

## Exemplar Local centre- Daylighting & Overheating- Higgs Young Architects 16-09-15

The proposed building has been designed taking into account in principle factors of daylight and overheating, however, the internal layouts for the proposed uses will be subject to future occupiers requirements and ventilation strategy and a fuller assessment of daylight and overheating will be carried out when these designs are finalised.

The design of the elevations has considered daylight and overheating factors in the proposed disposition of windows and proportion of openings to solid walls. An overall balance of windows to solid walls typically of under 40% and shallow depth of rooms from windows will allow the internal designs to meet the required standards.

The ground floor uses are largely commercial retail and require larger areas of shopfront glazing fronting the street and terraces. Subject to tenants required designs, the openings would provide flexibility for appropriate daylight. Overheating is mitigated by self shading from the upper floor projecting over the openings on the south facing arcade, adjacent buildings on the east and on west facing windows external blinds are proposed for shading.

On the first floor the overall balance of windows to solid walls and shallow depth of rooms from windows creates a good balance for providing adequate daylight and control of overheating for internal rooms. Additional rooflights are provided for the large meeting rooms which have greater room depths. The larger south facing windows on the large meeting room are provided with external horizontal blinds for solar shading.

The windows are of generous height to provide a vertical scale and unify the elevations across each unit, and will provide good daylight. Windows are subdivided with horizontal transoms above vision level located to allow areas of obscured or tinted glass at high level to reduce clear glazed area if required by internal layout room sizes for overheating consideration, without needing to change elevation openings and window proportions.