

# Analysis of the ATTMA Database



Presented by  
Barry Cope  
Group CEO

# Introduction

## BCTA Group CEO

ATTMA, SITMA, The Building Performance Hub, Building Passport

Responsible for:

- Business
- Auditing
- Quality Control
- Technical Support
- Authorisation of training providers

## Introduction

### ATTMA

Air Tightness Testing & Measurement Association  
UK Based

Operate in UK, UAE, Poland, Spain, Australia & New Zealand

Operates:

- Auditing
- Quality Control
- Technical Support

We are:

- Independent – not owned by anyone.
- Not for profit – we reinvest every penny

## Why Do We Lodge Tests?

1. Building Control / Approved Inspectors
2. Gain real world information
3. Protect the industry
4. Reduce administration
5. Eradicate bad practices
6. Fair Funding
7. Quality Control

## How Do We Lodge Tests?

1. Direct lodgement from Fantestic & Tectite
2. Drag and drop the raw data files
3. Csv upload
4. The ATTMA iOS Testing App



## How Do We Lodge Tests?

1. Direct lodgement from Fantestic & Tectite
2. Drag and drop the raw data files
3. Csv upload
4. The ATTMA iOS Testing App

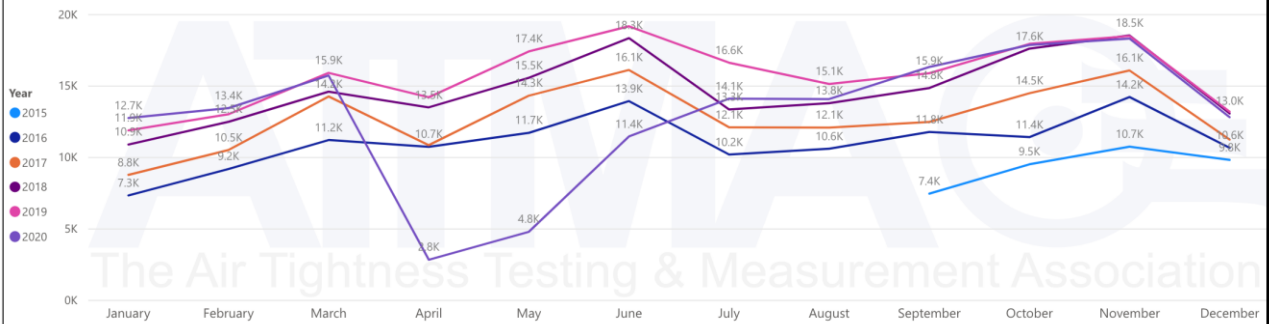


## Data

- 875,500 tests completed to date
- 600 per working day on average.
- UK use AP50 as the testing metric and not n50.

## Data

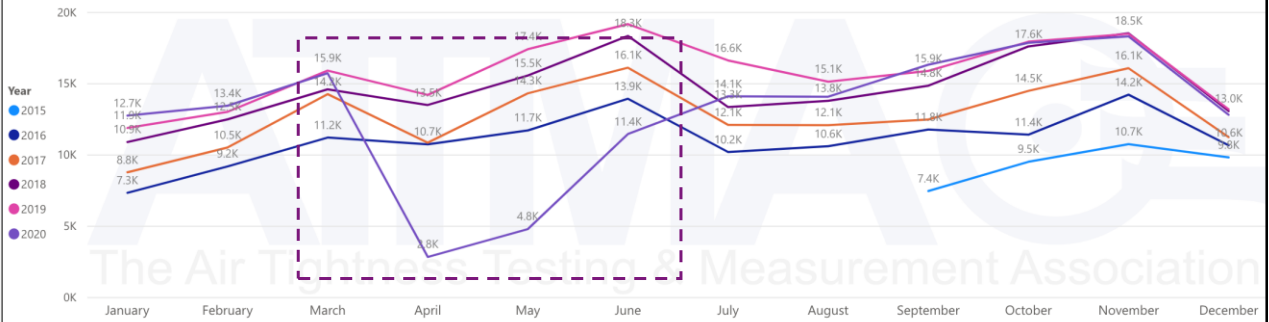
Lodgement Count (Date Lodged) by Month (Dwellings & Non-Dwellings)



