



Design & Access Statement

E04759

APPENDIX D Pt 1 of 2

Energy Statement

Sustainability Statement

BREEAM Pre Assessment

Project: Ranikhet Academy Redevelopment, Reading

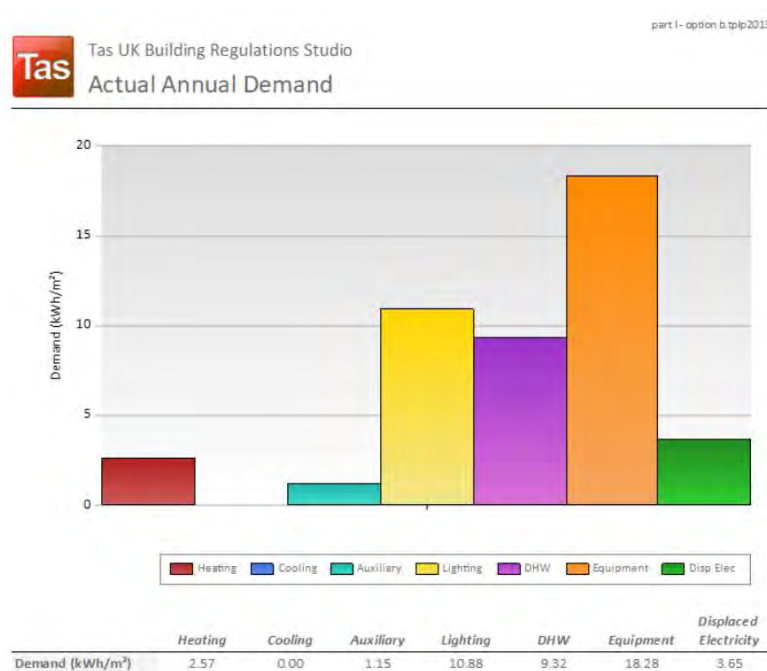
iTMS Code: E04759

Date: 12/01/21

Planning Submission: Energy Statement

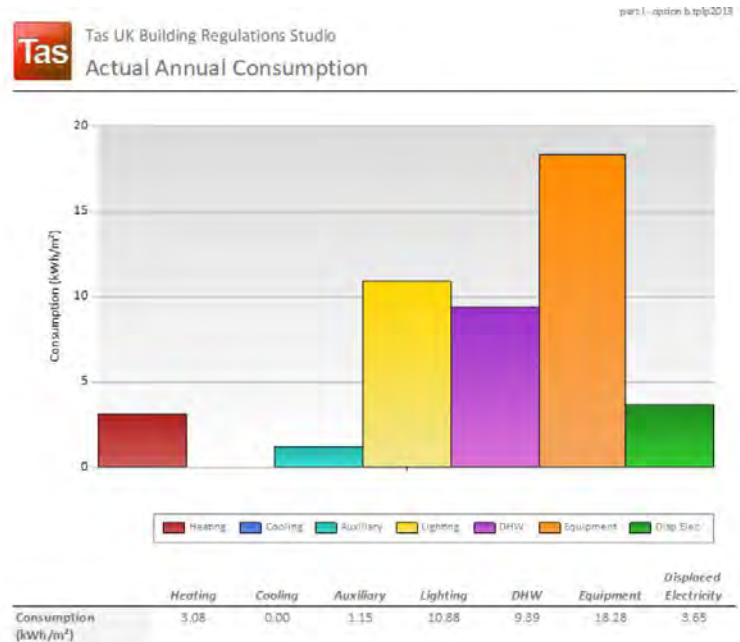
Predicted Annual Energy Demand

The baseline annual energy predicted energy demand of the development is based on using Building Regulations Approved Documents Part L NCM Methodology and dynamic simulation. The following table shows the breakdown including unregulated small power loads (identified as equipment).



Predicted Energy Consumption

Annual energy consumption is shown below. Unregulated loads (equipment) are shown separately.



Predicted Annual Carbon Dioxide Emissions

The annual CO2 emissions are as follows. Similarly, unregulated loads (equipment) are shown separately.



Renewables

The building is reusing 42No Trina 230W PV panels (approx. 68m² – 9.6kWp) from the existing school to be re-used on the new. The estimated annual energy produced is 7,508kWh (from BRUKL).

Energy Production by Technology [kWh/m ²]		
	Actual	Notional
Photovoltaic systems	3.65	0
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0

From the annual energy consumption figure we can see that 3.65kWh/m² exceeds the 10% requirement for renewables (2.45kWh/m²).

