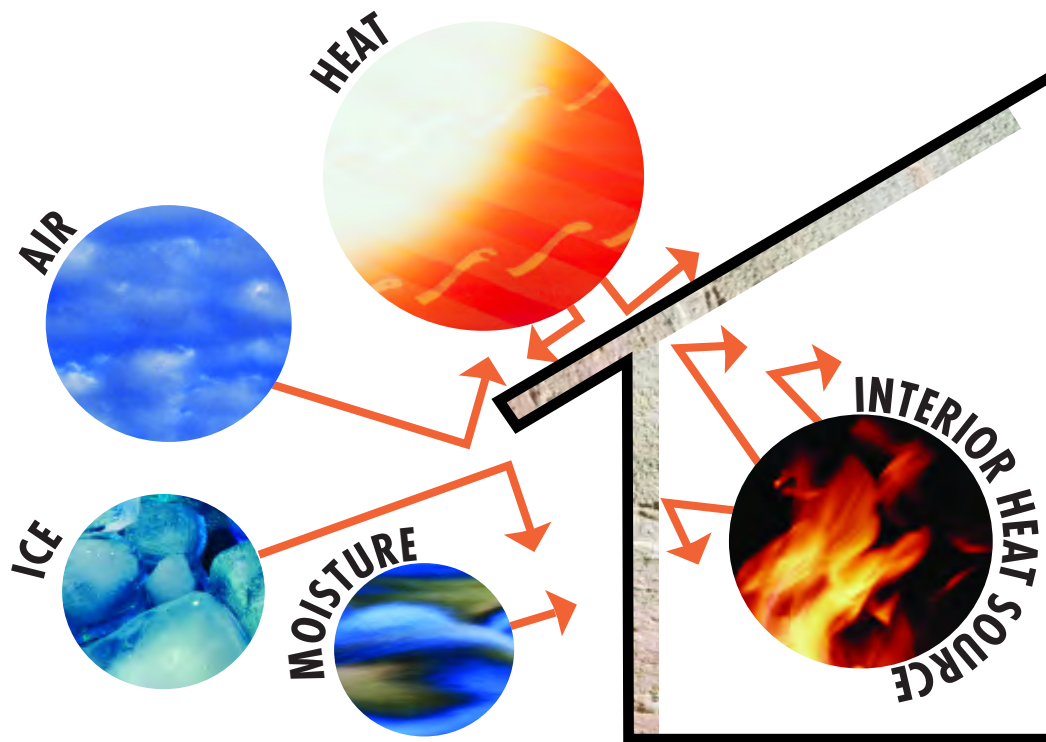


SUPER THERM[®]



WHEN IT COMES TO INSULATING AND WEATHERIZING, NOTHING RATES HIGHER THAN SUPER THERM[®].

- Blocks 95% of Heat Load (blocks the absorption and transfer of heat) • 99% of Ultra Violet Radiation (UV)
 - 92% of Visual Light (Short Wave Radiation) • 99.5% of Infra Red (Long Wave Radiation)
- Blocks Water and Moisture Penetration—certified and tested water barrier • Blocks Mold, Mildew, Wood Rot
- Blocks Air Infiltration—permanently flexible windbreaker and wind barrier • Blocks 68% of All Sound Waves—sound deadening
 - Blocks Flame Spread and Smoke—Class "A" Fire Rating ("0" Flame Spread and Smoke)



**SUPERIOR PRODUCTS
INTERNATIONAL II, INC.[®]**
The right coating for ultimate protection.

INTERNATIONAL AREAS OF BUSINESS ACTIVITY

Asia: Japan • China • Taiwan • Korea • Malaysia • Singapore • Indonesia • Russia • Ukraine

Europe: Italy • Germany • France • Belgium • Netherlands • Turkey • Greece • Spain

Middle East: Saudi Arabia • UAE • Oman • India

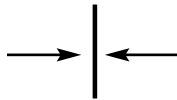
South America: Venezuela • Colombia • Brazil • Argentina

Central America: Mexico • Panama

Africa: Egypt • Nigeria

Australia • New Zealand • Mexico • Canada • U.S.A.

