



DG Timber Solutions Ltd opted for Protect Membranes Ltd to manufacture and supply a range of Construction membranes to complete a bespoke development in Royston, Hertfordshire.

## Bespoke Development, Royston, Hertfordshire



### The Challenge

The design of the house specified an airtight and thermal efficient solution to meet Building Regulations. The brief for DGTS was to provide a highly insulated (U-Values for walls/0.11 and floors/0.13) envelope to the main steel frame structure and concrete beam and block floors to both ground and first floor level. The dwelling floor area was approx 700m<sup>2</sup> broken up into twelve rooms including a wet room, gym, media room and library.





## The Solution

DG Timber Solutions Ltd opted for four specific membranes which when used together would provide all round protection resulting in an exceptionally high standard of air-tightness and vapour control.

The Protect Construction Membranes were chosen for their low emissivity reflective surfaces to enhance thermal performance and for their strength and durability. The membranes were key components for achieving lower U-Values and because of their versatility and flexibility in the whole of the construction design.

**Protect TF 200** high-performance breather membrane was used to protect the final wall construction prior to installation of the cladding.

**Protect VC Foil Ultra** was used for two reasons namely air tightness and to improve thermal performance of the timber framed wall.

**Protect BarriAir** prevented air leakage and therefore helped the structure to achieve its design thermal performance.

Lastly, **Protect VP400 PLUS LR** provided a low vapour resistance barrier resulting in the building being completely airtight.

Clive Darrington

Director for DG Timber Solutions Ltd says;

“DG Timber Solutions chose Protect Membranes as air-tightness and thermal performance was a key requirement on this project. Having worked closely with Protect Membranes over the last 15 years of membrane supply and development, when the client asked for assistance in making the build as airtight as possible, I had no hesitation in contacting Protect Membranes Ltd to ensure we used the best products available for this particular construction method”.

Established alongside the Glidevale range of ventilation and building products, Protect Membranes Ltd has benefitted from over 30 years of innovation, experience and technical expertise.

Protect Construction membranes are available from roofing and building merchants nationwide or for more details of our products visit our website [www.protectmembranes.com](http://www.protectmembranes.com)



# protect

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