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# OVERHEATING IN HOMES THE BIG PICTURE

FULL REPORT



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# What if a Minister asked you...

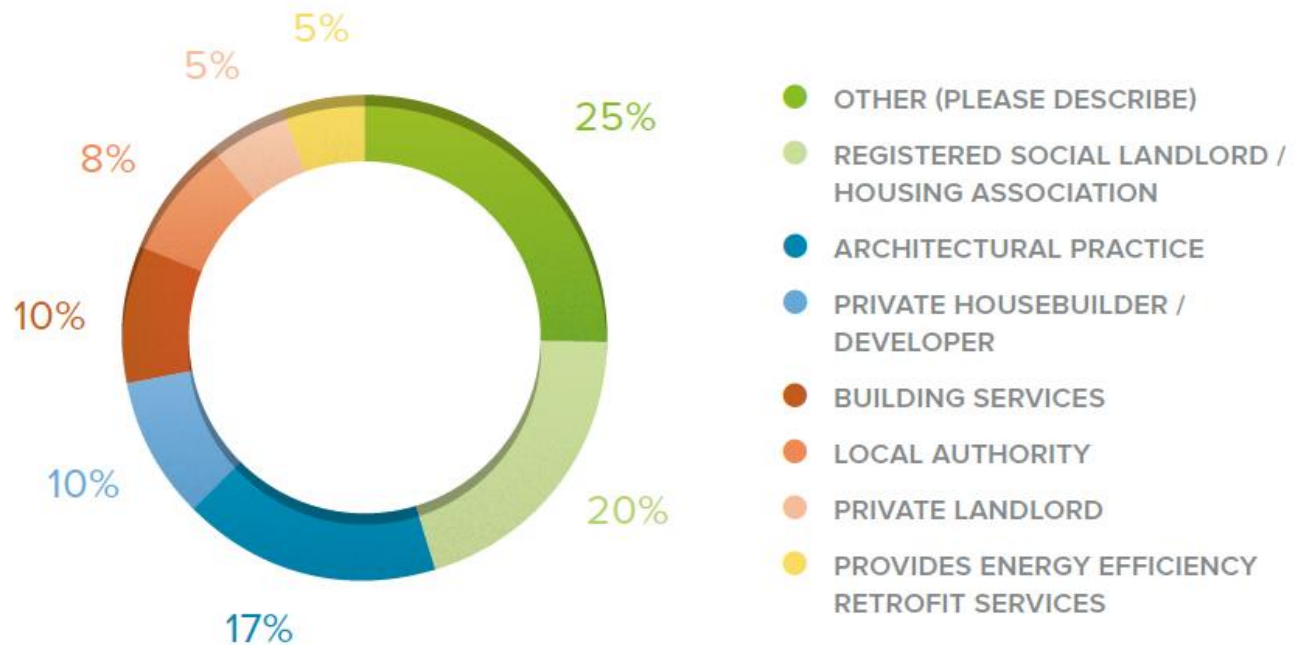
- Why does overheating happen?
- What is the scale of the problem?
- How can the construction and energy efficiency sector prevent the issue getting worse?
- What can local and national governments do to support the housing sector?
- And why does it matter?

# Evidence gathering



# Overheating Survey and interviews

Figure 4.  
Breakdown of  
Overheating Survey  
respondents by type



# What does the ZCH report say?



“In many cases, the risk of overheating may be low and no action will be necessary for a Housing Provider. However, unless they assess their potential current and future levels of risk methodically, there is potential to be ‘caught out’ by changing external circumstances such as the climate.”

