

Energy Verification Sheet - DCRA
Mechanical Notes & 2012 IECC Applicable Sections

1) 302.1, 403.6

Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J. **per iecc 403.6.1** – please show how the hvac equipment is properly sized. verify that hvac equipment is correctly sized according to acca manual "s" based on building loads calculated according to manual "j". please provide the "u" and shgc values for your manual "s" input data. not having the "u" and shgc values affects the final output. ensure you provide the project summary report and the component construction report. provide heat loss for ducts in unconditioned spaces and ensure the temperature design features have the proper values. a. after talking with the wrightsoft software developers we were able to determine how you can provide us with the reports that print the solar heat gain coefficient (shgc) they account for somewhere around 50-70% of the cooling load. b. have the person who does the manual j inputs after opening the program go to window properties – radial buttons – custom value drop down- glazing types- put a check in the nfr box – then print the "component construction report," the "load short form," and "rightj worksheet." this will provide us with the information we need to evaluate the system correctly. also, the system or systems that are depicted on the drawings should be the same system or systems that are used with the manual j calculations.

2) 403.2.1

Supply ducts in attic are insulated to >R-8. All other ducts in unconditioned spaces or outside the building envelope are >R-6. **per iecc 403.2.1** – please show how supply ducts in the attic are insulated to ? r8. all other ducts in unconditioned spaces or outside the building envelope are ? r6.

3) 403.2.2

All joints and seams of air ducts, air-handlers, and filter boxes are sealed. **per iecc 403.2.2** – please indicate how all joints and seams of air ducts and air handlers are sealed.

4) 403.2.3

Building cavities are not used as ducts or plenums.

5) 403.3

HVAC piping carrying fluids > 105°F or fluids < 55°F are insulated to > R-3.

6) 403.3.1

Protection of insulation on HVAC piping.

7) 403.4.2

Hot water pipes are insulated to > R-3.

8) 403.5

Auto./Gravity dampers install on all intakes/exhausts. **per iecc 403.5** – please indicate how dampers are installed in outdoor air intakes and exhausts and have automatic or gravity dampers that close when the ventilation system is not operating.

9) 403.1.1

Programmable thermostats installed on forced air furnace.

10) 403.1.2

Heat pump thermostat installed on heat pumps.

11) 403.4.1

Circulating hot water systems have auto. or accessible manual controls.

12) 403.5.1

All mech. vent. system fans not part of tested and listed HVAC equipment meet efficacy and air flow requirements. per iecc 403.5.1 – please provide information regarding how the ventilation system meets efficacy and air flow requirements. need performance data for exhaust fans, cfm & wattage.