



Advisory Note

Coastal Resort Construction

GEN/20/1

The Use of Heavy Duty Hot Dip Galvanizing

June 2002

The current growth of Australian coastal resorts, whilst developing our appealing locations, exposes building materials to harsh and corrosive forces.

Such corrosion rates are little removed from conditions, which would, in an industrial context, require the attention of marine surveyors and safety classification to world standards particularly for steel protection.

Naturally no such universal standard can apply to all coastal and adjacent construction, however, some safeguards merit close consideration where close proximity to the sea is an attractive and deliberate design feature. In this environment many building materials, particularly steel and concrete coatings are affected by ultra violet light, sea spray, chloride deposits, wind erosion and extended surface wet time.

Such locations are a technology interface where the maximum design requirements of building materials meet one of the most aggressive attacks on their integrity.

In this context heavy duty galvanized comprising zinc and zinc/iron alloys, provides a general insurance for both steel reinforcement for concrete and exposed structural steel. This offers a realistic maintenance free concept and immunity from conventional concerns with paint coating hardness and adhesion.

GAA offers case studies illustrating that heavy duty galvanizing can provide a 30-50 year maintenance free life in many such zones. Combined with an appropriate paint top coat a synergistic affect provides the near ultimate in protective service life, generally at a competitive first cost.

These case studies are certainly a feature of Australian coastal construction and are world standards, particularly where asset management has become a public concern.

In summary, after fabrication galvanizing is well proven in practice for atmospheric steel protection and is reliable at application. As an off-site finish it is harder than the steel it protects, and is well suited to rapid construction and for service longevity.

This Association is available to provide designers with useable practical guidance at project planning.

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