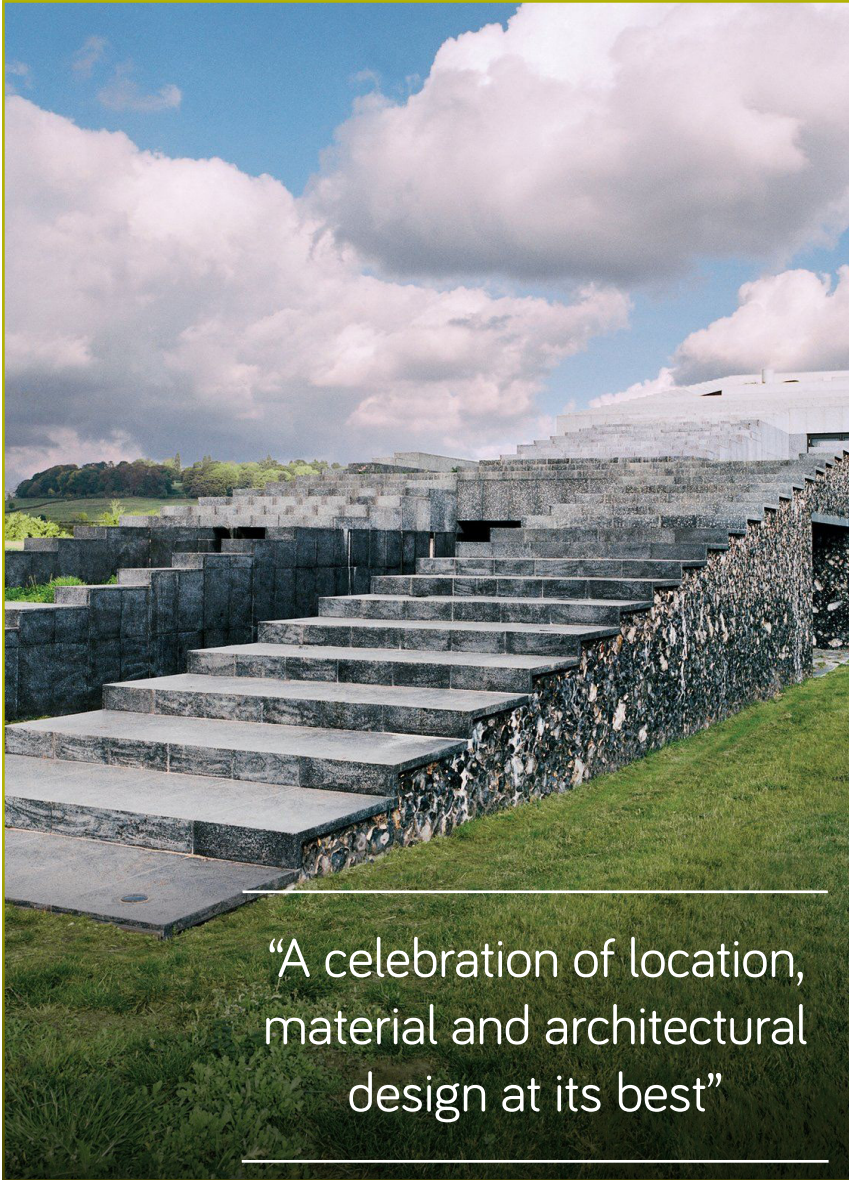


Flint House



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“A celebration of location,
material and architectural
design at its best”

PTSG Electrical Services Ltd led the design and installation of the lightning protection system on Flint House, completed in 2015 and winning that year’s RIBA (Royal Institute Of British Architects) House Of The Year Award.

The building was commissioned by Jacob Rothschild, 4th Baron Rothschild. The stones for the exterior were hand-knapped by master flint knapper, John Lord, in Norfolk. The interiors were decorated and furnished by David Mlinaric, using an eclectic mix of modern contemporary pieces and older items from the Rothschild collection.

On first receiving the tender drawings for Flint House, the complexity and obscure shape of the structure made it difficult to fully envisage what the solution would look like within the setting of its rural surroundings. The design team certainly didn’t expect the aesthetically-demanding and architecturally-driven project that it evolved into. When PTSG’s team was called for the first design meeting, its specialists realised it was not going to be just an average construction project; the drive to site passed the world-famous Waddesdon Manor, went through a forest, down a number of dirt tracks and into the middle of a field.

Baron Rothschild had a vision of creating a unique architectural form that blended into the landscape of arable land. This alone created a number of challenges as the design would need to be both visible and fully functional, without jeopardising

the building’s aesthetic appeal. Fortunately, due to the reinforced concrete construction, PTSG’s engineers were able to hide all connections within the concrete framework, whilst using the piles as the earth terminations to minimise the amount of external inspection housings. The biggest challenge was how to protect the unique stone roof tops, terraces and recesses without installing surface-fixed roof tapes.

To overcome this complex challenge it was decided, through a number of design meetings, to install a series of tapes hidden beneath the stonework and connect onto around 50 mushroom-style strike plates which would be set into the top of the slabs. Due to the varying colours of flint cladding and stonework, the plates were powder coated up to eight different shades of grey, enabling them to blend in with the building as much as possible. The project works were undertaken over a two-year period, which involved a great deal of liaising with other contractors to ensure the client’s targets were met and the outcome was a success. While the building may not be the largest on which PTSG has installed this kind of system, the attention to detail made it one of the most demanding projects for years.

Once the scaffolding had been removed, was clear to see that PTSG’s hard work and expertise had paid off. A remarkable and unique building has been constructed with a fully compliant lightning protection system which, as quoted by RIBA, is a “marvel of geological evolution and construction. . . a celebration of location, material and architectural design at its best”.