

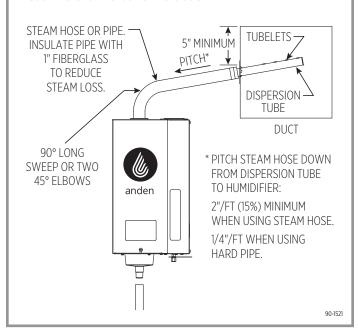
### **AS35 Steam Humidifier**

**Quick Start Guide** 

1

# Choose a location in a conditioned space

Place outside the grow room if possible. The capacity of the humidifier is reduced by the length of the steam hose or pipe due to condensation. The maximum recommended length of steam hose is 6 feet. Use hard pipe insulated with 1" thick insulation rated for 212°F or higher for lengths greater than 6 feet. If 6-foot steam hose does not reach from humidifier to dispersion tube, splice in 1" copper pipe using 3/4" x 1" reducing coupling. See Installation Manual for more details.

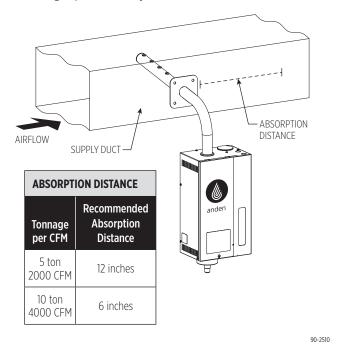


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# Duct location and absorption distance

Absorption distance is the unobstructed straight line distance needed for steam to be fully absorbed.

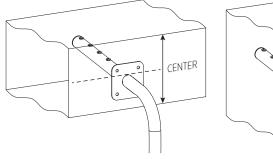
- Determine absorption distance based on the lowest air velocity that the system will see (refer to table below).
- Locate dispersion tube in a straight section of duct, far enough upstream of any obstructions or bends in the duct.

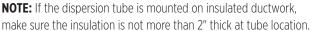


## Install dispersion tube

- The steam tubelets must face up regardless of the airflow direction in the duct. The plate is labeled "UP" to indicate proper orientation.
- On horizontal duct runs, install the dispersion tube low in the duct.
  On vertical duct runs, center the tube on the duct.







B

1

CENTER



### Install drain line

- Secure 7/8" drain line with the hose clamp provided. **Do not over tighten.**
- Make sure drain line has a constant downward slope and is not kinked or blocked.
- If floor drain is not available, use condensate pump to route water to a drain.

**NOTE:** The humidifier uses cold water to temper drain water to less than 140°F.



## Water quality and canister selection

The Steam Humidifier operates on water with conductivity between 75 and 1,250 EC.

- Connect to water supply. Do not use RO or DI water.
- · Use cold water only.

WATER QUALITY GUIDELINES						
EC (1:1)	Grains/ Gal		Recommended Canister by Voltage			
Research		Hardness	120VAC	208VAC	240VAC	
75-100	0-3	Naturally Soft	Installation Not Recommended	AS80LC	AS80LC	
100-300	3-9	Naturally Soft	AS80LC	AS80LC	AS80LC	
300-500	9-15	Slightly Hard	AS80LC	AS80	AS80	
500-650	15-20	Moderately Hard	AS80LC	AS80	AS80	
650-850	20-25	Hard	AS80LC	AS80	AS80	
850-1250	25-36	Very Hard	AS80LC	AS80	AS80	
above 1250	above 36	Extremely Hard	Installation Not Recommended			
		Softened	AS80	AS80	AS80	

## 6

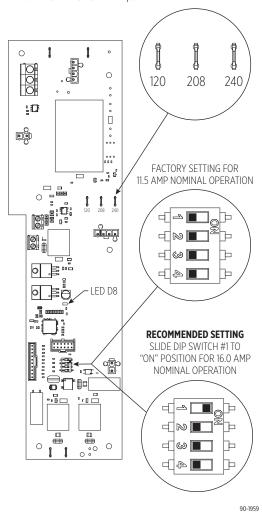
## **Capacity**

Settings are chosen based on desired capacity.

