

# Technology You Can Depend On!

Products that let you  
**breathe**  
a little easier®



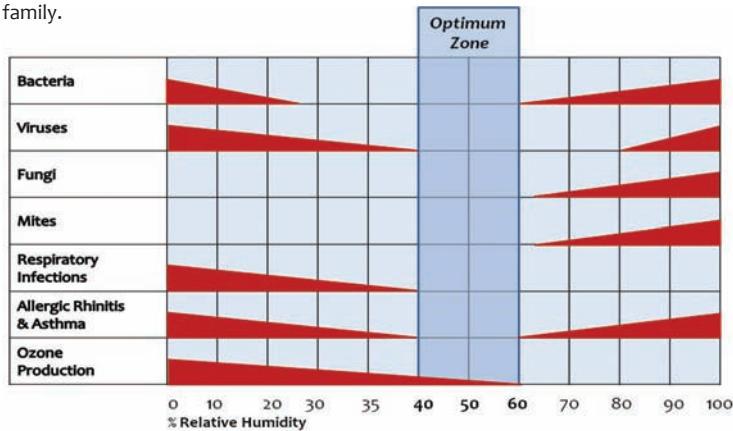
## GeneralAire® Elite Steam Humidifier: An Investment That Pays Dividends Everyday

We all have an investment in our health, homes and furnishings. Protecting those investments from the dry air may not seem like an important task, but the effects of dry air are astounding.

- Since the air in your home is always trying to reach its saturation point, it will absorb water wherever it can; from the bodies of you and your children, your pets, your furniture and even your house plants. As a result your skin, throat and nasal passages dry out, leaving you more susceptible to physical discomfort, colds, flu and even infection. That's why many doctors recommend humidifiers for allergy and asthma sufferers.
- Research shows that 30% – 60% relative humidity is ideal. Outside this range, bacteria, fungi, viruses and mites thrive and multiply, along with your risk of being adversely affected.
- Dry air causes dry, itchy skin.
- Dry air cracks expensive woodwork, floors and furnishings.
- Static electricity (caused by dry air) can damage computers, VCR's and other electronic equipment, requiring expensive repair.
- Dry air causes gaps in window & door frames, letting cold outdoor air in; causing you to turn up the heat and increasing your heating bills! Controlled humidity from the GeneralAire® Elite Steam Humidifier allows you the luxury of dialing the thermostat back & reducing annual heating bills. For example, 68° at 40% relative humidity feels just as warm as 74° at 20% humidity. Setting your thermostat back by as little as three degrees can reduce annual heating bills by as much as 5%.

### Humidity For Comfort

Research has shown that 40% to 60% relative humidity is ideal for today's homes. Outside this range, bacteria, fungi, viruses and mites thrive. Proper relative humidity provides a comfortable environment for your woodwork, your furniture, your plants, your pets and especially you and your family.



Indirect Health Effects of Relative Humidity in Indoor Environments. Environmental Health Perspectives, Vol. 65, p358. Sterling, et.al. 1986.

### Maximum Steam Production

Another factor affecting cylinder life is the maximum production setting. A higher production rate will result in a shorter cylinder life. For this reason DS25 and RS25 units are preset from the factory at 70%. Further reductions in maximum Steam Production will extend cylinder life.

### Check Water Quality

Steam cylinders must be matched to the local water conductivity. If not familiar with local water conductivity, check using an instrument (35662-30 EZTestr11 Conductivity Tester). Change cylinder before startup if not correct. If conductivity is outside these ranges, contact the factory before installation.

Elite Steam Models	Conductivity uS/cm	Steam Cylinder
DS25, RS25	300-1250	25-14
DS25LC, RS25LC	125-500	35-15
DS15, RS15	125-1250	15-14

If water conditions are outside the parameters shown above or those shown in the Installation Manual, do not install the unit. Contact the factory for technical support.

### The following water types are not acceptable:

1. Softened water, as this will lead to foam, electrode corrosion and greatly shortened cylinder life.
2. Water containing disinfectants or corrosion inhibitors, as these are potential irritants
3. Industrial water, boiler water or water from cooling circuits.
4. Any potential chemically or bacteriologically contaminated water.
5. Heated water.
6. Water with silica deposits.

### GeneralAire® Diagnostic Instruments

35662-30 EZTestr11  
GFI #7066  
Conductivity Tester



610 Digital  
Thermohygrometer  
GFI #7065  
Measures:  
Temperature  
Humidity Level



# Elite Steam Humidifiers



Manufacturers of Whole House Indoor Air Quality Products Since 1937:

- Humidifiers
- Dehumidifiers
- Air Cleaners
- UV Air Purifiers
- Heat/Energy Recovery Ventilators



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# Elegant styling designed to deliver precise humidification comfort



## Humidity Can Save Money!

As moisture evaporates from your body, it cools the surface of your skin, making you feel cooler. Controlled humidity from the GeneralAire® Elite Steam Humidifier allows you the luxury of dialing the thermostat back, thus reducing annual heating bills.

