## Cooling System Inspection & Return Policy

Compare items of your wine cellar refrigeration equipment against Packing List and Bill of Lading. Inspect for obvious damage prior to accepting equipment. Soon after receipt check carefully for any concealed damages or any shortages.

Issues must be reported within 5 business days of delivery to US Cellar Systems

An RMA (returned merchandise authorization) must be requested prior to return of any cooling equipment. Elective returns requested within 90 days will be subject to a restocking fee of 20% plus freight charges. New returns must be uninstalled and returned in original packaging. Credit for returned product will be issued within 30 days after inspection by USCS.

## Installation of your Wine Cellar Cooling Equipment

Proper installation is necessary for optimum performance and customer satisfaction. Only experienced and qualified personnel who are familiar with local building codes and regulations should install and maintain wine room cooling equipment.

In most areas an EPA certification is also required to handle refrigerant. Equipment, piping, and electrical installation must adhere to local and national codes as well as conform to good practices to ensure proper operation.

**PLEASE NOTE: Disconnect all electrical service prior to working on any unit. Use caution around equipment as sharp edges and coil surfaces can cause injury.**

## Condensing Unit Sizing and Configuration

This evaporator has been mated with an equivalent capacity condensing unit based on specifications provided to US Cellar Systems by the customer.

US Cellar Systems is not responsible for errors, misrepresentations, or changes in the room specifications provided. The use of oversized or undersized equipment is not recommended and either will impact the humidity level adversely.

The evaporator is equipped with a constant pressure expansion valve. When extra capacity is present in the system the evaporator will flood back refrigerant to the condensing unit leading to coil freeze up as well as possible compressor failure.

***It is recommended that a suction line accumulator always be used to reduce the chance of liquid flood-back to the compressor during off design conditions.**

****Glass is always recommended to be dual pane with a 1/2" gap**

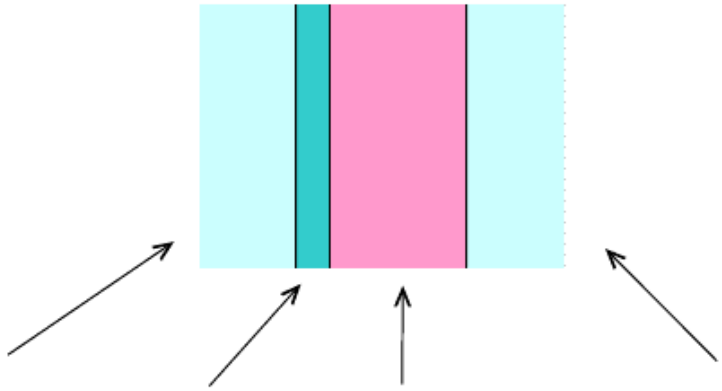
***** Do not size by estimates or charts if glass is incorporated or more than 2.5 watts ft² of lighting will be used.**

****** Adjustments should be considered in the sizing for extraordinary circumstances such as high elevation, particularly harsh seasons, etc.**

## Climate Controlled Wine Room Construction

Proper preparation of a wine room is key to controlling the environmental factors that may negatively affect the storage and aging of wine.

Room construction is likely to vary with each installation. Rooms should always be built using a vapor barrier on the warm side of the walls. Suggested methods:




Walls and ceilings of a refrigerated wine cellar must be protected with a vapor barrier on the "warm side" of the walls. Walls on the interior of the wine room should be insulated to R19 values or even higher, ceilings to R30. Fill any gaps or joints with expanding spray foam.

Check carefully that the vapor barrier remains intact around light fixtures, and fill any gaps. Lighting should be minimal and the total wattage and hours of use calculated into the load calculation for the wine cellar. LED lighting is preferred because it emits very low heat; its use is not limited.

Interior walls can be finished with moisture resistant green board. Wine Cellar Doors should be exterior grade and made of solid wood and/or insulated. Weather stripping and exterior grade seals should also be used to achieve an air tight seal.

***Glass is always recommended to be dual pane with a 1/2" gap**

**** Do not size by estimates or charts if glass is incorporated or more than 2.5 watts ft$^2$ of lighting will be used.**

**A wine cellar is not an "Air Conditioned" room**

**It is a REFRIGERATED room**

## Configuration of Fans for Wine Cellar Cooling Systems

Fan – the fan may be operated in 2 different ways:
The fans are cycled with the thermostat.

