



For purposes of aesthetics & structural efficiency, round steel or aluminum tubes are the most common sections used in the Triodetic system. Other sections & materials can be used & Triodetic has developed methods to do this for special applications. Longer spans & heavier loads are more efficiently achieved with steel members. Aluminum is well suited to applications where light-weight is critical (e.g. building retrofits & temporary structures), and is often preferred in marine locations. In pool/spa environments painted galvanized steel or anodized aluminum are preferred. Industrial applications generally only require galvanized steel or mill finish aluminum. Highly corrosive conditions may necessitate the use of stainless steel. Architectural applications generally require paint finish.

Triodetic provides alternative factory-applied finishes which offer better durability as a result of greater control of cleaning, pre-treatment & surface preparation prior to the electrostatic application & baking processes.

Alternative Finishes are briefly described below:

A) Galvanized

Steel tubes are rolled from hot dip galvanized (ASTM A525-65T) strip with the seam re-metallized after welding to ensure final coating thickness of approx. 1.25 oz/sqft (G90). The finished product is provided with a flo-coat to retain a clean surface during storage & in service.

Miscellaneous steel components are hot dip galvanized after fabrication with approx. coating thickness of 2 oz/sqft.

B) Acrylic, Polyester or Polyurethane Base Baked Enamel

These products offer a wide color choice & can be applied to steel or aluminum. Bright colors are susceptible to UV fading & chalking, however this can be reduced with an additional "clear coat". Special acrylic-urethane finishes using high-build epoxy base coatings are also available.

C) PPG Duranar (Fluoropolymer or "Kynar 500" Coatings)

This is a premium paint finish that can be applied to both steel and aluminum, some colors may be more expensive, require minimum order quantities and longer lead times. A range of standard & custom colors is available from PPG color charts.

D) Powdercoat

Factory Powder Coating is the most commonly specified finish because it provides excellent performance at reasonable cost. Polyester & polyurethane based powder coatings provide exceptionally uniform and durable finish when applied to either galvanized steel or aluminum.

E) Anodizing

Aluminum structures can be provided with anodized finish, including buffed, textured & polished (mirror) finishes. Anodized finishes are available in clear, gold, light, medium & dark bronze, as well as black.

F) Chrome Plating

Chrome plating can be provided on steel tube components & are used in conjunction with polished anodized aluminum connectors. This finish is primarily used for indoor decorative applications.

Decking & Glazing

All types of cladding & glazing have been used over Triodetic framing systems. These are listed below in order of relative installed cost.

- Galvanized steel, galvalume,
- Galvanized & painted steel, anodized aluminum,
- Painted aluminum
- Copper, stainless steel, fiberglass, wood, tensile fabrics,
- Acrylic, polycarbonate,
- Laminated & tempered glass.

Triodetic develops cladding drawings & will supply all materials for complex structure shapes. Depending on the requirements of each project, Triodetic will act as single source contractor, or subcontractor, or separately, and work with recommended local specialist suppliers/installers of these materials as appropriate.