

EXTREME SERIES

240V (METRIC)

OWNER'S MANUAL

Extreme ti 3500
Extreme ti 5000
Extreme ti 8000

*Whisper***KOOL**[®]
The Future of KOOL

Conforms to ANSI/UL Std 427

Certified to CAN/CSA Std C22.2 No. 120

We manufacture, test and certify 100% of our wine cooling units in the USA. By sourcing the best components and closely controlling our manufacturing processes, we can assure the highest-quality, lowest defect manufacturing rates in the industry.

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INTRODUCTION

Customer Service

Thank you for purchasing a WhisperKOOL cooling system. We strive to provide the highest-quality products and the best possible customer service. MacPhee's Customer Service is available Monday through Friday from 9:00 a.m. to 5:00 p.m. AEST. If you have any questions about your system, please email us at info@macphees.com.au.

Using the Manual

This manual is intended to assist in the proper maintenance of the cooling system. In order to ensure the longevity of your cooling unit, the equipment should be installed as outlined in the technician's manual. It is also vital to establish a proper care and maintenance schedule. Please read and review this manual carefully and keep it for future reference.

What is the WhisperKOOL Cooling System?

The WhisperKOOL cooling system is a specialized refrigeration system designed for one purpose only: to maintain the optimal temperature and humidity levels conducive to the proper storage and aging of fine wines. This system produces minimal in-cellar noise and has the most lenient exhaust requirements.

How Does the WhisperKOOL Extreme Series Work?

The WhisperKOOL unit is especially designed to maintain optimal conditions for wine storage and aging. The unit is fully self-contained and can be installed through most walls. The unit is also capable of a more flexible ducted application, which allows the unit to be placed in an indoor remote site, resulting in a quiet airflow. The standard through-the-wall and ducted units are temperature-controlled via a bottle probe. The ducted unit comes standard with a remote controller that can be located up to 50 feet from the cooling unit.

NOTE: The remote unit comes standard with a 15 m bottle probe and a 15 m cable for the remote controller. Additional lengths are available from WhisperKOOL.

Temperature Setting

The WhisperKOOL cooling unit can be set at any temperature within the acceptable wine-aging range of 10–21°C. It is designed to create a differential of up to 14°C between the cellar and the ambient temperature (as long as the space to which the unit is exhausting does not exceed 43°C).

BEFORE YOU START

1. **Inspect all components prior to installation.** If damage is found, please notify MacPhee's Customer Service at info@macphees.com.au within 30 days.
2. The unit should **remain in an upright position for 24 hours** prior to operation.
3. The evaporator unit **requires a dedicated 240V, 15-amp circuit.** A surge protector is recommended to use with the unit.
4. The unit is designed to gently cool down the temperature of the cellar over time by cycling cooler and cooler air throughout. Test the unit prior to installation.
5. You are **REQUIRED** to **install a drain line** to remove condensation from the unit.
6. The WhisperKOOL unit is intended for use in **properly designed and constructed wine cellars.** Hire a professional wine storage consultant with a valid contractor's license to build your wine cellar.

Never try to open the WhisperKOOL unit, repair it yourself, or use a service company without WhisperKOOL's authorization. This will void your warranty.

If you encounter a problem with your WhisperKOOL system, please refer to the Troubleshooting Guide. If you have any further questions or concerns, or need assistance, please contact MacPhee's Customer Service at info@macphees.com.au. Please be sure all testing has been completed prior to contacting Customer Service. Please have your results ready for your representative.

RECEIVING AND INSPECTING THE UNIT

Upon receiving your WhisperKOOL unit:

- Lift only at the designated hand-hold locations on the shipping container, or fully support the unit from underneath. A shipment may include one or more boxes containing accessories.
- Inspect the packaging for any obvious signs of damage or mishandling before opening the container.
- Note any discrepancies or visual damage on the bill of lading before signing.
- Place the box containing the WhisperKOOL unit on a tabletop to prepare it for testing prior to installation.
- Sit unit upright for 24 hours.

NOTE: WhisperKOOL units are manufactured in the USA and tested prior to shipment.

- Review the packing slip to verify the package's contents.
- Check the model number to ensure it is correct.
- Check that all factory options ordered are listed.
- Check the box for the following:

3500ti / 5000ti / 8000ti
Extreme cooling unit <ul style="list-style-type: none">• (1) Extreme Series owner's manual• (18) Anti-microbial pan tabs• (1) Drain line brush• (1) Retractable bottle probe
Single-piece mounting bracket
Accessory kit: <ul style="list-style-type: none">• (1) 2 m power cord• (2) Mounting bracket insulation foam (6 feet)• (11) 44 mm standard screws• (7) 13 mm Phillips pan-head screws• (1) 13 mm barbed "tee" fitting• (1) Drain line tube (13 mm ID clear plastic tubing, 3 meters)

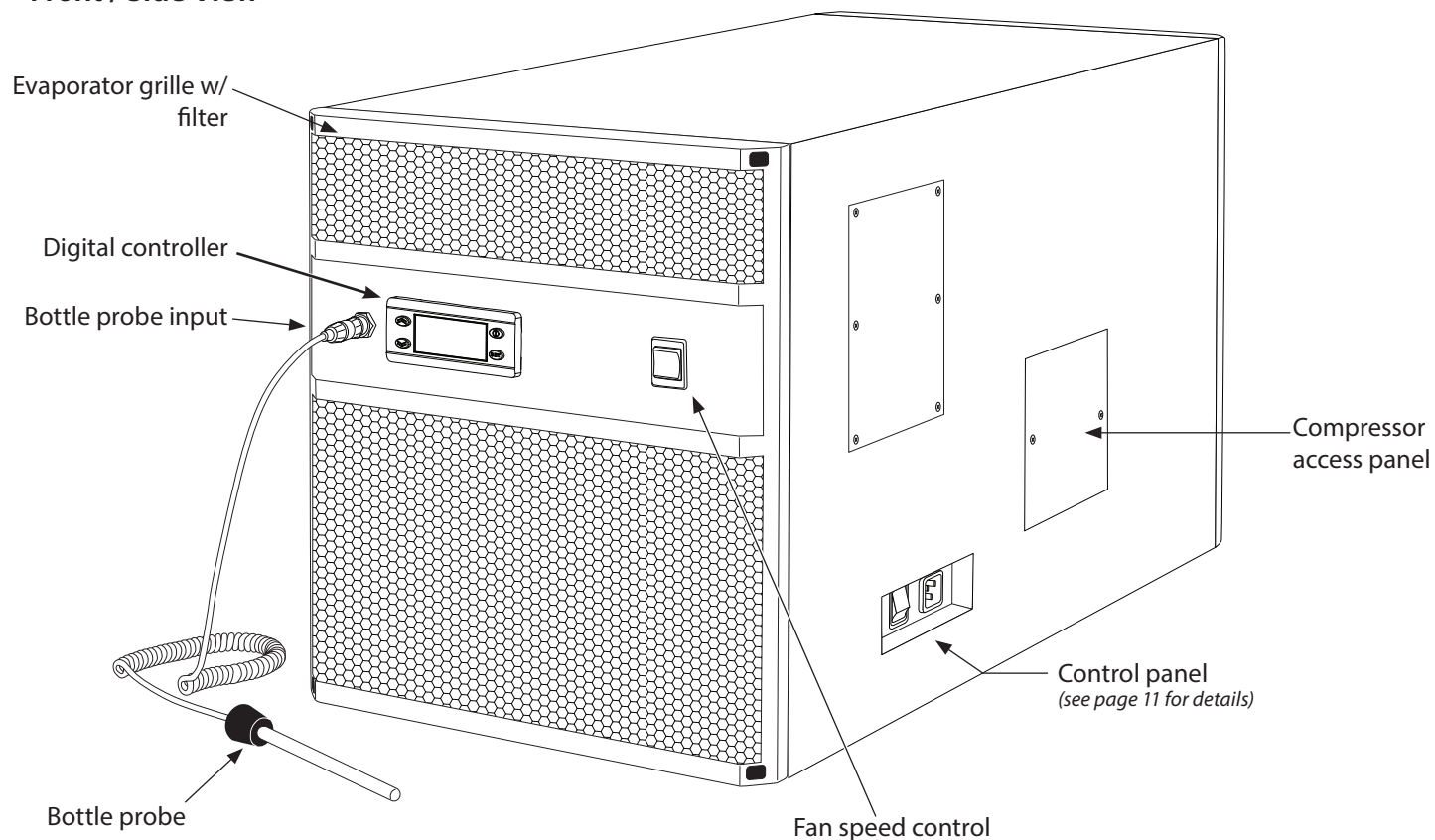
If any items listed on the packing slip do not match your order information, contact MacPhee's Customer Service immediately.

Please leave the WhisperKOOL unit in its original box until you are ready for installation. This will allow you to move the product safely without damaging it. When you are ready to remove the product from the box, refer to the installation instructions.

