



Chick Fil A Condition Survey Procedure

General notes:

- If you have any questions at all while on site call Travis, Dale, or Will
- Take pictures of all issues and include in report
- The numbers in the procedure below correspond to the numbers on the survey.
- Complete the report in full before leaving site and upload to FaciliBuild. Make sure that you save a copy to your computer.
- If the unit is an L-SERIES, we are NOT doing full evaluation. The only items that apply for L-SERIES are the following:
 - All items regarding ductwork (23, 24, 25, 26, 27, 28, 29)
 - Items that are starred: 10, 20, 21, 32, 35, 36, 37, 38, 39
- ENERGECE units we perform full evaluation

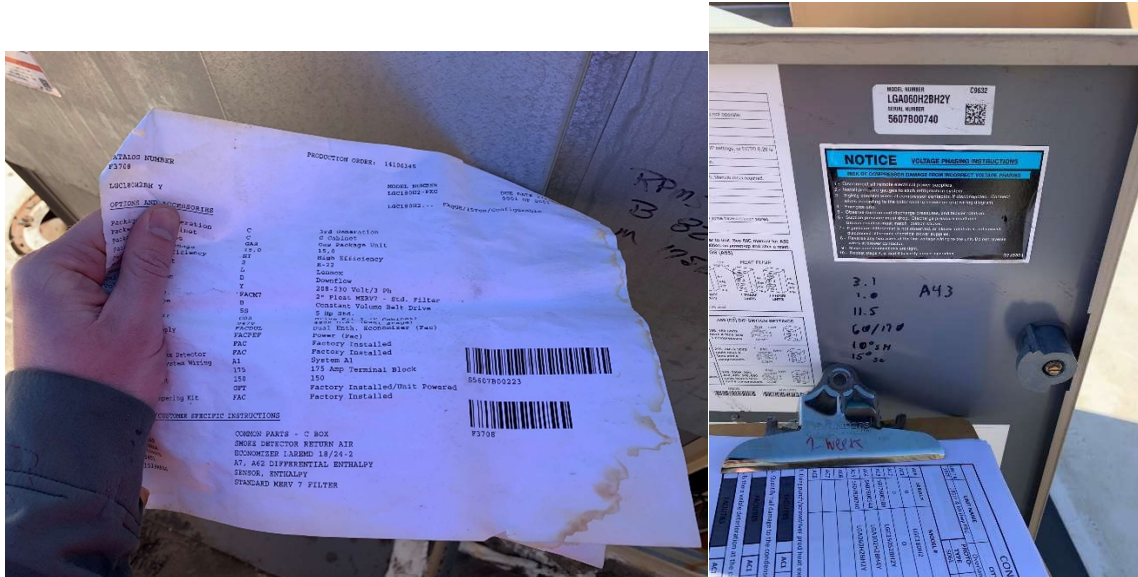
How to identify L-Series units:

- If original sticker is still intact, it will say "L-Series"
- Electronic components are different than Energence units. There will NOT be a Prodigy board
- When in doubt call Will



General note on gathering unit information

- If the excel forms have the model/serial number provided make sure you are double checking.
- If unit label is worn off, look inside the unit for the model number. There will sometimes be a sticker inside. Also there is often still the original packing slips and you can find the information there (see pictures below)



1. Using punch/screwdriver prod heat exchanger tubes. If holes found and/or prod test fails, enter unit tonnage & lock out.
 - a. Target rust spots
 - b. See video for technique
 - c. If hole is found or created when testing with screwdriver. Turn unit off immediately. Turn off gas valve and lock out tag out the gas valve. Let the owner know and then notify Will





2. **Quantify hail damage to the condenser coil (0% to 100%). If greater than 50% enter unit tonnage.**
 - a. For point of reference, the coil below had approximately 20% damage



3. **Is there visible deterioration at the condenser coil fins? Perform fin test. If YES, enter unit tonnage.**

To do fin test, test a corner of the condenser coil with your thumb. Try bending the fins with your thumb. A pass would be that the fins bend. A fail would be that the fins deteriorate or crumble.



