

Verified view looking south on St Pancras Way

4.8 Facades and materials

The facade is consciously closely related to the structure of the inside of the building. This is both a structural reality and an aesthetic idea - that the presence of the internal structure and the weight of the external piers are related to one another and form a single entity. The design team have avoided complex transfer structures in the facade and the perimeter columns coincide with the location of piers in the elevation. The facades are not curtain walls stretched thinly over the frame – instead, they are formed of an explicit beam and column structure, with significant depth and mass, that separates large windows that sit on the floors and extend to the underside of the beams.

The primary vertical structure of the facade is made in white precast concrete with a fluted or grooved front surface. These pilasters extend up to smooth white concrete capitals that coincide with the internal floor levels. Dark-painted metal profiles span between the capitals and frame a red sandstone spandrel panel. The specific petrology of the stone has not yet been agreed, but there are suitable red British sandstones including St Bee's from Cumbria and Cove Red from Dumfries. In between the stone spandrels are metalframed windows with wide side mullions and transoms concealed behind the cladding. On the setback floors at the top of the building the facade changes to become lighter and more open.



Centro Building on Pratt Street



Detailed model of the proposed facades





- 9 Green ceramic tiles

Palette of proposed materials



Detailed facade model - apartments to the left, office to the right

5.1 Flexible workspace

A typical office floor (levels 1, 2 and 3) measures 2,445m² NIA with an east west dimension between 60m and 66m and a north south dimension of between 42m and 48m. The depth of the plan varies from 12m, north of the core, to 22m on the east side of the core at the deepest part of the plan. There are only eleven columns in each floor plate which makes space planning very flexible. It is possible to split the floors into two or four roughly equal units, so a variety of different sized tenancies are possible. The floor to ceiling height is generous to reflect the deep plan and to allow daylight penetration as deep as possible into the building. The typical floor-to-soffit dimension is 3.460m.

The ceiling of the office is structured by the large-scale steel beams and the pattern of precast concrete planks. Within the bays created by this structure, the lights, fan-coil units and associated ductwork are laid out in a coordinated and ordered way. The building is sprinklered to allow a flexible plan layout and some cellularisation if necessary. Sprinkler pipework adds to the systems in the ceiling. Data, power and fresh air are all distributed under the floor.





Section perspective through the proposed office floor

View of a typical office space



Plan of a characteristic office floor



5.2 Terraces, amenity and biodiversity

The fourth and fifth floor are unusual because the building sets back and this generates large roof terraces and smaller floorplates. Subdivision of these floors into two is possible. Lush planting on the terraces helps create valuable amenity spaces for office tenants and softens the profile of the building as suggested by the Design Review Panel. In addition to the roof terraces for tenants on the fourth and fifth floor, there is a shared roof terrace on the sixth floor available to all building users. This space has capacity for 130 people and is supported by a kitchenette and a group of WCs integrated into the core. The communal terrace is 52m long and varies in width from 4.9m to 5.6m with a parapet and guarding at 1.2m above the floor level. Like the terraces lower down, the shared terrace will be densely planted and is a key contributor to the biodiversity of the building.

Aside from the terraces, there are roofs to the core and plant spaces at the top of the building on level 6 and level 7. These areas of roof perform three main roles. Firstly, they are a site for photovoltaic panels which provide electricity for the building. Secondly, they are planted with sedums and/or wildflowers to provide a niche for birds and inspects. Thirdly, some rainwater storage is possible in the depth of the roof and this, coupled with a basement attenuation tank, will minimise outflow to the sewer during rainstorms.



Perspective of the proposed planted terraces



Centranthus ruber





Deschampsia cespitosa





Scabiosa sp.



Plan of the fourth floor showing the office space and biodiverse terraces

5.3 Office building servicing, cycle parking and refuse

The internal 'street' was introduced to serve the light industrial units on the east side of the building which are described further below. However, it also provides a good route for delivery to the office building. The street will be carefully managed with office deliveries brought to the east entrance of the office core and be loaded directly into the goods lift. Vehicle access arrangements are discussed further in a dedicated transport report.

The ground floor plan includes a waste store with direct access to the core. Tenants can bring waste down in the goods lift at the end of the day and it can be brought out to waste vehicles parked in the internal 'street' as required.





Plan of the ground floor

A large basement area of twin-level bicycle racks provides space for 230 cycles including ten spaces for non-conventional cycles that cannot be racked. Cycle commuters are provided with changing facilities, 142 lockers and twenty-four showers in the basement split 50:50 male:female. Sixteen additional cycle parking spaces are provided externally for visitors.



Proposed shared basement plan running under the office building and apartments

KEY

Office cycle facilites Office plant rooms Light industrial spaces Residential cycle facilites Residential plant rooms

5.4 Rooftop plant, air intake and exhaust

Some of the plant spaces on levels 6 and 7 are internal, others are outdoor spaces that are visually and acoustically screened enclosures. For sustainability reasons, the design team have moved away from gas boilers and the entire building is serviced electrically. Heat is generated by air-to-water heat pumps which must be located on the roof because they need excellent ventilation to work effectively.

A large supply of fresh air is required for the office building which might have a population of over 1000 workers. In the current proposals, this air is brought in from the roof to eliminate intake louvres on the ground floor façade and to guarantee an unpolluted air supply. Stale air is exhausted at high level on the Pratt Street façade.



Planometric view from the south showing the terraces and photovoltaic panels



Plan of the sixth floor with south-facing biodiverse terrace



Detail of the office building entrance with large revolving door with single vane, suitable for wheelchair users