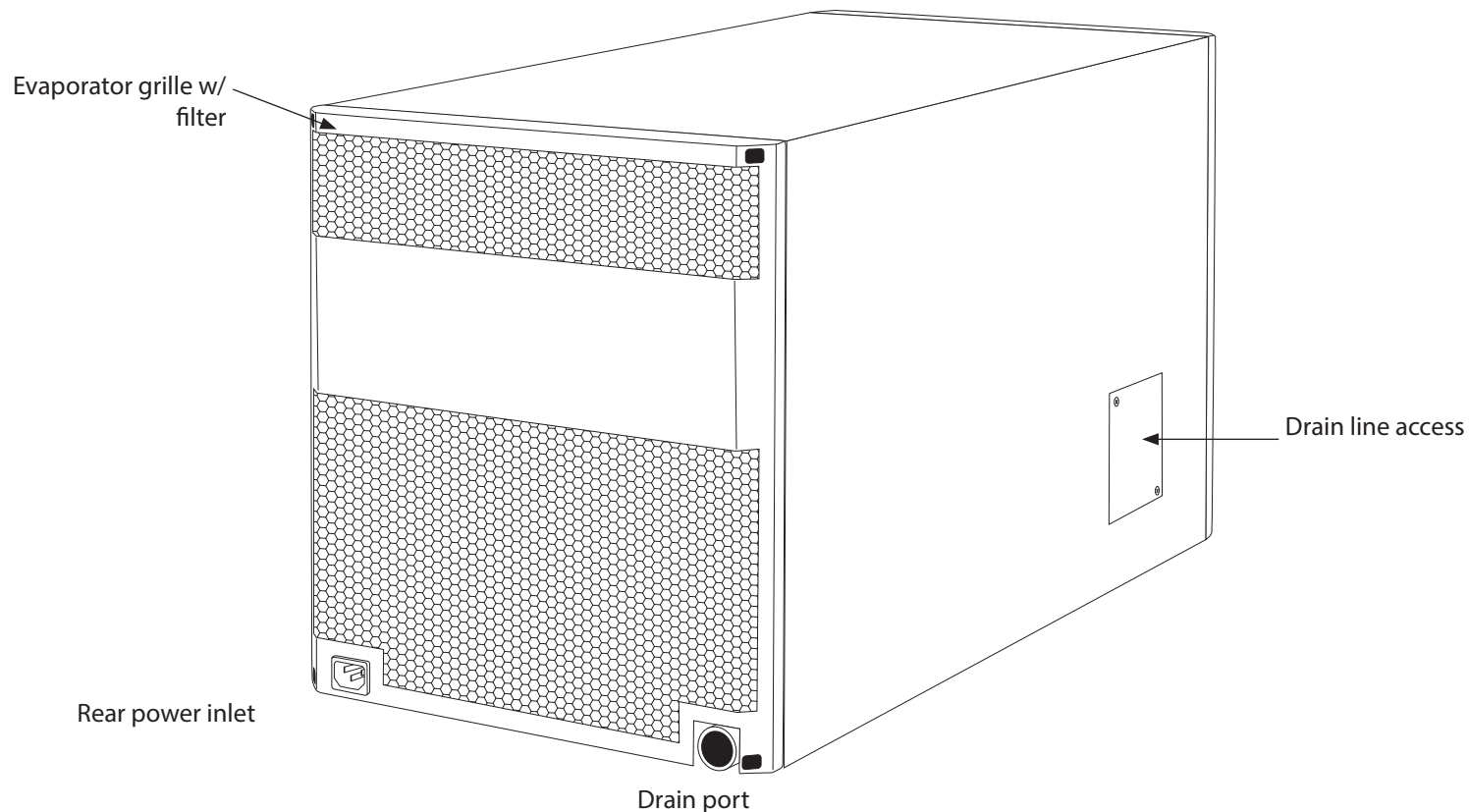
TIP: Save your box and all packaging materials. They provide the only safe means of transporting/shipping the unit.

QUICK REFERENCE GUIDE

Front / Side View

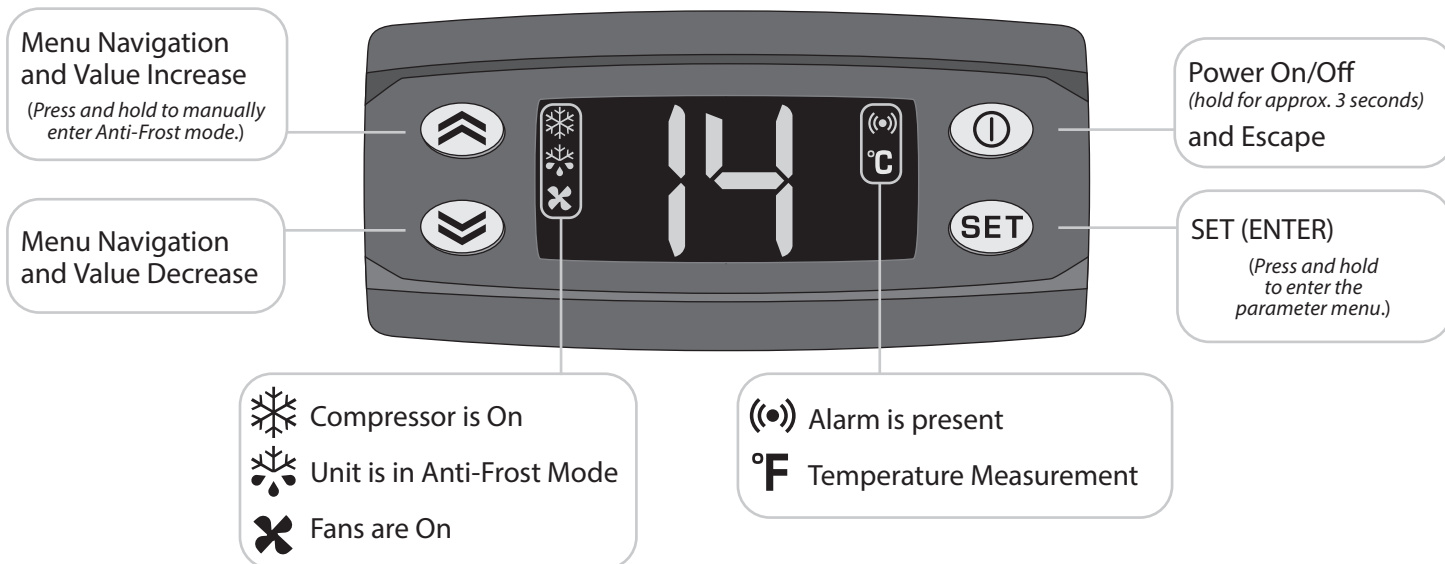


Rear / Side View



CONTROLLER LAYOUT

Refer to page 18 for complete listing of buttons and symbols.



FAN SPEED

Fan speed selection is determined by the amount of heat that needs to be removed from the cellar and the type of installation (through-the-wall or fully ducted). Fan speed selection is based on the cellar size, insulation factor, door seal, and desired wine temperature. When initially installing the unit, set the fan speed to the High setting to quickly chill the wine cellar. Once the wine cellar reaches the desired temperature, a lower fan speed may be selected. In the event that the outdoor temperature rises above 32°C, (when exhausting to the outdoors) a higher fan speed may be required.

UNIT SPECIFICATIONS

	3500ti	5000ti	8000ti
Cellar Size*	22 cu. m when cellar is fully insulated and sealed with a proper vapor barrier	35 cu. m when cellar is fully insulated and sealed with a proper vapor barrier	56 cu. m when cellar is fully insulated and sealed with a proper vapor barrier
Watts (15.5°C condenser air intake temperature) Sensible / Total	Low: 729/858 • Med: 784/923 • High: 843/992	Low: 1104/1181 • Med: 706/830 • High: 759/893	Low: 1311/1542 • Med: 1409/1658 • High: 1516/1783
Watts (23.8°C condenser air intake temperature) Sensible / Total	Low: 656/772 • Med: 706/830 • High: 759/893	Low: 903/1063 • Med: 971/1143 • High: 1024/1229	Low: 1180/1388 • Med: 1269/1492 • High: 1364/1605
Watts (29.4°C condenser air intake temperature) Sensible / Total	Low: 591/695 • Med: 635/747 • High: 693/804	Low: 813/956 • Med: 874/1028 • High: 940/1106	Low: 1062/1249 • Med: 1142/1343 • High: 1228/1444
Dimensions	712mm L x 362mm W x 401mm H		712mm L x 362mm W x 572mm H
Refrigerant	R-134a		
Amps	2.9 (running amps)	4.6 (running amps)	5.5 (running amps)
Voltage Rating	240V (15-amp dedicated circuit required)		
Weight (kg)	52		68
Drain Line	12.7 mm ID clear plastic tubing		
Installation	Through the wall		
Thermostat	Advanced digital controller, liquid-temperature-measuring bottle probe (retractable cable)		
Temp. Delta	Can maintain a 13°C cellar temperature with up to 43°C condenser air intake temperature		
Warranty	Two-year limited warranty (parts and labor)		

* Sizing the Unit to the Room

The specification chart will provide information on the unit's cooling capacity. There are circumstances in which a cellar design may require a larger unit due to preexisting design restrictions. Certain building materials such as glass, stone, or concrete may seem adequate but do not offer the insulation capacity required to maintain the optimum temperature for storing wine. We recommend purchasing a unit with a larger capacity to compensate for these design limitations. Undersized cooling units can lead to premature failure and/or prevent the system from reaching the desired set temperature. As a result, they are not covered under warranty.

