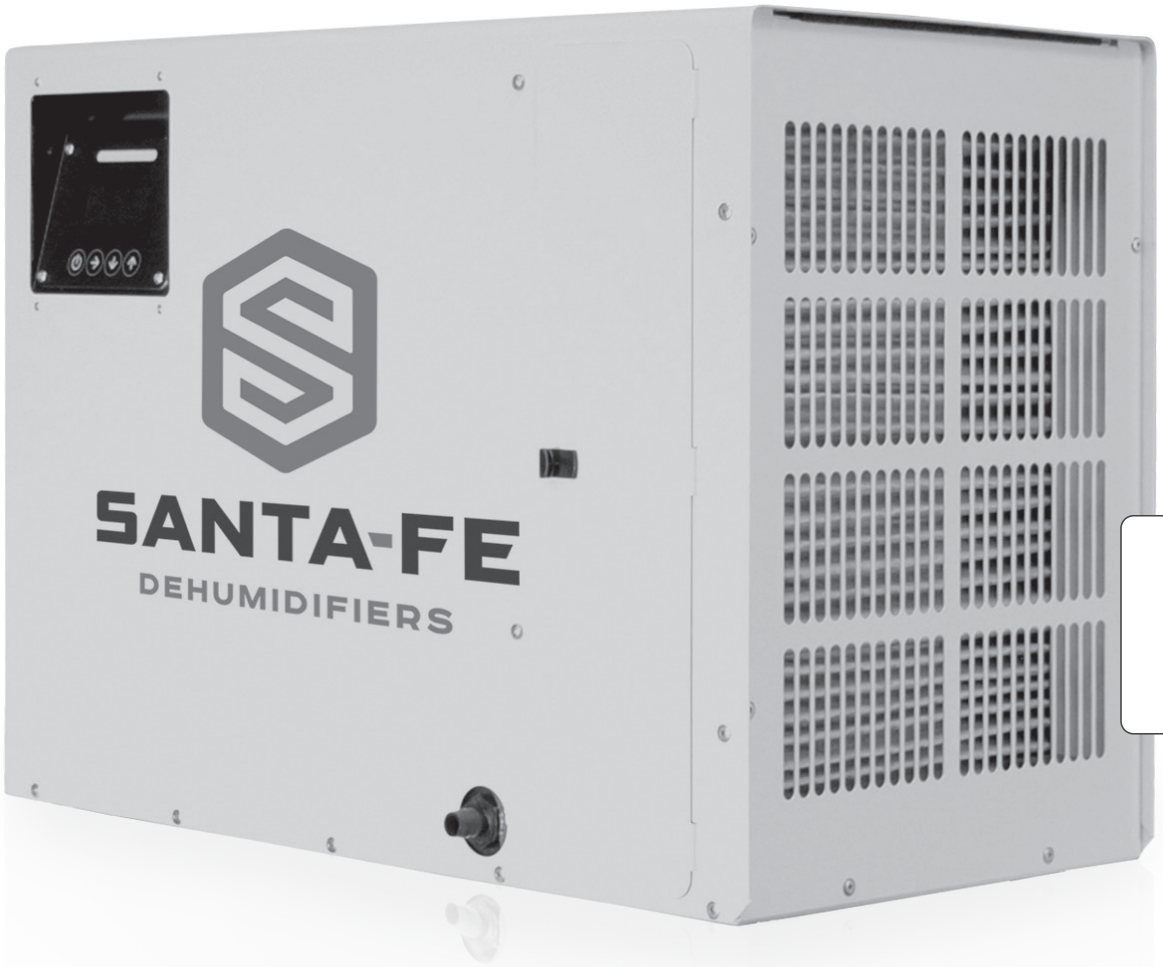
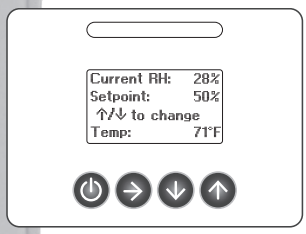
SANTA-FE DEHUMIDIFIERS

INSTALLATION & OPERATION INSTRUCTIONS



State of the Art
Digital Control



The **Santa Fe Advance100** has a horizontal configuration, installation flexibility and unique high and low dehumidification modes making it an ideal solution for almost any finished or unfinished area in the home.

Its digital controls and Wi-Fi compatibility make it easy for any homeowner to understand its use to improve air quality in their home.

Part Number 4031955

Serial Number

Install Date

Sold By

MADISON, WI

ENERGY STAR

WARRANTY 6-YEAR WARRANTY

Table of Contents

Safety Instructions 3
- Intended Applications 3
- Registrations 3

Specifications 4

Dehumidifier Set Up 5
- Items Included In Box 5
- Important Precautions 5
- Location Considerations 5
- Installing Leveling Feet 5

Ducting to Finished Areas (Optional) 6
- Attaching Duct Collars 6
- Recommended Installations 7

Drain Installation 8

Operation 9
- Digital Control 9
- 2-Pin Terminal Block 10
- Santa Fe Connect 10
- High and Low Dehumdification 10

Air Filtration 11
- Changing The Filter 11
- MERV Rating Chart 12

Electrical Requirements 13

Service 14
- Replacement Parts 14
- Refrigerant Charging 14
- Compressor / Capacitor Replacement 14
- Troubleshooting 14

Warranty 17

Therma-Stor®

4201 Lien Rd. Madison, WI 53704
1-800-533-7533
www.Thermastor.com | www.Santa-Fe-Products.com

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Safety Instructions

READ THE INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTIONS CAREFULLY BEFORE INSTALLING AND OPERATING THIS DEVICE. PROPER ADHERENCE TO THESE INSTRUCTIONS IS ESSENTIAL TO OBTAIN MAXIMUM BENEFIT FROM YOUR SANTA FE DEHUMIDIFIER.

⚠ WARNING!

THIS SYMBOL MEANS IMPORTANT INSTRUCTIONS. FAILURE TO HEED THEM CAN RESULT IN SERIOUS INJURY OR DEATH.

⚠ CAUTION!

THIS SYMBOL MEANS IMPORTANT INSTRUCTIONS. FAILURE TO HEED THEM CAN RESULT IN INJURY OR MATERIAL PROPERTY DAMAGE.

- Never operate a unit with a damaged power cord. If the power cord is damaged, it must be replaced by the manufacturer, its service agent, or a similarly qualified person in order to avoid a hazard.
- Do not unplug the unit by pulling on the cord. Grasp the plug firmly and pull it out of the wall socket or power receptacle.
- When plugging in the unit, use a Ground Fault Interrupter outlet.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Never operate electrical equipment near or in standing water.
- Do not stick your fingers or other objects through the safety grill.
- The unit must be used in the upright position.
- When changing filters, do not stick fingers or other objects in the unit.
- Do not restrict airflow in to or out of the unit. This may cause the unit to overheat.
- The unit should never be serviced or cleaned while it is plugged in.
- Do not sit or stand on the unit, or use as a shelf or table.
- Before leaving the unit unattended, ensure children do not have access to the equipment. Do not allow children to play with or near the unit or in its air flow.
- The unit is designed to be installed indoors only.
- No user serviceable components. Contact installer or call 1-800-533-7533 for all repair or warranty needs.

Intended Application(s)

The Santa Fe Advance100 is intended for use in crawl spaces or basements: however, the unit can be placed in almost any residential setting where dehumidification is desired. Use in non-residential applications and pool areas may void warranty.

The Santa Fe Advance100 is designed to operate in temperatures between 49° and 95°F. This unit works most effectively between 56° and 95°.

