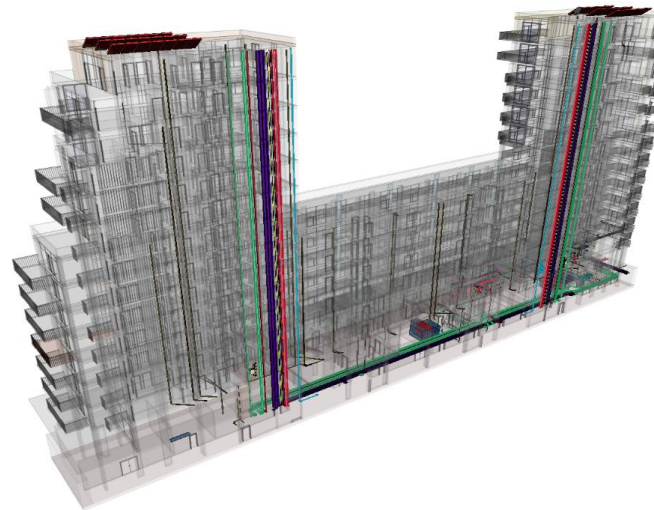


Description

- ◆ 45 Millharbour is a £39m, 17,315m² residential development with 136 units and a commercial component at ground floor level
- ◆ Located in the centre of the Isle of Dogs the development falls within a 20ha zone designated by Tower Hamlets as the Millennium Quarter
- ◆ The mixed use building is composed of three distinct elements, each responding to its immediate context and internal use. The two primary buildings are each of 14 storeys facing either Millharbour or the Millwall Inner Dock. The 7 storey linking block provides the new public access route across the site from the road to the dockside

Involvement

- ◆ Full involvement from initial brief through to final technical design including initial performance documents followed by the full and detailed design of the all mechanical and electrical building engineering services
- ◆ Site infrastructure analysis and planning with the Statutory Authorities including negotiations to connect the development to the local district heating system
- ◆ Full thermal modeling was undertaken to establish requirements for natural ventilation
- ◆ The system utilised heat the local district heating mains through plate heat exchangers to apartment heat stations in order to provide heating and hot water throughout
- ◆ Undertook lift traffic analysis to determine optimum lift selection
- ◆ Incorporated specialist fire strategy requirements including smoke vent systems, dry risers, and sprinklers
- ◆ LED and low energy lighting incorporated throughout with lighting controls in landlord's circulation areas
- ◆ Design of general power and distribution, access control, security and fire alarm systems



Benefits Delivered

- ◆ Autodesk Revit MEP fully co-ordinated Building Information Model to a level of development consistent with level 2
- ◆ Full clash avoidance was run using Autodesk Navisworks
- ◆ Worked as part of a collaborative design and construction team to deliver the project proposals within project constraints
- ◆ Undertook full part L compliance checks at each stage of the design
- ◆ Completed the design to achieve compliance with onerous Local Authority renewables requirements
- ◆ Close spatial co-ordination with architect and structural engineer at concept stage
- ◆ Liaison with interior designers, providing commentary on design considerations to ensure a compliant final solution incorporated into the final design proposals

Millharbour is a £39m, 17,315m² residential development with commercial component at ground floor level