THICKNESS OF SUPER THERM®



(EQUAL TO)

THICKNESS OF TRADITIONAL FIBERGLASS INSULATION

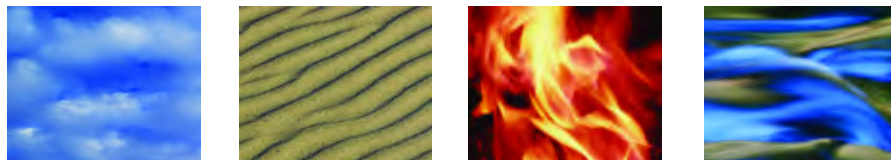


APPLY A R-19 EQUIVALENT RATING TO YOUR FACILITY WITH A SINGLE COAT!

With the ability to protect from all 3 methods of heat transfer, SUPER THERM® is proven to outperform traditional fiberglass insulation. In fact, a layer of SUPER THERM® no thicker than a single business card provides the same protection as 6 inches of fiberglass. And while a moisture content of 1.5% in fiberglass reduces its effectiveness by 35%, SUPER THERM® is specifically formulated to prevent moisture absorption.

SUPER THERM® is durable and versatile, with a 20-year lifespan under normal conditions. Neither temperature nor moisture will compromise its performance. SUPER THERM® outperforms and outlasts traditional insulation in lab tests and on the field.

SUPER THERM® is the most unique and effective insulation and weatherization material in the market.



Superior Products
International II, Inc.
sales@spicoatings.com
www.spicoatings.com



SUPER THERM®

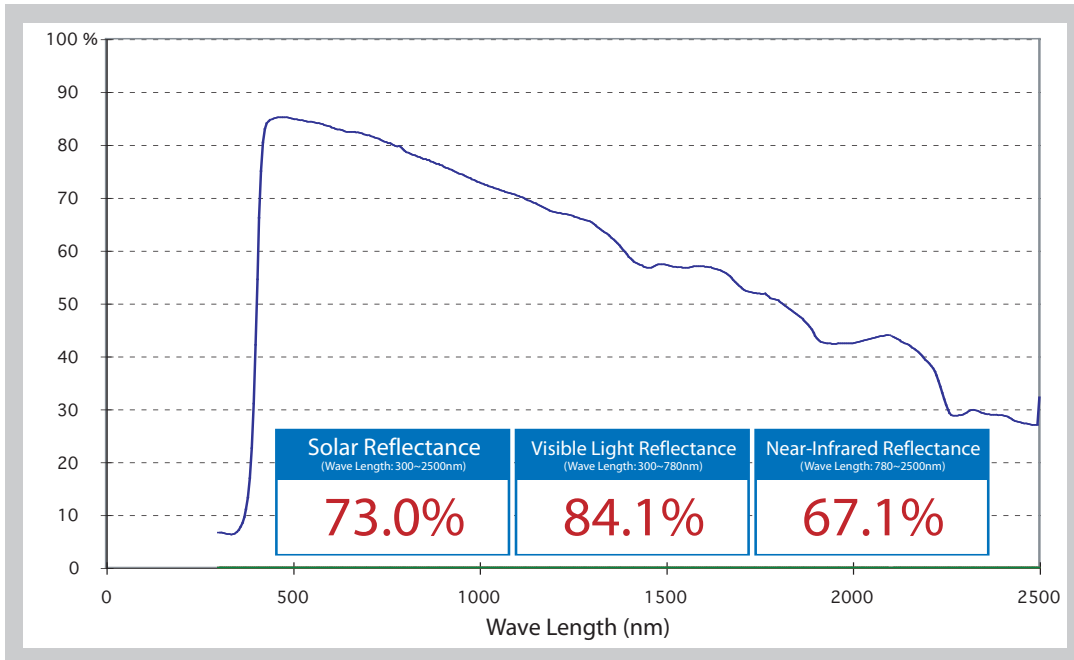
INTERNATIONAL TEST LISTINGS AND APPROVALS

MEETS THE HIGHEST STANDARDS

SUPER THERM® has been rigorously field tested and meets the highest standards. The unique formula is UL, FM, ABS, IMO and Coast Guard approved and a VOC Compliant water-based coating. SUPER THERM® has a Class A Fire Rating against flame and smoke. Plus, it is USDA approved for use in and around food preparation areas.

