

# Why Specify Aluminized Type 2 CMP?

## Proven Durability You Can Trust



Aluminized Type 2 (ALT2) CMP has been rigorously studied and installed for over 60 years across a wide range of environments. Backed by state DOTs, national agencies, and field data, ALT2 offers a minimum of 2x (up to 8x) the service life of galvanized steel, providing 75+ years of performance within the recommended environmental ranges (5-9 pH range and  $\geq 1500 \text{ ohm} \cdot \text{cm}$  site conditions).

### ONGOING IMPROVEMENTS IN MATERIAL QUALITY & PERFORMANCE

- **Advanced technological** achieves yields a higher-quality pure aluminum coatings for passive protection.
- **Improved coating** adhesion and thickness for superior performance in acidic soils, soft water.
- **Cost-Efficient Over Lifecycle** with lower initial cost than reinforced concrete or polymer-lined options.

ALT2 CMP is not the same product it was decades ago—it's stronger, uses advanced coating techniques, and is engineered for modern infrastructure.

### DESIGN FLEXIBILITY & STRUCTURAL STRENGTH






- **Field Fit = Faster Projects** – Flexible customized fittings means installers can adjust pipe alignment, and orientation in the field.
- **Adapt to Complex Site Geometry** – Traverse utilities, tie into existing infrastructure, or fit into tight spaces with a complete suite of custom elbows, tees, or manhole connections.
- **Accommodate Grade & Elevation Changes** – Custom fittings can handle slope transitions, outfalls, or deep structures more easily than rigid products. Helpful in areas with variable topography where tie-in elevations aren't fixed until construction!
- **Seamless Integration** – Connect to concrete inlets, plastic laterals, or HDPE outfalls. Custom fittings ensure a tight, engineered connection between dissimilar products if needed.

### MAIN INDUSTRY STUDY RESULTS

STUDY	KEY FINDINGS
FHWA-RD-91-1440, Durability Analysis of Aluminized Type 2, January 2000	"Our field studies suggest that in the absence of abrasion, an Aluminized Type 2 pipe may have a service life up to 8x more than predicted for galvanized pipe by the California Method."
Florida DOT, Drainage Handbook, Optional Pipe Materials, 2008	"Aluminized steel pipe will provide 2.9 times service life as compared to galvanized steel pipe in the same environment."
Durability of Aluminized Type 2 Corrugated Steel Pipe Exposed Throughout the US (NCSPA Prepared), 2014	Data confirms that 16-gage ALT2 CSP can achieve a minimum service life of 75-years under specific conditions: FHWA abrasion level of 2 or less, pH between 5 and 9, and resistivity greater than 1,500 ohm-cm (or $>5,000 \text{ ohm-cm}$ with pH 4.5 to 5). Most samples showed 100% coating retention on the soil side, even after 60 years.
US Army Corps of Engineers, Technical Report GL-88-2, Life Cycle of Drainage Structures, 1988	"An independent analysis did show that for 16-gage pipe in the recommended environmental ranges, Aluminized Type 2 lasts two to six times longer than plain galvanized pipe."

# ALT2 Advancements Over Decades

TESTED & VALIDATED | NATIONALLY RECOGNIZED STANDARDS | CONFIDENTLY SPECIFIED NATIONALLY

				
<b>ENHANCED QUALITY CONTROL</b>	<b>MODERNIZED ALUMINIZING PROCESS</b>	<b>IMPROVED COATING FORMULA</b>	<b>SUPERIOR CORROSION RESISTANCE</b>	<b>IMPROVED MECHANICAL FORMING</b>
Enhanced quality control for consistent coating weight, application, and adhesion.	Refined aluminizing process improves uniformity, reducing defects and ensuring consistent performance.	Technological enhancements lead to consistent coating and alloy layering, offering better corrosion resistance and extended service life.	ALT2 features a pure aluminum coating that outperforms galvanized steel in resisting oxidation and corrosion. It is continuously monitored to ensure long-term durability.	ALT2 offers improved fatigue resistance, making it more durable under various loading and forming conditions.

## Let's Work Together on Specifications

Our team is here to help with project-specific analysis, soil/ environmental compatibility, and specification guidance.

We can also provide full documentation of:

- Pipe Diameters & Gages Available
- All Coating Types
- Corrugation Profiles
- Joint Types
- Hydraulic capacity and Manning's "n" value
- Structural load tables
- Minimum cover and installation guidance

