

Life is full of **realcolor**[®]

COLOUR-COATED GALVANISED STEEL PRODUCTS



*Yayasan Toh Puan Zurina, Melaka
Protected by realcolor[®] Thermoshield.*

SNUB THE MISBELIEFS CHOOSE PPGI TO MAKE BUILDINGS BETTER

Let's do something different. Look around you. Do you see any steel products or finishing? The truth is, you may have spotted quite a few in no time, and there are more than meets the eyes without you knowing it! About 75% of the average household appliances contain or are made of steel. In the construction industry, the pre-painted galvanised steel (PPGI) is a popular choice for its lightweight, appearance and high anti-corrosion features. PPGI is a type of colour coated steel, widely used in building materials such as awning, roofing, cladding, wall panels, fencing, clean room, advertising board, cold room and etc., which you may have spotted earlier.

PPGI comes in a wide variety of colour choices, making it more appealing and suitable for all kinds of usage, such as in indoor, outdoor, residential, commercial and industrial applications. During

the manufacturing process, PPGI is produced by adding paint to strip metals, which is galvanised steel (GI), before the forming process to get the desired profile.

There is a lot to consider when it comes to choosing what type of PPGI you should use for your project. We may say that no type of metal is better than the other; however, certain materials can perform better in some situations. Despite the wide-ranging applications, there are also some misconceptions about PPGI. Let's take a closer look at these beliefs and see if they hold water.

For some, PPGI is too expensive and this has led them to resort to cheaper materials. They may be right - there are always less expensive materials out there. But one must not overlook that the premium pricing also comes with easy installation and maintenance, and a lower post-maintenance cost with fewer repairs, which result in cost savings in the long run. This is because



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when steel is galvanised, it does not rust or corrode easily – a stark difference from steel made with other coatings. It is also notable that galvanisation costs have remained relatively stable. While it may be more expensive at first, PPGI is a money saver that gives a more valuable investment in the long term.

Some also tend to think that concrete and aluminium are just as durable. However, in reality, PPGI still stands out when it comes to strength and durability. PPGI provides a better weight-to-strength ratio in building compared with aluminium, which is much lighter than steel. During relocation, structures made with PPGI is not likely to break

or bend when it's being taken down or moved, and can be reused in a new location or even recycled. In this case, concrete structures are not movable without proper reconstruction work and require more works to recycle.

One may ask if steel is only good for industrial projects or buildings. Being one of the strongest and longest-lasting construction materials, steel comes with multiple uses. Corrugated steel that has been galvanised protects it from rusting or corroding easily. This makes PPGI great for both indoor and outdoor use. Since PPGI does not rust easily, it takes away worries of accidents or tragedies due to cumulative corrosion from rust

and weathering on structures, making it essential for safe building. Besides, steel is pest and fire-resistant.

From providing steel products for the construction of intricately designed structures to responding to market needs according to the latest situation and needs, CSC Steel Sdn Bhd (CSC Steel), having been based in Malaysia for 30 years, is steadfast in its commitment to high-tech applications of PPGI, with realcolor® being one of its top brands.

CSC Steel's realcolor® consists of three range of products – **Supreme**, **Thermoshield** and **Primero** – each designed to handle different types of

Table: CSC Steel Product Corrosion Range

CATEGORY	DESCRIPTION	CORROSION RATE (µm/y)	TYPICAL ENVIRONMENTS	CSC STEEL'S BRAND		
				Supreme realcolor®	Thermoshield realcolor®	Primero realcolor®
C-5M	Very high – geothermal, marine	80 - 200	Coastal and offshore areas with high salinity and exposed areas along the coastline.	✓		
C-5I	Very high – industrial	80 - 200	Industrial area with high humidity and very high industrial pollution.	✓	✓	
C4	High or Tropical	50 - 80	Industrial areas and coastal area with high pollution and moderate salinity.	✓	✓	✓
C3	Medium	25 - 50	Urban areas and industrial atmosphere with moderate pollution. Coastal area with low salinity.	✓	✓	✓
C2	Low	1.3 - 2.5	Atmosphere with minimum pollution, very low humidity (rural areas).	✓	✓	✓
C1	Very low	< 1.3	Dry zone with very low pollution and humidity.	✓	✓	✓

Source: www.steelconstruction.info / www.sirim.my / www.jsm.gov.my





*Pensonic Kapar, Selangor.
Protected by realcolor® Primero.*

operating environments. Both Thermoshield and Supreme have obtained the SIRIM certification ISO 9223 under C-5I (Industrial) and C-5M (Marine) categories - the only steel products with the highest anti-corrosion rating available in the Malaysian market to date. The SIRIM certification is based on MS 2383:2011, which specifies and defines the anti-corrosion performance of pre-painted metal sheets into five categories about the principle ISO 9223 environmental corrosiveness guidance.

The realcolor® Supreme is the ideal selection against weathering, providing a superb performance of high thermal stability and excellent formability for roofing and wall cladding in harsh conditions, such as acidic, high humidity or nearshore environments. It contains more than 70% Polyvinylidene Fluoride (PVdF) binder that offers a unique combination of excellent outdoor durability, UV protection, formability and chemical resistance.

The realcolor® Thermoshield is an advanced cool roof system with excellent heat reflection and thermal control, ensuring your building stays cool while remaining durable and clean. It is glossy and vibrant but also lasts longer, improving aesthetic and maintaining a clean exterior in industrial, residential and commercial buildings, while its strong corrosion resistance feature ensures longer lasting and

safe buildings. It is the ultimate solution for industrial areas with high humidity and substantial industrial pollution. It is also one of the greenest building materials with no hazardous substances.

The realcolor® Primero is a high-performance polyester coated GI and one of the most versatile materials, suitable for tropical and high corrosion environments with up to C4 rating as certified by SIRIM. It is suitable for most common roofing and cladding applications with its excellent hardness and flexibility, optimum durability, good formability and colour selection - an ideal choice for industrial and coastal areas with high pollution and moderate salinity.

From an emergency fix to a long-term project, choosing the best materials is key and the PPGI will always come in handy for DIYers and traders alike. Dismissing all prevailing misbeliefs, it is important to know what steel you need for the best performance, as it may just save you time, money and possibly a headache along the way.

To know more about CSC Steel's realcolor®, check out <https://www.cscmalaysia.com/brand.php> or log on to CSC Steel's website for all your steel needs.