SUPER THERM® outperforms traditional insulation. It counters all three forms of heat radiation, convection and conduction. Traditional insulation only controls conduction. Experience the insulating power of SUPER THERM®.

SOLAR REFLECTANCE TEST AFTER 15 YEARS



The test piece was taken from a roof in January 2006 where SUPER THERM® was applied in 1989, and tested at Building Material Test Center in Japan.

The climate is very severe in this area with 38° C (100° F) in the summer, sand storms, very strong sun radiation, and -21° C (-5° F) in the winter with snow and ice.

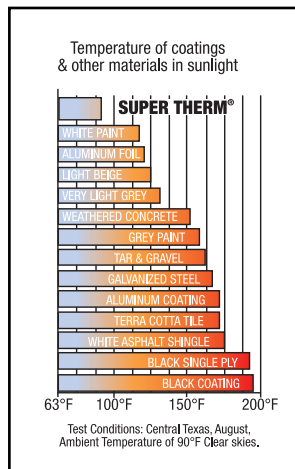
The reflectance of near infrared is 67.1%, but this is because the SUPER THERM® at that time did not contain the fourth ceramic, which was introduced in 2000 and designed to block infrared rays. Therefore, the result with the current SUPER THERM® will be better.

In Japan, university testing was performed on twenty one reflective coating in the market. Their average beginning reflectivity was 80%. After 591 days (1.5 years), reflectivity was reduced to 58%. This is an accurate view of most all reflective coatings in the world market.

SUPER THERM®'s solar reflectivity at the new stage was 92.2%, so the reduction in 15 years was less than 20%. (92.2-73=19.2) This result proves that SUPER THERM®'s durability in reflectivity is by far excellent.

SUPER THERM®'s solar reflectance after 15 years was 73%. The reduction of solar reflectance in 3 years tested for the Energy Star Program by the EPA was only 0.01%.

Tests prove it.
SUPER THERM® is the better option.



	Super Therm®	Fiberglass	Cellulose Fillers	Ceramic Paints	Polyethylene Foam
REI9, one, 10-mil coats (Interior App.)	✓	10"	8"	5.5"	5.5"
REI9, one, 10-mil coat (Exterior App.)	✓	✓	✓	✓	✓
68% Sound Blockage	✓	✓	✓	✓	✓
Rated as one of EnergyStar® best overall	✓	✓	✓	✓	✓
Approved by California Cool Roof program	✓	✓	✓	✓	✓
NASA tested	✓	✓	✓	✓	✓
Proven for both interior and exterior	✓	✓	✓	✓	✓
Class "A" rated "0" flame spread	✓	✓	✓	✓	✓
Passed 2000 hrs of salt spray testing	✓	✓	✓	✓	✓
USDA approved	✓	✓	✓	✓	✓
Moisture resistant	✓	✓	✓	✓	✓
Blocks 99.5% of infrared rays	✓	✓	✓	✓	✓
Resists mold and mildew	✓	✓	✓	✓	✓
20 years, residential life expectancy	✓	✓	✓	✓	✓

Legend: ✓ = Approved, ✓ = Partial Approval, ✗ = Not Possible

Challenge: *No other insulation or weatherization material in the market has the facts, tests results and field studies to compare with SUPER THERM®. There is no product in the world market with the proof of performance equal to SUPER THERM®. Forget the pretty brochures and advertising media and look at the facts to see the real value of SUPER THERM®.*

1. **High Reflectivity of Radiation Heat Transfer** (sum of all three radiation waves) is 95% to block the loading of heat onto the surface.
 - a. UV represents 3% of heat load *SUPER THERM blocks 99% of heat generated by UV.*
 - b. Visual Light (short wave radiation) represents 40% of heat load-*SUPER THERM blocks 92% of heat generated by Visual Light.*
 - c. Infrared (long wave radiation) represents 57% of heat load-*SUPER THERM blocks 99% of heat generated by Infrared.*
2. **High Thermal Emittance** to throw off heat that has loaded onto it's surface. *SUPER THERM has a thermal emittance of 0.91.*

