



Corrosion & Harsh Environment Protection

Thomas & Betts. Your best connection for innovative solutions.

Thomas & Betts

Corrosion is a natural and inevitable process. It cannot be eliminated, but it can be managed and controlled with the right products.

Thomas & Betts Solution Sets



Corrosion & Harsh Environment Protection



Grounding & Bonding



Power Quality, Efficiency & Reliability



Safety



Continuous Operation & Sustainability



Hazardous Location Protection



Total Project Cost Reduction



Liquid Ingress Protection



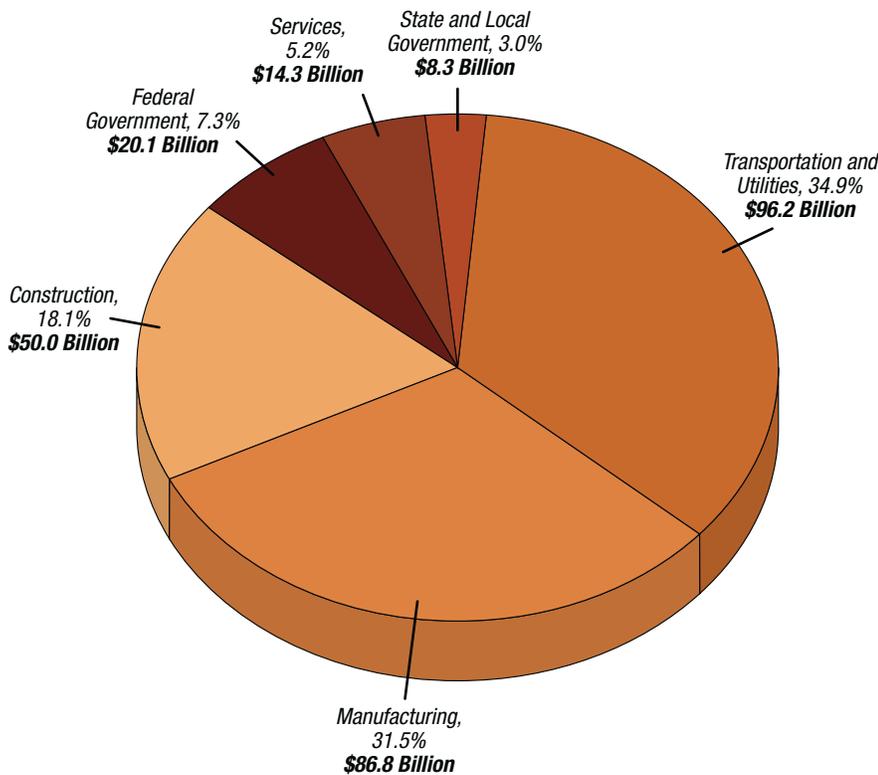
Extreme Temperature Protection

Corrosion Is Eating Away at Your Bottom Line

The direct effects of corrosion cost U.S. industry and government \$276 billion annually, according to a study commissioned by the U.S. Federal Highway Administration (FHWA).^{*} This figure reflects only the direct costs of corrosion, such as the expense of repairing a bridge that has become structurally deficient due to steel corrosion or the cost of treated drinking water lost from a corrosion-induced leak in a municipal water pipeline. It doesn't begin to take into account the indirect costs of corrosion, such as the cost of labor related to corrosion-management activities or the loss of revenue due to disruption in product supply. The FHWA study conservatively estimated this as equal to the direct costs.

Corrosion is a natural, inevitable process. It cannot be eliminated, but it can be managed and controlled. The FHWA study estimates that the implementation of optimum corrosion management practices could save as much as 25–30% of annual cost of corrosion in the U.S.

Extrapolated Corrosion Cost: \$276 Billion, 3.1% of GDP



^{*} The "Corrosion Costs and Preventive Strategies in the United States" study (Publication No. FHWA-RD-01-156), released in 2002, was commissioned and funded by the U.S. Federal Highway Administration (DOT), Y. Paul Virmani, project manager; conducted by Gerhardus H. Koch, Michiel P.H. Brongers and Neil G. Thompson of CC Technologies Laboratories, Inc., of Dublin, Ohio, in association with J.H. Payer, Ph.D. of Case Western Reserve University, Cleveland, Ohio; and sponsored by NACE International of Houston, Texas.

