Now you can paint-on durable Ceramic protection from the heat of the sun.

Space-Age technology developed by NASA and used in the Space Shuttle tiles to help control heat transfer is now available in CeramaX, a fluid applied waterproof ceramic coating.

Field tests, lab tests and most importantly, real-world use demonstrates that a 12-to-14 mil (only 12 to 14 thousands of an inch) coating of CeramaX blocks as much heat flow from a radiant heat source as 6 inches of bulky fiberglass insulation! This high percentage of radiant heat reflected is comparable to a rating of R-20. The pink fiberglass insulation used in the attics of most homes is R-19 and six inches thick and equals SIX THOUSAND MILS.

CeramaX is based on previously top secret technical information from the NASA Space Program. Created from that information is a unique Sealed Ceramic Micro-Bubble that we add to our coating in a special disperser to give CeramaX properties similar to the tiles on the Space Shuttle. These patented ceramic micro-bubbles act just like microscopic thermos bottles. There are over 100 BILLION of these ceramic “thermos bottles” in each gallon of CeramaX.

In the CeramaX used to coat the roof of an average 3-bedroom house there are enough special ceramic micro-bubbles to reach to the moon! That’s 224,250 miles!

CeramaX reflects radiant heat. Radiant heat comes from sources such as the sun, a fire or a heat lamp. The ceramic micro-bubbles in CeramaX protect against radiant heat only. Insulation such as the fiberglass batts in the walls of your home works by protecting against conductive heat. Conductive heat is the heat you feel when you press your hands together. CeramaX has only a minimal affect on conductive heat. Its great virtue is its phenomenal ability to reflect radiant heat. It actually RE-RADIATES heat back into the atmosphere, preventing heat buildup that would need extra interior insulation to compensate!

CeramaX is intended for use in a wide variety of applications where radiant-heat reflection is needed and where a coating able to withstand wind, rain, sun, abrasion or impact is needed.

CeramaX has the unique properties to protect metal roofs, tile roofs, bermuda roofs, shingle roofs, modified bitumen, 90# roofing felts, fiberglass 3ply roofs, built-up roofs, bus tops, truck and van tops, shipping containers, tractor trailer bodies, ice storage buildings, cryogenic containers, stucco walls, metal walls, industrial equipment…and the list goes on and on. CeramaX will protect almost any substrate that needs to be protected from intense heat buildup from the sun.

By eliminating heat buildup, CeramaX keeps your living or workspace comfortable and saves money on roof repairs. Lowering the temperature of your roof by 10 degrees F as CeramaX can
do, may reduce cooling costs by up to one-third! Imagine cutting your cooling costs by 30% or more! You can with CeramaX.

As the mighty sun rises, its scorching rays cook the surface of your roof with radiant heat. Your roof gets hotter and hotter, transferring that uncomfortable heat to your living space. Your air conditioner works harder, requiring more maintenance, wearing out sooner and your monthly electric bill climbs. All the while, you’re less and less comfortable. While your roof is being scorched, the seams, laps, flashings, fasteners and other components expand dramatically. The problem is that each component expands at a different rate and shear forces begin tearing at your roof. When the sun finally sets, the heat slowly bleeds off, some of the heat goes into the air and some into your living space. As this happens, the roof begins to contract, pulling and again shearing at the seams, laps, flashings and fasteners that all contract at different rates again.

This shearing caused by daily expansion and contraction creates roof fatigue, which spells the untimely and expensive death of your roof!

CeramaX keeps your roof cooler thus greatly lessening the shear caused by expansion that destroys your roof.

The result is… Your roof lasts longer!

CeramaX helps prevent thermal shock. A hot roof can experience thermal shock when a passing shower of cold rain hits the hot roof causing a rapid and tremendously violent contraction. These violent contractions can rip seams open, pop fasteners out of the roofs substrate, pull flashings out of the imbedding plies and generally destroy your roof. Keeping your roof cool prevents the radical contraction that leads to premature roof failure and costly replacement costs.

The 3 best reasons to use CeramaX are; ‘It Saves Money, It Saves Money, It Saves Money!’

CeramaX provides SOLAR REFLECTANCE, which means it reflects most of the infrared and visible light striking the surface of the coating. Over 88% of the light striking CeramaX is reflected back into the atmosphere and away from your roof. THEN… CeramaX repels over 85% of the heat striking it. It bounces this heat back into the atmosphere. This synergistic effect means that CeramaX reflects the majority of radiant energy away from the structure while the micro-porous structure of the coating dissipates and blocks any radiation that is absorbed and reduces the energy transmitted to the substrate.

How much does it cost?

