



## Case Study

### Integrated Engineering Solution for Jersey Supermarket Retailer

#### Services: Turnkey Refrigeration and Electrical Design

##### Project Overview

Grocery food retailer Alliance required a fast-track turnkey refrigeration solution and associated electrical system design for its new store in St. Helier, Jersey.

As the market leader in the UK refrigeration sector, Space Engineering Services leveraged its considerable experience in the retail sector to deliver a cost-effective and supremely efficient solution perfectly suited to this challenging project.

A turnkey refrigeration solution comprising of plant design, manufacturing, installation and commissioning was required, alongside a customised electrical design to deliver a coordinated solution within a short timeframe.



**space.**  
engineering services

##### Project Challenges

Part of Alliance's brief included a fast delivery of the project. This meant we had short leads times for manufacturing the refrigeration system and display cases, requiring us to carefully manage this project to ensure a timely solution.

The design of the store posed several challenges too. The building's interior has angular walls, restricting the store layout and in particular where the display cases and coldrooms could be placed. The building's construction also made the technical design aspects, including the service runs, particularly complex.

The Alliance store in St. Helier is located in an urbanised, limited access area, which resulted in crane, noise and delivery restrictions for plant and display case deliveries. This required a customised delivery solution with precision planning.

"We chose Space Engineering Services after seeing first-hand their success with previous projects for Alliance at Sand Street and Walker House in St Helier. We were confident that Space Engineering would be able to handle the challenges and complexities of this project, and we weren't wrong. Their attention to detail was second to none, and despite the very stringent programme and noise requirements for the plant, they successfully manufactured and installed everything on time so that the store opened on schedule."

**Lee De La Mare, Commercial Director, Alliance**

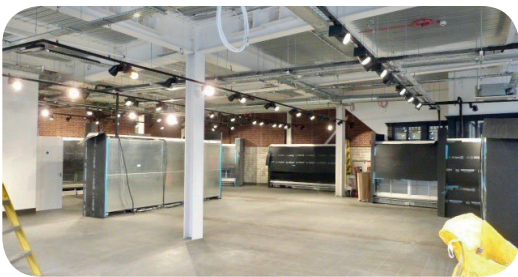
**Understand. Innovate. Deliver.**

For further information on how Space Engineering Services can help your business, please contact:

Tel +44 (0) 117 977 8833

Email [enquiries@space-engineering.co.uk](mailto:enquiries@space-engineering.co.uk)

Visit [www.space-engineering.co.uk](http://www.space-engineering.co.uk)



## Our Solution

Retail is where it all began for Space Engineering Services. Throughout our 30-year history, we've provided technical solutions to hundreds of supermarket stores, all with differing requirements, giving us a wealth of expertise that is unrivalled.

The Alliance store project required a high level of technical and design expertise on several fronts. Our Design team created a customised refrigeration and electrical design which overcame the complexity of the service runs and met the specific noise and layout challenges of the project.

At the core of our solution was a customised refrigeration system using refrigerant R448a. We manufactured and installed a Classic Mini refrigeration unit on the roof of the store which was fully compliant with the dimensional restrictions.

A bespoke frozen food and chiller coldroom suite was also manufactured and installed, custom-built to accommodate the existing building support columns and very limited stairwell access. Refrigerated display cases were supplied from our extensive product portfolio for meat, dairy, produce, beers, wines and spirits, and frozen food applications.

To ensure timely and efficient delivery of all refrigeration equipment without contravening the access and crane restrictions due to the store's location, we organised an early morning road closure to facilitate the roof mounting of the plant using a crane, and a specially constructed ramp to access the store from street level.



## Benefits

The Classic Mini is a compact, fully configurable HFC plant solution, ideal for the retail environment thanks to its optimum performance suitable for low to medium refrigeration users. It's a cost-effective solution that uses established technology, making it easy to service and maintain. With its pre-galvanised steel exterior, it can withstand the elements, and was installed on the store's roof to maximise retail space below. Low capital and installation costs also make the Classic Mini an attractive option, with high efficiency EC fans selected for this project for their optimal performance while minimising operating costs.

Our customised refrigeration and electrical design met all technical, dimensional, and noise challenges posed by this particular store. This enabled Alliance to maximise retail space while adhering to all environmental restrictions.

Highly efficient yet cost-effective display cases were selected for this project, to provide a high-quality shopping experience for Alliance customers, while balancing capital costs with on-going service and maintenance.

Thanks to our experienced in-house plant manufacturing capabilities and robust supply chain, we successfully supplied all required refrigeration plant to meet the tight schedule. This was combined with our effective design and project management capabilities, and the expertise of our onsite installation and commissioning engineers, to complete this exciting project without delay. This allowed Alliance to open its doors and welcome customers to the town's latest retail development on time, as planned.