4. Is there a hail guard installed on unit? If NO, enter unit tonnage.

Hail guard properly installed:



Hail guard not installed



5. **Check both sides of evaporator coil for deterioration. Perform fin test. If deterioration found, enter unit tonnage.**

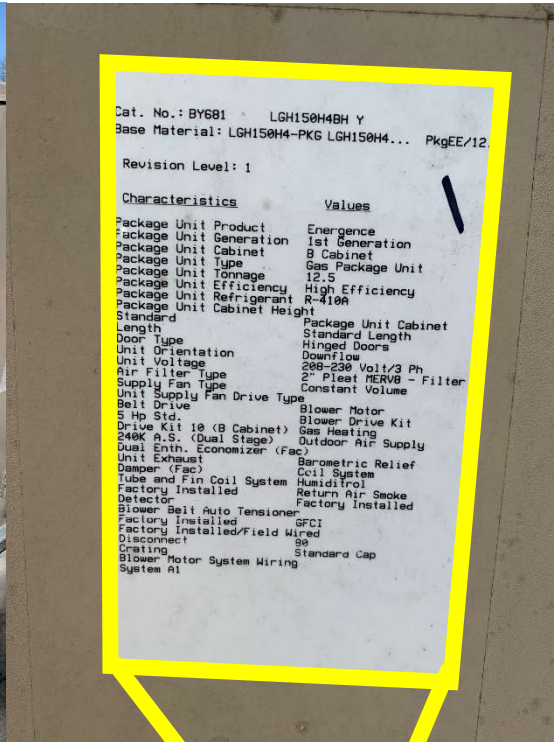
To perform fin test find an indiscrete spot in the corner of the corner of the evaporator coil. Try bending the fins with your thumb. A pass would be that the fins bend. A fail would be that the fins deteriorate or crumble.



6. **Is power exhaust installed? If NO, enter unit tonnage.**
7. **Are there curb adaptors on any of the units? If YES, enter unit tonnage.**
8. **Are there any Humiditrol units? If YES, enter unit tonnage.**

To determine there are a couple ways:

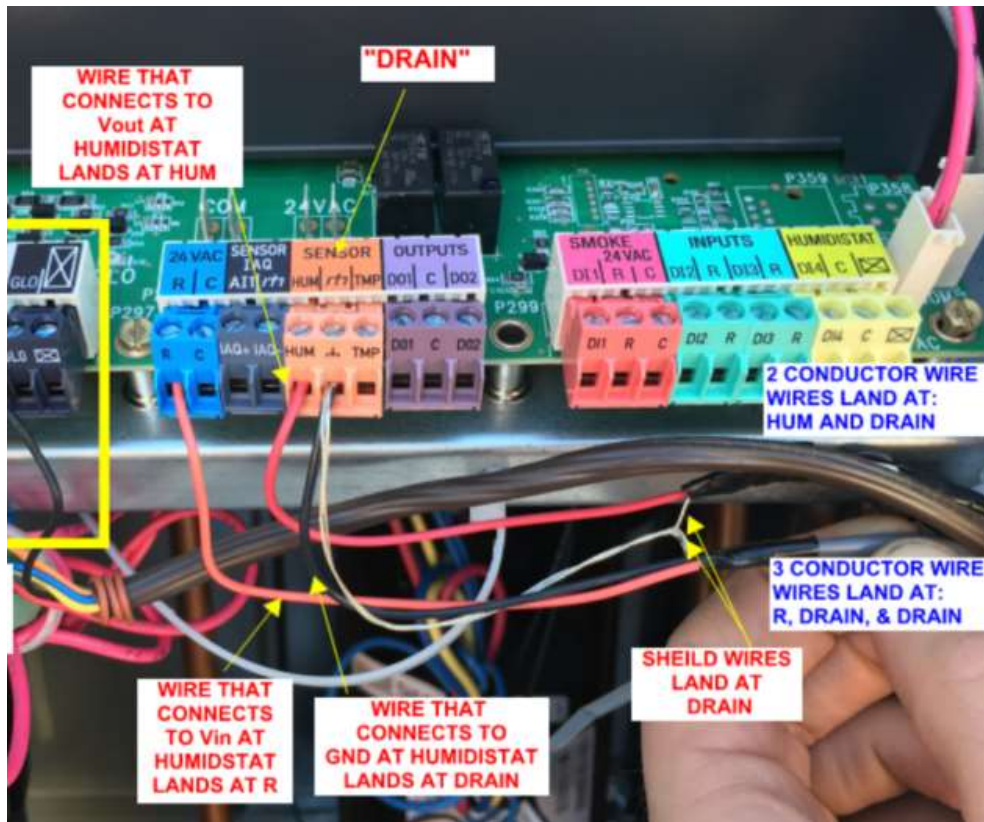
1. Look for the humiditrol sticker
2. Under the options sticker on the unit see if it shows Humiditrol



