

Durable coatings for metal roofs



Colour is essential to the overall aesthetic appearance of buildings, but for metal roofs, ensuring that the paint and coatings retain their integrity can prove to be a challenge.

Polyvinylidene Fluoride (PVDF) coatings

Super-polyester, silicone-modified polyester (SMP), and polyvinylidene fluoride (PVDF 70/30) are three major types of coatings in use today for metal roofings, with the PVDF providing the best and most long-lasting performance due to its superior chemical properties.

Formulated with 70 percent PVDF resin content, PVDF 70/30 coatings provide better resistance to UV damage than SMP and super-polyester coatings. While PVDF is the premium option of the three, it is still widely used in architectural applications due to its resistance to chalk and fade and its ability to retain gloss and colour. Chalk refers to the white substance that appears on metal panels that are weathered while fade is a breakdown of the pigments in the paint as the surface ages.

ColorLume VF-20L

M Metal's ColorLume VF-20L steel sheets are fabricated using a two-coat, two-bake Fluorocarbon (PVDF) process with over 70 percent of KYNAR 500 or HYLAR 5000 resin as the top coat. The substrate is made from AZM 150 alloy-coated steel sheets. AZM 150 refers to the coating mass in g/m² on both sides.

AZM 150 comprises 55 percent aluminium, 43.5 percent zinc and 1.5 percent silicon. It was first introduced to Singapore in 1979 and has proven to be successful in many projects.

ColorLume VF-20L is resistant to city grime, solarisation, dirt staining and acid rain. In spite of the severe weather conditions in the Southeast Asia region, ColorLume VF-20L steel sheets have retained their pleasing appearance and have excellent gloss and colour retention properties. ColorLume VF-20L has a lifespan of more than 15 years under exposure to normal weather conditions.

In applications, ColorLume is equally suitable for industrial and prestigious commercial projects which may require the use of corporate colours. Other applications include factories, logistics buildings, airports, hospitals, residential buildings, etc.

About M Metal

Formed in 2007 by industry veterans, M Metal Private Limited manufactures a comprehensive range of high-quality roofing and walling products, structural decking and purlins. Leveraging its network of international contacts, its deep industry knowledge and quality service, the company commits itself to being a solution provider from concept to completion.

