



Mixed use Retail **Office** Residential Hotel & Resorts Leisure Industrial Healthcare Heritage

Offices & Techno hubs /

Nabarezhnaya Towers, Moscow City Russia



Omnia office centre, Kiev Ukraine



Juxon house, London, UK



Cellular Operations, Swindon, UK



Milyutinky office centre, Moscow, Russia



Elite Plaza business centre, Yerevan, Armenia





*Developer: Standard Life
Architect: Sidell Gibson Partnership
Services Design: CD International BSE, UK*

Office / UK

London / Juxon House

High specification new build office accommodation of 140,000sqft in one of the most high profile sites in London, outside St Paul's Cathedral. The building must sit in harmony with its historic surroundings but must also provide a highly serviced, efficient 21st Century working environment.

Project outline

The building is designed to full institutional standards and is fully fitted out to open plan standards including lighting and cooling. The building can be let on a floor by floor basis and incorporates retail outlets at ground floor and basement levels.

Due to planning restrictions plant at roof level is prohibited and careful and detailed coordination has been carried out to ensure the most efficient use of restricted plant space.

MEP Systems outline

- Environmental Control
- Two pipe fan coil with local fresh air reheat, providing cost effective flexible solution
- Roof mounted chillers with dedicated condenser water circuit to ground floor retail.
- Standby generation.
- Capacity for dealer occupancy across levels
- Integrated BMS system.
- Engineered smoke control system.
- High efficiency lighting system.



*Architect: Richard Hywel Evans
Services Design: CD International BSE, UK*

Office / UK

Swindon / Cellular Operations

This multi award-winning office design has been dubbed “the happiest work place in Britain”. Featured in BBC3’s Dreamspaces, the radical space-age form snakes across Swindon’s silicon tundra.

Project outline

Our engineers were responsible for the MEP systems for high profile headquarters office block in Swindon which required a comprehensive CFD model to demonstrate the application of low level displacement for cooling/heating within the glazed office area.

The office provides 60,000 sqft of office and conference facilities.

The north facing glazing structure incorporates a solar blind and artificial lighting is carefully integrated into the interior design.

The general office area utilises a combination of chilled beams and displacement with cat 2 artificial lighting integrated within the chilled beam.

The electrical installation includes small power, UPS and a comprehensive IT data network.



*Client: Bourne Leisure Limited
MEP: CD International BSE, UK*

Office / UK

Hemel Hempstead / One Park Lane

No 1 Park Lane is situated in the heart of Hemel Hempstead, just north east of the town's well known "Magic Roundabout". At 96,135 sq ft the building is one of the largest in the town. It has an enviable position within the town centre and offers tenants and their employees excellent access to the town centre retail offerings.

Project outline

A maintenance and renewable energy project for a headquarters leisure companies offices. The maintenance comprised of a preparing planned schedules for all mechanical electrical and public health services with the over view of the works by the contractor.

The provision of a second standby generator to support the data rooms should the primary generator fail to start with additional UPS systems to ensure a secure supply to the data rooms in

a mains failure. The existing plant was audited and a sequence replacement was scheduled to provide energy systems to include solar panels for the hot water and watermisers to the toilets.