REGISTRATIONS AND CERTIFICATIONS:

3. **American Bureau of Shipping (ABS)**
 - a. Passed SOLAS 1974 (as amended) requirements for paints/finish materials requiring compliance with Parts 2 (Smoke & Toxicity) and 5 (Surface Flammability) of the IMO FTP Code, Res.MSC.61(67).
 - b. U.S. Type Approval Certificate No. SL520997-a
 - c. E.C. Type Approval Certificate No. 04-CH 468315-MED1
 - d. U.S. Coast Guard Product Approval No. 164.112/EC1347/4368315/EC0729
4. **Energy Star Program**
Approved Partner/ Approved Product
a. Only 0.6% drop in reflectivity over a 3 year roof test period (2% over 10 years).
5. **ICC (International Code Council) BOCA Legacy Report.**
6. **USDA (United States Dept. of Agriculture)**
 - a. USDA approved product for use inside food facilities.
7. **Marine Approvals of World-wide Salt Water and Maritime Use**
 - a. DNV (Det Norske Veritas)
8. **Factory Mutual Approval**
 - a. Tested and approved for Metal Roofing
9. **GSA Approval for Federal Uses**
10. **UL (Underwriters Laboratory, Inc.) approval**
11. **ECAP Report: Energy Conservation Assistance Program Department of Energy-United States of America-Florida Energy Office**

12. **State of California Cool Roof Program**
 - a. Approved and listed
13. **State of California Bureau of Home Furnishings and Thermal Insulation**
 - a. License Number TE 1392
14. **State of Florida Energy Rebate Program**
 - a. Qualifies for a percentage reduction from cost of coating substrates
15. **Superior Products International II, Inc. is an active member of the NRCA (National Roofing Contractors Assoc)**
16. **ASTM TEST LISTINGS :**
 - a. B117/D 1654 Salt Fog (400 hours and 2000 hours)-*passed*
 - b. C 236 - 89 (93) Thermal Transmittance/Conductance
 - i. Fiberglass 0.52 K
 - ii. SUPER THERM in one coat 0.31 K
 - iii. SUPER THERM in two coats 0.21 K
 - c. C411 High-Temperature Surface Performance

20th Century Insulation Theory: "R" value - load heat and then resist heat transfer through the material.

21th Century Insulation Theory: BLOCK HEAT LOAD. Prevent heat load into the surface to reduce heat that is available for transfer.

- d. C412 Tensile Properties-444 psi
- e. D522 Mandrel Bend on metal or rubber materials
- f. D1653 Water Vapor Permeability 3%
- g. D3273-82T/ D3274 Fungal Resistance
- h. D4060 Abrasion Resistance
- i. E 84/NFPA 255/UL723/UBC42-1/ANSI2.5/FM E 84 - Flame Spread / Smoke-"0" Class A or 1
- j. E 84-89 Flame spread/ Smoke Development-Flame "0" and Smoke "0"
- k. E96 Water Vapor Transmission-Less than .01
- l. E108 Flame Spread on Pitched Roof -*passed*
- m. E903-96 Spectral Reflectance 80% and 0.6% loss after three years weathering.
- n. E 1269 Heat Capacity by Differential Scanning Colorimeter
- o. E 1461 (92) Thermal Diffusivity/ Conductivity by Flash Method-reduced 367.20 BTU conduction to 3.99

