Additional information required for the block of flats is required as detailed below.

Part B – Fire Safety (Subject to Consultation with the Fire Authority)

1.1 The Regulatory Reform (Fire Safety) Order 2005 applies in England and Wales and covers general fire precautions and other fire safety duties. It is a requirement of the order for a responsible person to carry out a fire risk assessment that must focus on the safety in a case of fire for all relevant persons. A risk assessment will help to identify risks that can be removed or reduced and to decide the nature and extent of the general fire precautions that need to be taken to protect people against the fire risks that remain. Further information can be obtained via the web address: www.fire.gov.uk or by contacting us.

1.2 Regulation 38 of the Approved Inspector Regulations 2000 requires fire safety information to be given to the responsible person for building works to a relevant building at the completion of the project. For definitions of responsible person and relevant building please refer to the Regulatory Reform (Fire Safety) Order 2005. This information will aid the responsible person in carrying out a fire risk assessment. We are unable to issue our Final Certificate until we are satisfied that such information has been given to the responsible person. For guidance on information to be provided please refer to Appendix G of Approved Document B: 2006 Edition Volume 2.

1.3 Can you please confirm that the automatic opening vent within the common stair to the flats will be actuated when the fire alarm is operated.

1.4 Full details of the fire alarm system in accordance with BS 5839-1:2002 are to be provided including a suitable plan indicating the positions of the call points, sounders, automatic fire detectors including those in roof voids in excess of 800mm deep, restricted access points and their operating mechanisms and fire alarm panel.

Fire alarm systems in the common parts are not generally recommended by the fire service due to the high numbers of false alarms, vandalism and lack of on site management for resetting.

1.5 Emergency voice communications system and appropriate fire safety signage are required to all wheelchair refuge points, please provide details.

1.6 The fire alarm system is to be installed and commissioned in accordance with BS 5839-1:2002. A commissioning certificate will be required prior to a final certificate being issued.

1.7 Please provide full details of the internal and external emergency lighting system including a suitable plan indicating the positions of luminaries. Emergency lighting is required in the following locations:

- All common escape routes including external in the residential areas

1.8 The emergency lighting system is to be installed in accordance with BS 5266:1-2005. A commissioning certificate will be required prior to a final certificate being issued.

1.9 Fire exit signage is to be provided in accordance with the Health and Safety (safety signs and signals) Regulations 1996. In general, signs containing symbols or pictograms which conform to BS 5499-1:2002 satisfy these regulations. Additional escape signage may be requested by Premier Guarantee's Site Audit Surveyor and/or the Local Authority's Fire Safety Officer following a final inspection should they be considered necessary.

1.10 Please provide details of the fire safety signage to fire doors in the common parts of the flats.

1.11 Please indicate the proposed fire service access on a suitable plan. Access should be provided to at least 50% of the perimeter to the building for a high reach appliance. If this is not achievable fire mains will be required to serve the building in accordance with AD Part B Section 15.

1.12 Please indicate on a suitable plan the existing fire hydrants within the vicinity of the building. Hydrants should be provided within 90m of an entry point to the building.

2.0 Part L – Conservation of Fuel and Power

2.1 Please refer to Approved Document L2A 2010. Compliance is checked under the following 5 criteria under AD L2A 2010.

2.2 Before construction of a new building starts, the person who is to carry out the work must analyse and take into account the technical, environmental and economic feasibility of using high-efficiency alternative systems (such as the following systems) in the construction, if available:

(a) Decentralised energy supply systems based on energy from renewable sources;
(b) Cogeneration;
(c) District or block heating or cooling, particularly where it is based entirely or partially on energy from renewable sources; and
(d) Heat pumps.

Criterion 1 – Achieving the BER.

2.3 Please provide through an accredited calculation tool such as SBEM, Target CO2 Emission Rate (TER) and Building (as designed) CO2 Emission Rate (BER) calculations. Regulation 20 states that the TER calculation, along with a list of specifications for the building envelope, should be submitted to us before the start of building works.

2.4 An Energy performance Certificate (EPC) is required prior to us issuing our final certificate.

Criterion 2 – Limits on Design Flexibility.

2.5 **Fabric Standards -** Please provide u-values for components as detailed in Table 4 of AD L2A and BR 443. We may further request detailed u-value calculations as part of our check.

2.6 **Design Limits for Building Services –** Fixed building services should be provided with appropriate controls to enable the achievement of reasonable standards of energy efficiency in use in accordance with Paragraphs 4.34 and 4.35 of AD L2A and the Non – Domestic Building Services Compliance Guide.

2.7 Please confirm energy metering will be provided such that at least 90% of estimated annual energy consumption can be assigned to the various end use categories (heating, lighting etc.). Please refer to CIBSE TM39 for further guidance. Note Automatic meter reading and data collection facilities are applicable to buildings with a total useful floor area exceeding 1000m^2.

2.8 Fixed building services should be at least as efficient as the worst acceptable value as set out in the Non-Domestic Services Compliance Guide.

Criterion 3 – Limiting the Effects of Solar Gains in Summer.

2.9 Please provide design details and calculations to demonstrate compliance with the requirement for limiting the effect of solar gains in accordance with
Paragraphs 4.41 – 4.44 of ADL2A. This is to reduce the need for, or reduce the installed capacity of air-conditioning systems.

