

## **Common Leakage Sites No.12**

## Through a porous masonry inner leaf, particularly with blockwork containing fuel ash from power stations.



Air is leaking from the wall cavity into a room through porous blockwork, which has been noted as an issue with blocks made using fuel ash from power stations. It can also apply in reverse where the external sealing of the wall, such as a render coat, is cracked and allows warm air from the room to escape to the outside.

Building Fabric Leakage 12: Through masonry walls





12.01: External thermographic image whilst house is pressurised showing heat escaping through crack in render, also underlying block pattern visible.







12.02: External thermographic image whilst house is pressurised showing leakage along the underside of a row of projecting bricks.





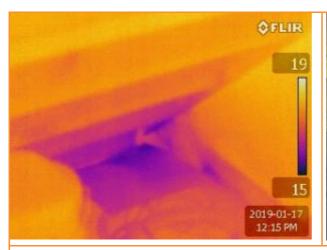
12.03: External thermographic image whilst house is pressurised showing leakage at base and side of brick alcove.





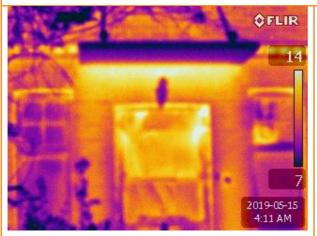
12.04: External thermographic image whilst house is pressurised showing leakage at top of brick alcove.





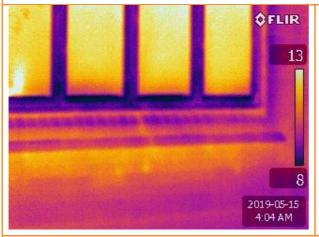


12.05: Internal thermographic image whilst house is depressurised showing leakage occurring beneath bottom of stairs, adjacent to wall to extension.





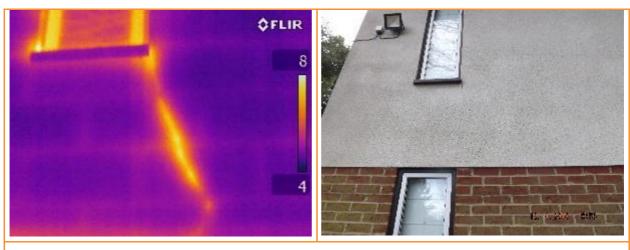
12.06: External thermographic image whilst house pressurised, showing major heat loss along the underside of the projecting porch over the main front door



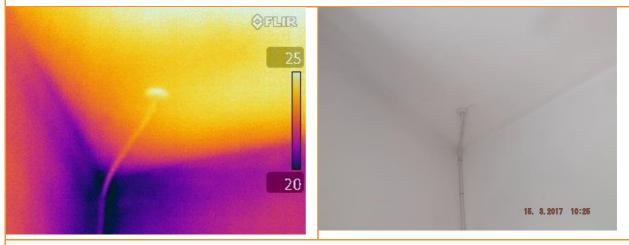


12.07: External thermographic image whilst house pressurised, showing heat loss along underside of projecting brickwork detail beneath side window

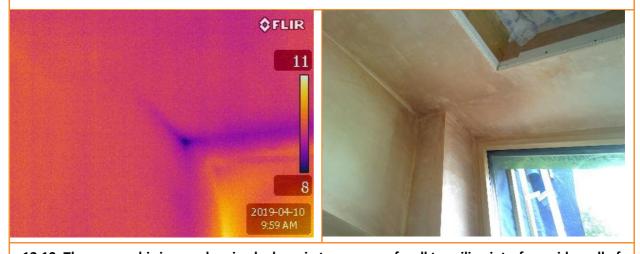




12.08: External thermographic image whilst existing house pressurised. Showing significant heat loss through the crack, and around the upper window. Pattern of blockwork behind render also visible.

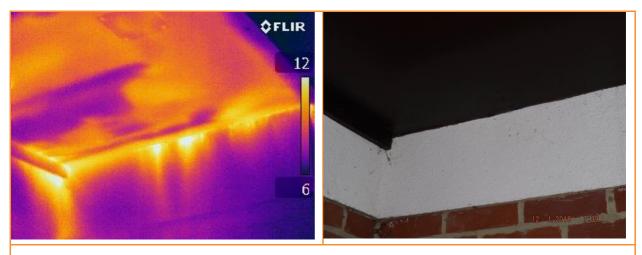


12.09: Thermographic image showing no discernable leakage around cable through the ceiling, but clearly a cold spot in corner where the external walls meet

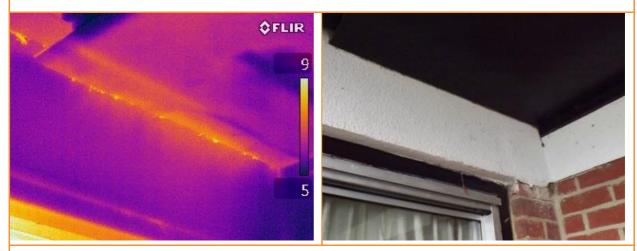


12.10: Thermographic image showing leakage in top corner of wall to ceiling interface, side wall of library/study, ground floor





12.11: Thermographic image showing major leaks along the wall to balcony interface



12.12: Thermographic image showing leakage along wall to balcony interface at top of former garage on lowest level