CASE STUDY

TeleBeam
the unique loft conversion & flooring system

Client Name:	**Telebeam**
Location:	**Devizes, UK**
Product Sector:	**Structures**
BBA Service:	**Agrément Certificate**

"We sought to gain BBA certification because they are highly regarded for impartial assessments and rigorous processes. The certification reassures our customers and building control that the product is safe, compliant and fit-for-purpose.."

PROJECT OVERVIEW

BBA Certification awarded for patented loft conversion system.

TeleBeam, a UK manufacturer of telescopic lightweight aluminium beams for loft conversations and flooring systems since 2004, opted to invest in third party certification with the British Board of Agrément (BBA). The business wanted to seek the expert advice of the BBA team and ensure the product continues to align with new legislation and fire safety standards. As a result, TeleBeam obtained a BBA Agrément certification for their unique lightweight aluminium beam system.

Digby Rowsell, Founder of TeleBeam, who has a background in architecture and building infrastructure and is experienced in designing loft conversions, was fully aware of some of the issues associated with the long length and heavy weight beams for loft conversions. Digby saw a gap in the market for a lightweight and telescopic aluminium beam, started the early prototypes for the designs in 2005, and patented and registered the product.

TeleBeam's telescopic technology is designed primarily for modern trussed roofs but also allowing post 1960's houses to have loft conversions with minimum disruption. The beams are made of lightweight aluminium and are telescopic with extruded aluminium sections. The non-invasive technology incorporates floor and roof support in one single bespoke solution. The TeleBeam solution can also be used in modern timber-framed buildings, as it is designed to spread the load over the whole structure.

CASE STUDY

The system can be designed bespoke for each project and comes in a wide range of spans and depths. This variety of sections offers solutions for most buildings.

Telebeam wanted to ensure that the product met with current and future fire safety standards, along with any new legislation following the Building Safety Act. Many larger projects now require certification in order to be specified. As part of Telebeam's commitment to certification for the system, the BBA Agrément certificate means they enter into a maintenance agreement. As part of this, the product is reviewed and renewed every three years with ongoing surveillance of the product's manufacturing process to further ensure consistency in production.

The Testing & Certification Process

Early testing of the product began with work at Southampton University, that included calculations and checks to test the overall performance with structural engineers. There were few places in the UK large enough to test the performance of the product for fire safety and fire resistance.

Aaron Lye, Associate Director of Telebeam commented, *"The BBA were very thorough in their testing and auditing of the manufacturing processes, where they looked at the fabrication, extrusion and traceability processes to ensure consistency and quality. There were lots of different stages and timescales involved throughout a reassuringly the lengthy testing process to ensure the relevant data was captured for multi-purpose use and the different dimensions required to accommodate different building sizes and types."*

Conclusion

Aaron Lye further added, "*we sought to gain BBA certification because they are highly regarded for impartial assessments and rigorous processes. The certification reassures our customers and building control that the product is safe, compliant and fit-for-purpose. Due to changing standards and tighter regulations, we often have enquiries from architects and specifiers for test reports and accredited certification, so having a recognised industry third party certification that we can show helps save a lot of time."*

The BBA Agrément Certificate clearly demonstrates that the TeleBeam solution meets UK regulations and has been assessed to provide durability and meets with fire safety standards, provided it has been installed and maintained in accordance with the details contained in the certificate. This enables a trusted and compliant product that can be safely and confidently specified by contractors for use.