

## The Sky's the Limit for London Food Court

Services: [Turnkey Refrigeration Package](#)

### Project Overview

A luxury retailer selected us to deliver the refrigeration system and required electrical services for a high-end food court for employees located in the roof of a building in central London.

Achieving an environmentally sound solution without compromising safety or performance, while also creating a luxurious and attractive space, were the key drivers for this project. Armed with the customer's clear vision, we delivered a complete refrigeration solution that would provide optimum performance without the harmful gasses associated with traditional refrigeration systems.

With the site located in central London, space was at a premium and it also presented some logistical challenges too, both of which we overcame through a customised solution.

We created a full 3D design to identify the most cost, time and energy efficient refrigeration solution based on the customer's requirements.

After thorough forward-planning, led by one of our experienced Project Managers, we installed and commissioned a customised and natural refrigeration system, cold rooms, and refrigerated

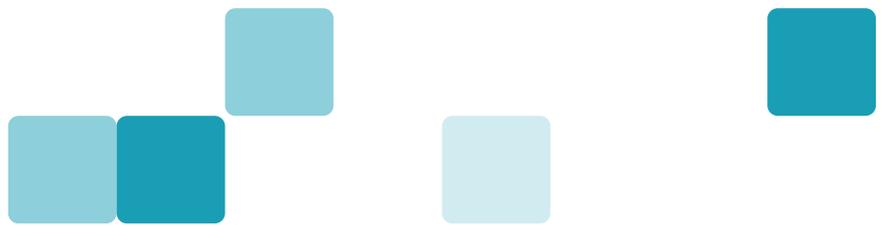
cabinets and counters to efficiently and safely serve the variety of food outlets which would be located in the new food court.

The superior finish achieved for the food court, and the impressive reliability of the plant installed, are a testament to our proficiency and attention to detail in delivering solutions of outstanding quality to meet the very highest of standards expected by our customers.

### Our Solution

We customised our tried and tested ECO<sub>2</sub> Mini Housed refrigeration unit, a powerful booster system offering superb performance, environmental credentials and a compact footprint. Designed for the convenience market, it operates on the single refrigerant CO<sub>2</sub> (R744). It has an extremely low a global warming potential of just one, providing an environmentally sustainable solution without compromising safety. Its in-built CO<sub>2</sub> leak alarm system was further enhanced with external pressure relief valves and an extract system for added security against refrigerant leaks and overheating.

The refrigerated cabinets and cold room suppliers were selected for their high quality, customisable



products to meet our customer's specific design and operating requirements. We managed the supply of 24 custom-built cabinets and serve-over counters, three cold rooms and a sophisticated Danfoss control system, safely delivering these to the roof of the building.

Our experienced teams carefully coordinated the installation and commissioning process to minimise site issues which could impact the schedule. Thanks to our collaborative approach and effective planning, all aspects of the refrigeration system and required electrical services were installed and commissioned on programme.

### Services Delivered

We were part of a carefully selected team of installers that worked collaboratively on this ambitious and unique project to deliver the following services:

- Design and build of a customised HT only refrigeration system which included a compact booster CO<sub>2</sub> unit, gas coolers and a fully supported control system to monitor and optimise system performance
- Supply chain management of custom-made refrigerated cabinets and serve-over counters and a large cold room, liaising between suppliers and the customer at every stage
- Complete installation service with full technical and commissioning support for the entire refrigeration solution which required extensive use of lifting equipment
- Comprehensive training both during and after the installation for the customer's in-house Maintenance Engineers on operating the CO<sub>2</sub> refrigeration system
- Project management throughout the design and delivery phases, providing a dedicated and dependable point of contact for all aspects of the refrigeration and associated electrical services

### Key Benefits

- To create the desired high-end finish and meet the customer's specific operational requirements, we delivered an entirely customised solution, offering them complete flexibility and extensive choice to ensure their vision for this impressive food court was realised
- The customer achieved an immediate step change in reducing their environmental impact, thanks to the ECO<sub>2</sub> Mini's low GWP of just one. Using the total equivalent warming impact (TEWI) calculation to compare the direct effect of alternative refrigerants, CO<sub>2</sub> has the lowest rating of 115, with R407a having a rating of 242,305 (over 2,000 times higher) and R404a a rating of 451,030 (almost 4,000 times higher), based on 200kg of refrigerant
- Our Project Manager, equipped with vast experience of retail refrigeration solutions, proactively managed the logistical and supply chain management challenges. The complex project was successfully delivered on programme, delivering minimised disruption to the customer's retail operations
- Requiring very little maintenance since it was installed four years ago, this system has been extremely reliable. This has resulted in close to 100% asset uptime, providing continued operation for the food court and low running costs

### Challenges Faced

Located on the roof of a building on a busy road in central London, access for the delivery of materials and equipment to the site was restricted. To overcome this challenge, we lifted and positioned the refrigerated cabinets, plant system and gas coolers onto the roof using a crane, working with all stakeholders, including the Highways Agency, to maintain the highest standards of safety throughout.

The detailed specification provided by the customer required us to work closely with a diverse supply chain which span multiple disciplines and geographical locations. Our collaborative approach and robust supply chain processes enabled us to deliver this project as an integrated solution to the complete satisfaction of the customer.