

# Crown Spa Hotel - Scarborough



**Project:**

Additional Floor to Form Penthouse Suites

**Location:**

Esplanade, Scarborough

**Client:**

Crown Spa Hotel

**Consulting Engineer:**

Alan Wood & Partners

**Architect:**

Denton & Denton / Alan Wood & Partners

**Project Value:**

£1.5 million



**Description:**

The Crown Spa Hotel is situated at the top of South Cliff and is Scarborough's only 4 star hotel. As part of the ongoing improvement and development of the hotel a fifth floor was proposed to add a further 24 en-suite bedrooms. Alan Wood & Partners were appointed to provide structural engineering, post planning architecture, quantity surveyor and project management roles.

The main challenges of the project were that the hotel is a Grade II listed building, the fifth floor structure was to be lightweight and that the hotel was to remain fully functioning and watertight during the construction. The hotel was fully scaffolded to all elevations with an over-roof system to provide a dry working

space and protect the existing hotel structure during the course of the works.

The additional room space was created using a mansard portal frame supported on spreader beams, which also supported the new floor construction. The roof was also designed to support solar panels as part of the hotels ongoing strategy to improve sustainability and reduce its carbon footprint.

The roof and mansards were clad using slate and lead flashings sympathetic to the buildings Grade II listing. The lightning protection and drainage schemes were designed to avoid changes to the front elevation to the hotel.