The BIG Energy Upgrade Kirklees Neighbourhood Housing Perspective

Dave Woodhead, Contracts Manager



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Richmond Flats





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Background

- One of three 1960s high-rise flats in the centre of Huddersfield.
- No investment for 30 years
- Regeneration area considered for demolition
- Decision to demolish the other two blocks but retain Richmond





Issues

- Limited space bed-sits with high turnover
- No showers
- All electric properties with high fuel bills
- Town centre location security
- Noise and traffic pollution
- Low demand from general needs





Richmond Flats - Kitchen





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Richmond Flats - Balcony







Activities Undertaken

- Full refurbishment to modern standards kitchens, bathrooms, lifts, structural work, acoustic insulation, CCTV, WiFi
- ERDF funding to improve thermal efficiency using 'Passivhaus' principles
- Emphasis on the fabric of the building (air-tightness and insulation) rather than on renewable technologies





Works

- PV to the communal areas (lights, alarms and lifts)
- Solid wall insulation to improve the UV value of the flats to current Building Regulations (0.3 W/m²k)
- Mechanical Heat Recovery Ventilation essential due to the air tightness achieved.
- Roof insulation
- Triple glazing not funded by ERDF, but essential to deliver the principles of 'Passivhaus'





Outcomes

- PV to the communal areas (no service charge to tenants.)
- Air tightness test within optimum range 3-5 m³/(h.m²)
- Space and water heating less than £200 per annum.
- Carbon saving (figures still be to be finalised)
- High demand for the flats
- One of the tenants was employed to work on the project and now has a permanent job as well as a lovely home
- Jobs secured in the region at a critical time for the local economy





Cost of Passivhaus

- £90k thermal render
- £50k triple glazing (additional over double)
- £42k Heat recovery/ventilation
- £5k Roof insulation
- £120k Photo-voltaic
- £5k Air-gap sealing





Harold Wilson Court







Harold Wilson Court Kitchen





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Harold Wilson Court PV







Lessons Learnt

- Need to be innovative when considering options for improving existing stock.
- Insulation should be the first option when tackling fuel poverty
- Tenant focus at design stage needs to look good and meet aspirations
- People not property



