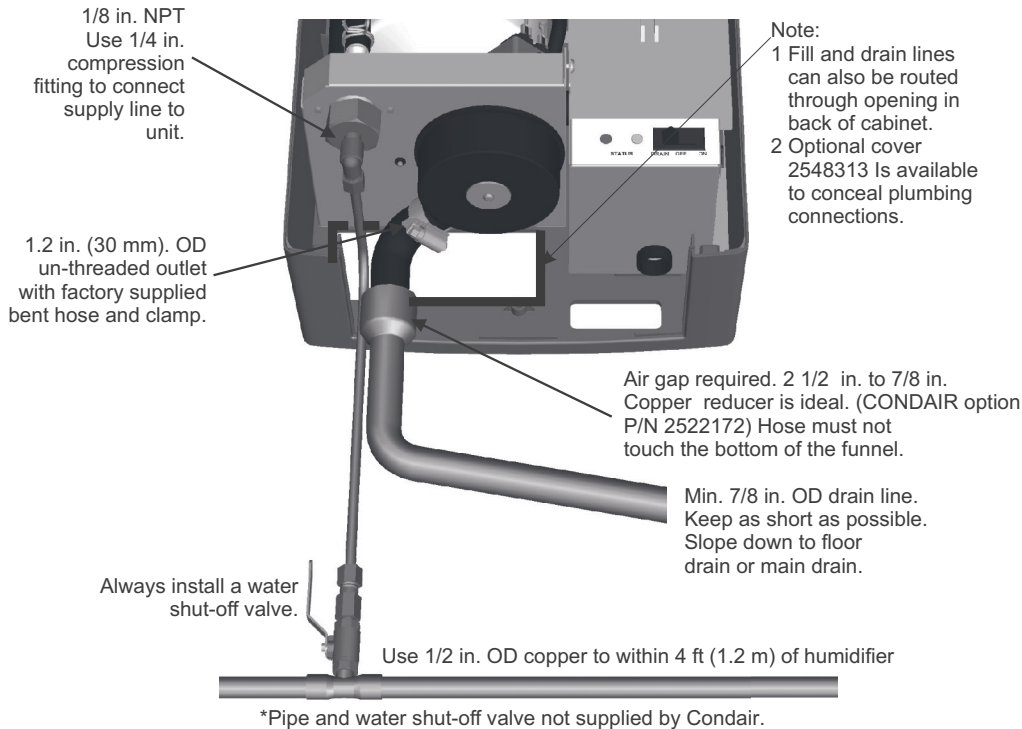
240 VAC (1 phase)



WARNING

Wiring needs to be preformed by a licensed Electrician.

Plumbing



Water Supply Requirements

Condair does not accept responsibility for installation code violations. All drain and fill line connections should be installed in accordance with local plumbing codes by a licensed plumber.

1. Use 1/2" OD copper or plastic supply lines within 4 feet of the humidifier.
2. Install water shut off valve and coupler to facilitate servicing.
3. Do not use reverse osmosis or de-ionized water.
4. Flush supply lines with fresh clean water after installing, prior to operating the humidifier.
5. Do not solder/braze copper lines while connected to the humidifier or the fill solenoid can melt or deform.
6. Water conditions must meet the following criteria for optimal operation, consult factory for water conditions outside of this range.
 - a. Pressure: 30 to 80 PSIG
 - b. Conductivity: 150-1200 Microsiemens
 - c. Temperature: 33.8-68°F/1-20°C
 - d. Harness 0-10 GPG and Silica 0-4 PPM—OR—
Hardness 0-3 GPG and Silica 0-14 PPM

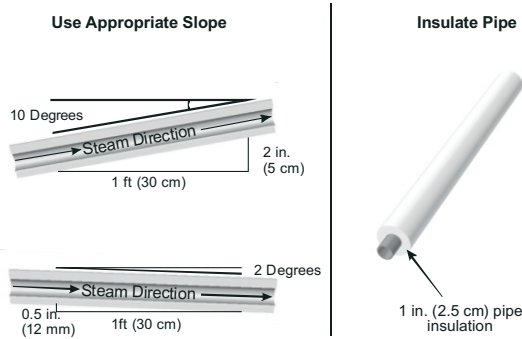
Drain Line Requirements

1. Use 7/8 Copper. Do not use PVC.
2. Install an air gap within three feet of the humidifier. A copper reducer from 2.5"-7/8" is ideal, do not allow the drain hose to bottom out in the funnel cup.
3. The drain line should not end in a sink used frequently by personnel, or where plumbing codes prohibit it. Route to a floor drain or equivalent for safety reasons.
4. Insure drain line is adequately sloped and sized to provide free and easy draining.

