Measuring a supermarket case coil

Case Identifying Information

Please complete the information below. This allows LRC to cross reference previously measured coils to the coil below. This allows us to make sure that the coils we make are to the greatest detail possible which ultimately reduces the amount of time spent installing a replacement – saving both time and money.

Case Manufacturer:_____ (for example Hussmann, Kysor Warren, Hill Phoenix).

Case Model Number: _____

Case Serial Number: _____

Length and Height

On the face that the air enters the coil (not necessarily the largest dimension) measure the height of the fins.

_____

On the opposite face measure the distance the air has to flow through the coil (depth)

_____

Measure the length of the coil fin (the main body of the coil) – this is the finned length of the coil.

_____

Measure the maximum overall length of the coil (important!!) – we need to make sure the replacement coil will fit in the case.

_____

Count the number of fins in 1 inch of coil length

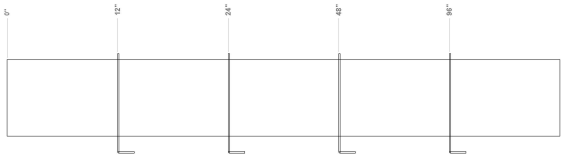
_____

Bracketing/Endplates

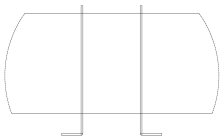
On the takeoff sheet sketch in the location of any mounting brackets

_____

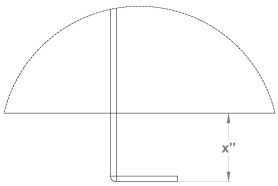
Start at one end and place the tape measure at the end of the fins (let it be the start or Zero) and then record the location of the bracketing (i.e. start at 0, 1st bracket at 6”, 2nd at 48” and so on).



On the take off sheet show the direction of the mounting flange – angles to the left or right.



If the brackets stand the coil off the case measure the overall height – the amount the brackets stick out away from the fin pack.



Tube diameter

Record the tube diameter

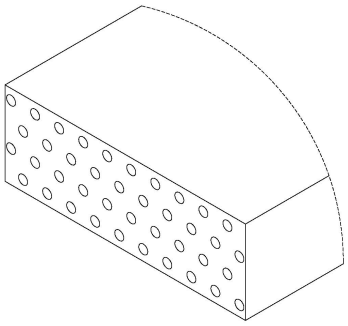
3/8”, ½”, 5/8”, ¾”

Aluminum or Copper tubes?

Aluminum / Copper

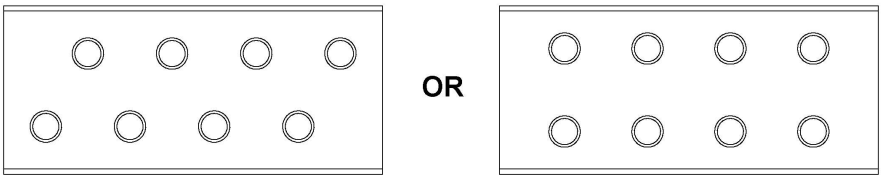
Number of tubes

Count the number of tubes (not return bends or the loops) – the number of places a tube sticks out through the last fin or endplate.



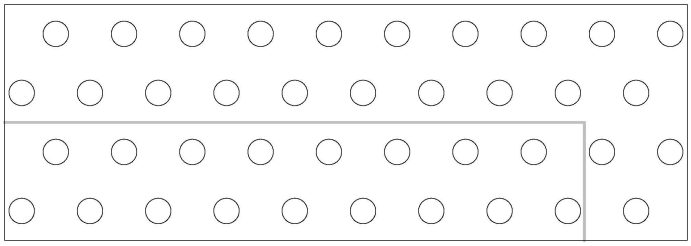
End views

Using the circuiting sheet pick either the staggered or the square pattern grid. The square pattern is not as common.



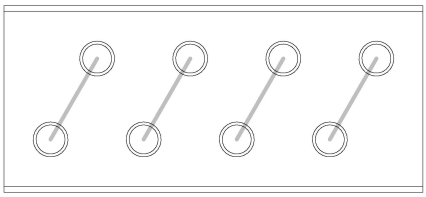
STAGGERED **SQUARE**

Draw a line on the grid to separate out the number of tubes seen at the end.

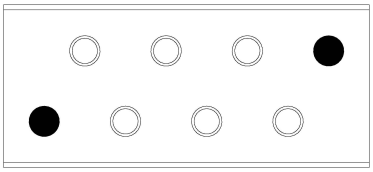


Draw lines between the holes to show where the loops or return bends are.

_____



Put a solid dot at the points where a tube comes in or goes out of the coil.



# of Circuits

_____

Count the number of inlets and outlets to the coil.

Total Inlets: _____ Total Outlets: _____

If there is a distributor count the number of small feeder tubes coming off the body of the distributor.

_____

If there is a distributor determine the approximate length and diameter (normally 3/16, ¼ or 5/16).

Diameter: 3/16 , ¼ or 5/16 Approximate Length: _____

If there is not a distributor sketch in the approximate direction and dimensions of the entering tubes.

_____

Record the part number of the TXV – this is needed to determine pressure drop and other features of the coil such as distributors.

_____

Record the refrigerant type in the case.

_____

What is the outside diameter of the suction line that connects to the coil?

_____

Is this a **Cooler** (+20/+25 ST) or a **Freezer** (0/-10 ST) coil.

If the case has corrosion issues do you want the coil coated??

Yes / No

If this is an old case many times increasing the number of fins per inch from 2 to 3 or 3 to 4 can give colder case temperatures that can help keep temperatures under the maximums. Are there any issues that need to be addressed?