

DSS MARINA ELECTRICAL CONNECTION POLICY

This policy is to provide the members and casual visitors of the Derwent Sailing Squadron, minimum standards when connecting to shore-power within its marina facility. This policy has been developed in order to protect marina users from electric shock and minimize the risk of galvanic corrosion to owners' boats and other boats in the marina.

Notwithstanding any provision within this policy, it is the vessel owner's responsibility to comply with all relevant Australian Standards.

1. Responsibilities of the Derwent Sailing Squadron

i. Supply:

The electrical supply at the Derwent Sailing Squadron is 240 volts at 50Hz single-phase (or 415 volts, 3 phase in specific locations) supplied by socket outlets which will accommodate Australian plugs, appropriate for the marine environment;

ii. Residual Current Devices:

The DSS shall ensure that all external supply points are protected by a Residual Current Device (RCD) and shall ensure that these are tested annually by a licensed and experienced person in accordance with the relevant Australian Standard;

The DSS shall maintain records of such testing as per the relevant Australian Standard;

A "Next Due" sticker shall be conspicuously applied to each RCD in the field to provide the user & the DSS with field confirmation of testing compliance;

The DSS shall ensure all external power points are clearly marked with the location of the RCD & supply point.

iii. Compliance Services to Members:

The club may facilitate services required to comply with this policy as appropriate to minimise the cost of compliance to members. This may include arranging for group services for certification inspections and testing and tagging of supply leads and appliances as necessary.

2. Responsibility of Marina Power Supply Users

i. Where a vessel has an internal AC power distribution system it should comply with relevant Australian Standards;

ii. In particular, where a vessel makes an electrical connection from the marina shore power, either directly or indirectly to an AC distribution system, or generates its own power via a generator for distribution, boats must be able to demonstrate the following compliance:

- a.** An appropriate galvanic isolator or isolation transformer is fitted on board to isolate the vessel electrical system from the marina electrical supply;
- iii.** Prior to connecting to the marina power supply, vessels falling under the requirements of items 2.i and 2.ii above should have their electrical system certified by a licensed electrician, using the DSS Electrical Installation Compliance Statement attached in Appendix A;
- iv.** Where a vessel temporarily connects from the marina shore power to a portable electrical device within the vessel there shall be no requirement for a galvanic isolator to be fitted. "Temporarily" is defined as no more than two consecutive days in any 30-day period;
- v.** Any connection to the shore power that is not "temporary" as defined above will require the fitting of a galvanic isolator to the supply lead during the connection period. Appropriate isolators may be available from the club for hire for limited connection periods;
- vi.** Connection to the marina electrical supply shall be via:

a. Floating Marina:

Shore end – 10-amp or 15-amp captive 3 pin plug with an IP rating of a minimum IP56. Adaptors to convert 15-amp leads to fit a 10amp outlet are NOT permissible. Vessel End – 3 Pin socket of equivalent current rating to the shore end with an IP rating of a minimum IP56, or of fully moulded/otherwise weatherproof nature (including a raised shroud)

b. Fixed Pile Marina:

Shore end - Suitable minimum 10-amp 3 pin plug of fully moulded or otherwise weatherproof nature until such time as IP56 rated sockets installed at which time requirements as per the floating marina shall apply

Vessel end - 3 Pin socket of equivalent current rating to the shore end with an IP rating of a minimum IP56, or of fully moulded/otherwise weatherproof nature (including a raised shroud)

- vii.** Supply leads shall be heavy duty flexible cords, complying with the appropriate Australian Standard and have a minimum current rating of 15 amp;
- viii.** The maximum length of a supply lead shall not exceed 15 metres unless approved in writing by the DSS General Manager due to the dimensions of the boat and distance from the connection point. Leads shall not be used while coiled due to the potential for overheating;
- ix.** Supply leads shall be of a continuous length – leads shall not be joined together unless by using IP56 rated means and not exceed the total length as stipulated in the appropriate Australian Standard. Only one (1) supply lead is to be connected to any socket outlet. The use of double adaptors or power boards is strictly prohibited;

- x.** Users shall not allow shore power leads to form a trip hazard. On the floating marina the permanent recesses and covers shall be used as a means of leads crossing walkways. In the fixed pile marina leads shall only be laid parallel to the marina walkway edge and shall not cross the marina walkway (shore power may only be connected to outlets on the walkway side the boat is berthed on).
- xi.** Prior to using any outlet, the user shall check the "Next Due" sticker on the outlet and only continue the use if the outlet is in compliance. If the outlet is out of compliance the outlet should not be used and the non-compliance should be reported to the Marine Facility Officer.

The user shall also use the "test" button on the RCD device to ensure the device remains functional;

- xii.** Users must ensure that leads are restrained correctly to suit all tides and boat movements without stretch or abrasion. Supply leads or plug ends shall not sag or fall into the water at any time. Any lead that has been subject to stretch shall be immediately removed from service and scrapped;
- xiii.** The supply lead shall be inspected and tested before use and then on a yearly basis by a suitably qualified and licensed person to the appropriate Australian Standard and a current legible inspection tag shall be fitted at all times to the supply lead within 20cm of the supply lead plug (male end). The suitably qualified and licenced person must ensure that all seals used to give IP56 or weatherproof ratings are in undamaged and fully functional condition with no degradation and that particular diligence is paid to inspecting for any lead damage given the water environment.
- xiv.** Users must also self-inspect leads prior to use for interim damage caused by chafe, impact, cuts, UV degradation, damaged waterproofing seals etc.;
- xv.** Portable 240 -volt devices used on vessels, should be inspected and tested on a yearly basis by a suitably qualified and licensed person to the appropriate Australian Standard and a current legible inspection tag should be fitted at all times to the supply lead within 20cm of the supply lead plug (male end). This includes battery chargers, dehumidifiers and any other device used on board;
- xvi.** Battery chargers should comply with the appropriate Australian Standard and incorporate protection against battery overvoltage and battery discharge back through the charger output and shall have a means to indicate the output or charger output status;
- xvii.** Any supply leads used for providing electrical supply to a vessels' 240-volt distribution system or to a 240-volt portable device must 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, the portable device socket end or the supply plug;
 - c. Minimise the likelihood of the plug or supply lead extension socket falling into the water;
 - d. Minimise the possibility of accidental disconnection;
 - e. Not present a hazard to persons walking the vicinity of the boat; and
 - f. Be either –
 - a. Located where it will not be subject to damage (e.g.: mechanical, UV, high temperature etc.) or
 - b. Provided with suitable protection against such damage that is acceptable to the DSS.
- xviii.** Marina users should ensure that vessels are adequately protected from electrolysis from normal conditions within a marina with shore power by maintaining adequate anodes at appropriate locations. Guidance on anode fitting can be obtained from the Marine Facility Officer;
- xix.** The users of power from the marina supply shall pay appropriate charges based on usage as measured by a power meter, where one is installed at the source pedestal, or on a daily rate determined by the club, where there is no meter.

The Derwent Sailing Squadron reserves the right to inspect the vessel for compliance and to immediately disconnect and disable any non-compliant systems, with formal written notification provided to the user.

REVIEW DATE

(TO BE DETERMINED)

ENDORSED BY

The Governance Committee

Signature:  Name: Vice Commodore Heather McCallum Date: 24/05/2022

APPROVED BY

The Board

Signature:  Name: Commodore Nick Connor Date: 24/05/2022

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