

ARCHITECTURAL STEEL

AND METAL COATINGS

THE BEAUTY OF LONG-LASTING PROTECTION



TNEMEC STRUCTURAL PRIMERS AND FINISHES HELP TURN BUILDINGS INTO LANDMARKS

The incomparable strength and design flexibility of steel makes it a prime choice for architects and builders. Yet even with its load-bearing capacity and resilience, it is susceptible to the insidious and destructive effects of corrosion.

No wonder architects and engineers all over the world specify Tnemec primers and finishes for trusted protection of interior and exterior steel and metals. No other manufacturer comes close to Tnemec's product development history, coatings knowledge, testing capabilities or problem-solving innovation.

Since 1921, Tnemec has developed a broad range of products featuring specialized formulations that defy the most relentless causes of structural deterioration and decay. These coatings have unique properties that resist temperature extremes, abrasion, high humidity, salt, ultraviolet light and chemicals. Given these qualities, Tnemec coatings can contribute greatly to a building's potential to stand untarnished for generations.

ONE AND ONLY

"We're really impressed with the performance characteristics of Tnemec products – very happy with the results – and our clients are, too."

– MARVIN CHEW
Specification Consultant, Chew Specifications

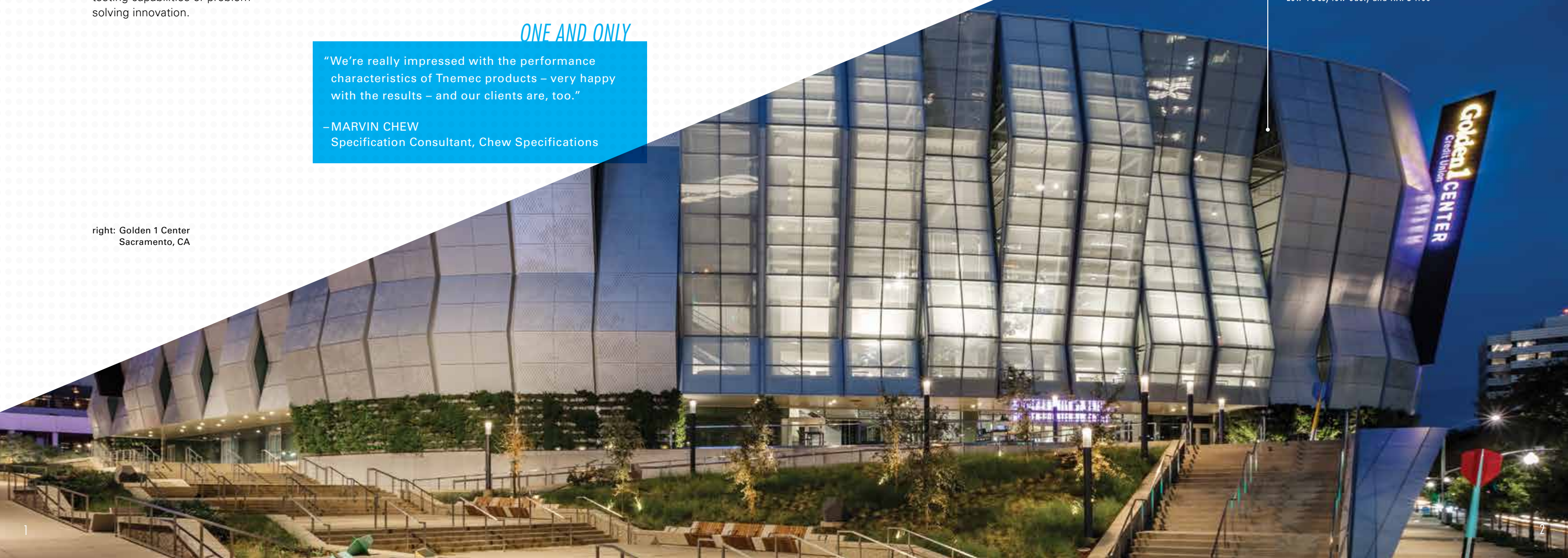
right: Golden 1 Center
Sacramento, CA

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TYPOXY®

Superior corrosion resistance
Low VOCs, low odor, and HAPS-free





LEED® CERTIFIED PROJECT · Publicized as the next generation of public transportation in Southern California, the Anaheim Regional Transportation Intermodal Center (ARTIC) in Anaheim is where futuristic design connects with sustainable technology, such as low volatile organic compound (VOC) coatings from Tnemec.

