



PEOPLE EXCEL UNDER THE RIGHT CONDITIONS

361°degrees

AIR CONDITIONING • HEATING
VENTILATION • ENERGY CONTROLS

CREATE THE ENVIRONMENT FOR SUCCESS

STAFF ARE 26% MORE PRODUCTIVE IN
GREEN-CERTIFIED BUILDINGS

SATISFIED STAFF ARE ABSENT 37% LESS

361°degrees

Hello,

We've spent a lot of time at 361 Degrees talking about our values and how we apply them to our work. Saying we're honest and reliable is easy, but it means little unless we prove it at every stage of every project.

So we looked back at the work we did over the course of a year and picked out some examples of where we've been challenged. Projects that show how we stick to our values and avoid cutting corners or compromising on the quality of our designs or installations.

The result is this collection of case studies, each of which, I hope, will give you a sense of how we work.

We begin with Royal & Derngate Theatre, who relied on us not only to install a new heating system without causing disruption, but also for the complex decommissioning of their old system.

At Hugo Boss, we partnered with a refurbishment specialist to deliver a vibrant, comfortable space within a tight deadline. And for IFF Hamburg, we innovated to solve a critical problem and pushed ourselves to deliver a project abroad.

"People excel under the right conditions." That belief is at the heart of what we do at 361 Degrees, because we know what a difference the right environment can make.

Heating, ventilation, air conditioning and energy controls are much more than simple utilities. People quickly notice when they go wrong, and the disruption is immense. But done well, they can transform your space into one where people love to be, even though they might never think about what is going on above their heads.

I hope this sample of our work gives you a good idea of what it's like to partner with 361 Degrees, and brings you a step closer to creating the right conditions for your people to excel.

Sincerely,

Mark Penprase
Managing Director, 361 Degrees

The image shows a modern building with a prominent teal-colored facade made of horizontal slats. On the left, a curved section of the building is visible, featuring large windows with red frames. The sky is blue with some white clouds. The text 'ROYAL & DERNGATE' is centered in white, uppercase letters, flanked by two horizontal white lines.

ROYAL & DERNGATE



A UNIQUE PERFORMANCE

The installation of a new boiler system at the Royal & Derngate theatre in Northampton was one of our most interesting projects of recent years.

The Royal Theatre in Northampton opened in 1884, with the Derngate added in 1983. This presented a unique challenge, as the heating and hot water system needs to service both these performance spaces, as well as the foyer and atrium.

361 Degrees prevented disruption to the performance schedule by preparing equipment off-site, and by removing the old system in stages so there was no interruption to service.



BEHIND THE SCENES

Royal & Derngate's heating system needed detailed planning, not only in its design, but also for a complicated installation process.

The plant room is in a hard-to-reach part of the basement, which could have led to extensive construction work. But the 361 Degrees team was able to use the auditorium's impressive lift system to gain access and eliminate the need for expensive renovations.

The floor moves up or down to adapt to performance requirements, so the theatre can play host to everything from classical concerts and operas to snooker tournaments and gala dinners.

Or, in this case, the installation of four new Remeha Eco Pro boilers.

The Royal & Derngate building developed around old heating system equipment, so simple removal of the existing boilers was not an option. Instead, 361 Degrees engineers carefully dismantled each boiler using blowtorches and removed them in stages, which meant there was no downtime for the theatre.

A new building management system caters for different temperature requirements in different spaces, so guests can be kept as comfortable as possible throughout their visit.

IFF HAMBURG





KEEPING IT SIMPLE

IFF develops flavourings and fragrances for use in everything from food to perfume and shampoo.

Like any workplace, it requires a steady, comfortable environment to create the conditions for staff to do their best work.

But its needs go a little further, as odours must be carefully controlled throughout the building so research is not compromised. Despite the unique challenge, 361 Degrees' experts were able to adapt a tried and tested solution to a new application.

And with the need for the project to be planned in the UK and delivered in Germany, keeping the process as simple as possible was key.