This is the recommended method from both operation and energy consumption point of views. Be careful to have the temperature sensing probe in a prominent location within the room. If it is in a return duct the lack of airflow will lead to erroneous readings. The fan is run all the time (not recommended).

In this mode it is important to ensure that the fan is turned off every 1-2 hours for a drain cycle. The high static nature of the fan will trap water in the drain pan and can lead to the overflow of the drain pan internal to the unit. A drain (or burp) cycle is important to remove the water from the drain pan area.

## Ducting (HS Series Cooling Units Only)

The HS Series Wine Cellar Cooling Units are designed to handle up to a total of 50 feet of insulated ducting, the same diameter as the hose spuds on the unit. If runs will be shorter or contain many branches then the system performance should be watched carefully during startup. This wine cellar refrigeration system is capable of being operated with the fan motor speed reduced via a speed control to bring the system performance into balance.

Please note that if the fan speed is reduced the evaporator capacity will be reduced correspondingly. In addition please remember that the unit is moving air through insulated ducting. Thermal losses should be considered in the total capacity calculation.

A minimum of R-8 insulation on the ducting should be used. For areas with high humidity and where the dew point can be in the range of 47-50 degrees it is recommended to use extra insulation. Extra capacity should be allocated if the unit and/or ducts are located in high temperature attic areas.

**Expansion Valve**

The unit is equipped with a constant pressure expansion valve. This is done to keep the evaporator at a constant temperature during low load conditions to prevent wide humidity swings.

If necessary to adjust connect a gauge set to the lines preferably close to the evaporator as possible. Set the valve pressure to the pressure that most closely corresponds to 38-40 deg F. This pressure setting gives a coil dew point of 55-60 humidity.

All systems are made for use with R134a refrigerant unless special ordered differently. R134a units should have the valve set to 33 psig. R22 refrigerant should have the valve set to 65 psig. R404a should have the valve set to 82 psig. These settings may be set at the factory but should be verified upon installation as items can shift during shipping.

Settings other than the above may result in relative humidity levels outside the normal 50-65% range. Do not operate the unit with an oversize condensing unit. If the unit is operated in this manner the coil may freeze and cause low humidity in the refrigerated wine room and/or lack of airflow leading to over temperature conditions in the room. It is also possible refrigerant will flood back to the condensing unit causing failure.

**Drain Lines for Wine Cellar Cooling Systems**

All fan coils require the use of a drain line. Each evaporator fan coil has a stub connection for the drain line. Either copper or PVC tubing in the size, matching the stub connection, can be used. The drain line must be installed below the bottom level of the drain pan within the fan coil. Drain lines should slope downward continuously and unobstructed to the drain location. If a gravity assisted drain is not possible, a condensate pump must be used. Follow the manufacturer's guidelines carefully for appropriate pump size. Place pump in an easily accessible location as it will need to be check and maintained regularly.

Due to the special construction the HS evaporators a "Ptrap" is required in the drain line just below the stub connection.

After installation of the drain line, test with water to ensure water flow.

All drain lines must be inspected regularly for blockages. Water deposits can form and cause water to back up in the line to the drain pan. Leaks occurring in this manner are not a mechanical failure.

**Line Sets for Wine Cellar Refrigeration Systems**

The following is a general planning and installation guideline for split-system wine cellar refrigeration system piping or "Line Sets".

The information is relevant whether using pre-made line sets or fabricating piping in the field. The specific wine cellar cooling unit's instructions should also be followed carefully to prevent early compressor failure and to protect your manufacturer warranties.

Check your area for additional information such as local building codes, special regulations, and/ or variances that are not provided by USCS, or manufacturer specifications.

Line sets consist of two semi-flexible copper pipes to connect the outdoor condensing unit to the indoor evaporator coil. The smaller pipe is called the liquid line (LL). The larger pipe is referred to as the suction line (SL), and includes insulation.

When designing the configuration of line sets, it is important to keep in mind the actual length as well as the functional length. Remember to include 90's, sharp bends, risers or upstream angles in line set length calculation.

Each of these creates additional restrictions on the fluid being moved in the lines. These restrictions function as if they are longer than a straight line would be. Improper fluid return could lead to early age compressor failure due to the insufficient oil return back to the compressor. USCS refrigeration systems are designed to pump refrigerant up to 50'. Longer runs can sometimes be achieved by precise measurements of all angles in the run, the introduction of exact amounts of additional oil to the system.

