



Thermal Camera Imaging Training

Suffolk Climate Change Partnership

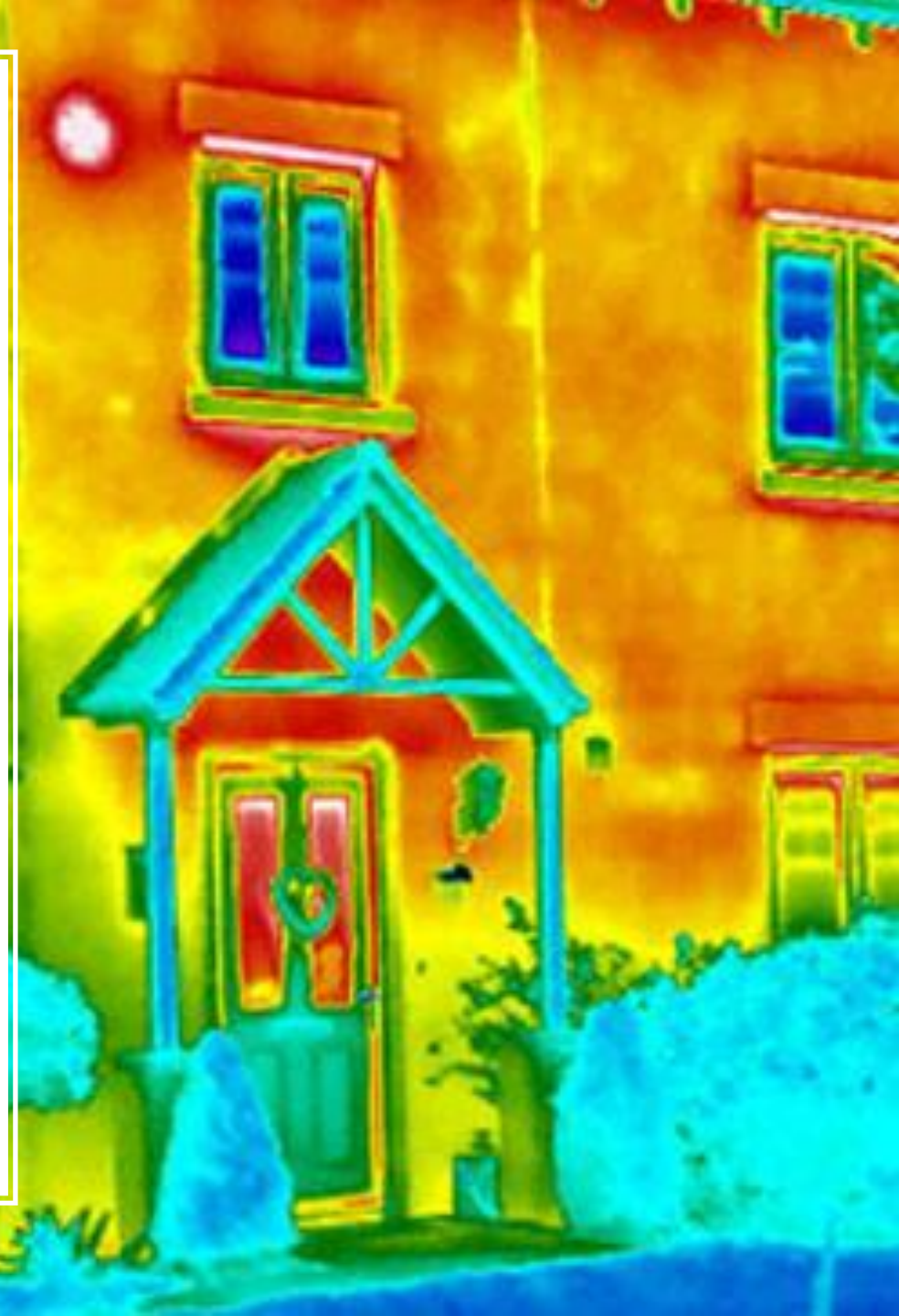
Thermal Imaging

Our aim is to help your Community Group raise awareness about insulation so you can help advise people in your community on how to improve the energy efficiency of their home. This could result in:

- ✓ a reduction in fuel bills
- ✓ helping people out of fuel poverty
- ✓ better health and well being
- ✓ a reduction in carbon emissions

A thermal imaging survey might

- ✓ identify places which might have draughts
- ✓ detect whether cavity wall insulation is patchy or missing
- ✓ detect areas with less loft insulation (though this is harder to do outside)





