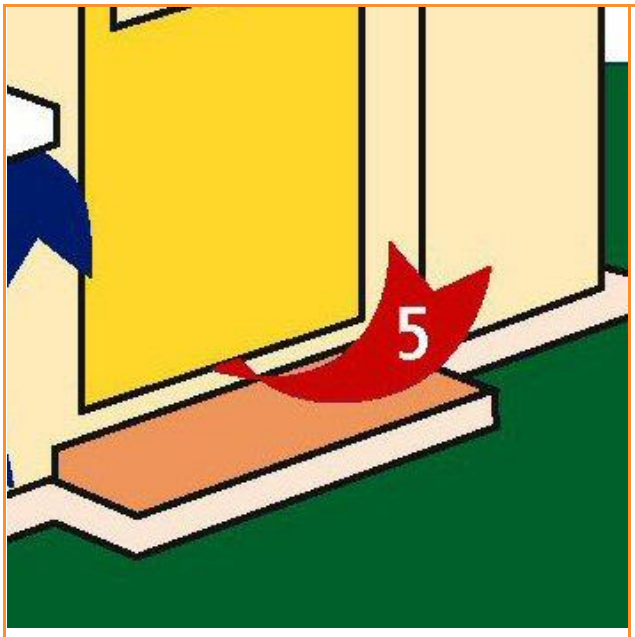
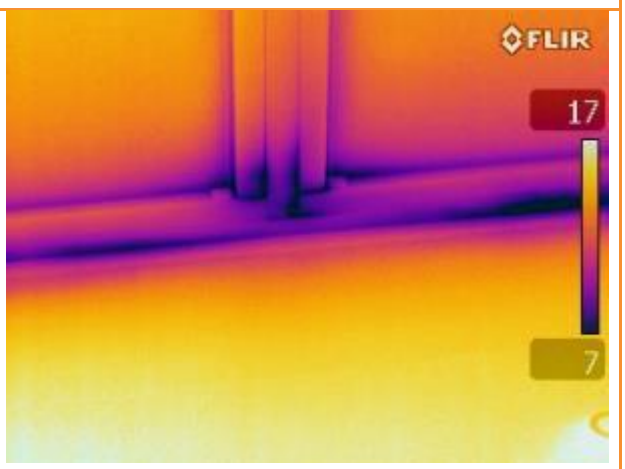
Common Leakage Sites no.5

Beneath and around doors and doorframes.



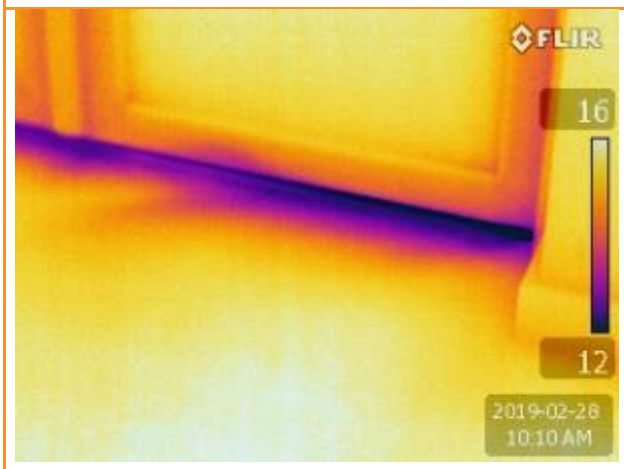
In this instance air is leaking from the outside or an adjacent unheated space around the door itself or perhaps between the door frame and the adjacent wall, due to either bad fitting or inadequate sealing. It is not uncommon to see a door that has been cut marginally too short with a noticeable gap underneath it, allowing substantial airflow through the gap.

Building Fabric Leakage 5: Beneath doors and doorframes

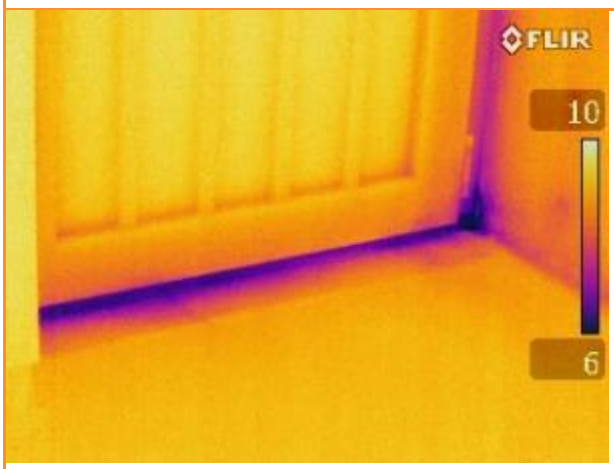


5.01: Internal thermographic image whilst existing house depressurised. Leakage across bottom of glazed door in lounge.

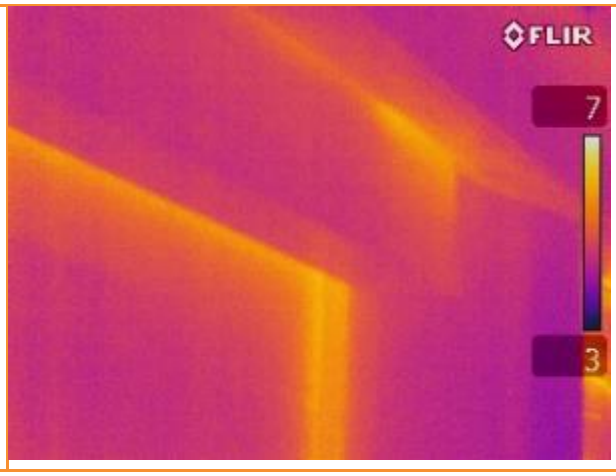
5.02: Internal thermographic image whilst house is depressurised showing leakage at base of front door.



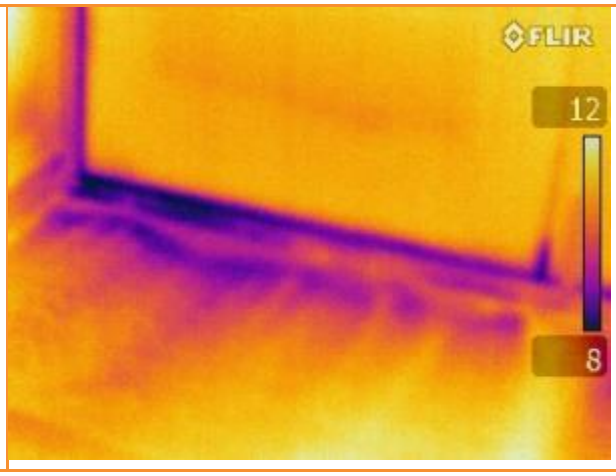
5.03: Internal thermographic image whilst house is depressurised showing leakage across the bottom of French windows.



