

	
<p>P12) Leakage that could not be eliminated, at the top of the large sliding doors</p>	<p>P13) Some minor residual leakage around the incoming water pipe – foam needs to be cut back and a permanent seal applied</p>

**Comments & Conclusions:**

The Air Change Rate of 0.11 AC/Hr @ 50 Pa achieved in the preliminary testing of the newbuild detached Passivhaus at 2A Kentrigg in Kendal, Cumbria, is an excellent result – the best I have measured in 28 years of testing dwellings in the UK. It meets the newbuild Passivhaus airtightness target of < 0.65 AC/Hr @ 50 Pa by a very large margin. We are confident that a satisfactory airtightness result will be achieved when the final acceptance airtightness test is carried out. Congratulations to Andrew Yates at Ecoarc for the design, to Trevor Lewis at Eden Insulation for the timber frame, Ecohaus Internorm for supply and install of the windows and doors, and to Sam Hudson and his team on site for successfully delivering one of the most airtight houses ever built in the UK.

With such an excellent result, considering additional sealing seems redundant, however we suggest that (a) the tape sealing in the top and bottom corners of all window and door openings be examined and overlapped where necessary; (b) Ecohaus Internorm be approached to see if anything can be done to reduce the leakage on the sliding doors (P12 above); (c) the incoming water pipe be permanently sealed by cutting back the excess foam and taping over (P13 above). Consideration could also be given to apply Vana tape patches over every nail through the vapourcheck board, since many of these are likely to have a small amount of leakage due to the rebound that tends to occur when a nailgun is used.

Lastly, but not least, the remaining penetrations still to be fitted – the support beam and the MVHR ducts – need to be sealed to the same high standard.