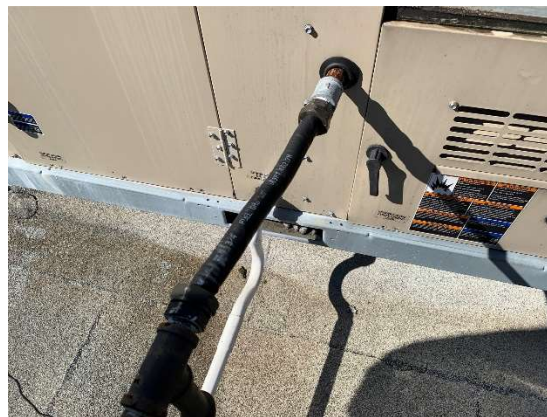
9. Is reversing valve installed in Humiditrol unit? If NO, enter unit tonnage.



10. Is the humidity sensor wired? If NO, enter unit tonnage.



11. Is there a reduction in the gas piping at the HVAC unit ie flex recently installed. If YES, enter unit tonnage.



12. Is a smoke detector present in unit? If NO, enter unit tonnage.
a. Example of a smoke detector is below



13. Is the smoke detector sampling tube capped? If NO, enter unit tonnage.

- a. Left is incorrect, sampling tube cap is missing. Right is correct. The red sampling tube cap is installed.



14. Check smoke detector module light. If light RED or an AMBER color, enter unit tonnage.

- Example of the smoke detector module is below. The module is separate from the smoke detector itself. Look into the clear plastic to identify color of the light. You may have to shade to see. Normal operation is green.



15. Are dust plugs in sampling tubes? If YES, enter unit tonnage.

- a. Red dust plugs can be seen installed below. These should have been removed during installation and is an issue.



16. Is sampling tube cap installed? If NO, enter unit tonnage.

- a. Duplicate of item #13

17. Is hub (hub houses bearings and located center of pulley) at the tensioner intact? If NO, enter unit tonnage.

- a. Below is a picture of an intact tensioner pulley. The hub is circled.



18. Look for damage/indentions at pulleys? If damage found, enter unit tonnage.

- a. Look for any damage on pulleys that could potentially be an issue for final balancing.

19. Record belt size.

20. Identify any damage to the blower. If DAMAGE found, enter unit tonnage.

- Look inside the blower with the unit off and ensure that there is no damage to the fan blades. Make sure it rotates freely by hand.

21. Quantify cleanliness of blower. If dirty, enter unit tonnage.

- a. Example of a dirty blower



22. At blower motor start up is there a concerning amount of noise or vibration? If so, enter unit tonnage.

23. Is blank plate secured on B-cabinets? If NO, enter unit tonnage.

- a. This will be visible on the return side of the unit. See the gap where the plate should be installed below.