Annual Corrosion Costs



Drinking Water and Wastewater Systems
\$36.0 billion



Gas and Liquid Transmission Pipelines
\$7.0 billion
Oil and Gas Exploration and Production
\$1.4 billion
Petroleum Refining
\$3.7 billion



Highways and Bridges
\$8.3 billion



Electrical Utilities
\$6.9 billion



Pulp and Paper Processing
\$6.0 billion



Food Processing
\$2.1 billion



Mining
\$0.1 billion



Causes of Corrosion

Corrosion is the deterioration of metal caused by a chemical reaction to its surrounding environment. In most cases this means electrochemical oxidation of metals in reaction with an oxidant such as oxygen. Corrosion can be accelerated by the presence of dust, moisture, high relative humidity, high temperatures, salt, acids, solvents and chemicals. How quickly corrosion occurs depends not only on the environment, but also on the specific type of metal. Cast iron, for example, rapidly oxidizes and forms red rust if left in its raw state, simply from exposure to the air, so it requires some form of protective finish. Other metals, such as stainless steel, have an inherently higher resistance to corrosion without the need for special coating.



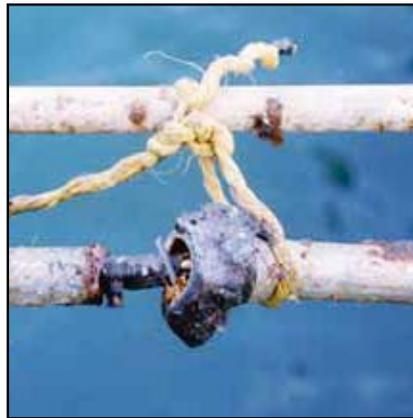
If left in its raw state, cast iron rapidly oxidizes, forming red rust.

What Corrosion Looks Like

When we think of corrosion, red rust that forms on iron or steel typically comes to mind, but corrosion may also appear in other forms, depending on the metal. White rust is corrosion of the zinc that is typically used as a protective coating over iron or steel. The natural green patina on the copper roofs of the parliament buildings is also a form of corrosion.



Red Rust



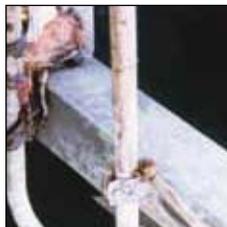
White Rust



Oxidized Copper



The Effects of Corrosion on the Electrical System



Corrosion in electrical systems typically represents only a fraction of the direct costs for many industries, but it yields a disproportionately large share of the indirect costs. Corrosion in electrical contacts creates high resistance and unreliable connections, which lead to poor power quality. In production and manufacturing, where downtime can be very costly, failure of a relatively inexpensive electrical component that leads to loss of power and control to production equipment can quickly add up to thousands of dollars in lost productivity. In aircraft, corrosion that causes electrical system failure can result in loss of life.

Electrical systems, therefore, are a prime area in which an upfront investment in corrosion protection returns significant cost savings, as well as increased safety and other benefits, over the long term. This means selecting electrical conduit, fittings, support systems and accessories in corrosion-resistant materials appropriate for the environment in which they'll be installed.

Galvanic Corrosion

Galvanic corrosion results from contact between electrochemically dissimilar metals. If you connect bare copper and aluminum — two metals commonly used for electrical wiring and connectors — the aluminum, being the less noble and more anodic of the two metals, will be attacked by galvanic corrosion. However, connectors for code construction are typically tin plated, which prevents galvanic corrosion, and tin-plated aluminum connectors that are CSA Certified as dual-rated may be used safely on either aluminum or copper conductors.

The white rust that forms on galvanized steel is also an example of galvanic corrosion. The more anodic and less noble zinc applied over steel during galvanizing is intended to act as a sacrificial layer to protect the steel underneath. White rust is evidence that the zinc coating is serving its purpose; the appearance of red rust indicates corrosion of the steel.