The UK has increased the total number of Lodgements by around 10% every year for the 5.5 years we have been collecting data

# Data

Lodgement Count (Date Lodged) by Month (Dwellings & Non-Dwellings)



The impact of the Coronavirus can clearly be seen as the UK shut down for around 6 weeks, with construction continuing shortly after

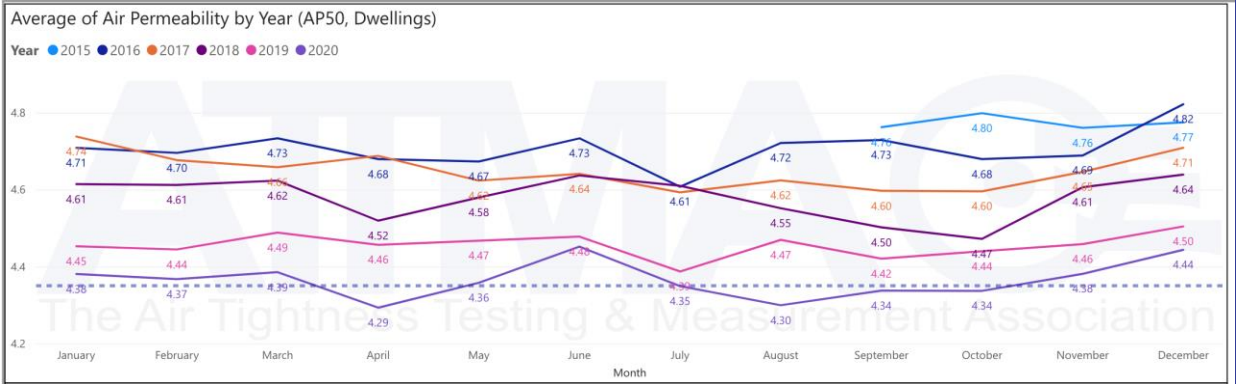
# Data

Average of Air Permeability by Year (AP50, Dwellings)



The average AP50 falls by ~3% each year. At this rate it will take over 20 years to reach net-zero homes!

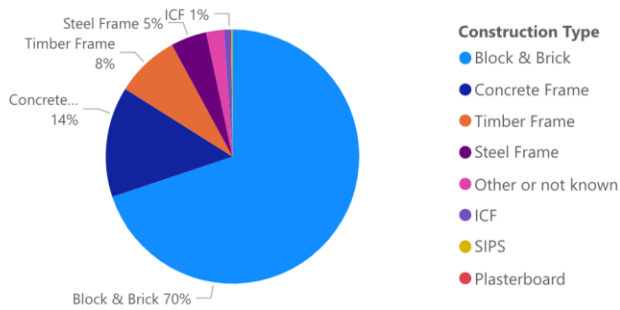
# Data



The average AP50 falls by ~3% each year. At this rate it will take over 20 years to reach net-zero homes!

# Data

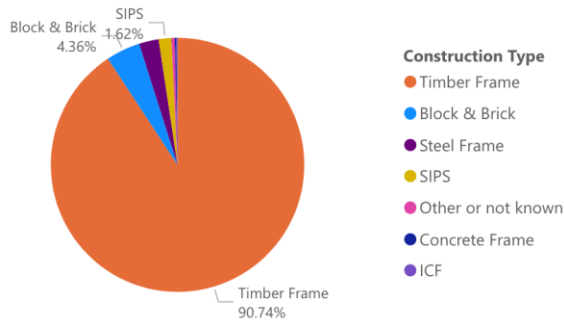
Construction Type Percentage (UK)



70% of homes in the UK are still built using traditional methods (lightweight block, brick)