Energy Consumption by End Use [kWh/m ²]		
	Actual	Notional
Heating	3.08	10.37
Cooling	0	0
Auxiliary	1.15	1.04
Lighting	10.88	14.11
Hot water	9.39	10.24
Equipment*	18.28	18.28
TOTAL**	24.5	35.76

* Energy used by equipment does not count towards the total for consumption or calculating emissions.
** Total is net of any electrical energy displaced by CHP generators, if applicable.

The overall improvement on the Notional Building Target Emission Rate (TER) is shown in the extract from the Part L BRUKL below. This currently indicates an approximately 25% improvement.

BRUKL Output Document
 HM Government

Compliance with England Building Regulations Part L 2013

Project name

Ranikhet Primary School
As designed

Date: Fri Jan 08 16:11:16 2021

Administrative information

Building Details
Address: Reading,

Certification tool

Calculation engine: TAS
Calculation engine version: "v9.5.1"
Interface to calculation engine: TAS
Interface to calculation engine version: v9.5.1
BRUKL compliance check version: v5.6.b.0

Certifier details

Name: Neil Boardman
Telephone number: 01962 845362
Address: Three Ministers House, 76 High St, Winchester, SO23 8UL

Criterion 1: The calculated CO₂ emission rate for the building must not exceed the target

CO ₂ emission rate from the notional building, kgCO ₂ /m ² .annum	13.2
Target CO ₂ emission rate (TER), kgCO ₂ /m ² .annum	13.2
Building CO ₂ emission rate (BER), kgCO ₂ /m ² .annum	9.8
Are emissions from the building less than or equal to the target?	BER <= TER
Are as built details the same as used in the BER calculations?	Separate submission

Reductions in energy consumption and carbon dioxide emissions

Energy efficiency measures for the building will comprise the following mechanical and electrical services features:

- Centralised Mechanical Ventilation Heat Recovery (MVHR) for toilets and ancillary areas.
- Natural Ventilation Heat Recovery (NVHR) to classrooms.
- Occupancy demand ventilation control.
- High efficiency gas condensing boilers.
- Variable speed pumping.
- LED Lighting throughout.
- Daylight linked lighting controls.
- Occupancy demand lighting control.

The dynamic simulation model will be updated in line with design development and the full proposal submitted to Building Control.



Project: Ranikhet Academy Redevelopment

iTMS Code: E04759

Date: 12/01/21

Planning Submission: Sustainability Statement

Sustainability forms a fundamental part of a every Hampshire County Council (HCC) design:

Where practical and affordable HCC follows the principles of sustainability in construction through the procurement, delivery, construction and in use.

This is with the intent of delivering more sustainable buildings.

HCC adopts a strategic approach, looking at opportunities that are open at the early design stages of the project, this includes summaries and case studies of sustainable techniques and technologies.

There are a number of key areas that are targeted on sustainability at Ranikhet, these include but are not limited to the following:

- Energy efficiency, low carbon and renewable energy strategies/technologies
- Water management strategies
- Health and wellbeing in use including day-lighting analysis and thermal comfort
- Waste and recycling strategies
- Pollution issues – low NOx, low GWP, use of refrigerants, reducing need for mechanical cooling
- Best practise management of the site

Energy efficiency, low carbon and renewable energy strategies/technologies

Also refer to the separate HCC Energy Planning Statement. In summary the buildings' carbon emissions are currently forecasted to improve on current Building Regulations by 25%. The new building will re-use the existing PV panels to generate renewable energy.

The proposed school is targeting a BREEAM Excellent rating. A BREEAM 2018 pre-assessment has been carried out to determine the optimum credit mix to achieve the required rating while promoting sustainability and adding value to the development.

Water management strategies

Water use will be minimised through considered specification of sanitaryware and water-using appliances will be utilised throughout including dual flush WC cisterns and tap flow restrictors with the following performance limits:

- 4 litre flush WC
- 6 litres per minute flow rate for taps (basins)

Health and wellbeing in use including day-lighting analysis and thermal comfort

Promotion of health and wellbeing for occupants has been a fundamental consideration of the design development. Extensive thermal modelling will be carried out to investigate and optimise the internal conditions resulting from building and services design proposals, including passive options for daylighting, ventilation and free cooling.

The building will comply with BB101 for summertime overheating criteria (without the need for cooling).

