

HW2	View Out	0 of 1 credit achieved
Aim To allow occupants to refocus their eyes from close work and so reduce the risk of eyestrain.		
Credit Criteria One credit where evidence provided demonstrates that all desks are within a 7m radius of a window.		
Credit Validation The client has stated that they are not working towards this credit and have therefore not supplied any evidence in support of it. The credit is withheld.		
Credit References None		
Further Information/Action None required		

HW3	Glare Control	1 of 1 credit achieved
Aim To reduce problems associated with glare in internal occupied areas.		
Credit Criteria One credit where evidence provided demonstrates that an occupant controlled glare control system (e.g. internal or external blinds) is fitted.		
Credit Validation All windows on all elevations are specified with occupant controlled Venetian blind systems. The can be manually controlled using separate tilt and control mechanisms. The marked up drawings show that all occupied areas are specified with blinds except for the two main windows in the ground floor facing the street. Walker Bushe Architects have confirmed that occupant controlled glare control systems will be installed to these windows.		
Credit References 1. Copy of Contract: ACE Contracts Quote 0607/14219 & Quote 0307/13958 2. Drawings 500/GA01 to 500/GA05 with marked up blind positions 3. Letter from Walker Bushe Architects, 29 th August, 2007		
Further Information/Action No further information required		

HW4	High Frequency Lighting	1 of 1 credit achieved
Aim To reduce the risk of health problems related to frequency of fluorescent lighting.		
Credit Criteria One credit where evidence provided demonstrates that high frequency ballasts are installed on all fluorescent and compact fluorescent lamps.		
Credit Validation Technical data sheets have been provided for all the fluorescent and compact fluorescent lamps specified in the refurbishment of the building. The data sheets show that high frequency ballasts are present on all the lamps. Therefore this credit is awarded.		
Credit References 1. Technical Data Sheet: Universal Module with Trident Satin Louvre 2. Technical Data Sheet: Coral Single HFO 3. Technical Data Sheet: Fagerhult luminaire with Profal Louvre 4. Technical Data Sheet: 5. Technical Data Sheet:		
Further Information/Action No further information required		

HW5	Internal and External Lighting Levels	1 of 1 credit achieved
Aim To ensure lighting has been designed in line with best practice for suitability and visual comfort.		
Credit Criteria One credit where evidence provided demonstrates that all internal and external lighting, where relevant, is specified in accordance with the appropriate maintained illuminance levels (in lux) recommended by CIBSE.		
Credit Validation The consulting engineers have provided a letter confirming that all the internal lighting levels are specified to be in accordance with CIBSE guidelines for lux levels, lighting uniformity and illuminance levels on surrounding walls and ceilings (guides LG3 for schools and LG7 for office areas). This is required as part of the consulting engineers performance specification. The design team have confirmed by letter that no new external lighting has been installed as part of the refurbishment. Therefore this credit can be awarded.		
Credit References 1. Letter from Peter Deer and Associates, 31 st August, 2007 2. Drawings 500/RC01 to 500/RC05 (reflective ceiling plans) 3. Letter from Walker Bushe Architect, 24 th August, 2007		
Further Information/Action No further information required		

HW6	Lighting Zones	1 of 1 credit achieved
Aim To optimise the level of occupant control over lighting within each workspace.		
Credit Criteria One credit where evidence provided demonstrates that lighting, in all occupied areas, is zoned to allow separate control.		

<p>Credit Validation</p> <p>Lighting has been zoned to allow separate control of different use areas within rooms.</p> <p>Control of zones includes the use of portable controls and PIRs.</p>
<p>Credit References</p> <p>1. Drawings 500/RC01 to 500/RC05 (Reflective Ceiling Plans)</p> <p>2. Technical Data Sheet: Portable Remote Control TF-65</p> <p>3. Technical Data Sheet: Surface Mount Ceiling PIR Light Controller</p>
<p>Further Information/Action</p> <p>No further information required</p>

HW8	Potential for natural ventilation	0 of 1 credit achieved
<p>Aim</p> <p>To ensure adequate cross flow of air in naturally ventilated buildings and future adaptation to natural ventilation in air conditioned/mechanically ventilated buildings.</p>		
<p>Credit Criteria</p> <p>One credit where evidence provided demonstrates that the natural ventilation strategy allows for sufficient control of the supply of fresh air.</p>		
<p>Credit Validation</p> <p>The design does not meet the criteria requirements for the provision of openable windows to allow natural ventilation.</p> <p>Credits withheld.</p>		
<p>Credit References</p> <p>None</p>		
<p>Further Information/Action</p> <p>None required</p>		

