

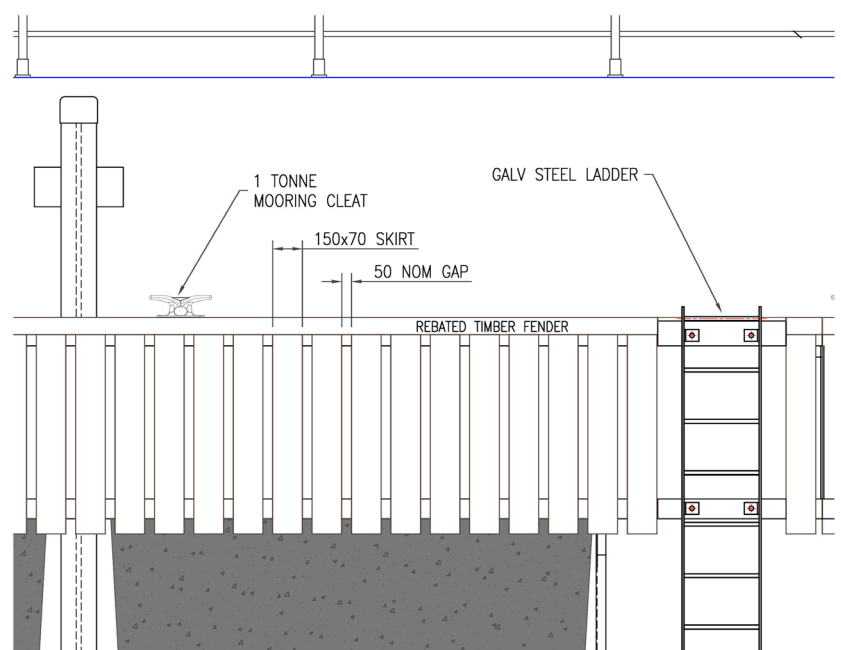
Twin lock pontoons for busy marina

Port Solent, UK



In 2019, Premier Marina's Port Solent marina on the south coast of England received new, dedicated lock pontoons by Walcon for both sides of the lock.

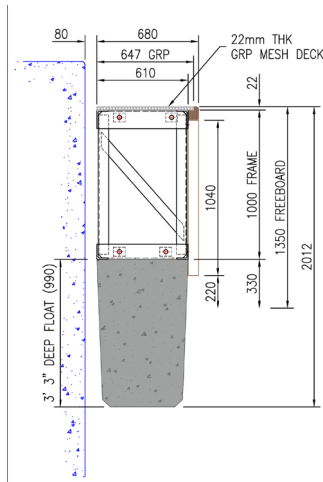
These specialist pontoons are designed to provide safe, temporary berthing for vessels using the lock to enter and leave the marina basin. They work hard with boats arriving and leaving around the clock, rising and falling as the lock is filled and emptied. As such they feature distinctive timber panel skirting (see above and right) to withstand the constant manoeuvring alongside and to cater for the different freeboards / heights of the craft using the lock.



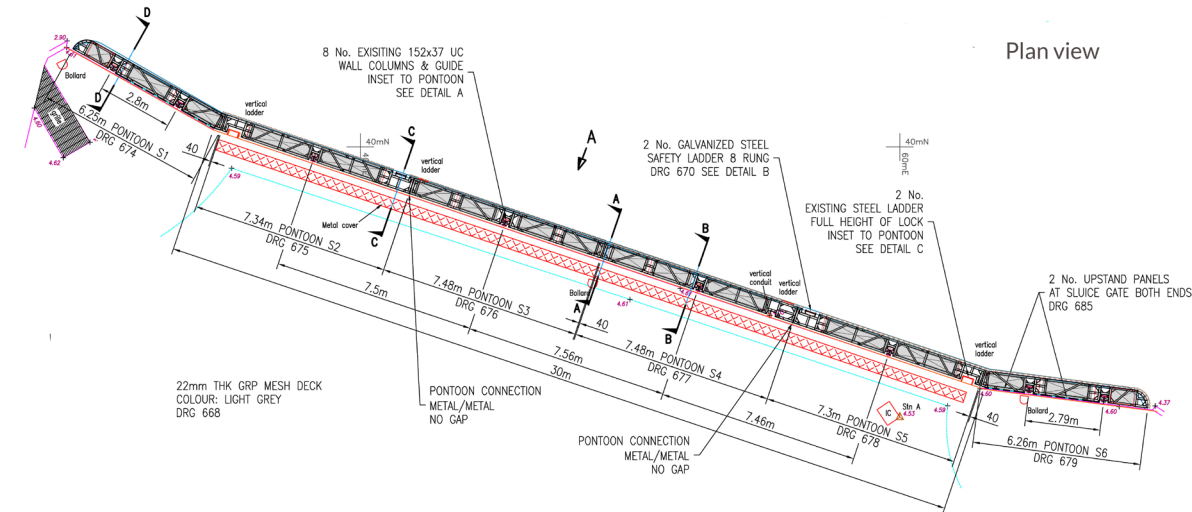
Building and fitting lock pontoons of this type can be a complex and challenging process. For this project, the specification required that they be built to allow them to reuse the existing wall columns. This would avoid additional expense and the need to shut down the entire lock for an extended period in order to fit new ones. This required a detailed survey to establish the exact positions of the Universal column guide piles. The pontoons themselves also needed to be

narrower than conventional walkway pontoons so as to maximize the space available for boats in the lock, and required a higher freeboard to make mooring and access to and from the boats alongside as easy and safe as possible.

To achieve this, the pontoons were built using Walcon's slim 600mm floats designed for finger pontoons with space frames fitted above to deliver a full metre of freeboard (see right).



Plan view



To ensure that the resulting top-heavy structure was stable required having pile guides at two levels. The space frames were helpful with this, enabling the positioning of the guides at the top and the bottom of the frames, far enough apart to provide the necessary stability. As an added benefit the solution also keeps the guides out of the water and so easier to maintain.

Throughout the works Walcon ensured that the lock was kept operational as much as possible so as to minimise disruption to Port Solent marina and its berth holders. This was achieved in part by assembling the new pontoons offsite and delivering them directly to the lock as their predecessors were being lifted out and loaded onto lorries for immediate removal and scrapping.

The pontoons were replaced in pairs, one pair a day, with the lock immediately reopened once the operation was complete. Once all the units were in place on one side of the lock they were commissioned and final adjustments undertaken to ensure that they would move up and down

smoothly and consistently across the full tidal range. With one side completed the entire operation was then performed again on the opposite side of the lock to complete the project.

Founded in 1963, Walcon Marine is the market leader in the design, construction and installation of marinas, yacht harbours and berthing facilities around the world. As probably the longest established and most experienced company in its field, Walcon Marine is a global organisation with manufacturing facilities in the UK, Australia and Dubai. Its pontoons are now installed in over 30 different countries on five continents.