The three-story, arching terminal is supported by 2,100 tons of structural steel that required more than 1,200 gallons of protective coatings compliant with the project's Leadership in Energy and Environmental Design (LEED) Platinum certification.

During fabrication, structural steel was shop-primed with Hydro-Zinc, a single-component, zinc-rich, aromatic urethane coating, followed by an intermediate coat of a low-VOC polyamidoamine epoxy. The finish coat was UVX, a low-VOC modified polycarbamide coating that offers superior color and gloss retention for long-term aesthetics.

right: Missouri State University Recreation Center
Springfield, MO



UNI-BOND® DF
Corrosion- and moisture-resistant
Easy to apply, with dry-fall capabilities
Low VOCs, low odor, and HAPS-free

COST, VALUE AND ENVIRONMENTAL BENEFITS MAKE A STRONG CASE

Another critical consideration when assessing the ideal structural or metal surface coating is its long-term value relative to life cycle costs and its contribution to a more sustainable environment. Tnemec coatings typically outlast ordinary paints, extending life cycles and creating significant savings over time when the substantial labor and materials expense of recoating is taken into account. In addition, Tnemec has been conscientious in developing low-VOC and standard-compliant

hazardous air pollutant (HAP) products. These and other industry-leading Tnemec coatings not only increase longevity and enhance aesthetic appeal, they can help achieve credits on projects seeking LEED certification.

Few companies are able to provide an equivalent array of high-performance products formulated for environmentally-friendly purposes.

Tnemec has pioneered long-lasting, corrosion-inhibiting formulations for nearly every situation, environment and substrate requirement.

PRIME PROTECTION AND PERFORMANCE FOR NEW CONSTRUCTION PROJECTS

The best insurance against future corrosion, steel degradation and compromised structural integrity is to employ superior protection right from the start.

Tnemec has pioneered long-lasting, corrosion-inhibiting formulations for nearly every situation, environment and substrate requirement. So, depending on your project's specific prerequisites or challenges, you can count on Tnemec to have the product you need.

The first step is selecting the right primer. Your Tnemec coatings consultant has the experience and expertise to recommend the primer that will provide the best adhesion, corrosion barrier and ultimate foundation for the coating system. Consultants are readily available to provide expert advice on tailoring the primer choice to other requirements, such as environmental conditions and dry times for shop or field applications.

right: Navy Pier Wave Wall
Chicago, IL

READY. RELIABLE. RESOURCE.

"My Tnemec representative is extremely knowledgeable. He is a great resource for product advice in special situations that involve any issues out of the ordinary. He always recommends the right application for the job."

- JIM BETHEL
Owner, Bethel Specifications Consulting

TNEME-ZINC

Galvanic corrosion protection
Shop-compliant and applicator friendly
Dry-fall capabilities

HELPING BEAUTY AND AESTHETICS SHINE THROUGH

The right combination of primer and topcoat is essential to the long-term protection, preservation and viability of steel surfaces in new construction. However, it is the topcoat that adds durable appeal with gloss retentive, fade-resistant colors that command attention and create a signature look for noteworthy or monumental projects.

Nearly all metal surfaces and accents can benefit from Tnemec's wide assortment of application-specific coatings – from high-visibility perimeter metal framework and roofing to functional elements such

as handrails, doors, window casings, awnings, decking, and enclosed structures. The full scope of Tnemec's superior protection also extends to non-ferrous aluminum and galvanized metals.

Nothing can so brilliantly transform an architect's vision and inspiration into a marvel of reality like Tnemec premier topcoats, available in 500 standard and nearly limitless custom colors, with elegant gloss, semi-gloss and satin finishes containing rich pigments and additives that provide ultimate ultraviolet (UV) protection and weather resistance.

right: Atlantic Wharf Building
Boston, MA



UVX®

Superior gloss retention

Hard, durable finish

Less than 100 g/L VOC

Tnemec's careful and thorough restorative coatings bring new vibrancy to aging buildings and structures.