Design: Chapman Taylor Partners

Developer: Porto Franco

Mixed Use Development / Estonia

Tallinn / Porto Franco

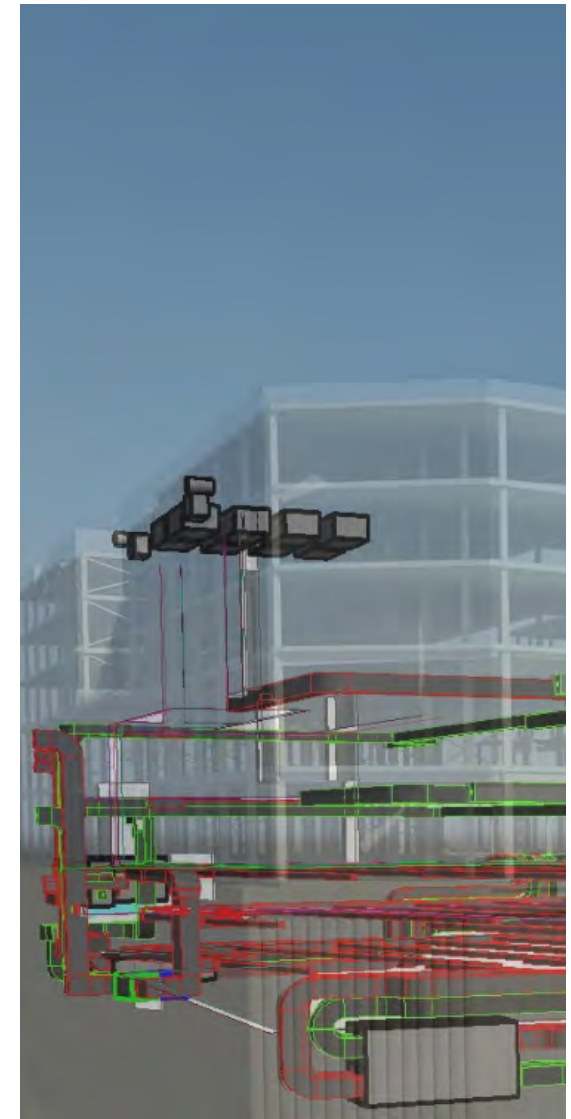
Porto Franco is located in Tallinn's Old Town and the passenger port.

Project Outline

It is the largest commercial and office centre in the heart of the city, with total area of approximately 160,000 sqm, and includes the shopping centre (GLA 40.000 sqm), the largest hyper-market in the city centre (6,600 sqm), cafes and restaurants, underground parking for 1,250 cars and the office centre (GLA 30,000 sqm)

CDI has completed MEP serviced design, in collaborative partnership with design team from Estonia, Finland and the UK.

We use BIM to create, manage and share the properties of the development throughout its design cycle. Model of the building has incorporated graphic, physical, commercial, environmental and will include operational data later. Thermal modelling provided servicing strategy and solutions that can be cost-effectively optimised against agreed parameters.





Client: Soho Works
MEP: CD International BSE, UK

Mixed use / UK

180 Strand / London

1 80 Strand is a fascinating project. Located in the heart of London between busy West End and the embankment of the river Thames, the project is redevelopment of the existing office building built in 70s.

