

# CASE STUDY



## CORNISH HOUSES, CAERPHILLY C.B.C.

This project, on behalf of Caerphilly County Borough Council, consists of various phases. These phases covering numerous housing estates are being rolled out over a number of years.

These particular PRC house types with a medium pitched, hipped roof are designated defective and are renowned for problems associated with severe horizontal and vertical cracking of the PRC columns, cracking of the horizontal PC panels and the first floor ring beams and for high rates of carbonation.

In close collaboration with the system installers, Joyner PA (Cymru) Ltd, the WBS External Wall Insulation System was used on the outside fabric of the building. This system incorporated 60mm Phenolic insulation, in addition to 10mm EPS insulation which was used between the concrete columns and was finished using the WBS Brick Slips in 'Miramar' and 'Estela'.

The External Wall Insulation System used not only improved the insulation u-values from 2.04 W/m<sup>2</sup>K to just 0.31 W/m<sup>2</sup>K, but more importantly will help to reduce heating bills and carbon emissions in the future.

In addition, because all WBS systems are designed to be strong and weatherproof, water ingress and dampness were also eradicated.

### WBS EWI Systems...

- A cost effective alternative to demolition & rebuild
- Reduce unnecessary heat loss & condensation
- Protect and prolong the external fabric of the property
- Offer high impact and weather resistance
- Low maintenance
- Minimise inhabitant disruption
- Does not reduce internal living space
- 30 year life expectancy
- Environmentally friendly
- BBA certified

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