Corrosion Protection of Electrical Conduit Systems

Corrosion Protection Options

CHEMICAL CATEGORY	CHEMICAL EXAMPLES	PVC	URETHANE	304 STAINLESS STEEL	316 STAINLESS STEEL	POLY CARBONATE	CAST IRON	BRASS	ALUMINUM
		COMPATIBILITY RATING							
Solvents (excluding alcohols and aliphatic)	Acetone, toluene, ketones, etc.	NR	NR	L	L	NR	L	L	L
Fuels	Jet fuel (alcohol based and aliphatic solvent based)	L	L	L	L	L	L	L	L
Plating Solutions	Chrome, nickel, copper, brass, gold, zinc, etc.	L	F	F	F	F	NR	NR	NR
Salts and Alkaline Materials	Caustic soda, caustic potash, alkaline cleaners, etc.	L	F	L	L	F	NR	NR	NR
Mild Acids	Low-concentration hydrochloric, sulfuric, fruit acids, glycolic, citric, etc.	L	S	L	L	S	NR	NR	NR
Strong or High-Purity Acids	Nitric, hydrofluoric, etc.	S	S	F	F	S	NR	NR	NR
Oxidizing Agents	Bleach, chlorine, hydrogen peroxide, etc.	L	S	L	L	S	NR	NR	NR

Chemical Compatibility Legend

SUITABILITY DESCRIPTION	COMPATIBILITY RATING
Rated for all Fumes, Splash & Liquid	L
Rated only for Fumes & Splash	S
Rated for Fumes only	F
Not Recommended	NR

The chart **above** provides a general guide for the end user to choose the most suitable material for corrosion protection. Compatibility with chemical environment should be thoroughly evaluated for each installation.



Delivering value through system solutions based on engineering innovation

Our Value Commitment

Thomas & Betts is committed to helping you meet the challenges of corrosion prevention with electrical solutions, services and systems that deliver value. These include:

T&B Engineered solutions — Our products are designed to perform dependably under conditions such as constant moisture, harsh chemicals, extreme temperatures, high-pressure washdown, ultraviolet exposure, hazardous areas, high-vibration equipment and continuous operation.

Tested reliability — Our products are rigorously tested for use in harsh environments, with proven results in thousands of installations.

Expert support — Thomas & Betts trained sales representatives and technical services experts are available at every stage of a project, from planning and site preparation through construction and MRO.

Training and certification — Thomas & Betts conducts training programs on specific products and systems and works closely with accredited electrical industry associations. Contact us for details.

Product availability — Our industry-leading distributor network assures you of reliable and on-time delivery. This global electrical product support system ensures that our solutions are available when and where you need them.

Product Platforms

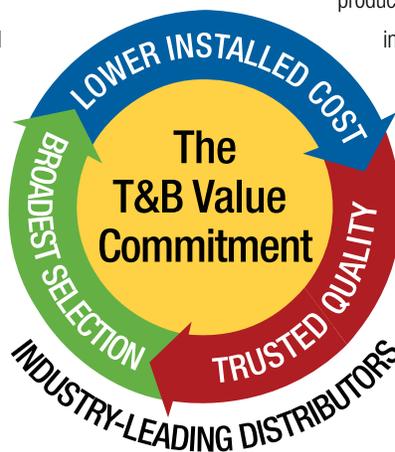
For over a century, Thomas & Betts has provided customers with electrical system solutions to help protect their people and assets, while meeting applicable codes, lowering installed costs and providing overall value.

Wire and Cable Management — Thomas & Betts invented Ty-Rap® Cable Ties in 1958 and continues to lead the industry in innovative wire and cable management solutions. From cable tray systems and electrical boxes to metal framing and meter sockets, end-users depend on Thomas & Betts products to get the job done right and to help reduce costs and installation time.

Cable Protection Systems — Electrical systems exist in harsh and corrosive environments, extreme temperatures and hazardous locations. Thomas & Betts has engineered, tested and certified cable protection solutions for all types of wires, cables and cords, offering long life and safe, reliable, maintenance-free performance, regardless of environmental conditions.

Power Connection and Control — Advanced electronic and electrical systems require signals and controls to be extremely accurate, consistent and reliable. Our power connection and control system solutions make this expectation a reality for your low-, medium- and high-voltage electrical system needs.

Safety Technology — Thomas & Betts is a worldwide leader in hazardous location lighting, emergency lighting and supporting central battery systems. We use state-of-the-art technologies to design our electrical system solutions so they meet global safety and reliability standards.





Thomas & Betts has the products you need for demanding applications in harsh and highly corrosive environments.