In order to efficiently control humidity levels, the area in which the dehumidifier is to be operated must be free of water intrusion or excessive fresh (outside) air infiltration. Before installing the Santa Fe Advance100, water intrusion and air infiltration problems should be addressed.

Registrations

The Santa Fe Advance100 conforms to unified standard UL 60335-2-40 and CSA standard C22.2.60335-2-40.

Specifications

Part Number:	4031955
Blower:	High Mode - 325 CFM @ 0.0" WG Normal Mode - 215 CFM @ 0.0" WG
Power:	High Mode - 665 watts @ 80°F and 60% RH Normal Mode - 675 watts @ 80°F and 60% RH
Supply Voltage:	115 volt – 1phase – 60 Hz
Current Draw:	High Mode - 5.7 amps Normal Mode - 5.8 amps
Operating Temp.:	49°F Min., 95°F Max.

Sized For: (Refer to website for more sizing considerations)

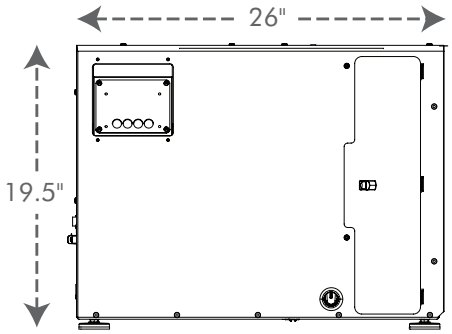
Crawl Space	
Very Tightly Sealed	Up to 3,700 Sq. Ft. (18,000 Cu. Ft.)
Moderately Sealed	Up to 2,800 Sq. Ft. (14,000 Cu. Ft.)
Some Leaks & Imperfections	Up to 2,400 Sq. Ft. (12,000 Cu. Ft.)
Basement	
Very Tightly Sealed	Up to 2,900 Sq. Ft. (29,000 Cu. Ft.)
Moderately Sealed	Up to 2,600 Sq. Ft. (26,000 Cu. Ft.
Some Leaks & Imperfections	Up to 2,400 Sq. Ft. (24,000 Cu. Ft.)

Minimum Performance at:

	80°F and 60%RH	**70°F and 60%RH**
Water Removal:	High Mode - 100 Pints/Day Normal Mode - 86 Pints/Day	74 Pints/Day 65 Pints/Day
Efficiency:	High Mode - 6.2 Pints/kWh Normal Mode - 5.3 Pints/kWh	5.4 Pints/kWh 4.7 Pints/kWh
Energy Factor:	High Mode - 2.93 L/kWh Normal Mode - 2.50 L/kWh	2.55 L/kWh 2.22 L/kWh

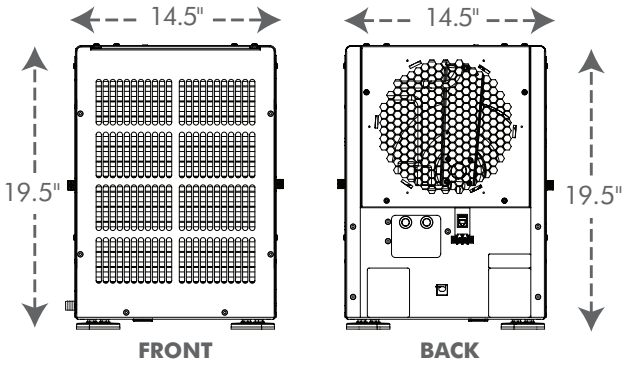
Air Filter:	MERV-13, Standard Pleat
Size:	14" x 17.5" x 1.75"
Power Cord:	9', 115 VAC, Ground
Drain Connection:	3/4" Threaded Female NPT
Drain Hose:	8' Direct Gravity Drain Hose (5/8" ID x 7/8" OD)
Refrigerant Type:	R410A (Refer to manufacturers label for more information)
Refrigerant Amount:	1 lb., 9 oz.

Dimensions:	**Unit**	**Shipping**
Width:	14.5"	23"
Height:	19.5"	30"
Length:	26"	40"
Weight:	80 lbs	100 lbs



Optional Accessories:

4035319	MERV-11 Filter (14" x 17.5" x 1.75")
4035131	MERV-11 Filters 4-Pack
4035132	MERV-11 Filters 12-Pack
4037722	MERV-13 Filter (14" x 17.5" x 1.75")
4037731	MERV-13 Filters 4-Pack
4037732	MERV-13 Filters 12-Pack
4022220	Pump Kit
4036695	Hang Kit
4039455	Duct Kit, Supply Only
4035646	Duct Kit, Return Only
4026969	10" Flex Duct 25'
4022126	10" Flex Insulated Duct 25'



Dehumidifier Set Up



⚠ CAUTION! REMOVE COMPRESSOR SHIPPING TIE FROM THE UNIT. FAILURE TO REMOVE SHIPPING TIE WILL CAUSE EXCESS VIBRATION TO BE TRANSMITTED TO THE FRAME.

The Santa Fe Advance100 uses a compressor to power the refrigeration system. To protect the compressor and refrigeration system during shipping a plastic tie wrap secures it to the units frame. Remove the tie wrap by cutting the tie wrap and pulling from the unit as shown. After removing tie wrap, insert plastic plugs provided into the holes.

Items Included in Box:

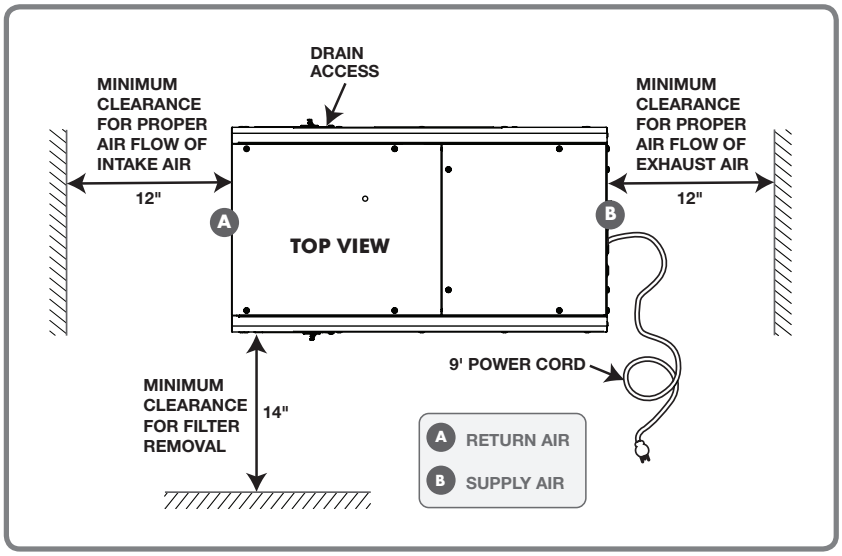
- Santa Fe Advance100 Dehumidifier
- Santa Fe Advance100 Installation & Operation Instructions
- Santa Fe Advance100 Leveling Feet
- Santa Fe Advance100 Casters
- Caster Installation Instructions
- Santa Fe Connect with Cable
- 8' Drain Hose
- Drain Adapter
- MERV-13 Filter

Important Precautions

- Do not install the Santa Fe Advance100 with the intake or exhaust of the unit within 1' of a wall or other obstruction. Avoid directing the discharge air at people. The dehumidifier should be used in the upright position.
- Do not place the unit where curtains or debris can be drawn into the intake and restrict airflow.
- The device is designed to be installed indoors in a space that is protected from rain and flooding.
- Do not operate in standing water or place the unit near open water. If used near a water source; be certain there is no chance the unit could fall into the water or get splashed and that it is plugged into a dedicated circuit and Ground Fault Circuit Interrupter (GFCI) protected outlet.
- Install the unit with enough space to access all sides for maintenance and service. The top "L" shaped panel needs to be removed in order to do repairs.
- DO NOT use the dehumidifier as a bench or table.
- DO NOT place the dehumidifier directly on structural building members without vibration absorbers or unwanted noise may result. Place the Santa Fe Advance100 on supports to raise the base of the unit.

