



Mascoat
P R O D U C T S

**Why Paint
And then
Insulate?**

The Industry Leaders in Thermal Insulation Coatings

MARINE APPLICATION GUIDELINES

Delta T² Marine

When applying Delta T Marine Coating on the surfaces for shipboard application, it is important to make sure that the coating is mixed and applied properly. These guidelines make all marine applications successful and that all surfaces are covered with Delta T.

Surface Preparation:

Carbon Steel Substrates:

For all carbon steel surfaces, it is vital to have a primer prior to the application of Delta T Marine. Since Delta T is water based, direct to metal application may cause flash rusting which might contribute to adhesion issues if not primed. It is important to prime all surfaces with either zinc or epoxy based product prior to application of Delta T Marine (DTM). Preconstruction primer will work fine. Make sure to touch up welds and areas of fabrication prior to DTM.

Aluminum Substrates

DTM can be applied directly to Aluminum. All aluminum substrates need only to be cleaned with air-sweep and/or wipe method. It is important to remove oil based or protective coating on the aluminum prior to the application. This can be accomplished with solvent wipe and/or vinegar wash

Areas to be covered:

Proper coverage of all areas of the ship is vital to the performance of the product. This includes all flats, overheads, stiffeners (both front and back), support members, and any other areas where thermal gain/condensation is a problem. The coating must be applied in accordance with application schedule for its area.

For Flats - minimum of 40 mils (1.0mm) to a maximum of 80 mils (2.0mm)

Overheads - minimum of 40 mils (1.0mm) to a maximum of 80 mils (2.0mm)

Stiffeners - minimum of 30 mils (0.75mm) to a maximum of 80 mils (2.0mm)

Support members - minimum of 30 mils (1.0mm) to a maximum of 80 mils (2.0mm)

How to apply the coating for Marine Applications

It is recommended applying the coating in a methodical format to insure proper coverage. Delta T Marine will apply easily if the following steps are followed:

1. Mix the coating as per the directions on the pail. It is important to mix the coating into a smooth consistency, but not over stir it.
2. Use a brush or a hand mitt, or small application gun (call Mascoat for this system) to back stripe all stiffeners and overhead areas that would be difficult to spray.
3. Spray the coating with a tip size to equate to the distance needed to be covered. For most marine applications this can be accomplished with a 419 - 521 tip. The larger the tip the more textured the surface will become.
4. Spray the first pass in 8-10 mils (0.25mm). Let it tack up and move around the area to be covered. Dry definition of the coating is placing your thumb onto the coating, turning it 90° and then removing it. If there is no coating on thumb, coating is ready for recoat.
5. Make sure that the first tack coat is dry prior to the application of the next pass.
6. Apply the next pass not to exceed 20-22 mils wet (0.5mm). Let it dry fully, prior to the application of the next coat.
7. Build the coats to desired thickness as described in step 6. Forced ventilation will expedite dry times.
8. Do not apply more than 20-22 mils wet (0.5) at any one time. Excess milage will slow dry times and may entrap water with coating film, thereby not fully producing insulating effects.

Touch up:

If an area needs to be touched up, it can be accomplished with brush, roll or spray method. Make sure that the area is clean and free of any debris.

Feathering the area prior to application will yield a seamless look. No sanding or buffing is needed if Delta T Marine is applied directly. The surface only needs to be cleaned.

Tips and Techniques:

- Always make sure that the coating is applied in all areas of the vessel that need protection for thermal or anti condensation areas. All heat paths will need to be coated to insure proper protection. Without covering these areas, potential heat migration or condensation might occur. Coat all areas of the vessel at least 18" from shell of vessel if not covered with another insulator.
- Spray the coating in lighter passes will yield better coverage and faster dry times rather than one thick pass. Time factor when applying usually nets the same amount of time, but the job is much nicer and overall performance and product usage is better.
- Prime sprayer with product by removing spray nozzle orifice to insure that all trash is removed from system. This is especially important if sprayer is used often and lines are not new.
- Use ventilation fans to help evaporate moisture when spraying the coating inside confined areas. This will insure better dry times and make the area more pleasant for application crews.
- Spray more light coats more than one heavy one in colder climates.
- Work smart and think out strategy prior to spraying. Spray areas that are hard to reach prior to bulk of application. Use ladders and scaffolding if needed.
- If product is found in unwarranted space or area, clean immediately via water and scrubbing method.
- If product slides or blobs occur, smooth out with brush or let dry thoroughly prior to scraping.
- Spray the coating when crews are not working on the vessels. Many shipyards use night crews to apply the coating and expedite the vessel's construction time frame.
- Use the wet mil gauge as a good way to judge how fast the coating is being applied. Once experience is gained, it is fairly simple to judge the coating's application thickness. One is normally supplied in each pallet shipment.
- A dry mil gauge will confirm total film thickness. If spraying on carbon steel, make sure to calculate (subtract) the primer from the total film thickness.