

Lindeman Great Barrier Reef Resort
Project

APPENDIX

D

SUPERIOR JETTY DESIGN





ELITE MARINA

INSTALLATION GUIDE

This guide is intended for qualified personnel and subcontractors involved in the installation of the Superior Jetties "Elite Series" Marinas.

All sites are different and local practices or requirements may vary from site to site. Recommendations in this document should therefore be treated as a guide only and all care should be taken with regard to personnel safety and practices on site throughout the works.

Superior Jetties accepts no responsibility or liability for the use of this document.

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PRE-ARRIVAL

- 1.) Check site conditions & weights of pontoons and decide on appropriate lift methodology. Your crane lift plan should be signed off and agreed with your crane supplier prior to arrival of pontoons on site.

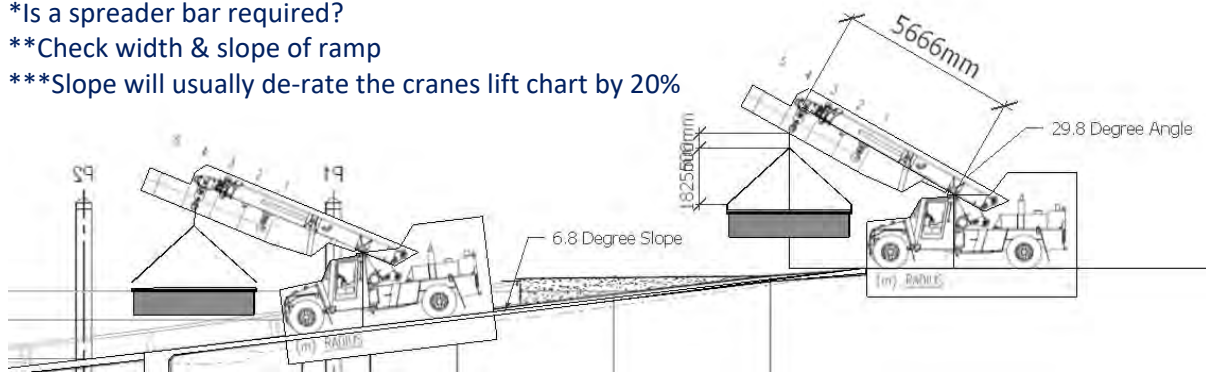
For unloading down a boat ramp

- Single Franna 8 point lift*
- Dual Franna's 2 x 4 point lifts**

*Is a spreader bar required?

**Check width & slope of ramp

***Slope will usually de-rate the cranes lift chart by 20%



For unloading off a quay wall, wharf or jetty

- Slewing Crane*

*Check radius/weight requirements with your supplier and decide on the appropriate sized crane

*Investigate ground and rock wall conditions if you plan to put the crane close to the edge

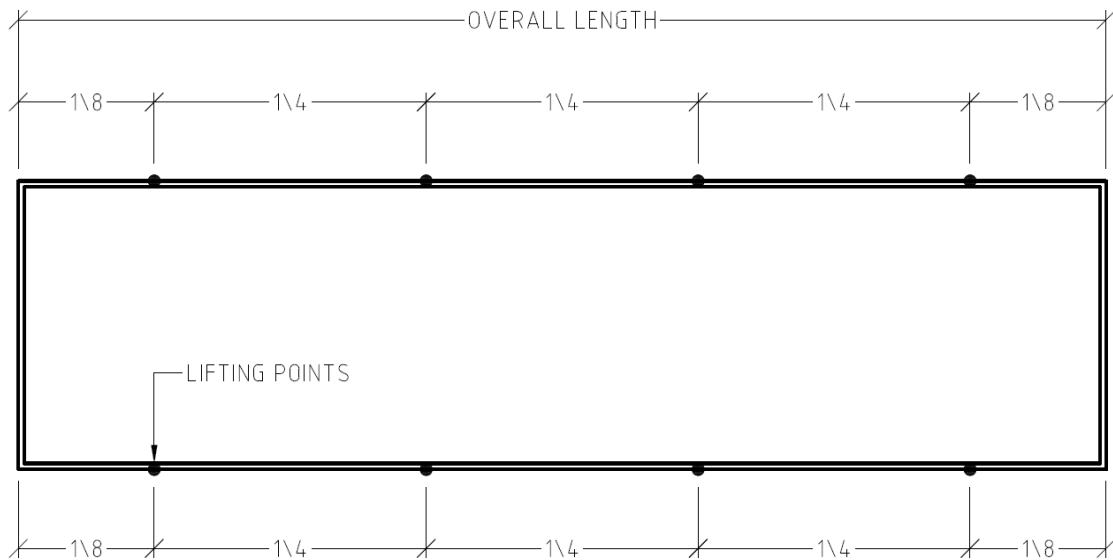
*Check wharf capacity/condition if applicable

*Check access restrictions to the intended unload area



ARRIVAL ON SITE

2.) Setup Lift plates along the pontoons walers per the layout below:



3.) Unload Pontoons from the truck.

it's usually easier to lift the pontoon and have the truck pull out so the crane(s) can go straight down the ramp without turning.



