

# Electrical Solutions for Commercial and Institutional Facilities

Thomas & Betts. Your best connection for innovative solutions.





# Delivering value through system solutions based on engineering innovation

The

**T&B Value** 

Commitment

TRUSTED

# **Our Value Commitment**

Electrical installers for commercial and institutional facilities must meet demanding project schedules while maintaining quality and safety and improving their profitability. Thomas & Betts is committed to helping you meet these challenges 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, OWER INSTALLED COS 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 TRUST 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**

Wire and Cable Management — Thomas & Betts invented the Ty-Rap® cable tie in 1958 and continues to lead the world in innovative wire and cable management. OEMs, panel builders, contractors and maintenance personnel depend on our electrical boxes, cable ties, weatherproof enclosures, cable tray and modular metal framing to do the job right and help reduce installation time and costs.

Cable Protection Systems — Thomas & Betts

Cable Protection Systems provide unsurpassed protection for wire and cables in the most

demanding applications. They encompass industry-leading flexible conduit systems, PVC-coated conduit and fittings recognized as the standard in oil and

gas applications and explosion-proof conduit systems meeting worldwide standards for hazardous locations.

# Power Connection and Control -

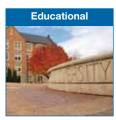
For reliable connection and intelligent control of electrical power, Thomas & Betts' mechanical and compression connectors,

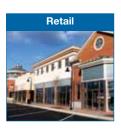
grounding products, medium-voltage cable accessories, high-voltage fuses, vacuum interrupters, reclosers and capacitor switches are specified worldwide in the industrial, construction and utility markets.

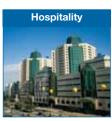
**Safety Technology** — Protecting lives and property requires state-of-the-art technology. Thomas & Betts is a worldwide leader in emergency lighting and supporting central battery systems, and lighting for hazardous locations. Our Safety Technology products extend the life of your electrical system and protect your employees and assets.

# Commercial and Institutional Facilities

















# Electrical System Issues for Commercial and Institutional Facilities



- Continuous Operation & Sustainability
- **Grounding & Bonding**
- **Safety**
- Power Quality,
  Efficiency & Reliability
- Liquid Ingress Protection



# **Total Project Cost Reduction**

The single largest expense for an electrical contractor on any commercial construction project is labor. While it is important to have experienced electricians installing sophisticated electrical systems, much of their time is spent on labor-intensive rough-in tasks, assembling the thousands of components that come together in a wall or ceiling to route, terminate, support and protect a complex commercial or institutional electrical system. Thomas & Betts offers innovative solutions to reduce installation costs.



# **IBERVILLE**

# **Boxes and Fittings**

- Industry's most complete selection of steel boxes
- · Labor saving SSX boxes with mounting strap for steel stud installations and integral additional support bracket
- Economically priced fittings for cable and all types of conduit

# **marrette**°

# **Wire Connectors**

 833™ wide range, twist-on winged wire connector - one size accommodates the majority of wire combinations

# **Carlon**<sup>®</sup>

# **ENT (Electrical Nonmetallic Tubing) System**

- Cut installation time as compared to rigid PVC conduit
- · Material-handling savings with lightweight, flexible coils
- · Time savings with quick connect mud box assemblies and fittings

# The Fast Track in Cable Management

- No complicated lavouts customize cable infrastructures on site
- · Ideal for light power, data and voice cabling
- Any lay-out can be achieved with a piece of tray and a wire cutter
- Patented QuikLok™ tray profile connects straight lengths of tray at record speed with no additional components or tools
- · Easy reconfiguration to meet future needs

# **Blackburn**®

# **Compression Connectors**

- Featuring the Color-Keyed® Compression System that ensures proper connections
- Boost efficiency with fewer crimps that yield superior terminations
- Ergonomic compression tools speed up installation and ensure operator comfort



Iberville® Steel Boxes



Marrette® Wire Connectors



Carlon® **ENT System** 





ExpressTray® Wire Basket Tray

Blackburn® Compression Connectors



# Thomas & Betts products for total project cost reduction

# Blackburn®

- Compression Connectors
- Motor Lead Disconnects
- Ergonomic Compression Tools
- Standard and HEX-FLEX® Crimp Die Systems

