



Crendon Timber Frame was appointed to design, supply, and install the full timber superstructure for a significant extension to the Premier Inn at Barry Island. The three-storey development on the north side of the existing hotel has added 21 new bedrooms and was delivered on behalf of the client, Whitbread Group Plc, for Bect Building Contractors Ltd.

This project is a great example of how offsite construction can offer real advantages in terms of programme delivery, structural accuracy, and site safety. With early involvement, Crendon Timber Frame worked closely with the design team to align all technical requirements, while maintaining a practical and efficient approach to delivery and installation.

The extension was built using Crendon's standard open panel Timber Frame system, manufactured in a controlled factory environment at our Ebbw Vale facility. JJI-Joists were used throughout, forming both the Floor and Roof cassette structures. By delivering these components in cassette format, we significantly reduced on-site build time, supported improved health and safety, and allowed for easier coordination between trades.

In line with the project's offsite fire mitigation strategy, Fermacell 12.5mm Gypsum Fireboard was used throughout. This solution not only supported the fire performance outlined in the mitigation report but also contributed to the racking resistance necessary to meet the building's structural requirements.



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Unlike typical domestic builds, this hotel extension required careful consideration of higher and more complex loadings, particularly in communal corridors and areas used for congregation. Our design team responded to these unique demands by engineering the Floor and Roof cassettes to span over multiple rooms, delivering enhanced structural efficiency and installation simplicity.

Crendon's involvement extended from early design coordination through to full installation. As an STA Assure Site Safe Gold Member, we take pride in delivering comprehensive design, supply, and fit solutions across all our engineered timber products.

Our Ebbw Vale design coordinator led the project, supported by in-house estimating, contracts, and site installation teams. Using MiTek Pamir for engineering and Wood Engine for drawing preparation and trade coordination, our team worked in close collaboration with the project architect and structural engineer to address every challenge and incorporate all requested changes seamlessly.

Site logistics required extra attention due to restricted access and limited storage. Crendon's ability to manufacture offsite and deliver on a carefully timed programme helped ensure smooth progression on site, keeping the project moving without delays or congestion.

Thanks to the strong working relationship between Crendon Timber Frame, Bect Building Contractors, and other subcontractors, the entire structural phase was completed within just four weeks and delivered on programme.



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With over five decades of experience, Crendon Timber Engineering continues to support commercial contractors and developers with innovative, offsite-engineered timber solutions. As part of the Wyckham Blackwell Group of Companies, we bring the strength of a national group with the focus and flexibility of local service.

Our Ebbw Vale branch plays a key role in supporting developments across Wales and the South West, backed by our in-house design, manufacturing, and installation teams. Whether it's Floor and Roof cassettes, full Timber Frame structures or bespoke hybrid solutions, Crendon delivers quality, precision and performance.

Please contact our team to discuss your next project:

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Connall O'Donnell, Bect Building Contractors,
Project Manager

"The Crendon team have successfully completed the 3-storey structure and roof for this hotel extension here in Barry. From early design collaboration, workshop pre-start with their knowledgeable team through to meticulously planned deliveries and installation. The project was challenging in terms of the tight programme, very small site footprint and installing a bolt on timber frame structure onto a live timber frame hotel in a safe manner, but the careful planning and consideration of these factors allowed us to install and complete on time. Our thanks to the whole team's efforts here. We look forward to working with Crendon again in the near future."