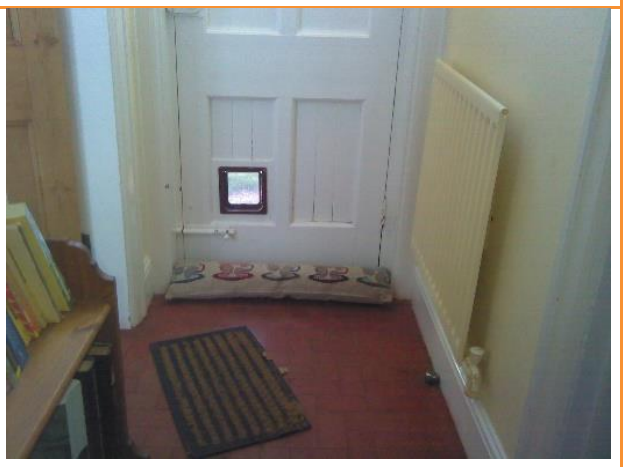
5.04: Internal thermographic image whilst house is depressurised showing leakage across base of internal door to garage, particularly at corner.



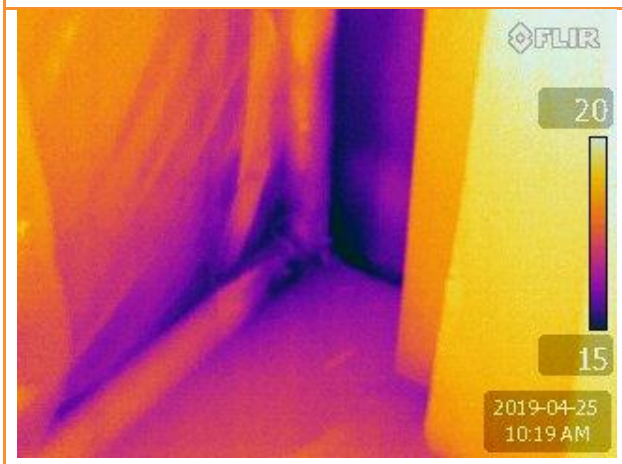
5.05: External thermographic image whilst house is pressurised showing leakage at side & top of garage door.

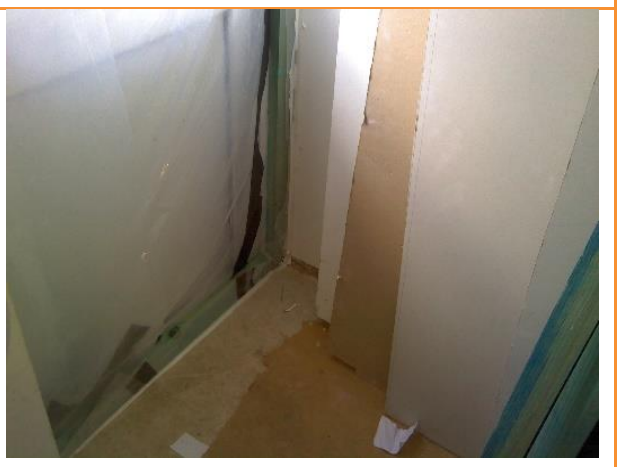


5.06: Internal thermographic image whilst house is depressurised showing leakage along base of front entrance door.

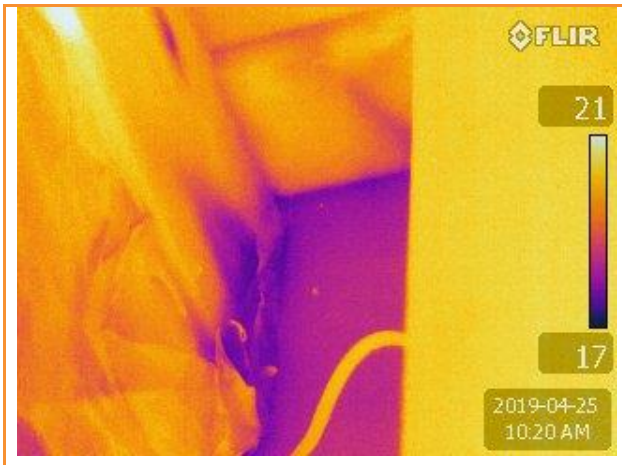


5.07: Internal thermographic image whilst house depressurised, showing substantial leakage on base of side door, also around cat flap, through the panels of the door and beneath the threshold





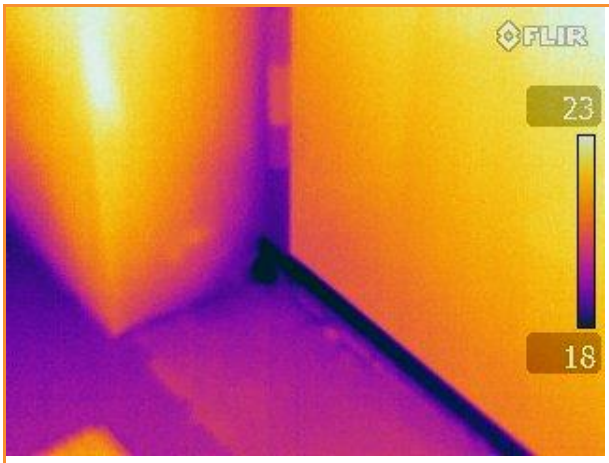
5.08: Thermographic image showing substantial leakage at the bottom corner and side of the existing rear door, which has yet to be replaced



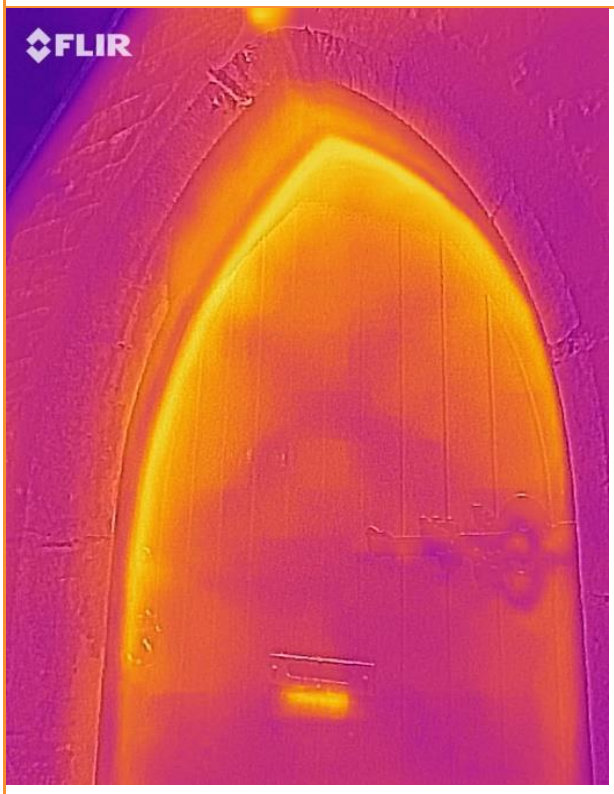
5.09: hermographic image showing substantial high-level leakage at the side of the existing rear door. Unclear if the fundamental problem is an issue with the door or with the external façade beside the door

