

## Energy Statement

The new two classroom building has been designed to optimise energy efficiency. The fabric performance and air permeability performance of the building are enhanced beyond minimum Part L2A Building Regulation requirements. Both the window fabric performance and the air permeability are beyond minimum requirements.

The energy efficiency of the building is further enhanced by the implementation of hybrid ventilation heat recovery units (HVRs) in the classrooms and a mechanical ventilation heat recovery unit (MVHR) that serves the cloak room and WCs.

The building heating and hot water load is supplied entirely by a high efficiency air source heat pump renewable energy supply. Four roof mounted photovoltaic panels provide a supplementary renewable energy electricity supply to the building.

The new classroom block achieves BRUKL compliance. The as designed building carbon emissions and primary energy rate are well below the maximum permissible levels, as below:

### The CO<sub>2</sub> emission and primary energy rates of the building must not exceed the targets

Target CO <sub>2</sub> emission rate (TER), kgCO <sub>2</sub> /m <sup>2</sup> :annum	4.74
Building CO <sub>2</sub> emission rate (BER), kgCO <sub>2</sub> /m <sup>2</sup> :annum	3.7
Target primary energy rate (TPER), kWh <sub>pe</sub> /m <sup>2</sup> :annum	50.54
Building primary energy rate (BPER), kWh <sub>pe</sub> /m <sup>2</sup> :annum	37.09
Do the building's emission and primary energy rates exceed the targets?	BER <= TER   BPER <= TPER