

# SHIP TO SHORE POWER CONNECTION POLICY

## FOR CONNECTION TO RPAYC AC POWER SUPPLY

The Royal Prince Alfred Yacht Club's marina provides power for use on your vessel with a connection to the low voltage electrical supply which is connected to a copper-based marina protective earthing system. All vessels and appliances connecting to the marina shore power system are connected entirely at the owner's risk, owners should seek professional advice in order to ensure that their connection is in accordance with the standard AS/NZS 3004.2.

### Supply

Limited 3 phase supply connections exist and may be available upon application, otherwise the use of 3 phase power outlets is prohibited.

### Annual 'Test and Tag'

Test and Tag is required every 12 months and must always show a current certification sticker signed by a licensed electrical contractor or by the Club's certified staff. The Club provides RPAYC Facility Holders (*Members*) an annual **complimentary Shore Power Lead test** for the lead connected to the AC Power supply.

### Anodes & Galvanic Isolation

RPAYC strongly recommends a galvanic isolation unit or an isolating transformer, compliant with standard AS/NZS 3004.2. fitted on board your shore supply to your vessel. Galvanic isolation may reduce corrosion activity caused by the coupling of your vessel's earth to the marina's common earthing system.

Additional sacrificial anodes with AS/NZS 3004.2 Clause 4.6.4 may be used to reduce these effects, refer AS/NZS 2832 series of Standards for suitable protection practices.

It remains the responsibility of the vessel owner to ensure anodes, galvanic isolation unit or isolating transformer is functioning correctly and any electrical installations carried out do not jeopardise the function.

### **YOUR RECREATIONAL VESSELS LOW VOLTAGE ELECTRICAL SYSTEM MUST COMPLY WITH AS/NZS 3004 PRIOR TO CONNECTING TO THE CLUB'S SHORE POWER**

- 1) The marina shore power connection located at the service pedestals is wired in accordance with AS/NZS 3004.1 and no isolation transformer is fitted to the shore-based service.
- 2) The power supply is 240V AC 50 Hz, combined RCD and MCB residual current and overload protection is fitted and regularly tested to ensure operation. Individual current overload ratings may vary from marina to marina.
- 3) All vessels connecting to the marina shore power system should be wired in accordance with AS/NZS3004.2 and it is the responsibility of the vessel operator/owner to ensure the vessel is compliant.
- 4) Boat owners connecting vessels and appliances to the marina shore power system do so entirely at their own risk and should seek professional advice in order to ensure that their connection is in accordance with the standard AS/NZS 3004.2.
- 5) RPAYC will not be held responsible for power outages, mains surges or voltage fluctuations.
- 6) It is the responsibility of vessel owners/ operators to ensure that the shore power lead is tagged in accordance with Australian standards, is suitable for the type of outlet to which the connection is made, is supported to keep it clear of the seawater, does not present a trip or other hazard and is removed completely when not in use and switched off at the outlet.
- 7) Persons are advised not to enter the water in the vicinity of vessels connected to the marina shore power nor vessels generating power onboard either using generator or other means.

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## MINIMUM CONNECTION REQUIREMENTS

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All leads, plugs and safety protection circuits require inspection every month, it is the responsibility of the vessel owner to inspect the condition of the cables, leads and safety protection.

It's the responsibility of the vessel owner to maintain the power lead:

- 1) The lead shall be suitable the marine environment complying with AS3191
- 2) The flexible lead shall be one length, a suitable length (e.g. cable length is not too short/long).
- 3) The lead shall be heavy duty 3 core (including earthing conductor) sheathed type
- 4) The lead should match the supply (e.g. 15 amp outlet/15 amp lead)
- 5) If the shore power bollard has a screw point terminal the lead must be a screw point shroud fitting
- 6) The lead plug and socket ends must be checked for corrosion on all exposed terminals
- 7) All cable ends must be waterproof and free of any damage
- 8) All components of the lead shall be in good condition e.g. ;
  - no corrosion
  - no exposed conductors
  - no UV damage
  - no moisture in the plug
  - no damage to the lead sheath etc.
- 9) Plug needs to be removed and checked regularly
  - clean out any contaminants
  - check for corrosion or heat damage
  - test RCD switch
  - report any signs of damage at the connection point to the Club immediately
- 10) The lead excess must be wrapped on the boat and must not be wrapped around pedestal, tap fitting, cleats or parts of the marina
- 11) Leads are to be kept clear of 'pinch points' e.g. pile guides, marina, between yachts etc.
- 12) Leads are not to come into contact with water
- 13) Leads are to be removed from the dock/pedestal when not in use
- 14) Household leads are strictly prohibited

The Club reserves the right at any time, to disconnect and/or remove leads where the lead does not satisfy the requirements outlined within the RPAYC Shore Power Connection Policy