Location Considerations

- Locate the dehumidifier near a suitable drain (8' drain hose included). Allow for proper drainage and routing of needed drain pipes.
- Locate the dehumidifier in an area where the cord's length (9') easily reaches a 115 VAC electrical outlet with a minimum of a 15 Amp circuit capacity.
- The unit is designed to operate while level. If the unit is placed on an unlevel surface, refer to section below (Installing Leveling Feet). Failure to level the unit may result in leakage or improper drainage.
- The unit should be suspended with a hang kit from the floor joists if there is any possibility of flooding. A flooded unit is not covered by warranty. Feet will be installed as a securing measure after the hang kit is put on the dehumidifier. DO NOT hang the Santa Fe Advance100 from its' cabinet.
- Allow sufficient clearance to handle the unit's overall dimensions as well as any optional return and supply ductwork to the unit.



- Allow sufficient clearance for filter removal and to prevent airflow obstruction.
- Electrical service access will require the removal of the top "L" shaped panel. Allow sufficient clearance around the unit.

Ducting To Finished Areas (Optional)

Attaching Duct Collars

Return Air Inlet

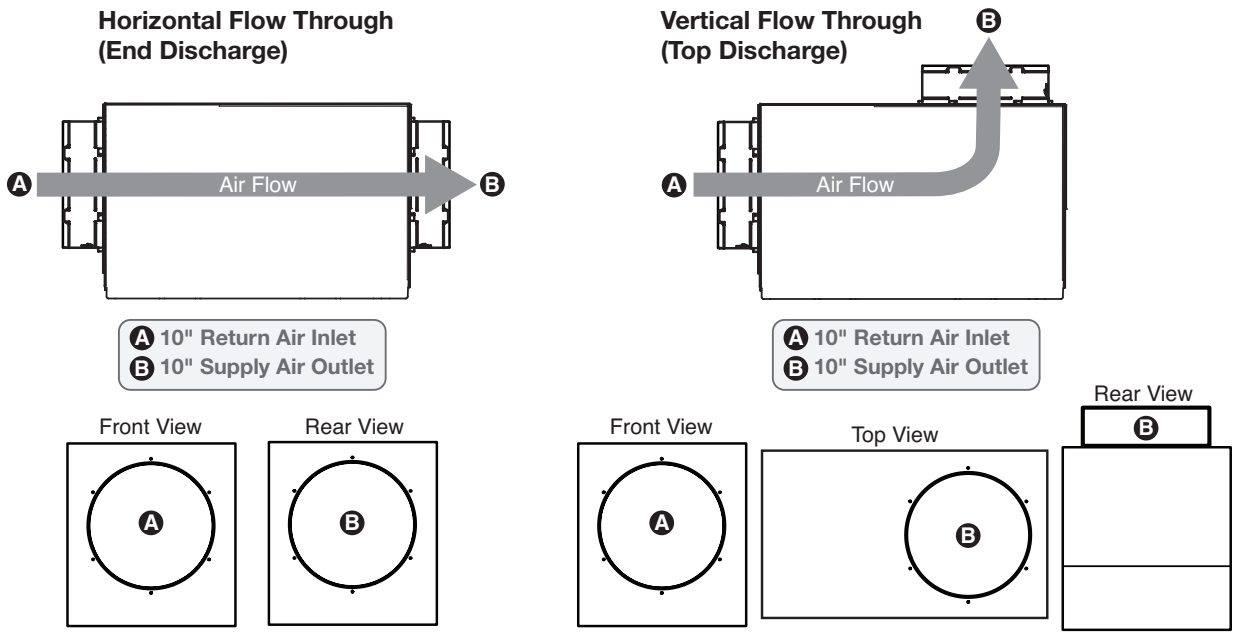
A 10" diameter duct collar and a front panel are attached to the unit.

Supply Air Outlet

The back panel of the dehumidifier can be rotated to allow for horizontal flow through or vertical flow through of the supply air.

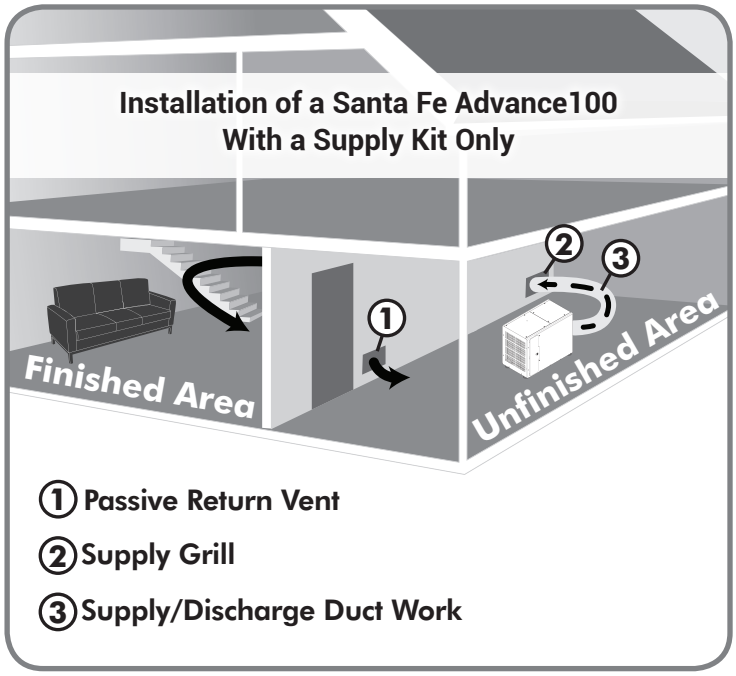
- **Horizontal Flow Through**
  The unit ships configured for a horizontal flow through. A 10" diameter duct collar is attached to the unit.

- **Vertical Flow Through**
  Remove the exhaust panel using a T25 torx bit. Rotate the panel so the exhaust collar is located on the top of the unit. Align the screw holes and snap the panel onto the base. Secure the exhaust panel to the base by replacing the six screws.



Ducting To Finished Areas (Optional)

Recommended Installations



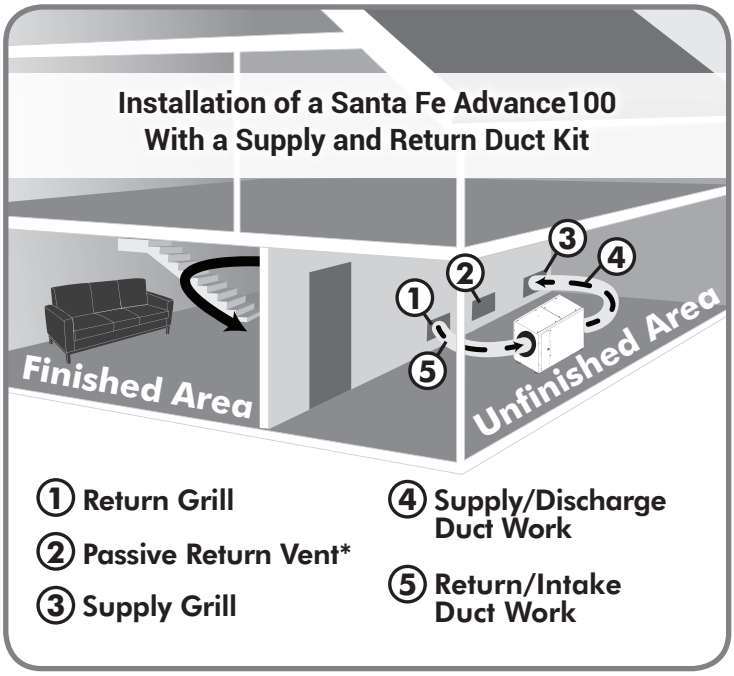
- Place the Santa Fe Advance100 in the unfinished area of the basement, near a drain access (condensate will drain via gravity or with an optional pump kit).
- Using the supply duct collar, supply the dry air from the dehumidifier into a large, open area in the finished section of the basement.
- Place a return grill / passive vent on the other side of the wall that separates the finished and unfinished areas. This will allow for a circular air flow throughout the basement.
- The passive grill will prevent the unfinished room from being placed under a negative pressure and also allow the dehumidifier to focus on keeping the unfinished area dry as well.
- Be sure to keep all doors open to any other rooms in the basement to help with proper air circulation (bedrooms, bathrooms, etc.)

