

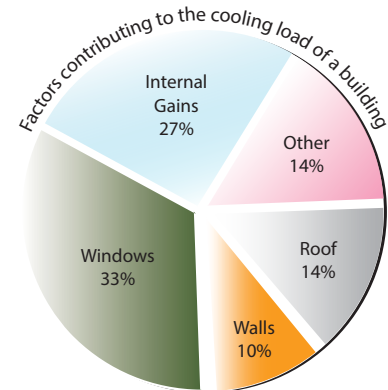
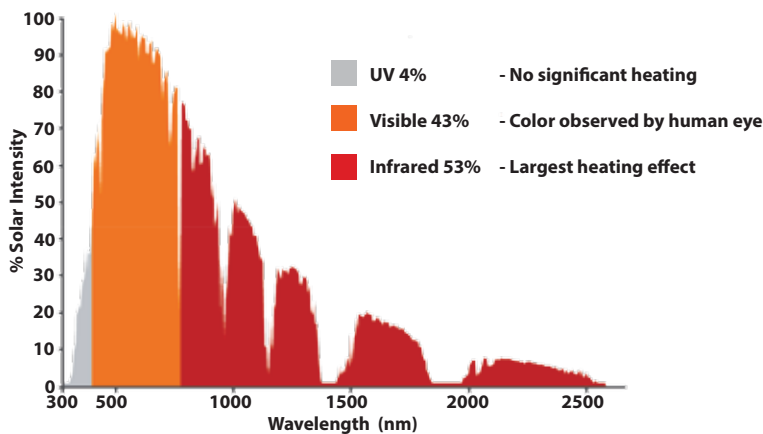
FLEXTHERMACOAT

A T H E R M O L A S T I C R A D I A T I O N B A R R I E R



White or light colored coatings have become the primary mode for reducing energy consumption in all types of structures including homes, commercial buildings and industrial plants. Coating manufacturers demonstrate in various ways the sunlight reflectivity level of their products to emphasize the energy cost savings that will be achieved. Thus white coatings have become the holy grail for reducing energy costs. Elastomeric roof coatings are flying off the shelf and no reputable coating manufacturer would be caught without multiple variations of this product as part of their offerings.

It will come as shock to a majority of 'white coating' users that the light reflected by white or light coatings is just one component, and by no means the largest, of the light spectrum we conversationally refer to as sunlight. The sun's energy reaches earth as a combination of visible light that allows us to see color, infrared wavelengths that cause the most heating, and ultraviolet rays. The illustration to the left shows the three major components that make up the full range of the sun's light.



It is safe to conclude that even if the white coatings reflected 100% of the visible light, **which they do not**, the majority of the heat causing energy is getting into the structures unabated. Since the combination of the visible light and infrared rays equals 96% of the heat energy source, restricting a major portion of these factors make it possible to achieve 50% or more in energy savings.

FLEXTHERMACOAT is a cutting edge blend of technologies formulated to provide relief from the sun's heat energy. White and light colored **FLEXTHERMACOAT** coatings deflect heat energy through a dual process of reflectivity and by radiating the infrared rays back into the atmosphere. This latter action is achieved through the extremely dense strengthening extenders and advanced pigments designed to radiate the invisible infrared light spectrum. Darker colors by their very nature are unable to provide the full benefits of reflectivity. Thus the amount of visible light spectrum reflected is in direct proportion to the intensity of the color. **FLEXTHERMACOAT's** ability to block and radiate the infrared energy back into the atmosphere is the key to energy savings when using dark colors. The blocked 53% infrared energy provides greater cost saving than what is achieved by conventional white or light coatings **if** they successfully reflected all 43% of the visible light energy.

FLEXTHERMACOAT's benefits do not stop with reduced energy consumption and measurable cost savings. The reduction in consumption also has a noticeable impact on the power grid, reducing peak demands and permitting the power companies to better manage the energy load. Another significant benefit is the increase in life expectancy of the roof system and building structures.

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FlexThermacoat has exceptional bond strength with most construction materials and substrates and unlike conventional coatings, it can be applied to a clean surface without the use of a primer. Conventional elastomeric coatings inherently are soft and flexible to permit them to expand and contract with the heating and cooling roof. Over time this attribute, in conjunction with the continuous sun and heat exposure, causes them to become tacky. Air borne dirt and debris stick to the tacky surface and start diminishing the bright white color. This in turn compromises the reflective aspect of the roof coating, reducing the energy savings which eventually become negligible.

FlexThermacoat with its high tensile strength expands and contracts more like spring steel and will not become tacky over its useful life of 5 to 10 years depending on the maintenance. **FlexThermacoat** has outstanding abrasion resistance and is an excellent water and moisture barrier. It has built-in UV inhibitors to prevent degradation and chalking and non-polluting mildewcides prevent the growth of algae and other fungi.

For optimal effectiveness and durability a minimum of two coats of FlexThermacoat should be applied. Each gallon of **FlexThermacoat** will cover approximately a 100 square feet area depending on surface conditions and application efficiency. A median thickness coat will provide a 12 mil wet film which will dry to approximately 6 mil dry film. Thus after two coats the overall effective dry film will be approximately 12 mil. Drying time at 70°F and 50% relative humidity is 30 minutes to touch and 4 hours to recoat.

SURFACE PREPARATION

All surfaces must be clean, sound and dry before painting. Remove dirt, chalk, rust, loose and peeling paint, oil, grease, wax or other surface contaminants with appropriate detergent and/or mechanical means. Remove mildew and sterilize the surface before coating. Use a masonry conditioner before painting porous, chalked or marginally prepared surfaces. All new masonry surfaces must be allowed to cure 30 days before application.

APPLICATION

Apply using brush, roller or airless spray equipment. Airless spray units will require a minimum 2500 psi pressure and a 0.027 (approx.) inch diameter spray tip. Filtering is not necessary but when used a 60 mesh filter is recommended. No thinning is necessary. When applying over very porous surfaces FlexThermacoat should be applied in two coats. The first coat should be light, followed by a second heavier coat applied to create a cross hatch pattern. Subsequent coats, if needed, should be at normal strength. Do not apply to wet surfaces or at air, surface or product temperatures below 50°F. Clean hands, tools and equipment promptly with soap and warm water.

ORDERING FlexThermacoat

FlexThermacoat is a specialty product and is manufactured on a custom order basis. When ordering product please plan ahead and allow sufficient time for production.