**TECHNICAL EXPERT**

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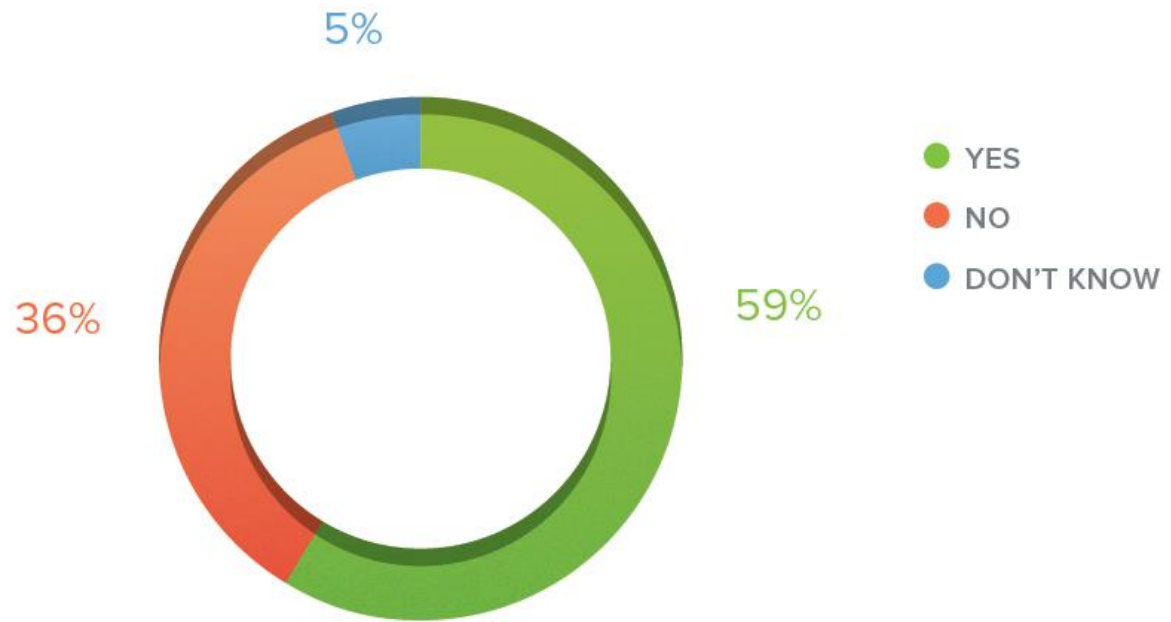
Which means...

**HAVE GOOD CHECKS FOR  
OVERHEATING IN PLACE**



# Checking risk – property level

Figure 29.  
Does your organisation  
have a method or process  
to assess the risk of your  
residential properties  
overheating?  
(Number of respondents  
out of 74 responses )



# Are the tools supporting proper checks?

Figure 4. A conceptual diagram of the types of factors which, if they can be accounted for, should improve the reliability of overheating risk assessment processes for dwellings

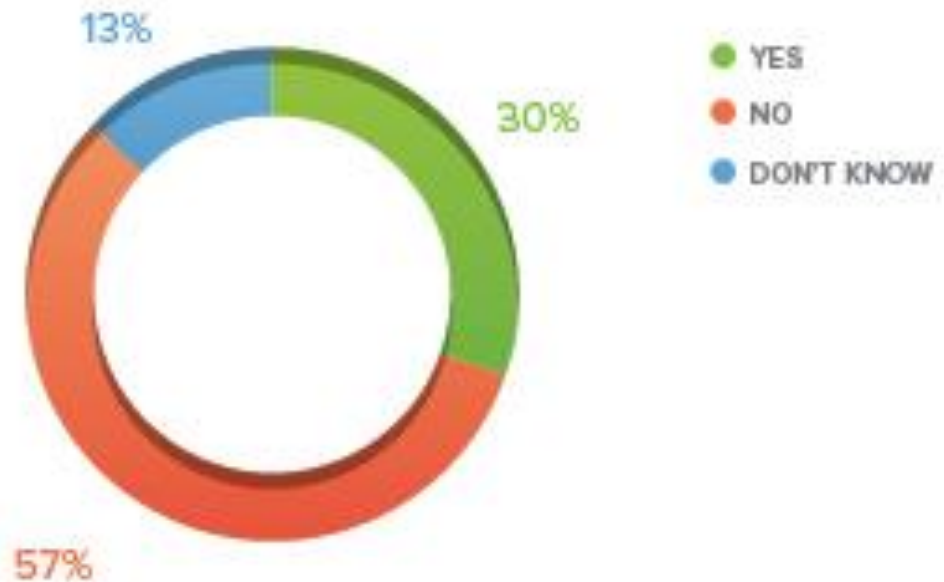




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# Processes to support checks and designs

Figure 3  
Does your organisation currently specify overheating related requirements in your contracts with architects / designers?