Suction line accumulators are recommended on all systems. Due to the lower pressures that refrigeration systems work with when compared to Air Conditioning Systems extended line installation is strongly discouraged. Even with careful planning there is no certainty the system will function within proper parameters.

Take adequate precautions to ensure the system is clean, free of particles and contaminates, and dry. Line sets should never obstruct or limit service access to the installed system components. Lines should be installed with as few bends as possible. Extra care should be taken with bends and couplings to avoid damage or kinks.

To minimize noise transferred from the equipment to the structure, refrigerant lines should be insulated, isolated, and supported. Support should be at minimum intervals using appropriate tape, hangars and brackets.

***Never solder vapor and liquid lines together.**

Individually insulated lines can be taped together for convenience, appearance, and support. To facilitate proper oil return a horizontal slope approximately 1 inch every 20 feet toward the condensing unit is best.

**Line Sets (con't)**

A conduit of PVC piping should be used for all underground installations. Buried lines should be kept as short as possible. Where lines penetrate walls, additional insulation and a sealing material should be used. Insulate all vapor lines with a minimum 1/2" of foam rubber. Any liquid lines that will be exposed to high ambient temperature, weather, or direct sunlight should also be insulated. *All lines can be insulated for a more aesthetic appearance.

To avoid contamination and prevent scaling during brazing, flow an inert gas such as Nitrogen through the system. Do not use soft solder. Braize all copper to copper joints with Silfos-5 or an equivalent material. For additional advice on non-copper joints see: TSB Joining Dissimilar Metals

If elbows are required, use long radius angles wherever possible.

| LINE SIZE INCHES (O.D. | 90° SHORT RADIUS ELBOW (FT.)* | 90° LONG RADIUS ELBOW (FT.) |
|---|---|---|
| 1/4" | 0.7 | 0.6 |
| 5/16" | 0.8 | 0.7 |
| 3/8" | 0.9 | 0.8 |
| 1/2" | 1.2 | 1 |
| 5/8" | 1.5 | 1.3 |
| 3/4" | 1.6 | 1.4 |
| 7/8" | 1.8 | 1.6 |

• Two 45° radius ells equals one 90° radius ell

Though USCS provides suggested system line sizes for each assembly, suction and liquid line sizes can be altered to minimize pressure changes and improve oil return to the compressor where elevation differences exist between the indoor and outdoor sections.

**Line Sets (con't)**

When sizing refrigerant lines for split-system cooling units several factors must be considered. Suction line pressure loss due to friction. Suction line velocity for oil return. Liquid line pressure loss due to friction.

Liquid line pressure loss (or gain) due to static head. The effect that each of these factors have on a cooling system depends on the orientation of the indoor and outdoor sections; e.g., indoor unit above the outdoor unit. Even the most well planned piping procedures can inadvertently create oil traps, and oil logging where elevation changes occur.

**Outdoor Condensing Unit Installation**

Where the condensing unit will be mounted outdoors special considerations must be taken. Units not being "hard wired" that use an electrical outlet, should NOT have a ground fault interrupter aka GFI. Condensing units should have a dedicated circuit breaker of the appropriate size listed in system information.

Condensing units should be placed on level ground atop a condenser pad and installed following local code regulations. Distance from structures and vegetation should also be considered. Outdoor enclosures should always be used for outdoor installations.

Enclosures should allow for proper ventilation while keeping out debris, vegetation, and small animals. Outdoor components should be inspected and maintained regularly. Most styles of louvered enclosures work well; mesh covers can also be used. If an enclosure was purchased with the order some minor assembly may be required.

For areas where winter temperatures can reach below 40°F for more than a few days at a time Low Ambient provisions should be used. A fan cycling switch and crank case heater should be added to the condensing unit. If purchased from USCS with the order these components will arrive installed.

**Water-cooled Condensing Units**

Unless special ordered, all USCS systems are provided with air-cooled condensing units.

Installation of a water cooled condensing unit is the same as air-cooled condensing units with the addition of water supply line connections. These connections should be made while the refrigeration line set is being connected. At this point, test the water connections for leaks.

