



Assumption Change Control Sheet

Test	5a – 5b, DHW response time
Assumption	35. DHW response time test initiation time for HIUs with cycling

Change Originator	Tom Naughton
Change Request No.	022
Date of Request	03/01/2020
Proposed Change to Assumption?	No

Proposed Approach

For HIUs that cycle during keep-warm with a cycle period of greater than 5 minutes (see assumption 34), Test 5 will be timed to start at the three-quarter point of the keep-warm cycle (i.e. 75% of the cycle time after the DH primary flow has ceased).

Rationale (underlying basis for assumption)

When an HIU has a “pulsed” keep-warm function (i.e. the DHW plate heat exchanger temperature is maintained with on/off primary valve control instead of a constant flow), an initiation time for the DHW response test is required.

The purpose of providing a specific period within the cycle to initiate the DHW response test is to produce a representative DHW response time that a user/resident will regularly encounter.

If the DHW response test is carried out too soon after the HIU has heated the DHW plate then the DHW response time will be much faster than a user would regularly experience. Carrying out the test right before the DHW plate was heated would reflect the worst-case situation which would misrepresent the usual performance of the HIU. 75% was chosen as a sensible compromise that would reflect a common (but not average) DHW response time for the user.

Impact of Change (e.g. implications for test rig)

N/A

CHANGE EVALUATION

Date Evaluated	25/06/2020
Additional Information Required?	N
Modification to Proposed Approach?	N
Details	

Signed-off	Y