



# **COOLER CONSTRUCTION GUIDE**



# COOLBOT WALK-IN COOLER SHIPPING AND WARRANTY INFORMATION

## SHIPPING

<u>Please read carefully this document regarding your shipments for instructions on receiving, inspecting, and filing claims if necessary.</u>

- Your CoolBot Cooler System will be delivered in ONE shipment which includes:
  - 1. Enclosure (Walk-in box)
  - 2. A/C unit
  - 3. CoolBot Temperature Controller
- You will be provided with shipment information and estimated delivery times.
- Our Walk-In enclosure manufacturer and our A/C supplier take every precaution for safe arrival, but their responsibility ceases when shipment is turned over to the carrier.
- The walk-in cooler will be transported and delivered on a semi-truck. The receiver will be responsible for providing appropriate access to the delivery vehicle and all necessary equipment (or man power) to safely unload the pallets from the carrier.
- The receiver will be responsible for ensuring a solid surface for unloading the pallet where it can be rolled out of the lift gate and be left on the ground.



### **IMPORTANT!**

INSPECT SHIPMENT IMMEDIATELY UPON ARRIVAL FOR LOSS OR DAMAGE. LOOK FOR TEARS ON THE PLASTIC WRAPPING, DENTS, CUTS, OR ANY VISIBLE DAMAGE ONCE THE LOAD IS ON THE GROUND BEFORE IT MOVES IN TO YOUR LOCATION AND <u>BEFORE YOU SIGN THE RECEIPT</u>.

PLEASE WRITE ANY DAMAGES AND/OR DISCREPANCIES ON BILL OF LADING BEFORE SIGNING AT THE TIME OF DELIVERY AND **TAKE PHOTOS OF THE LOAD FROM EVERY SIDE** TO SUPPORT YOUR CLAIM.

If concealed loss or damage is discovered later, notify your Store It Cold representative and submit pictures of the damage.

## **IMPORTANT!**

## AIR CONDITIONER

INSPECT A/C IMMEDIATELY UPON ARRIVAL FOR DAMAGE. LOOK FOR TEARS OR CUTS, OR ANY VISIBLE DAMAGE ON THE BOX ONCE THE A/C HAS BEEN UNLOADED AND BEFORE YOU SIGN THE RECEIPT. IF THERE IS ANY NOTICEABLE DAMAGE REFUSE THE DELIVERY AND CONTACT US IMMEDIATELY TO ARRANGE FOR DELIVERY OF A REPLACEMENT UNIT.

CAREFULLY OPEN YOUR A/C WITHIN 24HR AND INSPECT FOR CONCEALED DAMAGE AND FOR MISSING CONTENTS. IN CASE OF CONCEALED DAMAGE OR MISSING PARTS, **DO NOT PLUG IN YOUR UNIT**. PLEASE **TAKE PICTURES** AND <u>NOTIFY US WITHIN THE 24HR PERIOD</u> SO WE CAN HAVE A REPLACEMENT A/C BE DELIVERED.



## WARRANTY

#### ENCLOUSURE 10 YEAR LIMITED WARRANTY

The enclosure (Walk-In box) manufacturer warrants to the original purchaser that this preengineered wall, ceiling, and floor (if applicable) panels purchased from SIC, are free from defects in material and workmanship for a period of ten (10) years from the date of original shipment under conditions of normal use and service at the original installation site.

Component parts, hardware and accessories are warranted for a period of one (1) year from date of shipment.

#### THIS WARRANTY IS NON-TRANSFERABLE

The obligation of the Manufacturer under this warranty shall be limited to repairing or replacing, at the company's discretion, the panels that prove to be defective within ten (10) years of purchase, FOB factory. All hardware and accessories carry a standard one year warranty. The standard warranty does not include any labor charges for repair or replacement of defective parts. In no event, shall SIC be liable for loss of use, revenue or profit, or for any other indirect, incidental, special, or consequential damage including, but not limited to, food spoilage or product loss.

