The Polymer Coated Advantage:

- Proven long-term barrier protection for storm sewer application
- Superior in protection to asphalt coating
- Virtually inert to corrosive agents commonly found in storm sewers
- Unaffected by low pH soils

“Serving the Southeast Since 1965”

For years, Cherokee Culvert Company has heavily promoted the use of polymer coated galvanized corrugated steel pipe for the most aggressive of environments. This premier coated pipe begins with a standard 2 oz./ft.² galvanized strip in compliance with AASHTO M218. It is then laminated by approved coaters with an ethylene-acrylic film, manufactured by the Dow Chemical Corporation. These laminated coils arrive at our facility where they are formed into finished pipe. Since its inception in the early 1970's, polymer coated pipe has proved itself in some of the most demanding applications in the drainage industry. For such aggressive applications as culvert use, polymer coated pipe can achieve a service life prediction in excess of seventy five years. While we feel that installations as important as culvert crossings demand maximum protection against the effects of abrasion and corrosion, storm sewers allow for an entirely different approach. The 10 mil coating being supplied for culvert application may be considered “wasted durability” in a storm sewer application where velocities and abrasion pale in comparison to punishing culvert application. For storm sewers, a lighter, and more cost-effective polymer coating will offer exceptional durability.

Unique Laminating Process Creates A True Composite Structure

Tightly bonded under tremendous heat and pressure, the polymer coating essentially becomes an integral part of the steel substrate. Rigorous quality control ensures coating thickness consistency.

This leads to total insulation of the steel substrate, thereby creating a barrier protection to the underlying steel. Please see reverse side for an explanation of “barrier” versus “sacrificial” coatings.
BARRIER vs. SACRIFICIAL PROTECTIVE COATINGS

All types of corrugated metal pipe products on the market today offer some type of protective coatings to add durability to the material. Coatings such as zinc and aluminum are commonly used on carbon steel products, and clad layers are bonded to a core alloy on solid aluminum pipe. Additional post applied protective coatings, such as asphalt, may be applied after pipe fabrication to enhance the durability of the pipe. The environmental conditions in which the pipe is installed dictates the rate with which these protective coatings are sacrificed to protect the underlying core material and ultimately determine the service life of the pipe installation. Finding the correct combination can be based on past performance of corrugated metal products in a specific area, or on soil tests to determine a site's corrosion potential. Barrier type coatings help prevent any type of sacrifice of the base protective coating or the base metal. Polymer coated pipe combines the best barrier protection offered in the industry. It has been found to be inert to aggressive soil conditions which may prove detrimental to standard metallic coated products. In fact, studies reveal that polymer coated pipe is acceptable for use in areas where pH levels are as low as 3.0. Conditions such as this are damaging to even concrete pipe installations. Polymer’s durability alleviates the concern of unknown soil and water parameters and can be confidently used in areas where other products are relatively short lived. All of these advantages come with the strength and flexibility you have grown accustomed with corrugated metal pipe.

APPLYING 3/3 POLYMER TO THE PROPER APPLICATION

The focus of Cherokee Culvert’s product line over the past fifteen years is to manufacture various metal pipe materials that are suited for a particular application. In other words, we do not feel that there is a single product on the market (metal and others) which is appropriate for each and every application. Consequently, we manufacture metal pipe from five separate materials, in six metal thickness’, and in seven different corrugation profile configurations. This allows us to offer, what we feel, is the most durable and cost-effective material for a particular installation.

As stated earlier in this literature, Cherokee Culvert strongly recom-
\[\text{Effluent carrying heavy concentrations of salt have had no effect on this 10 year old 3 mil polymer coated corrugated steel storm drain installation}\
\]mends a 10 mil coating for culvert, or live stream applications. The lighter 3 mil coating is ideally suited for storm sewer application and in any installation where the end user has previously utilized asphalt coated galvanized steel pipe. Aggressive soil and/or effluent concerns can easily be addressed with the 3 mil coating.

We would very much appreciate the opportunity to discuss this material’s specific performance capabilities and determine how it may benefit your drainage application. While its performance should greatly exceed traditional asphalt coated pipe, the additional cost for this performance is minimal. Please contact your Cherokee Culvert Sales Representative, or this office, to request additional information or pricing.