Ducting in a Crawl Space (Optional)

Parts Needed:

- Supply Duct Kit - 4039455
- Flex Duct - 4026969 or Insulated - 4022126
- Zip tie
- Foil Tape

See Supply Duct Kit for installation recommendations.



- Place the Santa Fe Advance100 in the unfinished area of the basement, near a drain access (condensate will drain via gravity or with an optional pump kit).
- Using the supply and return duct kit, supply the dry air from the dehumidifier into a large, open area of the finished basement. Use the return duct kit to draw air back through the dehumidifier.
- Be sure the return and supply are at least 10 feet away from each other for proper air flow throughout the basement. Add a passive grill between the finished and unfinished areas (*or have a 2" gap under the door separating the two rooms). This will help keep the unfinished area dry as well.
- Be sure to keep all doors open to any other rooms in the basement to help with proper air circulation (bedrooms, bathrooms, etc.)

Drain Installation

The Santa Fe Advance100 generates condensate.

Place a secondary drain pan under the dehumidifier if it is suspended above a finished area or above an area where water leakage could cause damage.

A drain trap is required for the dehumidifier to run properly. Install a 3/4" threaded male NPT adapter to the drain or drain pan if one is being used. Install a drain pipe assembly utilizing 3/4" PVC pipe to transport the condensate to a drain. Pitch of drain should be 1" per 10'.

An optional condensate pump kit is available for use with the Santa Fe Advance100 and may be installed if lift is required to dispose of condensate. Condensate is automatically pumped to a remote location when the water level in the pump's reservoir rises to close the float switch.

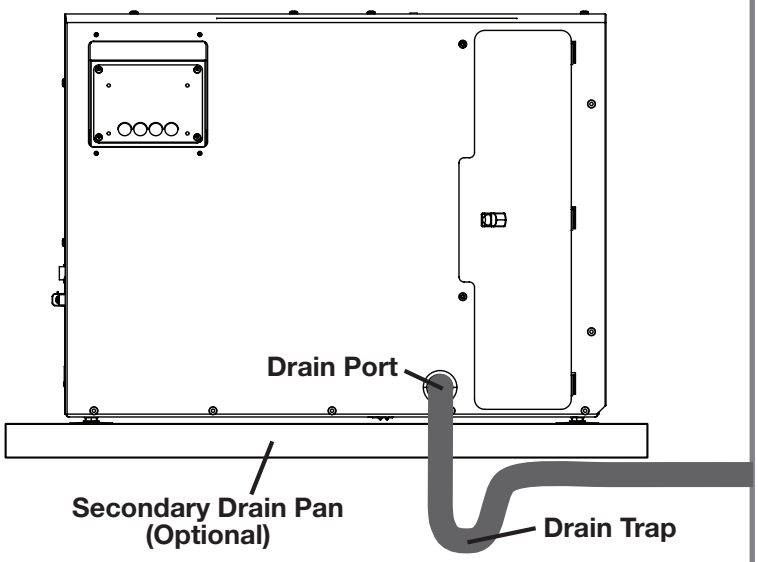
The pump also contains a safety float switch. The white leads from this switch extend from beneath the pump cover. This switch should be installed to the two "FLOAT" screw terminals located on the rear of the unit. If the pump fails, this switch opens the common control circuit and stops water production before the reservoir overflows.

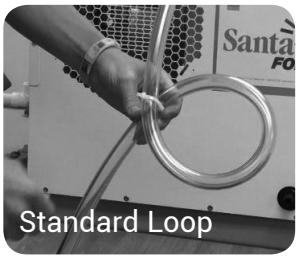
Note: An optional condensate pump kit can be purchased from a local dealer or online.

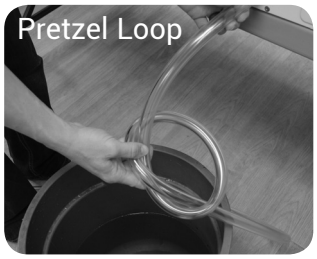
The Santa Fe Advance100 requires a drain trap. Creating a drain trap allows a small amount of water to build up in the trap area of the clear hose. This prevents air from back flowing through the hose and into the dehumidifier; essentially causing the unit to backflow water out of the corners of the machine. Position the trap in the hose approximately 8"-10" from the dehumidifier and make sure the highest point of the trap is still at least 2" below the black drain port adapter on the dehumidifier. If the highest point of the trap is above the drain port, water will back flow into the dehumidifier. Check the hose regularly to ensure water is draining properly.

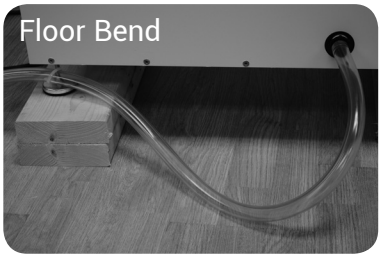
Drain Installation

Side View











PVC materials available from your local hardware store.

For additional information on how to create a proper trap, see our instructional video at: www.Santa-Fe-Products.com\drain-trap\

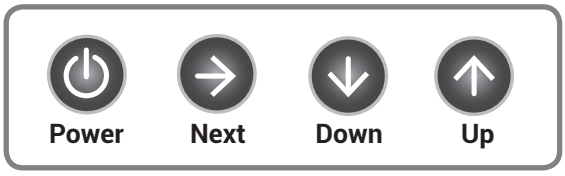
Use care to keep the hose as flat to the floor as possible after your trap is in place. Be sure the hose is not kinked or otherwise restricted so water can pass through the hose freely. Improper installation of the drain hose may result in water leakage.

If the Santa Fe Advance100 is located too far from the floor drain and the provided hose does not reach, you may use a 1/2" PVC rigid pipe to extend the drain. Rigid PVC tubing is readily available from your local hardware store. Be sure the extension is at a down-word slope to the drain.

An optional condensate pump kit may be installed if lift is required to remove condensate. To order, contact your local dealer or visit our website at www.santa-fe-products.com. You may also reach us by phone at (800) 533-7533.

Operation

Digital Control



Main Screen (See Screen 1)

- After plugging in the Advance100, press the Power button.
- Current RH: This is the current relative humidity of the space measured by the dehumidifier.
- Set point: This is the desired relative humidity of the space. When the unit turns on for the first time, the set point is initially set at 50%.
- Up/Down Arrow: This is how to change the set point. The lowest set point allowed is 35%. When increasing the set point, it will go up to 67% and then jump to 100% to avoid damage to the space.
- Temp: The current temperature in the space.