SIC expressly disclaims and makes no warranties, express or implied, as to the condition, design, utility, quality, adequacy, or capacity with respect to any standard or non-standard product, including, without limitations, any warranty of merchantability or fitness of such product for a particular purpose or intended use.

This warranty is in lieu of all other warranties expressed or implied and does not apply to equipment which has been subject to any accident, alteration, abuse, misuse, alterations by unauthorized service, improper installation or installation by an unlicensed contractor.

Exclusions from Warranty Coverage:

- Labor, mileage or other costs incurred for repairing, removing, installing, shipping, servicing, or handling of defective or replacement panels or parts.
- Normal maintenance or repairs
- Damage or delays occurring in transit
- Damage or loss of product, property, income or profit



- Floor panels subjected to wet mopping, flood, water leak, pallet jacks or weight exceeding 600 lbs/sq ft
- Damage by fire, flood, earthquake or natural disasters

## A/C UNIT 1 YEAR LIMITED WARRANTY

Your A/C unit carries a 1 Year limited warranty. **Please contact SIC to facilitate a warranty claim of your A/C unit during this period**.

**IMPORTANT!** Please refer to the OWNERS'S MANUAL of the A/C unit to follow recommendations about proper installation, operation, and maintenance of your A/C unit.

This warranty will NOT cover claims due to improper installation or improper electrical supply to the A/C unit.

### COOLBOT DIGITAL CONTROLLER 1 YEAR LIMITED WARRANTY

**DISCLAIMER**: By using the CoolBot temperature controller, you (the "User") acknowledge there are inherent hazards in getting an air-conditioner ("A/C") to do something it was not originally designed to do, and that these inherent hazards cannot be ameliorated, mitigated or obviated while still maintaining the essential functionality of the CoolBot. User accepts all responsibility in the use of and monitoring of the CoolBot and A/C. User assumes all risk of loss of property or product due to improper functioning of the CoolBot (or A/C). User assumes all risk of injury and warrants that he/she will defend, indemnify and hold the seller harmless for any direct or consequential harm or damage that may result from the use of this product.

**LIMITED WARRANTY:** CoolBots are warranted against defects for 1 year, not including damage due to misuse or accidents. To double the warranty on your CoolBot see page 19 of the CoolBot Installation Manual.

#### ALL COOLBOT WALK-IN COOLER SALES ARE FINAL INCLUDING ALL ITS COMPONENTS -ENCLOSURE, A/C UNIT AND COOLBOT DIGITAL CONTROLLER.



## **ENCLOSURE INSTALLATION INTRUCTIONS**

Enclosed with the Installation manual there is a Set-up drawing, showing the identification and proper placement of your walk-in cooler panels.

#### **IMPORTANT**

#### YOUR WALK-IN COOLER PANELS, DOOR, SCREEDING OR OUTDOOR PACKAGE PARTS MIGHT DIFFER IN DESIGN OR LOOKS FROM THE ONES SHOWN IN THIS MANUAL.

Having a <u>SUCCESSFUL INSTALLATION</u> begins with having a level floor. If the floor is not level, it will be necessary to install shims, under each floor panel cam-lock.

If the Walk-inn does not have Floor Panels, then under the Walk-in's Vinyl screed.

A minimum of 2" clearance between existing building walls and Walk-in is necessary for proper air circulation.



## **CAM-LOCK MECHANISM**

Before starting to put your enclosure together, familiarize yourself with the operation of the Cam-lock mechanism.

**Locks will be on the right side of the panel and they operate in a clockwise rotation to lock**. They are accessible through the small holes on the right side of the panel.

Insert the Hex Wrench provided with your Installation package, and after the panels have been carefully aligned, turn approximately <sup>3</sup>/<sub>4</sub> of a full turn until panels are securely locked together.

DO NOT OVERTGHTEN! It will strip the Hex hole and damage the mechanism.

DO NOT drive the Hex Wrench with a hammer as this can damage the lock.



This locking mechanism is reversible. Simply rotate in the opposite direction to release the lock and make adjustments. Don't forget to lock your panel again after adjustments have been made.



