• Air handler fan power
• High energy efficiency ratio (EER)
• Maximum cooling capacity
• Building envelope sealing
• High quality insulation installation.

Field verification and testing is only required when measures or equipment are installed that require field verification and/or testing. If such measures or equipment are not installed, then field verification and testing is not required. For example, if there are no air distribution ducts or no new ducts in the case of additions, then no testing of ducts is required. Similarly, if there is no split system air conditioner or heat pump in a building using package C or D for compliance, then it is not necessary to diagnostically test the refrigerant charge.

2.5.2 Sampling

At the builder’s option, HERS field verification and diagnostic testing may be completed either for each dwelling unit or for a sample of dwelling units. Sampling is permitted only when multiple dwelling units of the same type are constructed within the same subdivision by the same specialty contractors.

With the sampling approach, the HERS rater tests the first home for each model. As additional homes of the same model are constructed, the builder shall identify a group of up to seven dwelling units from which a sample will be selected for testing and the HERS provider is notified. The HERS rater then randomly selects at least one dwelling unit from the group and performs the tests on that unit. If the sampled unit passes, then all homes in the group are deemed to pass the tests.

If a sampled home fails, the HERS rater shall determine whether the failure was unique or that the rest of the dwelling units are likely to have similar failings. If the failing is considered unique, then the HERS rater chooses at random another house from the sample and performs tests on that house.

If the second house fails, then the builder is required to take corrective action in all unoccupied dwelling units in the group that have not been tested. The builder may also choose another path to compliance that does not involve a feature requiring field verification and/or diagnostic testing.

For multifamily buildings, variations in exterior surface areas caused by location of dwelling units within the building shall not cause dwelling units to be considered a different model for the purpose of sampling.

2.5.3 For More Information

More detail on field verification and/or diagnostic testing is provided in the 2005 Residential ACM Manual, as described below: