



Marine storage facility enabling efficient boat handling, increased capacity and durable structural performance in a challenging coastal setting

Location: Portland, Dorset

Client: Boatfolk

Marine / Leisure / Steel frame / Industrial



Expanding Dry Storage Capacity

The project involved the construction of a new dry stack storage facility at Portland Marina in Dorset for marina operator Boatfolk. The development enhances the marina's ability to store and manage marine vessels safely out of the water while providing fast launch and recovery for users. The facility provides secure storage for 132 boats while reducing maintenance demands associated with traditional wet berthing for the marina's growing customer base. It complements the marina's wider infrastructure, which includes hundreds of berths, lifting facilities, and marine engineering services.

Structural Design in a Marine Environment

AWA was responsible for the structural design and detailing of the dry stack building, which consists of a fully galvanised steel frame designed to withstand the harsh marine environment and year-round coastal exposure. Achieving stability was a key design challenge due to the lightweight building's 19m tall and slender shape. To address this, tension piles were incorporated to prevent overturning under lateral wind loads. Providing a structural geometry compatible with the client's vessel handling equipment was also vital for efficient operations.

Efficient Construction and Long-Term Performance

To facilitate efficient construction, the steel structure was fully fabricated off site and assembled on site using bolted connections, enabling rapid erection of the 90m long building with minimal disruption within the working marina. AWA continues to inspect the structure, ensuring it maintains its function and performance for years to come.