Water supply should be on prior to charging the system. After the system is charged and running check the water control valve for the proper adjustment. Correct pressure range for R134a systems is 150psig. - 175psig.

## Control Logic and Digital Controller

For most applications control is by the standard refrigeration "pump down" approach. The condensing unit is equipped with an adjustable pressure switch that is set for 25lbs cut in (turn on) with a 20lb differential (turn off).

Standard equipment setup provided by USCS on the condensing unit will be used. This includes: Sight glass, receiver, liquid line filter and pressure switch. These components may be installed or shipped loose. All items should be used on all applications.

The DC-1 controller then controls the 115vac solenoid valve and fan in the evaporator. While the system is running the pressure and temperatures will be within range. Once the minimum temperature setting is reached, the liquid line solenoid valve will close and the fan will turn off. After the refrigerant in the evaporator boils off, the suction pressure will be begin to "pump down". This will cause the suction pressure to decrease to the cut out point on the low pressure switch at the condensing unit, it will then turn off or shut down.

When the room temperature rises above the set point the solenoid valve opens, the fan turns on and the coil is again flooded with refrigerant, the pressure rises above the cut in point and the system starts back on-line. This is to keep the system from short cycling.

There is no wired connection between the condensing unit and the thermostat. For long runs (+50') or installation of the condensing unit in areas that can see large swings of temperature it is recommended that a Low Ambient Kit and an Suction Line Accumulator be purchased or added by the installer for system reliability.

The DC-1 controller supplied with all USCS wine cellar refrigeration equipment is programed to operate with a 5 °F differential in air temperature. Pre-programmed system controls for run time of the equipment help to balance the humidity of the wine cellar. If the factory controller is replaced, the replacement should have a deferential that can be adjusted from 1 °F to 10 °F. If the alternate controller does not have this ability, USCS cannot assure proper operation of the system.

***Upon start-up all systems have an automatic 10 minute delay to operation**
**** If defrost cycle is triggered it is an automatic 30 minute delay to operation**

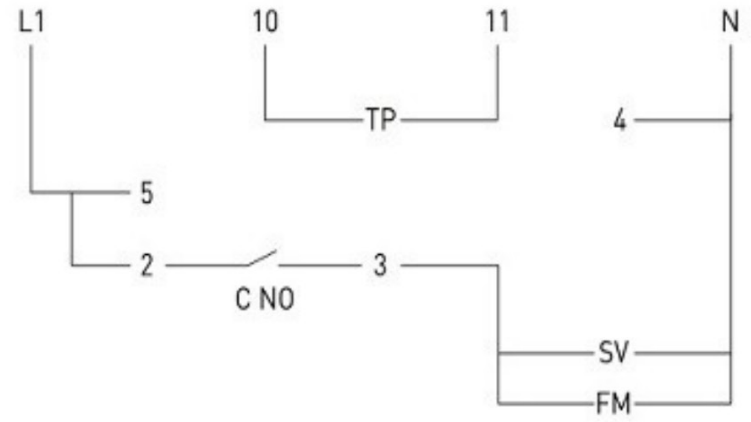
USCS uses air temperature probes only. There is an added advantage of efficiency to monitoring by air temperature. The system can recover changes in temperature more quickly. It will likely run more frequently than with other methods, but not have to run as long to compensate for changes.

With cycling on and off more often, the humidity level tends to be more consistent and most importantly, the wine is kept very stable. The sensor should be placed as near to the return air section of the evaporator as practical. With HS (ducted) systems it should be placed near the return air grill.

**Control Logic and Digital controller (con't)**

- **L1 - 115V Line Voltage**
- **N - Neutral**
- **SV - Solenoid Valve**
- **FM - Fan Motor**
- **TP - Temperature Probe**

**Fan Coil Wiring**




**Condensing Unit Wiring**


**10 - Temperature Probe**
**11 - Temperature Probe**
**4 - Neutral**
**5 - 115V Line Voltage**
**2 - Jumper from 5**
**3 - Switch Leg to Fan Coil**
**C NO - Internal normally open contact**

Wire used for the DC-1 should be 14 gauge stranded wire, NOT thermostat wire. If a wire harness was purchased with the order it will have numbered tabs on each strand corresponding to the diagram above.

The sensor wire MUST NOT be run parallel to other high voltage wiring, it should be encased in conduit according to local code regulations. The sensor wire lead from the DC-1 to its location near the return air MUST NOT be included in other wiring bundles. The sensor wire touching other electrical wires is very likely to cause misreading's or even malfunctions.

