

DOCKETED

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On HERS System

Additional submitted attachment is included below.



As a CalCERTS certified HERS rater who currently performs testing services for a large number of HVAC contractors, I feel the need to provide some input on this subject.

These are my views only and do not reflect the views of the CalCERTS organization.

I have read the responses which have varied from one of the most knowledgeable HVAC people in the industry (Mike McFarland), to other very notable contractors. While I do not support Mr. McFarland's idea to scrap the HERS system and start over, he makes some notable suggestions.

Over the last nine years of performing HERS ratings I have noticed some very important changes. Most notably, all the HVAC contractors I perform ratings for have significantly improved the installed performance of their systems. Duct leakage numbers on new installations are below 5%. Most alteration duct leakage numbers are usually about 10%. Is the HERS system perfect? Absolutely not. It truly pains me to pass a system which still leaks hundreds of CFM, but is within tolerance at less than 15% leakage. Airflow numbers have increased dramatically with most contractors now installing multiple air returns and improving system performance. To me this shows the industry is changing for the better, but will still need a full generation to achieve true performance.

Here are my main observations of what needs to change.

1. Building departments: In the tri-county area where I perform most of my work only 1 building department requires reporting of refrigerant charge. How is it still possible after all these years for the county building inspectors to not know what tests are required for HVAC changeouts?
2. The number one question I get from home owners is them asking me why I am doing duct testing, and how long has this been a requirement? When I tell them more than 15 years most are truly surprised and have never heard of this requirement until I show up. A real effort to educate consumers in the State of California is needed to show why they need to have licensed HVAC contractors pull building permits and have their systems independently tested.
3. The Pareto 80/20 principle here lies not with the permitted work, but with the unpermitted work. As every other contractor has pointed out, the licensed, permitted, and inspected work is significantly more expensive than non-permitted work. Simplifying the permit process will help.

Making the fines for performing unpermitted work steeper could also help deter the unscrupulous.

4. I made this suggestion several years ago and reiterate it today. All warranty work on any installed system must be accompanied by the building permit information. When ABC contractor installs a system the home owner is provided warranty information for how to register this new system. If the equipment manufacturer does not receive building permit information to accompany the warranty request, they should be able to reject the warranty claim. Potentially, this could also impact the insurance industry. It would be interesting to know how many home fires or damage has been caused by unpermitted work. While this approach is not fool-proof, random sampling to ensure compliance will still find more permits pulled in the long run.
5. As was pointed out from the City of Davis, serial numbers for installed equipment should be a permanent part of every home. At any sale or ownership transfer of the home these numbers must be verified. If the numbers do not match, then someone did not pull a permit and the home cannot sell until systems are permitted and inspected, with significant fines for non-compliance.
6. If the building inspectors continue to say they are understaffed to perform the extra work, then perhaps it is time for an expansion of the HERS Rater's roles and responsibilities. If the CSLB makes the HERS Rater a licensed role, then we could be the inspector to verify the last two steps of any equipment installation, electrical installation and the propane/gas line to the units. This reduces the number of inspections to one, the HERS Rater. This should reduce the cost of the permit as the county or city building inspector will not need to visit the home. The HERS Rater's are already collecting serial number information and performing all performance aspects of the inspection. Verifying the correct circuit breaker and correct propane/gas line is well within the HERS Rater's abilities. In order to make this work, we the HERS Rater's will need to be fully licensed to perform this work. I envision a special inspector license for this role. In addition, at CalCERTS we are already subject to annual quality assurance reviews. This system could also be expanded to verify compliance.

Respectfully submitted.

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