



Case Study:
Stonehill Road, Southend-on-Sea

Innovation

Fuelled.

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Client	South Essex Homes
Architect	Fuse Architects
Contractor	MSPS
Installer	BTS
Project	Refurb
System	K Systems E (EPS), Silicone Thin Coat Render (TC 15)

Background

The Stonehill Road refurbishment project, commissioned by Morgan Sindall Property Solutions for Southend-on-Sea City Council, was delivered by BTS Fabrications with K Systems as the system designer.

The project encompassed **104 semi-detached and terraced properties**, each with **non-traditional construction** types including **no-fines concrete, Unity,** and **Laing Easi-Form**. These diverse property types, required close collaboration with the K Systems technical team to develop **bespoke detailing solutions** that addressed junctions, interfaces, and non-standard features.

All properties remained fully occupied throughout the 38-week programme. **Resident liaison**

played a central role, with the project team paying particular attention to managing expectations around noise, access, and visual finishes.

Careful planning and execution were therefore essential to **minimise disruption, maintain resident comfort, and ensure satisfaction**. A Site Application Specialist from K Systems made regular visits, helping to maintain consistently high standards of workmanship.

The large-scale nature of the project introduced **logistical complexity**, requiring robust coordination across material supply, build sequencing, and resident communications.

Thanks to K Systems' bespoke EWI design and hands-on project

leadership, more than 100 occupied homes on Stonehill Road have now been **thermally upgraded, made safer, and visually rejuvenated**.



Low-rise
Residential



Refurb



2 Storeys

Our Service

With over 100 properties and multiple construction archetypes, the project required **precise demand planning** and **close collaboration**. Weekly coordination calls between K Systems and BTS ensured that procurement, delivery, and on-site usage were **effectively managed**.

Budget constraints added another dimension to the project. The original 110mm mineral wool specification was deemed unaffordable, so K Systems worked with the

delivery team to re-design the system. The specified EPS solution delivered **cost efficiency** while maintaining thermal performance and **regulatory compliance**.

Residents selected from three **bespoke Silicone TC 15 Thin Coat render colours**, which required **careful logistics** and **stock management**. The need to accommodate multiple finishes, without disrupting the installation, introduced a layer of complexity

in materials management. Deliveries had to be tightly controlled and scheduled based on each resident's selection.

Ultimately, the success of the scheme was underpinned by **rigorous material management, weekly planning sessions, and bespoke technical detailing** — demonstrating the value of K Systems' coordinated and technically responsive delivery model.



Mark Keen, Managing Director, BTS said:

“This extensive refurbishment project was a technically challenging scheme, with a significant level of non-standard detailing. The commitment and collaboration shown by the entire K Systems team (from Technical and Sales to Customer Experience), ensured the project ran smoothly from start to finish. Weekly team meetings were held and the K Systems’ Site Application Specialist made regular site visits, helping to maintain consistently high standards of workmanship and system performance. Their proactive approach, clear communication, and expert technical guidance were invaluable in delivering a successful outcome.”

Technical Project Details

Designing **effective fire breaks** was a key priority, with **vertical barriers** required at every party wall and adaptations at roof-line closures.

Extended verges were introduced to accommodate these closures, with approvals obtained from the **Solid Wall Insulation Guarantee Agency (SWIGA) to ensure compliance.**

Some homes required additional detailing at complex roof abutments and unique bay-window reveals, requiring further levels of **technical precision.** The K Systems technical team worked closely with BTS and Morgan Sindall to model

all non-standard junctions and **obtain approvals from both SWIGA and Building Control.**

The final solution specified a **90mm EPS system (K Systems E)** with **Silicone TC 15 Thin Coat render** in three resident-selected colours, replacing the original mineral fibre design. This delivered a **14% cost saving** and achieved the required thermal performance, with a **U-value of 0.29W/m²K.**

EPS insulation was chosen for its lower cost, ease of cutting, and lighter weight, which **improved**

installation speed, reduced site labour requirements, and **minimised waste.** Fire integrity was maintained through targeted use of **mineral wool at critical locations** including party walls, abutments, and window openings.

The Stonehill Road project successfully met all technical performance targets, achieving a **U-value of 0.29W/m²K** while maintaining compliance. In addition, the scheme has delivered a **long-term improvement in both safety and appearance for the community.**

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