TEST OF TIME - In 2009, many of the cast iron facades throughout New York City's SoHo district were being updated and restored to their former beauty. Several buildings in the area, including 77 Mercer Street, used a Tnemec high-performance coating system for long-term color and gloss retention. Following careful surface preparation, these projects received a prime coat of a zinc-rich urethane primer, an intermediate coat of an aliphatic acrylic polyurethane and a finish coat of Fluoronar, a fluoropolymer finish designed to offer unmatched protection against UV light degradation. And now, a decade after the last coat was applied, the Tnemec-protected building facades remain shining architectural landmarks.

EXISTING STRUCTURES GAIN NEW LIFE WITH TNEMEC COATINGS

Tnemec coatings are not just developed and designed for new construction applications. They are equally as effective when applied to existing steel or metal structures.

Tnemec coatings consultants can perform an overcoat analysis that will indicate if the existing paint needs to be removed or if it can support an overcoat in its current condition.

If old coatings are notably blistered, cracked or peeled, this will likely require proper surface preparation to include abrasive blasting, scraping or stripping and cleaning. The right primer is then applied along with the

appropriate overcoat. This can extend the life of the substrate and minimize future maintenance expenses.

Whether for a school renovation, an upgrade to a multi-tier parking garage or refurbishing/repurposing of a high-rise building, you can trust Tnemec to have the right coating system for the job, climate and circumstances. Even statues or civic works of art have been returned to their former beauty and glory with coatings formulated for long-term aesthetics, adhesion and resistance to nature's elements.

left: ZCMI Building
Salt Lake City, UT



FLUORONAR® METALLIC

Ultra-durable metallic finish

Outstanding color and gloss retention

User-friendly application

THE SCIENCE AND ART OF SUBSTRATE PROTECTION

Tnemec chemists and product development specialists are meticulous throughout formulation and testing in their effort to achieve the perfect balance between resins, additives and chemical coating ingredients. This process leads to powerful, uncompromising substrate protection, while also creating finishes that are vividly striking and visually compelling.

As a result, there is a Tnemec product for virtually every need and a Tnemec color to match most any requirement, including the creation of custom colors.

Tnemec coatings are an easily justifiable investment because they help enhance the aesthetic elements of architectural design, preserve their integrity and extend their ability to endure well into the future.

right: Exploration Tower
Cape Canaveral, FL



TEST OF TIME - Designed by architect I.M. Pei, the Rock & Roll Hall of Fame and Museum has received rave reviews since its opening in 1995. The museum's breathtaking structure is composed of nearly 200 tons of steel, all coated with a protective coatings system from Tnemec. Interior and exterior steel was primed using the time-tested, zinc-rich polyurethane primer, Tneme-Zinc, for long-term corrosion resistance. After almost 25 years, the steel remains protected and continues to help provide aesthetic appeal to Cleveland's most popular tourist attraction.

FLUORONAR®

Unsurpassed color and gloss retention
Excellent protection and durability
Easy application - brush, roll or spray



ENDURA-SHIELD®

Resistant to exterior weathering
Offers fast-curing and labor-savings



left: Pennsylvania Convention Center
Philadelphia, PA



below: Philadelphia City Hall
Philadelphia, PA

It is hard to find coating products that can live up to such unrelenting abuse and uncompromising demands.

TAKING A HARD LOOK AT COATING PROJECT DEMANDS

Interior coatings subjected to heavy traffic – plus constant daily wear and tear – must have the durability to withstand impact, friction, abrasion, scrubbing and cleaning.

Exterior coatings exposed to harsh environments must form a solid barrier capable of resisting the effects of UV light, extreme temperatures, freeze-thaw cycles, moisture infiltration, chemicals and corrosion.

It is hard to find coating products that can live up to such unrelenting abuse and uncompromising demands. But Tnemec is highly specialized and narrowly focused on one goal: to make the most effective coating products on the market.

