



SHORE POWER CONNECTIONS

What you need to know to stay safe

SHORE POWER LEADS AS/NZS3004.1.3.2

It is crucial that 240V shore power leads are tested and tagged annually as per AS/NZS3760 and shall be arranged so that it will:

- a. Permit normal movement of a boat at its mooring without undue stress
- b. Prevent water flowing along the supply lead from reaching the appliance inlet or the supply plug;
- c. Minimise the likelihood of the plug or cord extension falling in the water;
- d. Minimise the possibility of accidental disconnection;
- e. Not present a hazard to persons walking in the vicinity of the boat; and
- f. Be either –
 - I. Arranged in a way to minimise the risk of being caught between moving parts.
 - II. Located where it will not be subject to mechanical damage by high temperatures; or
 - III. Provided with suitable protection against mechanical damage or damage by high temperatures

RESIDUAL CURRENT DEVICE

All Shore Power supplies are protected by a Residual Current Device. An RCD is an electrical safety device that provides protection by rapidly disconnecting the electricity supply should a fault to earth be detected.

As water is a good conductor of electricity, you don't want to become the path of least resistance, always test the RCD every time you connect to Shore Power

CONNECTING TO SHORE POWER

When connecting to shore power the onboard electrical safety of your vessel is an important factor to consider...

Unlike household electrical wiring, the electrical wiring and equipment onboard your vessel resides in a corrosive marine environment that requires regular inspection and maintenance.

HOW TO MINIMISE THIS TYPE OF RISK

Fire aboard a boat, especially in a marina can quickly spread and cause an enormous disaster. Boats, marina property and lives are all at risk

DO YOUR PART TO KEEP YOUR BOAT SAFE, WE WILL ALL THANK YOU FOR IT!

Every time you connect to shore power, take a good look at the lead and fittings. If you see any evidence of damage, corrosion or arching of the connections have it checked by a marine electrician. When connecting the plug and socket make sure the locking ring is always secured to ensure protection from the weather.

Always ensure the shore power lead is arranged so that it will permit normal movement of the boat at its mooring without placing undue stress on the shore power cable and does not rub, chafe or crush against movement of a boat's fairlead's, anchor or mooring cleats.

ELECTRICAL STANDARDS

AS/nzs 3004:2008

YOUR BOAT'S ELECTRICAL SYSTEM MUST COMPLY WITH AS/NZS3000 KNOWN AS THE AUSTRALIAN/NEW ZEALAND WIRING RULES AND THE REFERENCED STANDARDS IN PARTICULAR AS/NZS 2003.2 ELECTRICAL INSTALLATIONS ON RECREATIONAL CRAFT.

This marina provides power for limited use on your vessel with a direct connection to the marina electrical supply, which is connected to a copper-based marina electrical protective earthing system.

The electrical supply at the Club is serviced with 240 volt or three phase shore power protected socket outlets which will accommodate a standard three pin

Connection of a recreational boat's electrical system to the marina a.c power supply may result in accelerated corrosion of the boats underwater metallic parts. It is the responsibility of the boat owner to ensure that either an isolating transformer and or a galvanic isolator are installed on board in accordance with AS/NZS3004.2.

Additional sacrificial anodes or galvanic isolators complying with AS/NZS 3004.2 Clause 4.6.4 may be used to reduce these effects. Also refer to AS/NZS 2382 series of standards for suitable cathodic practices.

The shore power supply lead shall consist of a heavy duty flexible lead complying with AS/NZs 3191 or flexible cable complying with AS/NZS 5000.1 and a plug that complies with IEC 60309.2. The supply lead shall be tested and tagged annually as per AS/NZS 3760 and shall not exceed 25m in length and must not be connected to the electrical supply while it is coiled up

SHORE POWER LEAD TESTING

The Club requests members to have their shore power leads tested annually. The Waterfront Department performs monthly power pedestal breaker testing and on an annual basis the throughout breaker testing is completed.

If you would like to have your shore power lead tested, you may leave your lead together with your boat name at Reception. We will test the lead and return it to your boat if there are no issues detected. In the event that your lead has not passed testing we will let you know.

Tip: Always plug in the boat end of your shore power cord before plugging in the shore power plug. That way you're not carrying a live cord across the water, risking dropping it, or falling in with it.

If you require further information about Shore Power Connection, Electrical Compliance or if your shore power lead needs repair we recommend our in house Tenant;

Andersen Marine Electrics

Marty Andersen Telephone: 0414 646 165

CONNECTING SHORE POWER STEP BY STEP INSTRUCTIONS

PRIOR TO CONNECTING SHORE POWER

1. Uncoil your shore power lead and thoroughly inspect for any mechanical damage such as crushing, kinks, cuts or abrasions.
2. The entry of moisture and salt into a boat's shore power plug and socket connection points for any damage, corrosion or arcing before connecting to shore power.
3. To prevent any personal injury or death DO NOT connect shore power should any fault be found, it is dangerous for unskilled personal to attempt repairs or alternations. If any difficulty arises, contact marina Waterfront Department for assistance.

CONNECTION TO SHORE POWER

1. Arrange the supply lead ensuring the lead is uncoiled, and not producing a tripping hazard.
2. Ensure the Plug/Socket weatherproofing lock rings are used to prevent water ingress and nuisance tripping.
3. Connect the shore power lead to the vessel power socket inlet before connecting to the marina shore power.
4. Test the shore power RCD on every occasion when connecting to shore power.
5. To test, connect shore power, switch on and press the Test Button.
6. RCD should trip off, if the RCD does not trip, a dangerous condition may exist due to a fault.
7. Disconnect shore power and notify Waterfront Department immediately.

BEFORE LEAVING

1. Ensure the marina shore power electrical supply is switched off and the flexible supply lead is disconnected.
2. The supply lead should be disconnected first from the marina socket outlet and then from the boat appliance inlet. Any cover that be provided to protect the appliance inlet from the weather should be securely replaced.
3. The supply lead should be coiled up and stored in a dry location onboard the vessel where it will not be damaged.
4. Do not leave the shore power lead connected and/or coiled up on the marina when departing.

Never allow leads and ends to enter the water