- p. G53 1000 hours UV Exposed
- q. D 7088 (Superseded Federal Specification TT-P-1411A Paint) hydrostatic pressure resistance of a submitted water proof coating over concrete interior surface to prevent exterior rain driven water from penetrating the wall from exterior to interior during construction.
- r. D 6904 resistance to wind driven rain for exterior coatings applied to masonry without block filler in test blocks. Superseded Federal Specification TT-C-555B. *SUPER THERM is a certified water barrier.*
- s. D-3274 numerical basis for rating the degree of fungal growth or mold and dirt accumulation on paint films. Resist the development of mold and mildew and not allow the growth over it's surface. *Score 9 out of 10.*
- t. E90 Standard Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions
- u. E413 Standard Classification for Determination of Sound Transmission Class.
17. **NASA (National Aeronautics and Space Administration) Testing:**
 - a. NASA 8060.1B/C Test 1 Flammability test, Class A , "0" Flame Spread
 - b. NASA 8060.1C Test 7 Toxic Off-gassing Test, K rated (no off-gassing).
18. **ABS (American Bureau of Shipping), IMO (International Marine Organization), and US Coast Guard Approval:**
 - a. IMO A. 653 (16) Flame Spread-*passed*
 - b. MSC 41 Smoke Toxicity-*passed*
19. **Japanese Testing (Japanese Institute of Technology):**
 - a. JIS A 5759 Reflectivity Light and Radiation
 - i. Visual Light Ration- 92.2%
 - ii. Long Wave Radiation (Infrared)-99.5%
20. **China Center for Technical Testing:**
 - a. National Measurement M0729
 - b. GB/T 1771-91 Resistance to Salt Fog (2000 hours)-*passed*
 - c. GB/T 1866-88 Manual Aging (2000 hours)-*passed*
 - d. GB/T 10834-88 Resistance to Salt Water (1000 hours)-*passed*
 - e. GB/T 5219-85 Adhesion (pulling apart method) - 4.07 MPa
 - f. GB/T 1733.93 Boiling Water Immersion (8 hours)-*passed*

21. ECAP Report–Florida Energy Office DENVER COLORADO LOCATION

- a. Reduction of 202 BTU load over roof and wall surfaces.
- b. Over the 24 hour test period, total cloud cover and still produced a 26% savings in energy usage for heat /cool.
- c. SUPER THERM sealed and reduced moisture load into the surfaces and therefore into the building.
- d. 25% of heating and cooling cost is dehumidification.
- e. Standard building constructed and coated with white paint required 1,037 BTU to maintain comfort.
- f. SUPER THERM coated building required 766 BTU to maintain comfort – 26-30% savings.
- g. SUPER THERM reduces the Heat Island Effects.

22. ECAP Report–Florida Energy Office–Miami Florida Location–only roof was coated for test

- a. SUPER THERM reduced solar heat load by 20-30%.
- b. Reduced interior ambient temperature of rooms by 2.3° F (with the roof coated). ConEdison reports that a 6° reduction in thermostat will produce a 39% saving in utility cost. Provided full roof coated, this could be a 5-6° drop in ambient inside the home giving the 39% savings.
- c. Solar gain on roof: Without SUPER THERM is 206 BTU's. With SUPER THERM is 85 BTU's.
- d. UV absorption : Without SUPER THERM is 98.0. With SUPER THERM is 03.0

23. ECAP Report–Florida Energy Office – LaPorte, Texas Location–Metal Shipping Containers

- a. Coated containers resulted in 46%-52% reduction in conduction related energy loads.
- b. BTU per sq.ft.per hour loads dropped from 606 BTU to 295 BTU or 311 BTU reduction.
- c. Interior ambient registered 22° cooler
- d. Thermal conductance to outside environment was 50% less
- e. External surface temperature was 47° cooler.
- f. Internal surface temperature was 37° cooler.
- g. UV absorption rate was 92% less.
- h. Internal Moisture levels was 28.5% dryer.
- i. Uncoated container surface moisture reading was 68%. Coated Container was 33%.
- j. To cool the container coated with SUPER THERM would require 46%-52% less energy.

k. External Surface Energy Flow Analysis shown by Tons (12,000 BTU) being lost through the external surfaces from inside the container. Without SUPER THERM is 7.78 and with SUPER THERM is only 3.39 for a savings in tonnage of 4.39 tons of A/C.

l. "SUPER THERM product concerning load and reductions produced by thermal conduction, convection and absorption WERE SIGNIFICANT"—reported by the Energy Specialist Alexander E. Othmer CEA/CBA/NDE III.

m. As expressed by Mr. Othmer at the conclusion of this report: "This is the third time we have had the pleasure to test SUPER THERM PRODUCTS, it is rare that a single products will show such Repeatable Results in three totally different environments, South Florida, Denver, Colorado and LaPorte, Texas a true testimonial to your products' ENERGY STAR rating."

