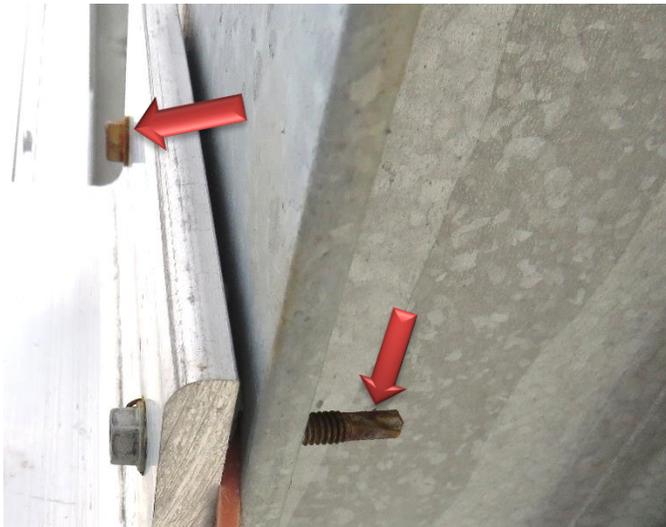




As we discussed before, not all fasteners that are zinc coated are for exterior use...Whenever we are installing fasteners that will be exposed to the exterior, **we should be asking the question and verifying the fastener.**

This includes bolts, screws, expansion type anchors, epoxy type anchors, etc.



Fasteners rated for exterior exposure will be **"CORROSION RESISTANT"**. The fastener should have a salt spray test of over 500 hours per ASTM B117 or have less than 15% surface rust after 15 cycles of salt exposure via the Kesternich Test per FM Global.

	Coating/Plating/Material	% Surface Corrosion
DIP NOT PASS	→ Cadmium	100% after 4 cycles
	→ Stainless steel – Type 304	None after 30 cycles
	→ Stainless steel – Type 316	None after 30 cycles
	→ Stainless steel – Type 410	100% after 3 cycles
	→ Stainless steel – Type 410 with Class 4 coating	5 to 10% after 30 cycles
	→ Zinc with clear chromate (ASTM B 633,SC1)	100% after 3 cycles
	→ Zinc with yellow dichromate treatment (ASTM B 633,SC1)	100% after 3 cycles
→ Mechanically galvanized, no chromate treatment (ASTM B 695)	100% after 3 cycles	

Chart by Powers Fasteners

Electroplated zinc is typically not an exterior fastener.

Hot dipped galvanized, 300 series Stainless Steel, Ceramic Coated are some examples of a properly coated fastener.

Please ask your Contractor to verify the corrosion resistance of the fastener with the technical department (NOT the Salesman) and request the *ICC-ES* report for verification, review section #5.

"Corrosion Resistant" and "For Exterior Use"