These studies have been combined with a façade design incorporating shading, and the use of occupant-controlled shading.

Waste and recycling strategies

Waste generation shall be minimised and where possible existing materials shall be recycled or reused.

Pollution issues – low NOx, low GWP, use of refrigerants, reducing need for mechanical cooling

The gas fired boilers will be ultra-low NOx and mechanical cooling will be limited to the IT server space.

Best practice management of the site

During the construction phase, the project team will consider and act where appropriate on the following:

- Procurement
- Construction site impacts
- Supporting the development of local jobs
- Building log books
- Buildings in use
- Achieving sustainability in operation
- Commissioning and re-commissioning
- Post occupancy evaluation
- Facilities engineering, maintenance and operation
- Energy and water management
- Use of sustainable materials and construction methods

RANIKHET PRIMARY ACADEMY

BREEAM NEW CONSTRUCTION 2018: PRE-ASSESSMENT REPORT



BOE12065
RANIKHET ACADEMY
READING
09 February 2021

REPORT

Document Status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
Final	BREEAM NC 2018 Pre-Assessment	Russell Pitter	David Johnson	Russell Pitter	09.02.21

Approval for issue

Russell Pitter



2021-02-21

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EXECUTIVE SUMMARY

RPS has been commissioned by Hampshire County Council to produce a BREEAM 2018 Pre-Assessment for the construction of the new Ranikhet Primary Academy in Reading.

It is our understanding that the requirement is to achieve an Excellent BREEAM rating.

This report is based on information received to date, detailed within the main body of the report and a BREEAM Pre-Assessment meeting held with the design team dated 20/04/20. Where specific information was not available, assumptions have been made in order to set up the BREEAM strategy. This report has been updated February 2021.

This report outlines the credit strategy to be followed by the development in order to achieve the required BREEAM rating. If the strategy outlined in this report is followed together with the suggested recommendations it is considered that the development can achieve an 'Excellent' BREEAM rating. The full credit strategy for the report is detailed within the Section 5 of the report.

1.0 INTRODUCTION

This report outlines the sustainable design principles of the scheme in relation to the BREEAM New Construction 2018 requirements.

The development will be assessed under the BREEAM New Construction 2018 'Education' version of the methodology and it is our understanding that a minimum of BREEAM 'Excellent' is required.

BREEAM assessment and certification is generally carried out in three phases:

- A preliminary assessment to set up the strategy to meet the BREEAM target.
- An initial assessment and interim certification is carried out at the design stage
- Final assessment and certification is carried out after construction.

A BREEAM assessment measures the sustainability of a development against design categories, rating the design and construction process as a whole package. The categories included within a BREEAM assessment are:

- Management
- Health and Wellbeing
- Energy
- Transport
- Water
- Materials
- Waste
- Land Use and Ecology
- Pollution

BREEAM has a scoring system of six levels. The different levels are made up by achieving both the appropriate mandatory minimum standards together with a proportion of the other credits so that a score is achieved. The scores required for the corresponding ratings are summarised in the table below.

BREEAM rating	Points score
Unclassified	< 30
Pass	≥ 30
Good	≥ 45
Very Good	≥ 55
Excellent	≥ 70
Outstanding	≥ 85

Table 1: BREEAM rating scoring system

BREEAM Pre-Assessment

This Pre-Assessment follows the guidance set out in the BREEAM NC 2018 technical manual, and thus the resulting score is based on version (SD5078 3.0).

The details for each category in the environmental ratings are in the completed Pre-Assessment below together with details of how the development intends to achieve this. This BREEAM pre-assessment has been completed based upon a review of the plans and the reports that formed part of the planning submission.

The rating obtained by using this BREEAM Pre-Assessment is for guidance only. The predicted ratings may differ from those obtained through a formal assessment, which will be carried out by an appropriately licensed BREEAM assessor. Advice should be sought from a licensed assessor at an early stage in a project to ensure the estimated rating will be obtained.

Design Stage Review

Design specifications are assessed for each individual building, before construction begins. A rating is determined, and (subject to quality assurance) a Design Stage or Interim Certificate is awarded for each building. Registered assessors can apply for assessment of a site, compile and submit a design report for assessment and monitor the assessment status online.

Post Construction Stage Review

The Post Construction Stage (PCS) assessment confirms that buildings have either been built to the Design Stage specifications or to (documented) variations from the Design Stage. Variations must be re-assessed so that new scores and BREEAM levels can be calculated for each affected building. Where a Design Stage assessment has been undertaken, it is used to inform the PCS assessment.

