



CARDO

Retrofit Case Study

PROJECT

CLIENT

LOCATION

SECTOR

SCOPE

VALUE

TIMESCALE

OVERVIEW

Ateb

Solva, Pembrokeshire

Local Authority Housing

Comprehensive Retrofit – 22 Terraced Bungalows

£666,000

Jan-June 2025



CARDO



The Challenge

This scheme was delivered in a live rural coastal setting, predominantly occupied by elderly residents. From the outset, the priority was wellbeing, comfort, and minimising disruption.

A Resident-First Approach

Each home required careful planning before works commenced. We undertook tailored engagement to ensure residents understood the programme, felt reassured about access, and were supported throughout.

Key elements included:

- Pre-start home visits and clear explanation of works
- Sequencing measures to avoid unnecessary repeat access
- Consistent site supervision and daily communication
- Flexibility where individual needs or vulnerabilities were identified



The Solution

The exposed coastal environment and age profile of residents required additional sensitivity in delivery. Our teams adapted installation methods and timing to reduce disturbance while maintaining programme momentum.

Once engagement and sequencing were agreed, we delivered whole-house retrofit measures including renewable energy, low-carbon heating, and targeted fabric upgrades, including:

- Solar PV panels
- Air source heat pumps
- Loft insulation upgrades
- Internal and external wall insulation

Experienced EWI operatives were directly employed to maintain quality and control in a remote location where specialist subcontractor availability was limited. This ensured technical consistency and programme stability.



The Results

Residents commented:

"What a difference – temperature increased by 5 degrees."

"The house is a lot warmer at night and looks great."

"The air quality is definitely better."

Outcome	Key Result
Programme Delivery	Successful execution of this large-scale retrofit, achieving project milestones and demonstrating reliable partnership over its five-month duration.
Enhanced Energy Efficiency	Homes now heat faster and retain warmth longer. SAP ratings improved by 15–25 points, typically raising homes from D/E/F to C. Target U-values achieved ~0.25 W/m ² K (walls) and 0.13 W/m ² K (lofts).
Resident Satisfaction	Residents reported heating cost reductions of 20–35%, depending on property condition and usage patterns. Tenants consistently praised warmer homes, improved temperature stability, and better indoor air quality.
Value Delivered	Successful management of the £666,000 budget , demonstrating cost-effective, large-scale delivery for the local authority.