

HINKLEY POINT C POOL BUNKER WEATHER PROTECTION

HAKI provided a tailored solution, using the HAKITEC and HAKISPAN systems, to protect workforce, products and equipment during the construction of nuclear power station, Hinkley Point C.

THE SCOPE

HAKI was approached by BYLOR with a requirement for temporary buildings to shelter workforces, products and equipment during the construction of HPC's east and west pool bunkers; the latter of which was to be constructed first to inform the development of the second. These temporary buildings will be anticipated to be in-situ for up to seven years following erection in 2020.

Each pool bunker has two roofs and is a large, above-ground concrete structure standing 20m high. Once HPC is active, each bunker will contain vital equipment which will be integral to the running of the nuclear power site.

THE CHALLENGE

A major concession which had to be factored into the design process was the project's scale and the site's exposure to the strong winds coming off the Bristol Channel. As HPC is positioned near an estuary, the bunkers would be exposed to, at times, treacherous weather.

Additional consideration had to be dedicated to the level of protection required and the compatibility of both the temporary and permanent works that would have to work in harmony whilst the bunkers are still under construction.

THE SOLUTION

HAKI tailored a solution using its HAKITEC 750 and HAKISPAN products. Measuring 35.5m long and 33.97m wide, the 750 weather protection roof is a highly robust and easy-to-maintain solution which enables the optimum working conditions for construction work to be undertaken efficiently and safely. As the bunkers' roofs will be crane-lifted on/off multiple times either in their entirety or in sections for the next five to seven years, the resilient 750 roof system was the perfect choice.

HAKI also gave the client notice on maintenance upgrades to roof sheeting or beams, so the system can be maintained over its lifetime. Impressively, HAKI's 750 system has an anticipated timeline of five years.

HAKI's onsite specialists also ensured safe erection of the first pool bunker in February 2020, overseeing the works by BYLOR's project team.

HIGHLIGHTS

35m

long temporary roof

Anticipated to be
in-situ for

7 yrs

Technical support

provided to ensure safety
throughout



ABOUT HINKLEY POINT C

Representing a significant milestone in the UK's nuclear power industry, Hinkley Point C (HPC) is the first of a new wave of nuclear power sites across the nation which will supply low-carbon electricity for around six million homes.

Under construction, HPC is Europe's largest construction site, divided into multiple projects covering the breadth of work required to construct this 3,200 MWe nuclear power station.

HAKI is proud to be working across HPC, supplying temporary access, buildings, and shelters throughout, to ensure safe and efficient delivery of the mega-project.

THE HAKITEC 750 TEMPORARY ROOF

The HAKITEC 750 temporary roof can be quickly assembled to provide robust weather protection and covering, for medium and large sites.

Safe assembly

Unlike most other temporary roof systems, the HAKITEC 750 uses very few components; making it simple to build in-situ from a scaffolder safe zone or crane into position if space is available.

An innovative roll-out method of erection is also popular with the HAKITEC 750. This ensures safe erection from secure, guarded platforms and removes the need for scaffolders to venture onto roof trusses.

Robust components

Using a strong aluminium lattice beam that is 750mm deep, the HAKITEC 750 can be easily tailored so roof trusses cover superior spans and give a gable roof pitch of 15° or 22.5°. The system can also be used for either a polygonal or monopitched roof.

The beams have been designed to provide extremely strong structures with large spans and have a long-service life, for projects that continue over extended periods of time or use in other jobs.

Equally as robust is the HAKITEC traditional sheeting and HAKI Trak.

Reduced risk of displacement

The HAKITEC temporary roof uses the 'hook on' locking catch system. This means the prefabricated components are at minimal risk of displacement to protect workers onsite. The majority of components are also standard to the HAKI Universal range so can be re-utilized in other structures.

