Builders Guide



<u>Overview</u>

Building an airtight home isn't reliant on just one trade, throughout the build, every trade can contribute towards your Air Tightness score and with a little more consideration prevent air leakage . From our experience, these are the best ways your tradesman can help you achieve a great Air Tightness score.

If you're a tradesman yourself, this guide may act as a checklist to ensure your work isn't putting your clients work at risk of failure. Alternatively for site managers or equivalent, this guide can be used to ensure you gain the best airtight score possible for your project.

Groundwork

- When Laying damp proof membrane, ensure you overlap the membrane to allow a tight seal at all joints.
- When cutting the membrane for service penetrations, be as accurate as
 possible, excessively large penetrations cause air leakage problems.
- Ensure a robust and air tight tape is used to seal the membrane, some lower quality tapes peel off due to wear and tear and cause air leakage.



Bricklayers

- To prevent air leakage into the cavity, seal the internal block work by filling all mortar joints and by sealing gaps around penetrations through the blockwork.
- Grout/cement-wash the surface of beam and block floor to seal joints between blocks.
- Although not essential for best results use a wet plaster finish or a parging layer (thin rough coat of plaster) to cover the internal blockwork.



Plumbing and Heating

- Avoid excessively oversized openings for services through walls these will be more difficult to seal afterwards.
- Airtight seal the holes for all services.
- For small to medium sized holes use a sealant that will accommodate expansion and compression movement between the wall and service pipe/duct/cable.
- Spray-applied foam can be used to stop air leakage through large gaps and holes in the structure. Care must be taken to ensure that the foam is applied deep into the hole rather than around the surface



Electrician

- Ensure extractor fans and cooker hoods are correctly fitted to avoid air leakage through the ventilation duct.
- Apply a tight seal around the perimeter of extractor fans.
- When making holes through the upper celling for lights ,ensure the hole is not excessive.
- During second fix, ensure all cable holes are sealed to ensure minimal air leakage.



Plastering

- Do not begin drylining until the blockwork has been adequately sealed.
- When drylining, place a continuous ribbon of adhesive around the outside of the plasterboard (most importantly the bottom), the use of 'dot and dab' should only be used in the centre of the board.
- Apply a continuous ribbon of sealant around any penetrations through the plasterboard (e.g. light switches, service penetrations etc..)
- Traditional Wet Plastering can be used (Float coat and Skim), this may be more expensive but will ensure block work is sealed.



<u>Ioiner</u>

- Ensure that the Loft's frame and hatch is a tight fit.
- It is essential to close the cavity at window/door openings. Use the correct cavity closers for best results., make sure the closer strip is fixed flat and robustly sealed to the wall.
- When fitting flooring do not leave an excessive gap where the flooring meets the wall, only allowing enough room for expansion.
- Before fitting a kitchen, ensure all service penetrations are sealed especially behind kitchen cupboards.





Airtight Testing Staffordshire



If you have any questions or would like to book your test, call/email:

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