Guidance Note SHORE SUPPLY



Important Safety Instructions for connection to shore supply

Falmouth Harbour Haven marina provides power for use on your vessel with an earthed direct connection to the shore supply. If you do not have an isolating or surge protect system fitted to your vessel to isolate its electrical system from the shore supply, corrosion through electrolysis could damage your boat and surrounding boats and or damage to your vessels systems could occur in the event of a power surge. Vessels should be regularly inspected by a marine electrician and provide a safety certificate if required.

On arrival to the Marina

- 1. The power supply is 230V, 50Hz. The socket-outlet will accommodate a standard blue 16A or 32A marina plug. It is not advisable to make any changes to your vessels power supply or system without advice from a qualified electrician. Ensure the cable rating matches the shore power supply requirements of the yacht. The internal wiring on your boat must also comply with the appropriate standards and have the required surge protection. Please report to the marina team the presence of any hybrid or lithium ion battery systems on your vessel on arrival.
- 2. Before connection:
 - a. Ensure that the power supply is switched off
 - b. Disconnect all electrical equipment on the boat.
 - c. Ensure your vessels engine is switched off, before connection.
 - d. Ensure the power pedestal looks in good condition, please report any concerns immediately. It is dangerous to attempt repairs or alterations. If you have any difficulty, please contact the marina reception or a professional marine electrician.
 - e. The connecting power cable must be in one length, with no sign of damage, and must not contain joints or other means to increase its length.
 - f. Only one connecting cable per vessel may be connected to any one socket-outlet. The entry of moisture and salt into a boat socket is potentially hazardous.
 - g. Examine your cables and equipment regularly and clean the plug and socket before connecting to the supply.
- 3. Connection:
 - a. First, connect at the boat inlet socket and then at the marina power tower socket- outlet. Ensure the connection is firm and secure.
 - b. Gradually switch on the vessel's systems to avoid power surges or overloading.
 - c. Monitor for any abnormal sounds, smells, or overheating from the connection points.
 - d. For safety reasons, your boat must not be connected to any other socket-outlet other than that allocated to you.
 - e. Do not allow the connecting power cable to fall into the water. Lay the shore power cable in a manner that avoids tripping hazards and prevents it from being pinched or damaged.

During your stay:

- 1. Periodically check the shore power connections and cable for any signs of wear or overheating. Immediately disconnect the shore power cable if there are any signs of electrical problems, such as sparking, overheating, or unusual noises. Report any issues immediately to the marina team.
- 2. Ensure the cable remains secure and free from damage throughout the vessel's stay.
- 3. Do not exceed the power rating of the shore power connection.
- 4. Monitor the Vessels's power usage to prevent overloading circuits.

On departure:

- 1. Ensure that the power supply on your vessel is switched off and disconnect all electrical equipment on the vessel before disconnecting the power supply cable.
- 2. The power supply cable should be disconnected firstly from the marina socket-outlet and then second from the vessel inlet- socket.
- 3. Before starting your engine please ensure you disconnect the shore power cable.
- 4. Any cover to protect the inlet from the weather should be securely replaced.
- 5. The power supply cable should then be coiled up and stored in a dry place to avoid damage.

OTHER MATTERS



Vessel Protection

Electrical maintenance and protection are vital components of vessel management, ensuring the safety and efficiency of onboard systems. Regular electrical maintenance involves inspecting wiring, connections, and components for signs of wear, corrosion, or damage, and promptly addressing any issues. This approach helps prevent electrical failures and reduces the risk of fire hazards. Additionally, implementing robust electrical protection measures, such as surge protectors, shields the yacht's sensitive electronics from voltage spikes and faults. The renewal and inspection of anodes is also critical.

Surge protection

Surge protection is a critical necessity for vessels, as it safeguards the vessel's sensitive electronic systems from the damaging effects of power surges. Power surges can occur due to lightning strikes, a fault or failure in the marina electrical systems, or sudden changes in the electrical grid, these events can be beyond our reasonable control.

Without surge protection, these unpredictable spikes in voltage can lead to significant damage to onboard equipment, including navigation systems, communication devices, and other essential electronics, resulting in costly repairs and potential safety hazards. By installing surge protection, yacht owners can ensure a stable and reliable power supply, enhancing the safety and longevity of their vessel's electrical systems, and providing peace of mind while docked at our marina.

Falmouth Harbour shall not be held liable for any damage, loss, or injury resulting from electrical surges or fluctuations that may occur while a yacht is connected to the marina's shore power supply. This includes, but is not limited to, damage to the yacht's electrical systems, electronics, and any onboard equipment. We cannot warranty the consistency, quality, or uninterrupted availability of electrical power and cannot guarantee that the shore power supply will be free from surges, fluctuations, or interruptions.

It is the sole responsibility of the yacht owner to ensure that their vessel is equipped with appropriate surge protection devices to safeguard against electrical surges and fluctuations. We strongly recommend the use of surge protectors.

Conditions of Supply

Falmouth Harbour may provide berthed boats with an electrical connection, subject to the availability of power. Owners must not open the electrical boxes provided by Falmouth Harbour or tamper with the electrical supply or electrical equipment supplied by Falmouth Harbour at the Marina. Falmouth Harbour reserves the right to charge the Owner the full daily cost of supplying the electricity together with the cost of any repairs and retesting necessitated by such tampering. In the event of such tampering Falmouth Harbour accepts no responsibility for any loss, damage or injury caused.