

GP SunZenit®

Thermoceramic high reflecting coating
for outside, interior, roof for reliable
building protection and insulation



Reliable energy savings

Long lasting performance

Promotes a healthy environment

Applicable on any support

High protection of building

A coating that insulates

Resistant to the harshest conditions

Always low VOC

High durability

10 years factory warranty



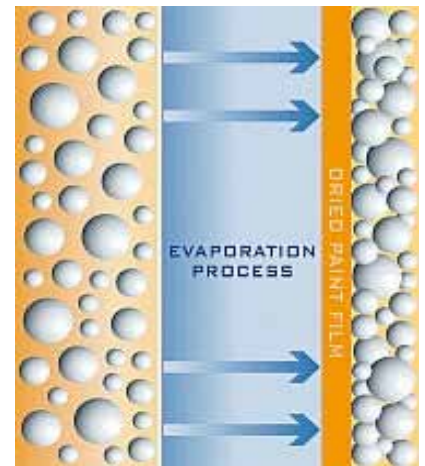
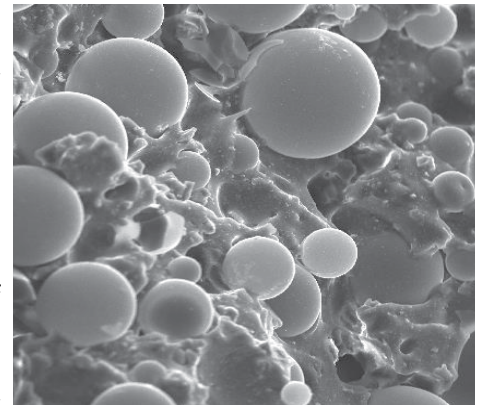
As a top coat or repair over a new or existing building surface

Steel, Wood, Concrete, Galvanized, Shingles, Aluminum, Tile, Bitumen, Fiberglass, Urethane
Foam, Stone, Etc.

GP SunZenit can be tinted to any color you choose!

GP SunZenit CERAMICS TECHNOLOGY

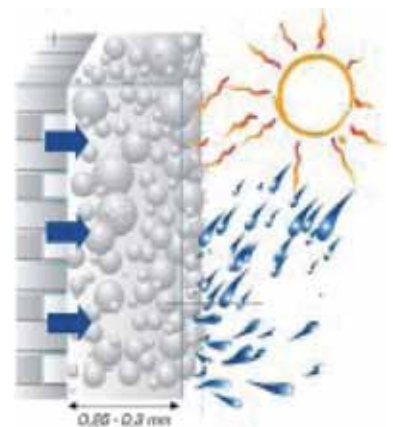
Ceramics are a well known non-conductor of heat. Nasa science use's a ceramic composite tile system that is over 90% void. These voids contain a complete vacuum. It states from thermodynamic that nothing can move by conduction through a vacuum. The GP SunZenit technology Green Power has been developed using ceramic micro-spheres (20-120 microns). This heat blocking protection can now be applied in a practical long lasting system to just about any substrate or surface (metal, plaster, concrete, bituminous membranes, etc.) as a complete stand alone roof system, facades top coat outside and inside, or repair. GP SunZenit formula's are complex combinations of acrylics, elastomers, mastics, weather-proofers, dispensers, reflector materials, mildew inhibitors, fungicides, bonding resins, anti-shrink materials, and other materials heretofore unavailable. The resins are made up of very complex polymers that can hold onto huge amounts of solid particles and still have great adhesion. Normal resins loose much of their adhesion as solids are added. We add huge amounts of our ceramic micro-spheres, which should float to the surface, but are held in fluid suspension by the polymers. When applied, and the coating has cured (water evaporates), these micro-spheres pack closely forming a very effective heat blocking micro- structure. Special polymers also allow the substrate to breath. Under wet conditions they swell allowing no moisture to penetrate, but when dry, the substrate is allowed to vent off any trapped or built up moisture. GP SunZenit coating of 0,25-0,30 mm forms a solidly bonded, seam free, highly flexible system that has an effective use range of -50°C to $+200^{\circ}\text{C}$. At the coverage 0,6 mm thickness GP SunZenit Roof Coat Cool Roof System is guaranteed not to leak, even with ponding water, for a full 10 years. High elongation and adhesion on all type of surfaces. Strong durability over the 10 years of guaranty. LOW VOC, Non-Toxic in liquid or cured state. No noxious fumes. Water based, easy clean up. Fire Resistance material. Completely Washable. Resists many harsh chemicals including oils, gasoline and acids. GP SunZenit Roof Coat is tested for asbestos encapsulation.