Thomas & Betts products for corrosive environments

Carlton®

- PVC Conduit Fittings and Accessories

Hazlux®

- HazCote® Corrosion-Resistant Lighting Fixtures

Ocal™

- OCAL-BLUE® Conduit
- OCAL-BLUE® Elbows
- OCAL-BLUE® Double-Coated GUA Series Conduit Boxes
- OCAL-BLUE® NEMA Type 4X Form 8 Conduit Bodies
- PVC-Coated Strut, Straps and Clamps
- PVC-Coated Liquidtight Conduit Connectors

PMA®

- Flexible Nylon Conduit Systems

Russellstoll®

- DuraGard® Non-Metallic Pin-and-Sleeve Plugs, Connectors and Receptacles

Shrink-Kon®

- Wire and Connector Insulation Products

Sta-Kon®

- Corrosion-Resistant, Nickel-Plated Wire Terminals

Superstrut®

- 316 Stainless Steel, Aluminum, PVC-Coated and Non-Metallic Modular Framing Channel, Pipe Hangers and Beam Clamps

T&B® Cable Tray

- Aluminum, Stainless Steel and Fiberglass Support and Wire Management Systems

T&B® Conduit & Fittings

- Aluminum Liquidtight Conduit and Fittings
- BlueKote® Conduit Bodies
- Non-Metallic Conduit and Fittings
- Ranger® Series Aluminum Liquidtight Cord Connectors
- Stainless Steel Conduit and Cord Fittings
- Type 316 Stainless Steel Form 8 Conduit Bodies

Ty-Rap®

- Coated and Uncoated Stainless Steel Cable Ties
- Cable Ties for Harsh Environments



Corrosion-Resistant Materials

Stainless Steel

Stainless steel is the household name for metal alloys containing at least 10.5% chromium and more than 50% iron. It provides one of the most hygienic surfaces, because it is very easy to clean and its surface has no pores or cracks to harbor bacteria and other impurities. It resists corrosion, withstands high temperatures and is easily maintained.

Type 304 stainless steel contains primarily iron, chromium and nickel. Sometimes referred to as marine-grade, Type 316 stainless steel is similar in formula to Type 304, but molybdenum is added to strengthen the stainless steel against surface pitting and other deterioration.

For electrical conduit systems, stainless steel offers performance that's hard to match, combining high corrosion and chemical resistance with strength, durability, ease of installation and low maintenance. Generally speaking, when compared to using standard galvanized steel conduit in corrosive environments, stainless steel offers three to five times the lifespan for Type 304 and four to eight times the lifespan for Type 316.



PVC-Coated Metals

One method to improve the corrosion resistance of standard galvanized steel or iron, as well as aluminum, is to coat the metal in PVC (polyvinyl chloride). Numerous industry standards, including UL6, ANSI C80.1 and NEMA RN-1, cover the manufacture and testing of PVC-coated conduit systems. Compliance with these standards, combined with installation by a contractor experienced with the special requirements of working with PVC-coated conduit, helps to ensure a quality system that will withstand corrosive environments. In general, PVC-coated metal provides strong resistance to most chemicals and will typically last nearly twice as long as standard galvanized steel conduit in corrosive environments.

Nonmetallic Materials

One way to avoid corrosion is to eliminate the use of metal. While complete elimination of metal is usually not practical in real-world applications, there are plenty of alternative materials for electrical raceway system components and accessories. These include PVC, polycarbonate, nylon, fiberglass and others. PVC conduit and fittings provide excellent protection when wiring systems need to be embedded in concrete, for example.

Because different non-metallic material properties and characteristics vary so widely, you should always check the specifications of any material you're considering for compatibility with the environment in which you're planning to use it. In addition, most nonmetallic materials have limitations for maximum operating temperature that must be taken into consideration to avoid softening or melting of components in high heat areas.



Aluminum

Aluminum provides the advantages of high strength-to-weight ratio, superior resistance to certain corrosive environments and ease of installation. Aluminum typically weighs about 50% less than steel and requires no maintenance after installation. It offers excellent resistance to solvents and fuels, but is not recommended for exposure to other types of chemicals, including salt, bleach, acid or chlorine.