5.10: Thermographic image showing checking for leakage at base of large sliding doors

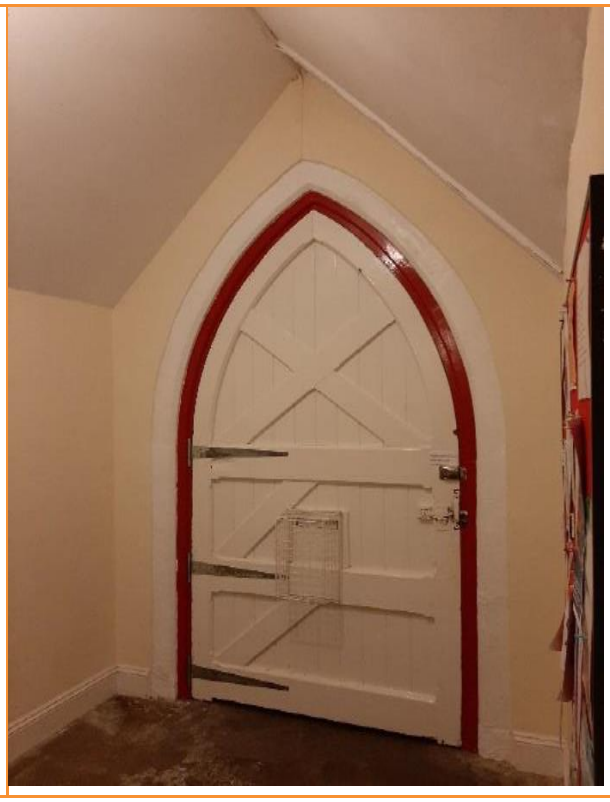
5.11: Thermographic image showing cold bridging down side of door and minor leakage on lock



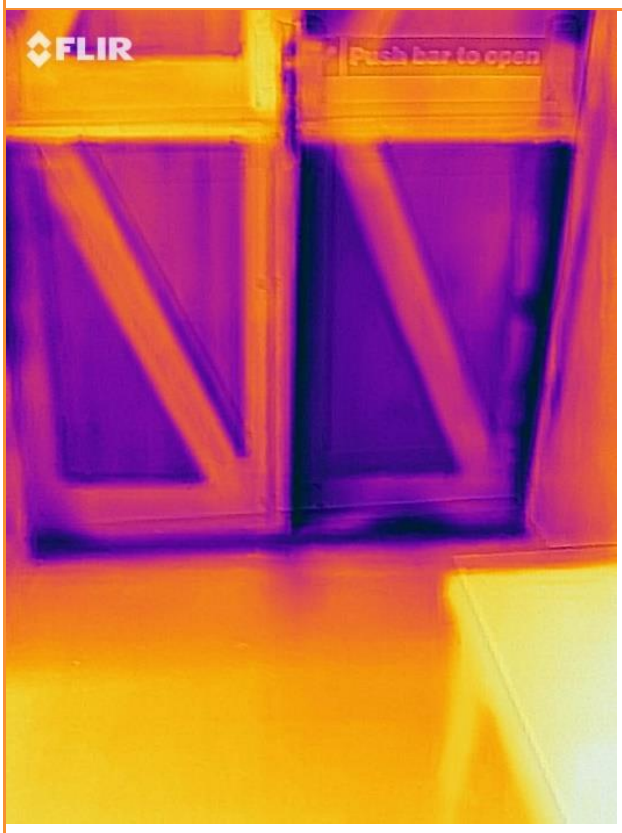
5.2: Thermographic image showing leakage across base of front doorway, particularly in lower left corner



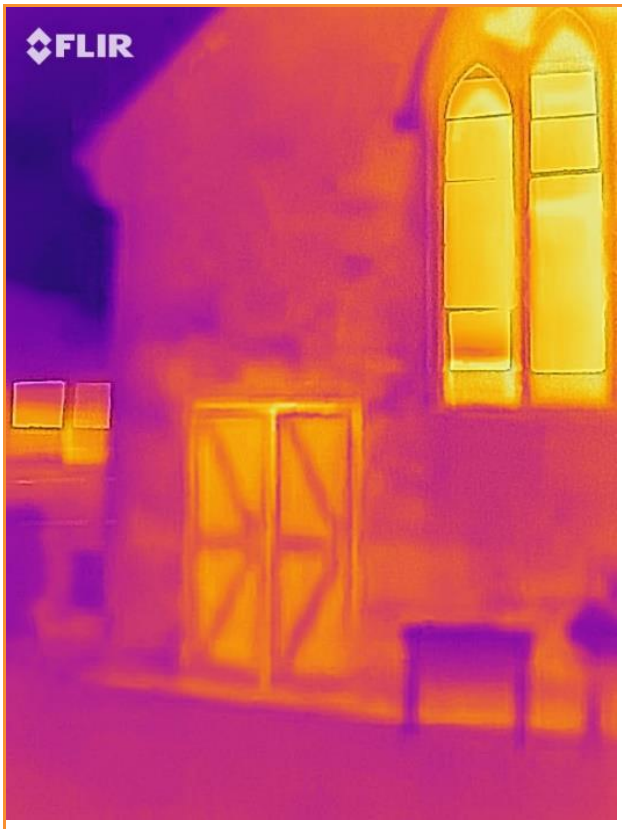
5.13: External thermographic image whilst building pressurised, showing substantial warm air (yellow) escaping the building around main entrance. The letterbox is clearly also leaky and at the very top of the image there appears to be leakage around the connection to the external light



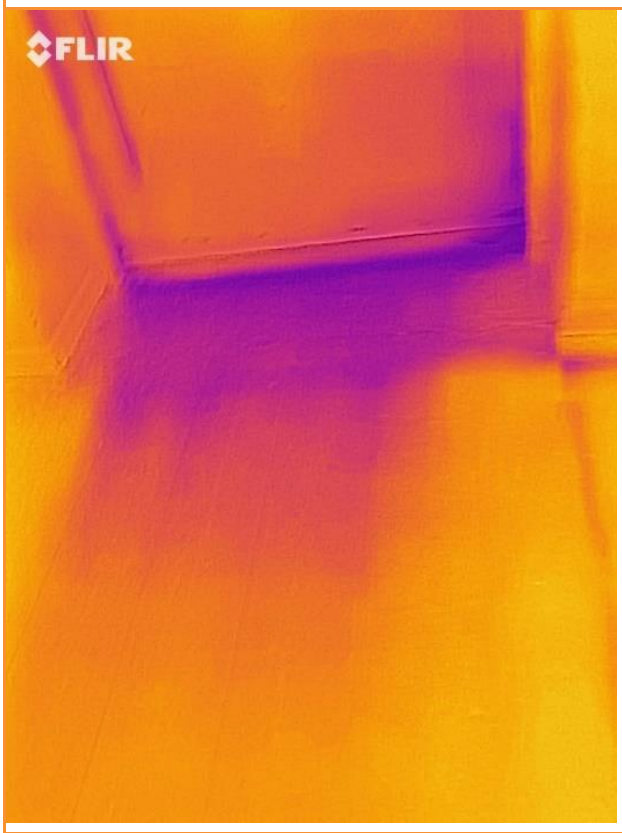
5.14: Internal thermographic image whilst building depressurised, showing substantial cold air (blue) entering the building across the base of the main entrance door, also through the letterbox