HW9	Internal Air Pollution	0 of 1 credit achieved
Aim To reduce the risk to health associated with poor indoor air quality.		
Credit Criteria One credit where air intakes serving occupied areas avoid major sources of external pollution and recirculation of exhaust air.		
Credit Validation The client has stated that they are not working towards this credit and have therefore not supplied any evidence in support of it. The credit is withheld.		
Credit References None		
Further Information/Action None required		

HW11	Ventilation Rates	0 of 1 credit achieved
Aim To recognise the provision of adequate fresh air rates, in order to maintain a healthy indoor environment.		
Credit Criteria One credit where evidence provided demonstrates that each space within the development achieves recommended minimum fresh air rates.		
Credit Validation This credit requires credit HW8 to also be achieved. Credit HW8 has not been awarded. Credit withheld.		
Credit References None		
Further Information/Action No further information required		

HW13	Volatile Organic Compounds	1 of 1 credit achieved
Aim To recognise and encourage the specification of finishes and fittings with low solvent content.		
Credit Criteria One credit where the design team has carried out a review of all finishes and fittings containing volatile organic compounds (VOCs).		
Credit Validation Walker Bushe Architects has provided technical data for all the finishes and fittings with a VOC content including details of the VOC content. A letter has also been provided stating the paint selection was a client decision balanced by budgetary and restraints. Performance requirements were also a consideration. Therefore this credit is awarded.		

Credit References

1. Letter from Walker Bushe Architects, 30th August, 2007
2. Technical Data sheet; Polyflor floor covering
3. Technical Data sheets for all Dulux paints used in the refurbishment
4. Technical Data sheet; Gerflor vinyl (timber) flooring
5. Technical Data sheet; CityPoint Carpet tiles
6. Technical Data sheet; Hammerite direct to rust metal paint smooth

Further Information/Action

No further information required

HW14	Thermal Comfort	0 of 1 credit achieved
Aim		
To encourage the use of design tools to ensure that thermal comfort is achieved.		
Credit Criteria		
One credit where thermal comfort levels are assessed at design stage, this is used to evaluate appropriate servicing options, and appropriate thermal comfort levels are achieved.		
Credit Validation		
The client has stated that they are not working towards this credit and have therefore not supplied any evidence in support of it.		
Therefore this credit is withheld.		
Credit References		
None		
Further Information/Action		
None required		

HW15	Thermal Zoning	1 of 1 credit achieved
Aim To recognise the provision of controls allowing independent adjustment of heating/cooling systems to reflect differing load requirements.		
Credit Criteria One credit where evidence provided demonstrates that local control is available for temperature adjustment in each area to reflect differing load requirements.		
Credit Validation Evidence has been provide to demonstrate that local occupant control is provided to each room as the heating and cooling has separate independently controlled equipment serving each space. User adjustment of temperature set point is provided in each space. Therefore this credit can be awarded.		
Credit References 1. Email 13/08/07 – From John Pengilly of Peter Deer and Associates, Subject: Conway St BREEAM Issues		
Further Information/Action No further information required		

HW16	Microbial Contamination	1 of 1 credit achieved
Aim To ensure the building services are designed and maintained to avoid risk of legionellosis.		
Credit Criteria One credit where evidence provided demonstrates that the risk of waterborne and airborne legionella contamination has been minimised.		
Credit Validation It has been confirmed by the design team that the water services and HVAC systems are designed to comply with the requirements of HSE Approved Code of Practice Guidance L8, "Legionnaires disease, the control of Legionella bacteria in water systems" 2000.		

The design team have stated that there are no humidification systems installed in the building and this has been confirmed from the building drawings.

The hot and cold water services systems are connected to the mains water supply with no cold water storage tank. The mains water pipework distribution system connects to cold water draw off points and cold feed to unvented electric hot water heaters located local to each range of hot water draw off points.

Therefore this credit can be awarded.

