



# How do changes to Part L of The Building Regulations affect Air Tightness Testing

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J O S T E C  
BUILDING REGULATIONS COMPLIANCE SERVICES

On 15th June 2022 UK Building Regulations changed. The changes primarily affect the building of new homes although some of the changes also affect renovations of existing dwellings too.

The changes are many and complex and in some cases, open to interpretation too.

This document will provide you with the key points that you need to know, to ensure your projects adhere to the most up-to-date Building Regulations and can ultimately achieve sign-off from Building Control.

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## Why are Building Regulations changing?

The UK is committed to achieving net zero CO<sub>2</sub> by 2050 in a collective effort to combat climate change. Together with the 2025 Future Homes and Buildings Standard, these changes are designed to keep us on track when it comes to a low-carbon future, through the building of more energy-efficient homes.

Changes relating to ventilation standards have arisen from Public Health England data on indoor air pollution.

## Which part of the Building Regulations is changing?

The changes to Building Regulations launched in June 2022 focused on 4 specific areas of overall Building Regulation...

- Changes to Approved Document L - Conservation of fuel and power
- Changes to Approved Document F - Ventilation
- Creation of Approved Document O - Overheating
- Creation of Approved Document S - Infrastructure for charging electric vehicles.

## What is Air Tightness Testing and why is it important?

Air tightness testing is also known as air leakage, air tightness or air permeability testing and is a test run to indicate the amount of air leakage from a dwelling. The output of an air tightness test is a number, measured in cubic metres of air leakage per hour per square metre of the external area of the building – ( $\text{m}^3/\text{hr.m}^2$ ) – as per Part L of Building Regulations.

Air leakage can occur through gaps and cracks in the fabric of the building envelope, allowing heat to escape, thus driving up heating bills and CO<sub>2</sub> production. Part L of the Building Regulations informs how the tests should be carried out, what threshold of air tightness is required to pass the test (although this can change depending on your SAP Calculations and ultimately forms part of your building control sign off.

Put simply, houses that leak too much air require more energy in order to keep them warm, are less efficient and also prevent more efficient sources of heating (such as air source heat pumps), from being effective.

## What's Changed?

### Sample Testing is no longer allowed

Until these changes came into effect on 15th June 2022, it was permitted that a proportionate sample of new build homes could be tested in order to achieve overall sign-off for a whole site - usually a large development of many homes.

Following the changes, all homes must undergo an air tightness test in order to achieve building control sign-off.

### A reduction in the maximum allowance of air leakage

Prior to these changes, The Building Regulations permitted homes to achieve a maximum air tightness 'score' of  $<10\text{m}^3/(\text{h}\cdot\text{m}^2)\text{@}50\text{Pa}$ . Following the updates to Part L, the allowable maximum is  $<8\text{m}^3/(\text{h}\cdot\text{m}^2)\text{@}50\text{Pa}$  - a 20% reduction.

It's understood that when the Future Homes and Buildings Standard comes into full effect in 2025, this will drop to  $<5\text{m}^3/(\text{h}\cdot\text{m}^2)\text{@}50\text{Pa}$

The tightening up on allowable air leakage allows more efficient energy sources, such as air source heat pumps to be viable in the heating of homes, thus supporting the UK's ambitions to reduce their carbon emissions.

## Requirements for Ventilation

Whilst there is a drive towards making homes more 'air tight', it's vital that appropriate ventilation is provided. Air leakage is essentially a form of uncontrolled ventilation but as developers are forced to meet stricter targets for air tightness, they will also be required to ensure appropriate mechanical ventilation is in place.

See our complete guide to changes in Part F of Building Regulations for more detailed information about ventilation requirements.

## **Need help or advice with Air Tightness Testing?**

Here at JosTec, all of our tests are carried out in accordance with ATTMA TSL1 (domestic) or TLS2 (commercial) and all our engineers are trained and registered members of ATTMA.

Air tightness testing is an often overlooked part of building new houses. It applies to every new build dwelling, and a certificate must be held in order to get building control sign-off. At JosTec, we have been providing testing and consultancy for over 11 years (read more about us).

We always make the testing process hassle free and over the years have experience in working with a variety of parties including large development companies, property owners, self-builders and much more, so you can rest assured we are able to deal with your needs effectively.

We make sure to carry out all work at your convenience and once complete, we always endeavour to get a certificate to you as soon as possible.

Please contact us for further information, by calling 01923 518923 or emailing us at [info@jostec.co.uk](mailto:info@jostec.co.uk)