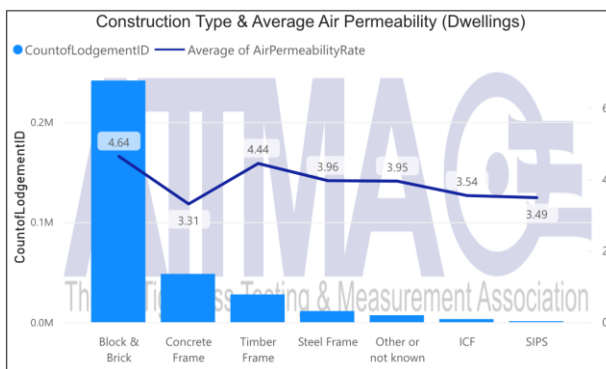
## Data

Construction Type Percentage (UK)



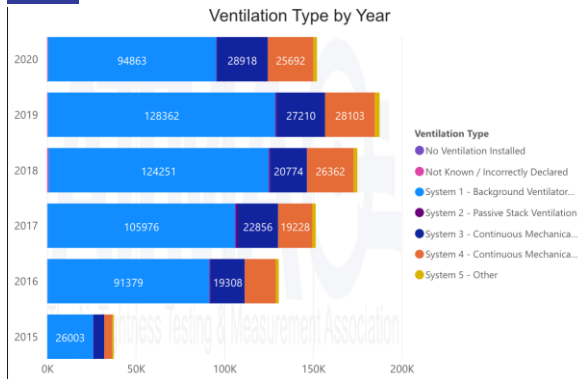
However, in Scotland, more than 90% of homes are timber frame!

## Data



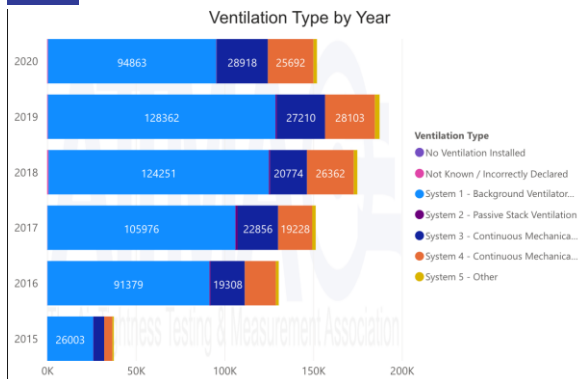
Evidence shows that traditional block construction is the worst performing material to use. Perhaps we would expect better from SIPS and ICF though?

# Data



Interestingly, we are building more homes with mechanical ventilation, though it is still valid to build homes with very little ventilation.

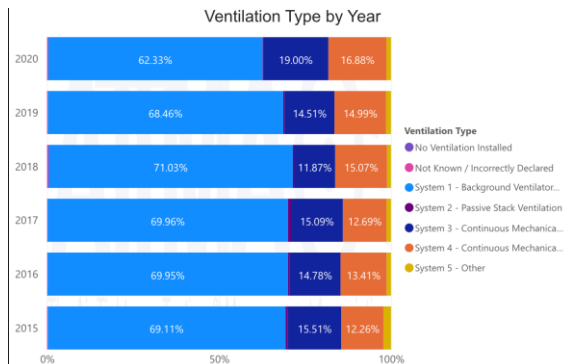
# Data



Homeowners are often expected to 'hope' the wind is in the right direction to provide air changes.



## Data



In fact, more than 62% of homes are constructed using 'background' ventilation types.

## Summary

### Advantages:

Very easy to lodge, many from existing software (Tectite / Fantestic)

Speed is very fast – uses Microsoft Azure server

Deviations process allows us to live review any deviations from the test standard

### Disadvantages

Lots of data was set as 'free text' in the early days making it hard to analyse

We don't record the reasons for failure – yet

## Summary

Buildings are becoming more airtight, however, it is at a very slow rate.

We are fortunate to test more than 50% of all new construction. This number may increase to 100% in a new regulations change.

ATTMA has significant amounts of data that can be analysed as required. If you would like to know more, please contact me.

## Questions

I'll be happy to take questions at the end (10:55am).