Credit References

1. Letter from Peter Deer and Associates, 31st August, 2007
2. Drawings 500/GA01 to 500/GA05

Further Information/Action

No further information required

HW17	Acoustic Performance	0 of 3 credits achieved
<p>Aim</p> <p>To ensure the acoustic performance of the building meets the appropriate standards for its purpose.</p>		
<p>Credit Criteria</p> <p>One credit where there is a commitment to carry out a programme of testing on the school buildings as described in Building Bulletin 93, and where there is a commitment to carry out any remedial works, as identified through the acoustic testing, to ensure that all spaces achieve the performance standards required by Building Bulletin 93.</p> <p>One credit for music accommodation (or multi purpose halls in primary schools with no music accommodation) where there is a commitment to achieve airborne sound insulation values that are at least 5dB higher, and impact sound insulation values that are at least 5dB lower, than the performance standards required by Building Bulletin 93.</p> <p>One credit where the increase in the indoor ambient noise level during 'heavy' rainfall does not exceed the levels defined in Table 1.1, Section 1.1, Building Bulletin 93 by more than 20dB in the design calculations.</p> <p>For the refurbishment of existing buildings an alternative 3 credits are awarded as follows:</p> <p>One credit where spaces achieve reverberation times compliant with table 1.5 of Section 1 of BB93.</p> <p>One credit where the spaces comply with the other performance standards of Section 1 of BB93.</p> <p>One credit where the increase in the indoor ambient noise level during 'heavy' rainfall does not exceed the levels defined in Table 1.1, Section 1.1, Building Bulletin 93 by more than 20dB in the design calculations.</p>		
<p>Credit Validation</p> <p>The client has stated that they are not working towards this credit and have therefore not supplied any evidence in support of it. The credit is withheld.</p>		
<p>Credit References</p> <p>None</p>		
<p>Further Information/Action</p> <p>No further information required</p>		

HW24	Drinking Water	1 of 1 credit achieved
Aim To provide appropriate and available supplies of free, fresh, chilled drinking water to pupils and staff throughout the day.		
Credit Criteria One credit where chilled mains fed dispensers are provided for pupil and staff use throughout the day.		
Credit Validation A drinking water fountain has been provided on the first floor just outside the toilets for the use of staff and pupils throughout the day. Marked up drawings have been provided showing the locations of the mains fed water dispensers and mains water pipe runs. Therefore this credit can be awarded.		
Credit References 1. Drawings 500/PH01 – 500/PH04 – water & gas (level -1)		
Further Information/Action No further information required		

3. 3

ENERGY

E1	Reduction of CO₂ emissions	0 of 15 credits achieved
Aim To recognise and encourage buildings that are designed to minimise the CO ₂ emissions associated with their operational energy consumption.		
Credit Criteria Up to 15 credits where the building demonstrates a percentage improvement above the requirement for CO ₂ emissions as set out in the Building Regulations.		
Credit Validation The Building Services engineers, Peter Deer and Associates has carried out a full SBEM assessment of the building in both its existing form and its newly refurbished form and provided a summary set of the SBEM calculations. The approved HEVACOMP software has been used to carry out the SBEM assessment. The calculations show that an improvement on the actual CO ₂ emissions rate has been made as a result of the refurbishment. However the calculations for the newly refurbished form show that the actual emission rate (BER) does not show any improvement over the target emission rate (TER). Therefore no credits can be awarded.		
Credit References 1. Draft Energy Efficiency Statement 2. Peter Deer and Associates		
Further Information/Action No further information required		

E2	Sub-metering of substantial energy uses	2 of 2 credits achieved
<p>Aim</p> <p>To recognise and encourage the provision of energy sub-metering to facilitate monitoring of energy use.</p>		
<p>Credit Criteria</p> <p>One credit where evidence is provided to demonstrate the provision of direct sub-metering of substantive energy uses within the building.</p> <p>Two credits where sub-meters are specified with a pulsed output for remote monitoring.</p>		
<p>Credit Validation</p> <p>Evidence has been provided to confirm that all small power usages will be metered on a floor by floor basis. This small power usage includes the electricity used by the reverse cycle heat pump heating and cooling equipment at each floor level. The heat pumps are relatively small unitary systems, each linked to internal heating/cooling fan coils units in individual rooms, all rated at less than 10kW electrical input.</p> <p>A separate meter has also been specified for the A/C plant on the roof.</p> <p>All meters will be located in the basement floor together to allow for easy monitoring of usage.</p> <p>The client has confirmed that there is no humidification plant, major fans or other major energy consuming items installed in the building.</p> <p>All meters specified have a pulsed output to allow for connection to a BMS systems.</p> <p>Therefore based on the evidence provided, the two credits can be awarded.</p>		
<p>Credit References</p> <ol style="list-style-type: none"> 1. Technical data sheet: A100C B5 Electronic Single Phase Meter 2. Technical data sheet: A1100 Electronic Polyphase Meter 3. Letter from Peter Deer & Associates confirming metering details, 31st August, 2007 		
<p>Further Information/Action</p> <p>No further information required</p>		

