

Coating systems

Metcolor

Metcolor® Tabella colori COLOUR CARD

Grigio Luce **RAL 7035** Grigio Polvere **RAL 7037**

0.6 coperture Marrone Seppia **RAL 8014** Bianco Grigio **RAL 9002**

Bianco Alluminio **RAL 9006** Bianco Puro **RAL 9010**

Bianco Grigio **MT 133** Testa di Moro **MT 134**

Nei limiti delle possibilità tecniche, i colori qui sopra rappresentati sono simili ma non identici ai reali colori METECOLOR®. I colori della presente cartella, a causa della luce, possono subire modifiche nel tempo.

In the possibilities technical limits, the colours above represented are similar but not identical to the real METECOLOR®. The colours of this page, because of the light, might have some modifications.

metecno METECNO INDUSTRIE S.p.A. Via per Genova, 18 - 20087 TRIVIGLIO (MI) - Italy Tel. +39-02-850511 Fax +39-02-8505228

For the manufacture of panels and sheets and for the end user, **COIL COATED** prepainting represents a complete solution to all technical and aesthetic requirements, providing the best technical/cost ratio of all protective finishes available today.

METECNO is the only Italian producer of profiled insulated metal panels to have integrated into its production processes the highly delicate stage of prepainting, by equipping itself with the most modern type of **COIL-COATING** line.

METECNO's exclusive painting system has been designed to meet the specific requirements of the end user and guarantees the durability of the underlying metal substrate. This is an essential factor since, in the final analysis, the paint constitutes one of the main guarantees for long life of the structure.

Specific cycles are programmed for each individual order, with solutions that combine the standard polyesters with silicon-polyesters, polyurethane and thick PVC. The versatility of the plant means that an enormous variety of colours are available to satisfy the imagination and creativity of the most demanding designer, making a significant contribution to the aesthetic enhancement of the building.

INFORMATION ON PAINTING SYSTEMS

STEEL

The metal support used for the Metecno pre-painting is cold-rolled and galvanized steel for hot dipping of structural quality called S 280 GD + Z according to UNI EN 10147 standards.

The surface look used for pre-painting is established by UNI EN 10142 standards and is obtained through skinpassing (surface cold-rolling) the galvanized sheet after reducing the flowering of zinc or through the use of anti-cracking galvanized sheets.

Before the true painting, the galvanized and skinpassed strip undergoes a pre-treatment divided into various stages, whose purpose is eliminating any undesirable greasy deposits and oxides, and preparing the surface with inert salts that enhance the grip and adhesion of the paint coat.

The pre-treated galvanized strip passes through the first painting head, which applies the first primer coat, and then through the first baking oven. In case of strips designed for the production of monolithic panels, a specific primer is necessary that guarantees the adhesion and grip of the polyurethane foam. When the strip passes through the second painting head and the second polymerizing oven, the final paint of the desired type and color is applied and baked.

Out of the existing paints, Metecno has selected three product lines, based on the opinion that this range is enough to face all kinds of weather conditions, from standard ones to the most aggressive ones.

Metcolor® Tabella colori COLOUR CARD

Avorio Chiaro **RAL 1015** Giallo Ginestra **RAL 1032**

Rosso Segnale **RAL 3001** Rosso Mattone **RAL 3009**

Blu Genziana **RAL 5010** Blu Chiaro **RAL 5012**

Verde Muschio **RAL 6005** Verde Pallido **RAL 6021**

Verde Menta **RAL 6029**

metecno METECNO INDUSTRIE S.p.A. Via per Genova, 18 - 20087 TRIVIGLIO (MI) - Italy Tel. +39-02-850511 Fax +39-02-8505228

GUIDE TO THE USE OF METECNO PRE-PAINTED PANELS FOR OUTDOOR USE

Nominal thickness of the dry paint coating: 25 microns

Products	Environment						
	Rural	Urban	Industrial	Industrial Ser.	Marine	Marine Ind.	High UV
STANDARD (Polyester)	Green	Green	Yellow	Red	Red	Red	Yellow
SUPER (Super-polyester)	Green	Green	Yellow	Red	Yellow	Yellow	Green
PVdF (Fluorurates)	Green	Green	Green	Yellow	Yellow	Yellow	Green

Green suggested Yellow to be examined o a case basis Red not suggested

	Normative Reference	STANDARD	SUPER	PVdF
Nom. thickness	ECCA - T1	25 microns	25 microns	25 microns
Lead hardness	ECCA - T4	≥ F	≥ F	≥ F
Degree of polymerisation	AICC - 23	≥ 100 M.E.K.	≥ 100 M.E.K.	≥ 100 M.E.K.
Adhesion	ECCA - T17	> 95	> 95	> 95
Resistance to bending	ECCA - T17	adhésion 1T cracking 4T	adhésion 1T cracking 4T	adhésion 1T cracking 4T
Gloss	ECCA - T2	20 gloss*	20 gloss	30 gloss
Resistance to salt fog	ECCA - T8	≥ 500 h	≥ 750 h	≥ 500/750 h
Description		Polyester-base cycle with good roll-forming characteristics and fair resistance to aggressive environments	Superpolyester and siliconpolyester base with excellent roll-forming characteristics and good resistance to external exposure	Polyvinylidene fluoride base cycle with excellent roll-forming characteristics and high resistance to aggressive external exposure

* 30 gloss for the colors MT 133 - MT 134

1. STANDARD system

It is a polyester-based system with an excellent stability when exposed to weather conditions and a good resistance to chemicals.

2. SUPER system

These are superpolyester-based and silicone-polyester systems. The resulting films are characterized by high resistance to the exposure to the sun, and have an excellent resistance to chalking and color changing.

3. PVdF system

These systems are based on polyvinylidene fluoride mixed in variable ratios with acrylic resins. Since these films are highly chemical inert, the life of these coatings is particularly long when they are applied to building elements that are in touch with the external environment.

The Metecno Coil Coating line can also manufacture Plastisol films, which are formed by a dispersion of PVC in a plasticizer; the thickness can vary between 100 and 200 microns. Plastisol films are suitable for particularly corroding environments, like iron metallurgic and chemical plants, but are mainly used in North European countries, where the insulation is lower than in the Mediterranean area. In fact, since these films are particularly sensitive to the UV rays, they easily chalk and change their color.

ALUMINIUM ALLOYS

In this case, the metal support used for the Metecno pre-painting is made of aluminum alloys of grade 3103 H16 or 3003 H26, according to the EN 485 standards. The aluminum strip is also subject, before painting, to a pre-treatment aimed at preparing the surface for the paint adhesion, although using different chemicals from those used for steel.

The strip is painted with the same methodology and process as those used for steel, and the painting cycles are the same as those described for steel, and also the behavior of the organic coatings is similar, considering the differences of the metal support.