## Table 2: DC-1 Controller Programming

| Parameter Name | Parameter Setting | Parameter Description |
|---|---|---|
| SCL | F | Temperature scale is in degrees F |
| SPL | 40F | Lowest allowable set-point |
| SPH | 70F | Highest allowable set-point |
| SP | 55F | The control set-point ( turn off ) |
| C-H | REF | Controller set to operate a refrigeration cycle |
| HYS | 5 | The control differential (cut in set-point of 60F, will maintain a 57F target) |
| CRT | 10 | Minimum compressor rest time after cycling off |
| CT1 | 15 | Compressor "ON" time when the temperature sensor fails (in minutes) |
| CT2 | 15 | Compressor "Off" time when the temperature sensor fails (in minutes) |
| CSD | 0 | A compressor stop delay after the door has been opened. (not applicable, set to 0) |
| DFR | 1 | Defrost per day |
| DLI | 60 | Defrost termination temperature |
| DTO | 30 | Defrost duration in minutes |
| DTY | ELE | Defrost Type, ELE = Electric Defrost (this my assumption, "GAS" = Hot Gas defrost, and this will force the compressor on) |
| DDY | 10 | This features enables the controller to display "REC" for "x" number of minutes after the defrost has expired and the refrigeration has resumed. (I suggest 15 minutes) "DEF" will be displayed during the defrost cycle. |
| ATM | REL | Alarm function is active and the high & low alarm set-points are independent temperature values. |
| ALR | -10 | Low alarm set-point ( I would suggest -25F) |
| AHR | 10 | High alarm set-point (I would suggest -5F) |
| ATD | 120 | Alarm delay in minutes (I would suggest 30 minutes) |
| ADO | 0 | Alarm delay for a open door (not applicable if a door switch is not used) |
| ACC | 0 | This parameter will trigger an alarm after a defined number of weeks has expired for the compressor operation. For example, the ACC parameter is set to "1", then every 168 hour of compressor operation will trigger this maintance alarm. This a good feature for cases that require condenser coil cleaning. Set this feature to "0" to disable it. |
| SB | YES | When this parameter is set to "YES", the controller operation can be put in stand by mode by holding in the key on the far right of the keypad. In standby mode, all relays cycle off. This works well for maintenance work, but can pose problems if it is mis-used. Setting this parameter to "NO" will disable the feature. |
| DS | NO | This feature enables the door switch input. The "NO" setting disables this feature. |
| OAU | NON | This parameter defines the function of the "AUX" relay (the second relay on the controller). "DEF" defines the relay as you defrost relay. |
| INP | SN4 | This parameter defines the type of temperature sensor used. "SN4" is the sensor type of the standard 10K NTC sensor. This will always be your choice. |
| OS1 | 0 | The offset for sensor one ("T1"). Should not require adjustment. |
| T2 | NO | This parameter enables the "T2" defrost termination sensor. |
| OS2 | 0 | The offset for sensor one ("T2"). Should not require adjustment. |

| | | |
|---|---|---|
| TLD | 5 | Your LAE controller is setup to log the historical high & low temperature extremes of your control temperature sensor. This delay parameter (in minutes) requires your high or low temperature reading to last for 5 minutes or longer before it is logged. You can view the "THI" (high temp) and "THO" (low temp) by pressing the "I" button on the controller's keypad. The "I" button is the "info" button. It is the key located to the far left of the controller's keypad. |
| SIM | 0 | The "SIM" function slows down the the rate of change in the temperature displayed on the controller's display. A value of "0" does not alter the temperature display, but any number 1 to 100 will slow down and even out the the temperature displayed. The higher the number, the slower the change. This does not slow down the controllers actions, but simply evens out |

**Initial Start-up**

Once the evaporator(s) and condensing unit are in place with the line set connected follow general practice leak detection procedures and perform a Standing Pressure Test as outlined below:

- Put a small amount of refrigerant into the system for leak checking purposes, up to about 10psig.
- Using Nitrogen, increase the pressure to about 150psig.
- Visually inspect and apply leak detector to all solder joints and flare connections
- Find and repair any leaks, repeat procedure if necessary
- Next the air and moisture must be removed from the system as follows:
- Connect vacuum pump to the system via manifold gauges and perform a "Triple Evacuation"
- Evacuate the system to 30 in. hg vacuum
- Break vacuum with Nitrogen
- Evacuate the system to 30 in. hg vacuum
- Break vacuum with Nitrogen
- Evacuate the system to 30 in. hg vacuum