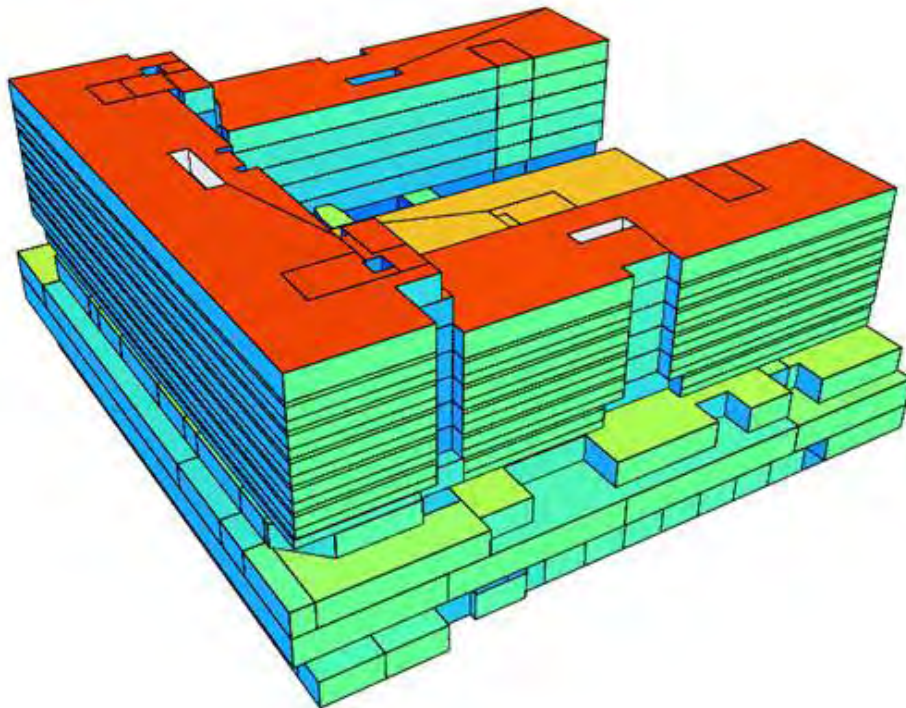
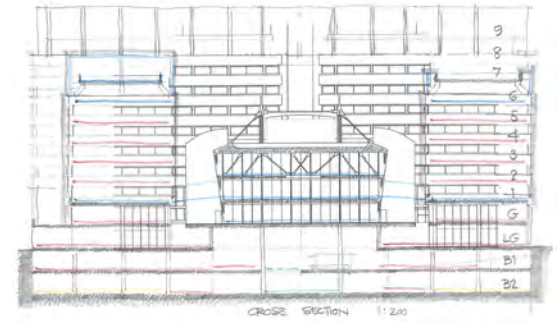
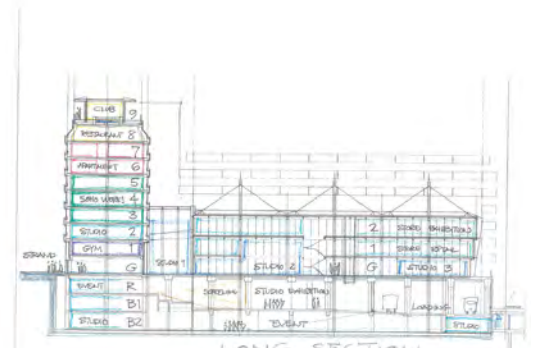
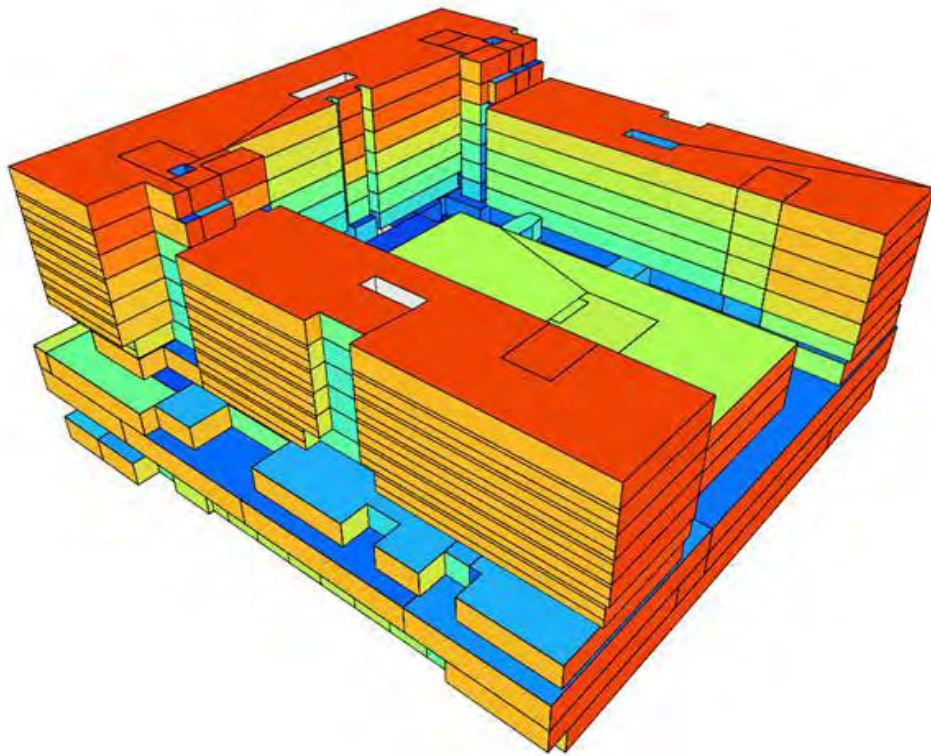
Project outline

Currently it is hub for creating industries, design agencies, office of publisher for Dazed and Confused and home for London Fashion Week shows. The business will continue to operate while the works are being carried over, so the coordination between the design and construction teams is important. The idea is to adapt the outdated building to suit the current and future style of working, living and entertaining.