STEAM CAPACITY					
Amperage	Voltage	Maximum Steam Capacity (gal/day)			
	120V	11.5			
11.5	208V	20.5			
	240V	23.3			
	120V	16.0			
16.0 (Nominal)	208V (recommended)	30.0			
	240V (recommended)	34.6			

#### Circuit board dip switches

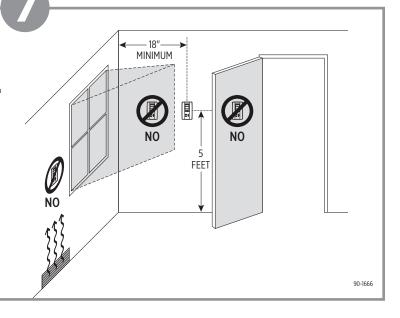
For max capacity connect to 240V and set dip switch from 11.5 to 16 Amps.

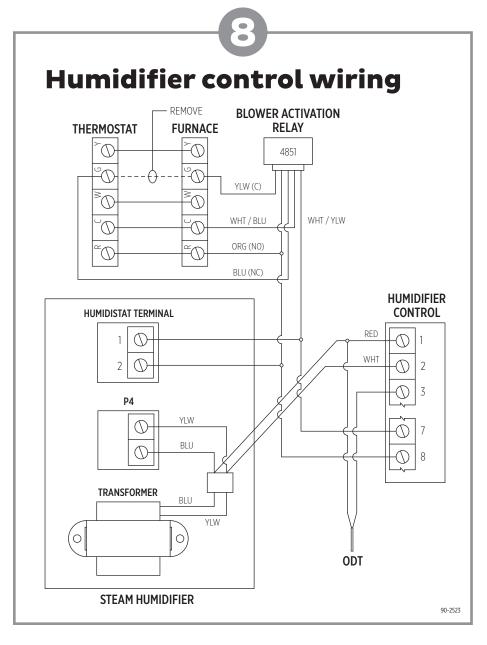


Determine location for humidifier control

#### Do not mount humidifier control:

- In the flow of supply registers.
- Behind doors or in corners
- In direct light, near lighting fixtures, or other appliances that give off heat.
- Outside or in unconditioned area.







## **Running and** programming control

The maximum humidity set point is 90% and the control comes with the default maximum humidity set point preset to 65%. See step 4 in **Program Mode** of ADMC manual.

#### **Humidifier control jumper setting:**



**Jumper (JP2) on right:** 24VAC dry contact when 24VAC EXT. wiring terminals 7 and 8.

### For additional help

Call Anden Tech Support at 1-800-972-3710. The Quick Start Guide is to be used as reference only. Installation is to be in accordance with Installation and Operating Instructions provided with the dehumidifier.

## Sequence of operation

#### 1. Green lights:

- **a.** Solid "on/off" light indicates humidifier is turned on.
- **b.** 1 minute flashing "on/off" light indicates power is restored to humidifier.
- **c.** Steam light on means steam is being created.
- **d.** Fill light on means water is being added to humidifier.
- e. Drain light on means water is draining from humidifier.

#### 2. Expected noises from the humidifier:

- a. Clicking noise of valve opening to add water.
- **b.** Clicking noise of drain valve opening during the drain cycle.
- **c.** Clicking noise of the relays opening and closing during normal operation of the humidifier.
- **d.** Sound of water flowing through the humidifier.

#### 3. Humidistat will call for humidity,

- a. Steam light will turn green.
  - i. Electricity will pass through the water in the canister unit causing the water to heat to boiling point, which sends the steam up the hose.
  - **ii.** On startup and steam canister replacement the water within the canister could take at least 30 minutes to boil and several days to condition and reach full capacity.
  - **iii.** Once the water in the canister is conditioned, the water will boil almost immediately.

#### 4. Drain valve operation

**a.** Any time the drain valve is activated, the Drain light illuminates green.