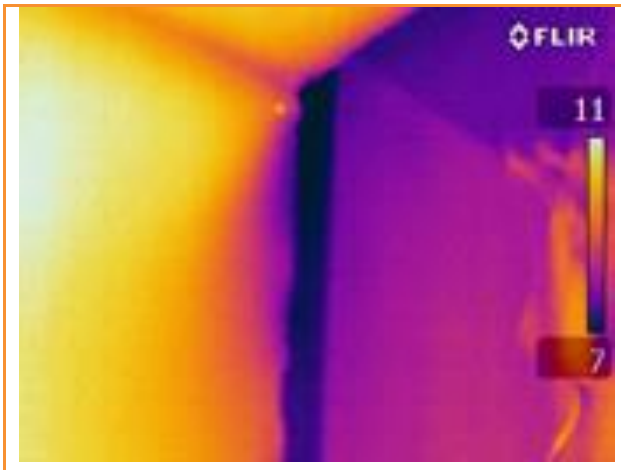
5.15: Internal thermographic image while building depressurised showing substantial leakage of cold air (black) in numerous locations on fires escape door in main hall



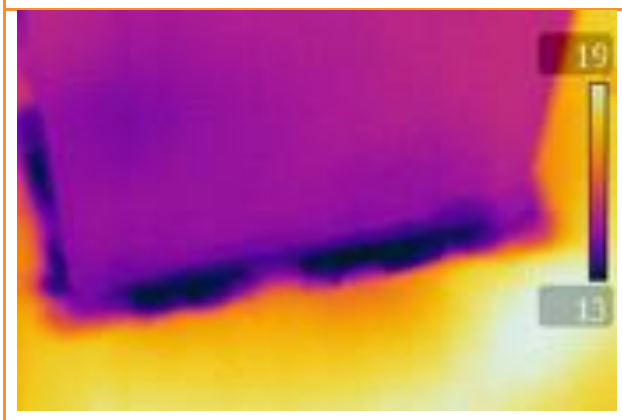
5.16: External thermographic image while building is pressurised showing leakage of warm air (yellow) at side and top of fire escape doorway from main hall



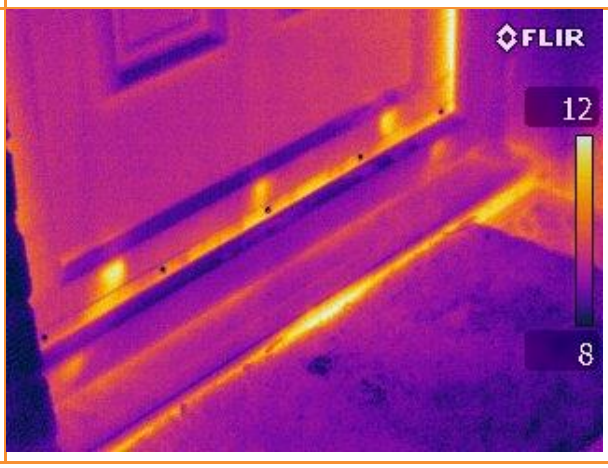
5.17: Internal thermographic image while building depressurised showing leakage of cold air (blue/black) underneath the external door from the kitchen



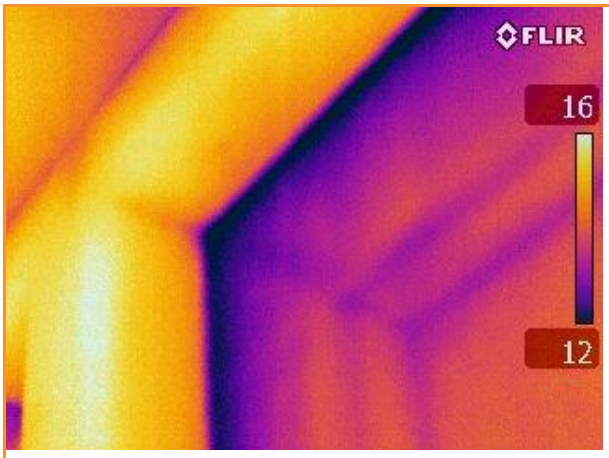
5.18: Thermographic image of cold section formed by leakage along vertical edge of door frame



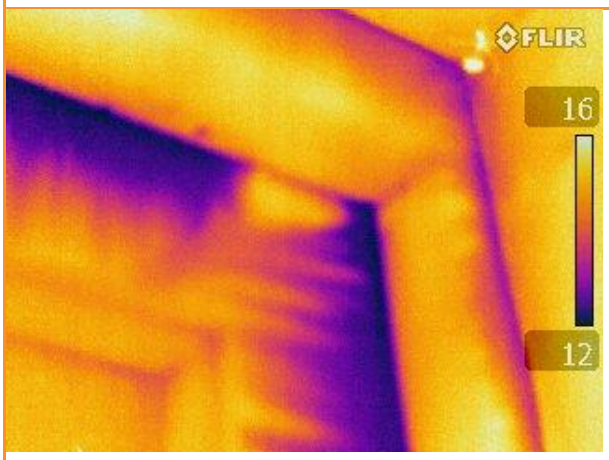
5.19: Thermographic image showing leakage beneath door from music room to plant room, sealed for testing



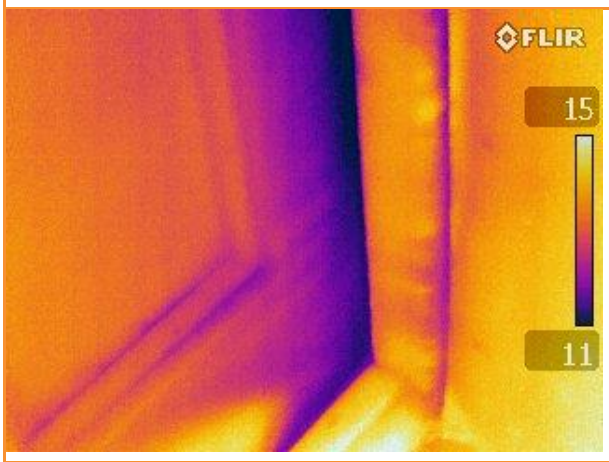
5.20: Thermographic images showing leakage on front door as house pressurised and close up showing cold spots and leakage at base of front door



