



## **Proposed Domestic Building Environmental Standards (Scotland) Bill Consultation**

To: All Chief Executives, Main Contacts and APSE Contacts in Scotland. For information only to England, Northern Ireland and Wales

### **Key Issues:**

Alex Rowley MSP has introduced a draft proposal for legislation that would require the Passivhaus standard (or a Scottish equivalent) to be met for all new build housing in Scotland.

A consultation has been released that seeks views on the draft proposal. The closing date for responses is 27 July 2022. We are asking our members to submit their responses to us by 20 July 2022 in order for a coordinated APSE response to be made.

More information on the proposed Bill can be found here:

<https://www.parliament.scot/bills-and-laws/proposals-for-bills/proposed-domestic-building-environmental-standards-scotland-bill>

You can complete the survey by clicking here:

<https://www.smartsurvey.co.uk/s/BuildingStandards/>

### **1.0 What is Passivhaus?**

A Passivhaus is defined by [The Passivhaus Trust](#) as “a building in which thermal comfort can be achieved solely by post-heating or post-cooling the fresh air flow required for a good indoor air quality, without the need for additional recirculation of air”. It was

developed “with meticulous attention to detail and rigorous design and construction, according to principles developed by the Passivhaus Institut (PHI) in Germany and can be certified through an exacting quality assurance process”.

Some of the benefits of a Passivhaus include summer and winter comfort, minimal heating requirements, high quality insulation, airtight building design, robust and long lasting buildings, low running costs (alleviating fuel poverty), focus on minimising energy consumption, thermal bridge free design, and performs better than current building regulations. An example of how this works can be seen below.

### Passivhaus schematic

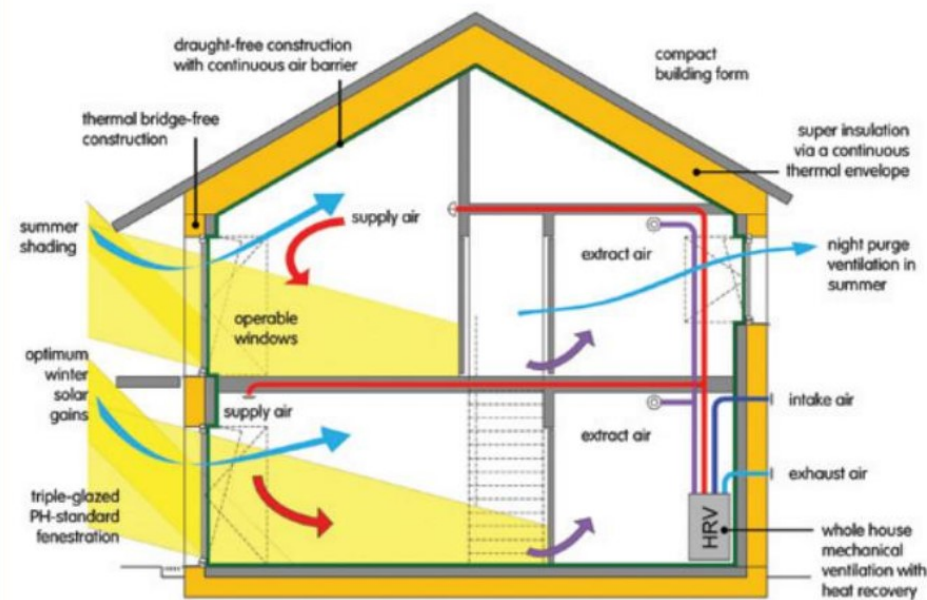


Image: ECD Architects

Source: [The Passivhaus Trust](https://www.passivhaus-trust.org/)

More information on Passivhaus can be found in The Passivhaus Trust’s introductory guide, which can be accessed online for free by [clicking here](https://www.passivhaus-trust.org/). This includes examples of Passivhaus domestic, non-domestic, community and buildings in the domestic setting that have undergone Passivhaus retrofit. The Passive House Institute in Germany also provides many free project reports and technical literature on [their website](https://www.passivehouse.com/).