E4	External Lighting	1 of 1 credit achieved
Aim		
To recognise and encourage the specification of energy efficient light fittings for external areas.		
Credit Criteria		
One credit where evidence provided demonstrates that energy efficient external luminaires are specified and all light fittings controlled for the presence of daylight.		
Credit Validation		
The client has confirmed that no new lighting is to be installed as part of the refurbishment.		
Therefore as per the guidelines, this credit can be awarded by default.		
Credit References		
1. Letter from Walker Bushe Architect, 24 th August, 2007		
Further Information/Action		
No further information required		

E20	Free cooling	0 of 1 credit achieved
Aim		
To reduce the dependency of the school on conventional mechanical refrigeration to provide thermal comfort conditions and so reduce energy and CO2 emissions and also the pollution aspects of refrigerant use.		
Credit Criteria		
One credit where the design incorporates a system of providing free cooling to completely displace the need for conventional mechanical cooling systems (excluding exceptional localised circumstances with small scale systems, for example server rooms) and the thermal comfort requirements of credit HW14 are achieved.		
Credit Validation		
The client has stated that they are not working towards this credit and have therefore not supplied any evidence in support of it. The credit is withheld.		
Credit References		

None
Further Information/Action
None required

3. 4 TRANSPORT

T1	Provision of public transport	2 of 2 credits achieved
Aim		
To recognise and encourage the selection of sites served by good public transport facilities.		
Credit Criteria		
One credit where the transport node is within 800m of the school with a frequent service at peak times OR where a school bus service is provided at the beginning and end of the school day.		
Two credits where the transport node is within 400m of the school with a frequent service at peak times.		
Credit Validation		
The school is located in Zone 1 of central London just off the main Euston Underpass. It is well served by Great Portland St and Warren St tubes covering the Hammersmith & City, Circle, Bakerloo, Victoria and Northern Lines. In addition numerous buses run along the main road next to Conway St.		
It is the opinion of the assessor that these extensive transport links are sufficient to award the two credits.		
Credit References		
1. Site map of school		
2. TFL Interactive Map – Great Portland St Bus Connections		
3. TFL Interactive Map – Warren St Bus Connections		
4. TLF Train timetables for Hammersmith & City, Circle, Bakerloo, Victoria and Northern Lines in both directions		
Further Information/Action		
None required		

T5	Cyclist facilities	0 of 2 credits achieved
Aim		
To encourage building occupants to cycle by ensuring adequate cyclist facilities are or will be present on site.		
Credit Criteria		
One credit where evidence provided demonstrates that there is adequate provision of covered, secure and well lit cycle racks with a minimum of five spaces per single form entry for pupils, staff, community users and parents.		
A further credit where, in addition to the above, information is provided to demonstrate that additional cyclist lock up facilities are provided for pupils, staff, community users and parents in accordance with the requirements illustrated in the Compliance Requirements.		
Credit Validation		
The client has made a number of provisions for cyclists within the restricted spatial confines of the building. There are storage spaces for eight bicycles in the basement floor of the building. A shower has been provided as well in the basement floor. Lockers are available for cyclists to use within Room B.07 Common.		
However under the guidelines for a school of this size in an urban area, thirteen cycle spaces are required and a minimum of two showers. In addition, a specially designed and designated space for the drying of wet clothes with heating and ventilation should be provided which has not in this case. Further the lockers are not in or adjacent to the changing rooms.		
Therefore the credits can not be awarded for the reason stated above.		
Credit References		
1. Drawing 500/GA01 floors/walls/GA's basement floor plan (level 01)		
Further Information/Action		
No further information required		

T6	Pedestrian and Cyclist safety	1 of 1 credit achieved
Aim <p>To recognise and encourage the provision of safe and secure pedestrian and cycle access routes.</p>		
Credit Criteria <p>One credit where evidence provided demonstrates that the site layout has been designed to minimise risks to pedestrians and cyclists.</p>		
Credit Validation <p>Walker Bushe Architects has provided drawings showing the location of the cyclist lock-up facilities in relation to the school entrance. Since there is no access road and the bikes will have to be taken through from the street through the building, the BRE have confirmed that this credit can be awarded by default.</p>		
Credit References <p>1. Drawing 55/AG01: Floors/Walls/GA's basement floor plan (level 01) 2. Drawing 55/AG02: Floors/Walls/GA's ground floor plan</p>		
Further Information/Action <p>None required</p>		

T8	Travel Plan	1 of 1 credit achieved
Aim <p>To recognise the consideration given to accommodating a range of travel options for building users, thereby encouraging the reduction of user reliance on forms of travel that have the highest environmental impact.</p>		
Credit Criteria <p>One credit where evidence is provided to demonstrate that a travel plan has been developed and tailored to the specific needs of the users of the assessed development.</p>		
Credit Validation <p>Southbank International have provided a copy of the proposed travel plan for 17 Conway St. The travel plan has been approved and signed off with full support by the Head of Southbank International.</p>		

It is confirmed that the travel plan has referred to a number of the issues set out in the BREEAM guidance and after feedback has been updated to cover all the issues.