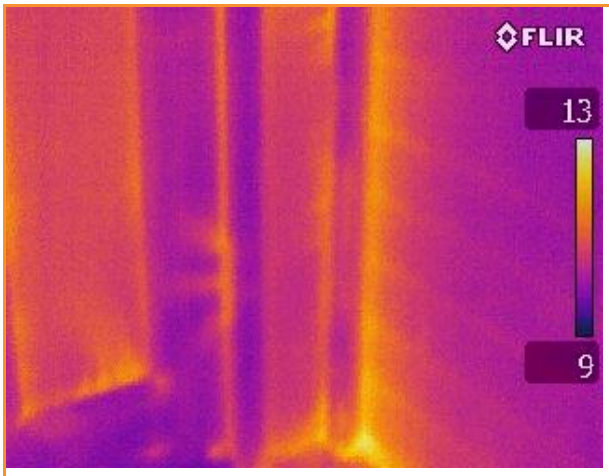
5.21: Thermographic image of leakage on top corner of rear door



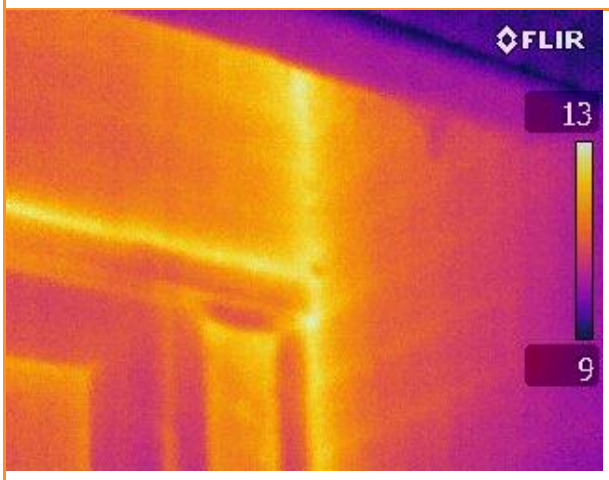
5.22: Thermographic image of leakage on top corner of rear door to lean-to extension



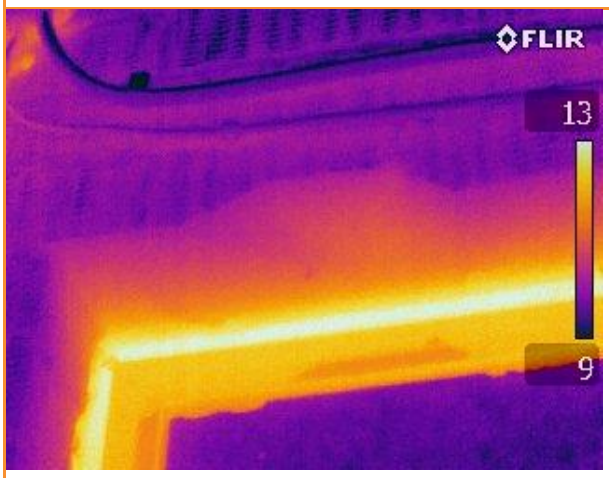
5.23: Thermographic image of leakage on bottom corner of rear door to lean-to extension



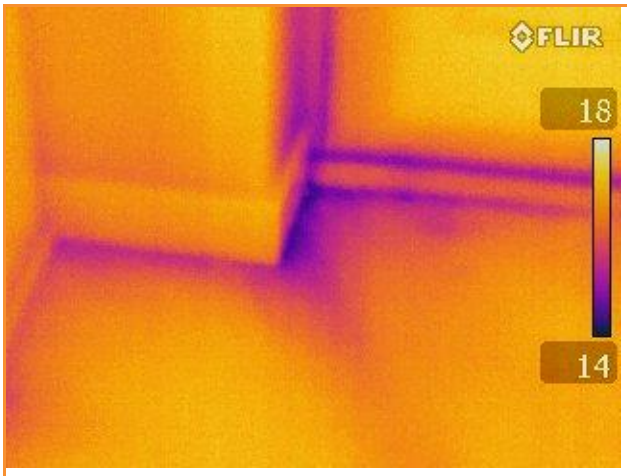
5.24: Thermographic image showing significant leakage around rear door frame to extension, and also where base of extension wall joins to main house



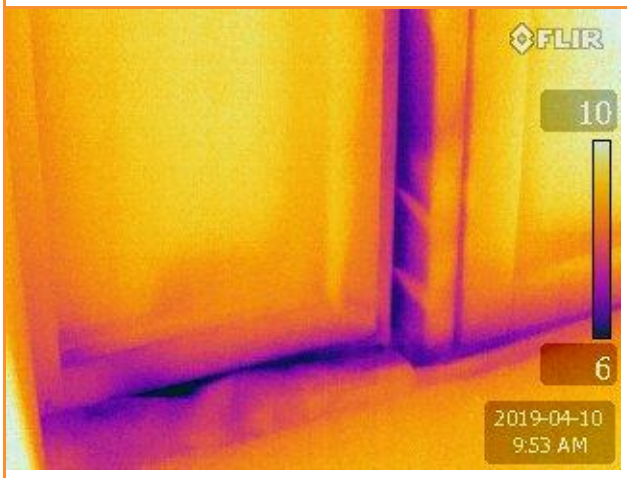
5.25: Thermographic image showing leakage across top of lintel and where edge of extension wall joins to main house



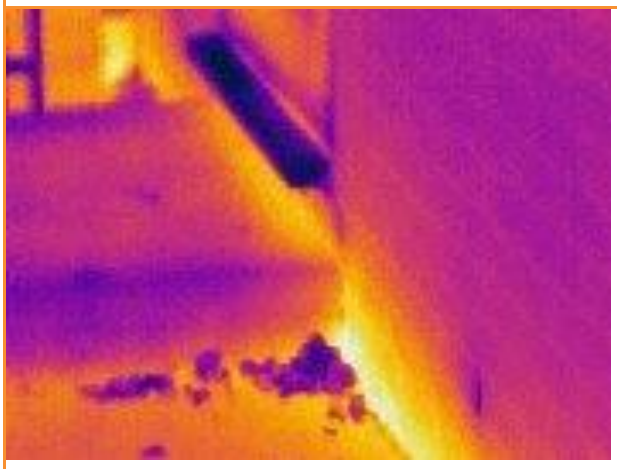
5.26: Thermographic image showing warmer temperature where brickwork is damaged, and leakage around window frame

