

Technical Bulletin 0008

Subject: Reference Electrode Potential Criteria for Steel

Reference Electrode Chemistry	Commonly Used Potential Criteria for Steel
Copper/Copper Sulfate - (Saturated)	-0.850 mV
Zinc/Zinc Sulfate ----- (Saturated)	+0.250 mV
Silver/Silver Chloride ---- (Saturated)	-0.750 mV
Silver/Silver Chloride ---- (Seawater)	-0.780 mV

Reference Electrode Potentials at 25°C (77°F)

For cathodically protected steel, the potential of the steel will be more negative than the potential of the reference electrodes, except for the Zinc-Zinc Sulfate (Zn-ZnSO₄) reference electrode.

For the Zinc-Zinc Sulfate (Zn-ZnSO₄) reference electrode, the protected potential of steel is more positive than the reference electrode. The values given above are for 25 degrees Celsius and are rounded off to the nearest 5 milli Volts.