## 2.0 Background on the consultation

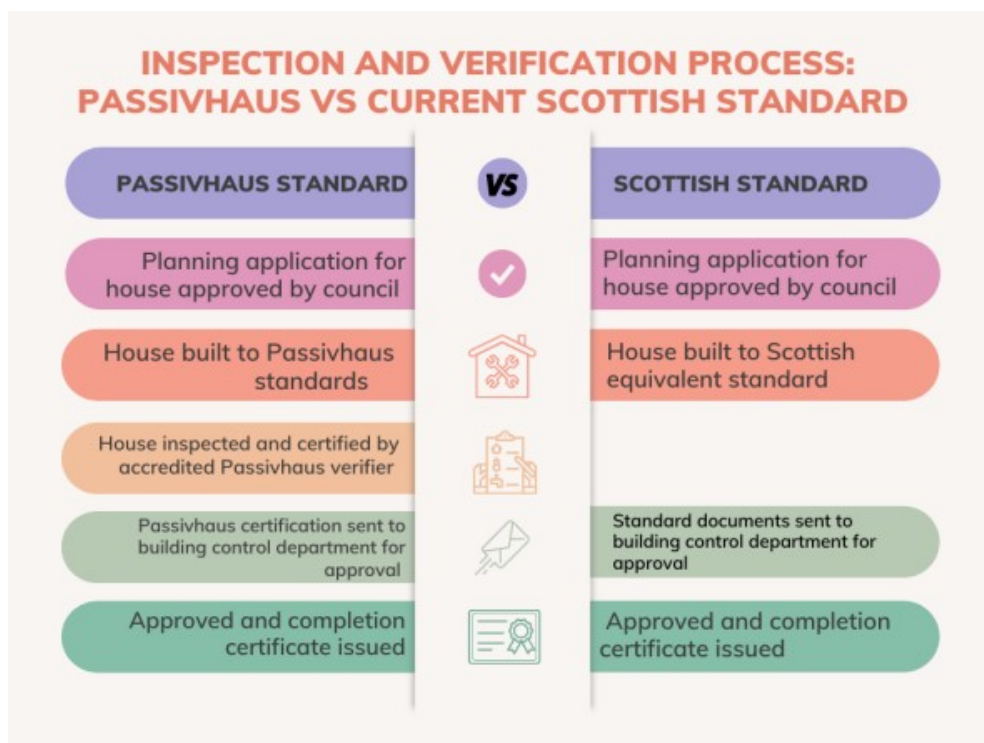
## The proposal

Alex Rowley MSP submitted a proposal for a Bill to introduce new minimum environmental design standards for all new-build housing to meet the Passivhaus standard (or a Scottish equivalent) in order to improve energy efficiency and thermal performance.

With the rising prices of energy, the increase in fuel poverty and the climate crisis (with Scotland failing to meet its climate targets), there is a need to look at using less energy and to better protect households from energy market conditions. Adopting a Passivhaus construction standard can reduce the energy demand for heating by up to 90%.

## Inspection and verification process

The proposed changes to the inspection and verification process can be seen in the image below.



Source: [Consultation report](#)

## Financial implications

The financial implications of introducing the proposed Bill is expected to be around 4% to 8% in additional building costs, as well as costs for the Passivhaus verification process

outlined in the graphic above. While the initial financial outlay is greater, this is a far more cost-effective means of building if you look at the lifecycle costs.

### **Reducing carbon emissions**

The proposal also focuses on the carbon emission reductions that could be achieved by switching to the Passivhaus standard. The reductions in demand on the national grid would be significant.

### **Performance gap**

The proposal would also address the so-called performance gap of what is expected to be achieved under the current Scottish building standards and what is actually delivered. The accompanying report to the consultation outlines that the difference in Energy Performance Certificate rating to what is delivered can be as much as 60%. The report suggests that building to a Passivhaus standard, with the inclusion of inspections and certification by an accredited Passivhaus verifier, would be a significant step towards closing that performance gap.

Overall, there are many potential benefits to adopting the Passivhaus standard.