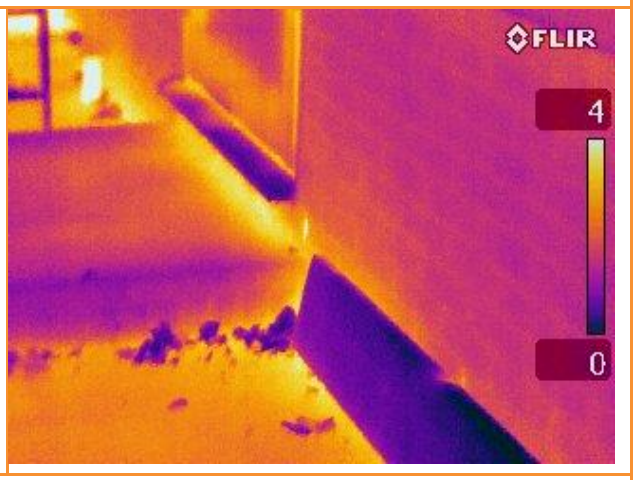


5.27: Thermographic image showing leakage at side of door threshold on front door

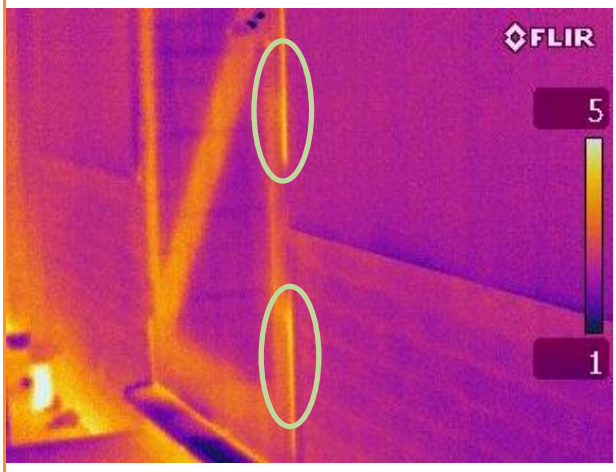


5.28: Thermographic image showing substantial leakage around the external door from the lounge area

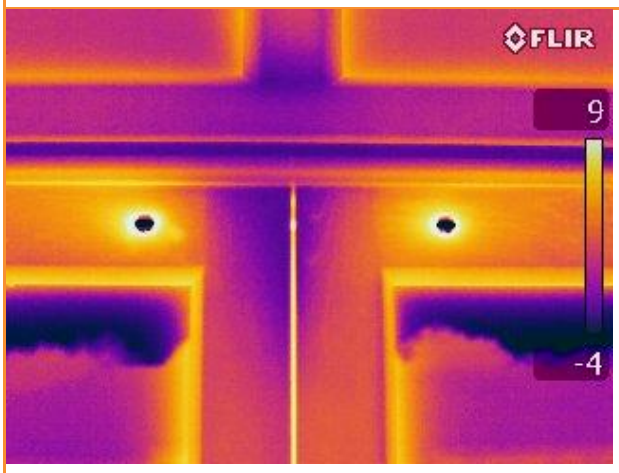


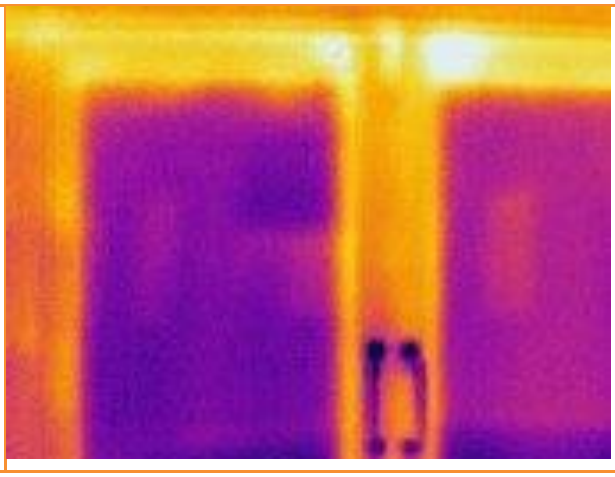


5.29: Thermographic image showing some heat loss beneath side door threshold before building pressurised (left), and then showing much more heat loss under threshold and on bottom & side of door after pressurisation (right)

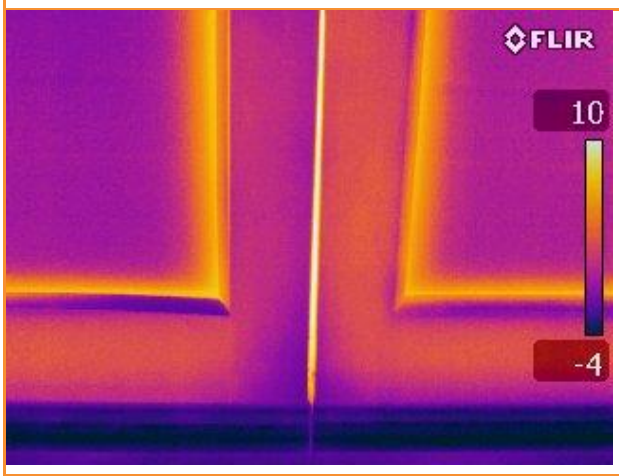


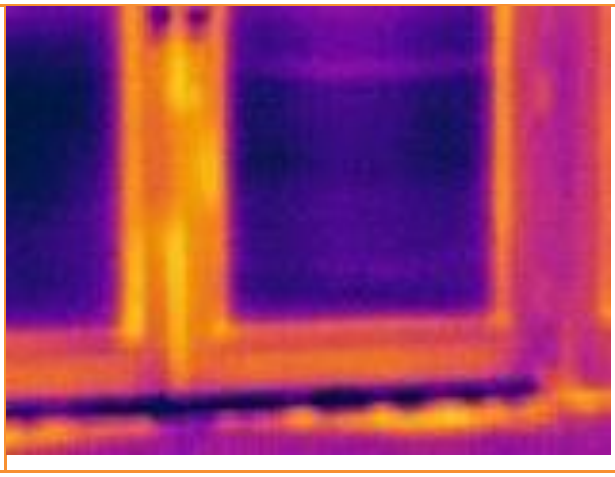
5.30: Thermographic image of side door, with frame visible and clear air leakage at two particular locations on the vertical edge - also beneath both door & threshold



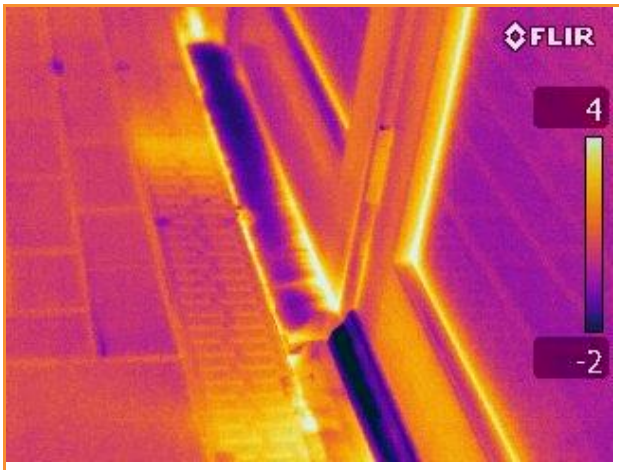


5.31: Thermographic image showing leakage at top of gap between front doors, before building pressurised (left), then after building pressurised showing increased leakage at top of double doors (right)



