

City, University of London Fabric Study

Location: London Borough of Islington, UK

Client: City, University of London

Dates of involvement: 2012

Our study presented options focussed on improving the thermal performance of three 1960's concrete buildings on the Northampton Square campus to achieve the University's HEFCE commitments for carbon reduction.

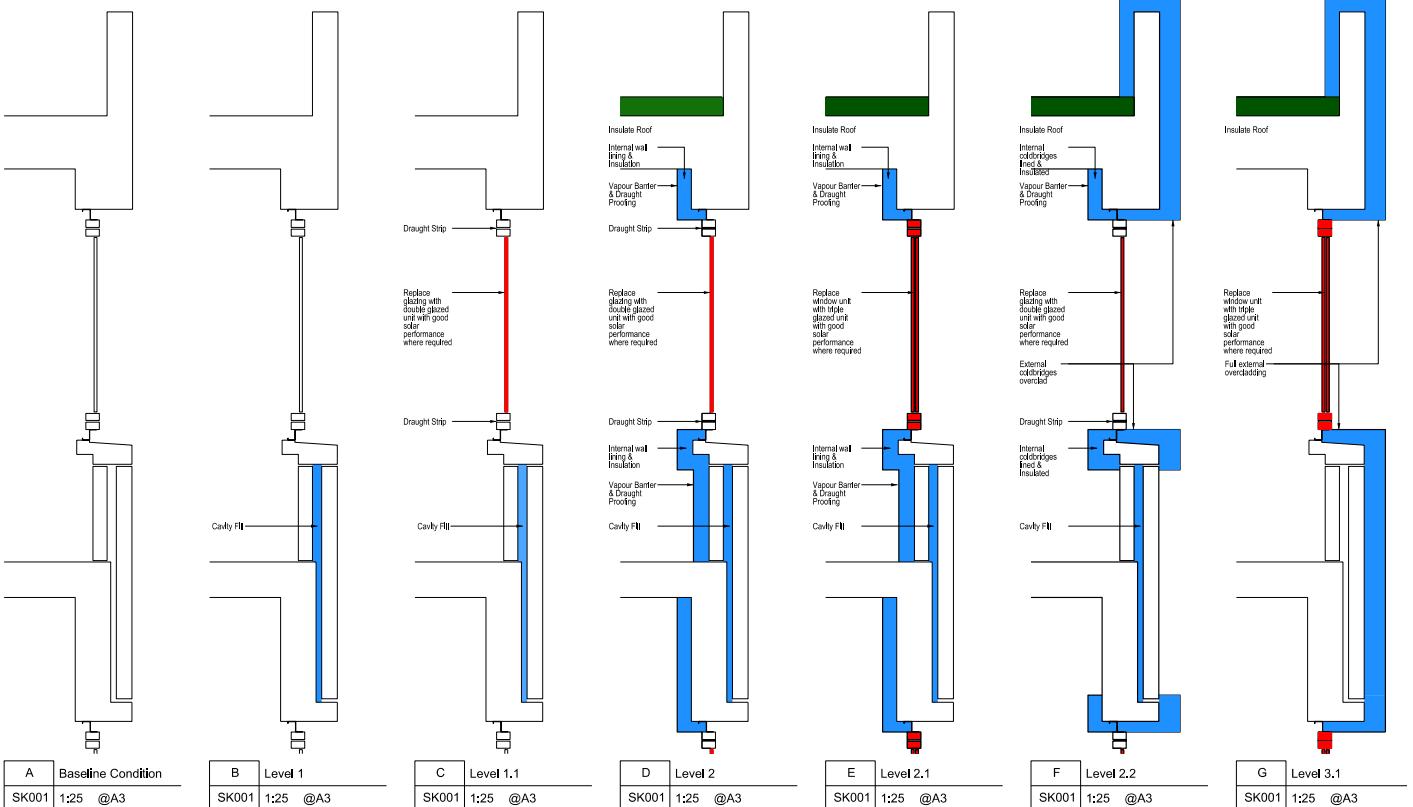
Selecting the Tait building as representative, we analysed the external fabric to assess options for improvement into low, medium and high levels of intervention.

A thermal model was then generated to establish the reduction in energy consumption and carbon emissions for each option compared with the baseline existing condition.

The costs to implement each option against life-cycle costs and payback periods were set out, considering maintenance, phasing and interfaces with other planned projects within the University.

Planning implications and how decisions made at the time could keep other options open were also appraised; this was important when potential benefits relate to variables such as future fuel or energy costs.

Our study set out clear comparisons to assist the University with decision-making regarding upgrading these buildings. For Berrows House, a similar approach can be employed, for example, according to agreed SKA targets.



Our method of analysis for the Tait Building, showing a range of increasing intervention to the external wall from light touch (e.g. double glazing), intermediate (e.g. internal insulated lining) to high level (full over cladding)