2.0 SUMMARY OF PREDICTED SCORE

The tables in the following section set out the predicted BREEAM score likely to be achieved for the proposed development, based on the commitments and assumptions from the design team. Overall, it is predicted that the proposed development should achieve a score of **75.12%**, thereby achieving an '**Excellent**' rating. Note for an 'Excellent' rating a score of at least 70% is required

BREEAM Rating						
	Credits available	Credits achieved	Credits targeted	% Credits achieved	Weighting	Category score
Man	21.0	15.0	15.0	71.43%	11.00%	7.85%
Hea	18.0	16.0	16.0	88.89%	14.00%	12.44%
Ene	23.0	17.0	17.0	73.91%	16.00%	11.82%
Tra	12.0	7.0	7.0	58.33%	10.00%	5.83%
Wat	9.0	4.0	4.0	44.44%	7.00%	3.11%
Mat	14.0	12.0	12.0	85.71%	15.00%	12.85%
Wst	10.0	7.0	7.0	70.00%	6.00%	4.19%
LE	13.0	9.0	9.0	69.23%	13.00%	9.00%
Pol	12.0	9.0	9.0	75.00%	8.00%	6.00%
Inn	10.0	2.0	2.0	20.00%	10.00%	2.00%
Total	142.0	98.0	98.0	69.01%	-	75.12%
Rating	-	-	-	-	-	 Excellent

Figure 1: Predictive Score

In addition, performance against the minimum standards required for an Excellent rating under each scenario is summarised below. If the required minimum standards are not met, then the target rating will not be achieved regardless of overall score.

Issue	Minimum / Mandatory Requirements Targeted
Man 03 – Responsible construction practices – Need to achieve at least 1 credit for responsible construction management	Yes
Man 04 – Commissioning & handover – Need to achieve the credit for commissioning test schedule & responsibilities	Yes
Man 04 – Commissioning & handover – Need to produce a Building User Guide	Yes
Ene 01 – Reduction of energy use and carbon emissions – Need to achieve at least 4 credits for energy performance or prediction of operational energy consumption	Yes
Ene 02 – Energy Monitoring – Installation of energy sub-metering that facilitates the monitoring of operational energy consumption	Yes
Wat 01 – Installation of efficient water-consuming components that result in a 12.5% improvement over baseline building water consumption	Yes
Wat 02 – Water Monitoring – Installation of a water meter on each mains water supply to each building (criterion 1).	Yes
Mat 03 – Responsible Sourcing of Materials – All timber and timber-based products used on the project are to be legally harvested and traded timber (criterion 1).	Yes
Wst 03 – Operational waste – Need to achieve credit by providing dedicated storage space for recyclable waste	Yes

Table 2: Minimum mandatory requirements for Excellent

Based on the information received to date, detailed within the main body of the report it is considered that the development can achieve the required 'Excellent' BREEAM rating.

Category assessment

Management (Man)

Man 01 Project Brief and design

To optimise final building design through recognising and encouraging an integrated design process and robust stakeholder engagement.

Assessment criteria

Project delivery planning :	Yes
Stakeholder consultation (interested parties) :	Yes
Prerequisite: Have the client and the contractor formally agreed performance targets? :	Yes
BREEAM Advisory Professional (Concept Design) :	Yes
BREEAM Advisory Professional (Developed Design) :	Yes

Credits awarded : 4

Comments :

Project delivery planning. Credit targeted. Requirement is that prior to completion of the Concept Design, the project delivery stakeholders meet to identify and define for each key phase of project delivery:

1.a Roles

1.b Responsibilities

1.c Contributions.

2 Consider each one of the following items when defining roles, responsibilities and contributions for each key phase of the project:

2.a End user requirements

2.b Aims of the design and design strategy

2.c Particular installation and construction requirements or limitations

2.d Occupiers' budget and technical expertise in maintaining any proposed systems

2.e Maintainability and adaptability of the proposals

2.f Operational energy

2.g Requirements for the production of project and end user documentation

2.h Requirements for commissioning, training and aftercare support

RPS will undertake the role of BREEAM Advisory Professional at both concept design and developed design stages.

Man 02 Life cycle cost and service life planning

To promote the business case for sustainable buildings and to deliver whole life value by

encouraging the use of life cycle costing to improve design, specification, through-life maintenance and operation.

