



Temperature Range

When a fastener is installed, torquing forces generate heat that can cause its coating to break out or burn away, leaving the bolt vulnerable to corrosion. When we designed Doxsteel Fasteners, we knew that our coating had to be able to take the heat if it was going to resist seizing.

Every doxsteel fastener can operate in temperatures ranging from -328°F to 1300°F without compromising its coating. ASTM specifications state that coatings working in temperatures higher than one half its melting point are in danger of producing liquid and solid metal embrittlement in the fastener. When compared to other leading coatings with much lower melting points, the difference is clear. In the extreme temperatures that come from torquing, doxsteel fasteners keep working.

COATING	MELTING TEMPERATURE	OPERATIONAL TEMPERATURE RANGE
Cadmium Plating	600°F	-40 – 300°F
Hot Dip Zinc	780°F	-10 – 390°F
Zinc Plating	780°F	-10 – 390°F
Zinc Plating + PTFE	300°F	-50 – 350°F
Ceramic + PTFE	300°F	-50 – 350°F
Zinc-Nickel Plating	1472°F	-10 – 390°F
doxsteel fasteners	2642°F	-300 – 1300°F