4.) Does the pontoon you are unloading require outriggers/stability assistance during installation?

Most walkway pontoons 2.2 metres or wider will generally not require outriggers. Finger Pontoons and any walkway sections under 2.2 metres will naturally want to turn over until they are secured to the adjoining section of the finished marina.

If you have a large enough installation vessel moving the pontoons sometimes the pontoon can be secured to the side of the vessel. Make sure there is sufficient fendering between the vessel/barge if you are using this methodology.

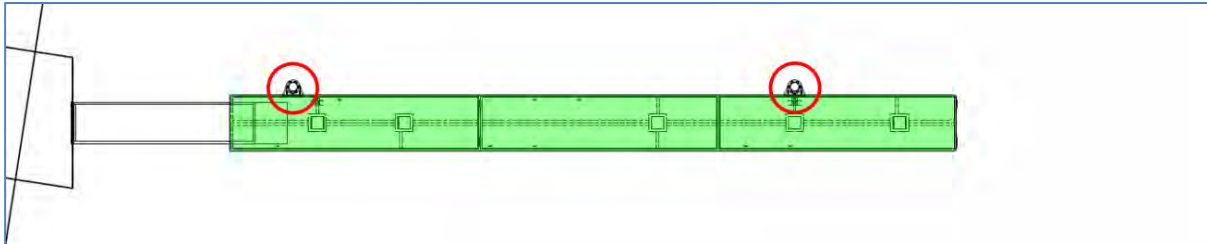
An outrigger can be used to stabilise the pontoons from the boat ramp to the final location for installation.



- Outriggers should be checked to ensure that they hold the pontoon at the appropriate freeboard for ease of installation.
- Depending on the push distance you may want to consider joining multiple pontoons together prior to moving to the site to assist with stability.

INSTALLATION

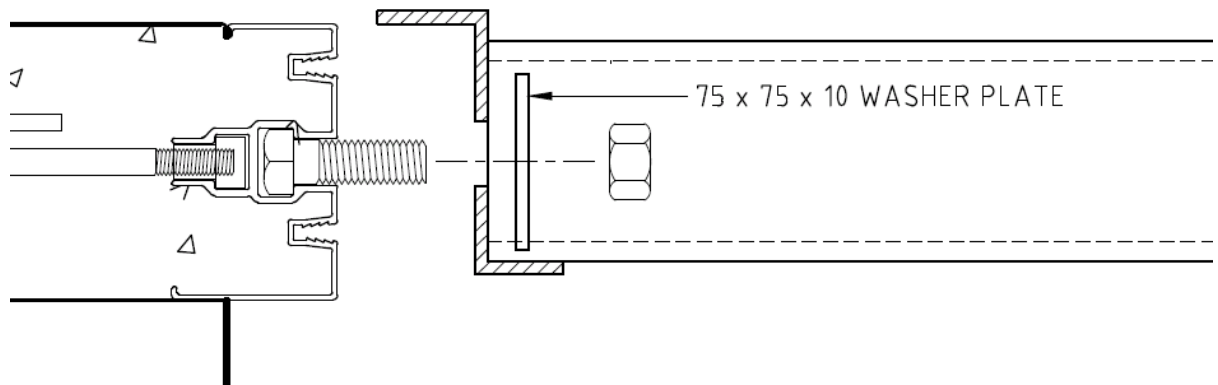
- 5.) Connect the first two or three walkway pontoons at the ramp/load-in location and load the Gangway on to the pontoon. Ensure that you have enough pontoons to install two pile brackets on arrival.



- 6.) Check the drawings for the number of Elastomeric Hinges required for each join and the positioning on the pontoon.
 - Slide M20 Bolts in to the waler and along to the intended location for the hinge. Apply Duralac or similar anti-corrosive compound to the exposed section of each bolt.
 - Secure firmly.
 - Float adjoining pontoons in to the intended position and have the adjoining M20 bolts ready to go on the receiving pontoon.
 - Line up all of the bolts and very slowly float the two pontoons together.
 - If the two pontoons are pushed all the way together you will not be able to get the M20 washers and nyloc nuts on to the bolts so push them apart very slightly to allow for the installation of the washer and nut.
 - Once all of the washers and nuts have been installed tighten the nuts and washers while checking that the pontoons are aligned at all times.