THE BEST PERFORMANCE COMES FROM LAYERS OF PROTECTION

1 PRIMERS

Top-grade Tnemec primers are essential for establishing a base layer of protection with an initial bonded seal against moisture infiltration. Alkyd, acrylic, epoxy and urethane primers each have their own unique properties for protecting steel in the field, during fabrication, erection and post-construction. Besides a durable dry-film that acts as a physical barrier to moisture, many primers feature special additives that disrupt and counteract corrosive catalysts.

2 INTERMEDIATE COATS


This step adds another substantial and extended layer of corrosion protection, which may be critical to longer life depending on the severity of the structure's or substrate's exposure conditions. Highly resilient and stable intermediate coats provide excellent adhesion and added barrier protection.

3 TOPCOATS

This aesthetic layer crowns the structure with a choice of sheen and color that will maintain its brilliance and vitality for many years without chalking or fading.

Advanced technology polyurethanes and fluoropolymers fight the intense, deteriorating effects of UV rays to offer exceptional gloss retention and colorfast quality far superior to conventional paints and coatings.

Whether used separately or as part of a complete system, Tnemec's leading line of architectural steel and metal coating products represents the best that the industry has to offer.



TEST OF TIME - Dedicated in 1993, the Holocaust Memorial Museum in Washington, D.C., features heavy steel trusses coated by Tnemec products in custom muted-gray colors, which create an appropriately somber and solemn mood. All interior and exterior exposed metals are protected with a prime coat of Tneme-Zinc. An intermediate coat of high-build and low-temperature-cure Epoxoline was applied by brushes and rollers. The final coat was Endura-Shield, which is highly resistant to abrasion and UV light.

After 25 years, the only metal that has required any recoating is that of heavily-used handrails. Overall, the success and effectiveness of Tnemec products used in this high-profile project has prompted noted area architects to contact Tnemec for long-lasting coatings.

Tnemec is an original pioneer in the science of specialized coating technologies that stand the test of time.

TNEMEC: PIONEER, LEADER AND INNOVATOR

For more than 90 years, Tnemec has preserved vital and valuable structures, including high-rise office buildings, architectural landmarks, recreational attractions, transportation and correctional facilities, and more.

The company is committed to the support of, and association with, respected industry organizations such as the Construction Specifications Institute (CSI), National Association of Corrosion Engineers (NACE) International, Society for Protective Coatings (SSPC), American Institute of Architects (AIA), and the U.S. Green Building Council (USGBC).

Tnemec is an original pioneer in the science of specialized coating technologies that stand the test of time.

The focus, tradition and unequalled reputation of the company continues with the regular introduction of many new and innovative product formulations designed to protect a wide range of substrates while also enhancing property values.

The performance of Tnemec products has been demonstrated in thousands of the most demanding real-world situations. Customers have come to rely on, trust and recommend Tnemec.

Whatever the need, chances are good Tnemec has the solution.

PRODUCT SELECTION EXPERTISE AND COMPREHENSIVE TECHNICAL SUPPORT

As an architect, engineer, owner or contractor, it is reassuring to know that Tnemec's extensive product line is backed by outstanding technical support.

Tnemec coatings consultants have a thorough understanding of the products. More importantly, they know substrate vulnerabilities and invest time in understanding your project's own distinctive requirements. Through years of experience, they know how to account for the unique challenges posed by diverse geographic regions, and they have a unique ability to recommend the right product for the job.

With a vast network of technical support experts, Tnemec is there for you every step of the way. We provide assistance with coating selection, cost analysis, performance data, and application parameters. We take great personal pride in successfully protecting our customer's assets.

Unparalleled service, responsiveness and tailor-made solutions from a single source are never more than a phone call away.

below: Bryant University Strength & Conditioning Center
Smithfield, RI

CREDIT THE ASSIST

"One of the main reasons I specify Tnemec is because I get a lot of assistance from their coatings consultant. His technical knowledge and responsiveness are great!"

—MATTHEW BLAKELY
Senior Architect, KCCT



AEROLON®

Controls condensation and thermal bridging
Ultra-low thermal conductivity
Spray-applied and self-adhesive tape versions

front cover project:
Amazon Spheres – Seattle, WA

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INNOVATION IN EVERY COAT™

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