



April 2024

CASE STUDY

MID DEVON DISTRICT COUNCIL
FOSTER SUSTAINABLE HOUSING
DEVELOPMENT IN CULLOMPTON



TOGETHER WITH



MID DEVON DISTRICT
COUNCIL HAVE COMMITTED
TO SUSTAINABLE
DEVELOPMENT, WITH AICO
AND ZED PODS

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Mid Devon District Council's commitment to sustainable development took a significant leap forward with the recent completion of the St. Andrews House development in Cullompton. Partnering with European market leader in home life safety, Aico, and ZED PODS, a leading innovator in eco-friendly modular housing, the council delivered a groundbreaking project that sets new standards for social housing in the South West region. Mid Devon Council, with Aico, integrated advanced Internet of Things (IoT) technology to better monitor environmental data from within the homes to improve living conditions for residents.

BUILDING TOMORROW

The St. Andrews House development represents a pivotal moment in Mid Devon's efforts to address the pressing need for affordable, sustainable housing. Located in Cullompton, on a site previously occupied by garages and car parking, the project aimed to provide modern, energy-efficient homes while minimising the environmental impact of construction and operation. ZED PODS' expertise in modular construction and sustainable design made them the ideal partner to work on the development of 6 zero operational carbon apartment homes. Each house has an estimated carbon saving of 10 tonnes per year, and estimated water saving of 107,690 litres per year, as stated on [ZED PODS' website](#).

By embracing innovative approaches to construction and home life safety technology, the council are successfully delivering eco-friendly properties that meet the needs of both residents and the environment. The integration of Aico's fire and carbon monoxide (CO) alarms and HomeLINK IoT technology not only enhances the safety and comfort of residents, but also sets a new standard for sustainable housing in the South West region.

ENHANCING FIRE, CO, AND ENVIRONMENTAL PROTECTION

The fire and CO alarm systems throughout St. Andrews House utilise Aico's Ei3028 Multi-Sensor Fire and Carbon Monoxide Alarms in kitchens, Ei3016 Optical Smoke Alarms in hallways, and Environmental Sensors sited in the kitchen, living room and bathroom.



Aico's HomeLINK Gateway connects with 3000 Series fire and CO alarms with the Ei3000MRF SmartLINK Module installed, and HomeLINK Environmental Sensors to complete the HomeLINK Connected Home Solution. Data about alarm systems and property environment is transmitted to the online HomeLINK Portal.

Aico's Ei1025 Environmental Sensors monitor temperature, humidity and indoor air quality. This information is invaluable to councils such as Mid Devon, as the data can be used to monitor environmental conditions, make more informed maintenance decisions, and tackle issues such as damp and mould, without even visiting the property.

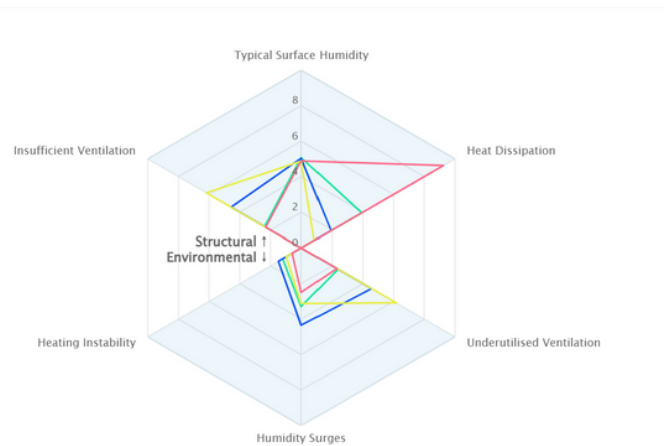


ADDRESSING DAMP AND MOULD ISSUES

In their English Housing Survey, the British Government reported that in 2022, 4% of dwellings had a problem with damp. A new amendment to the Social Housing Regulation Bill introduced Awaab's Law in the wake of the tragic passing of two-year-old Awaab Ishak, caused by damp and mould in his home. Awaab's Law will force social landlords to fix damp and mould within strict time limits, and so it is important the housing associations and social landlords have the technology available to combat these issues more efficiently.