24. Reported, shown and discussed as the only insulation material used on container homes being built in Florida by the **Bob Vila building show aired in 2006 from Tampa, Florida.** Found on BobVila.com.

25. SUPER THERM used to **glue wall boards to steel studs** in steel facility construction and offer fire resistance.

a. Performed by William B. Gleckman Architect, NY, NY; testing performed by VTEC Labs, Bronx, NY.

26. Japanese Testing results:

a. Sony–Koda Factory: Coated one of their buildings with SUPER THERM and measured against year before. Previous year in month of May used 3767 KW and June used 5647 KW. Following year after coating with SUPER THERM, May used 519 KW and June used 1869 KW. **A 75% savings on KW or actual cost of energy in real dollars.**

b. Hitachi Electric: Roof–Uncoated temp was 82° C facing sun, after coated temp was 47° C

c. Sekisui : Actual room temp changes: Uncoated: 43° C After coating: 31° C on interior ambient.

d. Yokohama Tire–Rubber: Actual interior room temp changes: Uncoated: 47° C and after coated: 28° C.

e. Kirin Brewery: Actual interior room temp changes: Uncoated: 63° C and after coated: 48° C.

f. Panasonic–Matsushita Electric: Roof surface temp changes: Uncoated: 70° C and coated 46° C.

27. SUPER THERM has been applied over 70,000,000 sq.ft. of roofing in Japan and all of the **70 million sq.ft. has been data logged to check performance (before and after). No other insulation type material has been field tested as extensively as SUPER THERM.**

28. Japanese Government in an effort with Sony Corporation did a joint effort with the National Electricity Saving Committee to study SUPER THERM and how it could save energy cost.

a. 40,300 sq.m (434,636 sq.ft.) of manufacturing space is chosen to coat.

b. Currently rockwool is used as insulation.

c. Factory takes 30% of all electrical cost for A/C.

d. **Results of Energy Saving Cost Savings was 736,704 kWh/year X 15yen/kWh = 11,050,560 yen/year (\$96,092 USD).**

e. **ROI (Payback period on the cost of the SUPER THERM system) is 1.06 years or 13 months.**

29. **Nissan Plant in Yokohama, Japan** is 2,200,000 sq.ft. and coated with SUPER THERM.

30. **BTU testing** under test method ASTM E 1461-92, Thermal diffusivity and E1269, differential scanning calorimeter.

a. Standard metal test plate allowed 367.20 BTU to load and conduct through.

b. Standard metal test plate with single coat of SUPER THERM allowed 3.99 BTU to load and conduct through.

31. **Wal-Mart Testing** performed at their own corporate facility on their own trailers.

a. One trailer was the control with nothing over the roof to block heat.

b. One trailer was coated with white paint.

c. One trailer was coated with SUPER THERM at 8 mils.

d. One trailer was fitted with 3 inches of Low E (foil/bubble pack).

e. One trailer was fitted with 3 inches of fiberglass.

f. Measurements were taken over the last full week of August in 2001.

g. These were 53 foot trailers and the back doors were left open during the testing and placed side by side.

h. Data loggers were used to record the ambient temperatures inside the trailers each day.

i. Result: SUPER THERM outperformed consistently the other trailer ambient temps by a minimum of 6° F and as much as 11° F.

j. White paint could not throw off loading heat even though it had good emissivity of .70.

k. The Low E and fiberglass, due to their characteristics, load heat and then hold this heat which develops and loads into the ambient interior temperature by the end of the day.

l. As a measure of the importance of making a 6° F drop in temp inside the trailers, a study and report from ConEdison on moving the thermostat 6° F in a home would make a 39% savings in energy bill expense.

32. Condensation control

a. Not only does SUPER THERM cover and control the loss and gain of heat and protecting cold in ducting, due to the ability to control the surface temperatures, it controls the condensation that would normally develop due to the dew point occurring. SUPER THERM is a tested and certified water barrier as well as an insulation material therefore blocking the normal effect that relative humidity has with the ambient temperature in developing the dew point and condensation.

