



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 INDUSTRIAL*

Where is this coating used and where is it used?

Delta T Industrial (DELTA T) is used to replace or enhance conventional thermal insulation systems in a variety of applications. Applications include controlling radiant heat gain, personnel protection, reducing and/or eliminating condensation, and blocking energy transfer from one substrate to another. The coating is also used to provide a multi-purpose product that protects and insulates in a paint-like material. Insulating factors depend on thickness applied and temperatures.

How much coating is needed for substrates to make them cool to the touch?

The thickness of the coatings depends on the how hot the substrate is initially. It is best to consult our chart which will help you determine how much coating you will need. We can also perform an extensive thermal analysis for you if needed.

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 Industrial, a corrosive and protective layer is inherent in the coating. This thick blanket-type cover provides an excellent corrosion barrier system while providing dramatic temperature differentials, which aid in corrosion protection.

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

Delta T Industrial is excellent for peak temperatures ranges from Subzero to 500°F. Its sustained workload upper limitation is 350°-400°F. There is not a lower range as the coating has been tested to -60°F.

What about using the coating for anti-condensation applications?

The coating provides a thick barrier to entry for most harsh atmospheres. By applying 40 mils (1.0mm) our coating reduces or eliminates most condensation issues depending on conditions. Adverse conditions such as chilled water piping or temperatures near freezing will require additional thickness to provide anti-condensation results. Carbon steel surfaces still require a good priming system prior to the application of our coating.

What about personnel protection areas?

The coating is excellent for this type of application. In fact, it is hard to compete with regards to a cost per linear of square foot when compared to conventional insulation. By spraying the coating directly onto a substrate, a protective layer is

now achieved thereby reducing the heat transfer to personnel. Our coating has a low emissivity rating which aides in not making the coating efficient in transferring heat. This means that the coated substrate actually feels cooler than it registers with a thermometer. Additional benefits include view ability of the substrate and ease of maintenance.

What about expansion and contraction of the substrate?

This coating is designed to have excellent bonding with ability for expansion and contraction. Its elongation rate is 80%, which allows the coating to be bent without breaking or debonding even at an 80-mil thickness. This is important to substrates that have shut down and startups.

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 and therefore can be applied directly to stainless, aluminum and galvanized substrates. 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 or grey from the factory, although we have other custom made colors. Color tinting is usually done on site during application. Advantages of tinting are coat thickness differentiation and aesthetics. Tinting can be accomplished by following our tinting procedures in the application instructions found on our website.

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 20-30 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 a thinner multiple coat. This allows the coating to dry quickly, build up additional thermal breaks, and also

increase yield. When building coat thickness it is important to make sure that the coating is dry to the touch prior to the next application.

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 may 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. Acrylic topcoats have similar characteristics and are similar from mechanical characteristics.

Since our coating will have a mechanical bond with other coatings, there are no problems with solvent-based systems as a topcoat. Top coating can be applied directly on top of Delta T Industrial without any prep. If the coating is dirty prior to topcoat procedure, then a light water sweep may be warranted. Hard topcoats such as epoxies and urethanes may have problems due to the elongation rates if applied on Delta T Industrial. Thus we recommend staying with products that have an elongation rate of 12% or greater.

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

NO! The coating is very environmentally friendly containing only 1 gram per liter VOC content. Cleanup concerns are kept to a minimum. No special storage procedures or freight concerns.

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

Delta T Industrial 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. The coating can also be applied to working substrates under 212°F. If application is needed to working substrates higher than 212°F, special application instructions can be found at our website.

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 Industrial can be applied by 3 means. It can be applied with an airless sprayer, a conventional air power SA 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 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 Industrial can be stored without any special accommodations like solvent borne systems.