PREPARING THE UNIT FOR INSTALLATION

The WhisperKOOL Unit requires a dedicated 240V, 15-amp circuit. The unit draws a large amount of amps during its initial startup. By designating a dedicated circuit breaker, you will guarantee the unit has enough power to run effectively. Contact an electrician for assistance with the installation of this dedicated electrical circuit.

The unit must sit upright for 24 hours prior to installation. To prepare the unit for installation:

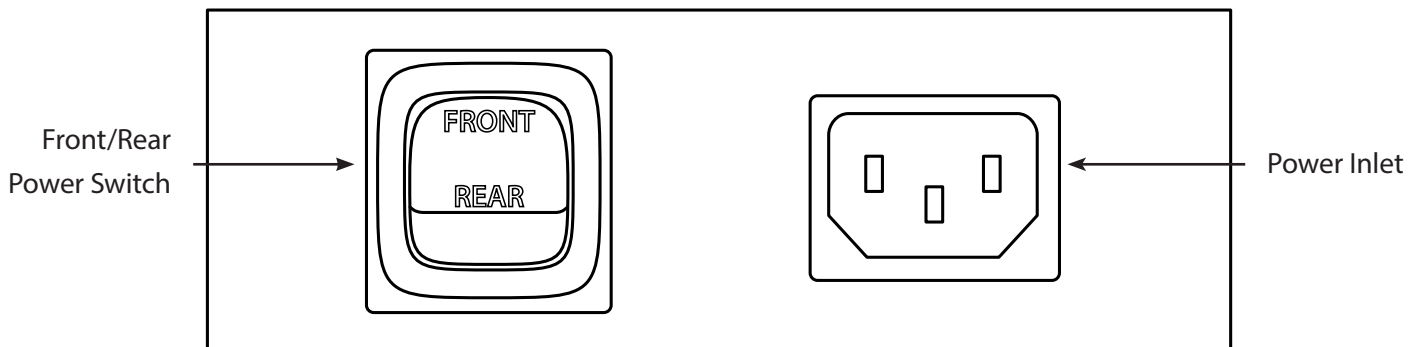
- Remove unit from box.
- Match the electrical outlet to the plug provided on the WhisperKOOL unit.
- Provide a dedicated circuit and wiring for the unit (see above).
- Provide a weatherproof plug for units connected outside.

Power surges and spikes can damage sensitive electrical equipment. WhisperKOOL recommends plugging the unit into a surge protector or power conditioner in order to protect your system. As outlined in our terms and conditions, power surges and spikes are not covered under warranty.

We recommend that you do not use a GFI (ground fault interrupter) with this product.

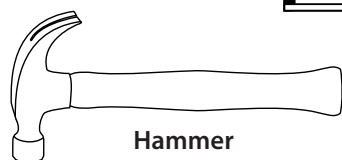
The unit is equipped with two power inlets. One is located on the right side of the unit (inside of the cellar), and the other is located on the rear of the unit (outside of the cellar). Use the selector switch located on the right side of the unit to select which power inlet you would like to use. If you would like to plug the unit into a socket outside of the cellar, set the selector switch to rear. If you would like to plug the unit into a socket inside of the cellar, set the selector switch to the front position. When placed in either position, power can only enter the unit utilizing the power inlet you've selected.

In case the unit should lose power, check the home/main circuit breaker. If the unit does not respond properly, refer to the Troubleshooting Guide.



PREPARING THE INSTALLATION LOCATION

Minimum Tools Needed:



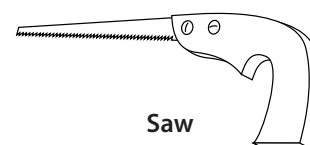
Hammer



Level



Screwdriver



Saw

3500/5000ti Cut-Out Dimensions: 368mm W x 406mm H

8000ti Cut-Out Dimensions: 368mm W x 578mm H

Locate the desired installation location (no more than 457 mm from the ceiling). Using a stud finder, locate the studs on either side of the center point and mark them with vertical lines.

Using a level and a pencil, mark a horizontal line on the wall between the two studs, no less than 38 mm and no more than 457 mm from the ceiling.

Using a ruler or measuring tape, measure 406 mm down (3500ti & 5000ti) or 578 mm (8000 ti), and mark another horizontal line parallel to the first one.

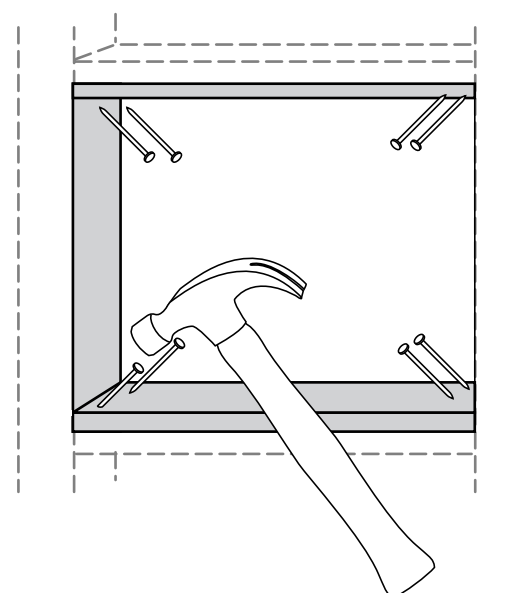
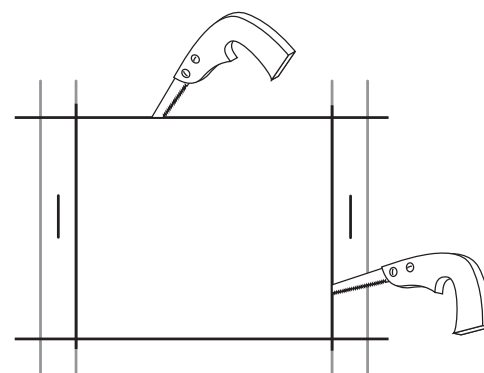
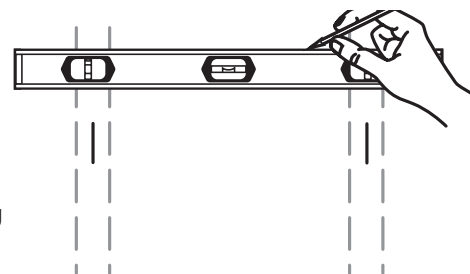
Using a saw, cut along the uppermost horizontal line until your saw reaches the stud. Turn the saw around, inserting it into the cut that has just been made, and cut toward the opposite stud so that there is a clean horizontal cut between the two studs. Be careful not to cut into the studs themselves.

Make the second horizontal cut from stud to stud on the line 406 mm below the first cut.

Once the horizontal lines have been cut, make vertical cuts using the inside edge of the studs as a guide. Once both vertical cuts have been made, there should be rectangular hole in the sheetrock. Make the same hole on the other side of the wall. Using a nail, mark all four corners of the first hole by making nail holes through the sheetrock. Connect the holes with a pencil mark and cut on the other side of the wall.

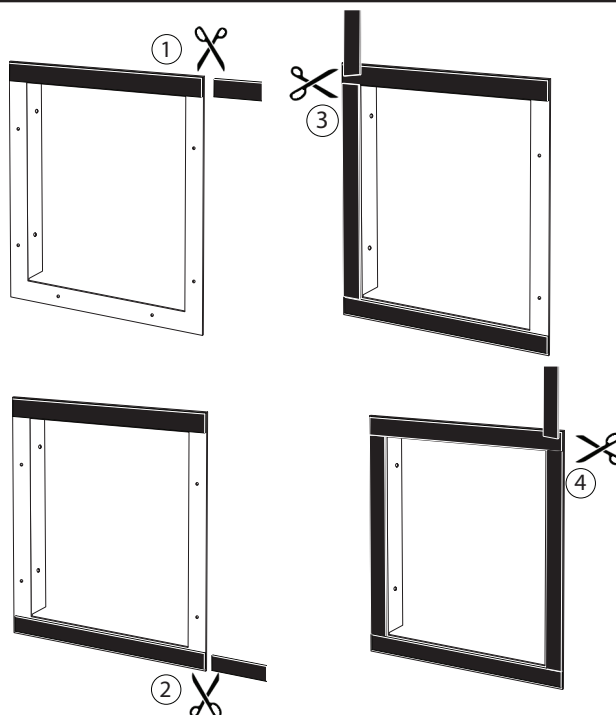
Sheetrock alone cannot support the weight of a 43-kg cooling unit. Therefore, it is necessary to frame the hole that has just been cut with upper and lower supports. These supports also provide solid material for the mounting bracket screws.

Using two 2x4s (368 mm in length) and eight 6d nails, secure the upper and lower supports to the right and left studs, just inside the sheetrock. Make sure that the internal height remains at 406 mm (3500ti & 5000ti) or 578 mm (8000 ti) so that the WhisperKOOL unit will fit snugly through the framed cut-out.