## WALK-IN INSTALLATION WITH A FLOOR OPTION

1. Set the floor panels according to the Set-up drawing included in your documentation. All panels have labels, and are identified in the Set-up drawing.



2. Make sure that all floor panels are level. If not, using shims under cam-locks of the floor panels around the outside edge is suggested to level the floor.





3. After all floor panels are level, firmly and securely lock all floor panels together with the Hex Wrench provided in your installation package. Turn it approximately <sup>3</sup>/<sub>4</sub> of a full turn and repeat until all floor panels are securely locked together.



4. Begin with two corner panels. Usually the left back corner is a good place to start. Make sure that the top of each wall adjacent panel is flush with each other. Use the wrench to secure the wall panels to the floor and then lock the wall panels together to start the wall. Check for alignment to make sure the panels are flush with the floor, corners and each other as you proceed.





5. Select the next adjacent wall panel, going in a clockwise direction around the perimeter and follow the same steps as above: Align, lock to the floor, lock to the adjacent wall panel and double check for alignment making sure panel is flush on all sides and on top with the adjacent panels and floor.



- 6. Repeat this procedure with each wall panel working your way around the perimeter of the cooler in a clockwise fashion.
- When installing the Door panel, <u>DO NOT REMOVE THE DOOR FROM DOOR FRAME</u>. Follow the same recommendations as when installing the wall panels. **Door frame panel must be LEVEL and PLUMB**. Ensure it is flush at the top with all adjacent panels. DO NOT screw-in the door threshold yet.





#### TIPS FOR PROPER DOOR INSTALLATION

- Level and plumb door frame and frame legs are level to each other. Shim under door frame or floor to achieve level and plumb.
- Frame legs are to be in plane with each other. Check with 4' straight edge across door face at bottom of doorway.
- Frame legs are parallel and not spread out. Opening width at bottom of doorway to match width at top of doorway.
- Adjust door closer per instruction manual.
- Verify function of door locks and emergency
- release when door is locked.
- Door sweep lightly drags on floor when opening/closing door.
- 8. Proceed to install the rest of the wall panels in the same way the other wall panels where installed, **leaving the Front left corner for last.**





9. Close the wall enclosure by installing the last wall panel and give a last check around your box to make sure all surfaces are flush and the top edges of the walls are all level.



10. Select the first ceiling panel from your Set-up drawing and place it on the corresponding side of the cooler indicated in the drawing. Ensure that it sits properly on all the tongue and groove edges and that it is flush with the corners and walls on the outside.





11. Lock the ceiling panel to the wall panels using the Hex Wrench.



12. Proceed with the next adjacent ceiling panel marked in your drawing, making sure that it sits properly on all the tongue and groove edges and that it is flush with the corners and walls on the outside. Lock the panel to the adjacent panel first and then lock the panel to the walls.





13. Install the last ceiling panel to close the box.



#### 14. IMPORTANT!!

Check your box around one last time. Seams in between panels should be tight and flush. <u>Check your door for correct operation</u>. Open your door less than 90° and let it close by itself. Make sure it closes freely and makes a good seal with the frame. Ensure the door does not hit or rub against any parts of the frame. A door that is not closing properly is usually the result of unlevel set-up and/or improper installation. Please unlock the necessary panels and correct positioning and leveling until the door operates properly.





15. Cover wrench holes with the plastic buttons provided in the installation kit. Use a plastic or regular hammer to gently tap them in place.



16. Enclosure Set-up finished.





## SECURING DOOR SILL PLATE (THERESHOLD) TO THE FLOOR

#### NOTE: Coolers with NO floor will NOT have threshold

Across the bottom of each door opening is a stainless-steel threshold.

Secure the threshold by using self-drilling screws and by screwing them into the floor panel (illustration 1).

Some thresholds may overhang in a 90° angle to the front. Ensure you fasten that side as well to the front side of the floor panel (illustration 2).