## **3.0 Barriers to adopting the Passivhaus standard**

There are barriers to adopting the Passivhaus standard, and some key influential bodies have already expressed why they feel this should not be introduced. Homes for Scotland (the body representing housebuilders) and Scottish Government have set out their objections to the proposed bill. Homes for Scotland suggest that “a move to Passivhaus would add greatly to challenges by increasing design cost and complexity, construction capital costs and build programmes”. Scottish Government responded to Scotland’s Climate Assembly in December to say “we are not proposing adoption of an existing standard, such as Passivhaus, but are investigating how good practice from such very low energy standards can support improved compliance with building regulations and more assurance on performance in practice”. These responses show that there are differing opinions on whether the Passivhaus standard or an alternative means of achieving higher performance from housing should be adopted.

### 3.0 Consultation questions

The questions contained in the consultation can be found below:

1. Which of the following best expresses your view of the proposed Bill?

- Fully supportive
- Partially supportive
- Neutral (neither support nor oppose)
- Partially opposed
- Fully opposed
- Do not wish to express a view

2. Do you think legislation is required, or are there other ways in which the proposed Bill's aims could be achieved more effectively? Please explain the reasons for your response

3. Which of the following best expresses your view on setting the Passivhaus standard or a Scottish equivalent as the most appropriate new build housing standards to contribute to eradicating fuel poverty?

- Fully supportive
- Partially supportive
- Neutral (neither support nor oppose)
- Partially opposed
- Fully opposed
- Unsure

4. Which of the following best expresses your view on setting the Passivhaus standard or a Scottish equivalent as the most appropriate new build housing standards to contribute to a reduction in emissions?

- Fully supportive
- Partially supportive
- Neutral (neither support nor oppose)

- Partially opposed
- Fully opposed
- Unsure

5. Which of the following best expresses your view of the process set out to ensure that the new standards are met in all new build housing (see pages 14 to 16 in the consultation document)

- Fully supportive
- Partially supportive
- Neutral (neither support nor oppose)
- Partially opposed
- Fully opposed
- Unsure

6. What could be the market effects of the introduction of this proposal?

7. Any new law can have a financial impact which would affect individuals, businesses, the public sector, or others. What financial impact do you think this proposal could have if it became law?

- A significant increase in costs
- Some increase in costs
- No overall change in costs
- Some reduction in costs
- A significant reduction in costs
- Skip to next question
- Don't know
- Please explain the reasons for your answer, including whom you would expect to feel the financial impact of the proposal, and if there are any ways you think the proposal could be delivered more cost-effectively.

8. Any new law can have an impact on different individuals in society, for example as a result of their age, disability, gender re-assignment, marriage and civil partnership status,

pregnancy and maternity, race, religion or belief, sex or sexual orientation. What impact could this proposal have on particular people if it became law? If you do not have a view skip to next question. Please explain the reasons for your answer and if there are any ways you think the proposal could avoid negative impacts on particular people.

9. Any new law can impact on work to protect and enhance the environment, achieve a sustainable economy, and create a strong, healthy, and just society for future generations. Do you think the proposal could impact in any of these areas? If you do not have a view then skip to next question. Please explain the reasons for your answer, including what you think the impact of the proposal could be, and if there are any ways you think the proposal could avoid negative impacts?

10. Do you have any other additional comments or suggestions on the proposed Bill (which have not already been covered in any of your responses to earlier questions)?

#### **4.0 APSE Comment**

APSE encourages our members to complete this consultation and to forward your response to APSE so that we may also submit a coordinated response. The introduction of a requirement to follow the Passivhaus standard (or a Scottish equivalent) would have significant effects on the work of local authority house builders, so it is important that we consider all of the contents of the draft proposal to ensure that the voice of local authorities is fully represented in these discussions.

**Reminder: APSE has set up a COVID-19 Information Hub to deal with frontline service issues as they arise, ensuring greater resilience and learning between each other during this difficult time. You can access this hub by clicking [here](#) and you can also join our WhatsApp Support Network by clicking [here](#).**

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