You can now begin the actual Start-up process as follows:

- Break the vacuum with refrigerant and charge to a clear sight glass. At this point a UV Leak detector can be added to the system as a precautionary measure for future needs.
- Check the AVX (expansion valve) at the evaporator for proper adjustment. *See adjustment procedures in the expansion valve section of this document if required
- Monitor the system for temperature drop to begin
- Check evaporator fan motor, condenser fan motor, and compressor for proper amp draws outlined in the spec sheet for the particular system.
- Record all required data on the Warranty Card/Diagnostic sheet
- Next the air and moisture must be removed from the system as follows:
- Send a copy to US Cellar Systems to activate warranty and keep a copy for future reference.

**Initial Start-up (con't)**

For additional questions, or technical issues call the USCS tech line 562-728-5774 for assistance.

***Upon start-up all systems have an automatic 10 minute delay to operation**
**** If defrost cycle is triggered it is an automatic 30 minute delay to operation**

Once operating, the room will not instantly cool to the desired or programmed temperature. It is a process that will vary greatly in time on the size of the space.

It is normal for initial cooling to be achieved over the course of several hours. If there is large quantities of wine moved into the room not already at storage temperature it can be slower. Drastic temperature swings are a risk to wine.

Slow, steady adjustments to a stable temperature and humidity are the goal. If the humidity in the room is slightly below normal after the product is in place and the correct temperature is achieved a container of water may be placed in the room and allowed to evaporate.

**Protecting your investment**

After your new wine cellar is up and running there is one final and important step to best protecting your investment; begin planning a routine maintenance schedule with your contractor. We suggest at least an annual inspection of your equipment to keep it in best working order.

Environmental issues cause the majority of equipment failures. Some of which may not be covered under warranty but nearly all are avoidable with regular maintenance and inspection. In harsher environments such as coastal, mountainous, or desert areas, it is suggested that maintenance and inspection be more frequently performed. Some of the required inspection steps must be performed by a licensed technician.

**NOTES:**

**Overview of Routine Inspection and Maintenance**

**For Split System Refrigeration**

- Clean the condensing unit of any dust, debris, and foreign objects. This includes: mud, sand, vegetation, leaf litter, and even small creatures. (compressed air or Nitrogen may be used)
- Visually check, clean, and clear drain line from end to end (compressed air or Nitrogen may be used) Small water deposits can and likely will develop over time in the drain pan, drain line, and condensate pump (if used)
- If a condensate pump was added during installation inspect, clean, and test. This is the most common source of water leaks and is not a result of the refrigeration equipment operating improperly.
- Visually check condensing unit wiring, coil, and fan motor for any issues
- Visually check evaporator coil/air handler for any signs of corrosion, water leaks, dust, or debris
- Visually check evaporator coil/air handler wiring, fan motor, supply and return ducting (if used) for any issues
- Check system refrigerant levels (visually inspect the sight glass)
- Check that the amp draw on each system component is within specs
- Check that operating pressures are within specifications
- (Requires gauges and licensed technician)

**Warranty Activation Card**

The information collected on the following page is an overview of the system statistics and performance at installation/startup, and should also be retained for future reference.

When troubleshooting, any variations from the original results should be noted and reported to USCS for diagnosis assistance or possible warranty issues.

Always contact USCS for diagnostic assistance and approval PRIOR TO replacing any components. Failure to contact USCS in advance of repairs may void warranty coverage.