### WALK-IN COOLER INSTALLATION WITH OUT FLOOR OPTION

#### YOUR WALK-IN COOLER PANELS, DOOR, SCREEDING OR OUTDOOR PACKAGE PARTS MIGHT DIFFER IN DESIGN OR LOOKS FROM THE ONES SHOWN IN THIS MANUAL.

- 1. Use a chalk line to mark the installation area to the dimensions of the walk-in as shown in the drawing (Figure 1). Measure diagonally from corner to corner to be sure the floor vinyl screed is square.
- 2. Apply a bead of silicone along the bottom of the vinyl screed, then place the vinyl screed along the chalk lines.

**NOTE**: Leave the vinyl screed loose until the walk in is assembled. DO NOT anchor to the floor.

**NOTE**: The vinyl screed might have to be cut as all pieces are not cut to measure from the factory. Use a miter saw or a hand saw to cut the screeding.



3. Begin with two corner panels. Usually the left back corner is a good place to start. Stand the wall panels inside the screed making sure they sit correctly (fully cradled in the screeding). Make sure that the top of each wall adjacent panel is flush with each other. Use the wrench to secure the wall panels together to start the wall. Check for alignment to make sure the panels are flush with each other as you proceed.





4. Select the next adjacent wall panel, going in a clockwise direction around the perimeter and follow the same steps as above: Align, lock to the adjacent wall panel and double check for alignment making sure panel is flush on all sides and on top with the adjacent panels.



5. Install shims under vinyl screed corners and across as needed, to ensure support panel joints and levelness of panels and walls across the top.





6. Follow the rest of the steps as mentioned in **INSTALLATION OF A WALK-IN WITH FLOOR OPTION** from step 6 (inclusive) through 16.

## INSTALLATION OF OUTDOOR PACKAGE (OUTDOOR UNITS ONLY)

#### YOUR WALK-IN COOLER PANELS, DOOR, SCREEDING OR OUTDOOR PACKAGE PARTS MIGHT DIFFER IN DESIGN OR LOOKS FROM THE ONES SHOWN IN THIS MANUAL.

Outdoor units that will be exposed to rain and snow have been ship with an A/C hood, a roof membrane and a hardware kit as part of your outdoor package. Install the A/C hood <u>before</u> your roof membrane.

Included items of your outdoor package:

- 1. A/C hood
- 2. Roof Membrane
- 3. Installation Hardware (screws, trim)

#### RAIN HOOD (OUTDOOR UNITS ONLY)

Align the top edge of the hood no more than 2" below the horizontal joint in between the ceiling panel and the wall panel. Make sure it's center in position with respect to the A/C opening. Screw in place with the self-drilling metal screws.





#### **INSTALLATION OF ROOF MEMBRANE (OUTDOOR UNITS ONLY)**

**IMPORTANT** <u>SIC recommends the roof membrane to be installed by a contractor to ensure it is</u> <u>installed correctly</u>. Improper installation may result in water accumulation or water infiltration through the membrane.

- Extend your membrane on the roof of your walk-in with the soft (smooth semi-glossy textured) side up (OVERLAPPING SEAMS ON THE FABRIC DOWN). Ensure that it hangs approximately the same amount on all sides. Don't worry if it is too long, it can be trimmed after it's installed in place.
- 2. Starting at the front of the cooler, pull down on the membrane and secure to the wall by installing the plastic trimming provided. Screw the trimming to the front side using the self-drilling sheet metal screws provided in your installation kit.

**IMPORTANT!** Make sure the trim is <u>level and below the seam in between the wall panel</u> and the ceiling panel. It's important that this seam stays under the membrane.

- 3. Repeat the same process for the back side of the cooler.
- 4. After the front and back part of the membrane have been secured, proceed to one of the sides of the cooler. Tuck the excess fabric at the front corner underneath the membrane to create a nice fold. Pull down tight and start securing the membrane to the wall panels following the same recommendations as before. Install the trimming at the same level as

you did on the front and back to remain constant around the perimeter of the cooler. Work your way from front to back as you pull down tight and secure.





