



**4D**  
monitoring

# Case Study

Spirella Building – Building Optimisation

# About Us: 4D Monitoring Ltd.

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4D Monitoring are a leading IOT (Internet of things) provider, that work with landlords, property managers, service providers, and tenants to help them better understand their properties through the use of data. Our aim is to make technology affordable for every Building, not just large office buildings in London. We make sure our solutions are as competitive and accessible as possible.

## Challenge: Building Monitoring in Grade II listed building

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4D Monitoring faced the challenge of installing a sensor system to accurately monitor energy consumption in a Grade II listed building without causing any visible intrusion. The solution needed to be robust and precise, offering the customer 24/7 access to the collected data. The customer also required 4D Monitoring to play a consultative role, recommending potential changes to plant equipment runtimes to achieve energy savings.



# Case Study: The Spirella Building

The Spirella Building, a former corset factory designed by Cecil Horace Hignett, was built more than 100 years ago in 1912. It was refurbished in 1996 from derelict condition into a vibrant business centre by Letchworth Garden City Heritage Foundation.



Letchworth  
Garden City  
Heritage Foundation

## Solution: Plant Monitoring Sensor System

The building was equipped with IOT sensors to measure the internal room temperatures, as well as plant monitoring sensors that would monitor the performance of the buildings HVAC systems, including the boilers, hot water systems and air handling units. The initial install was of the plant room equipment was £9k.

## Benefits: Reducing Costs Improving Sustainability

Using the data gathered from the sensors and our analytics package, and alerts and rules created with the customer, 4D Monitoring was able to work with the onsite engineering team and able to reduce the operation of the HVAC systems to match occupancy requirements and to diagnose some long-term issues with the aging building management system that would otherwise have been missed. This led to a reduction in energy costs of around 30% across year one, a saving of £105k, and producing an ROI of around 6 weeks on the initial investment.

### Results: Numbers That Shout Success

The quantifiable results of the original install:

Install: £9,000 – Year One Energy savings: £105,000 (30%) – ROI: 6 weeks

# Summary: IoT Boosts both Sustainability and Comfort

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This collaboration between 4D monitoring, Letchworth Garden City Heritage Foundation has demonstrated the potential of IOT technology to improve sustainability in older buildings and has helped to improve not just the energy efficiency, but also the quality of the building environment for its tenants. missed.

[www.4dmonitoring.co.uk](http://www.4dmonitoring.co.uk)