**WARRANTY ACTIVATION CARD and DIAGNOSTIC STATUS REPORT**

**PLEASE SUBMIT COMPLETED REPORT TO USCS SHORTLY AFTER STARTUP TO ACTIVATE WARRANTY**

ORIGINAL PURCHASER _____ DATE_____

SYSTEM NAME_____

CONDENSING UNIT SERIAL#_____EVAPORATOR COIL SERIAL#_____

SUCTION LINE SIZE USED_____LENGTH_____

LIQUID LINE SIZE_____ LENGTH_____

NUMBER OF 45 DEGREE BENDS_____ 90 DEGREE BENDS_____

DRAINLINE SIZE USED_____LENGTH_____

*Record this data with compressor running and return air temp between 53F and 58F

VOLTAGE AT COMPRESSOR _____

AMP DRAW AT COMPRESSOR_____

IS CONDENSOR FAN RUNNING_____YES_____NO

GFI ON CONDENSOR CIRCUIT_____YES_____NO

GAGE WIRE RUN FOR CONNECTIONS_____

AMPERAGE OF CIRCUIT FOR CONDENSOR_____EVAPORATOR_____

IS THE CIRCUIT SHARED FOR CONDENSOR_____EVAPORATOR_____

LENGTH OF SYSTEM PRESSURE TEST USING NITROGEN _____

LENGTH OF EVACUATION TIME _____

SUCTION PRESSURE AT EVAPORATOR_____

DISCHARGE PRESSURE_____

DISCHARGE (HOT GAS) LINE TEMPERATURE_____

SUCTION LINE TEMPERATURE AT EVAPORATOR_____

SUCTION LINE TEMPERATURE AT COMPRESSOR_____

RETURN AIR TEMPERATURE_____

SUPPLY AIR TEMPERATURE_____

COMPRESSOR AMBIENT TEMPERATURE_____

*AIR HANDLER (HS) APPLICATIONS ONLY

SUPPLY TRUNK LENGTH_____SIZE_____RETURN TRUNK LENGTH_____SIZE_____

NUMBER OF REGISTERS_____SIZE_____

INSTALLATION COMPLETED BY:

COMPANY_____CONTACT_____

PHONE_____FAX_____EMAIL_____

# LIMITED WARRANTY

Seller (USCS) warrants that the goods will be free of defects in materials and workmanship asfollows: WITH RECEIPT OF COMPLETED WARRANTY ACTIVATION CARD

All cooling unit parts are covered for a period of one (1) year from date of sale.

Purchaser's exclusive remedy is limited, at Seller's option, to repair or replace defective parts with either new or factory reconditioned parts. Unless otherwise provided by applicable law. Purchaser is responsible for shipping the unit to repair facility designated by Us Cellar Systems.

US Cellar Systems will pay return shipping at regular ground rates for wine cellar cooling units repaired under warranty. At the sole discretion and approval of the seller local replacement parts may be sourced. Repairs or replacement parts not authorized in advance by US Cellar Systems may void the terms and conditions contained in this warranty agreement. Modification of any component may void the terms and conditions of this warranty. Variances from USCS prescribed installation manual may void the terms and conditions of this warranty.

US Cellar Systems is not responsible for labor to diagnose potential issues, remove possibly defective parts or to reinstall repaired/replacement parts. US Cellar Systems is not responsible for costs of supplies, labor, travel, or materials related to initial installation or subsequent maintenance or repairs.

Warranty does not cover damage due to such things as accident, misuse, abuse, neglect, acts of god, fires earthquakes, floods, high winds, government, war, riot or labor trouble, strikes, lockouts, delay of carrier, unauthorized repair, or any other cause beyond the control of US Cellar Systems, weather similar or dissimilar of the foregoing examples.

Purchaser understands and acknowledges that the goods sold are for only for the purposes of cooling wine cellars and or similar units that house wine, foods, or cigars. Purchaser assumes all risk of using these units, including risk of spoilage, humidity variations, leaks, fire water damage mold, mildew, dryness and similar perils that might occur.

UNLESS OTHERWISE PROVIDED BY APPLICABLE LAW, SELLER IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, AND THERE WRE NO WARRANTIES, EXPRESS OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF; THE IMPLIED WARRANTIED OF MERCHANTABILITY AND OF THE FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. SOME STATES DO NOT FOLLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, OR A WAIVER OF THE IMPLIED WARRANTIES OF FITNESS AND OR MERCHANTABILITY. SO TH EABOVE LIMITATIONS MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE. ANY LEGAL ACTION OR PROCEDING RELATED OT THIS PURCHASE SHALL BE INSTITUTED SOLELY IN A FEDERAL COURT IN LOS ANGELES COUNTY, CA. US CELLAR SYSTEMS, LLC. AND CUSTOMER AGREE THAT VENUE IS PROPER IN, THESE COURTS IN ANY SUCH LEGAL ACTION OR PROCEEDING.