Borrowing a Camera

- Book out the camera
- Sign the Borrowing Agreement
- The person who has signed the agreement form on behalf of your community group is responsible for the camera.
- Our cameras are insured for loss or accidental damage but please:
 - Keep it with you or in a locked place
 - Don't lend it to anyone else
- We understand accidents happen so please report any damage or problems ASAP

Introducing the Flir Pro One Smartphone Thermal Camera

- Easy to use
- We have both Android & iPhone versions
- To be compatible with FLIR ONE, a device must meet the minimum requirements
 - Android users - version 9.0.0 or newer
 - iOS users - version 13 or newer
- Fits into your phone charger point
- The camera requires charging separately
- Takes 40 mins to charge & lasts around 1 hour
- Your phone battery will also be reduced whilst in use
- We also supply you with a portable battery charger with 2 usb points





- They are small, and easy to handle and store.
- They can be easily placed safely in a pocket as you travel to your venues to carry our surveys.
- The camera comes in its own protective case but like your phone they won't take kindly to drops, bumps or bashes.
- Photos can be easily stored on your phone for interpreting in the warmth of your own home. You can then email to them to the householder.



Ideal Conditions for use

- Indoors $>10^{\circ}\text{C}$ warmer than out
- Enough light for visible images
- No direct sun, rain or strong winds
- Thermal imaging works best during the colder months
- Our cameras are available from November to April.

- By carrying out community thermal imaging surveys you are not only helping your local community save money and stay warm and healthy this winter, but you are also helping Suffolk reach its target of Net Zero by 2020.
- Thermal imaging is a fantastic, straightforward way to diagnose energy leaks from homes.
- The images can tell us immediately where costly heat is escaping from such as windows doors, walls and poorly insulated roof



