#### HOME HEALTH CHECK

### Thame Park Estate: A New-Build House Case Study



### **INTRODUCTION**

Phoenix Energy Community was formed in 2023 by members of Thame Green Living, Green Crendon and Zero Carbon Haddenham, with a vision that everyone in our local community lives and works in energy efficient buildings, powered by renewable energy.

One of the first projects we have set up to help deliver this vision is our 'Home Health Check'. By sharing experiences and getting issues rectified, households will improve their energy efficiency and home comfort. Good for people, household finances and the planet!

## **CASE STUDY: THAME PARK ESTATE**

The first houses on the newly built Thame Park Estate were built and sold by Taylor Wimpey in December 2015. The houses on the estate were marketed as being built by an 'award-winning house builder' with a 'passion to build high quality homes'. On paper, in energy efficiency terms the houses were certified EPC B, the second highest EPC standard.

In reality, a number of houses on the estate are now known to have various issues, relating to poor build quality and lack of care in construction. In particular, missing or incorrectly installed insulation and poorly fitted windows and doors have resulted in substantial under-performance in energy efficiency terms, leading to higher energy bills, lower comfort levels, and costs (and inconvenience) of putting issues right.

With the 10-year NHBC warranty coming to an end relatively soon for Taylor Wimpey Thame Park residents (December 2025 – December 2026 for most houses), this case study has been developed to help all residents of the estate to do their own 'home health check'. Some issues are relatively easy to rectify by owners themselves – and there's some guidance provided below. We would also encourage any other residents who have experienced issues with their homes to share their stories.

#### STAGE 1: MOVING IN

In late 2015, a couple made the move from a modern one-bed flat, located in a 7-storey Barrett building in Southeast London, to a new-build family house located on the Taylor Wimpey 'Thame Park' estate off Wenman Road in Thame.

Immediately on moving in they noticed how cold the house was, how slow it was to heat and how quickly it cooled down. Whilst they had come from a flat with three internal walls, mechanical ventilation and no need for heating, given their new house had been sold to them as a highly energy efficient home (EPC B) this was not what they expected. In addition to the high build quality

assurances in the estate marketing materials, the couple assumed that the house complied with all the relevant building regulations, including energy efficiency requirements.

Over time it became apparent that there definitely were several issues with the house. They logged a concern with Taylor Wimpey as part of the snagging process.

#### **Taylor Wimpey Guarantee**

All Taylor Wimpey properties come with a 2-year guarantee from the company, and a 10-year NHBC warranty.

https://www.nhbc.co.uk/homeowners/make-a-claim



# **STAGE 2: INVESTIGATIONS**

With their growing list of issues, the couple undertook various investigative works – some at their own expense:

WHAT	WHO INVESTIGATED
Airtest – to identify where air was getting into the house (via unplanned ventilation)	Private Contractor (owner's expense)
2. Heat Mapping (interior and exterior)	Private Contractor (owner's expense)
3. Loft inspection	Taylor Wimpey contractor
4. Internal wall cavity inspection (boroscope)	Thermabead (free consultation)
5. Check for insulation under the concrete in the floor (smashed floor tile to inspect)	Owners
6. Detailed visual inspection	Owners

# **STAGE 3: RESOLVING ISSUES**

### A. DRAUGHTS

AREA	ISSUE	REMEDIATION
Patio Doors	Not sealed in properly – draughts coming in all around the join between the wall and doorframe	<ol> <li>DIY (by owners) – relatively cheap and easy</li> <li>New seals for the patio doors purchased and fitted. Example:         <ul> <li>https://www.toolstation.com/stormguard-upvc-universal-seal/p57199</li> </ul> </li> <li>Insulation (in this case old socks and tights!) stuffed into the gaps around the patio doors</li> </ol>
Front Door	Poorly fitted, and uPVC door didn't fit the wooden frame correctly). In addition, the wood of the door frame had warped over time (unexpected for a door of this type/age), with the result that air was coming in around the edge.)  Letterbox was also poor quality, allowing air to come in.	DIY (by owners) – relatively cheap and easy  1. added foam seal to wooden front door frame to reduce drafts.  Example: https://www.toolstation.com/stormguard-sureseal-3-self-adhesive-draught-excluder/p45303  2. Made draft excluders for door https://www.nationaltrust.org.uk/discover/crafts/make-a-cosy-draught-excluder  3. Replaced letter box



Bathroom	Cold air coming in under the shower unit and from behind the toilet. This suggested that the wall cavity was not fully insulated and/or that the caviti hadn't been capped off at the top, allowing cold air from the loft to come straight down the wall cavity and into the bathrooms and WC.	Insulation (in this case old socks and
Windows	Draughts around all the windows, and especially bad for the emergency exit windows	<ol> <li>DIY (by owners)- relatively cheap and easy</li> <li>New seals purchased and fitted for the windows. Example:         <ul> <li>https://www.toolstation.com/stormguard-upvc-universal-seal/p57199</li> </ul> </li> <li>All PVC windows adjusted. Helpful videos on youtube:         <ul> <li>https://www.youtube.com/watch?v=ssKjRM4meJQ;</li> <li>https://www.youtube.com/watch?v=QWkP4P7lUMA</li> </ul> </li> </ol>
Patio Doors	These had been installed backwards, that meant the glass could be popped out from the outside with a screwdriver!	Doors replaced as part of wider building project by private contractor.
Skirting boards	Cold spots highlighted on internal heat mapping report (thermal imaging) from under/behind skirting boards	DIY (private contractors) – moderate cost Replaced skirting boards and added expanding foam insulation in the gap at the base of the dry lined walls (between dry lining and floor),

# **B. INSULATION**

AREA	ISSUE	REMEDIATION
Loft	Insulation incorrectly installed, resulting in it being ineffective.	Taylor Wimpey (no cost to owners)  All loft insulation re-laid correctly
Walls	Wall insulation was sparse and absent entirely in some areas.	Thermabead  After 7 years of wrangling, Taylor Wimpey finally agreed to contribute financially to the cost of replacing the wall insulation. The old insulation was sucked out and Thermabead's product (polysterene balls in a thin glue glaze) pumped in.



Windows	Some of downstairs windows had no external sealant around the edge, leading to draughts/poor energy efficiency.	Taylor Wimpey  External sealant installed on all windows that had been missed.
---------	---	--

# C. OTHER

AREA	ISSUE	REMEDIATION
Extractor fans	All were set to high power, both in background and boost mode. This meant they were sucking out warm air all the time, plus creating louder noise and using more electricity (higher running costs) than necessary.	DIY (by owners)— free/easy  Adjusted all the extractor fans (Manual for the standard Taylor-Wimpey model here: https://www.electricpoint.com/media/productattachments/files/g/r/Greenwood_Airvac_CV2GIP_Installation_Instructions.pdf)
Window box	Fitted incorrectly, resulting in water getting in and the internal windowsill cracking.	Taylor Wimpey (no cost) Window box ledge removed and replaced correctly
Drains	Manhole installed backwards outside, causing blockages	Taylor Wimpey contractor (no cost) Scheduled to be fixed. (Could also have been claim under NHBC warranty).

If you are a Thame Park Estate resident, and would like to find out more, please join us for a residents' event on **Thursday 13<sup>th</sup> November at 7.30pm**. <u>Click here</u> for more information and how to register.