Assessment criteria

Elemental LCC :	No
Component level LCC options appraisal :	No
Capital cost reporting :	Yes
Capital cost of the project :	1000 Â£k/m ²

Credits awarded : 1

Comments :

Elemental life cycle cost plan credit not targeted. We are not aware that an elemental LCC plan will be produced before the end of concept design stage giving an indication of future replacement costs over a period of analysis of 20, 30, 50 or 60 years including service life, maintenance and operation cost estimates.

Component level LCC options appraisal credit not targeted. We are not aware that a component level LCC will be carried out by the end of Process Stage 4.

The capital cost for the building in pounds per square metre of gross internal floor area will be included as part of the submission to BRE for benchmarking purposes. Credit targeted.

Man 03 Responsible construction practices

To recognise and encourage construction sites which are managed in an environmentally and socially considerate, responsible and accountable manner.

Assessment criteria

Prerequisite: Are all timber and timber-based products used during the construction process of the project 'legally harvested and traded timber'? :	Yes
Environmental management :	Yes
Prerequisite: Have the client and the contractor formally agreed performance targets? :	Yes
BREEAM Advisory Professional (site) :	No
Responsible construction management :	2
Monitoring of construction site impacts :	Yes
Utility consumption :	Yes
Transport of construction materials and waste :	No

Exemplary level criteria - Responsible construction management : No

Key Performance Indicators: Construction site energy use

Energy consumption (total) - site processes : 1 kWh

Energy consumption (intensity) - site processes : 1 kWh/project value

Key Performance Indicators: Construction site greenhouse gas emissions

Process greenhouse gas emissions (total) - site processes : 1 KgCO₂eq

Carbon dioxide emissions (intensity) - site processes : 1 KgCO₂ eq/project value

Credits awarded : 4

Comments :

The principal contractor will be required to operate an Environmental Management System and achieve 15 items referred to in table 4.1 Responsible Construction Management items.

Site related energy and water impacts are to be monitored and recorded on a monthly basis.

Man 04 Commissioning and handover

To encourage a properly planned handover and commissioning process that reflects the needs of the building occupants.

Assessment criteria

Commissioning testing schedule and responsibilities : Yes

Commissioning - design and preparation : Yes

Testing and inspecting building fabric : No

Handover - have a technical and a non-technical building user guide been developed prior to handover? : Yes

Handover - have a technical and a non-technical training schedule been prepared around handover? : Yes

Credits awarded : 3

Comments :

1 credit targeted for commissioning undertaken in accordance with Building Regulations, BSRIA and CIBSE guidelines.

1 credit targeted for undertaking design reviews and giving advice on suitability for ease of commissioning. Providing commissioning management input to construction programming and during installation stages. Management of commissioning, performance testing and handover or post-handover stages.

Credit not targeted for completing post-construction testing and inspection to quality-assure the integrity of the building fabric, including continuity of insulation, avoidance of thermal bridging and air leakage paths (thermographic survey).

1 credit targeted for developing two building user guides for the following users: Non-technical user guide for distribution to the building occupiers. Technical user guide for the premises facilities managers.

Man 05 Aftercare

To ensure the building operates in accordance with the design intent and operational demands, through providing aftercare to the building owner and occupants during the first year of occupation.

Assessment criteria

Is this a speculative development? :	No
Aftercare support :	Yes
Commissioning - implementation :	Yes
Post occupancy evaluation :	Yes
The client or building occupier commits funds to pay for the POE in advance. :	Yes

Credits awarded : 3

Comments :

Aftercare support credit targeted - The Contractor will provide the necessary infrastructure and resources to provide aftercare support to the building occupier.

Commissioning implementation credit targeted - The building occupier will commit to collecting energy and water consumption data for a period of 12 months after initial occupation.

Post Occupation Evaluation credit targeted - The client or building occupier commit to carrying out a post occupancy evaluation (POE) exercise one year after initial building occupation and to disseminate the findings in terms of the buildings post occupancy performance. The Client has confirmed that they will use soft landings and the cost POE will be shown in Cost Plan.

Health and Wellbeing (Hea)

Hea 01 Visual comfort

To encourage best practice in visual performance and comfort by ensuring daylighting, artificial lighting and occupant controls are considered.

