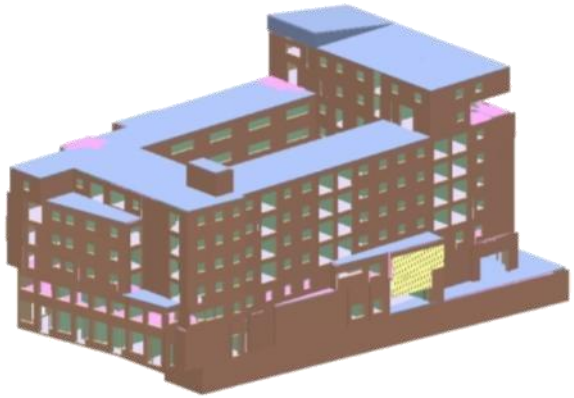
Digital Media Centre

Hevacomp Enabled:

- Natural ventilation strategy
- Reduced energy consumption
- Lower CO2 emissions
- Design and evaluation of performance specifications and room data sheets, lighting, ventilation, heating, cooling, natural ventilation, smoke clearance, domestic services, above ground drainage, building regulation & BREEAM compliance.
- Creation of 3-D lighting models for accurately predicting lighting levels and quality



Results:

- An owner commissioned building energy model differed from SiCo Hevacomp model
- The SiCo Hevacomp model indicated natural ventilation alone would not meet the required heating a cooling of some building zones
- A change was made during the design phase to rectify these looming occupant comfort problems, saving money and avoiding costly post-construction retrofits

See: www.leicester.gov.uk/phoenixsquare

Project Facts:

- Project Location: Leicester, UK
- Construction Cost: £31 million
- An 11 floor mixed-use facility with of cinemas, hi-tech workshops, leisure and residential
- Consultant: SiCo
- SiCo's role: Developed and designed the total building services package including the thermal modeling and associated SBEM calculations
- Construction begun 11/07, completion in Fall '09

Key Design Elements:

- Ground source heat pump providing low grade heating to under floor heating and radiators backed up by twin condensing boilers.
- Photovoltaic panels, rainwater reclamation and the use of natural ventilation minimize the energy usage while maximizing the internal climate.