Pulse Update **20/05/2019**

This update note has been drafted for the MHCLG Ventilation and Airtightness Working Group to accompany the evidence pack submitted to the Ministry in December 2018.

Arising from the extensive field study work and third party reviews were a number of important learning points that were summarised in an action plan at the foot of the field trial report. Please accept the following by way of an update on each of these points:

Item	Update
Synchronous tank pressure and air temperature measurement	This has now been fully implemented and has been installed as standard in all new Pulse units purchased from 1st March '19.
Air leakage path detection	Complimentary low cost leak checker fan prototype developed and expected to go on sale from late 2019. Here it is hoped that take-up will be among main contractors who will test for leaks throughout the build process. In turn reducing less robust superficial fixes to poor airtightness at point of final compliance test and handover.
Air receiver size, portability and charge time	Although product design is largely a matter for the market at large, we can confirm that the Manufacturing Technology Centre has recently been appointed to support BTS in a re-design of the Pulse system packaging to improve overall robustness, portability and usability. BTS expect to launch a MK2 Pulse product late 2019 subject to progress made toward Building Regulations acceptance of the method.
Passivhaus and other very air tight buildings	This is an area where performance was found to be less than satisfactory during the field trials in 2018. Similar to a large door fan delivering too much flow and thus needing flow reducer plates and eventually a smaller fan, Pulse tests with a standard unit were being found to over pressurise. Further Pulse testing has however since been carried out across a range of very airtight Passivhaus dwellings and we have determined that it is possible to tackle the issue of over-pressurisation as experienced in our field trials with a software change. Specifically, BTS are imminently set to introduce a software setting where a user can adjust the valve open duration in order to deliver a flow rate better optimised to the building being tested. This avoids the need for a user to own or switch to a different size air receiver or air release valve when on site.
Pulse for non-residential	BTS continues to work on this alongside the University of Nottingham. The working principals will remain the same, simply with a greater number of air receivers to be added into the system and evenly distributed throughout the space being tested.

For any queries or further information, please contact:

Luke.Smith@buildtestsolutions.com