Other Options

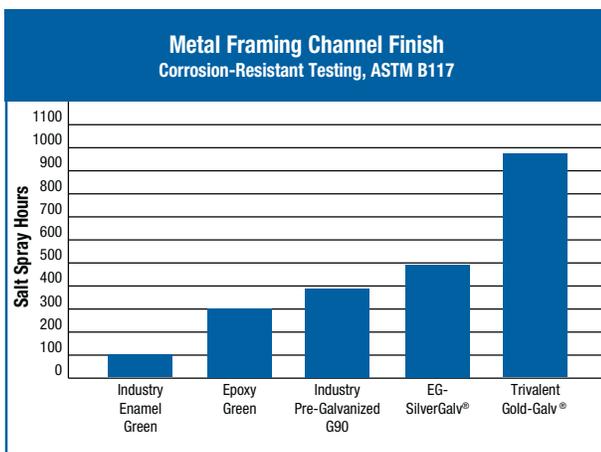
In addition to PVC coating, other protective finishes and coatings have been developed to give galvanized cast iron or steel superior protection against corrosion.



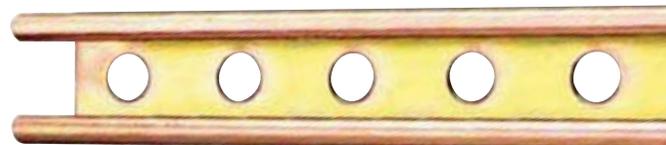
After a 500-hour 5% salt fog test, the standard galvanized iron conduit body has severe salt adhesion and significant rusting.



The BlueKote® conduit body still has a glossy sheen and no evidence of salt adhesion or penetration after the same salt fog test.



As another example, the Thomas & Betts Gold-Galv® finish for Superstrut® Modular Metal Framing is a gold trivalent finish applied over electro-galvanized steel to provide superior corrosion resistance as compared to industry-standard pre-galvanized G90 steel strut. The trivalent Gold-Galv® finish is RoHS (Restriction of Hazardous Substances) compliant.





Harsh Chemicals Used

Chemical Resistance Performance Rating

- A** Best
- B** Better
- C** Good
- D** Poor

	Overall Chemical Resistance	Phosphoric Acid (Crude)	Phosphoric Acid (>40%)	Sodium Hydroxide (50%)	Sodium Chloride	Sodium Carbonate	Sodium Metasilicate	Diethylene Glycol	Sodium Silicate	Hydrogen Peroxide (30%)	Acetic Acid (20%)	Sulfuric Acid (10-75%)	Citric Acid	Fruit Juice	Chlorine, Anhydrous Liquid	Chlorine Water	CLOROX® Bleach
316 Stainless	A	B	D	B	B	A	A	A	B	B	B	D	A	A	C	C	A
304 Stainless	A	D	D	B	B	A	A	A	A	B	B	D	B	A	C	C	A
Aluminum	B	C	C	D	C	D	D	B	A	A	B	D	C	A	D	D	A
Brass	D	N/A	D	D	D	B	N/A	N/A	D	N/A	D	N/A	D	D	D	D	N/A
Cast Iron	D	D	D	D	D	B	A	A	B	B	D	D	D	D	D	N/A	D
Nylon	B	B	B	A	A	B	N/A	A	A	D	D	D	A	A	D	C	A
PVC	A	B	B	A	A	A	A	C	A	A	D	A	B	A	D	A	A
PVC Coated	A	B	B	A	A	A	A	C	A	A	D	A	B	A	D	A	A
Kynar®	A	A	B	A	A	A	N/A	A	A	A	A	A	A	A	A	B	A
Polycarbonate	B	A	A	D	A	A	N/A	B	N/A	A	A	B	A	N/A	C	N/A	N/A

The information in this chart has been supplied to Thomas & Betts by other reputable sources and is to be used ONLY as a guide in selecting equipment for appropriate chemical compatibility. Thomas & Betts does not warrant that the information in this chart is accurate or complete or that any material is suitable for any purpose. Before permanent installation, test the equipment with the chemicals and under the specific conditions of your application. Ratings of chemical behavior listed in this chart apply at a 48-hour exposure period. Thomas & Betts has no knowledge of possible effects beyond this period.

Materials Comparison

Food and beverage processing plants consume over 370,000 tons of stainless steel each year. You can achieve savings up to 33% through careful selection of appropriate materials for your specific application.