Therefore this credit can be awarded.

Credit References

1. Southbank International School Travel Plan, July 2006
2. Letter from Walker Bushe Architects containing addendum to Southbank International School Travel Plan, 31st August, 2007

Further Information/Action

No further information required

3. 5 WATER

W1	Water Consumption	2 of 3 credits achieved
Aim		
To encourage the specification of low water use sanitary fittings.		
Credit Criteria		
Three credits where evidence provided demonstrates that the specification includes taps, urinals, WCs and showers that consume less water in use than standard specifications for the same type of fittings.		
Credit Validation		
The client has provided a complete sanitaryware schedule identifying all toilets, urinals, showers and sinks. From the technical data sheets provided, the necessary information has been entered into the W1 Water Consumption Calculator which has given a result of 4.34m ³ per person per year.		
Therefore two credits can be awarded.		
Credit References		
1. Sanitaryware schedule 2, 24 th August, 2007		
2. Data sheets for all toilets, sinks, showers and urinals specified in the sanitaryware schedule		
3. Email from Ideal Standard Plumbing confirming Piccolo taps are aerated, 5 th September, 2007		
Further Information/Action		
No further information required		

W2	Water Meter	1 of 1 credit achieved
Aim To ensure water consumption can be monitored and managed and therefore encourage reductions in water consumption.		
Credit Criteria One credit where evidence provided demonstrates that a water meter with a pulsed output will be installed on the mains supply to each building.		
Credit Validation The project team have provided drawings detailing the water arrangements in the building. Water will be supplied via a standard mains connection. The project team have also provided the technical data for the water meter that will be installed to the mains incoming supply and demonstrated that there is a pulsed output on the meter with the ability to connect to a Building Management System. Therefore this credit is awarded.		
Credit References 1. Drawings 500/PH01 to 500/PH04 2. Technical data sheet for water meter Contact Water meter M-NRK / M-NRSK		
Further Information/Action No further information required		

W3	Major leak detection	1 of 1 credit achieved
Aim To reduce the impact of major water leaks.		
Credit Criteria One credit where evidence provided demonstrates that a leak detection system is specified or installed.		
Credit Validation The building services engineer had confirmed that a leak detection system is to be installed to the water supply to the building and that the leak detection has the following features;		

1. The system is capable of identifying major leaks both within the building and between the building and the site boundary, and should cover all mains water supplies to the building.

2. The leak detection system is:

a. Audible when activated;

b. Activated when a continuous flow of water passes through the water meter at a flow rate above a pre-set minimum for a pre-set period of time;

c. Able to identify different leakage rates, e.g. continuous, high and/or low level leaks, over set time periods;

d. Programmable to suit the owner/occupiers' requirements; and

e. Where applicable, designed to avoid false alarms caused by normal operation of large water consuming plant such as chillers.

Therefore this credit is awarded.

Credit References

1. Fax from Principal Interiors to Walker Bushe Architects, 15th June 2007 including technical details of system to be installed

Further Information/Action

None required

W4	Sanitary supply shut off	1 of 1 credit achieved
Aim		
To reduce risk of minor leaks in toilet areas.		
Credit Criteria		
One credit where evidence is provided to demonstrate that proximity detection shut off is provided to the water supply to all urinals and WC's.		
Credit Validation		
The client has provided evidence to demonstrate that a shut-off to the water supply to the urinals and WC's is to be provided, linked to the PIR occupancy detection systems used to control the lighting.		
Therefore this credit can be awarded.		
Credit References		
1. Fax from Principal Interiors to Walker Bushe Architects, 15 th June 2007 including technical details of system to be installed		
Further Information/Action		
None required		

W5	Water recycling	0 of 1 credit achieved
Aim		
To encourage the collection and use of waste water or rainwater to meet toilet flushing needs and reduce the demand for potable fresh water.		
Credit Criteria		
One credit where evidence provided demonstrates the specification of systems that collect, store, and where necessary, treat rainwater or greywater for WC and urinal flushing purposes.		
Credit Validation		
The client has stated that they are not working towards this credit and have therefore not supplied any evidence in support of it. The credit is withheld.		
Credit References		
None		