

Product Application Guide
ThermaCote®

Energy
Solutions Coatings



877-899-0988

www.CoatingsRus.com



PRODUCT DESCRIPTION

ThermaCote® is a single component spray applied thermal barrier coating encompassed of ceramics and acrylics (water based). This product is easy to apply in new or retrofit construction and enhances the performance of insulation, HVAC Duct Work, Wall Systems, and Roof Systems for all types of substrates including metal, brick, cement block, concrete, wood, or sheet rock. ThermaCote® is MAS Certified Green and UL® Classified as a Class A Fire Retardant with a 0 (zero) Flame Spread. When used as the Primary Thermal Envelope (PTE), ThermaCote® seals the structure and minimizes Solar/Radiant Heat Gain. Lowering built-up heat due to solar heat gain results in lower roof temperatures and reduced cooling costs. ThermaCote® guards insulation against moisture, thermal transfer, thermal bridging, and conduction; it also allows entrapped moisture to escape all of which provides an environment closer replicating the lab conditions where insulation is assigned its “R” value. ThermaCote® is sustainable as it lowers the energy consumption of a structure, prolongs the life of the building materials and adds no harmful VOCs to the indoor or outdoor environment during installation, service or dismantling and recycling.

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EQUIPMENT AND TOOL RECOMMENDATION

ThermaCote® is a single stage coating designed for application via heavy-duty airless spray equipment. Brushing and rolling is not recommended but may be a feasible alternative for smaller, harder to reach areas.

Sprayer Requirements- ThermaCote® requires a sprayer capable of maintaining an output of 2 GPM (8 LPM). ThermaCote, Inc. recommends and is a licensed distributor for Graco® pumps and can assist you with your pump needs. Please see this link for more detailed information about the Graco® Texture Sprayer Line <http://bit.ly/N8CzM7>



Note: It is necessary and ThermaCote, Inc. recommends the removal of all inline filters on the machine and in the spray gun(s) if filters are present to prevent clogging in the machine, unless a coarser (30 mesh) filter replacement is available.

Hose-A pressure rated 3/8" hose is recommended for better flow of material when spraying ThermaCote®.



Mixing Paddle-We recommend the mixing paddle ("mud paddle") pictured here when preparing ThermaCote® for application.

Variable Speed Drill- ½ hp or greater drill is recommended in conjunction with mixing paddle to properly mix ThermaCote® before spraying

Safety Equipment-Goggles and respirator

Optional Gear- Protective bodysuits, shoe covers, drop cloths, spray shield.

*Caution: Shoe covers can result in loss of traction and should never be worn on sloped or slippery surfaces.

SURFACE PREPARATION

ThermaCote® will adhere to almost any surface which is properly prepared. Proper preparation means the surface is thoroughly cleaned, dry and free of dirt, debris, rust, grease, oil or any other foreign substance.

- New metal surfaces may require removal of temporary protective films. Pressure washing or vinegar wash works well to remove these protective films when necessary.



- Rusty surfaces may require wire brushing and priming with a suitable primer for the substrate to ensure the best adhesion and finish. A rusty metal surface (as shown) should be pressure washed first, cleaned with a wire brush and coated with an appropriate rust prohibiting primer before the application of ThermaCote®.
- Concrete surfaces should be pressure washed to remove all loose surface material. An extremely porous surface may require block-filler before the application of ThermaCote®.

MIXING INSTRUCTIONS

Do not open product until ready to apply. Upon opening, notice that ThermaCote® ingredients settle up in the bucket; this is due to the light weight nature of its construction (5 lbs/gallon wet). It is recommended to use the entire contents of an opened container in one application once it has been mixed. Over mixing can result in loss of performance.

ThermaCote® is packaged in 5 gallon buckets. The lid on the bucket has 8 pre-cut notches that must be cut in order to remove the lid (unless using a “lid puller”). On a lid with no pre-cut notches use a sharp blade to make at least 8 evenly spaced slices and use a lid puller to release the lid from the bucket.

1. Insert the mud paddle into the drill and secure.
2. Push the mud paddle through the thick top layer to the bottom of the bucket.
3. Mix ThermaCote® at a slow speed initially, gradually increasing speed; use an up and down motion and be sure all lumps break up and mix until you have a smooth homogenous liquid (2 minutes or less). Do not scrape the bucket with the drill in motion as this could contaminate the coating with plastic shavings.
4. DO NOT RUN DRILL ON HIGH SPEED



A clean stir stick can be used to gently scrape clinging material from the sides of the bucket but insure that nothing that has become hard or brittle (crusty) is dislodged as this can cause your tips to clog during spraying. A seasoned applicator can properly mix a can of ThermaCote® in less than 2 minutes. **DO NOT OVER MIX** as this can affect the overall performance of the product.

SPRAYING INSTRUCTIONS

1. Run clean water through the spray equipment to prime and wet the lines and to generally insure a ready sprayer before application begins.

2. ThermaCote® should be applied in coats of a 10 to 25 wet mil thickness (WMT) dependent upon the application.

*The wet mil gauge pictured here is a useful tool for determining the thickness of these coats.

3. Allow ThermaCote® to dry completely between coats when applying multiple coats.



Coverage should average 50 square feet per gallon at 20 mils thickness on flat surfaces. Coverage should average approximately 80 square feet a gallon on smooth metal surfaces at 13 WMT. 13-15 mil coats of ThermaCote® will dry in 2 hours at 70° F in low humidity atmospheres (less than 5,000 feet above sea level).

CLEAN UP

Use warm, soapy water for cleanup of tools, equipment, spills and drips.

- Flush spray equipment with clean water until clean water comes out.
- Do not run storage fluids through a pump before water runs clean. Properly cared for equipment will last longer and go further between repairs.

PRODUCT STORAGE

Store product indoors, out of direct sunlight in temperatures between 40°-110° F (4 - 43 °C)

PROTECT THE PRODUCT FROM DIRECT SUNLIGHT DURING STORAGE-Prolonged exposure to direct sunlight can cause a “curing” type reaction to take place inside product container and make the product hard or crusted inside the bucket.

PROTECT THE PRODUCT FROM FREEZING TEMPERATURES