Assessment criteria

Control of glare from sunlight :	Yes
Daylighting (building type dependent) :	2
View Out :	Yes
Internal and external lighting levels, zoning and controls :	Yes
Exemplary level criteria - Daylighting :	No
Exemplary level criteria- Internal and external lighting levels, zoning and control :	Yes

Credits awarded : 5

Exemplary credits awarded : 1

Comments :

Visual Comfort - Credit targeted. Requirements are that a glare control strategy designs out potential glare in all relevant building areas where risk has been identified. This should be achieved through building form and layout or building design measures. The glare control strategy does not increase energy consumption used for lighting. This is achieved by: Maximising daylight levels in all weather, cloudy or sunny and ensuring the use or location of shading does not conflict with the operation of lighting control systems.

Daylighting - Credits targeted. The requirement is that daylighting calculations demonstrate that 80% of occupied areas achieve a daylight factor of 2%.

View out - Credit targeted. Requirement is that 95% of the floor area in relevant building areas will be within 8m of a wall which has a window or permanent opening that provides an adequate view out.

Internal and external lighting - Credit targeted. Internal lighting to be in accordance with SLL Code for Lighting 2012. For areas where computer screens are regularly used, the lighting design complies with CIBSE Lighting Guide 7.

Exemplary level criteria - Internal and external lighting levels, zoning and control. Credit targeted. To achieve an exemplary performance credit for Internal and external lighting levels, zoning and control: Lighting in each zone can be manually dimmed by occupants down to 20% of the maximum light output using dimmer switches positioned in accessible locations. Dimming and control gear should avoid flicker and noise. Section 2.5 of the MEP Stage 1 report confirms LED lighting controlled via automatic

presence/absence detection and daylight linking sensors. SEN areas and Classrooms will have dimmable tuneable LED lighting. Teaching spaces, offices, meeting rooms, Halls shall also all be dimmable and have manual switching controls together with the automatic controls. Catering kitchen areas and plant rooms shall be manual only switching.

Hea 02 Indoor air quality

To encourage and support healthy internal environments with good indoor air quality.

Assessment criteria

Pre requisite: Indoor air quality (IAQ) plan :	Yes
Ventilation :	Yes
Emissions from building products :	1
Post-construction indoor air quality measurement :	No

Exemplary level criteria- Emissions from building products :

Key Performance Indicators

Formaldehyde concentration :

Total volatile organic compound (TVOC) concentration :

Credits awarded : 2

Comments :

Pre-requisite: A site-specific indoor air quality plan is required to be produced and implemented. The objective of the plan is to facilitate a process that leads to design, specification and installation decisions and actions that minimise indoor air pollution during occupation of the building. The indoor air quality plan must consider the following:

- 1.a Removal of contaminant sources
- 1.b Dilution and control of contaminant sources:
 - 1.b.i Where present, consideration is given to the air quality requirements of specialist areas such as laboratories
- 1.c Procedures for pre-occupancy flush out
- 1.d Third party testing and analysis
- 1.e Maintaining good indoor air quality in-use.

Ventilation credit targeted. Requires the building to be designed to minimise the indoor concentration and recirculation of pollutants in the building as follows:

Provide fresh air into the building in accordance with the criteria of the relevant standard for ventilation. In naturally ventilated buildings or spaces: sensors either have the ability to alert the building owner or manager when CO2 levels exceed the recommended set point, or are linked to controls with the ability to adjust the quantity of fresh air, i.e. automatic opening windows or roof vents.

For naturally ventilated or mixed mode buildings, the design demonstrates that the ventilation strategy provides adequate cross flow of air to maintain the required thermal comfort conditions and ventilation rates in accordance with CIBSE AM10.

Section 1.4 of the MEP Stage 1 report confirms that the ventilation strategy for new school buildings will maximise the use of natural ventilation and natural ventilation heat recovery (NVHR) where possible.

Emissions from construction products. 2 credits available. 1 credit is targeted which requires three out of the five product types to meet the emission limits, testing requirements and any additional requirements listed in Table 5.11 (Please refer to page 92 and 93 of the BREEAM Technical Manual SD5078 BREEAM New Construction 2018 Version 3.0)

Hea 04 Thermal comfort

To ensure the building is capable of providing an appropriate level of thermal comfort.

Assessment criteria

Thermal modelling :	Yes
Design for future thermal comfort :	Yes
Thermal zoning and controls :	Yes

Credits awarded : 3

Comments :

First credit targeted. Requires thermal modelling to be carried out using software in accordance with CIBSE AM11 Building Energy and Performance Modelling. The modelling demonstrates that for air-conditioned buildings, summer and winter operative temperature ranges in occupied spaces are in accordance with the criteria set out in CIBSE Guide A Environmental design.