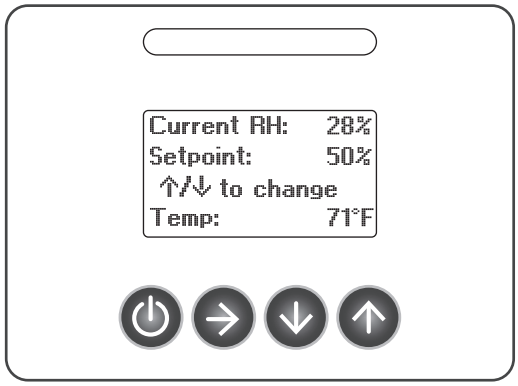
Settings

- To change the settings on the control, press the Next arrow, then the Up or Down arrow to select the different options per setting. After choosing preferred setting, use the Next arrow to go to the next setting until the main screen appears again.
- Option One: Changing the units from Fahrenheit to Celsius (see Screen 2).
- Option Two: Changing the fan mode (see Screen 3). Options are Always On or Auto, which means that the fan will only be on when dehumidification is active.
- Option Three: Changing the color bar to Off or On (see Screen 4).

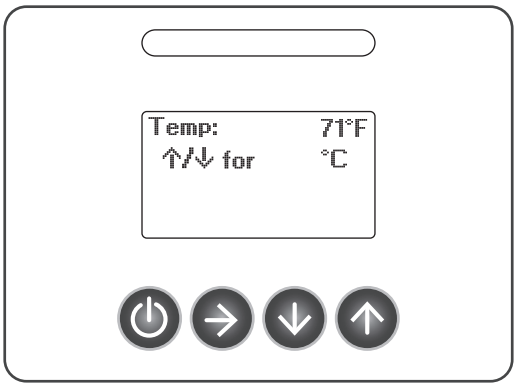
Color Bar

- Solid Green: Actively dehumidifying.
- Breathing Green: Fan is on and the dehumidifier is circulating air.
- Periodic Flash of Green: Dehumidifier is on but in standby mode.
- Solid Red: Error.

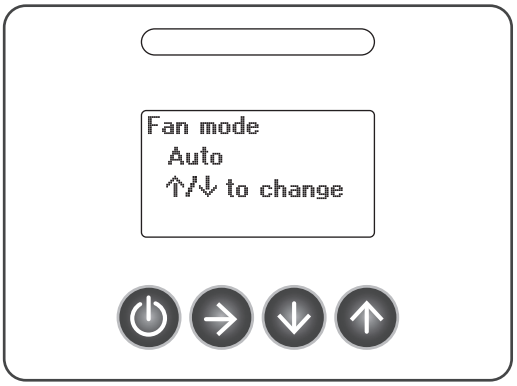
Screen 1



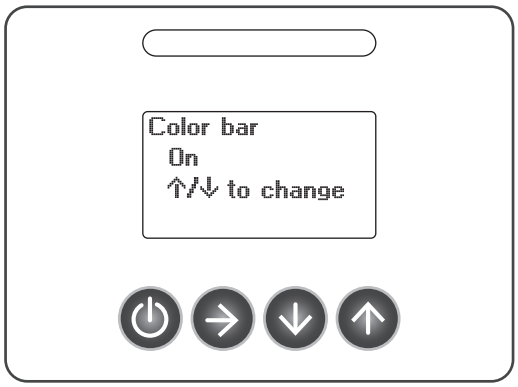
Screen 2



Screen 3



Screen 4

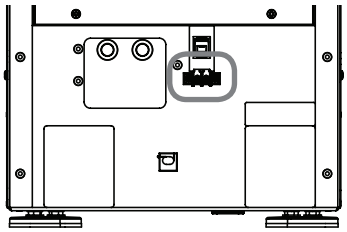


Operation

2-Pin Float Terminal Block

If a float switch is being used, it needs to be a normally-closed type. The wire that leads from the float switch must be installed into each of the two FLOAT Screw Terminals located on the rear of the unit. When the float switch detects a flood, it will open to cut-out the compressor and stop water production by the dehumidifier. The Color Bar on the control will turn red with "FLOOD ERROR" displayed on the screen. The terminal block needs to be jumped to operate if a Float Switch is not used.

Rear View

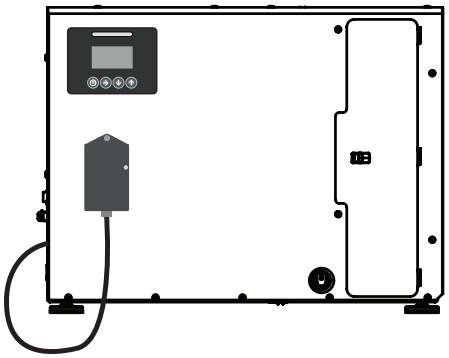


Santa Fe Connect Installation

The Santa Fe Connect Monitor allows the homeowner to control the Advance100 through the Santa Fe Connect App on a Smart Phone. The monitor links to your dehumidifier by attaching the Santa Fe Connect Cable to your dehumidifier. See the Quick Start Guide in the Santa Fe Connect box for installation instructions.

Santa Fe Connect

Side View



Normal and High Dehumidification Mode

Normal Dehumidification Mode

The Advance100 will dehumidify at a performance rate of 86 pints/day at 80 degrees and 60% humidity. This mode makes the dehumidifier quieter and ideal for when the space needs to be dehumidified but the homeowner needs the Advance100 to generate less noise. Normal Mode cannot be manually set, the unit will automatically start in Normal Mode if the humidity in the space is higher than the set point. If the set point cannot be reached within 20 minutes, the unit will automatically go into High Mode. Once the set point is reached, the unit will turn off and repeat the cycle if the humidity goes above the set point.

High Dehumidification Mode

The Advance100 will dehumidify at its full capabilities pulling 100 pints/day at 80 degrees and 60% humidity at the normal noise level. When the Relative Humidity Set Point is set to 0%, the dehumidifier will always run in High Mode. The unit only goes into high mode, if it has been running for more than 20 minutes and the space has not reached the required set point.

Air Filtration

The Santa Fe Advance100 is equipped with MERV-13 air filter. Replacement filters are available at www.ThermastorFilters.com. The filters should be checked and replaced every three to six months. Operating the unit with a dirty filter will reduce dehumidifier capacity and efficiency.

DO NOT operate the unit without a MERV-11 or MERV-13 filter. Filter non-compliance voids the product warranty.

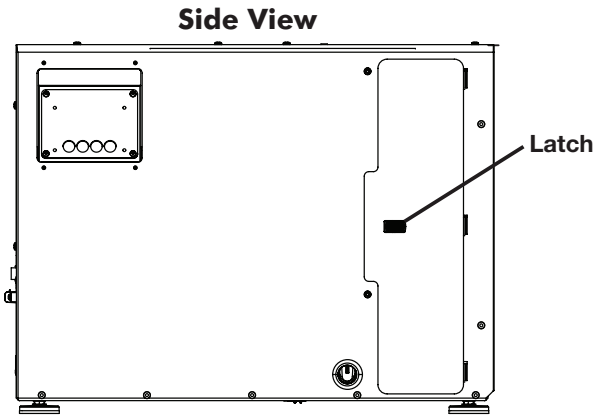
⚠ CAUTION!

MAKE SURE UNIT IS OFF BEFORE CHANGING THE FILTER. FAILURE TO FOLLOW FILTER HANDLING INSTRUCTIONS MAY RESULT IN IMPROPER FUNCTION OF THE DEHUMIDIFIER AND CAUSE PREMATURE FILTER WEAR OR UNIT DAMAGE.