33. **As reported by the ASHRAE** (American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc) **in their 90.1 Code** for wrapping metal ducting and other metal structures. The R19-R21 Fiberglass wrap, as shown on a chart in the code, is effectively only a R 7.4 due to the inability of fiberglass to seal the surface and cover effectively. If this wrap is compressed into position as is normally the case when installed, the compression will reduce the R value by 40% or more again and thereby having an effective R value of only 4.4 for the 6 to 8 inches used.

a. SUPER THERM covers 100% of the area including supports and configurations. Not affected by compression nor moisture. Since fiberglass is designed to load the heat and absorb it, this is a major problem with heat transfer and loss as compared to SUPER THERM that is designed to prevent the "loading of heat" as the insulation method. If one blocks the loading of heat, then there is no heat to absorb, transfer and lose.

34. **SUPER THERM covers all surfaces of a wall, roof or surface, which includes**

the studs, braces and joist. Transfer of heat either being lost or gained is blocked through these areas. Unlike all the standard insulation materials that are applied between studs, braces and joist and allows heat transfer through these areas.

35. **SUPER THERM applied over air ducts and A/C boxes** on the tops of roofs will maintain the temperature inside the box to ambient instead of the 160° F it now experiences. Inside the box is where the coils are trying to unload heat. Makes the system work more efficient.

No other insulation type material has been field tested as extensively as SUPER THERM.

36. SUPER THERM covered over the exterior concrete surfaces of walls in a nine story apartment in Munich, Germany **dropped the heating cost by 30%**. SUPER THERM seals the concrete from air flow and moisture gain which are two of the problems with concrete surfaces and insulation.

37. Durability: SUPER THERM rechecked by an architectural firm in Tokyo. **A roof ten years old was rechecked for performance and found to be identical to the heat blocking ability when new.** The four ceramics in SUPER THERM are designed to block the loading of heat. This means that it is not just a reflector of heat but will not allow the loading of heat even when the surface becomes dirty as happened on the roof in an industrial area.

a. Later a section of roofing where SUPER THERM had been applied 15 years earlier was retested by the Japanese Institute of Technology and found **Solar reflectance maintained at 84.1% after 15 years in a harsh environment.**

b. **ENERGY STAR testing on SUPER THERM: Beginning was 80%. After three years, it was 79.4%.** Most reflective coatings and materials listed on the tested product listing had dropped by 10% to 40% in the three year period.

c. Independent testing performed in Japan on **21 reflective coatings and the**

average beginning solar reflectance was 80.8%. After only 571 days (1.5 years), the solar reflectance of their surfaces had dropped to 54.8%. This is typical of reflective coatings in the world market.

38. **WINTER: SUPER THERM holds heat inside the room in the winter** by not loading the heat which would be absorbed into the wall to be transferred and lost to the cold. The ceramics will not load the heat and allow the normal transfer.

39. **Stops mold and mildew development** over its surface. Tested and field uses over concrete surfaces in car wash on bottom section of parking garage in the Munich Airport.

40. **Sound Proofing:** STC testing conducted by VTEC labs in NY found a rating of 50 at 800 to 1300 Hz. SUPER THERM applied at the standard thickness of 10 mils.
a. Typical STC Ratings: 2x4 or 24" centers, 3/8-5/8 inch wallboard, rock wool or fiberglass batting is 30-42.
b. National Building Code requires that partitions separating dwelling units meet an STC 50.

41. **Certified as Environmentally Safe and Healthy and Energy Efficient with Eco-Effective Design**
a. Cradle to Cradle Design Certification "Gold" by MBDC LLC, which is a product and process design firm dedicated to revolutionizing the design of products and services worldwide that was founded by William McDonough and Dr. Michael Braungart to promote and shape the "Next Industrial Revolution" through the introduction of a new design paradigm called Cradle to Cradle Design and the implementation of eco-effective design principles.

b. Qualifies for LEEDS Points (Platinum Rating) under the The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ - the nationally accepted benchmark for the design, construction, and operation of high performance green buildings.