24. Is ductwork lined? If YES, enter unit tonnage.

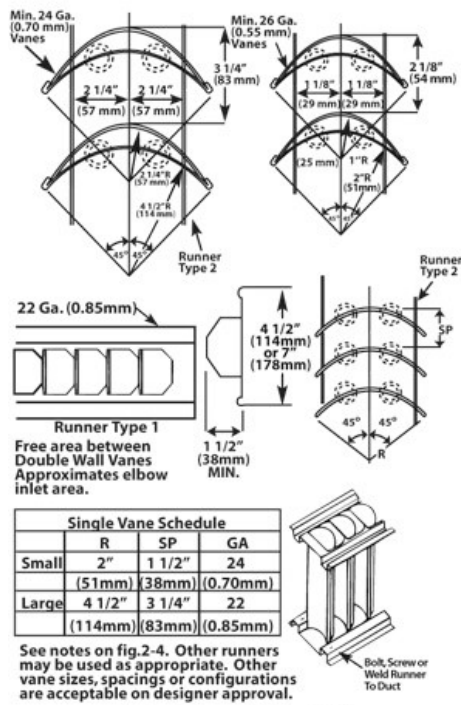
- a. Check both the return and discharge side. Neither should be lined.

25. Are turning vanes present in units? IF NO, insert unit tonnage.

- Take off the panels to view the return and discharge ductwork. If you can't see with your eyes, you may have to use your camera and flashlight simultaneously to check. This is tricky, but it is possible. The only ductwork you may not be able to view is the discharge for the large C cabinets since you have to slide blower out and look down ductwork. Otherwise "Not accessible" is not acceptable.

26. Are turning vanes single or double thickness? If DOUBLE, enter unit tonnage.

- a. Example of double thickness turning vanes. They are thicker and are shaped like an airplane wing:



As Described on page 2.5, Figure 2-3 of the SMACNA HVAC Duct Construction Standards, 2nd Ed., 1995.



-Example of single thickness turning vanes. They are just one single piece of sheet metal bent into the correct shape:



27. Is duct work seated and aligned? If NO, enter unit tonnage.

- a. Make sure that the return and discharge ductwork comes all the way up to the unit and that there are no gaps
- b. Make sure that the ductwork is aligned with the unit.
- c. Make sure no gaps, etc where air can leak into the ceiling.

28. Is canvas connector present? If NO, enter unit tonnage.

Example of canvas connector:



29. Quantify cleanliness of duct. If dirty, enter unit tonnage.

a. Example of dirty ductwork



30. Is drop radiused? If R does not equal W enter unit tonnage.

a. Example of radiused ductwork



b.

31. Do units have prodigy boards? If no, enter unit tonnage.

32. Identify prodigy boards New or Old. Answer New Green, N or Old Red, R.

a. New prodigy board:



b. Old prodigy board:

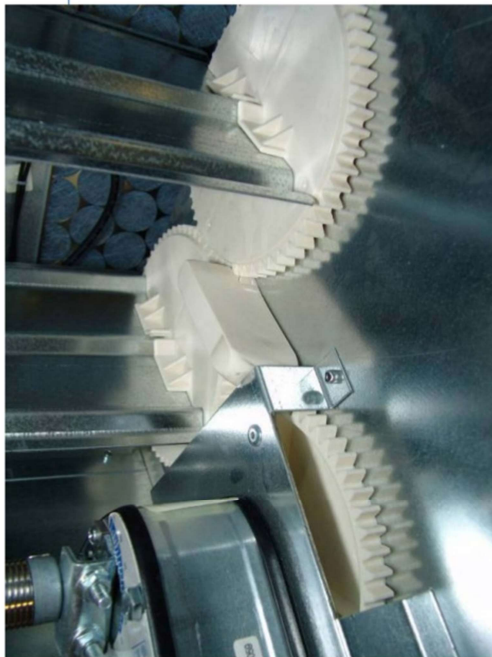


33. If economizer open, turn unit off to assure it closes. If does not CLOSE enter unit tonnage.

- a. Make sure that the economizer opens and closes

34. Are actuator gears worn? If yes, enter unit tonnage.

- a. Make sure gears are in good condition and not overly worn/damaged. Picture below shows gears in good condition:



