

<b>Change Note</b>		<b>CN-065</b>
<b>Change to:</b> Technical Assumption 44		
<b>Description:</b> Performance requirements of keepwarm function		
<b>References:</b> Test regime paragraph 4.33, Tests 5a and 5b		
<b>Change originator:</b> GJ		<b>Date of request:</b> 14/03/22
<b>Rev:</b> 01	<b>Date authored:</b> 14/03/22	<b>Proposed change to assumption:</b> No

### 1. Proposed Approach

Retaining  $t_{32} = 45^{\circ}\text{C}$  within 15 seconds.

This is likely to be reduced to 10 seconds in the next iteration of the test regime, therefore manufacturers have sufficient time to make changes to their units.

Communicate the need to reduce DHW pipe sizing, as this has a more significant potential to reduce delivery times than HIU generation time at the moment.

### 2. Rationale (underlying basis for the change)

Retaining  $45^{\circ}\text{C}$  as the threshold for DHW generation temperature as part of the response time test remains appropriate, as does the objective to permit delivery of DHW within with 45 seconds.

It is not entirely clear what the upper threshold for HIU generation time should be, to enable DHW to be delivered within 45 seconds. However, there is some concern that the target would be missed for longer lengths pipework, particularly if a more 'traditional' approach is taken to DHW pipe sizing.

As a general matter, reducing HIU generation time will improve delivery times. For this to make a meaningful difference, it would make sense to reduce significantly – e.g. to 10 seconds.

However, from the data it would appear that a significant proportion of HIUs on the market would struggle to meet this requirement, particularly on the low temperature regime.

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

None

<b>Evaluation of change</b>			
<b>Date evaluated:</b> 15/03/22	<b>Those present:</b> BESA HIU Technical Committee	<b>Additional info required?: No</b>	<b>Modification to proposed approach?: No</b>
<b>Details: Rationale detailed in TN-019</b>			
<b>Signed off:</b> Yes			