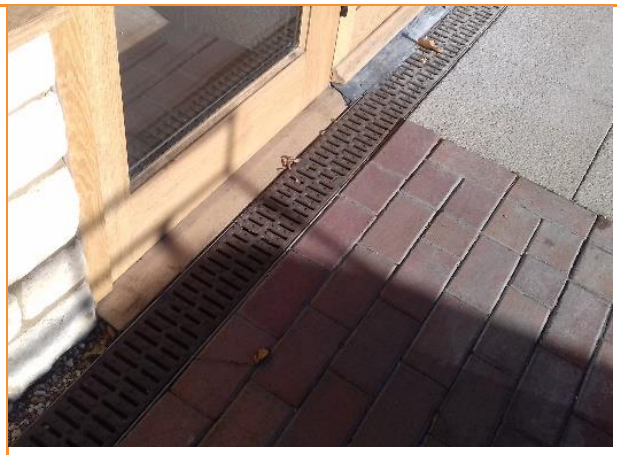


5.32: Thermographic image showing leakage at bottom of gap between front doors, before building pressurised (left), and after building pressurised showing increased leakage between doors but particularly beneath threshold

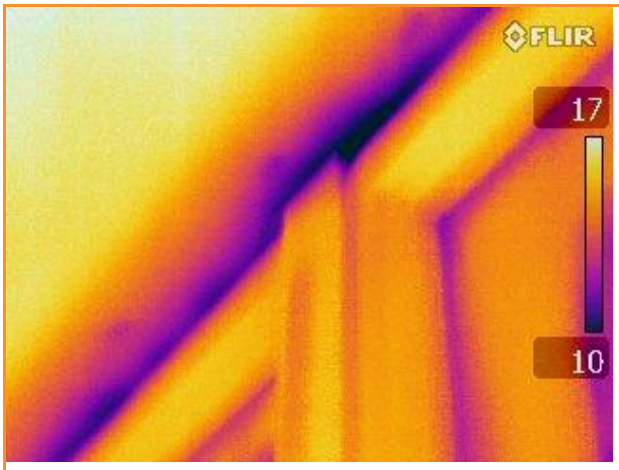


5.33: Thermographic image whilst building pressurised showing major leakage on front door threshold

5.34: Thermographic image along front façade of building when pressurised, showing heat loss at edge similar to that before pressure applied, but major heat loss under door frame and beneath threshold (left), then close-up view of edge of threshold; classic "plumes of warmth" showing hot air escaping when building pressurised (right)

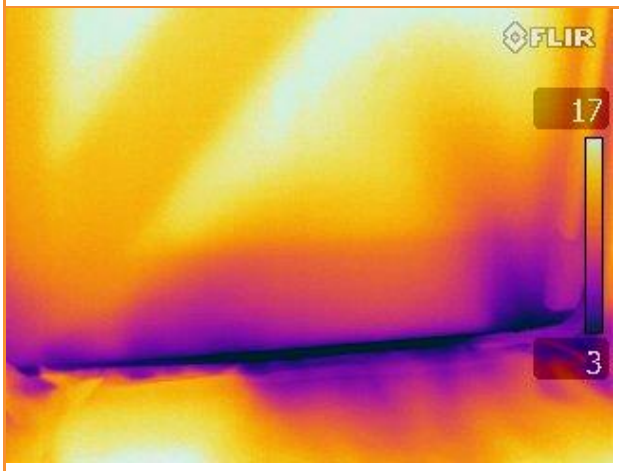


5.35: Thermographic image whilst building pressurised showing substantial leakage at side of front double doors at low level

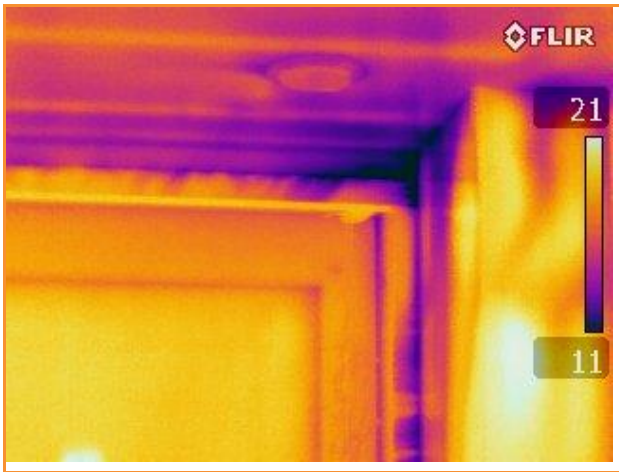


5.36: Thermographic image of major leakage at top of double doors whilst depressurising

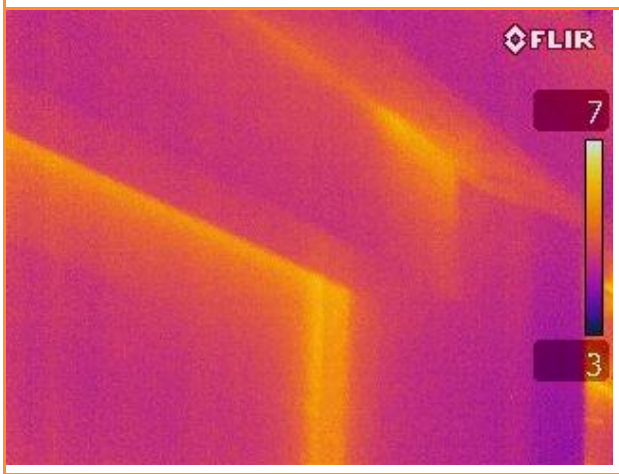
5.37: Thermographic image of major leakage across top of side door whilst depressurising



5.38: Thermographic image of major leakage under base of side door whilst depressurising