- 5. After the membrane has been correctly installed and secured to the sides of your cooler, you can trim with a utility knife the excess fabric <u>below the trim</u> if desired. This will give a cleaner and more professional look but it is not necessary.
- 6. Your cooler is now set up for outdoor use.

## **A/C INSTALLATION INTRUCTIONS**

This is a quick, simple guide to install your LG unit in your Cooler enclosure. <u>Please read the OWNER'S MANUAL supplied with your A/C unit to familiarize yourself with the</u> <u>PROPER operation, maintenance, usage, and installation of your A/C unit.</u>

- Carefully unpack your A/C unit out of the box. Make sure the unit remains in the correct position. <u>DO NOT stand the box or the A/C unit on the side, back or front</u>. DO NOT discard any of the contents inside the box.
- 2. Once your unit is out of the box, remove the 4 screws which fasten the cabinet at both sides and back.





3. Slide the unit from the cabinet by gripping the base pan handle and pulling forward while bracing the cabinet.



- 4. Carefully insert the A/C cabinet on the pre-cut hole from the inside of the cooler and slide towards the outside until the top bracket of the cabinet touches the wall panel.
- 5. Ensure that the cabinet has a slight tilt downward towards the outside. Position the cabinet so that the back is about ½" to 1" lower than the front. Use the holes at the bottom of your A/C cabinet to screw in place to the edge of the precut hole on the wall panel.





6. Slide the unit inside the cabinet.



- 7. Do not install the front cover of the A/C at this point.
- You can use the foam strips provided with your A/C unit to fill the gaps on the wall in between the A/C opening and the cabinet.
  A great alternative is to use refrigeration pipe insulation available at hardware stores (looks like a pool noodle but black) and cut in strips. Insert the strips into the gaps to seal the space.

## **COOLBOT CONTROLLER INSTALLATION**



The following is a quick set up guide to install your CoolBot controller to the LG A/C unit as part of your Cooler system.

Please refer to the COOLBOT INSTALLATION MANUAL AND TROUBLESHOOTING GUIDE included with your **CoolBot** package to familiarize yourself with the parts, functioning, proper use, settings, and troubleshooting of the CoolBot digital controller.

1. Plug the wires into the corresponding labelled ports at the bottom of the CoolBot temperature controller.



2. Mount the CoolBot on the wall next to the A/C's control panel side.



3. Find and free the A/C's Temperature Sensor. It's the only thing attached to the front grill of the A/C. Remove both the mounting clip and the sensor. Take the sensor out of the mounting clip.





4. Using ONLY a 2" square piece of Aluminum foil (included with the CoolBot package), place the CoolBot Heater Cable (Red Tip) next to the A/C's Temperature Sensor. Hold them together and wrap them tightly with the foil. You can use a Twist -tie 1 inch below the foil to keep them together.



5. Route the A/C sensor and heater along the main A/C power cable so they hang down. You can use a twist tie to keep them in place around the power cord. Place the tie right before the red shrink starts.





6. Use a pen or a pencil to open a small gap in the front of the fins of the A/C about 1" from the bottom and near the center, between the first and second Cooling pipes. Take the FINS Sensor cable from the CoolBot and insert ONLY ¼" of the tip in to the small gap. DO NOT force the Sensor in; you will damage it! DO NOT TOUCH any Cooling Pipes with the Sensor. Pinch the fins lightly around the Sensor to keep it in place.



PLEASE PROCEED CAREFULLY IN THIS STEP.
 NOTE: You <u>do not</u> have to replace the front cover of the A/C if you don't want to. This is for aesthetic purposes only and it won't affect the functioning or the warranty of your



system. An A/C unit with the front cover removed, will give you much easier access to the coil and Fin sensor for troubleshooting purposes and regular maintenance (coil cleaning).

Replace the front cover of the A/C starting with the top and then carefully routing the sensor and heater cables through the small opening that the A/C cover has on the right side near the bottom. The A/C power cable and the Heater-A/C sensor connection will be routed through the small opening at the bottom of the front cover. The Fin Sensor and the Heater Cable will go through the notch on the right side of the cover as they make their way to connect with the CoolBot digital controller. After the cover is in place secure it on the front with the screws that came with your A/C installation package.