For example, 68°F at 40% relative humidity feels just as warm as 74°F at 20% relative humidity. Setting your thermostat back by as little as three degrees can reduce annual heating bills by as much as 5%.

## How the Elite Steam Humidifier Works

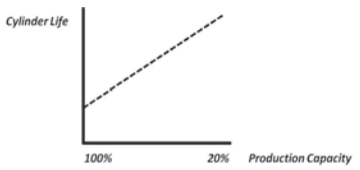
The GeneralAire® Elite Steam Humidifier is an electrode humidifier. Steam humidification is produced by passing electric current through water inside a plastic steam generator cylinder between highly-conductive metal electrodes. Steam output is directly proportional to the conductivity of the water between clean electrodes. The Steam Cylinder, therefore is the engine of the humidifier.

## The Life of a Cylinder

As water evaporates inside the cylinder, minerals are left behind. Much of these minerals are removed through the cylinder drain, however some remain; building up on the cylinder walls and electrodes. As lower portions of the electrodes accumulate a thick coating, the water level automatically rises to expose clean electrode surface for maximum electric conductivity. Eventually mineral buildup creates a thick coating along the entire length of the electrodes and little electrical current can pass between them, resulting in poor steam output. The DS50 / DS50LC humidifier senses low amperage and displays the E6 Cylinder Exhausted error code. There is no need to replace your humidifier. At this time, **simply replace your steam cylinder.**

### Humidity Load

(also known as Gallons Per Day) has a direct impact on the life of your cylinder. When properly sized to match the square footage of a home, a humidifier will rarely be required to run at full capacity. As a result, water levels inside the cylinder remain lower and buildup of minerals on the entire length of the electrodes takes longer. Thus, the life of your cylinder is greatly enhanced. Conversely, extraordinary installations that require constant operation at full capacity reduce cylinder life. The water level in the cylinder stays generally much higher, and the electrodes become completely insulated by mineral buildup more quickly. Installations like this may result in cylinder life of less than 1000 hours. See the chart to the right (How Much Humidity Do I Need?) to calculate the proper Humidity Load (and select the right humidifier) for your home.



## Construction / Renovation

In high end construction and renovation projects humidification is often required while the structure is being finished, as it helps to protect and stabilize wood floors, trim and decoration. Humidification load in an unfinished structure may be five to eight times higher than a finished one. Elite Steam humidifiers may be operated while construction is underway but you may expect a shortened cylinder life as a result. To ensure your humidifier provides ideal humidification levels once the structure is finished, replace your cylinder.



## Elite Steam Models DS50, DS50LC\*

- Include:**
- 8' Steam Hose
  - GFX50 Humidistat
  - Water Fill Connector
  - 9' Condensate Hose
  - Water Supply Tubing Kit
  - Air Pressure Proving Switch
  - 12" Stainless Steel Manifold



## Features

- DS50 (GFI #5530) & DS50LC (GFI #5535)
- Unit Size: 18" W x 31" H x 14" D
- The only humidifier to accommodate homes up to 10,000 Sq. Ft.!
- 230V
- Capacity 20 Lbs/Hr
- 50-58 GPD
- LCD display with numerical and icon driven menu
- Drain Tempering
- Constant control monitoring and diagnostics
- Pure sterile steam delivering premium indoor air quality
- GFX50 Automatic Humidistat is included
- Replacement Steam Cylinders: 50-14 (GFI #7624) & 50-15 (GFI #7635)

## How Much Humidity Is Right?

- Calculate the Total Cubic Feet of Home**
- Total Home Square Footage X Average Ceiling Height
- Calculate the Load (lbs/hr)**
- Total Cubic Feet X Desired Condition Factor (Table Below)
  - X 1.05 For Each Fireplace
- Calculate Gallons Per Day (GPD)**
- Gallons Per Day = Load (lbs/hr) X 2.88



## Pounds of Moisture Per Cubic Foot

Indoor Air Temp °F	Indoor RH%			
	35%	40%	45%	50%
68	0.00015	0.00018	0.00021	0.00024
70	0.00017	0.00020	0.00023	0.00026
72	0.00019	0.00022	0.00025	0.00028

