Workshop 1D: Let off steam! We need to talk about ventilation...

Speaker: Jenny Brierley (University of Sheffield) Chaired by: Andrew Burke (NHMF) Room: Norfolk Room

The centre of excellence for improving property performance http://www.conference Let off steam! We need to talk about ventilation...



NHMF Conference Workshop 23 January 2018

Jenny Brierley Researcher, University of Sheffield

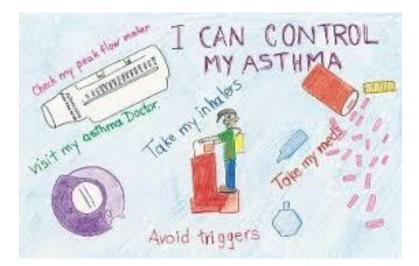


Why do we need to talk about ventilation?

Indoor Air Quality and health



Building fabric





Energy use and carbon emissions

What is this research project about?

Maintaining ventilation in low-energy rented homes...

...How do social landlords maintain ventilation systems? ...How do residents ventilate their homes?

...What is the relationship between these practices?

...What can be learnt about making ventilation effective that is relevant to housing providers?

Phase 1 November 2017 Phase 2 April-May 2018 On-line survey of 400 maintenance practitioners in the UK Case studies of 5 housing association schemes in England

Five Quick Questions about Ventilation

4 multiple-choice questions:

- Q1 How do you keep ventilation working well in your rented homes?
- Q2 Who carries out maintenance of any ventilation technology in your homes?
- Q3 From your experience of these means of ventilation, given the choice, which would you specify or not specify in future new homes?
- Q4 What obstacles have you experienced to maintaining effective ventilation in your rented homes?
- 1 open-ended question:

Q5 In your view, what are the three biggest problems, and the solutions, for social landlords in maintaining effective ventilation in rented homes?

Who took part in the survey?

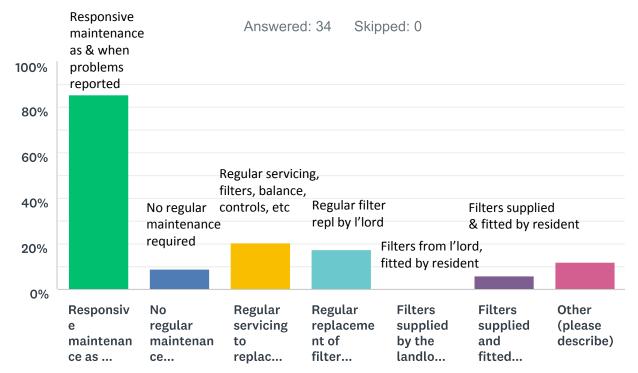
Who was invited?

All NHMF members 409 maintenance practitioners in the social housing sector Approx 1/3 local authorities, 2/3 housing associations UK-wide

Who responded?

34 responses = 8.3% Low number : high quality! Representative?

Q1 How do you keep ventilation working well in your rented homes? (please tick all that apply)



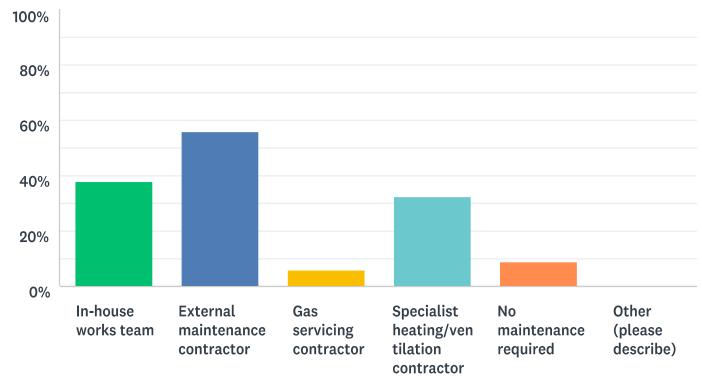
Questions to consider...

Is ventilation maintained more effectively through planned or responsive maintenance? What do regular service contracts include?



Q2 Who carries out maintenance of any ventilation technology in your homes?(please tick all that apply)

Answered: 34 Skipped: 0



Questions to consider...

What is the trigger for action to maintain ventilation? How are maintenance teams trained in ventilation systems? Q3 From your experience of these means of ventilation, given the choice, which would you specify – or not specify – in future new homes?

Nine ventilation technologies, commonly installed in low energy new homes, listed, selected by the researcher

Response options: no problem/some reservations/would not specify/no experience

Products that all had experienced:

| Trickle vents | 19% had reservations | |
|---|--|--|
| Extract fans | 19% would not specify intermittent fans | |
| | and 12% had reservations, sensor activated slightly more | |
| | acceptable than manual or light switch activated | |
| Windows | Generally acceptable | |
| Products where experience is not universal: | | |
| MVHR | Over 90% of those with experience of MVHR would | |

MEVspecify this, but over half of these have reservationsMEVContinuous MEV more popular than demand controlledMEV, but fewer would specify this than MVHRPassive StackOn a par with MEVCooker hoods29% would not specify

Questions to consider...

How far do maintenance concerns influence the specification for new homes? How does the feedback loop work in your organisation?



'Which way up is this thing supposed to go?' Q4 What obstacles have you experienced to maintaining effective ventilation in your rented homes?

Twelve commonly cited obstacles listed, selected by the researcher

Response options: experienced frequently/sometimes/never

Obstacles universally experienced, with high % frequently experienced:

Residents do not understand the need for ventilation79% frequentTrickle vents/system vents blocked to prevent draughts62% frequentEquipment switched off by resident to save money61% frequentEquipment switched off by resident due to noisy system56% frequentDifficulty gaining access to homes36% frequent

Obstacles not experienced by all but high % sometimes or frequently experienced:

| Breakdown/unreliability of equipment/controls | |
|--|-----|
| Maintenance requirement unclear | |
| Maintenance staff not familiar with technology installed | |
| Cost of maintenance contracts | 48% |

MVHR experience includes:

Filters difficult to replace/inaccessible Cost of replacement filters 73% frequent or sometimes62% frequent or sometimes

88% of respondents felt that ventilation performance was frequently or sometimes given low priority

Questions to consider?

How does your experience compare with these responses? What priority should be given to ventilation performance, relative to other maintenance demands?



Q5 In your view, what are the three biggest problems, and the solutions, for social landlords in maintaining effective ventilation in rented homes?

Question to consider...

How well does this reflect your views on this question?

Ventilation Products Residents Costs **Education** set Training Control Tenants Ventilation Social Education Fans Install Low Literature Cost Mould Fuel Poverty Fans Resident Customer **Tenants** Behaviour Ventilation Condensation Contracts Tenants Education Fans Training Support MVHR Fans Condensation Vents Tenants Heating Understanding Cost Contractors Knowledge Products Ventilation Lifestyle **Residents** Tenants

Some issues to consider...

What should ventilation look like in the future?

What type of ventilation systems are needed?

What degree of control should residents have and how?

What is needed to change ventilation habits?

Can ventilation performance be improved without increasing costs?

What and where are the gaps in staff understanding?

Who is responsible for what in relation to ventilation performance?

Have you got more ideas and insights to add to the research? Issues you think the case studies should explore?

- Take part in a Focus Group today
- at 5.00pm in
- or talk to me anytime during the day or email jmbrierley1@sheffield.ac.uk

Thank you for taking part in the workshop

Thank you to the NHMF for supporting this research