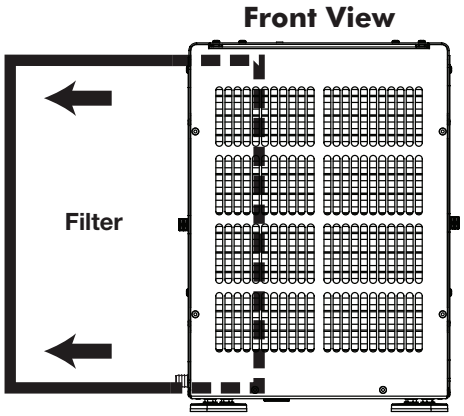
Changing the Filter

For greatest filtration and efficiency of the Santa Fe Advance100, it is recommended the air filters be replaced every three to six months.

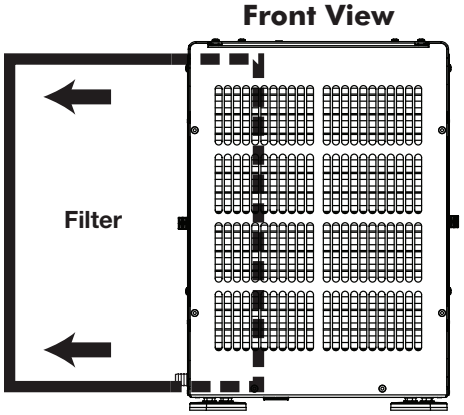
Step 1 - Pull back slide latch to swing filter door open.

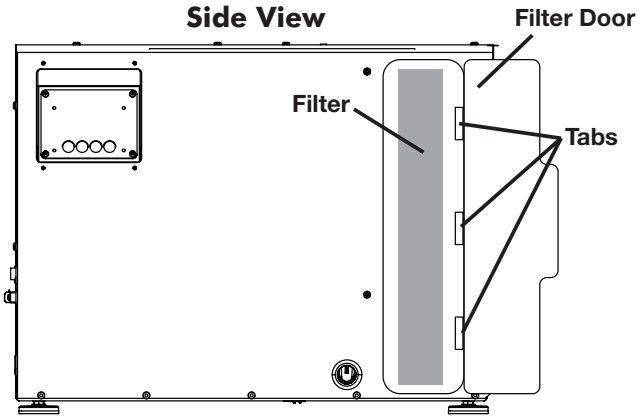


Step 2 - Remove the filter by pulling it out of the filter compartment.



Step 3 - Insert new filter into the filter compartment. Verify that the filter is inserted in the correct direction by ensuring the Airflow arrow is pointed towards the rear of the unit. Then insert filter door into tabs and swing door closed to lock the latch into place.





Air Filtration

MERV Rating Chart

Standard 52.5 Minimum Efficiency Reporting Value	Dust Spot Efficiency	Arrestance	Typical Controlled Contaminant	Typical Applications and Limitations	Typical Air Filter/Cleaner Type
20	n/a	n/a	< 0.30 pm particle size	Cleanrooms	≥99.999% eff. On .10-.20 pm Particles
19	n/a	n/a	Virus (unattached)	Radioactive Materials	Particles
18	n/a	n/a	Carbon Dust	Pharmaceutical Man.	Particulates
17	n/a	n/a	All Combustion smoke	Carcinogenetic Materials	≥99.97% eff. On .30 pm Particles
16	n/a	n/a	.30-1.0 pm Particle Size	General Surgery	Bag Filter - Nonsupported
15	>95%	n/a	All Bacteria	Hospital Inpatient Care	microfine fiberglass or synthetic media, 12-36 in. deep, 6-12 pockets.
14	90-95%	>98%	Most Tobacco Smoke	Smoking Lounges	Box Filter - Rigid Style Cartridge Filters 6 to 12" deep may use lofted or paper media.
13	89-90%	>98%	Proplet Nuceli (Sneeze)	Superior Commercial Buildings	
12	70-75%	>95%	1.0-3.0 pm Particle Size Legionella	Superior Residential	Bag Filter - Nonsupported
11	60-65%	>95%	Humidifier Dust Lead Dust	Better Commercial Buildings	microfine fiberglass or synthetic media, 12-36 in. deep, 6-12 pockets.
10	50-55%	>95%	Milled Flour Auto Emissions	Hospital Laboratories	Box Filter - Rigid Style Cartridge Filters 6 to 12" deep may use lofted or paper media.
9	40-45%	>90%	Welding Fumes		
8	30-35%	>90%	3.0-10.0 pm Particle Size Mold Spores	Commercial Buildings	Pleated Filters - Disposable, extended surface area, thick with cotton-polyester blend media, cardboard frame.
7	25-30%	>90%	Hair Spray Fabric Protector	Better Residential	Cartridge Filters - Graded density viscous coated cube or pocket filters, synthetic media.
6	<20%	85-90%	Dusting Aids Cement Dust	Industrial Workplace	Throwaway - Disposable synthetic panel filter.
5	<20%	80-85%	Pudding Mix	Paint Booth Inlet	
4	<20%	75-80%	>10.0 pm Particle Size Pollen	Minimal Filtration	Throwaway - Disposable fiberglass or synthetic panel filter.
3	<20%	70-75%	Dust Mites Sanding Dust	Residential	Washable - Aluminum Mesh.
2	<20%	65-70%	Spray Paint Dust Textile Fibers	Window A/C Units	Electrostatic - Self charging woven panel filter.
1	<20%	<65%	Carpet Fibers		