PREPARING THE UNIT FOR INSTALLATION

A sturdy single-piece mounting bracket is used to frame the installation location and secures the unit to the wall studs. The bracket has been designed to hold the unit at a two-degree (2°) angle. This helps project air into the space and aids in condensation drainage.



Applying Insulation Tape

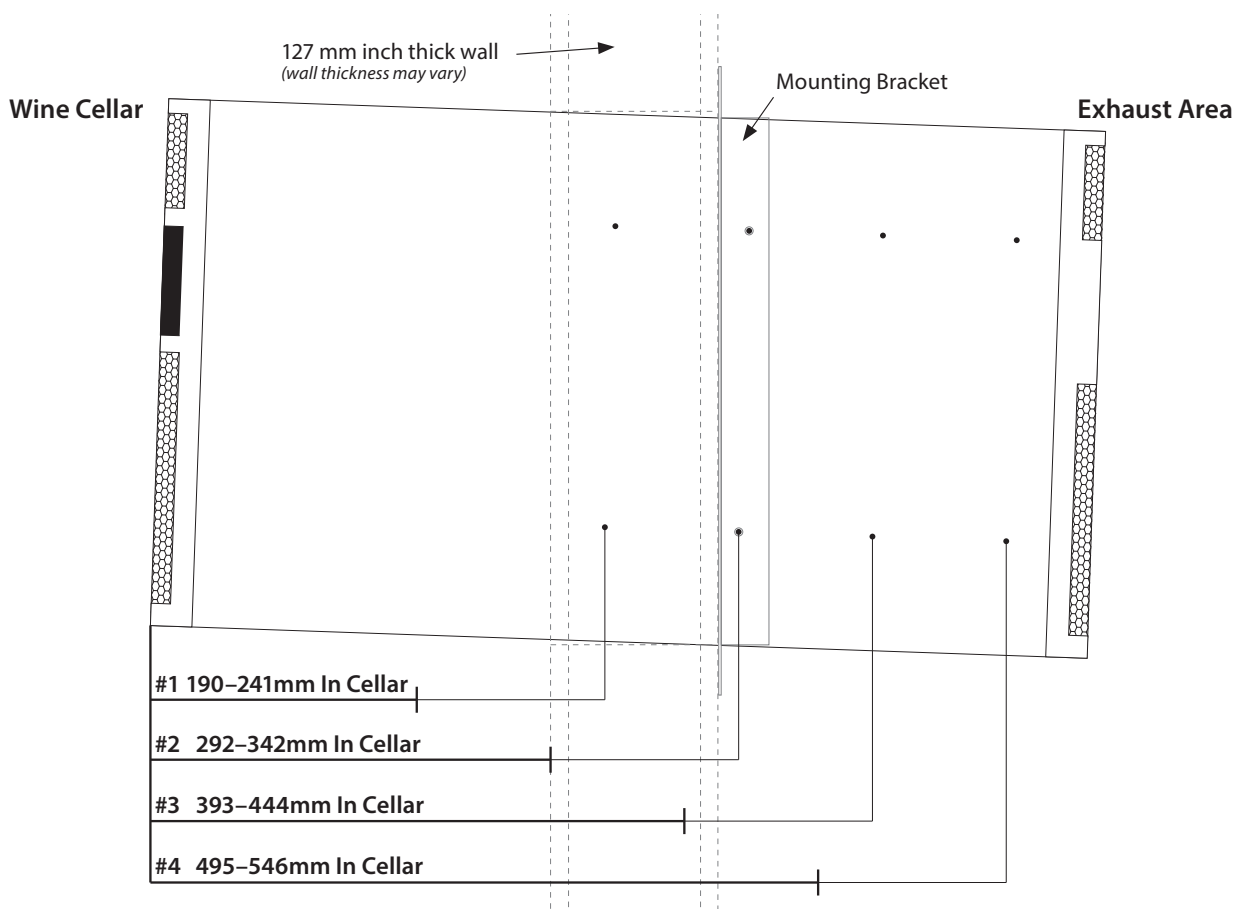
Locate the two meter piece of black foam tape included with the unit. Align one end of the foam tape with the upper left corner of the rear side of the mounting bracket. Stretch the tape across the rear of the bracket and cut the tape at the opposite edge. Peel off the white paper backing and attach the cut piece of foam tape to the top rear side of the mounting bracket. Follow the same procedure to place a piece of tape on the bottom edge of the mounting bracket. Place the remaining piece of foam tape on one side of the mounting bracket (spanning the distance between the pieces of tape on the top and bottom edges of the mounting bracket), then cut, remove paper backing, and secure. Do the same on the opposite side of the bracket. Discard any excess. The foam tape will create a tight seal between the bracket and the wall.

Mounting Bracket Installation

Select your desired bracket mounting location (see diagram below). This location determines the depth of the installation. For example, position #1 keeps most of the unit out of the cellar while position #4 sets the back of the unit near flush with the exterior wall. Slide bracket onto unit. Ensure that the TOP label on the bracket and the unit mounting flanges are towards the back. Use the supplied 12.7 mm pan-head screws to fasten the bracket to the unit. It is **imperative** that you use screws no longer than 12.7 mm in length.



If you are installing through an exterior wall, please review the next page for specific instructions on exterior grill installation.



OPTIONAL EXTERIOR GRILLE

The exterior grille is required on all installations where the exhaust side of the unit is exposed to the outdoors (i.e., rain and other adverse weather conditions).

Non-Flush Installation

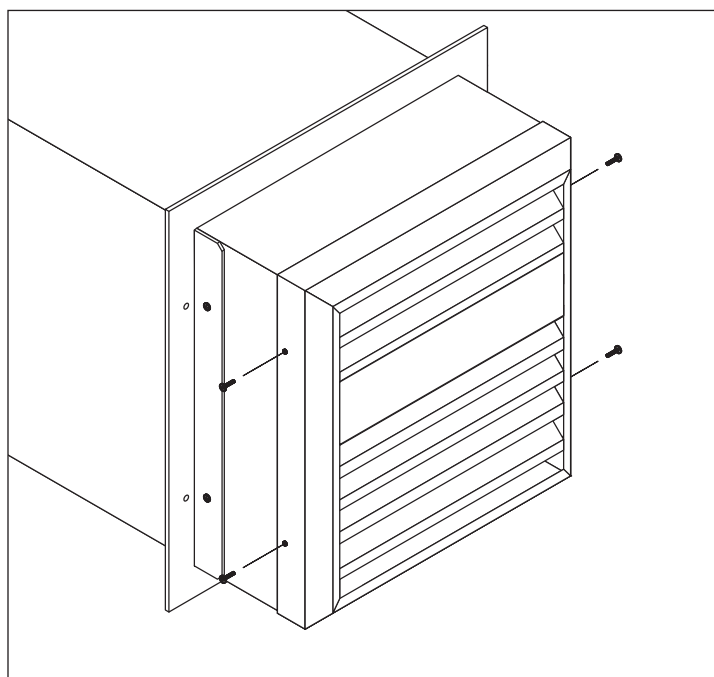
Install the unit according to the standard through-the-wall procedure. After the unit is installed, place the exterior grille over the exhaust side filter grille and line up the screw holes on the top, bottom, and sides. Use the supplied 13 mm pan-head screws to fasten the grille to the unit.

Flush Installation

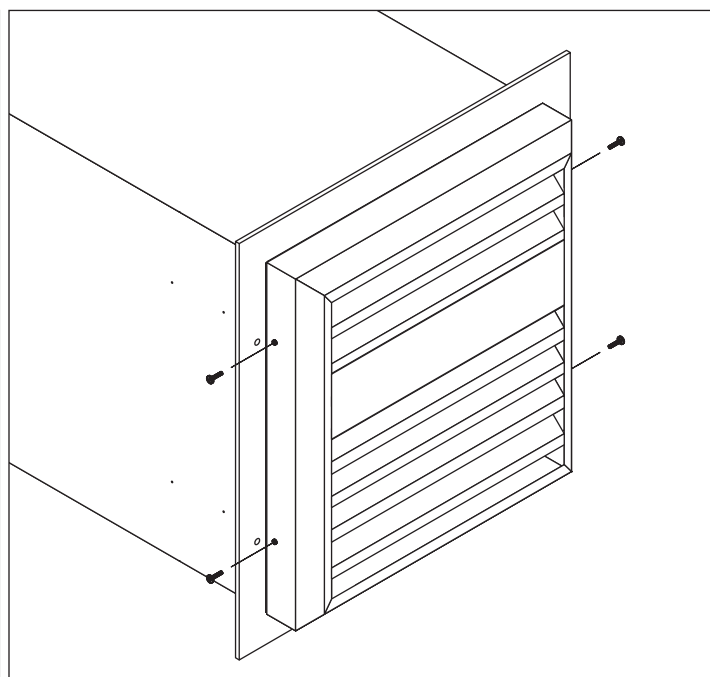
This installation is slightly different because you are utilizing the same holes for both the mounting bracket and exterior grille.

