

Materials Of Construction

Determining the appropriate material of construction for a project depends on several factors, including water quality, climate and environmental conditions, availability of time and manpower for maintenance, unit lifetime requirements, and budget. BAC provides the widest variety of material of construction options in the industry and has the ability to provide a solution to meet all conditions and budgets. Options such as **EVERTOUGH™ Construction** and the **TriArmor® Corrosion Protection System** provide superior corrosion resistance and durability at a tremendous value. To determine the best material options for your specific project, consult your local BAC Representative.

> **EVERTOUGH™ Construction**

EVERTOUGH™ Construction combines a number of BAC's innovative corrosion protection features in a single cost-effective package.



TriArmor® Corrosion Protection System

The TriArmor® Corrosion Protection System is the ultimate in corrosion and leak protection for the cold water basin at the best value. For over 20 years, thousands of units with the TriArmor® System have withstood the harshest environments, proving its durability and reliability.

Corrosion Resistant Distribution System

For Series 3000 Cooling Towers, pultruded fiberglass reinforced polyester (PFRP) hot water basins provide a lightweight and high strength alternative to conventional stainless steel with an added level of corrosion resistance. BAC's fiberglass reinforced panels are impervious to a wide variety of chemical and atmospheric contaminants.

For the PT2, Series 5000, FXV, FXV3, PFi, Vertex, CXVT, CXVB, PCC, and VCA the distribution system is constructed of corrosion resistant PVC.

Thermosetting Hybrid Polymer

A manufacturing process fuse bonds a hybrid polymer to heavy-gauge G-235 galvanized steel providing superior corrosion protection. Over the past 25 years, this corrosion protection system has been installed on thousands of units worldwide.

Warranty

Backed by a 5 year warranty on equipment, 10 year on the TriArmor® System basin, and 1 year on coils (if applicable).

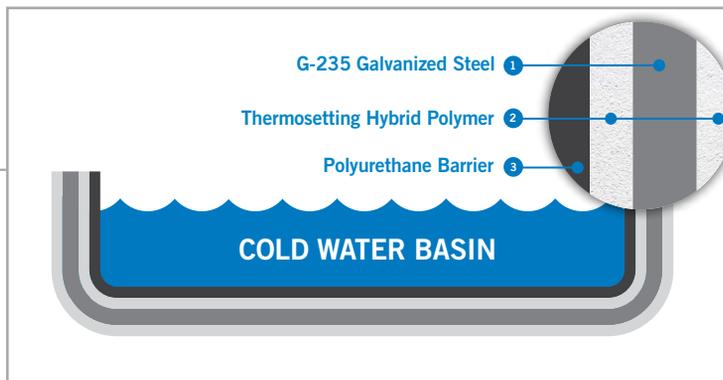
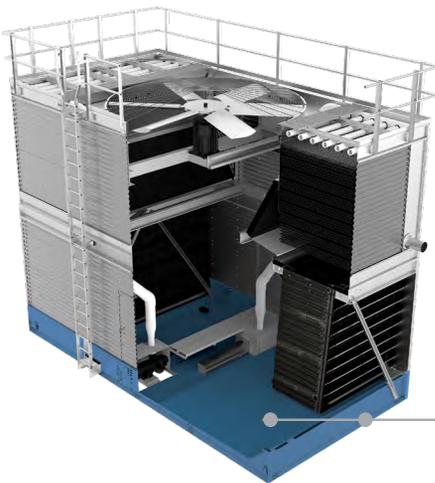
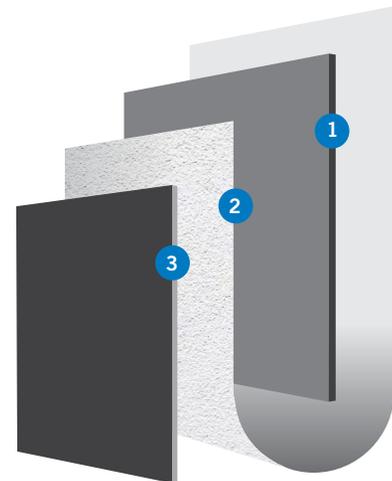


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> TriArmor® Corrosion Protection System

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- 1 G-235 Galvanized Steel** - This heaviest commercially-available galvanized steel is universally recognized for its strength and durability. With proper maintenance and water treatment, it offers excellent service life under normal operating conditions.
- 2 Thermosetting Hybrid Polymer** - This polymerized coating is baked onto the galvanized steel creating a durable barrier. It has been tested to withstand 6,000 hours in a 5% salt spray without blistering, chipping, or losing adhesion.
- 3 Polyurethane Barrier** - Factory-applied, corrosion-resistant, impermeable coating creates a seamless cold water basin, preventing leaks. To ensure longevity, microscopic chains of rubber-like resin molecules permanently bond tightly with one another and the thermosetting hybrid polymer.



COLD WATER BASIN MATERIAL CORROSION-RESISTANCE COMPARISON

	TRIARMOR® SYSTEM	STAINLESS STEEL	GALVANIZED STEEL
Acid Test pH=4	●	●	○
Alkaline Test pH=11	●	●	○
Chloride Level Test	●	◐	○
5% Salt Spray Test	●	◐	○



TriArmor® Corrosion Protection System Spray Booth

Did You Know?

Protecting the cold water basin is the easiest way to extend the life of your evaporative cooling equipment. As long as the basin is in good condition, nearly every other part of the equipment can be repaired or replaced. Maximize the life of your new equipment by selecting TriArmor® Corrosion Protection System.



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COLD WATER BASIN MATERIAL PRICE COMPARISON

TRIARMOR® SYSTEM	\$\$
STAINLESS STEEL	\$\$\$\$
GALVANIZED STEEL	\$

> Galvanized Steel

This heaviest commercially-available galvanized steel is universally recognized for its strength and durability. With proper maintenance and water treatment, it offers excellent service life under normal operating conditions.

> Thermosetting Hybrid Polymer

This polymerized coating is baked onto the galvanized steel creating a durable barrier. It has been tested to withstand 6,000 hours in a 5% salt spray without blistering, chipping, or losing adhesion.

> Stainless Steel

Stainless steel is the industry's traditional alternative to galvanized steel when elevated levels of corrosion resistance are required. Stainless steel materials can be provided in lieu of standard materials for unit structure, as well as many auxiliary components.

> Which Material Option is Right for My Project?

Included within the product sections of this handbook is a discussion on construction options. These sections define the availability of certain materials and combinations of materials for each product. Refer to these sections for specific product information. Your local BAC Representative can provide guidance on the proper unit construction for your project.



Unit with the Thermosetting Hybrid Polymer



Unit with Stainless Steel



Unit with Galvanized Steel