



May 2024

CASE STUDY

AICO PARTNER WITH
SOUTHEND-ON-SEA COUNCIL ON
RETROFIT SHOW HOME



TOGETHER WITH



Southend-on-Sea
City Council

AICO HAS HAD A LONGSTANDING RELATIONSHIP WITH SOUTHEND-ON-SEA CITY COUNCIL FOR MANY YEARS, SUPPORTING THE INSTALLATION OF THEIR FIRE AND CARBON MONOXIDE (CO) ALARM SYSTEMS.

CONTENTS

01

Expanding Home Life Safety Beyond Fire Protection

02

Showcasing Exemplary Practices Through a Model Home

03

Revolutionising Home Environment Management with HomeLINK App



EXPANDING HOME LIFE SAFETY BEYOND FIRE PROTECTION

Southend has pledged to reach net zero emissions by 2030 and is now launching a proactive retrofit program for its 6,000 homes, which currently constitute 46% of the organisation's carbon footprint.

Supported by Ben Harrsion, a finalist for Aico's Rising Star award in their 2024 Community Awards, the programme is currently implementing a wide range of projects from internal training and data improvement, to insulation projects including Social Housing Decarbonisation Fund (SHDF) wave 2.1.

The standout initiative within this programme is the retrofit show home which opened in November 2023. By partnering with several council departments and obtaining support from the DEFRA-funded 'Catchment to Coast' project, the housing team led a comprehensive retrofit of a solid wall 1950s semi-detached home which included:

- External wall and loft insulation
- Triple glazing
- De-centralised mechanical heat recovery ventilation
- Air source heat pump and electrical appliances
- Solar panels with a 6kW battery
- Grey water recycling Hydraloop that recycles shower water for toilet flushing
- Sustainable drainage and Hydrorocks to reduce the risk of flooding
- Low maintenance bio-diverse and drought tolerant garden planting
- Aico's 3000 Series Fire and Carbon Monoxide Alarms and, HomeLINK Environmental Sensors

The project stands out for its holistic approach to sustainability, which includes using recycled materials, local products, and future-proofing the home from overheating and drought risks.

SHOWCASING EXEMPLARY PRACTICES THROUGH A MODEL HOME

Hosting 250 visitors, the show home serves as an educational resource for the entire community and enables the council to showcase exemplary practices. The test-and-learn approach to the show home also allows the project to inform which measures to roll out to the wider programme.

All retrofitting carried out in the show home adhered to PAS 2035 and will undergo ongoing assessment with Aico's HomeLINK Environmental Sensors, which were used both prior to and after the retrofit to ensure that there are no unintended consequences, and that indoor air quality is maintained moving forward.

Southend-on-Sea Council's show home is fully equipped with a Category LD1 fire and CO system using Aico's Grade D1 3000 Series multi-sensors, future-proofing it for any revisions to British Standard 5839-6. By using Aico's HomeLINK Gateway and Environmental Sensors, temperature, humidity, and CO2 levels can be monitored, giving insight into issues such as damp and mould, indoor air quality, fuel poverty and void properties.



This information is seamlessly transmitted to the online HomeLINK Portal, so that Southend Council and its property management company, South Essex Homes, can see in real-time exactly how the house is functioning and can intervene before any issues occur.



The retrofit show home involved taking a holistic approach to sustainable housing which meant that we installed a wide range of interventions. The project is designed to test the latest innovations to inform us on where we should focus our efforts in the wider retrofit programme. AICOs environmental sensors are crucial for understanding the impact of these measures and ensuring that we continue to evaluate the performance of the home beyond installation.


Ben Harrison, Housing Sustainability Officer,
Southend-on-Sea City Council



REVOLUTIONISING HOME ENVIRONMENT MANAGEMENT WITH HOMELINK APP

The utilisation of Aico's HomeLINK App for Residents has played a significant part in this project, enabling residents to take control of their own environment and take a proactive approach to their health and well-being. The app facilitates direct communication between Southend Council, South Essex Homes, and the tenant, through its messaging feature.





In addition, Southend Council and South Essex Homes have collaborated with Aico on Smart Meter Integration, to offer the tenant and council an additional dimension to the app.

This system has garnered positive feedback and is not only being implemented in SHDF trials and void properties equipped with Environmental Sensors, but has also prompted a Category LD2 upgrade programme across all of Southend Council's properties. This initiative underscores the commitment to prioritise tenant safety, and compliance for both the council and South Essex Homes.



Following on from the success of our show home we have been very impressed with the information that we are receiving, we are now extending this to all our SHDF homes, as we now have the ability to monitor and manage our stock by using the data on the portal. We are intending on rolling this out to our housing stock over the coming months in particular the higher risk properties bringing them up to LD2 standard.

Steve Morl, Mechanical & Electrical Engineer,
South Essex Homes



Southend Council's retrofit programme has enjoyed remarkable success, achieving such acclaim that it has been honoured with the following awards and nominations:

- Winner of ACES Retrofit Housing Award 2023
- Highly Commended at Essex Housing Awards' 2023 (Retrofit)
- Shortlisted for RICS' Eastern Region
- Shortlisted for MJ Awards' Innovation in Delivering Sustainability and Social Value
- Shortlisted in the Unlock Net Zero Awards



The Retrofit Housing project that Southend council and SEH have been tirelessly working on, has really yielded some great insights across all aspects of the property, a real success and credit to them working to BS 5839-6 Category LD1 and the forward thinking use of our Environment Sensors has future proofed this property for the eventual tenants and will provide them with great insights as to how the property environment is working and also how efficient Southend Council have made the property. Maintaining their sustainability and compliance drive, Southend Council and SEH are now rolling this process out to all the properties involved in their SHDF project and will be installing Aico Gateways in all properties across the next few years.

Matt Golding, Relationship Manager, Aico



This partnership, and the implementation of Aico's innovative 3000 Series, HomeLINK Gateway and Environmental Sensors has allowed Southend-on-Sea council to demonstrate its commitment to prioritising safety in residential living.

Learn more about Aico's innovative product range here - www.aico.co.uk/products