1. Slide the mounting bracket onto the unit followed by the exterior grille, bring the two pieces together by sliding the exterior grille over the mounting bracket side flanges.
2. Align the two top screw holes of the exterior grill with the top screw locations on the unit. Use the supplied 13 mm pan-head screws to fasten the grille.
3. Repeat Step 2 on the bottom of the unit.
4. Use the supplied 13 mm pan-head screws to fasten the grille and bracket to the unit ensuring the bracket stays perpendicular/square.
5. Continue through-the-wall installation.

You are required to use the 13 mm pan-head screws provided. Do not drill holes into unit.



Non-Flush Installation

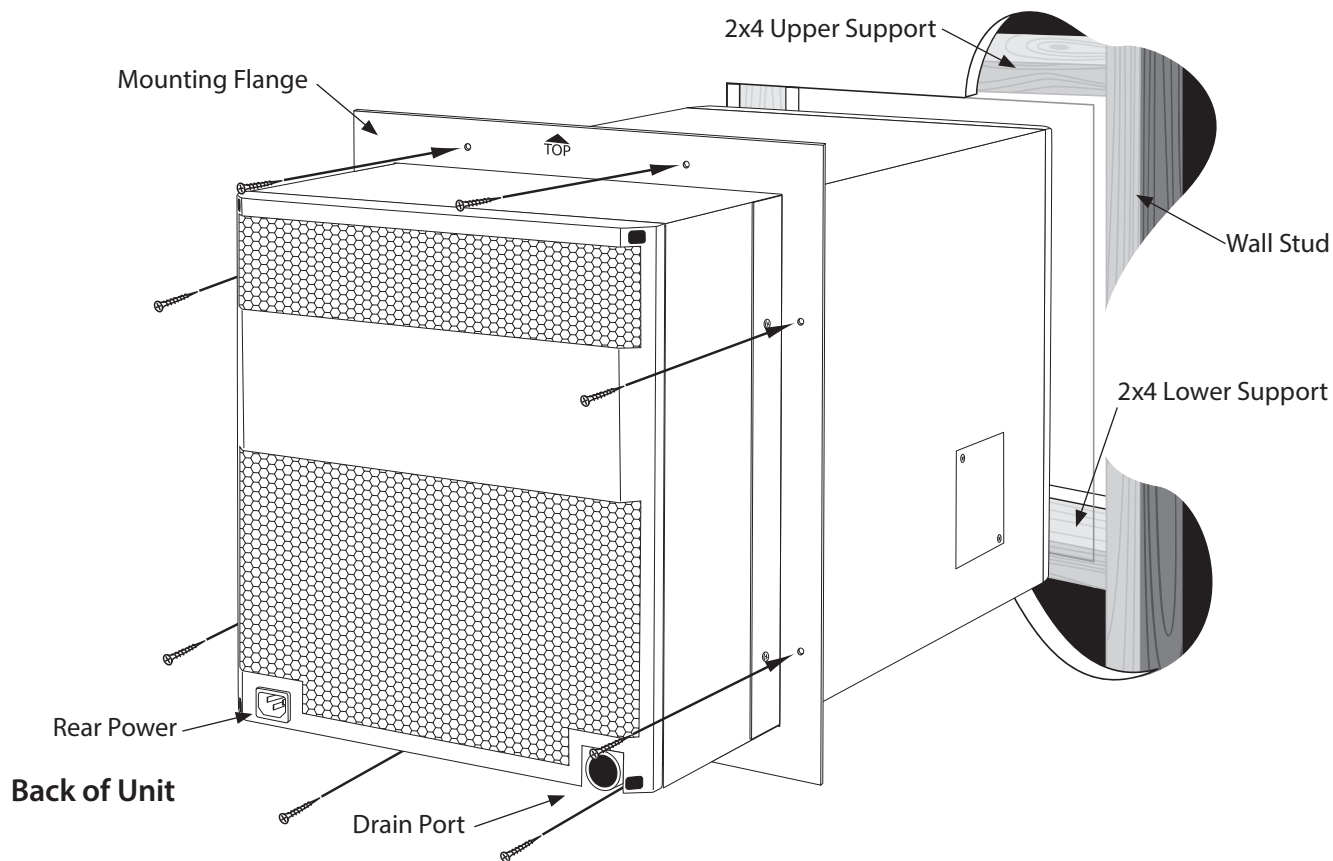


Flush Installation

INSTALLING THE UNIT

Slide the unit from the outside wall into your wine cellar with the outer flange flush with the wall. Secure the flange to the wall using the pre-drilled holes. The 44 mm screws should penetrate the studs as well as the upper and lower supports to provide adequate support for the WhisperKOOL unit (see illustration). Seal all cracks and gaps around the WhisperKOOL Extreme unit with an air-tight sealant or caulking to prevent air leakage.

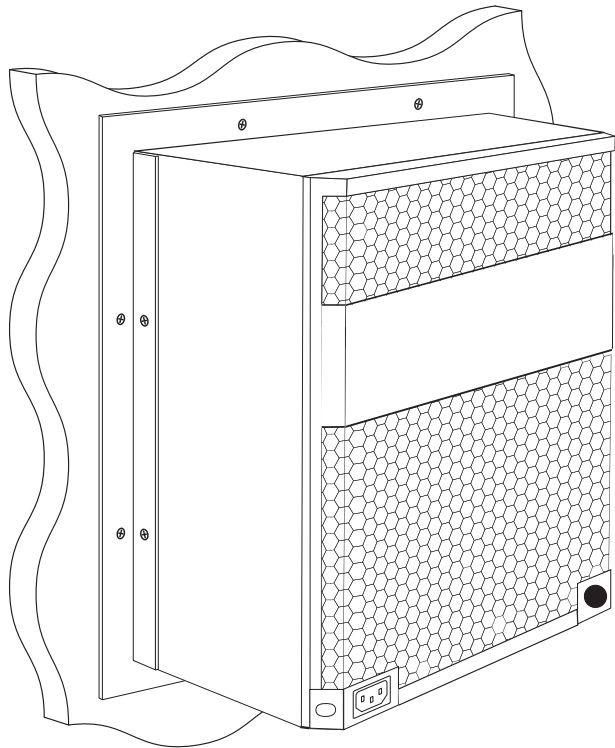
Note: If you use decorative moulding, it should be attached to the walls and **never** to the cooling unit itself. The moulding itself should be removable in case the unit needs servicing.



CONDENSATION DRAIN LINE

The condensation drain line tube is used to drain excess condensation from the unit to a proper discharge location. It is important that the drain line tube be properly connected in order to prevent leakage and other problems associated with excess condensation.

Failure to use the condensation drain line tube will void the warranty on the unit.



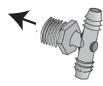
All units come with a drain line for additional removal of excessive condensate. It is mandatory to install the drain line with a "tee" fitting. During operation, the cooling unit will strip excess water from the air in order to maintain the proper level of humidity within the cellar. However, in extreme humidity, additional condensate will be removed. The drain line will prevent overflow and leaking by allowing for discharge of the additional condensate.



To prevent mold from growing, allow the drain line to hang above the water line.

Extreme Drain Line Installation

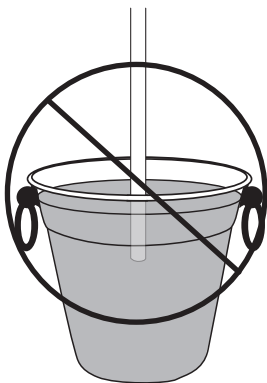
1. Wrap tee with Teflon tape one or two turns clockwise.
2. Next, thread the barbed tee into the drain port and rotate until tight. Make sure the barbed parts of the tee are vertical.
3. Next, attach the piece of 13 mm ID clear plastic tubing to the lower barb of the tee.
4. Every six weeks, disconnect the drain line from the tee. Remove the tee from the rear drain port and clean it. Then use the supplied drain line brush to clean the interior drain line. Use the drain line access door to drop a pan tab into the drip tray to prevent the buildup of microbial growth.



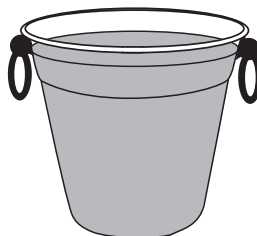
Black 13 mm tee



Drain line



WRONG: Drain line is under water.



LIQUID-MEASURING THERMOSTAT SYSTEM (BOTTLE PROBE)

WhisperKOOL cooling units come with a liquid-temperature-measuring thermostat. The self-calibrating bottle probe contains a sensor which communicates back and forth with the thermostat. This results in a consistent temperature setting and accuracy. Wine should be kept at a very precise, controlled temperature and humidity. By measuring the liquid temperature rather than air, the unit will operate 75–80% of the time.

Setting up the Bottle Probe

1. Locate an empty wine bottle.
2. Fill it 75% full with room-temperature tap water.
3. Place bottle probe securely into bottle as seen in Figure 1.
4. Place bottle off to the side of the unit in your wine cellar, with the probe level.
5. To ensure a consistent temperature, place bottle probe approximately three (3) feet away from the air output and not in the flow of the air.
6. Connect the opposite end of the bottle probe wire to the circular connector on the front of the unit marked "BOTTLE PROBE." Twist the connector clockwise to lock it in place as seen in Figure 2.

It is recommended that the bottle be placed in a central location of your wine cellar. Avoid pulling too much on the probe cord. It may become disconnected, resulting in limited functionality of the unit.

