

Field Identification of Wrought Iron

If you choose to use this procedure you are doing so at your own risk.

“Wrought iron is best described as a two-component metal consisting of high purity iron and iron silicate – a particular type of glass-like slag. The iron and the slag are in physical association, as contrasted to the chemical or alloy relationship that generally exists between the constituents of other metals. Wrought iron is the only ferrous metal that contains siliceous slag.” (*Wrought Iron, Its Manufacture, Characteristics and Applications*, A.M. Byers Company)



Select an area on the metal approximately 3” by 3”. Using a grinder with a 4” general purpose metal grinding wheel, grind in one direction. Do not grind in a back-and-forth or circular direction. Keep the grinder at 30 degrees.



Replace the grinding wheel with a 60 grit (or finer) 4” abrasive flap disk. Polish in one direction (the same direction as the grinding) until most of the grind marks have been removed.



Heat the ground surface to about 150° F.



With a brush, apply to the heated surface a solution of 5 parts water and one part muriatic acid. Apply liberally. Wash with water; air cool and dry.



Spray the dry, cooled surface with clear enamel.



Clear enamel brings out surface detail; wrought iron siliceous slag is clearly visible.