Introducing the `Tony tray´

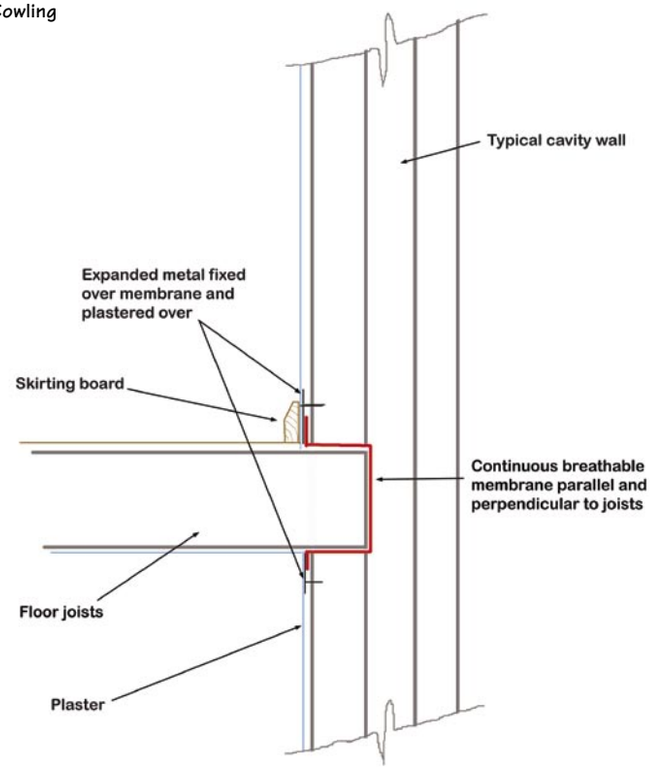
Builder, Tony Cowling, tells us how we can simply solve all those hard-to-fix floor air leaks into the cavity, without having to resort to buying all those expensive cavity boots to go on the end of each joist ...

Once the blockwork walls are up to the necessary height and ready for floor joists, lay out a sheet of air barrier material on top of the blocks on the outside walls, hanging down 50mm inside and 400mm outside (this is for100mm blocks and joists up to 225mm deep. Wider membranes will be needed for thicker blocks or deeper joists. Then go ahead and fit the floor joists in the usual way. After the infil blockes between the joists have been laid, the air barrier must be turned back over this course and rested upon the joists, protruding inside the inner wall face by at least 75mm at floor level. This process should be done to all the outside walls, whether parallel or perpendicular to the floor joists, and any joins taped (because the blockwork in the floor space does not get plastered, and hence sealed). Service ducts can be incorporated at this stage and sealed to the membrane air barrier.

Before plastering takes place expanded metal should be fixed over the edges of the barrier, trapping it against the blockwork both at ceiling level and behind where the skirtings will eventually go. The air barrier would ideally be a breather membrane, but could also just be polyethene.

Using this simple method will ensure airtightness of the whole floor area.

Tony Cowling



Insight

Gideon Richards

Flooring renewables

If we want to make an impact on climate change, then we all need to make some difficult choices. That said, is it obvious what is or isn't a correct choice?

Concrete supporters argue that the material is a great energy storer, and it's true. However, as I will find during the next few months, it is just as good at sucking away huge amounts of energy (heat) where it hasn't been insulated properly and my floor is a classic example of this. My dilemma and choices are, how do I prevent this? I can already hear many of you shouting at me, it's easy, stupid, insulate the floor, and I agree, but my options are relatively limited. I could rip up the concrete, but it's a big and hugely messy job, or I can lay insulation on top of the existing concrete. No contest is there really? Even with this second option, for the lay person, there are still numerous issues to be resolved and questions to be answered - and not just technical ones. For instance, I will loose 50mm - 100mm off the height of the rooms, and what about the height of the doorways? Will choosing this option impact on the saleability of the house? And with the new HIPs coming into force and the energy rating of the building being an integral part of the scheme, will my efforts be recognised by an assessor? Or will the fact that I haven't any proof of what the concrete base is, still penalise me? I know and you know that it's a no brainer; something is better than nothing and such action will make the house more comfortable and save money in the longer term (and carbon!). So why am I even wasting my words on the debate!

Well, for one thing, it illustrates that we all have choices. The government has the ability, through its policies and legislation, to steer us down certain avenues, which can affect our choices. But we see it back-tracking on the 'Merton Rule' in PPS22; watering down the PPS on Climate Change; withholding reports on how a 'heat mechanism' could work, - until a freedom of information order was placed on BERR; and cherrypicking technologies through fiscal, legislative and regulatory measures (although we are lead to believe the government is technology blind). Add all this to the continuous criticism by the House of Commons Environmental Audit Committee and it certainly doesn't inspire confidence that the government is good at making positive choices for climate change. Taking 'strong action now', as required in the first conclusion of The Stern Review, definitely feels lacking.

At a recent meeting with Communities and Local Government (CLG) to discuss the updating of the Domestic Heating and Compliance Guide (DHGC)[1], I got to wondering how strong will the government really be in setting the levels for future revisions to Part L? Will they be able to provide strong leadership and avoid being hijacked by assertive lobby groups? With the UK having 200,000 new homes built per year (with an increasingly low carbon footprint) and 25 million existing homes, where do you think the carbon savings need to come from? Will Yvette Cooper choose to include the 'unnecessary gold plating' and bring in stronger energy efficiency measures for existing buildings?

At the very least, I hope the next Part L revision will focus more attention on reducing CO_2 pollution from existing buildings and this time include the reductions needed to meet the government's full 2020 targets from energy efficiency and on-site or near sited renewables (unless of course there are other schemes afoot, such as, offsetting in third world countries and changing the target downwards!). And will the CERT schemes support the additional requirements of Part L and influence people like me who want to do the right thing, but have so many conflicting issues running around in their heads?

Will the government finally bite the bullet, make the difficult choices and 'act now' and say we 'will do' what it takes to meet or exceed our commitment to the 2020 renewable energy targets, rather than choosing the less palatable back tracking option? With climate change as it is, isn't it a 'no brainer', government? The choice is yours!

1. The Domestic Heating and Compliance Guide (DHGC) which should be out early next year.