

Publication of Building Information Forge Valley Community School

A basic description of the project and building	Forge Valley Community School – a new build secondary school on existing school site. 1050 11-16 pupils plus 300 17-19 6 th form places. 12186m ² school comprising main teaching block plus separate sports block and biomass boiler house. Main block is 3-4 storey teaching accommodation arranged around central atrium and adjacent performance hall.
The key innovative and low-impact design features of the building	Steel frame but with concrete floors. High floor-to-ceiling heights (3.5m) allow for good daylight factors and single sided natural ventilation to most teaching spaces. Atrium naturally ventilated. Where mechanical vent is forced it has heat recovery where possible. Space and water heating from biomass boilers to main teaching block. Solar thermal pre-heating to sports water system. Rain water harvesting to serve WC's.
Basic Building Cost - £/m²	Approx £1200 (inc FFE & Construction Prelims etc.)
Services Costs - £/m²	Approx £430 (inc biomass and sprinklers)
External Works - £/m²	Approx £130
Gross floor area - m²	12873 (inc boiler house)
Total area of site - hectares	10.7
Functional areas and their size - m²	<ul style="list-style-type: none"> • Teaching – 4810m² • Halls – 1206m² • Staff and Admin – 559m² • Learning Resources – 561m² • Dining & Social – 435m² • WC's & Changing – 529m² • Plant – 822m² (inc 200m² boiler house & store) • Partitions – 544m²
Area of circulation - m²	2667m ² – including atrium and breakout spaces
Area of storage - m²	373m ²
% area of school grounds to be used by community	In discussion with appropriate bodies. (DANNY CAN YOU CONFIRM THERE IS AN AGREEMENT TO BE CONFIRMED?)
% area of school buildings to be used by community	Approx 20%
Predicted electricity consumption - kWh/m²	44 based on 30W/m ² x 7.5hrs x 5 days x 39weeks
Predicted fossil fuel consumption - kWh/m²	30 (20% of annual energy comes from fossil fuels)
Predicted renewable energy generation - kWh/m²	120 (80% of annual energy comes from Biomass)

Predicted water use - m3/pupil/year	4.59 from BREEAM calculator
% predicted water use to be provided by rainwater or grey water	0.87
The steps taken during the construction process to reduce environmental impacts, i.e. innovative construction management techniques.	<p>All key subcontractor packages to dispose of their own waste - Subcontractor agreements</p> <ul style="list-style-type: none"> • Waste Management Plan. i.e Pallets to be taken back to yard/factory • All movements of waste from the site to be logged using SmartStart system • Progress to be reviewed monthly at Project Review or CSR Meetings • Noise monitor, dust and vibration monitor to be used weekly readings to be taken • Dust monitor to be used • Surfacing to site access roads • Smart Start system to be used to monitor type of waste leaving site • Segregated skips • Areas to be cut and filled • Concrete materials to be crushed where available • Penalties for non-compliance • Paint tin etc returned to supplier • Pallets returned to factory • Segregated plasterboard waste storage areas • Record Diesel used on site • Display poster encouraging Car sharing etc. • A Meter reading has been installed for Electricity with EDF • Delivery tickets of Diesel will be kept on site and recorded on a graph • Water meter to be installed on filter tank for site activities and site office for water consumption • Materials to come from 35km radius, by using local suppliers • Encourage car sharing to and from work • Diesel tanks to be surrounded by bunded block wall • All Diesel tanks to be double bunded • Spill kits and drip trays • Wash down areas to be provided to wash down concrete wagons, etc • Ground workers to supply filter tank, to prevent any containments being pumped into local sewers



A list of any social or economically sustainable measures achieved/piloted.	<ul style="list-style-type: none">• Site Poster encouraging operatives not to leave taps running etc• Distanced travelled to site by operatives is to be monitored each day. By recording distances travelled to and from work.• Noise Management Plan• Community Liaison• Complaints Procedure• Monthly News Letter
BREEAM Rating and score	Very Good rating is required

* BREEAM (Building Research Establishment's Environmental Assessment Method) used as an environmental assessment method for buildings to ensure best practice in sustainable design and used to measure a buildings environmental performance.