# Checking for delivery

Figure 32.

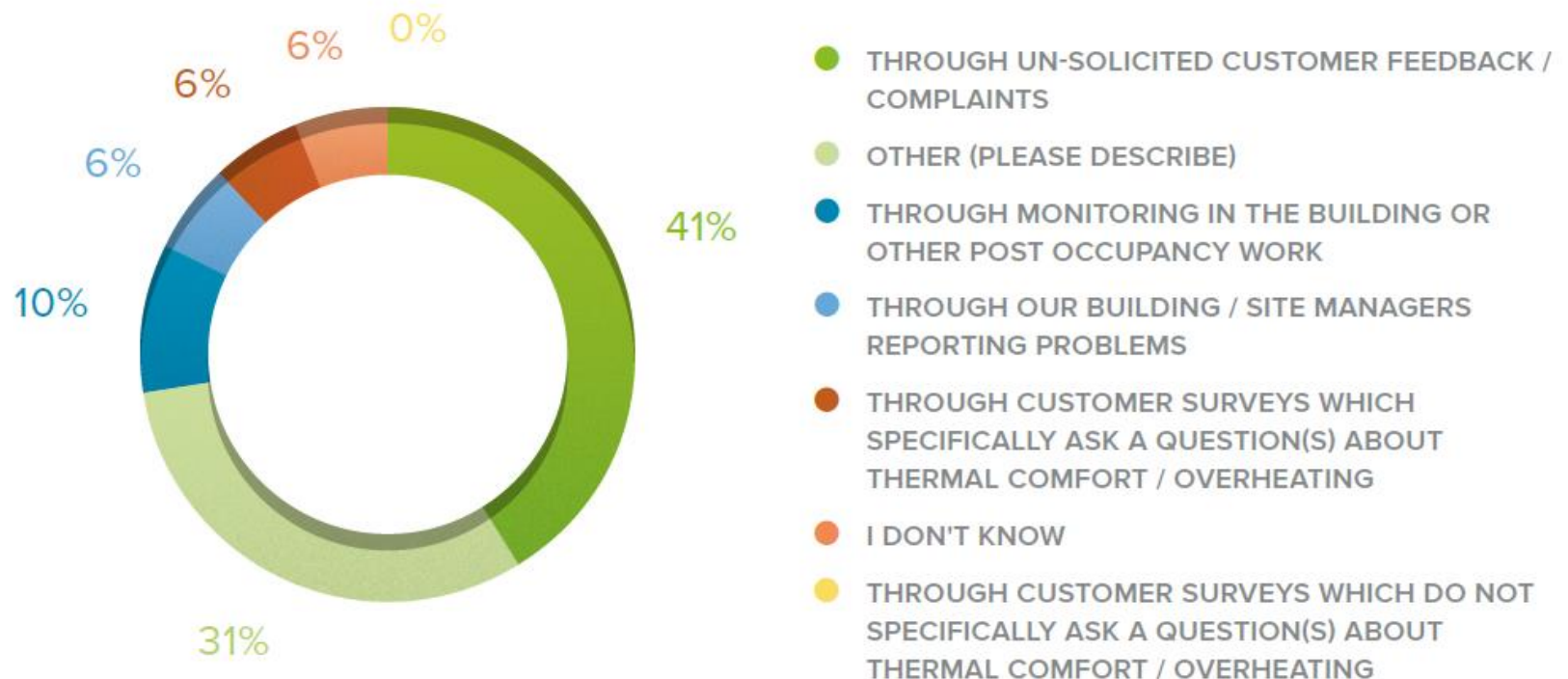
Types of process used to ensure that measures to mitigate the risk of overheating are implemented  
(Total number of individual respondents = 72)



