

The invention relates mainly to a method for the production of pre-painted sheet metal, comprising at least the steps of: supplying a steel substrate; depositing a metal coating on at least one face by quenching the substrate in a bath formed by 4.4 to 5.6 wt.-% aluminium and 0.3 to 0.56 wt.-% magnesium, the remainder of the bath being exclusively zinc, inevitable impurities linked to the method and optionally one or more additional elements selected from the group containing Si, Ti, Ca, Mn, La, Ce and Bi, the weight concentration of each additional element in the metal coating being less than 0.3 %, the presence of nickel being excluded; solidifying the metal coating; preparing the surface of the metal coating; and painting the metal coating. The invention also relates to the associated sheet metal.