35. Is there any play in the actuator gear box? If yes, enter unit tonnage

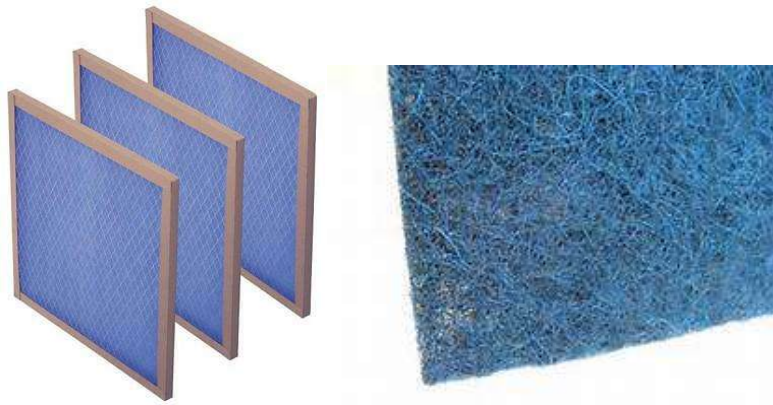
- a. Move dampers by hand and make sure that there is no significant amount of play.

36. Do filters meet CFA spec. (2" pleated polyester/cotton with MERV rating of 8). If no, enter unit tonnage

- a. Example of the correct style filter below. The MERV rating will be listed on the side of the filter.
- b. **Correct** style filters (need to say MERV 8 on side)



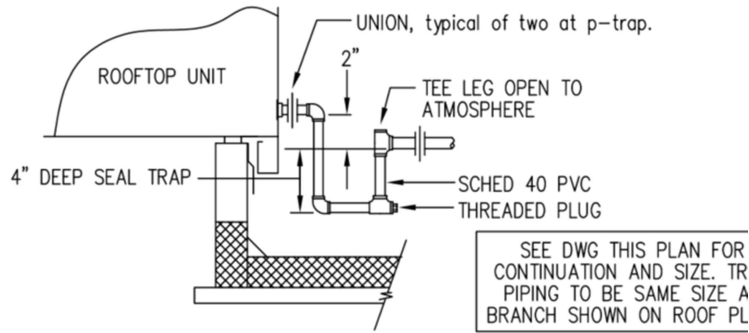
c. **Incorrect** style filters:



37. Provide condensation pipe size. Minimum 1" at playland unit, and 1.25" at all other units.

38. Do condensation traps meet provided detail. If NO, enter unit tonnage.

a. Correct installation below. Needs to match exactly:



2 CONDENSATE DRAIN PIPING
NO SCALE

- 39. Do pre-filters need to be cleaned? If YES, enter unit tonnage.
-Pre-filters are the mesh OA filters. Note if they are dirty and if they should be cleaned
- 40. Do pre-filters need to be replaced? If YES, enter unit tonnage.
 - a. Pre-filters are the mesh OA filters. Note if they are damaged and should be replaced.
- 41. Is bathroom exhaust fan running?
- 42. Is bathroom exhaust fan making excessive noise?
- 43. Is bathroom exhaust fan vibrating excessively?
- 44. Does bathroom exhaust fan have a back draft damper?



- 45. Does bathroom exhaust fan duct have a liner?
-Make sure bathroom exhaust duct has internal insulation (liner)

46. Visually inspect ductwork at bathroom exhaust fan, and rate cleanliness 1 to 10.

47. Record model and serial number of Suncoast Panel.



48. Is there a HES control panel visible?

The HES control panel shows the temperatures inside the hood ducts. This will usually be mounted near or on the hoods and should be easily visible if installed.

49. If T-stats not Robert Shaw or Network, note out of spec.

Robert Shaw and Network stats will look like this:

