



Mascoat
P R O D U C T S

**Why Paint
And then
Insulate?**

The Industry Leaders in Insulation Coatings

FREQUENTLY ASKED QUESTIONS About *DELTA T Marine*

The following is a list of FAQ's. These questions and answers are a guideline to help with questions you might have. If you do not find the answer to your question please call us at 713.465.0304.

Where is this coating used and why?

Delta T Marine is used to replace or enhance conventional marine thermal insulation systems. It is designed to retard heat/cold from entry into shipboard atmospheres. Normally applied at 40-60 mils (1.0-1.5 mm) the coating provides equal protection when compared with 2-3" of conventional batt-insulation systems.

How much coating is needed for shipboard thermal protection?

Our coating at 40-60 mils (1.0-1.5mm) has been used to replace 2-3" of standard blanket insulation inside vessels on walls, stiffeners, overheads, etc. Our coating performs equally, providing an RvE of 9-13 depending on thickness. Best of all there is no cutting, wrapping, taping, pins and hangers involved. The coating is sprayed directly to a primed steel surface or directly onto aluminum or stainless. This makes hard to irregular surfaces easy to protect and insulate, also becoming maintenance free.

Is the coating considered an anti-corrosion coating?

Technically since the coating is water based, we do not recommend it being used on bare steel without a protective coating (primer). However, due to the thick nature of Delta T Marine, a corrosive and protective layer built as a benefit. Since the coating is applied on vessels up to 80 mils (2.0mm), it provides a substantial protective layer that is very flexible. This means that our coating can expand and contract with the vessel and not worry about de-bonding issues even at 8-10 times the thickness of conventional protective coatings.

What about the maximum and minimum temperatures that Delta T is capable of?

Delta T Marine is excellent for peak temperatures ranges from Subzero to 500°F. Its sustained workload upper limitation is 350°F. There is not lower range.

What about using the coating for anti-condensation applications?

Yes. Absolutely. In fact, this is what this coating is designed for. By applying 40 mils (1.0mm) our coating reduces or eliminates most condensation issues. This is the main purpose of the coating as well as retarding radiant heat loads from the sun or cold.

What about expansion and contraction of the vessel?

This coating is designed to have excellent bonding with expansion and contraction. It can also bend to itself without cracking.

What is the finish like after application?

The finish equates to a semi smooth texture depending on which spray tips are used. The coating can be textured if warranted with a larger spray tip or sprayed to a finish like results with a small tip.

Do any materials degrade the coating?

Prolonged emersion in acid will eventually degrade the coating. Diesel, gas, oil, do not degrade the coating if spilled. The only problem is that some materials may dirty the coating. Cleaning can be accomplished by soap and water or a rag and acetone. If you are worried about harming the coating, we recommend a good topcoat procedure.

Will it adhere to stainless or aluminum? Do I need primers on these substrates?

It adheres directly to aluminum and stainless. The coating contains no harmful chlorides. Our adhesion tests have shown that there is no greater bond with or without primers on these substrates or by blasting or sanding profiles.

What colors does it come in?

The coating is white from the factory. Color tinting is usually done on site during application. Advantages of tinting are coat thickness differentiation and aesthetics.

What is the application procedure?

Application instructions can be found on our website. It is important to follow these instructions thoroughly to insure proper insulating results. There are numerous ways to apply the coating, so make sure that you examine all profiles before application.

How thick can we apply the coating?

We have found it best to try to keep wet coat thickness of no greater than 25-30 mils. The reason for this is to keep sagging to a minimum and help to evaporate the water weight as quickly as possible. Our testing has shown to produce better thermal insulating and application qualities with thinner multiple coat process. This allows the coating to dry quickly, build up additional thermal breaks, and also increase yield.

How do we expedite the dry times?

Best way to insure quick dry times is to force ventilation into the space as well as out of the space. Also make sure that coating thickness does not exceed 20-22 mils wet, and to keep ambient temperatures warm. This means that lower ambient temperatures may require space/substrate heating prior to application. We recommend substrate or ambient temps of at least 60°F during spray applications.

Is it a single component coating?

The product is a one-part system. No catalysts. No pot life.

Should we use primers? Which ones are best?