NEW APPROACHES TO CLEAN AIR

The Hamburg offices and labs of International Flavors & Fragrances presented an unusual challenge for the 361 Degrees design team. The focus in a typical workplace is on providing fresh air and maintaining comfortable temperatures. For IFF, the added dimension of controlling smells was an essential part of the project.

The spread of any odour would affect the company's research, so the ventilation system design included the use of carbon filters to clean the air coming from outside the building. Such filters are typically used for individual rooms so applying the principle to the whole system required careful planning, but ensured a balanced, clean flow of air throughout.

Our designers also decided to maintain the labs under negative pressure, so air is drawn from the clean corridors rather than allowed to spread outside the lab. It means no odours can escape, so there is no risk of compromising work in other parts of the building.

INTERNATIONAL COOPERATION

Detailed planning and informed designs are essential to any HVAC installation process, but this is especially the case when a project is spread over two countries.

Experience of conducting thorough audits and calculating the heating and cooling needs of a building helped our team determine the scope of the project early on. This led to a proposal and design drawings that were detailed enough for the pre-installation phase to be easily managed remotely.

Once the engineers arrived on site, stripping out old radiators and coordinating the ventilation, air conditioning, and toilet ventilation installations was a simple case of following the sensible, detailed plan.

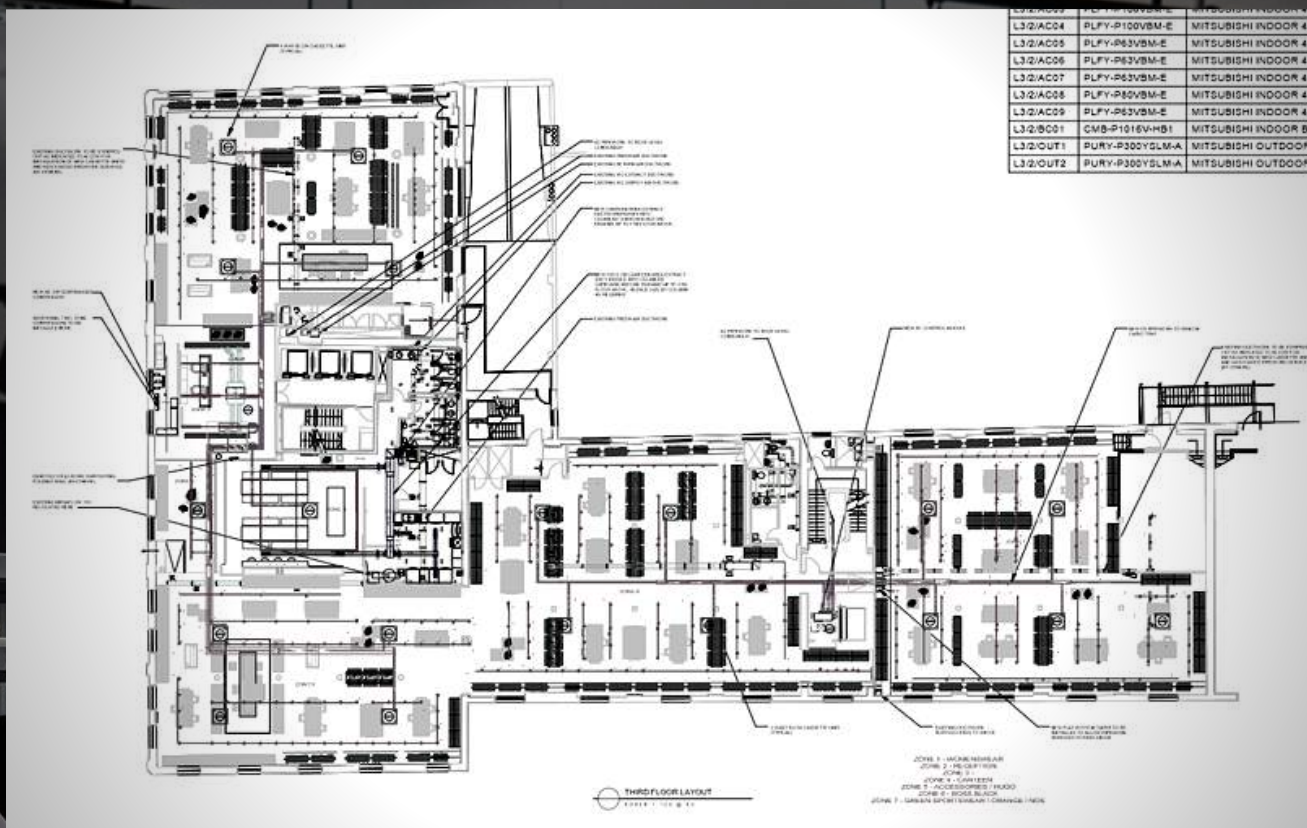
Internationally-recognised certifications such as ISO 9001 and ISO 14001 gave the client confidence we maintain the highest standards in environmental responsibility, quality management, and health and safety. We are also equipped to provide mechanical services to BREEAM, WELL, BCO and other specifications, depending on the objectives of the client for their building.

