



**Casestudy:**  
Cartcraigs, Glasgow

**Innovation**

**Fuelled.**

## Casestudy: Cartcraigs, Glasgow



Client	Wheatley Group
Architect	Mast Architects – Glasgow
Contractor	CCG – Glasgow
Installer	PWM – Glasgow
Project	Refurb
System	K Systems M (Mineral Wool), Silicone TC15 Render

### Background

The Cartcraigs high-rise project located in the heart of Southside Glasgow was a rewarding project to be involved with allowing real transformation and change in several key areas.

The tower block was originally **built in the 1960's** with a grey cladding finish but due to decades of inclement Scottish weather, the building was **weather-beaten, tired and dated**. With its **stature and prominent location**, the building should have been an attractive living option in Southside Glasgow but instead was **unappealing** to potential residents, and in **desperate need of modernisation**.

Rising fuel prices and the current **poor thermal performance** of the

tower block, meant it was extremely difficult and expensive for tenants to heat their flats – so much so that many occupants were considered in a state of **fuel poverty**.

In collaboration with **MAST Architects** and **our approved installer PWM**, we designed a façade solution that not only significantly **improved the thermal performance** of the building, but **transformed Cartcraigs aesthetically** creating a modern, fit-for-purpose living space.

A complete revamp which has given the building a new lease of life and delivered **safe, modern and energy efficient homes** for the residents.



High-rise Residential



Refurb & Retrofit



17 Storeys

### Our Service

Due to the scale of this project, the congested location and small site footprint, we had to work closely with our approved installer, main contractor, and local authority to ensure **minimum disruption to both the residents of Cartcraigs and residents of the surrounding area**.

Delivery routes and schedules were agreed to ensure consideration for local residents throughout the project.

As part of our **service commitment**, our **Site Application Specialists**

carried out **regular site visits** to ensure our system was installed to the highest standard and in line with our specification.

They were available throughout the duration of the project to provide **technical guidance, installation support** and ensure the **highest levels of quality**. This allowed the K Systems Technical & Logistics Teams to support the schedule of the project with timely delivery of materials to site and ensuring there were no delays during the installation and inspection processes.

**“In conjunction with the Architects we approached K Systems to design a system to comply with fire regulations and offer a solution to make the look of the building more aesthetically pleasing along with making it a point of interest within the Southside area. Great site support was provided by Ally along with Technical/Service support from Jim and Martin. The team at PWM look forward to working on our next project with K Systems.”**

Kevin Fox, PWM Projects Manager

“K Systems provided a great overall package from the inception of this project with design advice, through the technical stages, with assistance through specification and then with the provision of weekly reports and checks once the project got on site. Cartcraigs, being a high-rise block needed monitoring and adherence to the project specification, and having the K Systems team providing regular on site checks gave the design team the assurance that all requirements were being met.”

David Locke, Mast Architects

## Technical Project Details

The original façade incorporated a 25mm cavity with reinforced concrete inner leaf shaped panels, which could be seen beneath the then grey façade panelling. Wheatley Group, the client, had requested a clean, crisp, and smooth finish that would also comply with **Scottish Fire Regulations**.

After numerous design meetings taking into consideration client requirements, budgets, and timeframes, we put forward our industry-proven **K Systems M Silicone EWI system**. The system was designed using **160mm non-combustible mineral wool insulation to meet the 0.18 (W/m<sup>2</sup>K) U-value requirement**, making it the perfect choice for the refurbishment to combat the heating issues faced by residents and futureproof the building as a viable living space for years to come.

Bespoke technical detailing and rigorous adherence to our high-rise policy ensured a high performing system with an **A2 non-combustible fire rating**, complying with all safety regulations for buildings over 11m in Scotland. The **160mm insulated grey and white façade** delivered a really attractive high-rise that will now better withstand the Scottish elements.

The finish used was our high-performance thin coat render, **Silicone TC15**. The contemporary colours of grey and white were chosen from our wide range of colours which visually transformed the 17-storey building. Our polymer rich Silicone TC15 allows **ease of application**, and its hydrophobic properties will provide a clean, crisp and **low-maintenance finish** for years to come.

Our specification included **bespoke detailing** to provide solutions for Cartcraig's individual retrofit design challenges. We also commissioned **wind load calculations** and **fixing pull-out tests** to determine optimum fixing patterns to anchor the EWI system to the different substrates. Ultimately, a **safe, thermally efficient and visually appealing** result was achieved.



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