Note: The thermostat can be set between 10-21°C.

Remember: The WhisperKOOL unit operates based on the temperature of the water. Do not be misled by thermostats which read air temperature. The air temperature in the cellar will be cooler than the liquid temperature of the wine while it is reaching its optimum balanced temperature.

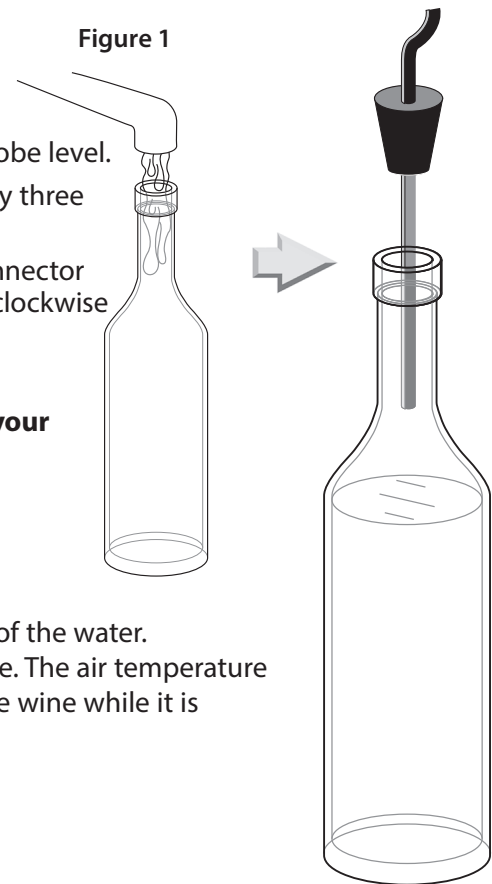
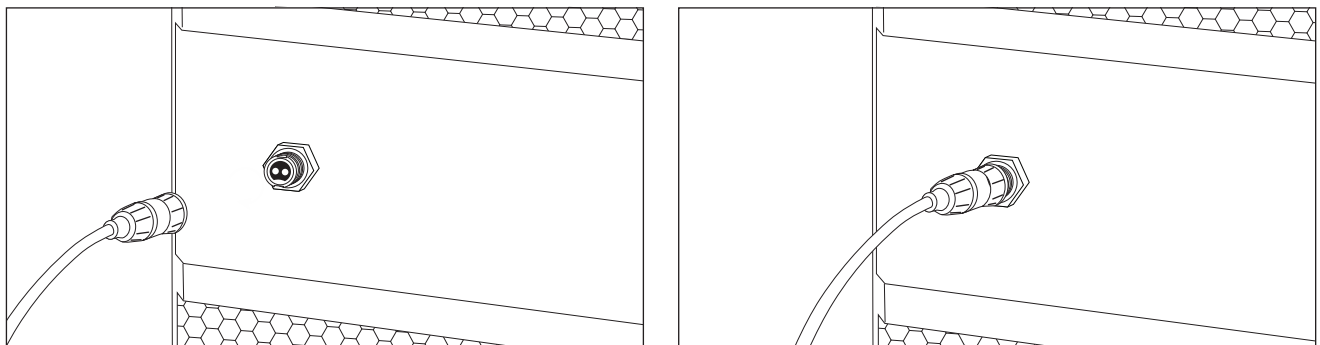


Figure 2

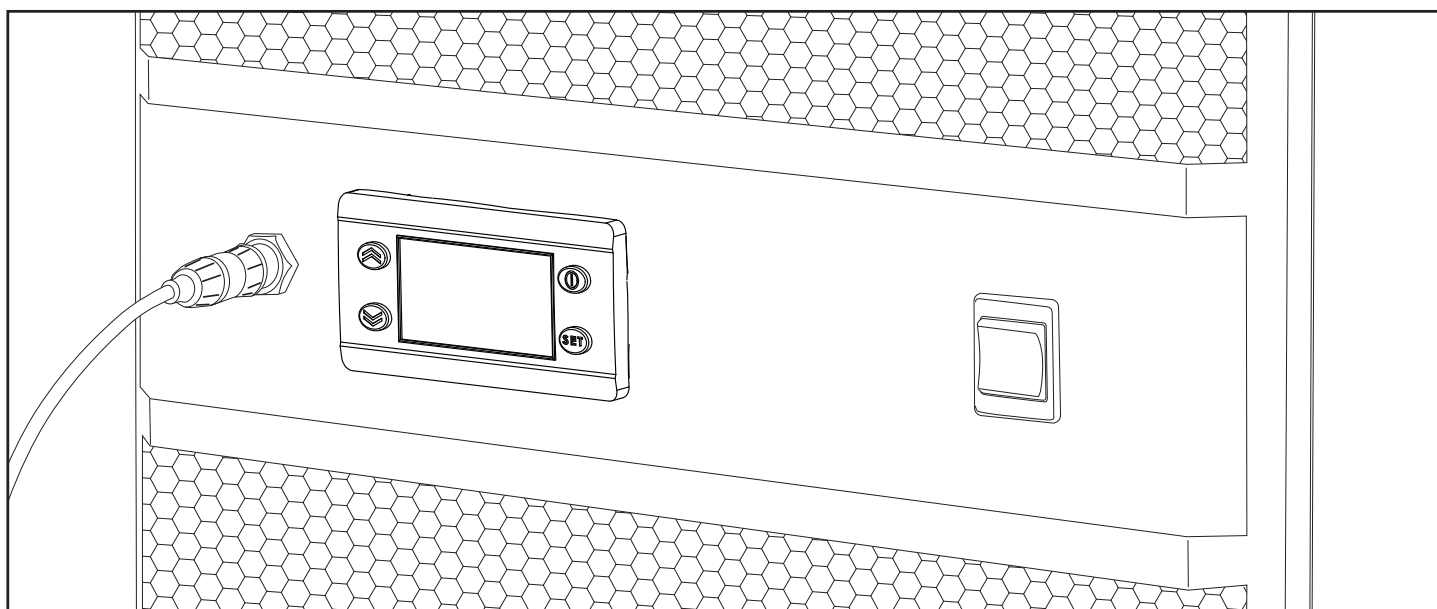


MULTI-SPEED FAN CONTROL

Designed for wine cellars up to 35 and 56 cubic meters, the Extreme 3500ti, 5000ti, and 8000ti feature multi-speed fans. These fans have a high setting for maximum performance in high-temperature (+43°C) environments and a low setting for super-quiet operation.

Fan Speed Selector Switch (Low/Med/High)

The cooling unit fans operate on three speed settings: **Low**, **Medium**, and **High**. For optimum sound and energy efficiency, select the lowest fan speed that will maintain the desired cellar temperature. If the relative humidity is low, a higher fan speed will cause less moisture to be removed during cooling. High speed is recommended for initial cellar cool-down, extreme temperature conditions, and ducted installations.



Fan speed selection is determined by the amount of heat that needs to be removed from the cellar and the type of installation (through-the-wall or fully ducted). Fan speed selection is based on cellar size, insulation ratings, door seals, and the desired wine temperature. When initially installing the unit, set the fan speed to the **High** setting to quickly cool down the cellar. Once the wine cellar reaches the desired temperature, a lower fan speed may be selected. In the event that the outdoor temperature rises above 32°F (when exhausting to the outdoors), a higher fan speed may be required.

SYSTEM OPERATION

Initial Start-Up

When power is applied to the unit, the snowflake symbol will be displayed (if unit is calling for cooling). There may be a delay of up to 60 seconds before the evaporator fan turns on. When the evaporator fan is activated, the fan symbol will display.

Setpoint

The setpoint is set at the factory (WhisperKOOL) to 14°C. It can be adjusted by the customer between 10–21°C in 0.1 degree increments.

Humidity Features

The Fdc parameter can be increased to allow the evaporator and condenser fans to run for a longer period of time after the compressor turns off, allowing more moisture to be reintroduced into the wine cellar.

Anti-Short Cycle

The Anti-Short Cycle ensures that the compressor will remain off for a period of three minutes after the unit has reached the setpoint to allow the pressure in the refrigeration unit to equalize prior to starting the compressor.

Anti-Frost Cycle (defrost)

When the evaporator probe senses a temperature of -3°C for five minutes, the unit will go into an Anti-Frost Cycle. This will shut down the compressor and allow the evaporator and condenser fans to run to evaporate any frost accumulation on the coil. The compressor will remain off until the evaporator coil reaches 4°C, or for a maximum of ten minutes. The unit will then return to normal operation.

Bottle Probe Failure Protection

In the event that a bottle probe should fail, the APST (Advance Product Safety Technology) will automatically transition the compressor to a pre-determined time cycle (based on detailed laboratory testing), which will ensure that the product is kept within a safe temperature range.

Display

The bottle probe temperature is displayed by default. "Def" is displayed during Anti-Frost. The air sensing probe and evaporator probe temperatures can be accessed by pushing the SET button and scrolling through "PB1" (bottle probe), and "PB2" (evaporator probe).