\*Based on .5 air changes per hour  
\*LC = Low Conductivity



## Elite Steam Models DS15P, DS25, DS25LC\*

Requires Installation Kit Option Below

## Features

- DS15P (GFI #5528), DS25 (GFI #5524) & DS25LC (GFI #5527)
- Unit Size: 13- 1/8" W x 23-3/4" H x 8-1/4" D
- For homes up to: DS25 / DS25LC 6,000 Sq. Ft.; DS15P 3,500 Sq. Ft.
- 120V / 230V
- Capacities from 5.5 Lbs/Hr to 9-12 Lbs/Hr
- From 15.84 GPD to 25-35 GPD
- LCD display with numerical and icon driven menu
- Drain Tempering
- Constant control monitoring and diagnostics
- Pure sterile steam delivering premium indoor air quality
- Replacement Steam Cylinders: 15-14 (GFI #7523) , 35-14 (GFI #7624) & 35-15 (GFI #7534)

## GeneralAire® Installation Kits

### Duct Mount Kits

- DMNKIT (GFI #7525)**  
**DS15P, DS25, DS25LC**  
**Includes:**
- 8 ft Steam Hose, 9' Condensate Hose, Nozzle, Water Fill Line Connector, GFX3 Humidistat, Code Valve, Water Supply Tubing Kit, Air Pressure Proving Switch.



### Remote Blower Kits

- RMB15 (GFI #7545)**  
**DS15P Only**  
**Includes:**
- 120V. 12 ft Steam Hose, 13 ft Condensate Hose, Water Fill Connector, 6" Thru-the-Wall Sleeve with 120V Blower & Grille Pkg, GFX3 Humidistat, Code Valve and Water Supply Tubing Kit .



- EDKMK 4 (GFI #7675)**  
**DS15P, DS25, DS25LC**  
**Includes:**
- 4 ft Steam Hose, 5' Condensate Hose, Water Line Fill Connector, Air Pressure Proving Switch.



- RMB35 (GFI #7540)**  
**DS25, DS25LC Only**  
**Includes:**
- 230V. 12 ft Steam Hose, 13 ft Condensate Hose, Water Fill Connector, 6" Thru-the-Wall Sleeve with 120V Blower & Grille Pkg, GFX3 Humidistat, Code Valve and Water Supply Tubing Kit .



## Elite Steam Models RS15P, RS25, RS25LC\*

- Include:**
- Code Valve
  - GFX3 Humidistat
  - Water Fill Connector
  - Water Supply Tubing Kit
  - Integral Room Steam Blower



## Features

- RS15P (GFI #5548), RS25 (GFI #5547) & RS25LC (GFI #5543)
- Unit Size: 13-1/8" W x 23-3/4" H x 8-1/4" D
- For homes up to: RS25 / RS25LC 6,000 Sq. Ft.; RS15P 3,500 Sq. Ft.
- Multiple Installation Options: Duct Mount – Room Mount – Remote Mount
- 120V and 230V options
- Drain Tempering
- Capacities from 5.5 lbs/hr to 12 lbs/hr
- Integrated AHU fan relay for on demand humidification
- LCD display with numerical and icon driven menu
- Constant control monitoring and diagnostics
- Pure sterile steam delivering premium indoor air quality
- GFX3 Automatic Humidistat is included
- Replacement Steam Cylinders: 15-14 (GFI #7523) , 35-14 (GFI #7624) & 35-15 (GFI #7534)

## GeneralAire® GFX3 Humidistat (GFI #7050)

- Automatic or Manual Control; Your choice with Included Outdoor Sensor.
- 10 Humidity Settings.
- Easy to Use.
- Contemporary Design! Built to Last!
- Wall or Duct Mount.
- LCD Backlit Readout (Easy to read / understand).
- Calibrate to match existing appliances in your home.
- Extremely Accurate.
- Extend Outdoor Sensor up to 200'
- Humidity Range from 10% to 75% (Great for humidors, wine cellars or older turn-of-the-century homes alike!).
- No special wiring required to install! Use any wire and the GFX3 will perform as promised!



## GeneralAire® Elite Steam Humidifier Specifications

Model	Power Supply (single phase)	Steam Output (lbs/hr)	GPD	Home Size (Sq Ft)	Dimensions		
					W	H	D
DS15P	120Vac 50/60Hz	5-5	15.8	3,500	13 1/8	23 3/4	8 1/4
RS15P	120Vac 50/60Hz	5-5	15.8	3,500	13 1/8	23 3/4	8 1/4
DS (25 / 25LC)	230Vac 50/60Hz	9-12	25-35	6,000	13 1/8	23 3/4	8 1/4
RS (25 / 25LC)	230Vac 50/60Hz	9-12	25-35	6,000	13 1/8	23 3/4	8 1/4
DS (50 / 50LC)	230Vac 50/60Hz	20	50-58	10,000	18	30 1/2	12 1/4

\*LC = model with low conductivity cylinder