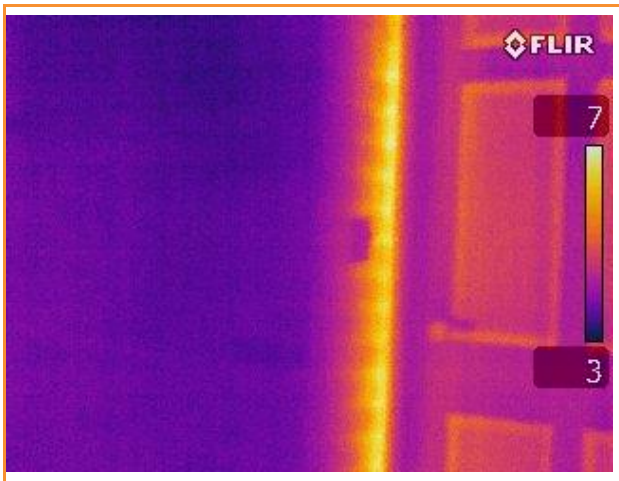


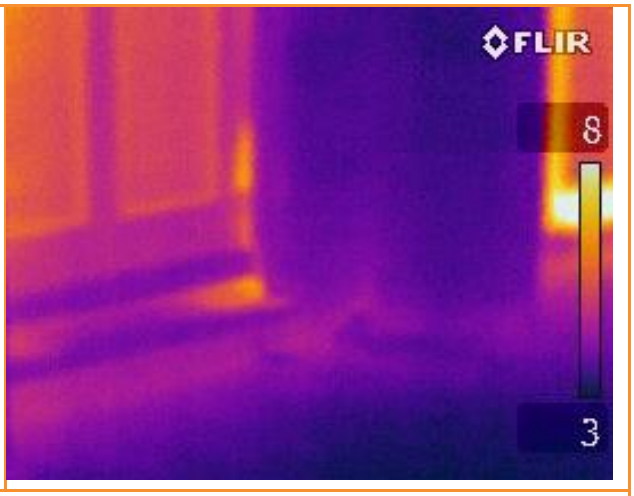
5.39: Thermographic image showing substantial leakage at corner of double doors



5.40: Thermographic image showing leakage under pressurisation at side & top of garage door, also along section of eaves junction to top of wall

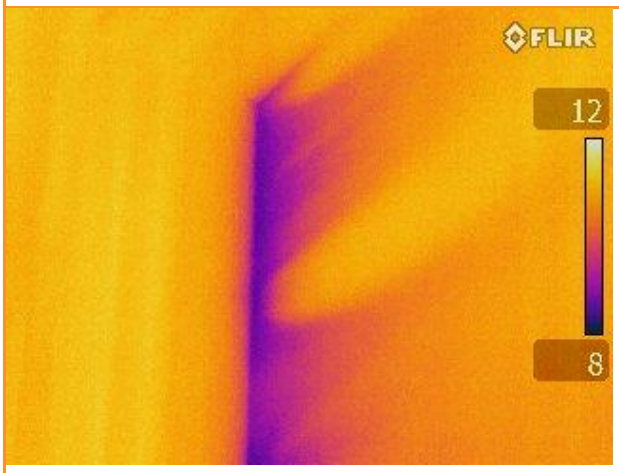
5.41: Thermographic image showing leakage around back door during pressurisation

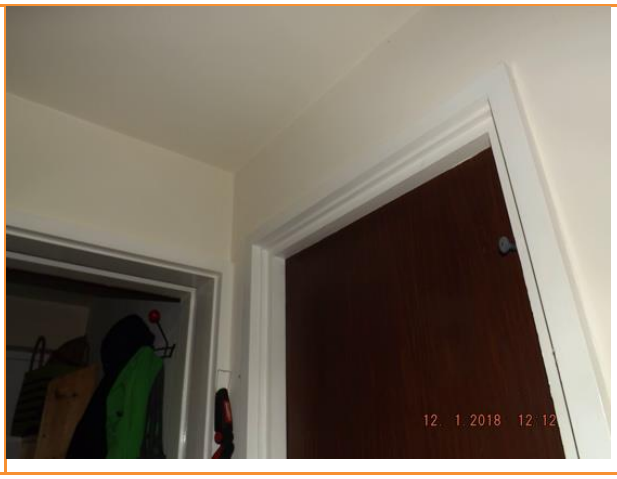




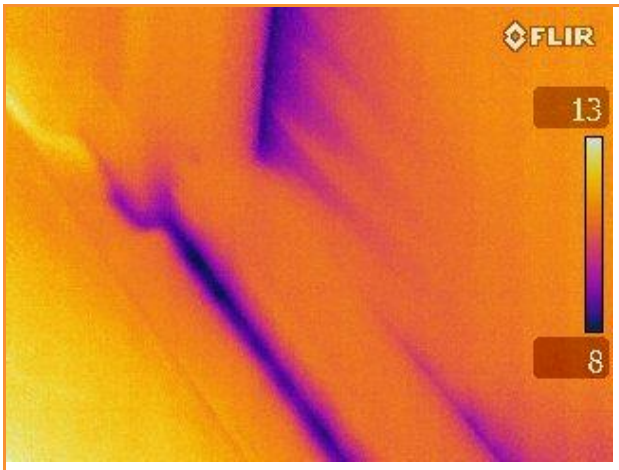
5.42: Thermographic images showing close-up of leakage at side and base of back door

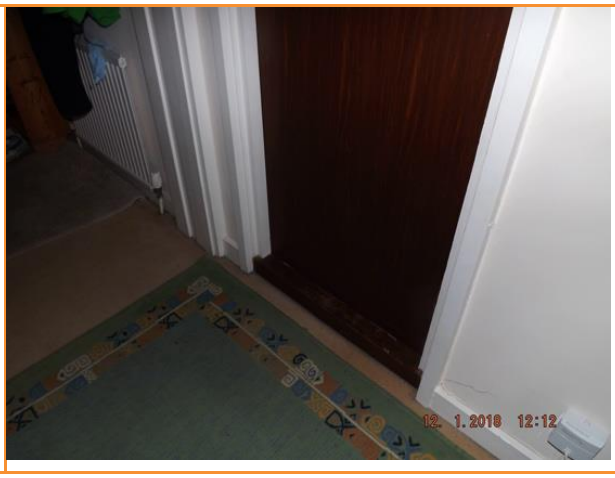
5.43: Thermographic image showing substantial leakage at base of front entrance doorway





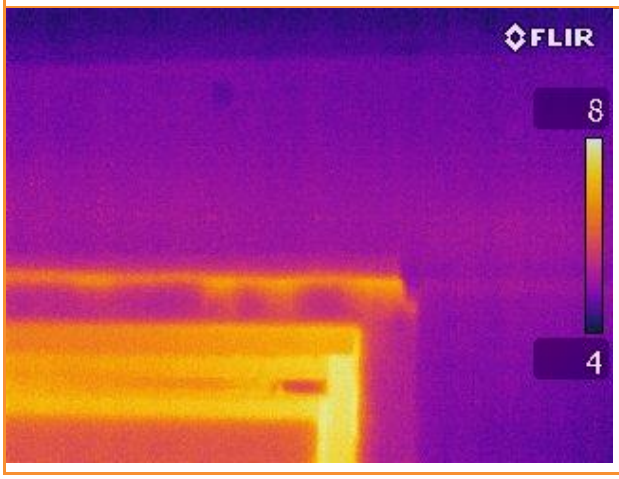
5.44: Thermographic image showing substantial leakage on upper side of internal garage door





5.45: Thermographic image showing substantial leakage at lower side and beneath threshold

5.46: Thermographic image showing leakage along lintel above rear lounge doors. Also, leakage at side & top of sliding door



5.47: Thermographic image showing leakage on lintel and at end of large door, ground floor of extension