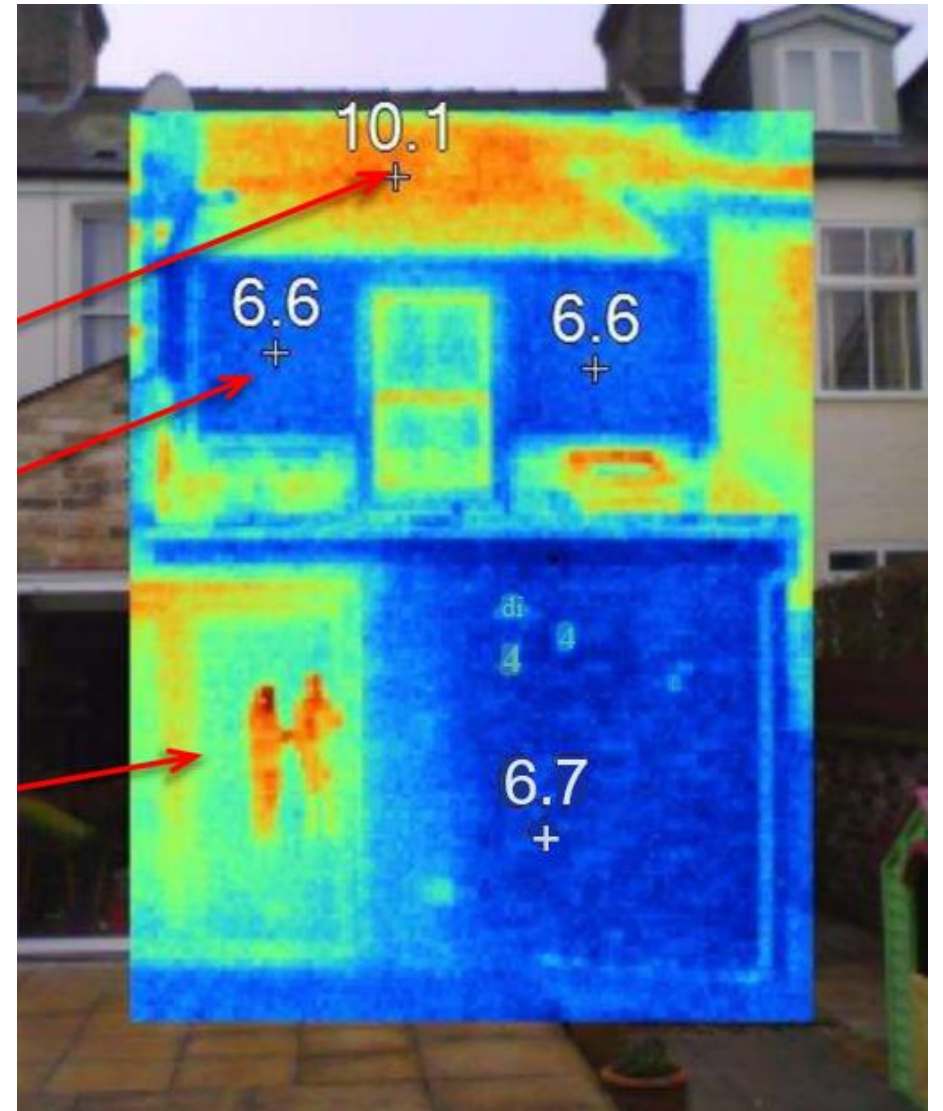
Interpreting the Images

Loft insulation: Poor = Warm

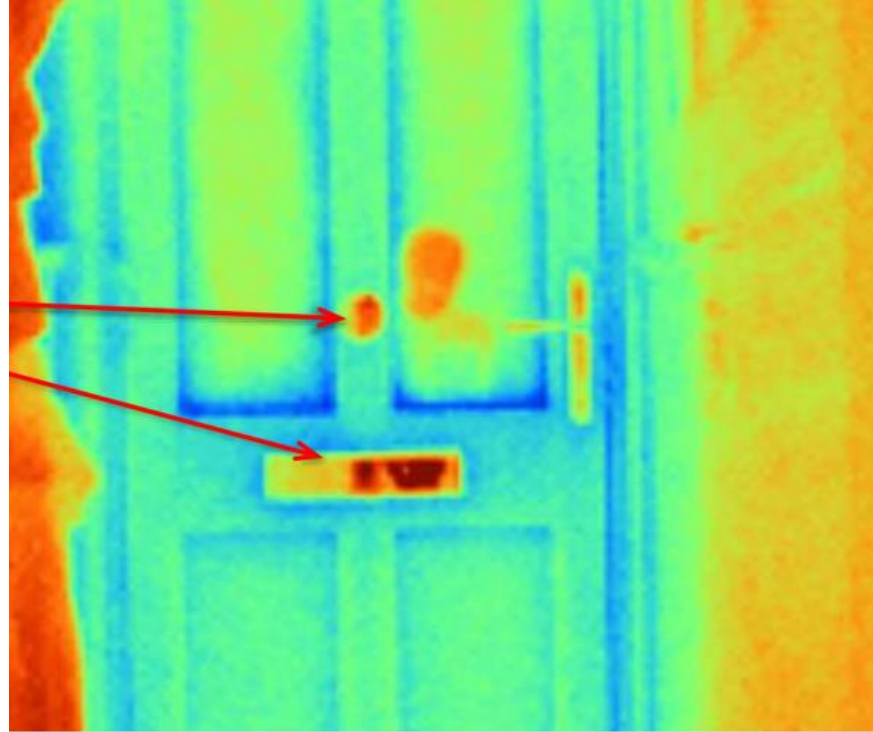
Wall insulation: Good = Cool

People = Reflections in glass
(you taking the survey!)

