

Energiesprong Retrofit



We have worked with Moat Homes and Engie on a pilot Energiesprong project, retrofitting five of Moat's homes in Maldon, Essex.

Originating in the Netherlands, Energiesprong is a fully integrated, zero-carbon approach to delivering deep retrofit 'whole-house' refurbishments with guaranteed energy performance levels.

The homes in Maldon are in a highly exposed rural location with coastline nearby. This meant that the residents were previously paying very high energy bills of up to £2k a year, with some resorting to trying to keep just a single room warm in the winter. A super insulated shell was wrapped around the existing homes to dramatically reduce heat loss and reduce noise from the road. This led to comfortably warm, near net zero energy homes which has made a significant difference to residents' lives and energy bills.

Client
Moat Homes

Contractor
Engie

Contract Value
£640,000

Duration
7 months

Address
Mundon Road, Maldon,
CM9 5JU



Uninsulated voids under the houses' flooring worsened the properties' heat loss. This was addressed by installing bonded polybead insulation below the floors of the pilot properties. Additionally, insulated wall panels were installed, extending below the damp proof course, while existing windows were replaced with triple glazed windows which were slightly larger than the original windows to let in more light.

Air Source Heat Pumps were used to provide an energy-efficient alternative to traditional heating systems, providing significant reductions in heating costs and environmental emissions. Photo-voltaic panels were also installed to provide an additional energy source, with unused power directed to charge on-site batteries where it was stored for later use and excess electricity directed towards the National Grid. Mechanical Ventilation and Heat Recovery units were installed to reduce internal humidity levels and improve indoor air quality.

An additional challenge was posed by the local planning department's stipulation that the external features of the buildings had to remain in keeping with their neighbouring properties and that the existing aesthetics of the pilot properties had to be retained. To achieve this, the external insulation panels (which formed the shell that was wrapped around the building) were made with an acrylic brick-effect and colour-matched to the brickwork they covered.

Martin Arnold acted as the Employers Agent for the programme, providing key procurement advice to our Client and working closely with the Contractor to develop the design at the latter stages of the process to ensure that the deliverables were in line with the Client's goals and objectives. We closely monitored the progress and quality of the works on site, managing all stakeholder expectations and providing regular cost reporting in our role as Cost Consultant.

Services Provided

Asset Management

Cost Planning & Cost Management

Employer's Agent

Environmental

Retrofit Specialists