



SOL₂O
GREEN BUILDING SOLUTIONS

Solar Thermal Catterick Barracks

Client Ministry of Defence

Contract Value £36,000

The Brief

SOL₂O have been contracted to design and install a renewable energy solution to provide heat to a new build, half-olympic size swimming pool at Catterick Barracks.

The Solution

The heating of the half sized Olympic swimming pool holding approximately 1.25 million litres of water is now supplemented by an energy saving and carbon reducing flat plate solar thermal array.

The installation took approximately six months and consists of 34 flat plate solar collectors totalling 68m² mounted on 25° tilted 'A' frames to ensure the maximum amount of sunlight is captured by the panels.

This sunlight, absorbed by the flat plate collectors is circulated through insulated copper pipes to the pool and is finally linked to multiple plate heat exchangers used to indirectly transfer heat to water in the pool.

The system is expected to significantly offset the energy and carbon costs associated with the primary gas fired pool heating system.

The Result

The solar thermal systems collectors produce approximately 7000kWh of energy per annum, this produces a significant saving on both energy and carbon as opposed to standard gas pool heating systems.

The SOL₂O installation comes with a 2 year warranty on all work as standard alongside a 20 year manufacturers warranty for the panels.