Well, considering reduced electric bills, extended roof life, increased comfort and the beauty supplied, it’s just about FREE! If you’re paying only ten cents per kilowatt-hour, CeramaX will pay for itself in no time, and if you’re paying more, your return is bigger – faster.
### CeramaX

<table>
<thead>
<tr>
<th>Properties</th>
<th>Test Method</th>
<th>Test Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flame Spread</td>
<td>ASTM E-84-87</td>
<td>10 or less</td>
</tr>
<tr>
<td>Smoke Developed</td>
<td>ASTM E-84-87</td>
<td>less than 5</td>
</tr>
<tr>
<td>Adhesion</td>
<td>ASTM D-3359</td>
<td>100%</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D-2370</td>
<td>200% +</td>
</tr>
<tr>
<td>Tensile Strength</td>
<td>ASTM D-412</td>
<td>255psi</td>
</tr>
<tr>
<td>Accelerated Aging</td>
<td>ASTM G-53</td>
<td>Passed 200 hours</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM D-792</td>
<td>.98 @ 24C - dried film</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Brookfield 10 rpm</td>
<td>25 – 35 Kcps</td>
</tr>
<tr>
<td>Wt Per Gallon</td>
<td>8.25 # per gal</td>
<td></td>
</tr>
<tr>
<td>Insulation Value</td>
<td>Radiant heat on 13 mil thick coating = Effect of R-20 (0.040k)</td>
<td></td>
</tr>
</tbody>
</table>

**OTHER:**
- Lead and chromate free: Yes
- Resin Vehicle Type: Acrylic Styrene Polymer - Proprietary Blend
- Cures by: Evaporation
- Color: White and tintable to pastels if desired
- Hiding: Excellent at 10 dry mils
- Gloss: Low-sheen
- VOC Emissions: ONLY 10.425 grams/liter (0.087 lb./gallon)
- UV Resistance: Excellent
- Fungus / Mildew Resistance: Very High
- Film Thickness: 100 square feet per gallon = 16 wet mils, = 8 dry mils/coat
- Dry Time: To Touch – 50 minutes @ 70% R.H.  To Recoat – 3 hours  To Fully Cured – 7 days
- Shelf Life: 1 year
- Open Pot Life: 6-8 hr. @ 70 degrees F.
- Clean up: Soap and Water
- Thinner: Water if needed

**INDEPENDENT STUDY:** An independent study was performed at the University of Nevada, Las Vegas under the direction of the Mechanical Engineering Department. The study was designed to test new technologies that help in saving on energy demand. The test facility was composed of two simulated houses, 9 ft. X 12 ft. X 8ft. in size. The wall construction consisted of two - ½ in. plywood boards with 6 inches of Styrofoam between them. The floor was made of the same construction giving an R-value 22. The attic was covered with 6 inches of fiberglass insulation with an R-value of 19. The rooms were equipped with several instruments; thermocouples, heat flux sensors, and two identical heating and cooling system units. The weather was monitored by a computer based data acquisition system monitoring the thermocouples, a pyrometer and a wind monitor to record different variables that help in assessing the performance of each of these technologies.

The results showed that a regular outdoor paint showed a 59.70% increase in energy usage compared to the chamber painted with our uniquely effective technology and containing the special micro-sphere ceramic compounds in CeramaX.
**CeramaX** does not trap moisture and it contains a blend of unique biocides to fight against the growth of mold, mildew, fungus and algae.

<table>
<thead>
<tr>
<th>Air Temperature</th>
<th>Uncoated</th>
<th><strong>CeramaX Coated</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>3 in. from surface</td>
<td>98 Degrees F</td>
<td>108 Degrees F *</td>
</tr>
<tr>
<td>Outside surface</td>
<td>168 Degrees F</td>
<td>121 Degrees F</td>
</tr>
<tr>
<td>Inside surface</td>
<td>159 Degrees F</td>
<td>114 Degrees F</td>
</tr>
</tbody>
</table>

* This value is higher because heat is reflected into the air above the coated surface.

**CeramaX** contains proprietary solar-reflective ceramic compounds suspended in a hybrid terpolymer emulsion with urethane and acrylic modifiers. You get excellent adhesion to most substrates, high weather resistance, UV stability, elasticity, toughness and exceptionally long life on exterior applications.

Available only through
Acry-Tech…

“*Your Partner For Success!*”
3601 NE 5th Ave  Ft. Lauderdale, FL 33334

800-771-6001
954-565-6001
954-565-2864 Fax
[www.acrytech.com](http://www.acrytech.com)
[sales@acrytech.com](mailto:sales@acrytech.com)