GP SunZenit REFLECTANCE

Hemispherical Spectral Reflectance testing shows excellent reflectivity in the spectrums that account for heat transfer by radiation: 85%. Emissivity more than 90%. It also directly reflects 16% of the harmful UV radiation. Independent Lab tests show UV exposure actually makes the coating stronger and more flexible. This high overall reflectance qualifies GP SunZenit Cool Roof System for top energy saving. GP SunZenit has been studied and tested in several European Departments of Technical Physics. Has been also demonstrated that the energy saving in the building can reach the medium value 25-30% for application outside, inside and roof in summer time (more than 40% in summer) and in the winter time, due to the combination of several effects of material like reflectance values, thermohygro-metric balance due to vapor permeability, water protection and elongation. The durability of the system is also extremely long lasting : the product has been tested aging for long term without significant reduction of mechanical characteristics. GP SunZenit is available in different formulation:

- Roof Coat for roof protection Cool Roof
- Exterior for external facades
- Interior for inside surfaces
- Metal Tank for metal vessel





GP SunZenit COATING SPECIFICATIONS

GP SunZenit is primarily used as a roof, inside, outside coating. It may be utilized wherever a weather resistant, flexible membrane like coating is required. GP SunZenit is water basis. Primers: for porous support and gypsum board use Primer P, for bitumen roofs, urethane foam, galvanized steel use Primer BT2S, for metal use Primer M, rusty metal could require a rust inhibitor. Wait 12 h approx. before recoat when Primer is dry. Follow instructions for proper application on different surfaces. A reinforcing fabric is suggested in the area of joints, flashing seams, corners, around vents, air conditioners, ducts and any area where leakage could be a problem. See applications instructions for details.

The roof need a minimum slope of 2% and water drain around the roof edge. Surface preparation: all surfaces must be dry, clean and free from dust, dirt, oil and grease. Minimally, surfaces should be cleaned.

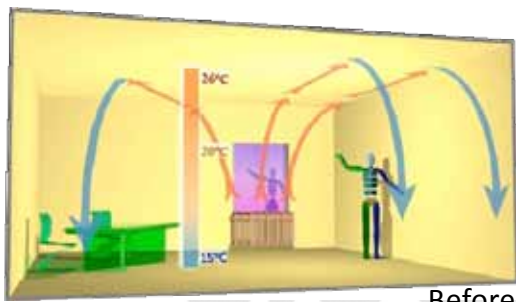
With a power washer prior to coating providing this will not damage the roof or cause leaking. Theoretical minimum coverage: 0.25-0.3 mm thickness with approx 400-600 g/m² and no loss (to be applied in 2 or more coats by roller and airless sprayer). In case of waterproofing the roof or ponding water existing minimum coverage is 0.6 mm. Drying time: to set 60 minutes - to recoat 12 hours at least when dry - to complete hardening 48 hours (at 25°C and 50% relative humidity). After 60 minutes GP SunZenit coating has surface set to the point where it is no longer susceptible to airborne dust and will not run in the presence of increased humidity. Do not apply GP SunZenit coating if precipitation is imminent or is likely to occur before GP SunZenit coating is dried through, or if temperature is expected to drop below 5°C. Elongation: 100%. Adhesion: excellent adhesion to a wide variety of substrates like wood, urethane foam, galvanized steel, aluminum, bitumen roof, shingles, concrete, asbestos and others. Accelerated weathering: no evidence of chalking, delaminating or loss of flexibility and adhesion. Resistance to water ponding: GP SunZenit Roof Coat coating displays excellent resistance to ponding water at the right thickness (0.6 mm minimum). Color: tinting may be achieved with GP SunZenit coatings by the addition of universal colorants. Darker colors will give a correspondingly lower reflectivity to the coating systems. Ask the availability of the colour choosed .

For specific request please contact the company exp. dept: info@gpintech.com

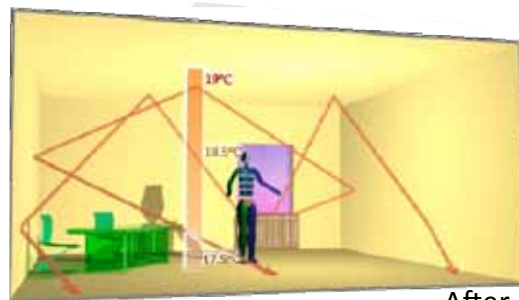
TECHNICAL DATA (*)

Tensile Strength	Tensile Strength	> 2.5 N/mm ²
Elongation EN ISO 527-1	Ultimate Elongation at Break	100%
Breathing trapped water vapor EN 1062	Permeability - water vapor transmission	Class V2 – Sd 1 m
Water impermeability EN 1062	Impermeability	Class W3 < 0.015 kg/m ² h ^{0.5}
UV ozone Resistance ASTM D 1149		No chalking, delaminating or loss of flexibility and adhesion
Adhesion EN 1542	Adhesion after weathering Crack bridging	> 1.5 N/mm ² > 2 N/mm ² 0.5 mm
Chemical Resistance ASTM 1308	16-hour spot tests on salt solutions, acids, petroleum products and other harsh chemicals	No harmful effect
Solar Reflectance EN 410: 2011	Solar Reflectance (white base color) ρ Emissivity ε	85% > 90%
Fire Resistance		Class B 1 (Class A version FIRE)
Thermal Conductivity DIN 52616		0.05 W/mK

* The medium values can change for different versions of product and for testing normes.



Before



After

Effect of **GP SunZenit Interior** in the inside temperature.



Coloured **GP SunZenit Exterior** for outside facades.



GP SunZenit Roof Coat Cool Roof System on metal, concrete, bituminous surfaces. Metal Tank for metal vessel.



GP SunZenit a brand of G&P intech.



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