

# A guide to timber frame construction

Robin Lancashire (pictured right) of frameCHECK, part of TRADA Technology's Construction Services team, looks at some of the issues addressed in the latest edition of the industry 'bible' – *Timber Frame Construction*



**W**ith platform timber frame construction continuing to build on an already substantial share of the construction industry, there is a strong demand for up-to-date, accurate information on this modern method of construction.

Since *Timber Frame Construction* was last published by TRADA, there have been many changes in

Building Regulations, client expectations and specifications. Environmental considerations, cost and time saving methods, thermal and acoustic performance have all played their part. This has helped timber frame increase its market share and prominence, as it already delivers many of the solutions needed for the future.

Airtightness detailing is a good example of the changes introduced. Under current Building Regulations,

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airtightness testing of new buildings is now mandatory in England and Wales, unless a high default value is adopted. Future regulations are bound to make performance criteria tighter, therefore placing greater emphasis on detailing and workmanship.

Details for junctions with walls and floors in the past did not consider the importance of achieving an airtight seal. Now, with mandatory airtightness testing, consider the effect that even a small horizontal gap repeated around much of the building perimeter could add up to – and the effect on the overall result. The new book shows a detail to create an airtight barrier at the junction of the ground floor and external wall by using a wider damp proof course.

Another area that can be prone to considerable air leakage is the upper floor junction with an external wall. A new detail shows how the upper and lower external wall air barriers can be linked through the floor zone in an efficient and effective manner.

Acoustic requirements, too, have come under the microscope in recent months, partly because tighter thermal performance has a positive knock-on effect on acoustics, and because some developers will be looking to gain points under the Code for Sustainable Homes, where up to 4.7 points are available for considerably improved acoustic performance. With regard to timber frame, acoustic performance requirements now mean that many voids between internal wall studs and floor joists are filled with insulation to absorb sound.





With timber frame, new acoustic performance requirements mean that many voids between internal wall studs and floor joists are filled with insulation to absorb sound.

Resilient bars and acoustic battens are now familiar products used in separating elements to reduce hard contact and acoustic transfer between dwellings. A wide variety of these products is used in differing combinations to achieve and exceed the statutory requirements. In the fourth edition, drawings, text and tables have been updated to provide information and solutions around these changes. Many main contractors approaching timber frame for the first time are challenged by it. The speed of construction, order of work and different trade disciplines often call for some fast relearning to enable efficient management and delivery of a quality building to their client. TRADA guidance has a firm place in meeting this need and the fourth edition of the publication is much in demand.

A further new guide, based on *Timber Frame Construction*, is to be published by the end of the year. This handy A5-sized

guide from frameCHECK, the site manager's pocket guide to timber frame, will contain a checklist summarising the key tolerances, order of work and considerations to be taken into account during the construction process.

The size and layout of the book is designed to allow users on site to access important information quickly, to confirm details and assist in discussions with others.

Full details of both publications can be viewed at [www.trada.co.uk/Bookshop](http://www.trada.co.uk/Bookshop).