Every day, Aico record over 41,000 mould insights with their HomeLINK technology. According to HomeLINK data, the most common room for damp and mould risk is a bathroom, with living rooms being the lowest risk. The 'Signature of Mould' insight on the portal gives a detailed vision of the most likely causes on mould in specific rooms within a property, by displaying a graph covering certain heat, ventilation and humidity factors – such as heating

instability and natural ventilation deficit. Additionally, temperature data will assist the council in identifying households potentially living in fuel poverty and giving them the power to see where energy consumption can be reduced.



The HomeLINK portal also allows Mid Devon to monitor the fire safety compliance of St. Andrews House, notifying them if an alarm head has been removed from its base, if there has been an activation, mains absence, fault, or if an alarm has reached its replacement date.

HIGHLIGHTING KEY BENEFITS



Working alongside Steve Bulley, Aico Regional Specification Manager for the South West region, has been an absolute pleasure and a cornerstone of our success in delivering the St. Andrews House development. Steve's dedication, expertise, and collaborative spirit were pivotal in ensuring the seamless integration of Aico sensors throughout the property, enhancing safety and security for our residents. What truly sets Steve apart is his ability to build strong, trusting relationships. My close working relationship with Steve was built on mutual respect, open communication, and a shared commitment to excellence. His professionalism and proactive approach ensured that our goals aligned seamlessly, and his guidance throughout the project was invaluable.

*Mike Lowman, Operations Manager
Building Services, Mid Devon District
Council*



If Mid Devon choose to, they also have the option to rollout the HomeLINK App for Residents to empower their tenants to take control of their home's health. The mobile app presents the collected data into a more user-friendly interface which can still be broken down into a view of each room. 'Linky', the app's house mascot, gives the user a clear idea of their home's health with its changing colours (green, orange and red) and facial expressions. The app will remind the resident when an alarm test is due and give them tips on how to improve their home's health according to the existing data. Giving residents access to this information keeps them engaged and proactive in improving their home's environment.



Energy Efficiency Improvements

The deployment of Aico's HomeLINK Gateway and Environmental Sensors will result in the ability to monitor and potentially reduce energy consumption within the homes, equating to lower energy bills.



Improved Indoor Environmental Quality

Environmental Sensors will help to monitor and maintain optimal indoor conditions, enhancing the health and well-being of residents.



Net-Zero Progress

Mid Devon Council will make substantial strides towards achieving net-zero targets. The success of this pilot project will lay the foundation for future retrofit initiatives in the region.

The council can leverage data on the HomeLINK portal to make informed decisions regarding energy efficiency measures, and therefore reducing time spent on the decisions made without appropriate information. This data-driven approach allowed for continuous improvements and adjustments, ensuring the long-term sustainability of the retrofit properties.

The development of St. Andrews House in Cullompton stands as a testament to the power of collaboration and innovation in addressing the challenges of affordable housing and environmental sustainability. Through strategic partnerships with ZED PODS and Aico, Mid Devon District Council has set a precedent for future social housing projects, emphasising the importance of eco-friendly design and advanced safety technology in creating thriving communities.



It has been an absolute pleasure working alongside Mike Lowman at Mid Devon Council to deliver the Aico detection system throughout the eco build development, St. Andrews House. Mike's dedication to creating sustainable, safe, and thriving communities is truly commendable, and his forward-thinking approach to social housing has been inspiring.

From the outset, Mike's passion for improving the lives of residents shone through in every decision we made together. His deep understanding of the needs of our community, coupled with his vision for innovation, guided our collaboration every step of the way. Together, we navigated the complexities of the project with ease, ensuring that the integration of Aico detection systems met the highest standards of safety and efficiency.

Steve Bulley, Regional Specification Manager, Aico



Find more about Aico's HomeLINK
Connected Home Solution at
www.aico.co.uk/homelink