The only substrate that requires a primer is steel. We have not found one primer that is better than others from an adhesion value. Primers range from epoxy systems to pre-construction primers. The important thing is to have a protective system on the steel in a thickness to cover it. You can use the priming system you are most comfortable with prior to Delta T application.

What happens if we apply the coating directly to steel?

We do not recommend this procedure, as flash rusting will develop on steel. This is due to the coatings water based structure. Flash rusting will not hurt the substrate; it is only an aesthetic problem. Please apply primer prior to application of Delta T on steel surfaces.

Does the coating get dirty? How do we clean it?

Since the coating has a microscopic micro-porous structure it will get dirty if left exposed over time. It can easily be cleaned with water and scrubbing or light pressure wash. If the coating is used in high traffic or other areas, a topcoat procedure is recommended.

What about touch ups and can we remove the coating easily?

Yes. It can be removed with a wire wheel, sanding, blasting, etc. Make sure to remove the coating on unwanted surfaces with a rag and water quickly as the coating dries very fast.

What about the shelf life?

The shelf life is one year from manufacture date. This is due to binder systems. We have however shot coating that is two years old without problems. The important thing is to make sure that the coating is stored in a cool place.

What about topcoats? Is this important in high traffic or abusive areas?

Due to the coating's acrylic structure, we recommend a high-grade acrylic as a topcoat in high traffic or abusive areas. Its properties are closely resemble our insulation coatings. Normally with topcoats additional layers of Delta T will be needed.

Since our coating will have a mechanical bond with other coatings, there are no problems with solvent-based systems as a topcoat. To date we have used epoxies, urethanes, and other various systems without any problem. Top coating can be applied directly on top of Delta T Marine without any prep. If the coating is dirty prior to topcoat procedure, then a light water sweep may be warranted.

Are there any harmful Volatile Organic Compounds to be concerned with?

NO! The coating is very environmentally friendly. Cleanup concerns are kept to a minimum.

Is Personnel Protection Equipment (PPE) needed when handling the coating?

Delta T Marine is considered a non-hazardous coating. In small confined areas, we recommend a respirator and forced ventilation. Of course protective clothing and OSHA standards should be followed at all times. In unconfined areas, a simple dust mask will work for respiration. Delta T has a slight ammonia order similar to acrylic house paint.

Is it flammable and can we do hot work while applying the coating?

Since Delta T is non-combustible and has a very low flame spread of 5, the coating can be sprayed while hot work is ongoing. This allows for multiple crews to work the same space.

Does it provide any sound deadening characteristics?

YES! It provides a 1-3 Db drop at 60 dB. This is equivalent of 50-80% sound deadening of airborne structural noise depending on thickness and substrate. Thus, you can effectively thermally insulate and sound deaden with one product. The product also has a sound reduction co-efficient of 28.

What about the weight of the coating after it is applied?

At 40 mils of coating applied, Delta T weighs less than 0.08 lbs a square foot. Conventional insulation systems weigh 0.30 to 1.0 lbs a square foot.

Does the coating need special equipment for application?

Delta T Marine can be applied by 3 means. It can be applied with an airless sprayer, a conventional air power SG1 gun (please see our recommended application methods sheet) and by brush or roller. It is important to use the right application method for each application.

How long does it take to dry?

The coating dries very quickly in normal ambient conditions. Approximately one hour at 75°F. Dry times will increase if ambient conditions are below 70°F. Higher than 80°F will dramatically shorten dry times and can speed application if needed.

How long does it take to cure?

Cure times depend on ambient and humidity conditions. Normally the coating will fully cure in 24-36 hrs. We recommend letting the coating cure 48-72 hours if a top coating is needed.

How long until we can recoat?

Recoating can occur after coating is dry to touch. It is important to make sure that the coating is dry prior to recoat procedure. This is to insure that the coating does not trap water and produce a marsh mellowing affect. If the coating does not smear, it is ready to recoat.

What about overspray or dry fall?

If using airless equipment, overspray is kept to a minimum. Anything in a 3' area is considered dry fall. The dry fall is a B-B like structure that can be swept up, vacuumed, or washed away easily.

What about storing procedures?

We recommend keeping the coating in a heated warehouse if conditions are below freezing. If product freezes in the pail, it destroys the insulating results. If left outside, we recommend keeping the product out of direct sunlight. Otherwise, the Delta T Marine can be stored without any special accommodations like solvent borne systems.