# How did Housing Providers find out they had a problem?

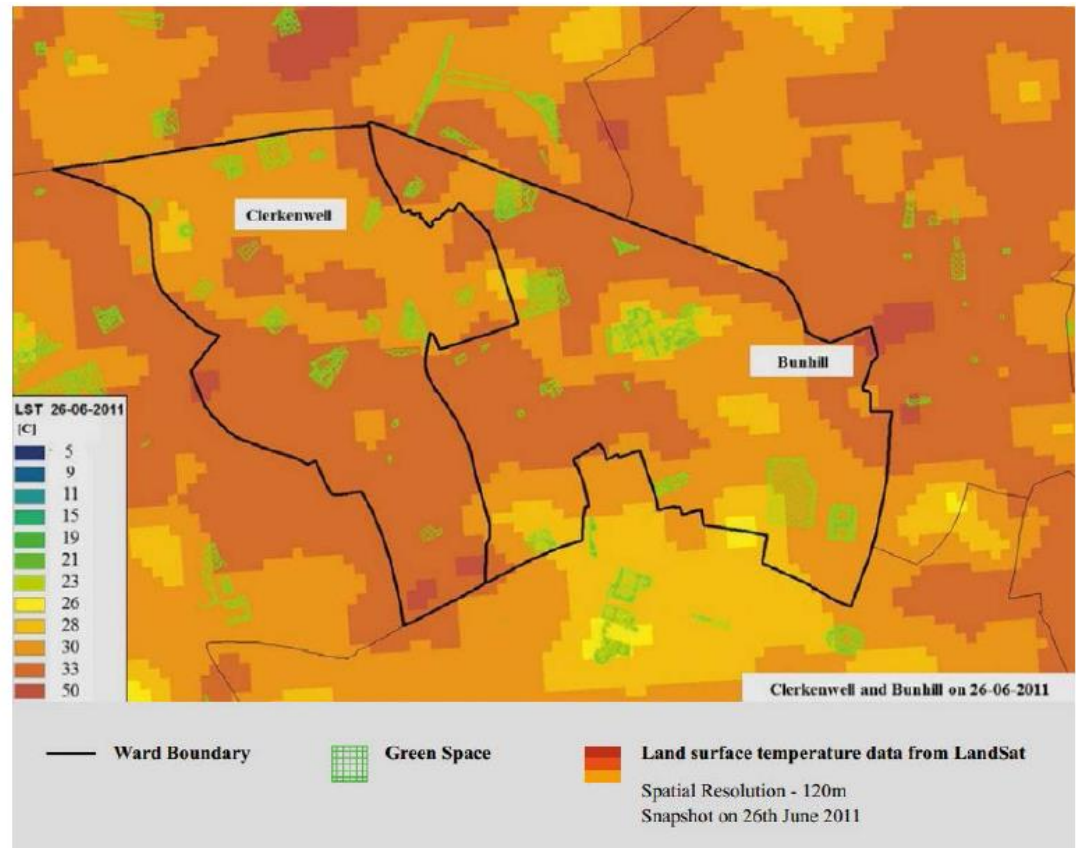
Figure 17.

For those who reported experiencing overheating problems in their stock, how did they find out there was a problem?



# Checking for vulnerable spots

Figure 10. Clerkenwell and Bunhill measured Land Surface Temperatures – day time 26th June 2011 and green spaces map overlay (ARUP 2014, 24)



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# Are government frameworks supporting checks?

“The dwelling should have appropriate passive control measures to limit the effect of heat gains on indoor temperatures in summer, irrespective of whether the dwelling has mechanical cooling. The guidance given in paragraphs 2.38 to 2.42 of this approved document provides a way of demonstrating reasonable provision.”

**Criterion 3, Part L1A**

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# What amount of checking is enough?

“We’ve been discussing an overheating issue in a development recently where people in the business are trying to argue with the purchaser that there isn’t an overheating problem because SAP tells you there is not a significant overheating risk. And if that were right – i.e. that’s the regulation to do with overheating, then that would be the end of it...To be in a situation where we can’t demonstrate that we comply is a bit scary.”

**HOUSEBUILDER**



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# How can existing frameworks be improved?

“My general view of the overheating issue is that this, together with indoor air quality, will be the two predominant issues over the next 5 to 10 years [for the sector]. We have learnt how to keep buildings warm successfully and our Building Regulations deliver a high quality level of heating performance.”

**TRADE BODY**



# HUB CONTACTS

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