Safety Features

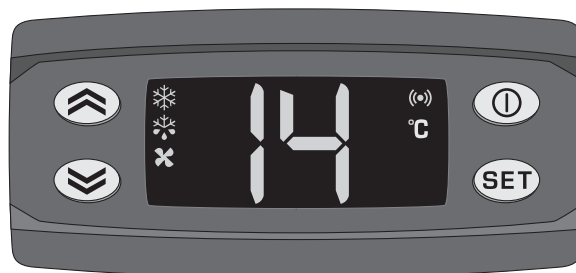
Once the compressor relay is de-energized the controller must wait five minutes before reenergizing the relay. This prevents the compressor from repeatedly turning off and on. If the unit is calling for cooling during this time, the compressor symbol will blink, indicating that cooling is needed but the control is waiting for the Anti-Short Cycle delay.









In the event of a faulty bottle probe, the compressor will cycle off for 10 minutes and on for 40 minutes. "P1" will be displayed on the screen.

Alarms

See **Alarm Codes** in the Controller Functions chart.

CONTROLLER FUNCTIONS



Button/Symbol	Normal Functions
ON/OFF 	<ul style="list-style-type: none"> Press and hold the ON/OFF button for approximately 3 seconds to turn the unit on or off. Note: This does not disconnect power from the unit. In order for the power to be shut off from the unit, the power cord must be unplugged from the power outlet. This button also serves as an escape button.
UP/DOWN  	<ul style="list-style-type: none"> Use these buttons to scroll up or down a menu. Press and hold the UP ARROW button for approximately five seconds to manually start the Anti-Frost Cycle. The Anti-Frost Cycle will begin, but only if the evaporator is below 4°C. If the evaporator is above 4°C, the display will blink three times, signalling that an Anti-Frost Cycle is not needed, and the unit will continue normal operation.
SET 	<p>Changing the Set Point</p> <ul style="list-style-type: none"> Press and Release the set button. While "SEt" is displayed, press and release the set button again. While the current temperature setting is displayed, press the up or down arrows to change set point. When the display shows the desired temperature setting, press and release the set button again. <p>Accessing Alarm Codes</p> <ul style="list-style-type: none"> Press and Release the set button. While "AL" is displayed, press and release the set button.
SNOWFLAKE 	<p>Steadily Illuminated: The unit is in cooling mode and the compressor is running.</p> <p>Blinking: The unit is calling for cooling, but must wait five minutes before restarting the compressor. This five-minute delay serves as an anti-short cycle for the compressors protection.</p>
DRIPPING SNOWFLAKE 	<p>The unit is running an Anti-Frost Cycle. The evaporator and condenser fans are running to evaporate any frost which may have formed on the evaporator coil.</p>
FAN 	<p>The evaporator and condenser fans are on.</p>
ALARM 	<p>The alarm symbol is shown and an audible buzzer will sound when the unit encounters an issue that needs attention. The displayed alarm codes are explained on the next page. To silence the buzzer, press any button. The alarm code will remain displayed until corrected.</p>

ALARM CODES

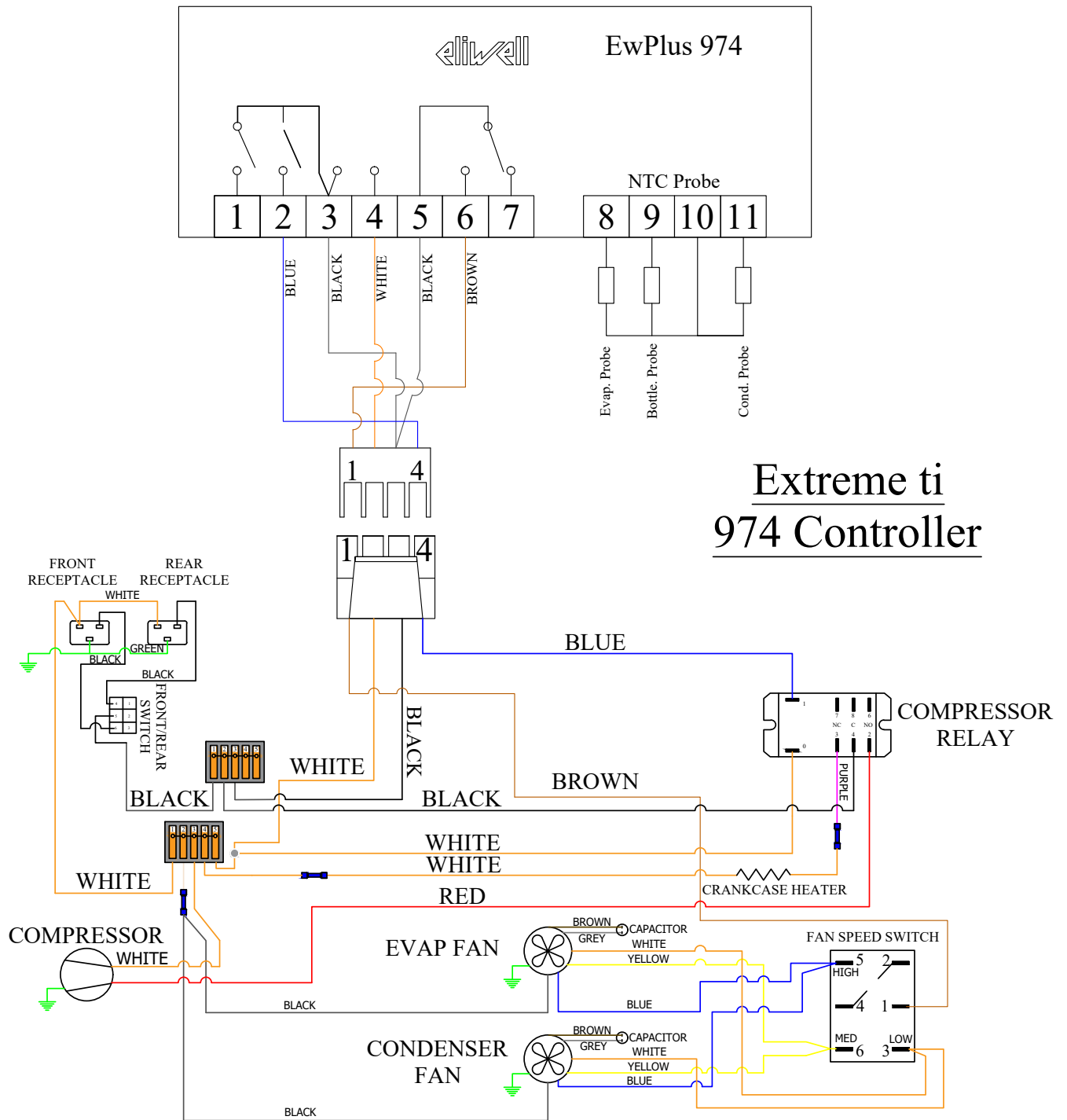
Message	Cause	Solution
"E1"	Bottle probe is unplugged	Attach bottle probe to unit
	Faulty bottle probe connection	1. Check bottle probe attachment at circular connector 2. Check bottle probe connection at the back of controller
	Defective bottle probe	Replace the bottle probe
"E2"	Faulty evaporator probe connection	Check evaporator probe connection at the back of controller
	Defective evaporator probe	Replace the evaporator probe
"E3"	Faulty condenser probe connection	Check the condenser probe connection at the back of the controller
	Defective condenser probe	Replace the condenser probe
"AH1"	The bottle probe is sensing a temperature that is 2°C above the setpoint	1. Allow time for the wine to reach the desired temperature 2. Make sure all windows and doors are closed and have a proper seal 3. Follow the procedures in the pre-installation instructions to test the unit for proper cooling
"AL1"	The bottle probe is sensing a temperature that is 2°C below the setpoint	1. Make sure unit is not in cooling mode (the snowflake symbol will not be lit) 2. Add heat to the room until the wine reaches the desired temperature
"Ad3"	Anti-Frost Cycle ended on time-out	1. Check the evaporator coil for ice buildup; unplug the unit and allow the coil to thaw before restarting 2. Make sure the room the intake air is not less than 16°C 3. If the unit continues to go into continuous Anti-Frost Cycles (every 5 minutes), call Customer Service for more troubleshooting information

CPSM (Customer Preference Selection Mode)

Press and hold the SET button for approximately 5 seconds to enter the CPSM menu. "Fdc" will be displayed on the screen. Use the down arrow to access the following parameters.

