

Change Note		CN-072
Change to: Technical Assumption 63		
Description: Ambient air temperature during tests		
References: All tests, test regime paragraph 2.23		
Change originator: SC		Date of request: 13/1/22
Rev: 01	Date authored: 13/1/22	Proposed change to assumption: Yes

1. Proposed Approach

Recommended to reduce the ambient temperature variation in the tests to $20 \pm 2^\circ\text{C}$

Clause to be added on ambient sensor placement:

"The ambient temperature sensor should be placed in a well-ventilated draught free area (air speed less than 0.5m/s) at a height of 1.5m from the ground and a minimum distance of 1m away from the HIU with the sensor protected against direct radiation from the test installation."

2. Rationale (underlying basis for the change)

Gains in test reproducibility with a tighter ambient variability.

A HIU during testing will lose heat to the ambient air. A wide ranger in allowable ambient air temperatures ($20 \pm 2^\circ\text{C}$) potentially makes test results:

- Less reproducible
- Inadvertently favouring poor HIU design choices
- Giving unfair advantage to manufacturers who inadvertently have a high/low ambient temperatures during testing

Closed storage water heaters EN 12897 and Gas fired domestic appliances EN 13203 test to $20 \pm 2^\circ\text{C}$ ambient.

3. Impact of change (e.g. implications for test rig)

- Extra cost to test houses to regulate temperatures (especially cooling in Summer).
- Loss of available testing time, especially when testing overnight.
- Difficulty in stabilising temperature gives an incentive to 'clean' data.
- Increase testing costs and test duration.

Evaluation of change			
Date evaluated: 18/1/22	Those present: BESA HIU Technical Committee	Additional info required?: No	Modification to proposed approach?: No
Details: Rationale detailed in TN-027			
Signed off: Yes			