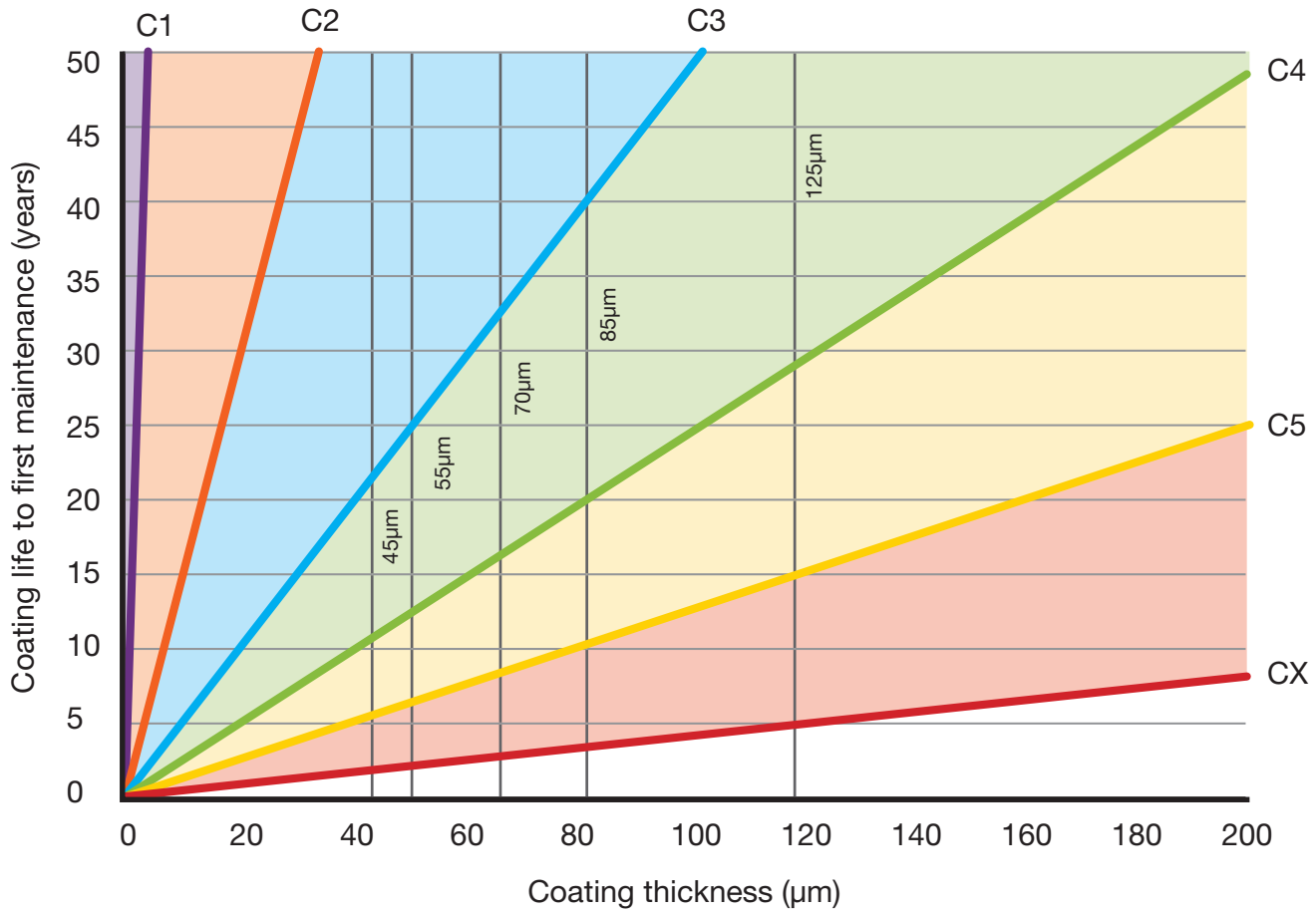
TIME TO FIRST MAINTENANCE CHART FOR HOT DIP GALVANIZED STEEL TO AS/NZS 4680

HUNTER GALVANIZING



The Time to First Maintenance Chart above was developed from ISO 9223 and ISO 14713 data. Please note that the chart above is provided as a guide only and may differ to the corrosion rate that is evident on your galvanized product due to site-specific environmental and atmospheric conditions. The map provided to the right is a guide to the corrosion zones displayed above. Corrosive zones are specified based on the airborne salinity, precipitation, temperature, relative humidity and sulfur dioxide influences evident at a particular geographic location. It should be noted that surfaces that are sheltered and not rain-washed in a coastal environment may be subject to higher corrosion levels due to the presence of hygroscopic salts settling on the unwashed surface.

ESTIMATED CORROSION RATES OF STEEL AND ZINC IN AUSTRALIA DEVELOPED FROM AS3212 AND AS/NZS 2312.2

Category, description and typical environment			Corrosion rate for the first year (µm/y)	
			Mild steel	Zinc
C1	Very Low	Dry Indoors	≤1.3	≤0.1
C2	Low	Arid/Urban inland	>1.3 to ≤25	>0.1 to ≤0.7
C3	Medium	Coastal or Industrial	>25 to ≤50	>0.7 to ≤2.1
C4	High	Calm sea-shore	>50 to ≤80	>2.1 to ≤4.2
C5	Very High	Surf sea-shore	>80 to ≤200	>4.2 to ≤8.4
CX	Extreme	Ocean/Off-shore	>200 to ≤700	>8.4 to ≤25

CORROSIVITY IN AUSTRALIA AS DESCRIBED IN AS 4312

Category		Generic Examples	Specific Examples
CX	Severe surf shoreline	Surf beach shoreline with very high salt deposition	Some Newcastle beaches
C5	Surf sea-shore	Within 200m of rough seas and surf beaches. May be extended inland by prevailing winds and local conditions.	More than 500m from the coast in some areas of Newcastle
C4	Calm Sea-shore	From 200m to 1km inland in areas with rough seas and surf. May be extended inland by prevailing winds and local conditions.	All coasts
		From the shoreline to 50m inland around sheltered bays. In the immediate vicinity of calm salt water such as harbour foreshores.	
C3	Coastal	From 1km to 10km inland along ocean front areas with breaking surf and significant salt spray. May be extended inland to 50km by prevailing winds and local conditions.	Metro areas of Perth, Wollongong, Sydney, Brisbane, Newcastle and the Gold Coast
		From 100m to 3-6km inland for a less sheltered bay or gulf.	Adelaide and environs
		From 50m to 1km inland from sheltered bays.	Port Philip Bay and in urban and industrial areas with low pollution levels
C2	Arid/Urban Inland	Most areas of Australia at least 50km from the coast.	Canberra, Ballarat, Toowoomba and Alice Springs
		Inland 3-6km from a less sheltered bay or gulf.	Adelaide and environs
		Can extend to within 1km from quite, sheltered seas.	Suburbs of Brisbane, Melbourne, Hobart
C1	Dry Indoors	Inside heated or air-conditioned buildings with clean atmospheres.	Commercial Buildings

COATING THICKNESS & MASS CHART

Steel Thickness (mm)	Local Coating Thickness Minimum (µm)	Average Coating Thickness Minimum (µm)	Average Coating Mass Minimum (µm)
≤ 1.5	35	45	320
> 1.5 to ≤ 3	45	55	390
> 3 to ≤ 6	55	70	500
> 6	70	85	600