Steam Distribution

Install Requirements

1. Steam lines must not have any restrictions which could result in back pressure.
2. Follow recommended materials, size and length, see table.
3. Slope the steam lines a minimum of 2" for every 12" horizontal run against the flow of steam and 0.5" for every 12" horizontal run with the flow of steam.



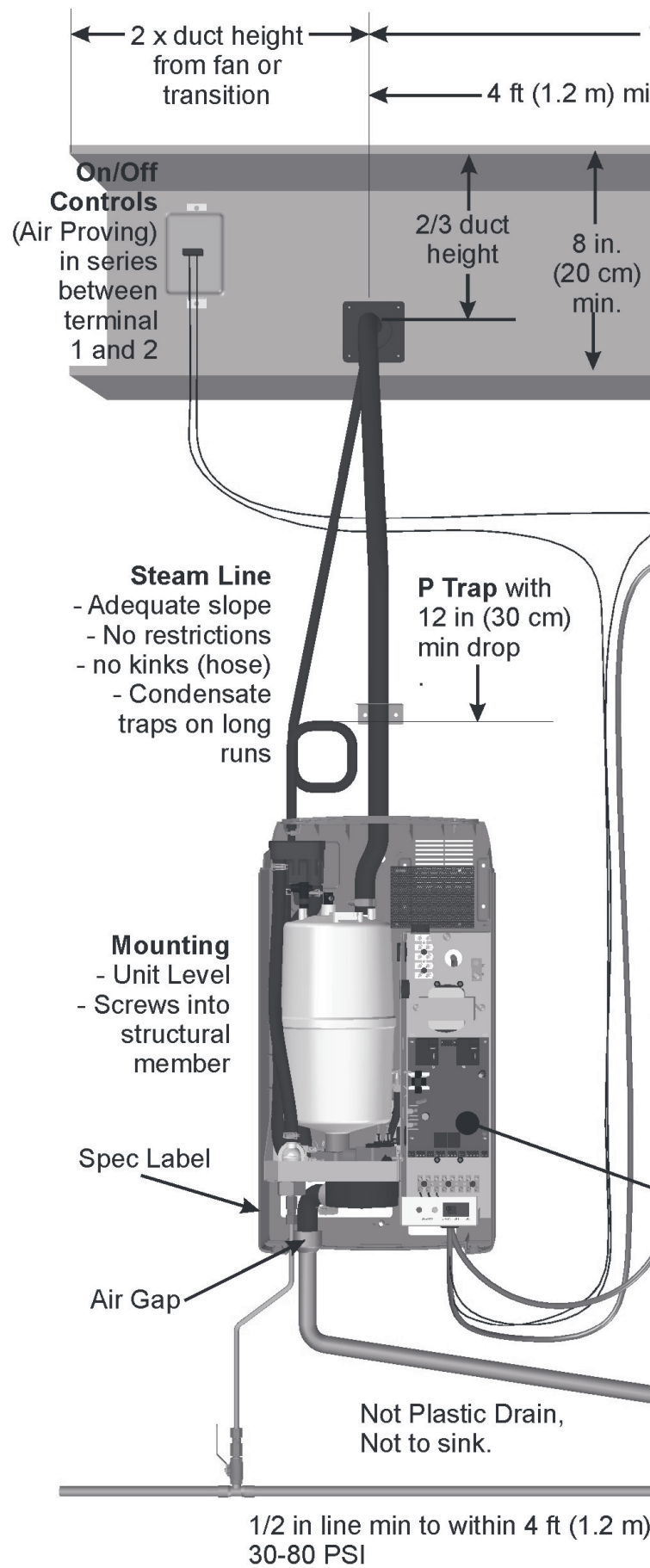
4. Insulate copper or SS tube with 1.0 in. (2.5 cm) pipe insulation.
5. Trap low points in steam line with full size 'T' fittings, and off of the distributor condensate connection. Condensate traps must be a minimum of 3 in. in height or duct static pressure + 2 in. (whichever is greater) and drop a minimum of 12 inches prior to the top of the trap.
6. Do not over tighten hose clamp at cylinder steam outlet. The maximum torque is 12 in-lbs.
7. Support the steam line so the weight does not rest on the cylinder.

Voltage	Steam Output lbs/hr (kg/hr)	Material*			Maximum Steam Line Length ft (m)	Possible Losses lbs/hr (kg/hr)
		Condair Steam Hose	MED-L Copper Tube	Stainless Steel Tube		
110-120V	5 (2.3)	Part Number 1328810 (7/8")	3/4"	0.875 X 0.049W	7 (2)	0.5 (0.2)
208V	8.7 (3.3)				10 (3)	1 (0.5)
220-240V	10 (4.6)				12 (3.5)	1.5 (0.7)
Oversized Steam Line (used for longer steam runs)**						
110-120V	Not recommended	Not Recommended	1"	1.125 X 0.049W	Not Recommended	
208V	8.7 (3.3)				12 (3.5)	2 (0.9)
220-240V	10 (4.6)				24 (7)	3 (1.4)

* The use of steam line other than copper, stainless steel tube or Condair supplied steam line will void the warranty and may adversely affect the operation of the humidifier.