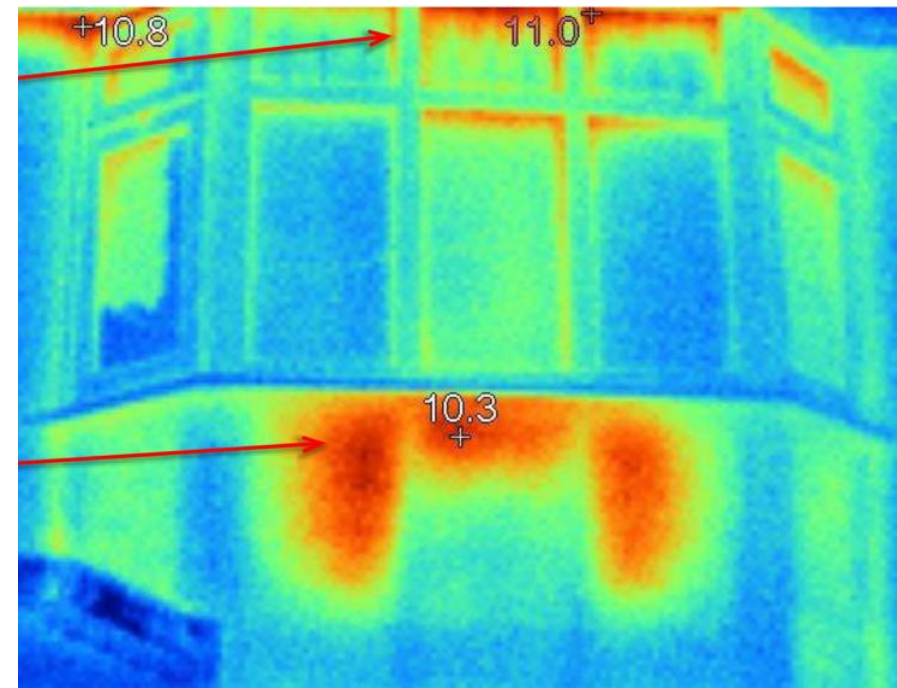
From outside: Warm = Leaky



Temperature errors
Shiny metal



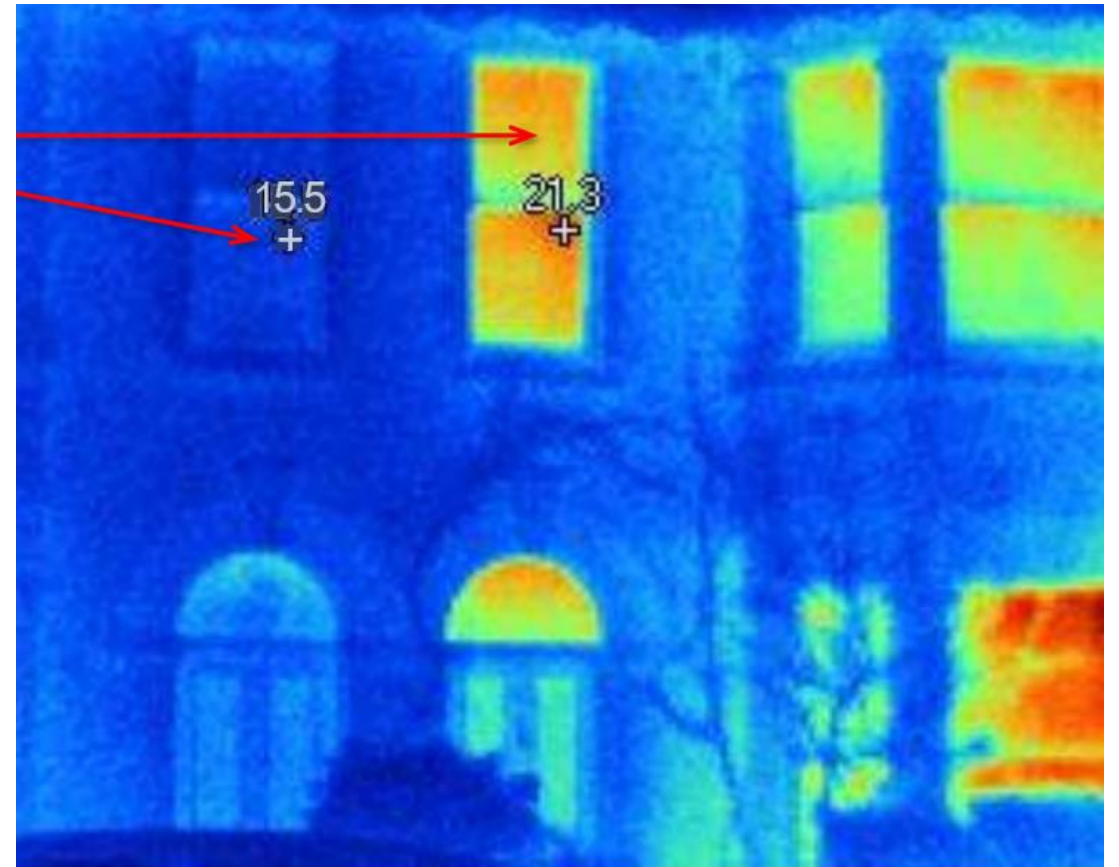
Draughty windows



Radiator without a
reflective foil panel

Why are the houses so different?

Different internal
temperatures?



FLIR Home Inspect App

- To find out more hidden problems and for more top tips – download the FLIR Home Inspect App on your iOS or Android Device.
- Equally, you can look at our YouTube Channel:
https://www.youtube.com/channel/UC9WDs_u07vWiEOL7rg8yqOg

Identify hidden problems



Step-by-step guides



After the Surveys – Then What ?

- Fill out a survey form for each home if possible or share the images with the homeowner
- Help signpost people in poorly insulated homes (rated D,E,F,G) & income under £31,000 to the Warm Homes scheme
- Encourage & support easy DIY insulation & draught fixes
- Encourage behavior change (closing curtains, turn down radiators by 1oC etc)
- Consider running a Community Bulk Buy project for insulation & draught proofing measures