Criterion 4 – Building Performance Consistent with BER.

2.10 **Building Fabric** – The building fabric should be constructed so that there are no reasonably unavoidable thermal bridges in the insulation layers. To ensure there are no reductions in thermal performance, the insulation layer should either be contiguous with the air barrier at all points in the building envelope, or the space between them should be filled with solid material such as in a masonry wall. Ways of demonstrating that reasonable provision has been made are:

a. To adopt a quality – assured accredited constructions detail approach in accordance with an approved scheme. The calculated linear thermal transmittance can be used directly in the BER calculation.

b. Calculate the linear thermal transmittance by a person with suitable expertise and experience following the guidance set out in BR 497. A process flow sequence should be provided indicating the way in which the details should be constructed. The calculated linear thermal transmittance value used in the BER calculation should be increased by 0.2W/mK or 25%, whichever is greater.

c. To use unaccredited details, with no specific quantification of the thermal bridge values. The calculated linear thermal transmittance value used in the BER should be increased by 0.04 W/mK or 50%, whichever is greater.

2.11 **Air Permeability & Pressure Testing** – As the total useful floor area of the building exceeds 500m^2 the building will be subject to pressure testing. The Building Emission Rate (BER) calculation is required to show the measured air permeability to show the compliance of the as-built building and to reflect design changes during construction. Note the BER must not exceed the TER. The measured air permeability should not exceed the limiting value of 10m^3/(h.m^2) at 50 Pa.

2.12 A Building Emission Rate (BER) calculation is required to be submitted to show the compliance of the "as built" building. This will need to take account of all design changes during construction. Note the BER must not exceed the TER. Calculations certified and submitted by a person registered by FAERO Ltd or BRE Certification Ltd is deemed as acceptable without further calculation checks by us.

2.13 **Commissioning of the Building Services -** Confirmation will be required from the contractor that the building services systems have been commissioned correctly. This will result in a report being produced that follows the procedures set out in the CIBSE Commissioning Code M. A commissioning notice should be submitted to us within 5 days of the completion of the commissioning work.

2.14 **Air Leakage of Ductwork -** Within a building served by fans with a design flow rate greater than 1m^3/s air leakage testing of ductwork will be required. A practical guide to ductwork leakage testing DW/143, HVCA 2000 has been produced giving further guidance. If the BER assumes ductwork has a leakage rate lower than that defined within DW/143 then all ductwork should be tested. Please provide test results when available.

Criterion 5 – Provisions for Energy-Efficient Operation of the Building.

2.15 A building logbook should be produced for the building and issued to the building owner. CIBSE TM31 Building Logbook Toolkit should be used. The data used to calculate the TER and BER should be included in the logbook. We will require confirmation that this has been provided.

Consequential Improvements.

Consequential improvements are required to an existing building that has a total useful floor area in excess of 1000m2 and where one of the following types of work is undertaken:

- An extension
- The initial provision of any fixed building service
- An increase to the installed capacity of any fixed building services. Installed capacity is defined as the design output of the distribution system output devices divided by the total useful floor area. See AD Pt L2A Paragraph 20

Please note that where consequential improvements to the existing building have been identified, justification for a lesser standard may be applicable on the grounds that it is not technically, functionally or economically feasible to carry out the improvements within a simple financial payback of15 years.

Please contact us to discuss a program of consequential improvements.

As the existing building exceeds 1000m2 of useful floor area extending this building will result in a requirement for consequential improvements, which achieve a value of not less than 10% of the value of the principal work. Please provide details of the proposed consequential improvements including costings as prescribed within Table 1 of AD L2B.

If it is intended to install building services as a first installation within the existing building this will result in a requirement for consequential improvements. Please provide details of the proposed consequential improvements as prescribed within Table 1 of AD L2B.

If it is intended to increase the installed capacity of heating and or cooling services these attract both specific improvements and consequential improvements as detailed in Paragraphs 22 – 23 of AD L2B. Please provide details of the proposed consequential improvements as prescribed within Table 1 of AD L2B.

2.1 Please refer to Approved Document L1A 2010. Compliance is checked under the following 5 criteria under AD L1A 2010.

2.2 Before construction of a new building starts, the person who is to carry out the work must analyse and take into account the technical, environmental and economic feasibility of using high-efficiency alternative systems (such as the following systems) in the construction, if available:

(a) Decentralised energy supply systems based on energy from renewable sources;
(b) Cogeneration;
(c) District or block heating or cooling, particularly where it is based entirely or partially on energy from renewable sources; and
(d) Heat pumps.

Regulation 7 – Materials and Workmanship

Materials should comply with appropriate British Standards or Agrément Certificates and relevant numbers should be quoted in the main specification. Alternatively, the materials should be marked, stamped, independently certified or otherwise justified by test or calculation to show their suitability.

Materials should generally be in accordance with BS8000 series of documents and other accepted good practice (e.g. Quality assured to ISO 9000).

General Comments

This is not an exhaustive list and further information may be requested at a later date.

Signed:

Jon Huckle

Jon Huckle MBEng
Plan Assessor on behalf of P.G. Surveyors