

# New Head Office Building

## Project Profile

**Client:** Forkers Ltd

**Structural Design:** ASC

**Value:** £1.5m



July 2017 saw the opening of our new Head Offices at Hill Top, West Bromwich. The extended and refurbished fully air conditioned offices now consist of 13,000ft<sup>2</sup> (1200m<sup>2</sup>) of office space on 2 floors, much of which is open-plan providing a high quality working environment for up to 50 staff. The facility also includes reception area, a large boardroom, ground floor meeting room, canteen areas on both floors which double as informal meeting areas together with a number of spacious glass partitioned offices.

The building extension is 20m x 20m in plan and was designed as a separate structure to the existing building, the extension was fully completed and serviced prior to completing a full refurbishment of the existing building. On completion the 2 buildings were fully connected to form an open plan flow and spacious feel throughout.

Design and detailing of the new building (and refurbishment of the existing building) was completed in-house by our engineering and technical teams with design of structural elements (foundations, piling and steel frame) completed by an external consultant. The building design aimed to create as much open-plan office space as possible, with fixed facilities such as toilets, kitchens, stairs, fire escapes etc, having flexibility to be positioned to both maximise use of space and also to satisfy building regulations. The open plan areas allow for a great deal of flexibility in the way desk space is organised allowing departmental teams to work together in a collaborative working environment.

The project included;

- Extensive site investigation which confirmed the depths of fill at up to 18m deep due to the presence of an old infilled clay pit beneath the footprint of the extension
- A mining risk assessment was carried out which proved that no shallow workings or shafts existed on the site however gas measures were incorporated in the foundations due to the potential of migrating mine gas
- The building was supported on 25no driven steel mini-piles (273 & 324mm dia) driven to 18m in depth on a 5m grid. The tubular mini-piles were concrete filled and provided with internal reinforcement
- Construction of 700mm deep reinforced concrete pile caps with 450mm wide x 550mm deep ring beams
- Structural steel frame with Firetex FX1003 60 minute fire protection paint
- In-situ reinforced concrete ground floor slab and hollow core concrete floor beams to first floor



# New Head Office Building (Cont'd)

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Structural Design: ASC

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- External walls were built using 430m<sup>2</sup> of 100mm 7n solid block, 22,000no 65mm Himley mixed Russet facing bricks to match the existing building and Xtratherm cavity insulation
- Use of pre-fabricated roof trusses to the new build with a hand built infill section to connect to the existing roof
- Fully insulated roof space with Marley Wessex roof tiles in smooth finish to suit the shallow 22.5° pitch which were also used to re-tile the existing office roof to match the new build
- EPS 100 high density polystyrene on the ground and 25mm EPS150 high density polystyrene insulation to the first floor
- 50mm latex liquid screed to both ground floor and first floor
- Non opening windows using a Comar 5PI ECO system with Sunguard SN 70/35 protective glass to the new building and to replace the windows in the existing building to match
- Heating & cooling provided by an integrated air conditioning and trickle vent system including 3no Mitsubishi VRF units, 1no Mitsubishi single split unit and Mitsubishi heat recovery ventilation units. Variable refrigerant flow (VRF) is used with one outdoor condensing unit to multiple indoor units with the system controlling the amount of refrigerant flowing to the multiple evaporators ensuring maximum efficiency in operation
- The heating/cooling system is based on no-opening windows in the building ensuring it operates efficiently. The system also allows zonal temperature control within the building
- Electrically heated stored water for hand washing and Zip-taps under kitchen sinks for instant hot & cold filtered drinking water
- The lighting system consists of PIR controlled LED 600 X 600 light fittings in recessed ceiling units for offices and open plan areas, with LED down lights in all other areas i.e. breakout, toilets, stairs & stores
- The offices have been fitted with a comprehensive array of power points and data cabling which ensures versatility in desk layout, printer and plotter location.
- An integrated security and fire alarm system.

Following completion we were delighted to be nominated by Sandwell Council for the West Midlands LABC Building Excellence Awards 2018 in the category of Best Small commercial project and to be shortlisted as a finalist.