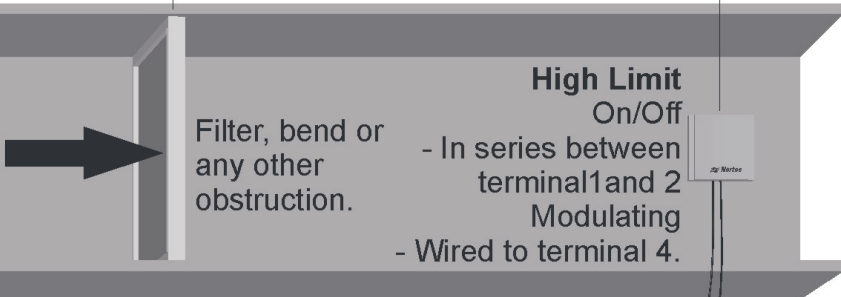
** These diameters require a reducer at humidifier and steam distributor connection. Use Condair part number 1115444 at humidifier to prevent backpressure caused by condensation collecting at the reduction.

Condair WH Installation Check



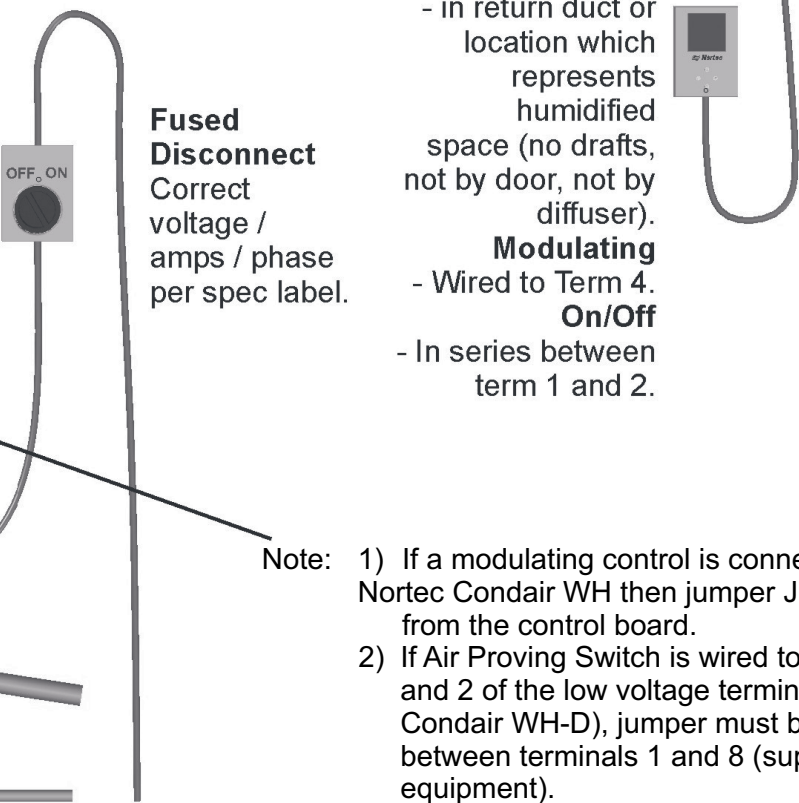
10 ft (3 m) min.

n.



**High Limit
On/Off**

- In series between terminal 1 and 2
- Modulating
- Wired to terminal 4.



**Fused
Disconnect**
Correct
voltage /
amps / phase
per spec label.

Humidity Control

- in return duct or location which represents humidified space (no drafts, not by door, not by diffuser).

**Modulating
On/Off**

- Wired to Term 4.
- In series between term 1 and 2.

- Note:
- 1) If a modulating control is connected to the Nortec Condair WH then jumper J10 must be removed from the control board.
 - 2) If Air Proving Switch is wired to terminals 1 and 2 of the low voltage terminal strip (for Condair WH-D), jumper must be installed between terminals 1 and 8 (supplied with equipment).

All information contained in this quick start guide is for general information purposes only. This is NOT an installation manual and nothing in this guide is meant to constitute installation instructions. For complete Condair installation/operation recommendations for your Condair equipment, please refer to the installation manual for your specific system, accessories, and components.

All electrical connections must be installed in accordance with local and national electrical code requirements by a licensed electrician.

All water supply and drain line connections must be installed in accordance with local plumbing codes by a licensed plumber.

Condair does not accept any liability for installations of humidity equipment installed by unqualified personnel or the use of parts/components/equipment that are not authorized or approved by Condair.

Get complete installation, operation, engineering manuals and more from our website: www.condair.com



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