The first two level of former car park will be transformed to exhibition and conference space,

above them will be levels of co-working spaces, offices and complimentary retail and entertainment tenants. Further above services apartments, gym and other amenities. Large architectural practice has signed to take the 2 floors of the office space and Soho House will expand their portfolio of club locations.

CD International working collaboratively with the architects and structural team members and deliver the MEP solution in Revit, while testing various HVAC strategies in thermal model.





Design: RTKL
Developer: ENKA

Office Development / Russia

Moscow / Naberezhnaya Tower

Concept Design for building services
systems for business complex located in
Moscow City.

Project Outline

Concept design for two 24-storey office towers in the business district of Moscow. In addition, company's directors were commissioned to undertake scheme design for a further 50 storey tower which will complete the office complex.

The scheme established the Cat A servicing strategy utilising Western standards with vertical risers having additional capacity for increased tenant loads.

Technical Overview

- 6 No. water cooled chiller
- Cooling capacity
- Fresh air volumes 80m³/s
- 6 No. ventilation AHU
- On floor fan coil units



*Client: MEP Consulting
Energy Assessor: CD International BSE, UK*

Office / UK

London / Tankerton Works

This standalone building located on Argyle street, a small pedestrian passage approximately 200 metres from Euston Road and less than 2 minutes to the principal thoroughfares and trading areas of King's Cross and its excellent transport infrastructure.

Project outline

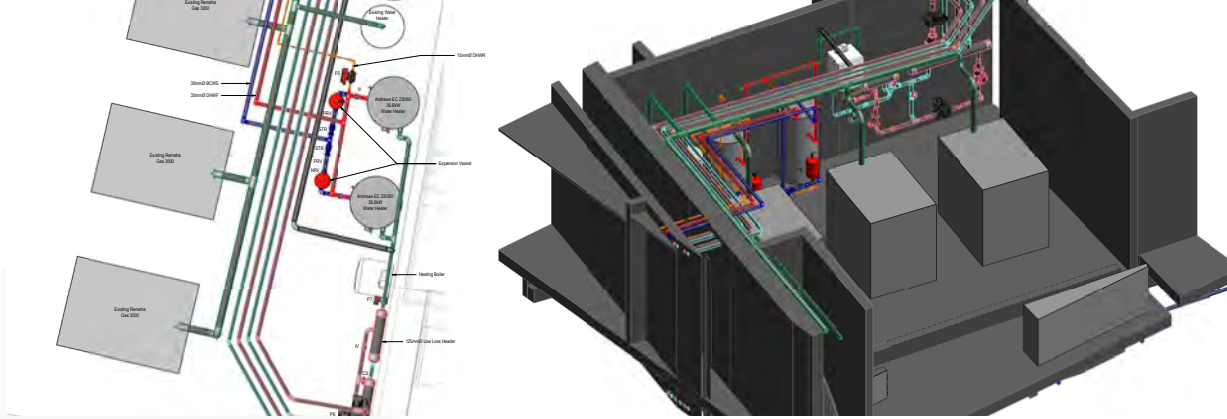
The former factory building that was restored and converted into offices in 2006.

Currently, building is heated via portable electric heaters that consume a lot of energy and do not provide comfortable environment.

CDI proposed to install three-pipe variable refrigerant system (VRF) for heating and cooling, which provides economically precise, individual comfort control to multiple spaces. System oper-

ate with minimum energy usage and low maintenance cost, as service required to the zones that need it, which allows for less required maintenance.

