



INNOVATION IN EVERY COAT.™

TNEME-ZINC

PRIMER FOR THE PROTECTION
OF ARCHITECTURAL STEEL



A PRIMER BUILT FOR LONGEVITY

The strongest and most beautiful structures in the world define the areas in which they stand. But corrosion – whether from external elements or internal chemicals – can destroy the backbones of these pivotal architectural structures. The protection of structural and decorative steel starts with a primer built to resist the harshest environmental and corrosive elements. Once corrosion initializes, steel rehabilitation can become an expensive endeavor for any owner, with labor and material costs compounding unneeded downtime. Preempting the attack, and prolonging protection, begins with high-performance coatings from Tnemec.

In the field, Tnemec's time-tested, innovative zinc-rich urethane primer, Series 90-97 Tnemec-Zinc, has out-performed other coatings, with exceptional galvanic and barrier protection worthy of the outstanding structures it protects. In the laboratory, Tnemec-Zinc has been evaluated using the most rigorous industry-standard performance tests and exhibits results beyond expectation, setting the standard for zinc-rich coatings used in structural design and maintenance.

FEATURES AND BENEFITS

- Applicator-friendly
- Excellent adhesion
- SSPC-Paint 20 Type II classified
- Fast-cure capabilities
- Galvanic corrosion protection
- Low-temperature cure
- Shop-compliant
- Meets AISC Class B Slip Coefficient
- Dryfall capabilities



DATASHEET

THE PRODUCT

Tneme-Zinc is an advanced technology, zinc-rich polyurethane primer that provides extraordinary performance when applied to steel. The primer's moisture-curing, organic film is user-friendly and rapid curing, making it compatible with various chemical- and corrosion-resistant topcoats. Available in several formulas, including a single-component and HAPS-compliant version, Tneme-Zinc can be applied with brush, roller, or spray equipment, both in the field and shop, making its application as easy as its specification.

Tnemec's high-performance primer contains 83 percent zinc pigment by weight in the cured film, providing galvanic protection to the substrate. When finished with other Tnemec products, the coating system provides outstanding barrier protection against ambient exposure. Tneme-Zinc can be topcoated with a wide variety of finishes – including epoxies, acrylics, and polyurethanes – in virtually any environment. And, with an extended recoat time, steel does not need to be finish coated in the shop; the steel can be shipped to the jobsite and the finish coat applied on site.

Like many compatible Tnemec topcoats, Tneme-Zinc can also be applied in the field, exhibiting “dry-fall” properties under the proper conditions and, under the tightest timelines, an optional



accelerator is available to speed up the curing process, allowing the product to be topcoated “same-day.” Additionally, organic zinc-rich primers like Tneme-Zinc do not require a mist coat to prevent out-gassing, allowing for a more efficient application and leaving the topcoats with a consistent and level film.

GALVANIC PROTECTION

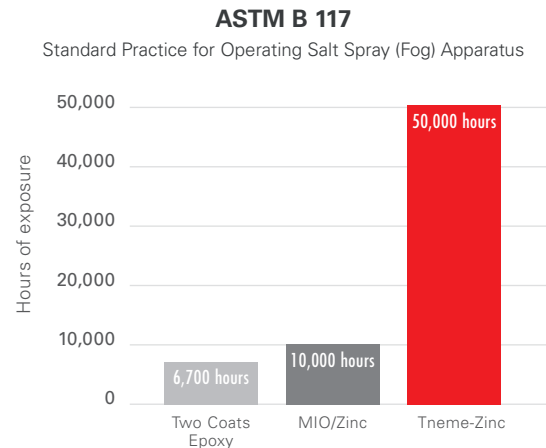
Zinc-rich coatings like Tneme-Zinc can double, or even triple, the service life of steel. The combined galvanic protection and physical barrier properties provided by these coatings help resist and contain threats of widespread corrosion. When typical topcoats are scratched or damaged, underlying zinc-rich primers control undercutting of the film. In opposition, if a traditional alkyd or epoxy system is damaged, undercutting can cause the coating to lift and peel away from the substrate, leaving an unsightly appearance and opening up the surface to severe corrosion. Tneme-Zinc provides galvanic protection with the added benefit of a full, supported coatings system from Tnemec.

THE PERFORMANCE

Tneme-Zinc has been tested in the field and laboratory for decades, being pushed to extremes to prove its durability.

When compared to traditional two-coat epoxy systems and newer MIO/zinc-filled primers, one coat of Tneme-Zinc can withstand harsh environments longer. During salt fog testing (ASTM B 117) the zinc-rich primer exhibited no blistering, cracking or delaminating after 50,000 hours exposure, with little creepage at the scribe and no more than 1% rusting.

Subjected to the same test, two coats of epoxy lasted through 6,700 hours while the MIO/zinc prime coat exposed to 10,000 hours showed 1/64" creepage and 3% rusting on the plane.



OKLAHOMA CITY, OK • The SkyDance Pedestrian Bridge soars above Interstate 40 in Oklahoma City, welcoming locals and visitors to the thriving metropolitan area. The steel bird-like structure and the bridge itself are protected by the same high-performance Tnemec coating system, which includes a prime coat of Series 90-97 Tneme-Zinc for advanced corrosion-protection. Following the shop application of the primer, intermediate and finish coats, all the steel members were shipped to the jobsite ready for installation, with Tnemec representatives helping all along the way, from specification through application and beyond. The bridge utilized over 500 tons of steel and more than 400 gallons of Tnemec coatings that will prolong the need for maintenance or recoating in the future.

SEATTLE, WA • In 2000, The City of Seattle began renovating the 73-year-old opera house located in its world-renowned Seattle Center, home of the famous Space Needle and the 1962 World's Fair. The project would require more than 450 tons of steel to complete the design and the architects needed to ensure that all of the steel was well protected against corrosion.

The project team specified Series 90-97 Tneme-Zinc as the primer for the exterior-exposed steel, which was shop-applied by the steel fabricator and shipped to the jobsite. Onsite, the steel received an epoxy intermediate coat and a sparkling "Bright Aluminum" acrylic polyurethane topcoat. The renovated opera house, renamed Marion Oliver McCaw Hall, was opened in June 2003.

More than a decade after being completed, McCaw Hall's curvilinear façade is still dazzling its visitors and the venue remains home to the Pacific Northwest Ballet and the Seattle Opera, which present around 150 performances each year.



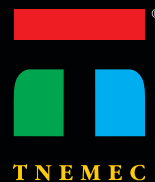
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THE SUPPORT

Before and during application, Tnemec's industry experts are available to assist with specification, equipment, or coating concerns. Technical issues in the shop or the field can be addressed by a knowledgeable Tnemec coating consultant when needed, helping to keep projects on schedule and within budget. With Tneme-Zinc's long-standing track record, coating consultants are well-aware of all the nuances of the coating and are an extremely helpful resource.

For project or specification assistance, or additional education about zinc-rich coatings, contact your local Tnemec consultant, or visit tnemec.com.



LOOKING FOR MORE INFORMATION ABOUT TNEME-ZINC?

Contact your local Tnemec
representative at [tnemec.com](https://www.tnemec.com).

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