

Homebuilding & Renovating

BRITAIN'S NO.1 FOR SELF-BUILDERS AND HOME EXTENDERS

BEGINNER'S GUIDE TO SELF-BUILD

✓ Finding plots

✓ How to get started

✓ Top tips for success

RENOVATION

How to avoid
a money pit!

£67k

A unique new home
created on a budget

Warmer home, lower bills

- Underfloor heating VS radiators
- Choosing insulation
- Latest woodburners
- 15 ways to make your home warmer

COVER STORY

“We created our
dream home
for retirement”

HOW TO...

Restore
interior doors

Design a
smart home

Choose the best
garage door

Get flat
roofs right

Ask the experts

Our team of homebuilding experts provide in-depth answers to your questions. This month, they advise on replacing a warm air heating system, smart home quotes and more



ROB DWIAR
Rob Dwiar is a landscape designer and writer, RHS gold medal winner and 2016 RHS Young Designer finalist. On Twitter: @RobDwiar



TIM PULLEN
Tim is *Homebuilding & Renovating's* expert in sustainable building and energy efficiency



IAN ROCK
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MIKE RANPURA
Mike is the Director of Smart Life AV, a CEDIA Advanced Member Company

REPLACING A WARM AIR HEATING SYSTEM

Q We have planning permission to build a two-storey extension. Our house was built in 1968 and has warm air heating, and we are struggling to work out a heating solution for the extension. We like the warm air system but the boiler is in a cupboard in the hallway and is quite noisy. We have been told it isn't possible to extend the system or relocate the boiler. If we keep the warm air heating in the original house, what are the best options for the extension or should we bite the bullet and put in an entire new heating system?

LIZ NEEDHAM

TIM PULLEN SAYS:

Warm air heating systems were popular in the 1960s and early '70s but fell out of favour as rising fuel costs began to make their inherent inefficiency bite. The unanswered questions in this case are: how old is the boiler and where does the hot water come from? A boiler more than 10 or 12 years old needs replacing and in these systems it was common for hot water to be provided by an immersion heater.

It may be possible to retain the existing system and heat the extension with a new, separate boiler running radiators or underfloor heating and providing hot water to the whole house.

A boiler should not be noisy and the fact that it is means that it is likely to need replacing anyway. Warm air boilers are still manufactured by the likes of Johnson & Starley, but they are more expensive than standard boilers because they are quite rare. If that boiler needs to be replaced, and you need a boiler for the extension then it would make better sense to take out the existing warm air system and install a single new condensing boiler driving radiators throughout the house and extension, and providing hot water.

WANT ADVICE ON YOUR PROJECT?

Whether you are embarking on a self-build, renovation project, extending your home or tackling a DIY task, if you have a query about your project why not ask one of our experts? Email your question to homebuilding@futurenet.com.

You can also visit our website, www.homebuilding.co.uk, to read the latest expert advice, or get social and join us on Facebook, Pinterest, YouTube, Twitter or Instagram.

Finally, come along to one of our eight Homebuilding & Renovating Shows across the UK (www.homebuildingshow.co.uk) and book a free 15-minute consultation with an expert at our dedicated Ask the Experts stand.

CRACKS APPEARING AFTER BUILDING WORK

Q We've redone our master en suite in our old home. As part of the work, the builder knocked down the existing timber walls and rebuilt them to create a larger en suite. One of the new bathroom walls meets a masonry wall (which is an external gable end wall). A small crack has now appeared between the bathroom wall and the old wall; it hasn't impacted the tiling, but I wonder if it's something to worry about? What should we do?

SALLY BARKER

IAN ROCK SAYS:

In older properties, interior walls of timber construction aren't necessarily just partitions with the sole function of dividing rooms. Some can be load-bearing, although any competent builder will know this and should act accordingly. Nonetheless, it's worth asking your builder about this and also checking that there aren't any significant loads located above the removed wall, such as water tanks in lofts.

That aside, small vertical cracks at junctions between internal studwalls and external masonry walls are extremely common and are rarely a cause for concern. The main cause is 'differential movement' between contrasting materials which expand and contract at different rates, probably exacerbated by heat and humidity in bathrooms.

However, with gable end walls there are some other forces at work, such as wind suction. And in older houses there's often a lack of restraint provided from the internal floor and ceiling structures. This is why all new gable end walls must be secured with multiple straps.

It's also very common for older buildings to naturally move in tune with seasonal changes to ground conditions, causing hairline cracks to develop periodically at stress points internally.

Based on your description, however, the cracking is unlikely to be a significant issue. Some form of mastic expansion joint might be advisable to accommodate a limited degree of future movement, perhaps with a decorative cover strip or surface beading to provide a neat cosmetic finish.



It's very common for older buildings to naturally move in tune with seasonal changes

SMART HOME QUOTES: WHAT TO LOOK FOR

Q *We want to create a smart home and are looking to install an AV system in our self-build. We're now at the stage of comparing quotes but the prices vary considerably. How should we choose who to go for? And should we opt for the cheapest?*

MARTIN ROSS

MIKE RANPURA SAYS:

Depending on who you approach the price disparity between quotes may be several thousand pounds. The audio-visual (AV) industry is based on delivering a bespoke service and each company will specify a system for you that they believe best suits your needs. Some companies may provide you with a template quote and offer an optional full line-by-line breakdown quote for a refundable fee if you decide to proceed with them. This is completely normal and it's because quotes take a very long time to create.

Be aware that to complete the project to a high standard a reputable company will price in items such as cooling, proper surge protection, cable management bars, customised shelves for equipment, fire hoods for speakers which are required by law, among other things. This will, of course, have an impact on the overall price and therefore going for the cheapest quote isn't always sensible. Always ask what items are excluded from the quote to ensure you are comparing quotes fairly. If you are self-building, you can request a system design service. **H**