

Request for clarification of the text in the bottom section of the R406 Report.

EnergyGauge is inconsistent with TAM section “R6.6 Energy Rating Index Alternative Method Sample Reports” (bottom section of the R406 report and the example report in the TAM). Could you please clarify?

Text from Example Report in TAM, page R-55.

1) *Compliance requires an air tightness test demonstrating an ACH50 <= 5.4 ACH50 conducted according to R402.4.1.2*

- Please clarify the source of the number, in this case 5.4 ACH50, that appears in this example from the TAM. Should it be the actual ACH50 used in the project for the calculations or should it be the upper limit of 7 @ ACH50 as defined in Mandatory requirement R402.4.1.2?
- The EnergyGauge report produced for example project “ERI Test Case 1 (L1000-01)” is attached. It writes “ACH50 <= 8.1”. Where does this 8.1 come from? That’s greater than 7 so it should at least fail the mandatory requirements test, though the project itself and other pages in the reports show ACH50 of 7. Perhaps this is a bug in EnergyGauge?

2) *ANSI/RESNET/ICC 380 compliance requires a duct leakage test report confirming a leakage rate of <=2.5 cfm/100ft².*

- We assume this number 2.5 is the duct leakage rate used in the project for compliance calculations. The reason for the units being “cfm/100ft²” is unclear. Should it be “cfm/ft²” (i.e. Qn)?
- EnergyGauge 406 report shows the Qn value as cfm/100ft². Although this matches the units shown in the TAM, since this is reported as the Qn we believe the units should be cfm/ft². If so, this is a bug in EnergyGauge and an issue with the TAM not having the correct units for Qn.
- Since a duct air leakage test is not required when ducts and air handlers are located entirely within the building thermal envelope, it seems that we should not report that compliance requires a duct leakage test in these cases. EnergyGauge appears to report that duct testing is required even when it is not, see the example project “ERI Test Case 1 (L1000-01)”.

3) *ANSI/RESNET/ICC 301 compliance requires a tested roof absorptance of 0.76 and a tested roof emittance of 0.90.*

ANSI/RESNET/ICC 301 Table 4.2.2(1) does not require testing the roof surface, however we see that the EnergyGauge report always indicates that compliance requires a tested roof even in cases where tested values for roof absorptance and emittance are not specified. This appears to be an issue with EnergyGauge.