C. Toms & Son - Case Study

Project Type

Industrial - Boats & Marine - Insulating A Fishing Trawler

The Project

C. Toms & Son is a family business located on the beautiful Fowey Estuary in Cornwall. The business has been in the boat building industry since 1939 and has a wealth of experience in the creation and repair of vessels ranging from fishing trawlers and canal boats to yachts and larger projects.

As an existing client, we have worked on several projects for C. Toms & Son and in more recent projects, the focus has been providing Spray Foam Insulation for Fishing Trawlers and in particular, the living quarters and the chilled fish room.

Due to the curved steel surfaces of these boats, along with the minimal depth available to hold the insulation, Spray Foam is a popular choice to insulate boats due to its air-tight, thermal performance.

The Specification

Many boats are built using curved steel sheets and this can make the insulation process difficult and time consuming. The available depth for insulation can sometimes be compromised by the constraints of the boats shape or internal space requirements.

We always carry out a pre-install survey when it comes to installing Spray Foam Insulation on boats as it enables us to work with the client to achieve the best results for the project. There were two main areas of insulation that were important for this particular install.

Fishing Vessels can get very cold and are often away at sea for days on end. This means that the living quarters need to be well insulated so that the crew have a

warm and comfortable area. To achieve maximum comfort, we specified 75mm of Closed Cell Insulation.

The speed of application of spray foam coupled with its airtight performance and seamless adherence to a variety of surfaces makes it the optimal solution when considering insulating your boat. In damp, cold environments, spray foam provides the thermal envelope required.

Dependent on the structure of the vessel and materials used, we usually promote a Closed-Cell formula such as ThermoFoam CC-2000 thanks to its multitude of capabilities in marine environments.

High density foam such as Closed-cell provides a strong bond to the surface on which it's applied. The closed-cell nature of the foam means that it offers an exceptional barrier against vapour transfer and therefore does not hold or trap moisture.

A Closed-Cell Spray Foam application, when installed properly, should live with the life of the boat/vessel and is guaranteed for a minimum of 25 years.

The Installation

The installation area is amongst a busy boat building yard where there are many potential hazards. We worked with the C. Toms team to ensure that our team could operate safely, often working at height and around sharp metals.

We spray-applied 75mm of Closed-Cell insulation between metal wall studs, between metal ceiling joists and to the entire floor section to achieve a seamless thermal layer of insulation around the living quarters.

The finished result will help to retain heat whilst preventing condensation from forming on the metal, allowing the boat's crew to enjoy a comfortable space. Insulation can also work well in the summer, helping to reduce the effects of solar gain within a structure.

Client Feedback

We use the team at ThermoFoam regularly as their solutions are able to insulate areas effectively and with speed. Having worked on numerous projects with the team, we always have the confidence that the end result will match our specifications.

ThermoFoam understand the safe working practices of the yard and work well around our other staff members to ensure that health and safety is treated seriously. The pre-install survey that they carry out is essential in allowing us to plan for their arrival on the day of installation.

When schedules run behind and there is a delay on the install, ThermoFoam are always respectful and flexible with us. This demonstrates that they are serious about building long term relationships with their clients.

Ross Winhall, Logistics Manager, C. Toms & Son