

Case Study: *HVAC new installation*

# Lynch Plant Hire



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## The Recommendation

The HVAC installation services industry is a competitive one. Every new client won is valuable to us and we strive to provide the best service possible to ensure we retain them. Tender processes, manufacturer discounts and keeping ahead with technology evolution make winning new customers ever more challenging. The work, time and effort that goes into winning new customers is sometimes taken for granted, however, it is all worth it when, on the back of an existing relationship, a new one is introduced.



We have worked with MBDA for many years providing mechanical installation and maintenance services to their sites, some of which are within critical environments. The nature of their business requires utmost confidentiality and as a trusted advisor to MBDA our relationship is a strong one. A member of the MBDA team has since retired and when asked by Allen Commercial if he knew of any trustworthy, reliable HVAC installation providers, our name was the only one to be recommended.





## What We Offered

We met with Allen Commercial and their design consultant. We gave advice and recommendations and together we ensured the system specification would be suitable for their requirements. Once a price and time frame had



been agreed, we planned in the project around our engineering team's availability and the customers deadline.

Having been recommended, this was reference enough of our capabilities. The system chosen was to be manufactured by Mitsubishi Electric who we were a Business Solutions Partner for. What we didn't know at the time of starting the project was that Mitsubishi Electric would be conducting an audit on the installation as part of our approval for Diamond Quality Partner. The Mitsubishi Diamond Quality Partner (DQP) for air conditioning,

ventilation and heating is the highest available partnering status and recognizes unrivalled achievement of industry excellence.

## JCW's Mission

The site consists of a two-story office building which was undergoing substantial remodelling and refurbishment and required a new HVAC system with only one existing AHU to remain. This AHU required an overhaul to ensure it would run to its optimum performance.



## JCW's Mission continued

The original chiller and its chilled water cooling and gas heating systems needed to be removed and due to the location, a crane was necessary to remove the obsolete system before work could commence on the new installation for the Mitsubishi Electric heat recovery VRF system. The new system will provide flexibility with one zone being cooled while another can be heated.



As with any building, suitable ventilation was required as well as heating and cooling. A new, energy efficient AHU for the supply and extract to the toilets was also planned.



## Key Facts

### Air Conditioning

Manufacturer Chosen: Mitsubishi Electric

System: City Multi

Ground Floor Equipment: No. 1 City Multi R2 System  
No. 1 x PURY P400 Heat Recovery Unit  
No. 8 x PEFY FCU Ceiling Concealed Units

First Floor Equipment: No. 3 x City Multi R2 Systems  
No. 1 x PURY P300 Heat Recovery Unit  
No. 6 x PEFY FCU Ceiling Concealed Units  
No. 1 x PURY P600 Heat Recovery Unit  
No. 14 x PEFY FCU Ceiling Concealed Units  
No. 1 x PURY P300 Heat Recovery Unit  
No. 7 x PEFY FCU Ceiling Concealed Units  
1 x AE200E Centralised Controller

Timescale for Project: 12 Weeks

Final Handover Date: 31st January 2018

Total Value: In excess of £250,000





## The Challenges

Speaking to the Project Manager for this site he confirmed the installation was straightforward and completed ahead of schedule. The only issue that required an adaptation was the height of the ceiling void which restricted the width of the ventilation ductwork. The ductwork needed to be changed to suit the restriction but with our engineer's experience and expertise this was easily overcome.

Words from our JCW Project Manager

*“We are really pleased with how smoothly this project went and with the end result.*

*We completed the installation ahead of schedule and are now just waiting for the other elements of the refurbishment to be completed so we can begin commissioning.*

*Our historical relationship with MBDA has led to us to being introduced to Allen Commercial and it has been a pleasure working alongside their team.*

*We are looking forward to working with them again on their next project.”*



## Energy Efficiency

The Mitsubishi Electric system chosen consists of an exclusive BC controller which makes two-pipe simultaneous cooling and heating possible. The BC controller is the technological heart of the CITY MULTI R2 series. It houses a liquid and gas separator, allowing the outdoor unit to deliver a mixture of hot gas for heating and liquid for cooling, all through the same pipe. This innovation results in virtually no energy wasted by being expelled outdoors which can result in energy savings of up to 20% over conventional systems.



## Handover & Training

Full commissioning, site training, practical completion and snagging took place at the end of January 2018 which was followed by the full completion and handover.



A full detailed O & M (Operation and Maintenance) Manual including the commissioning programme with commissioning drawings and the Health & Safety file was provided at the time of handover, as well as user training, in line with CIBSI (Chartered Institute of Building Services Engineers) guidelines.



## Future Maintenance

The first year's maintenance of the air conditioning system has been included within the installation cost. A complete planned preventative maintenance programme will then be prepared to run alongside the defects period and 7 year warranty, in line with the manufacturers recommendations and our Diamond Quality Partner approved status.

## Conclusion

While completing this installation, Mitsubishi Electric audited the site as part of our approval to become a Diamond Quality Partner. Not only did this installation prove us worthy of this prestigious recognition, we were also praised on our professionalism and the quality of our engineers and workmanship.

We approach all of our HVAC installation projects with the same ethos, hence why Mitsubishi subsequently awarded us with Diamond Quality Partner status.

It was a pleasure working alongside Allen Commercial and we are already discussing our next installation project with them.



DIAMOND QUALITY  
PARTNER



## Testimonial

### Nigel Allen | Operations Director

*“We were looking to work with a reliable HVAC installations company and JCW were recommended to us by a mutual acquaintance. Following initial discussions and site meetings we agreed terms and they commenced the project.*

*JCW have proved themselves to be extremely reliable and professional. The installation was completed within the agreed timescale and the handover and training with the end user on this new system was conducted with the same professionalism.*

*We are very pleased with the service we have received from JCW and we will definitely consider them again for future HVAC installation projects.”*



## Other Resources

Are you planning an installations project?

Want to read more?



## About JCW Energy Services Limited

We provide complete project management, installation, in house maintenance and tailored managed solutions to a broad range of clients across the UK.

We are a national mechanical and electrical building service provider, offering integrated planned preventative as well as reactive maintenance services across all property portfolios.

Although the JCW Group is a relatively new company, part of the group has history within the industry dating back to 1903.

Today JCW is in a unique position where it not only employs nearly 200 dedicated staff but also can offer mechanical and electrical services with an equal amount of engineers within each discipline. This means that we can self deliver hard services nationally through our mobile engineering workforce as well as provide full project management and installation services through our network of six offices.

Our offices are strategically placed and take ownership of their areas customers to provide a fast, reliable, local service. Our engineers are fully qualified, have a wealth of experience, are accommodating and genuinely care about the work they conduct and the service they provide.

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