Cooling for server rooms and electrical installations will be upgraded to the modern standards. In addition, ventilation will be provided to the basement units and heat recovery to be installed.



Client: North Lincolnshire Council
 Contractor: Elecomm
 MEP: CD International BSE, UK

Office / UK

Scunthorpe / Church Square House

The project is a £5.7 million Church Square House extension in located in Scunthorpe, extension to the North Lincolnshire Council building, where 600 of the authority's staff will be based.

Project outline

CDI has completed the mechanical, electrical and public health services design up to RIBA Stage 4 (Detailed Design). It was produces in Revit, on fully coordinated model with architects and structural engineers and has been submitted the main contractors.

Energy saving measures included:

- HTM: hybrid ventilation system was designed to provide natural ventilation, hybrid

ventilation, secure night time cooling and boosted levels of ventilation during summer. The HTM FS systems were designed to be installed above a suspended ceiling or within a ceiling raft and to work in conjunction with natural ventilation provided by manual or automatic windows.

- Natural ventilation to council chambers was provided via two WindCatchers installed on the roof.



*Design: Chapman Taylor Ukraine
MEP: CD International*

Office Development / Ukraine

Kiev / Omnia office centre

Detailed Design Project of 14-storey office building, located in the centre of Kiev. .

Project Outline

Modern Class A office building, predominantly clad in glazed curtain walling with approximately 10,000 lettable office area and one level underground car park. CD International was commissioned to undertake Building Services Design up to Tender Stage, working together with our local partner.





Design: Mountford Pigott.

Services Design: CD International BSE, UK

Office / Ukraine

Ukraine / Office on Andreevsky

A new build office development in the heart of the historic region of Kiev to provide flexible office floor areas that can be easily divisible

Project outline

The development is located on a steep gradient which results in a tiered development across the site. The overall development comprises of 40,000m² office, 10,000m² car parking and 5,000m² retail.

The building massing on the site results on a range of storey levels from 8 to 14. The development is based on enclosed courtyards with a number of access points into each office courtyard.

MEP Systems outline

The development is based on a previous industrial factory site and the electrical loads need to be enhanced to accommodate the increased built area. The electrical load is 3.6MW but this load may be reduced should the cooling for the building be generated by ice storage.

The office areas are being provided with 4 pipe fan coil air conditioning with the majority of the plant located in the basement. The office area will be served from a number of main risers which facilitate the floors being sub-divided.



Architect: Chapman Taylor
MEP: CD International BSE, UK

Office / Russia

Moscow/ Milyutinsky Centre

Concept design for office block, located in the historical centre of Moscow – Milyutinsky side-street.

Project outline

The project will consist of 8,000m² GBA of office building on 5 levels with 2 levels of car parking with 100 parking spaces with car wash bay.

On ground level there will be restaurant and main lobby and terrace located on the top level. Careful consideration of plant room and risers location required in order to save prime office and car park space.





Investor: European Bank for Reconstruction and Development, UK

Client: Elite Group, Armenia

Energy Assessor: CD International BSE, UK

Energy Efficiency Assessment / Armenia

Yerevan / Elite Plaza Office Centre

Elite Plaza is an 18-floor Class-A office building located at the core of the city center Yerevan, near the main square and the Central Bank offices. It will accommodate around 25,000 m² of office, retail, conference and exhibition areas.

Project outline

Our engineers in partnership with CEF UNISON from Kyrgyzstan, had undertaken the review of existing technical design and technical specification; assessed expected energy performance of the Project and compare it with the energy baseline.

Also, additional energy efficiency opportunities were identified and conducted their cost-benefit analysis. This was the basis for Sustainable Energy Investments (SEI) assessment of the

Project. Technical assistance on specification of Building and Energy Management System was also included within the project.

Our team had also provided the Client with corporate energy efficiency and environmental policy guidelines. In order to promote technical capacity, our engineers conducted Presentation for Client, energy efficiency specialists and Yerevan city's planning authority.

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