http://www.mechreps.com/PDF/Merv_Rating_Chart.pdf

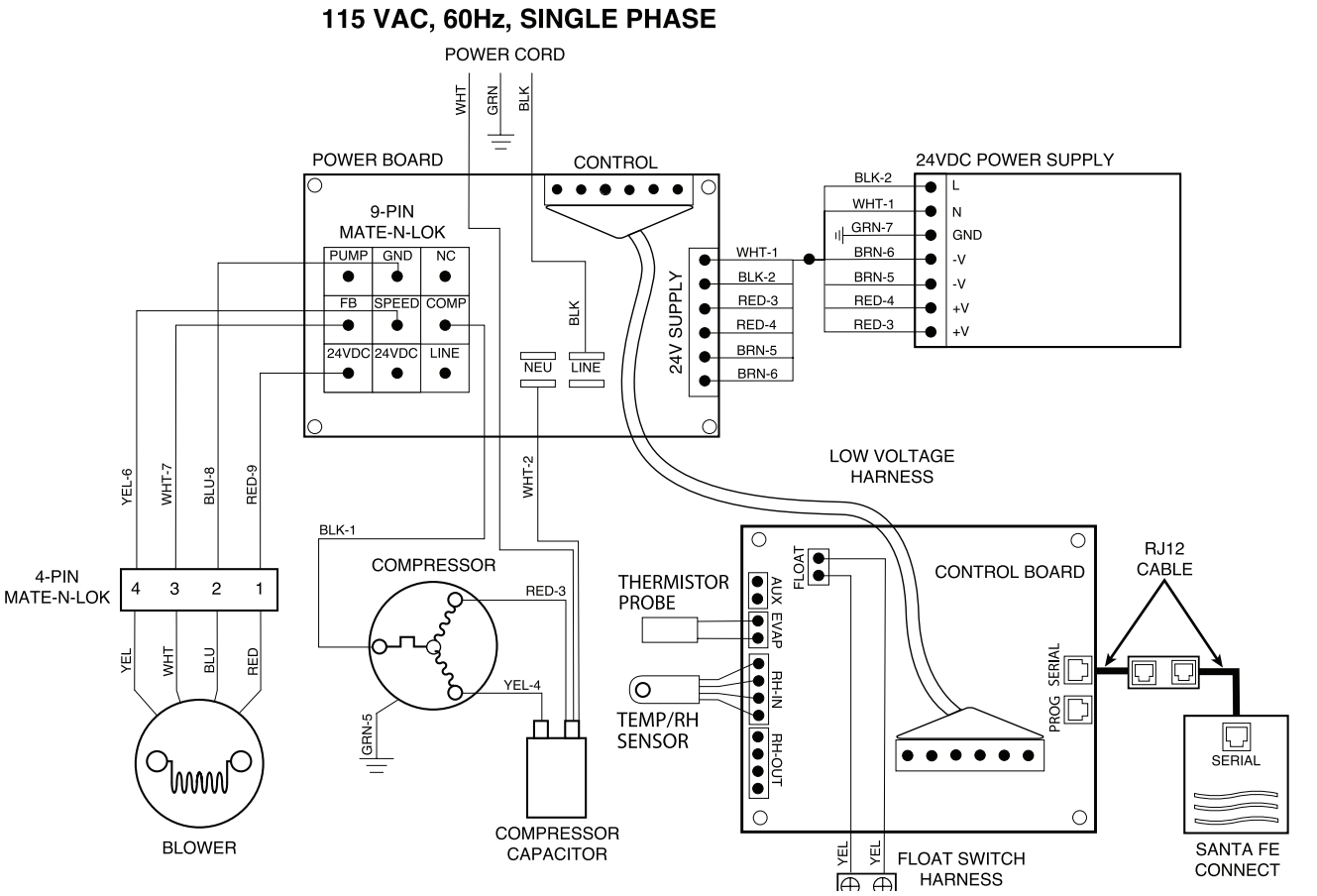
Electrical Requirements

The Santa Fe Advance100 plugs into a common grounded 115VAC outlet. The device draws 5.7 Amps at 80°F and 60% RH. Locate the dehumidifier in an area where the cord's length (9') easily reaches a 115 VAC electrical outlet with a minimum of 15 Amp circuit capacity. If used in an area that may become wet, a GFCI protected circuit is recommended. The unit should not be used in areas prone to flooding. Consult local electrical codes for any further information.

⚠ CAUTION!

ELECTRICAL SHOCK HAZARD: Electrical power must be present to perform some tests. These tests should be performed by a qualified service person.

Wiring Schematic



Service

⚠ WARNING!

SERVICING THE SANTA FE ADVANCE100, WITH ITS HIGH PRESSURE REFRIGERANT SYSTEM AND HIGH VOLTAGE CIRCUITRY PRESENTS A HEALTH HAZARD WHICH COULD RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR PROPERTY DAMAGE. ONLY QUALIFIED SERVICE PEOPLE SHOULD SERVICE THIS UNIT.

Replacement Parts

4034887-02	Evaporator
4036164-01	Capillary Tubes
4034888	Compressor
4029510	Filter/drier
4035868	Condenser
4038815-02	Impeller
4033032-03	35mfd 370V Capacitor - Compressor
4035235-02	5mfd 370V Capacitor - Impeller
4026221	Leveling Foot
4034716-07	Defrost Thermistor
4027057	Compressor Overload
4026608	Leveling Caster
4036848	Humidity Sensor
4038809	Control Assembly
4037727-03	Power Supply
4037300	Santa Fe Connect

Refrigerant Charging

If the refrigerant charge is lost due to service or a leak, a new charge must be accurately weighed in. If any of the old charge is left in the system, it must be recovered before weighing in the new charge. Refer to the
unit nameplate for the correct charge weight and refrigerant type.

Compressor/Capacitor Replacement

This compressor is equipped with a two terminal external overload and a run capacitor, but no start capacitor or relay.

⚠ CAUTION!

TROUBLESHOOTING SHOULD BE PERFORMED BY A QUALIFIED HVAC TECHNICIAN.

Symptom	Possible Reason
Neither fan nor compressor running. Dehumidification is being called for.	1. Dehumidifier unplugged or no power to outlet. 2. Humidity control set too high. 3. Loose connection in internal or control wiring. 4. Defective control or power board. 5. Open circuit between FLOAT terminals.
Compressor is not running. Dehumidification is being called for. Fan is running.	1. Defective compressor run capacitor. 2. Loose connection in compressor circuit. 3. Defective compressor overload. 4. Defective compressor. 5. Unit is in Defrost mode. 6. Open circuit between FLOAT terminals and unit is in FAN ON Mode.
Compressor cycles on and off. Dehumidification is being called for.	1. Low ambient temperature and/or humidity causing unit to cycle through defrost mode. 2. Defective compressor overload. 3. Defective compressor. 4. Defrost thermistor defective. 5. Dirty air filter(s) or air flow restricted. 6. Defective fan. 7. Defective control or power board.

Service - Troubleshooting

⚠ CAUTION!

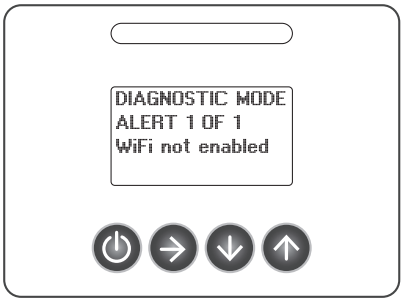
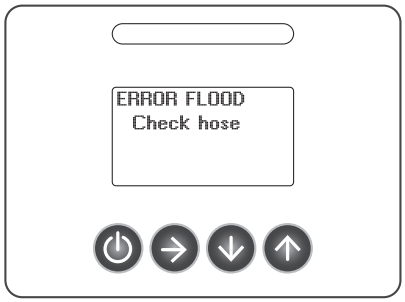
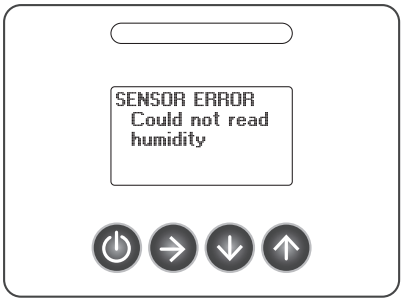
TROUBLESHOOTING SHOULD BE PERFORMED BY A QUALIFIED HVAC TECHNICIAN.

Symptom	Possible Reason	Troubleshooting Procedure
Fan is not running. Dehumidification or fan is being called for.	1. Loose connection in fan circuit. 2. Obstruction prevents fan impeller rotation. 3. Defective fan. 4. Defective thermistor. 5. Open circuit between FLOAT terminals and unit is in FAN AUTO Mode.	⚠ **WARNING!** **ELECTRICAL SHOCK HAZARD:** **ELECTRICAL POWER MUST BE PRESENT TO PERFORM SOME TESTS. THESE TESTS SHOULD BE PERFORMED BY A QUALIFIED SERVICE PERSON.** **Troubleshooting Procedure for Performance Related Issues** This method of diagnosis is used to function check the internal components in the dehumidifier. This is to be used when a performance issue is suspected. 1. Set the humidity controller all the way to the most humid setting (100%) – Did the unit shut off? 2. If yes, turn the fan setting to the ON mode – does the fan start? 3. If fan starts, leave in the fan ON mode and set the humidity all the way to driest setting (0%). May have to wait 5 minutes for the compressor to start. 4. Listen for a distinct buzzing/humming sound of a compressor starting up – do you hear this noise? 5. If compressor is running and continues to run, after about 15 minutes you should feel a slight increase in air temperature being discharged out of the discharge air side of the unit. 6. If so, depending on your environmental conditions (temp/Rh%), you should see some water production out of the hose within 30 minutes or so. (*Note: If the room temperature is 55 degrees or below and/or in area of low relative humidity, the dehumidifier will produce little to no water.*) 7. Collecting the water removed in a 24 hour period will give a measurement of performance.
Low dehumidification capacity (evaporator is frosted continuously). Dehumidification is being called for.	1. Defrost thermistor loose or defective. 2. Low refrigerant charge. 3. Dirty air filter(s) or air flow restricted. 4. Excessively restrictive ducting connected to unit. 5. Unit is operating in Low Mode in a cold temperature environment.	
Dehumidifier removes some water, but not as much as expected.	1. Air temperature and/or humidity have dropped. 2. Humidity meter and or thermometer used are out of calibration. 3. Unit has entered defrost cycle. 4. Dirty air filter(s) or air flow is restriced. 5. Defective defrost thermistor. 6. Low refrigerant charge. 7. Air leak such as loose cover or ducting leaks. 8. Defective compressor. 9. Restrictive ducting. 10. Unit is operating in Low Mode.	

