



Melaka Halal Hub.

Thermoshield

realcolor®

Need to keep cool? We've got you covered

When it comes to harnessing heat, our forefathers sweating it out in this tropical heat showed us how to cool things down, all under one roof. It starts from the top, where they utilised clay roof tiles to slow down the penetration of heat into the interiors. These durable tiles which could last up to a century would re-emit the heat out later as evening comes. Together with other features like ceiling height, ventilation tiles, windows and air-wells among many, the architecture of old worked simultaneously to cool down the sweltering discomforts of the tropical heat.

Today, roofs have evolved with the times. Clay roof tiles are still in use but 'cool roofs' have now emerged as part of the solution to the heat problem, especially in the concrete jungle. The US Environmental Protection Agency (EPA) has listed cool roofs as one of the building features that could help mitigate the "urban heat island effect".

Urban "heat islands" (where you really don't want a holiday on) happens when the multiple structures of a city, like buildings, roads, and other infrastructures absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Thus, the urban areas become "islands" of higher temperatures which could have a difference of between 1-7 degrees higher than outlying areas, the US EPA's site explained.

HERE'S WHY COOL ROOFS ARE...COOL

One of its important characteristics is that cool roofs helps to reflect sunlight and heat away from a building, reducing roof



Yayasan Toh Puan Zurina.

temperatures and saving building owners air-conditioning costs. This energy efficiency causes not only the building itself to require less air-conditioning to keep cool, but it also lowers the ambient temperature around the building and altogether alleviates the urban heat island effect.

Hence, looking up, a solution for managing a building's energy efficiency through the roof may just become a top of mind recommendation in time to come. CSC Steel's Thermoshield Realcolor® is a proprietary cool roof system specially designed to reduce heat absorption, retain its glossiness and maintain its colour vibrancy.

It is based on CSC's pre-painted galvanized steel (PPGI), or colour-coated steel technology that is generally used in exterior architectural structures and building materials such as roofing, wall cladding, fencing, wall panels and advertising boards.

Thermoshield
realcolor®



STAY COOL ALWAYS. **BE CLEAN. BE DURABLE**

Cool roofing system that reduces heat absorption while retaining its glossiness and colour vibrancy.



cscmalaysia.com

PRODUCTS & SERVICES

Some of the ways you can count on Thermoshield Realcolor® to conduct energy efficiently include:-

Thermal control: Its infra-red reflective feature reduces heat and brings on cooler surfaces. This is thanks to the principle of colours related with heat absorption – the lighter a shade of a roof's colour, the more heat it deflects. Darker colours absorb and retain more heat.

This is experienced in Thermoshield Reacolor® having good reflexivity in the higher ranges of the Solar Reflexivity Index (SRI). The US Department of Energy defines SRI as "...a measure of the roof's ability to reject solar heat, as shown by a small temperature rise. The SRI is a scale ranging between 0 to 100 where a standard black is 0 and a standard white is 100. For instance, the standard black has a temperature rise of 50°C in full sun while the standard white has a temperature rise of 8.1°C. So this means, on the SRI's scale, materials that absorb and retain solar radiation have a lower number while highly reflective materials (which remain cooler in sunshine) will have a higher number.

Choosing from cool range of colours that Thermoshield Reacolor® offers, you can be assured of achieving provides thermal controlling benefits by helping keep your house or building cool while lifting the burden from your air-conditioning unit, giving you savings in your overall cooling costs.

Self-cleaning: How about saving you from physical energy and water usage costs resulting from maintaining the cleanliness of your roof system? Our pre-coated steel gives the roof system self-cleaning properties due to the hydrophilic pigment on Thermoshield Realcolor® surface which helps transport dirt down together with the rain water. (If you're technically curious, our shield coating modifies the flow of the droplets to pass over evenly due to a low water-contacting angle on the steel's surface).

Sustainable: Thermoshield Realcolor® is certified by SIRIM's ISO 9223 under the C51 (Industrial) category, essentially the highest anti-corrosion rating in the market. This means it is hardy. Durable. Being around to protect your roof and energy usage efficiency for a longer period of time would also mean an extra mile towards reducing

Thermoshield
realcolor®

OUR PATENTED COOL ROOF SYSTEM

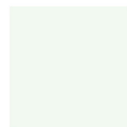
is specially designed to reduce heat absorption, retain its glossiness and maintain its colour vibrancy.



PRE-PAINTED GALVANISED STEEL WITH
SELF-CLEAN, COOL AND SUPER DURABLE FUNCTIONS



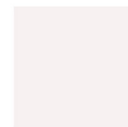
MONDAY BLUE
SRI: 75



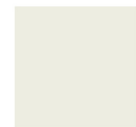
MILKY GREEN
SRI: 83



IVORY GREY
SRI: 73



NEUTRAL BEIGE
SRI: 78



OFF WHITE 30
SRI: 78



TORRES BLUE 30
SRI: 30



MIST GREEN 30
SRI: 41



GLACIER GREY
SRI: 63



OAT BEIGE
SRI: 68



BROWNIE GOLD
SRI: 58



BLUE WHALE
SRI: 29



AQUAMARINE
SRI: 34



OPTIMISTIC GREY
SRI: 42



ALMOND BEIGE 30
SRI: 63



MOCHA BROWN
SRI: 30



ROYAL BLUE
SRI: 31



ASPEN GREEN
SRI: 29



MARINE GREY
SRI: 34



OAK
SRI: 47



WOLFBERRY
SRI: 38

Note: Solar Reflectance Index (SRI) values shown in this colour chart are approximate figures only. All regular colours shown in this colour chart are as close to the realcolor® Thermoshield colour. Please refer to our sales personnel for more information.

construction waste while saving costs in the long term.

Besides being an efficient conduit of energy, Thermoshield Realcolor® has excellent formability. And it doesn't hurt for it to have a warranty of up to 30 years against perforation or warranties against colour fading and/or chalking and for dirt staining, depending on terms and conditions.

At CSC Steel, the Thermoshield Realcolor® works hard so you can afford to get smarter with your building's energy efficiency capabilities, giving you more thermal control with easy maintenance and long-lasting durability. All these while

keeping your electricity bills lower and helping you help our environment.

The reason is that CSC Steel is determined to continue in one of its missions to innovate and produce green steel products that contribute to comfort, productivity and energy efficiency, being sustainable in every way possible. A little less heat, and a little more conservation, please, we say.

Chat with us, and to find out more about Thermoshield Realcolor®, please scan this QR code and look us up today.

