



## Mobile signal improvement in a regional supermarket distribution centre

### Case Study

The newly constructed distribution centre of 70,000 m<sup>2</sup> in size constructed from fabricated steel trusses and metal cladding. They didn't realise but the steel and cladding used to construct the building was blocking the signal.

Reliable signal is a crucial part of business operations. The distribution centre required the team to be able to communicate to each other via mobile phones whilst working.

They urgently needed to find a solution otherwise the newly constructed distribution centre would be obsolete.

### The Problem

The construction materials used to create the distribution centre was blocking the mobile signal.

### Business Needs

The main building is 242m long x 185m wide x 20m high and constructed from large span fabricated steel trusses and metal cladding. The use of metal cladding and steel effectively blocked any mobile signal from penetrating through. A further challenge was posed by the cable trays which were located above the suspended ceiling and would make any cable installation problematic.

Recognizing that mobile connectivity was crucial for business operations, the customer included mobile signal solutions as part of the project from the onset. This helped to ensure a smooth detection and installation process.



### Mobile Signal

Due to the construction materials they were experiencing no mobile signal within the building



### Multi-Network

For employees working within the distribution centre



## The Solution

Pan RF conducted a site survey which established that there was adequate EE mobile coverage outside the building, but once inside, the signal strength declining significantly, particularly in the 3rd-floor offices and goods out areas.

Pan RF presented the Cel-Fi Quatra mobile signal booster as a solution to the customer to provide voice and data services on the EE network. The Cel-Fi Quatra is a hybrid, all-digital solution which combines the best of active DAS and Smart Booster technologies. Speed tests and walk tests were carried out and showed major improvement of coverage levels within the 3rd floor and ground floor areas.

## The Results

This cost-effective, OFCOM licence-exempt solution was deployed in a short space of time and provided the warehouse employees with reliable voice and data services in the new facility.

## The Products

CEL-FI  
**QUATRA**



## Business Benefits



Improved Signal



Multiple Network Coverage



Full Mobile Coverage



Cost-effective solution