



Title: Sampling & Cloning Guidance
Ref: 11.4
Issue: v.2.0
Issued By: Jonathan Ellis **Date:** 26/05/2015
Approved By: Philip Salaman **Date:** 26/05/2015

Revision History

Issue	Issued	Approved	
1.0	19/12/2011	19/12/2011	10/03/2014
2.0	26/05/2015	26/05/2015	04/04/2017 (DJ) 28/04/2018 DJ



Sampling & Cloning

EPCs created using the Sampling & Cloning conventions should be audited for QA using the following guidelines.

Background:

1. EPCs produced for landlords with large amounts of similar housing stock.
2. The whole housing stock should be divided into groups of similar properties. These groups are the ones that are sampled.
3. The sample size will depend on the number of properties in each group.
4. The EPC lodged for the remainder of the group will be the median average of the sample.

In Detail:

In addition to ensuring the individual EPC surveys have been performed to the normal standards expected for RdSAP, the following standards should be achieved with regards to the choice of properties with common values and sampling.

- Assessors must state how the whole housing stock has been grouped:
 - Properties with '*Common Values*', or
 - Through '*Sampling and Multiple Certification*'
- **Common Values** - An approach which involves producing an EPC for one property using data from a similar property that has been amended to account for differences between them.
 - Evidence provided should include:
 - Schedule of housing stock from which the groups were selected
 - Similar characteristics identified
 - Different characteristics identified
 - Identify the criteria for which the groups have been selected
 - A calculation to show how the numbers have been determined in each group – see '*Have the correct numbers been selected?*' below.
 - Records and photographs from the inspection surveys completed to provide the sample.
 - EPC results for each property surveyed in the sample.
 - EPC adjusted to suit variations – no more than six differences
- **Sampling and Multiple Certification** - under which EPCs for a group of properties are produced following a survey of a sample, where it can be shown that the dwellings are similar enough to make this approach valid.
 - Evidence to show properties are representative
 - Schedule of housing stock from which the groups were selected
 - Evidence of visual inspection of group
 - A calculation to show how the sample numbers have been determined in each group – see '*Have the correct numbers been selected?*' below.
 - Are the properties typical to the group

- Is a spread of designs included in the sample?
- Is a spread of locations included in the sample?
- Records and photographs from the inspection surveys
- Ensure samples conform to the following Tolerances

Parameter	Tolerance
SAP rating	90% of the sample properties should have a SAP rating within +/- 4 SAP points of the SAP rating of the median record; and 95% of the sample properties should have a SAP rating within +/- 6 SAP points of the SAP rating of the median record
EI rating	90% of the sample properties should have an EI rating within +/- 4 EI points of the EI rating of the median record; and 95% of the sample properties should have an EI rating within +/- 7 EI points of the EI rating of the median record
Floor area	90% of the sample properties should have a floor area within +/- 5% of the floor area of the median record; and 95% of the sample properties should have a floor area within +/- 7.5% of the floor area of the median record.
Recommendations	95% of reports should contain identical recommendations; and no reports should contain recommendations that would be fundamentally inappropriate for other properties in the sample.

- Evidence to show the calculation to determine the median value ('typical' value used for EPCs on properties other than those sampled)

○ **Have the correct numbers been selected?**

- According to CLG guidance:
 - <10 properties – 50%
 - 11 – 50 properties – 5 + (30% of group minus 10)
 - Over 50 properties – 15 + (10% of group minus 50)

This document should be read in conjunction with DCLG documents:

'Energy performance certificates for dwellings in the social and private rented sectors
A guide to generating Energy Performance Certificates for similar dwellings owned by the same landlord'

'Evaluation of the Energy Performance Certificate (EPC) pilot for social housing
Final Summary Report'