Service - Troubleshooting

⚠ CAUTION!

TROUBLESHOOTING SHOULD BE PERFORMED BY A QUALIFIED HVAC TECHNICIAN.

Symptom	Possible Reason
	1. Santa Fe Connect is not installed.
Error Flood Alert goes off but there is no flood. 	1. Check Condensate Pump for flooding. 2. Check Drain Pan for standing water. 3. Check that terminal block is jumped. 4. Check float switch. 5. Check terminal block wiring is attached to control board and black of terminal block.
Sensor Error – Could not read humidity. 	1. Check that sensor wire is not unplugged or loose. 2. Sensor not reading - Call Service.

Warranty

Limited Warranty. Therma-Stor, LLC ("Therma-Stor") warrants as follows: (i) the Santa Fe Advance100 dehumidifier ("Product") will be free of material defects in workmanship or materials for a period of 2 years ("Two-Year Warranty") following the date of initial purchase of such Product by an original customer purchasing from Therma-Stor or an authorized reseller ("Customer"); and (ii) the Product's components will be free of material defects in workmanship or materials for a period of **six (6) years** following the date of initial purchase of such Product by a Customer.

Limitation of Remedies. CUSTOMER'S SOLE AND EXCLUSIVE REMEDY UNDER THE ABOVE LIMITED WARRANTY AND THERMA-STOR'S ENTIRE LIABILITY THEREUNDER, SHALL BE, AT THE SOLE OPTION OF THERMA-STOR, REPLACEMENT OR REPAIR OF SUCH PRODUCT OR ITS COMPONENTS ("COMPONENTS") BY THERMA-STOR OR THERMA-STOR'S AGENTS ONLY. REFRIGERANT, PIPING, SUPPLIES, TRANSPORTATION COSTS, LABOR COSTS INCURRED IN REPAIR OR REPLACEMENT OF SUCH COMPONENTS ARE NOT INCLUDED. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY AND LIMITED REMEDY SET FORTH HEREIN FAILS OF ITS ESSENTIAL PURPOSE. CUSTOMER ACKNOWLEDGES THAT NO REPRESENTATIVE OF THERMA-STOR OR OF ITS AFFILIATES OR RESELLERS IS AUTHORIZED TO MAKE ANY REPRESENTATION OR WARRANTY ON BEHALF OF THERMA-STOR OR ANY OF ITS AFFILIATES OR RESELLERS THAT IS NOT IN THIS AGREEMENT. Notwithstanding the above, during the term of the Two-Year Warranty only, Therma-Stor will provide, free of charge to Customer, all Components and labor (except costs related to removal and installation of Product) required to fulfill its obligations under such Two-Year Warranty.

Disclaimer of Warranties. EXCEPT FOR ABOVE LIMITED WARRANTY, WHICH IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED WITH RESPECT TO THE PRODUCT AND ITS COMPONENTS, THERMA-STOR HEREBY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Warranty Limitations. The foregoing limited warranty extends only to a Customer and shall be null and void upon attempted assignment or transfer. A "defect" under the terms of the limited warranty shall not include problems resulting from Customer's or Customer's employees', agents', invitees' or a third party's misuse, improper installation, improper design of any system in which the Product is included, abuse, lack of normal care, failure to follow written instructions, tampering, improper repair, or freezing, corrosion, acts of nature or other causes not arising out of defects in Therma-Stor's workmanship or material. If a Product or Component is replaced while under warranty, the applicable limited warranty period shall not be extended beyond the original warranty time period. The limited warranty does not cover any costs related to changes to a Product or Component that may be required by any codes, laws, or regulations that may become effective after initial purchase of the Product by Customer.

Customer Responsibilities. As a further condition to obtaining warranty coverage hereunder, the Customer must send a valid warranty claim to Therma-Stor such that Therma-Stor receives such claim prior to the end of the applicable warranty period. Therma-Stor shall have no obligation hereunder with respect to any claim received by Therma-Stor after the expiration of the applicable warranty period. As a further condition to obtaining warranty coverage hereunder, the Customer must present forms of invoices evidencing proof of purchase of a Product. If such invoices do not clearly indicate the date of initial purchase by a Customer, the applicable Product's date of manufacture will be used instead of the date of initial purchase for the purpose of calculating the commencement of the applicable warranty period. Warranty service must be performed by Therma-Stor or a servicer authorized by Therma-Stor. In order to obtain warranty service, the Customer should call Therma-Stor at 1-800-533-7533 and ask for the Therma-Stor Products Service Department, which will then arrange for applicable warranty service. Warranty service will be performed during customary, daytime working hours. If the Product must be shipped for service, Customer shall be solely responsible for properly packaging the Product, for all freight charges, and for all risk of loss associated with shipment.

Limitation of Liability. IN NO EVENT SHALL THERMA-STOR, IN CONNECTION WITH THE DESIGN, SALE, INSTALLATION, USE, REPAIR, REPLACEMENT OR PERFORMANCE OF ANY PRODUCT, COMPONENT, PART THEREOF OR WRITTEN MATERIAL PROVIDED THEREWITH, BE LIABLE, TO THE EXTENT ALLOWED UNDER APPLICABLE LAW, UNDER ANY LEGAL THEORY FOR ANY SPECIAL, DIRECT, INDIRECT, COLLATERAL OR CONSEQUENTIAL DAMAGES OF ANY KIND. NOTWITHSTANDING THE ABOVE LIMITATIONS AND WARRANTIES, THE SOLE AND EXCLUSIVE LIABILITY OF THERMA-STOR, REGARDLESS OF THE NATURE OR THEORY OF THE CLAIM, SHALL UNDER NO CIRCUMSTANCES EXCEED THE PURCHASE PRICE OF THE PRODUCT, COMPONENT OR PART UPON WHICH THE CLAIM IS PREMISED.

Applicable Law and Venue. ANY ARBITRATION, ENFORCEMENT OF AN ARBITRATION OR LITIGATION RELATED TO THE PRODUCT WILL BE BROUGHT EXCLUSIVELY IN DANE COUNTY, WISCONSIN, AND CUSTOMER CONSENTS TO THE JURISDICTION OF THE FEDERAL AND STATE COURTS LOCATED THEREIN, SUBMITS TO THE JURISDICTION THEREOF AND WAIVES THE RIGHT TO CHANGE VENUE. CUSTOMER FURTHER CONSENTS TO THE EXERCISE OF PERSONAL JURISDICTION BY ANY SUCH COURT WITH RESPECT TO ANY SUCH PROCEEDING.

Miscellaneous. If any term or condition of this Limited Warranty is found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or conditions hereof or thereof or the whole of this Limited Warranty. Any delay or failure by Therma-Stor to exercise any right or remedy will not constitute a waiver of Therma-Stor to thereafter enforce such rights.



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