

**Research Innovation Learning Development Centre (RILD), Royal Devon and Exeter Hospital  
BREEAM Healthcare: Credit M9, Publication of Building Information**

For over a decade, BRE's Environmental Assessment Method (BREEAM) has been used to assess the environmental performance of both new and existing buildings. It is regarded by the UK's construction and property sectors as the measure of best practice in environmental design and management. Through improving the quality of the UK's building stock BREEAM works to minimise the adverse effects of buildings on the global and local environments while promoting a healthy and comfortable indoor environment.

BREEAM assesses the performance of buildings in the following areas:

- Management: overall management policy, commissioning site management and procedural issues
- Health and well-being: indoor and external issues affecting health and well-being
- Energy use: operational energy and carbon dioxide (CO<sub>2</sub>) issues
- Transport: transport-related CO<sub>2</sub> and location-related factors
- Water: consumption and water efficiency
- Materials: environmental implication of building materials, including life-cycle impacts
- Land use: green field and brown field sites
- Ecology: ecological value conservation and enhancement of the site
- Pollution: air and water pollution issues

By considering these issues at the earliest opportunity developers and designers are able to maximize their chances of achieving a high BREEAM rating. Credits are awarded in each area according to performance. A set of environmental weightings then enables the credits to be added together to produce a single overall score. The building is then rated on a scale of PASS (25%), GOOD (40%), VERY GOOD (55%) or EXCELLENT (70%), and a certificate awarded that can be displayed in the building and used for promotional purposes or as part of an organization's overall environmental statement.



## Table of Information

a. BREEAM Rating and score	The RILD Project is aspiring to achieve an “Excellent” rating of over 70%. The final score will be assessed at the completion of the project and published at that time.
b. Basic Building Cost - £/m2	£1,126.72 / m2 (excluding building services)
c. Services Costs - £/m2	£961.28 / m2
d. External Works - £/m2	£62.09/m2
e. Gross floor area - m2	7,535m2
f. Total area of site - hectares	Overall site area within the site boundary for the RILD project is 5000m2 approx.
g. Area of clinical / public / staff / teaching / research spaces - m2	3248m2 approx
h. Area of circulation - m2	1200m2 approx
i. Area of storage - m2	565m2 approx
j. % area of building to be used as shared facilities with the community (where relevant)	N/A
k. Predicted electricity consumption - kWh/m2	28.2kwh/m2
l. Predicted fossil fuel consumption - kWh/m2	33.3kwh/m2(gas)
m. Predicted renewable energy generation - kWh/m2	6.3kwh/m2
n. Predicted CO2 emissions/ EPD rating	19.4kgCO2/m2 EPC B
o. Predicted water use - m3/user/year	4.9m3/person/year
p. % predicted water use to be provided by rainwater or grey water	N/A
q. A basic description of the project	The proposed RILD centre to be constructed on the Royal Devon and Exeter Hospital site in Exeter will house the Wellcome Wolfson Centre (WWC) for Medical Research and the new Post Graduate Education Centre (PGEC). The site is adjacent to the

	<p>existing Peninsula College of Medicine and Dentistry building (PCMD) on the Barrack Road edge of the hospital site.</p> <p>The WWC research facility is required to expand the current research activities of the PCMD and the new PGEC is to replace and enhance the facilities currently on the hospital site for this purpose. The existing PGEC will be demolished to make way for the new buildings. It is desirable the new buildings will be integrated with each other and the existing PCMD building with shared entrance/reception facilities.</p> <p>The new development is to provide a centre for Research, Innovation, Learning and Development on the Hospital site (RILD).</p> <p>The WWC will comprise both clinical research areas and class 2 medical research laboratories, complete with offices, meeting rooms, write up areas, primary laboratories and specialist laboratory spaces. The PGEC facility will comprise teaching rooms, some with specialist equipment within them, lecture theatres and seminar rooms, social areas and break out space. There will be some minor refurbishment works within the PCMD building from clinical research to offices, where areas are left vacant by the provision of the new facilities.</p>
<p>r. A basic description of the building</p>	<p>The building is of concrete frame construction with a combination of concrete block infill walling and rainscreen cladding. The upper floors are constructed from in situ concrete with both standing seam and single ply membrane roofs.</p>
<p>s. The key innovative and low impact design features of the building.</p>	<p><b>Air Source Heat Pump:</b> An efficient air source heat pump will be used to provide heating and cooling to the building via an underfloor pipework system.</p> <p><b>Photovoltaic Panels:</b> Located on the roof the panels will generate electricity from the sun's solar energy to reduce the requirement from the national grid. Electricity that is not used can also be exported back to the grid.</p> <p><b>Individual Metering:</b> This allows high loads to be identified/monitored by the building user.</p> <p><b>High Frequency Luminaires:</b> Energy efficient light fittings used to reduce power consumption. This is combined with daylight compensation and presence detection to reduce unnecessary use of lighting.</p>

<p>t. The steps taken during the construction process to reduce environmental impacts, i.e. innovative construction management techniques.</p>	<p>All waste will be segregated for recycling to achieve the zero waste to landfill target.</p> <p>Demolition material from the existing buildings will be crushed on site and reused as sub base.</p> <p>Limited site parking and encouragement of all site employees and visitors to use the park and ride scheme.</p> <p>Only sustainable timber used on the project.</p> <p>All water and energy usage on site will be monitored so any areas of excessive usage can be reduced.</p>
<p>u. A list of any social or economically sustainable measures achieved/ piloted.</p>	<p>Interserve where ever possible have procured supply chain members from the local area (within 50 miles).</p>