T&B® Cable Tray Systems



StarTeck® Fittings



Silver Grip® Tray Cord Fitting



Superstrut® Channel



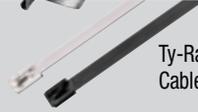
Ty-Rap® Cable Ties



T&B® Liquidtight Fitting



Steel City® Conduit Strap



Ty-Rap® Cable Ties



T&B® Aluminum Liquidtight Fitting



Red•Dot® FS Box



T&B® Aluminum Erickson Cord Fitting



T&B® Aluminum Ranger® Cord Fitting



T&B® Aluminum Chase Hub

NOT RECOMMENDED

NOT RECOMMENDED



PMA® Flexible Nylon Conduit Systems



T&B® Type A Conduit Fitting



T&B® Ranger® Cord Fitting



Ty-Rap® Nylon Cable Ties



Liquatite® Type A Conduit



Liquatite® Type B Conduit



T&B® PVC Liquidtight Flexible Conduit



Carlton® PVC Polar-Gard conduit



PVC-Coated Liquidtight Hub



Ocal™ PVC-Coated Fittings



Ocal™ PVC-Coated Conduit



Hazlux® Lighting Fixtures



T&B® Fittings Type 316 Stainless Steel Form 8 Conduit Bodies

DuraGard® Pin-and-Sleeve Connectors





Stainless Steel Solutions

T&B Fittings

Star Teck® Stainless Steel Cable Fittings For Teck and ACWU Cable

- The industry benchmark for safety, quality construction and ease of installation
- Star Teck® (ST® Series) fittings for challenging industrial environments
- Star Teck XP® (STX® Series) fittings for hazardous environments
- Star Teck Extreme® (STE® Series) range-taking fittings for challenging industrial environments
- Star Teck Extreme XP® (STEX® Series) range-taking fittings for hazardous environments



T&B Fittings

Stainless Steel Conduit and Cord Fittings



- Type 304 stainless steel fittings in straight, 45° and 90° versions for liquidtight flexible metal conduit
- Type 316 stainless steel fittings for Type A liquidtight flexible non-metallic conduit
- Type 316 stainless steel Bullet® hub connectors for rigid or intermediate metal conduit
- Type 304 stainless steel Ranger® liquidtight fittings for flexible cord and cable
- Type 316 stainless steel STAR TECK® fittings for jacketed metal-clad and teck cables
- Type 316 stainless steel Silver Grip® fittings for tray cable and portable cord in hazardous locations

T&B Fittings

Type 316 Stainless Steel Form 8 Conduit Bodies

- Marine-grade Type 316 stainless steel construction in rugged Form 8 design for the harshest environments
- Available in shapes LB, T, TB and the versatile new LU® Universal Conduit Elbow
- Ship complete with covers, gaskets and screws
- Hub sizes from 1/2" to 2"



Superstrut®

Stainless Steel Modular Framing Channel and Accessories



- Available in Type 316 stainless steel
- Innovative Trapnut® Strut Fastener reduces time by up to 43% on retrofit applications
- Full line of fittings and accessories

T&B Cable Tray

Type 316 Stainless Steel Cable Tray



- Ladder, ventilated and solid trough designs
- Full range of classes and associated loading capacities
- Complete selection of fittings and covers

Ty-Rap®

Stainless Steel Cable Ties



- Uncoated Type 302/304 and Type 316 stainless steel
- Also available in polyester-coated Type 316 stainless steel
- Secure, heavy-duty ball locking mechanism

Ocal™
OCAL-BLUE® Conduit



- Hot-dipped galvanized steel or aluminum conduit
- Hot-dipped galvanized threads (steel conduit only)
- Nominal 2 mils blue urethane coating on interior
- Minimum 40 mils PVC coating on exterior

Ocal™
**OCAL-BLUE® Double-Coated
STAR TECK EXTREME®
Fittings**



- Aluminum fittings for jacketed metal-clad and teck cables
- Nominal 2 mils blue urethane coating on both interior and exterior
- Nominal 40 mils PVC coating bonded to exterior
- For use in ordinary and hazardous locations

Ocal™
**OCAL-BLUE® Double-Coated
GUA Series
Conduit
Boxes**



- Ductile iron bodies with O-ring gasketed cast aluminum covers
- Nominal 2 mils blue urethane coating on both interior and exterior
- Nominal 40 mils PVC coating bonded to exterior
- For use in hazardous locations

Ocal™
PVC-Coated Strut, Straps and Clamps



- Steel strut with nominal 15 mils PVC coating
- Full line of PVC-coated beam clamps, pipe straps, conduit hangers and threaded rod also available

