

Manual S, D & J Checklists

Building Department

- Wrightsoft report (.pdf file)
- Site Plan
- Building Floor Plan
- REScheck Report (if available)
- Electrical/Mechanical Plans (if available)

Manual S, D & J Reviews

- Jobsite address is listed on the first page of the report
- Designer contact information is listed on the report
- The orientation described on the Site Plan is identical or within 45° to the orientation described on the report
- The design of the residence on the report is identical to what is described on the set of Floor Plans
- Infiltration method indicates: Average
 - Other methods indicated must have supporting documentation to meet criteria
- The square footage listed on the report is approximately the same as what is identified on the Site or Floor Plan
- Value for Sensible Cooling is larger than the Cooling Load calculated from the Manual J
- Value for Heating Output is larger than the Heating Load calculated from the Manual J
- The Actual Air Flow should be a value approximately 400-450 cfm/ton; calculate to the cooling equipment to verify the requirement has been met
- The Location should read the corresponding location of the residence or a location of similar climate according to the International Energy Conservation Code
- Indoor Temperature: 70 Heating and 75 Cooling
- Relative Humidity: 50% Heating and 50% Cooling
- Construction descriptions on the report must be identical to what has been described either on the REScheck Report or Floor Plan
- The Required Total Capacity at 0.85 SHR value should be less than the size of the cooling condenser that is proposed to be installed
 - If the Required Total Capacity at 0.85 SHR value is within 0.2, suggest for the designer to upgrade ½ ton on their cooling equipment proposal
- The ceiling heights on the report are identical to what is indicated on the Floor Plan
- Internal Gains for Occupants: 230 x (# of bedrooms + 1)
- Internal Gains for Appliances/other: the value should be approximately the same as the value of square footage of the residence
 - Internal Gains should be dispersed by appliance locations and the locations of occupants shall be dispersed by what rooms will impose internal gains at peak hours (4pm-6pm)

- For multi-story homes, occupant loads should be dispersed to the areas of the home that are furthest away from the air handling equipment
- The location of the Air Handling Equipment is installed on the report in the same location that is described as on the Floor Plan
- All duct runs have a termination point and register with sizing and calculated cfm listed
 - If the duct runs appear questionable, run length and obstacles, a balancing request can be made prior to final inspection
- Return air grills are not in a prohibited location pertaining to code or within the minimum distance to gas appliances, masonry fireplaces, and exterior doors that lead to the garage
 - If Electrical/Mechanical Plans have been submitted and the Return Air Grill locations have been defined, then these locations must be identical to what is described on the report
- Return air paths have been indicated on the report for all sleeping rooms
- The value for External Static Pressure is between 0.60-0.90 in H₂O
- The Total Effective Length (TEL) is less than or approximately 400 feet
- Velocities for Supply runs are less than 1,000 FPM on main and 600 on branch lines
- Velocities for Return runs are less than 800 FPM on main and 600 on branch lines
- Natural Draft or 80% furnaces are located outside of the living space of the residence

Inspector Checklist

- The approved copy of the report is available on the jobsite
- The address on the report is correct corresponding to the jobsite location
- The Heating and Cooling Equipment installed is identical to what is listed on the report
- The orientation and floor design on the report is identical to what has been constructed
- Duct runs have been installed according to the design described on the report
 - If duct runs do not correspond to what has been designed on the report, a balancing report may be required to verify cfm will be met
- The locations of Return Air Grills that were constructed are identical to the report