# **IMPORTANT**! Ensure that you do not pinch any cables while trying to attach the front of the A/C.

**IMPORTANT!** After the front cover is in place, visually inspect through the louvres of the cover to ensure that the Fin Sensor end (tip) did not come loose out of the fins.



8. You can use zip ties or cable ties to route, bundle and manage the cables inside the cooler for a nicer look.

**IMPORTANT.** If you decide to organize your cables and tie them, please make sure that:

- The Heater-A/C sensor connection is not touching anything metal and it is out of the direct air draft
- The Fins Sensor did not come out of its position on the fins of the A/C
- The Room Sensor is not touching anything metal and hangs loose in the air.

NOTE: Cable management is only for aesthetic purposes and it won't affect the functioning or the warranty of your Cooler if you decide not to do it. Just make sure to follow the recommendations for the sensors and cables mentioned above.





## **ELECTRICAL INSTALLATION**

## IMPORTANT!!

<u>The enclosure does not have any predrilled access holes or electrical hookups from the</u> <u>factory. Electrical installation for your cooler SHOULD be performed by a qualified electrician</u> to ensure correct power supply, wiring, and compliance with local codes.

#### **Required Connections**

Cooler	Door	CoolBot	A/C
6 x 6	120V	120V	120V
8 x 8	120V	120V	120V
8 x 12	120V	120V	230V
10 x 14	120V	120V	230V



- A 120V 60Hz single phase power connection on the **front** is required to supply power to the light and the digital thermometer on all cooler sizes. Please, ask your Electrician to refer to the wiring diagrams below to wire the Cooler Light and Thermometer.
- A 115V 60Hz single phase power connection is required on the **back (or sides)** to supply power to the A/C unit shipped with your Cooler (15KBTU or below ONLY)
- A 230V 60Hz single phase connection is required on the **back (or sides)** to supply power to the A/C unit shipped with your Cooler (18K or 24K BTU ONLY).
- A 115V 50-60Hz single phase connection is required on the **back (or sides)** to supply power to the CoolBot Digital controller.



#### FRONT WIRING FOR INDOOR UNITS



#### FRONT WIRING FOR OUTDOOR UNITS





## **OPERATION AND MAINTENACE INSTRUCTIONS**

### **1. OPERATION**

- Product inside your walk-in cooler should not be overloaded or tightly stacked as to inhibit proper air flow and air distribution throughout the box.
- DO NOT STACK PRODUCT INFRONT OF THE A/C.
  The top of the box is not designed for storage. Items stored on top may cause condensation, damage panels and void the warranty.

### 2. ROUTINE CLEANING

- Wipe panels with a damp cloth using mild soap. DO NOT use harsh chemicals or abrasive pads or cleaners. Stainless should be cleaned with stainless steel cleaner; wipe in the direction of the grain. Dry all finishes thoroughly.
- Clean door gaskets using mild soap; wipe dry after cleaning
- Do not wash down or spray the inside of the walk-in with water
- Clean the fins of your A/C following the instructions on page 15 (DIRTY FINS) of your COOLBOT INSTRUCTIONS MANUAL AND TROUBLESHOOTING GUIDE.

### **3. PERIODIC INSPECTIONS**

- Inspect the door gasket for wear and make sure it seals tight against the Stainless-Steel trim of the frame. Replace gaskets if worn or torn.
- Inspect the hydraulic door closer to ensure that it engages when the door is within an inch or two and pulls the door tight.
- Inspect the door hinges and lubricate hinge pins with petroleum jelly as needed.
- Inspect the door sweep gasket at the bottom of the door for proper seal. Replace if sweep is worn or torn.
- Check the Thermometer reading with another thermometer in the same location or by placing the thermometer probe in to a cup of water with ice; it should read 32°F (0°C).
- Check for missing plugs and buttons and replace as necessary.