PVC-Coated Solutions

Ocal™
**OCAL-BLUE® Double-Coated
UL® Listed Type 4X Form 8
Conduit Bodies**



- UL® Listed Type 4X and NEMA 4X rating for excellent protection against washdown, moisture, rain, ice or snow
- Cast iron bodies and covers coated inside and out with 2 mils blue urethane, then exterior coated with minimum 40 mils PVC in gray (standard), blue, white or custom colors
- Ship complete with cover with integral O-ring seal and stainless steel encapsulated screws
- Available in all popular shapes in hub sizes from 1/2" to 2"



PVC over urethane



Ocal™
**OCAL-BLUE® Standard-
and Large-Radius Elbows**



- Fabricated from Ocal™ PVC-coated conduit
- Factory bent to save time and wasted materials
- Standard radius 30°, 45°, 60° and 90° and large-radius 90° available for immediate shipment
- Special radius and other angles available upon request

Ocal™
**PVC-Coated Liquidtight Conduit
Connectors**



- Genuine T&B® liquidtight conduit fittings — straight, 45° and 90°
- Nominal 40 mils PVC coating bonded to exterior
- Pressure-sealing sleeves protect connections



Nonmetallic Solutions

PMA®

High-Performance Flexible Nylon Conduit Systems

- Wide selection of flexible polyamide conduit provides excellent flexing and fatigue life in extreme operating temperature ranges
- Excellent resistance to highly corrosive chemicals
- Complete line of easy-to-install straight and angled fittings
- IP66, IP68 and IP69K liquid ingress protection



Carlon®

Circuit Safe® JIC Series Nonmetallic NEMA Enclosures

- Excellent resistance to a wide range of corrosive agents, acids, alkalines and salts
- Enclosures with temperature range of -40°C to 85°C
- Manufactured with structural foam thermoplastic, providing high impact strength to eliminate dents and deformations
- High dielectric strength
- Excellent weathering capabilities



Carlon®

PVC Conduit Fittings and Accessories



- One of the most comprehensive lines of PVC conduit and fittings available in the industry
- Full selection of PVC Schedule 40 and 80 elbows, conduit bodies and more
- Polycarbonate enclosures provide excellent corrosion and impact resistance

T&B Cable Tray

Fiberglass Cable Tray



- Ladder, ventilated and solid trough designs
- Full range of classes and associated loading capacities
- Complete selection of fittings and covers

T&B Fittings

Nonmetallic Flexible Conduit and Fittings



- Type A PVC flexible conduit and chemical-resistant, non-burning thermoplastic fittings
- Liqueatite® PVC liquidtight Type B conduit and Bullet® nonmetallic liquidtight fittings
- Variety of other nonmetallic conduit and cord fittings available

Superstrut®

Nonmetallic Modular Framing Channel and Accessories



- Rugged polyester and vinylester construction
- 1½" x 1½" channel dimension reduces installation costs and waste
- Full range of nonmetallic fittings, pipe clamps and hardware

Ty-Rap®

Cable Ties for Harsh Environments



- Weather-, UV- and chemical-resistant polypropylene (black)
- Flame-retardant, low-smoke density, UL94V-0 fluoropolymer (maroon)
- Radiation-resistant, UL94V-0 fluoropolymer (aqua)

Russellstoll®

DuraGard® Waterproof Pin-and-Sleeve Connections



- Not just watertight, but waterproof, mated or unmated
- Tested to 1,000 psi for washdown applications
- Full line of 20 A to 60 A connectors, plugs and receptacles in UL94V-0, corrosion-resistant thermoplastic housings

T&B® Cable Tray

Aluminum Cable Tray



- Ladder, ventilated and solid trough designs
- Full range of classes and associated loading capacities
- Complete selection of fittings and covers

Superstrut®

Gold-Galv® and Aluminum Modular Framing Channel and Accessories



- Gold-Galv® gold trivalent finish provides superior corrosion protection over electro-galvanized steel
- Also available in 6063 extruded aluminum
- Full range of fittings and accessories available in both Gold-Galv® finish and aluminum

Sta-Kon®

Corrosion-Resistant Nickel-Plated Wire Terminals



- High-performance solderless crimp terminals
- Complete line of ring and fork terminals, splices and disconnects
- Vinyl-insulated, nylon-insulated and non-insulated styles
- Variety of corrosion-resistant finishes and materials