Fdc <i>Humidity Management/Enhancement</i>	This parameter is preset to one (1) minute at the factory. This amount of time should provide adequate relative humidity for the cellar. An increase in this parameter will keep the fan running longer after the compressor has turned off, reintroducing some of the moisture which was extracted from the wine cellar during the cooling cycle back into the cellar. (The WhisperKOOL unit, however, cannot increase the humidity of the cellar.) This parameter should not be adjusted below 1. Adjustments should be made in increments of 5, with a maximum of 15 and a minimum of 1. After making any adjustment to Humidity Enhancement, you should wait a minimum of three days before making any additional adjustments. This will allow the cellar sufficient time to acclimate to the new setting.
PA2	There are no adjustable settings in this parameter.
tab	There are no adjustable settings in this parameter.
Rel	There are no adjustable settings in this parameter.
loc	Change this parameter from "n" to "y" to lock the keyboard from changes to the setpoint.
ddd	Select one of these numbers to display your preference: 0 = Setpoint 1 = Bottle Probe Temperature 2 = Evaporator Probe Temperature 3 = Condenser Probe Temperature
"CA1"	Use this parameter to calibrate the bottle probe to a known temperature. This parameter can be adjusted between -24°C and -11°C. Example: Bottle temperature reading = 14°C Known temperature reading = 13°C CA1 parameter setting to match known temperature = -1

EXTREME 3500 ti, 5000 ti WIRING DIAGRAM





TROUBLESHOOTING GUIDE

Unit has ice forming on the evaporator	
Possible cause	Solution
Evaporator coil is dirty	Clean the coil with a vacuum. If coil is very dirty, use a spray bottle with a small amount of liquid dish detergent or coil cleaner. Spray coil, let set for five minutes, then flush with fresh water.
There is something blocking the supply and/or return air	Remove blockage
The evaporator fan is not turning on	Call a service tech to troubleshoot
The unit has not gone through an Anti-Frost Cycle yet	Check the coil for surface ice. Melt with blow drier until coil is warm to the touch. Soak up water with a towel.
The unit continues to ice	Observe ice formation pattern. If only part way up the coil face, unit could be low on refrigerant. If all the way up, the coil may be dirty or airflow is blocked.
Unit does not run/power up	
Possible cause	Solution
Unit is not plugged in	Make sure the unit is plugged into an outlet
Power switch not on	Turn unit on by pressing the power button on the control
Line voltage is incorrect rating for unit	Check line voltage to make sure there is 240V
Bottle at setpoint	Lower setpoint
Thermostat not calling for cooling	Lower setpoint
Power select switch in wrong position	See page 11 for correct switch position
Faulty thermostat or wiring	Call Customer Service
Cellar temperature is too warm	
Possible cause	Solution
The temperature of the room to which the unit exhausts exceeds 110°F	Intake temperature needs to drop below 43°C
The unit is undersized for the cellar	Order correct size unit
There is something blocking the supply and/or return air on evaporator or condenser side of the unit	Remove airflow obstruction
Unit is mounted too low in the cellar	Relocate unit so the distance from the ceiling and top of the unit or cold air supply duct is no more than 18"
One or more of the fans is not turning on	Call Customer Service
Compressor is not turning on	Call Customer Service
Compressor keeps cycling on overload	Make sure all fans are working and there is no airflow obstruction
Poor seal around door	Make sure there are no air gaps around the door. If door seal is damaged, replace it.
Setpoint too high	Lower the setpoint
Evaporator coil is frosted or iced up	Observe ice formation pattern. If only part way up the coil face, unit could be low on refrigerant. If so, call Customer Service at 1-800-343-9463.
System runs constantly	
Possible cause	Solution
Leaky door seal or poorly insulated cellar	Fix leaky door seal and insulate cellar in accordance with this manual (page 9)

Unit leaks water

Possible cause	Solution
Unit is level	System should have a two-degree (2°) pitch towards the exhaust side
Drain line clogged or kinked	Check drain line to make sure water can flow freely
Drain is clogged, preventing water from escaping	1. Disconnect exterior drain line and clear it out; run provided drain line brush through the drain port and into the interior drain line. 2. Open access door and, using a flashlight, check drain line for blockage; drop a pan tab into the drip tray to prevent further blockages.
Drain line does not have a downward slope	Fix drain line so there is a downward slope from the unit to the drain
Coil is iced, causing drip tray to freeze and water to overflow	Melt ice with blow drier; soak up with a towel

Unit runs but does not cool

Possible cause	Solution
Lack of airflow	Make sure fan is unobstructed and coil is clean
Compressor not running	Call Customer Service
Unit undersized	Call Customer Service
Compressor is overheating	Shut unit off for 1 hour to allow compressor to cool. Turn back on and check for cooler air to flow out. If compressor runs, check for and clean condenser coil as a possible cause of compressor overheating. If problem repeats, call Customer Service.

Evaporator fan runs but compressor does not

Possible cause	Solution
Running an Anti-Frost cycle	Check evaporator coil temperature
Compressor and/or starting components faulty	Call Customer Service
"Fan on" (FOn) setting has been increased, allowing fans to run after the compressor turns off	Lower the "fan on" (FOn) time
Compressor may have overheated	Shut unit off for 1 hour to allow compressor to cool. Turn back on and check for cooler air to flow out. If compressor runs, check for and clean condenser coil as a possible cause of compressor overheating. If problem repeats, call Customer Service.

Compressor runs but evaporator fan does not

Possible cause	Solution
Faulty fan motor	Call Customer Service
Faulty controller	Call Customer Service

Compressor short cycles

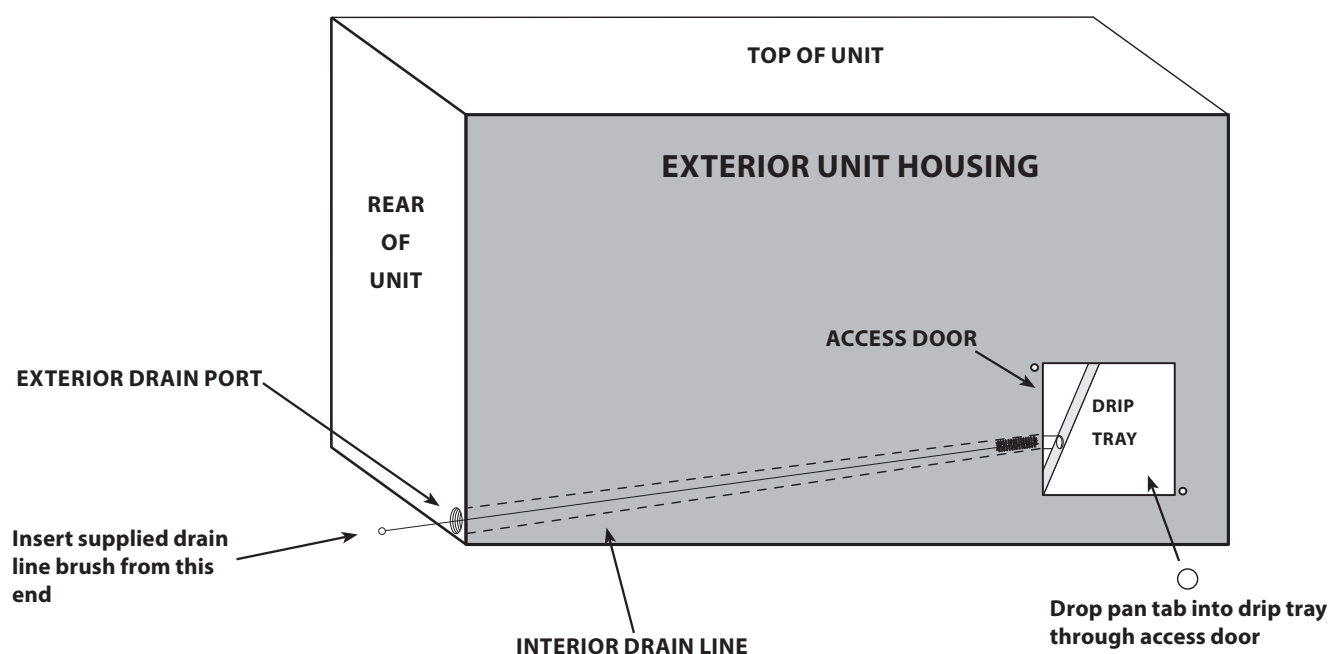
Possible cause	Solution
Evaporator blows on bottle probe	Move bottle probe to a more central location
Unit low on refrigerant charge	Call Customer Service
Condensing fan motor/capacitor faulty	Call Customer Service
Compressor and/or starting components faulty	Call Customer Service

Humidity in cellar too low

Possible cause	Solution
Not enough moisture	Install a humidifier or decorative fountain in the wine cellar

MAINTENANCE SCHEDULE

Monthly	<ol style="list-style-type: none"> 1. Check for unusual noise or vibration 2. Check drain line to see if it is above the waterline (when draining into a vessel)
Every Six Weeks	Using the supplied drain line brush, clean the interior drain line leading from the drip tray and drop a pan tab into the drip tray (see illustration below for more details).
Annually	<ol style="list-style-type: none"> 1. Use a vacuum with brush attachment to clean coils; be careful not to crush coil fins 2. Inspect for corrosion 3. Check wiring connections and integrity of cords 4. Pour a 50/50 bleach solution into the external drain line every spring



Pan tabs kill bacteria and related odors, remove sludge and scale, and help to prevent water damage caused by condensate overflow. They are non-corrosive and easy to install. Simply use the access door to drop a pan tab into the drip tray every six weeks.

WARNING: Keep pan tabs out of reach of children. They contain quaternary ammonium chloride and can cause skin and eye irritation. They are harmful or fatal if ingested. Wear protective gloves when handling pan tabs. Wash hands thoroughly after handling. If pan tabs make contact with eyes, rinse cautiously with water for several minutes. In case of an emergency, call 1-800-255-3924 (24 hours).

NOTES

*Whisper***KOOL™**

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