For IFF, the result is comfortable new office space, laboratories well equipped to handle their demanding work, and peace of mind that their mechanical services are built to stand the test of time.



HUGO BOSS





A VIBRANT SPACE

The office of a major fashion label like Hugo Boss needs to be a vibrant, creative and comfortable space. We worked with fit-out and refurbishment specialist Overbury to design and install a new VRF air conditioning system over two floors, creating the perfect environment for office space and a trading floor.

A narrow window to complete the work between seasons meant the usual installation time was condensed, but detailed planning and the efficiency of the 361 Degrees engineers kept the project on track.



FASHIONABLY EFFICIENT

We installed 50 Mitsubishi Electric units, with the more efficient system making use of grilles and acoustic techniques to create a more consistent environment. Exposed ductwork was sprayed black to match the aesthetics of the impressive Hugo Boss building.

The layout of the building posed a challenge for our installers, as it became clear the large condensers could not be moved into place without some creative thinking. We solved the problem by taking the equipment apart at our own headquarters before transporting it to the site.

The condensers were then taken up the stairwell piece by piece and carefully reassembled in their new home.

Our sister company 361 Servicing is now providing ongoing maintenance for the system, so the designers can continue to do what they do best without any disruption to their working environment.

Our services

361° consulting

Consultancy

- > Audits; inspections; reports
- > Specification; technical and physical requirements
- > Tender creation

Design

- > Sustainable designs
- > Detailed drawings
- > Heating and cooling calculations
- > Validation

361° degrees

Installation

- > Full project management
- > Integration with other services
- > CAT A and CAT B
- > Commissioning
- > Training and operation manuals

361° servicing

Servicing

- > Regular maintenance
- > Breakdown repair
- > Parts and equipment replacement
- > Inspections and certificates

Our qualifications

361°degrees

- ISO 9001 (quality management)
- ISO 14001 (environmental responsibility)
- BS OHSAS 18001 (occupational safety)

CERTIFICATIONS AND REGISTRATIONS

ENGINEERS

- Gas Safe Register (gas heating and hot water)
- F-Gas Level 2 (air conditioning refrigerants)
- ACOP L8 (water management and treatment)
- OFTEC (oil heating)
- BS 7671 (electrical)
- PASMA (scaffold towers)
- IPAF (scissor lifts)
- CSCS (construction sites)
- DBS (school and care home work)
- SSSTS (site supervision)

DESIGN

- MSc Sustainable Energy Systems
- BEng Building Services Engineering
- Low Carbon Consultancy
- Design and engineering software proficiency:
 - AutoCAD (computer-aided design)
 - Hevacomp (building simulation and energy analysis)
 - Thermal Analysis Simulation (TAS)
 - Integrated Environmental Solutions (IES)



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