- 7.) Push to site and lift connection end of gangway to the mooring block/jetty connection point and attach gangway by inserting the pin in to the piano hinge and securing with washers and cotter pins.
- 8.) Slide the walkway pontoons back in to their intended position and secure pile brackets by lifting them over the pile and then lining up with the M20 Bolts installed in the waler at the correct location.
- 9.) Install washer plates and nyloc nuts and secure (add Duralac on bolts)



- 10.) Repeat the above procedure until all pontoons have been joined and all pile brackets are on.

INSTALLATION OF SERVICES

- 11.) Next have your subcontractors install all power/water services through the deck of the pontoons and install all pedestals and potable water & fire services.
 - Install the largest services first (usually fire/water lines)
 - Separate Water and Electrical services in different conduits
 - Power and Fire Pedestals should be chem-set in to the concrete deck at their appropriate locations. Use dome nuts on the top of the rods to stop water ingress.

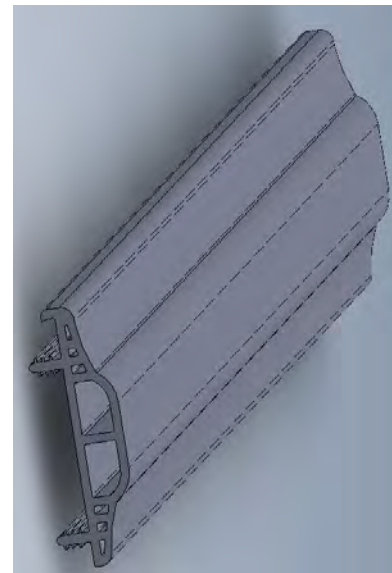
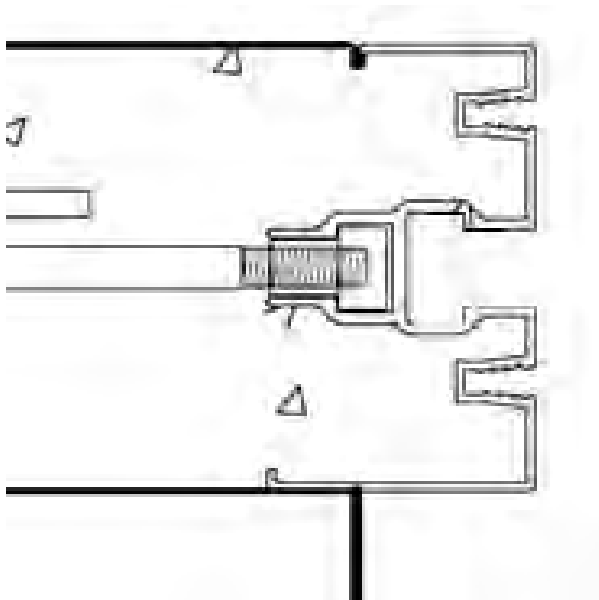


FINISHING

- 12.) Install Transition Plates across joins. Move over to one side and only secure on that side. You should end up with a small amount of the hinge visible like below.



- 13.) Install Fender around pontoons. Fendering is easiest to install using two plastic lump hammers and working your way along each section from start to end while pulling on the fender as you go so you don't end up with bubbles in the run.



POST WORKS

14.) Engineers review and certification

The certifying engineer should visit the site and provide signed of “as-built” drawings

15.) Preparation of Manufacturers Data Report

Capture and save the following documentation for future maintenance requirements:

- Pile Supply (Certificate of Origin/Type) Records for Steel Piles
- Pile Splicing Records and Test Certificates (if applicable)
- Pile Driving Records (Pile Logs from the Piling Contractor)
- As Built Drawings including:
 - Marina Plans (Pontoon/Pile Brackets etc)
 - Hydraulic
 - Electrical (Cabling Schedules/Distribution Board GA's and Single Line Diagrams)
- Pontoon Manufacturing Quality Documentation
- Installation Checklists
- Subcontractors Licences/Certifications
- Council or Fire Services Certifications
- Form 16 (or as applicable in your area)
- Warranties/Installation Instructions
 - Service Pedestals
 - Fire Hose Reels
 - Manual Call Points
 - Sounders
 - Extinguishers
 - Others as applicable

If you have any questions regarding this document or the information provided in here please contact the Superior Jetties Project Management Team on +61 (0)7 5594 8200.