Second credit targeted. Requires thermal modelling to be undertaken for a projected climate change scenario:

Dynamic thermal simulation software packages provide the facility for building designs to be assessed under external climatic conditions specific to geographic location. Industry standard weather data for the UK is available in the form of Test Reference Years (TRYs) and Design Summer Years (DSYs) provided by CIBSE (2016) (<https://www.cibse.org/weatherdata>). This weather data enables thermal analysis of building designs under current climatic conditions, yet no account is taken of the projected variations in weather data that will occur during the building's life cycle as a result of climate change. The following probabilistic DSY weather data files should be used to establish the projected climate change environment against which the design is evaluated:

Naturally ventilated buildings

Time period: 2050s

Emissions scenario: Medium (A1B)

50th percentile DSY 2 and DSY 3

Section 1.10 of the MEP Stage 1 report confirms that the thermal modelling for the new build will use the CIBSE 2050 future weather data to predict overheating risk.

Third credit targeted which requires the thermal modelling analysis to inform the temperature control strategy for the building and its users.

Hea 05 Acoustic performance

To ensure the building is capable of providing an appropriate acoustic environment to provide comfort for building users.

Assessment criteria

Criteria performance requirements or SQA bespoke requirements? :	Criteria performance requirements
Sound insulation :	1
Indoor ambient noise level :	Yes
Room acoustics :	Yes

Credits awarded : 3

Comments :

Sound insulation credit targeted. The design team have confirmed that the performance standards set out in Section 1 of Building Bulletin 93: Acoustic design of schools: performance standards, February 2015 (BB93) relating to airborne sound insulation between spaces and impact sound insulation of floors will be achieved.

Indoor ambient noise levels credit targeted. The design team have confirmed that the indoor ambient noise level standards set out within Section 1 of BB93 will be achieved for all room types.

Room acoustics credit targeted. The design team have confirmed that room acoustics (Control of reverberation, sound absorption and speech transmission index (STI) criteria will be achieved:

Teaching and study spaces will achieve the requirements relating to reverberation time for teaching and study spaces set out within Section 1 of BB93.

Open plan teaching spaces will achieve the performance requirements relating to reverberation time and STI set out within Section 1 of BB93.

Corridor and stairwells, for those that give direct access to teaching and study spaces, will achieve the performance requirements relating to sound absorption.

Hea 06 Security

To encourage the planning and implementation of effective measures that provide an appropriate level of security to the building and site.

Assessment criteria

Security of site and building : Yes

Exemplary level criteria :

Credits awarded : 1

Comments :

Credit targeted. Requirement is that a Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). The purpose of the SNA will be to identify attributes of the proposal, site and surroundings which may influence the approach to security for the development. The controls and recommendations shall be incorporated into proposals and implemented in the as-built development

Anne Chalmers, Crime Prevention Design Advisor for Thames Valley Police has been consulted with regard to the security measures at Ranikhet Academy Primary School.

Hea 07 Safe and Healthy Surroundings

To encourage the provision of safe access around the site and outdoor space that enhances the wellbeing of building users. .

Assessment criteria

Safe Access : Yes

Outside Space : Yes

Credits awarded : 2

Comments :

Safe access - Credit targeted. Requirement is that dedicated and safe cycle paths are provided from the site entrance to any cycle storage, and connect to offsite cycle paths where applicable.

Dedicated and safe footpaths are provided on and around the site providing suitable links for the following:

- a The site entrance to the building entrance
- b Car parks (where present) to the building entrance
- c The building to outdoor space
- d Connecting to off-site paths where applicable.

Pedestrian drop-off areas are designed off, or adjoining to, the access road and should provide direct access to other footpaths.

The above is referenced on page 3 of the document 'E04759 Ranikhet RBC Meeting 2020-02-17'

Outside Space - Credit targeted. Requirement is that there is an outside space providing building users with an external amenity area. The site block plan shows that there is a cafe courtyard which is of an appropriate size to provide enough amenity for the predicted number of building users during coffee or lunch breaks to gather, socialise, relax and connect with the natural environment. The space is open to the sky, has appropriate seating areas and is non-smoking, it is located to ensure it is accessible to all building users and avoids areas that will have disturbances from sources of noise (e.g. building services, car parks, busy roads, delivery areas etc.)