Hazlux®

Hazcote® Corrosion-Resistant Lighting Fixtures



- Enclosed, gasketed and sealed fixtures for adverse, wet and marine locations
- Cast aluminum housing with Hazcote® corrosion-resistant Kynar® coating
- Polymeric and powder-coated aluminum styles also available
- Fixtures available for both ordinary and hazardous locations

Aluminum and Other Solutions

T&B® Fittings

Star Teck® Teck Cable Fittings

- Star Teck®, Star Teck Extreme®, Star Teck XP® and Star Teck Extreme XP® aluminum and PVC-coated fittings



T&B® Fittings

Aluminum Liquidtight Conduit and Fittings



- Liquatite® conduit features a lightweight aluminum core with sunlight-, acid- and oil-resistant PVC jacket
- Aluminum liquidtight fittings available in straight and 90° configurations
- Fittings available with optional Revolver® rotating ground lug

T&B® Fittings

Ranger® Series Aluminum Liquidtight Cord Connectors



- Available in straight or 90° designs
- Designed to accept a wide range of cables, offering nine fittings that cover cord ranges from .125" through .950"
- Slotted design gland nut to accommodate securing in tight spaces

T&B® Fittings

BlueKote® Conduit Bodies

- Triple-layer protection over ferrous conduit body — including two layers of epoxy coating — stops corrosion in its tracks
- BlueKote® internal surface coating provides an additional layer of corrosion protection and reduces force required to pull wires



- Available in Forms 7 and 8 in all popular conduit body shapes and sizes — plus the new LU® Universal Conduit Elbow
- Your choice of iron or stainless steel covers



Shrink-Kon®

Wire and Connector Insulation Products

- Protect against moisture, corrosion and abrasion
- Heavy-, medium- and thin-wall heat-shrinkable tubing
- Self-fusing insulation tape



Head Office

Thomas & Betts Limited
700 Thomas Avenue
Saint-Jean-sur-Richelieu, Quebec J2X 2M9

Tel.: (450) 347-5318
Fax: (450) 347-1976

Regional Sales Offices

Atlantic Provinces

Thomas & Betts Limited
106 Chain Lake Drive, Unit 2C
Halifax, Nova Scotia B3S 1A8

Tel.: (902) 450-1307
Toll Free: 1-877-862-4357
Fax: (902) 450-1309

Quebec

Thomas & Betts Limited
7900 Taschereau Boulevard
Building D, Suite 108
Brossard, Quebec J4X 1C2

Tel.: (450) 466-1102
Toll Free: 1-800-465-1399
Fax: (450) 466-1163

Ontario

Thomas & Betts Limited
2000 Argentia Road
Plaza 5, Suite 500
Mississauga, Ontario L5N 2R7

Tel.: (905) 858-1010
Toll Free: 1-877-291-7771
Fax: (905) 858-1080

Manitoba / Saskatchewan

Thomas & Betts Limited
6531-148th Street, #1
Surrey, British Columbia V3S 3C5

Tel.: (604) 598-9811
Toll Free: 1-866-540-8220
Fax: (604) 598-9840

Alberta

Thomas & Betts Limited
4836 Eleniak Road
Edmonton, Alberta T6B 2S1

Tel.: (780) 424-7092
Toll Free: 1-888-664-5666
Fax: (780) 424-7093
Toll Free: 1-866-424-4082

British Columbia

Thomas & Betts Limited
6531-148th Street, #1
Surrey, British Columbia V3S 3C5

Tel.: (604) 598-9811
Toll Free: 1-866-540-8220
Fax: (604) 598-9840

Visit the Thomas & Betts world of electrical product solutions

Visit our web site for more information about Thomas & Betts solutions and our newest products. For a user-friendly catalogue and competitive part number search, application and technical support and other useful information, go to: www.tnb.ca

Industry codes and specifications

All Thomas & Betts products meet or exceed applicable industry specifications or codes detailed in the appropriate Thomas & Betts product literature.



Online CAD library

Thomas & Betts offers free download of two- and three-dimensional CAD models of many of its products in more than 90 native CAD formats at: www.tnb.com/cadlibrary



All information and specifications contained in this catalogue are subject to change due to engineer design, errors and omissions. Illustrations and diagrams within this catalogue may vary from actual products.

Thomas & Betts. Your best connection for innovative solutions.

Wire & Cable Management • Cable Protection Systems • Power Connection & Control • Safety Technology

Thomas & Betts