

MP10 painting system

The name "MP10 system" identifies a coil-coated steel with pvdf resins (polyvinylidenfluoride) in the measure of 70/30 kynar 500, thus granting the highest quality of the finished product, suitable to satisfy special needs, as material workability, chemical resistance and particular resistance to high UV radiations; is mostly used for walls, coverage and sandwich panels which will be installed, besides in highly polluted environments, also in industrial and/or sea areas with remarkable sunlight, with an average foreseen life of 10 years *.

Physical characteristics

Cold rolled steel, depending on the final quality required by customer, is subject to hot dip galvanizing as per euro-norm and, in order to achieve the highest guarantee over the life of finished products, the zinc coverage shall never be lower than 275 gr/m².

The painting cycle foresees a non-chrome treatment of nitro-cobalt salts and a passivation of zirconium salts of the galvanized steel: this set of treatments will support the application of 5 µm of primer and 20 µm of pvdf paint to form a total dry layer of nominal 25 µm of organic protection. For the lower side the application of 5/7 µm of foamable backcoat is foreseen or, under specific request by the customer, of the same painting cycle used on the upper side.

The colour matching / reproduction is stricter than polyester or superpolyester because pvdf is formulated with particular ceramic pigments due to its guarantee of resistance to high UV.

Chemical and quality characteristics

Salt spray resistance (EN 13523-8)	The test is performed with reference and according to euronorm and does not allow for blisters on the cross more than 2 mm per edge (total 4 mm) and, on the surface, more than the degree 8 from the ASTM D714 scale after 750 hours exposure
Humidity resistance (EN 13523-25)	The test is performed with reference and according to euronorm and does not allow for blisters on the cross more than the degree 8 from the ASTM D714 scale after 3000 hours exposure
T-bend test (EN 13523-7)	The test determines the adhesion of the paint to the steel which must not exceed 1 t, and it is performed by tearing with adhesive ribbon the bending itself and the elasticity of the paint that must not crack over 1.5 t
Specular gloss (EN 13523-2)	It is measured with a gloss-meter having the incidence radius of 60° and must be within 30 ±5 gloss
Pencil hardness (EN 13523-4)	It is measured by engraving the paint at 45° with Koh-I-Noor pencils and must not be any lower than grade HB
Resistance to solvents (EN 13523-11)	After 100 double rubbing (50 for metal colours) with cotton pad, soaked in MEK (metil-etilchetone) and pressure of about 1 kg, the paint must not show any discrepancy nor defect

(*) Provided both Parties have reached an agreement and in presence of our evaluation of the installation site