# Carlon®

• ENT System

# Iberville®

- Boxes and Covers
- Fittings

# Marrette®

• Twist-On Wire Connectors

#### Reznor

• Heating, Ventilation and Cooling Systems

#### Superstrut<sup>®</sup>

- Cobra® One-Piece Pipe and Cable Clamp
- QuikClamp® Conduit Clamp
- Trapnut® Strut Fastener

# T&B® Cable Tray Systems

- SpeedTray™ Light-Duty Aluminum Cable Tray
- ExpressTray® Light-Duty Steel Wire Basket Tray



# **Continuous Operation & Sustainability**

Technology and regulatory evolution are driving change throughout our commercial and institutional facilities. Thomas & Betts is focused on providing innovative electrical solutions that are not only highly durable and maintain integrity over time, but are also flexible to efficiently accommodate future demands.



# rededot / Carlon

# Weatherproof While-in-Use Covers

- Durable protection for outdoor electrical outlets
- Ideal for parking garage power support
- · Complies with CEC standards
- Rugged metal covers provide long service life and superior protection

# Steel City®

# **High-Capacity Floor Boxes**

- Durable, high-capacity, in-floor electrical solutions, such as the 68-HP and 665-AV2, provide sustainability to meet current and future power and data wiring needs
- Also allow for running of pre-terminated low-voltage cable
- Save time by offering the highest quality BIM models for all in-floor electrical and low-voltage needs in a hospital
- All-metal cover options, including stainless steel, aluminum and brass, resist damage and provide durability in high-traffic areas

# **REZNOR**<sup>®</sup>

# **Heating-Cooling Make-Up Air Systems**

- · Outside air dehumidification
- · Hotel and motel corridor air conditioning
- Medical facility replacement air for waiting rooms, surgery centers and corridors

# elastimold

# Solid-Dielectric Switchgear

- · Shielded, solid-dielectric switchgear
- · Compact and lightweight
- Uses no oil or gas

# **Separable Connectors**

- Shielded, deadfront, high-voltage cable connector systems
- Underground cable accessories for 5 to 35kV, including elbows, joints and terminations
- Underground surge arresters



Red Dot®
Weatherproof
While-in-Use Covers



Steel City® 68-HP Floor Boxes



Reznor® Heating-Cooling Make-Up Air Systems



Elastimold® Solid-Dielectric Switchgear



Elastimold® Separable Connectors



# Thomas & Betts products for continuous operation and sustainability

# Carlon®

• PVC Conduit and Fittings Systems

# Elastimold®

- Solid-Dielectric Switchgear
- Separable Connectors

#### Emergi-Lite®

• EMEX Central Battery Systems

# Iberville®

- Steel Boxes and Covers
- Fittings
- Roughing-In Products

## Lumacell®

• ARGES Central Battery Systems

# Marrette®

• Twist-On Wire Connectors

## Ready-Lite®

• Central DC Battery Systems

## Red Dot®/Carlon®

• Weatherproof While-in-Use Covers

#### Reznor®

• Heating, Ventilation and Cooling Systems

# Shrink-Kon™

• Cable, Wire and Connector Insulation Products

## Sta-Kon®

- Nylon, Vinyl and Non-Insulated Terminals
- Comfort Crimp® Compression Tools

# Steel City®

- 68-HP Floor Boxes
- 665-AV2 Floor Boxes

# T&B® Cable Tray Systems

- Conventional Metallic and Nonmetallic Cable Tray Systems
- SpeedTray<sup>™</sup> Light-Duty Aluminum Cable Tray
- ExpressTray® Light-Duty Steel Wire Basket Tray



A stable, reliable power supply is the backbone of any building, plant or facility. Power failure or instability as the result of inadequately designed systems can cause major safety, production and operational concerns. Thomas & Betts offers a wide range of proven bonding and grounding products and tools for commercial and institutional applications, designed to ensure superior electrical system performance and reliability.



# **Blackburn**®

# **Grounding Systems**

# E-Z-Ground® Compression Connectors

 High-conductivity copper and bronze connectors for direct burial, OEM and telecom applications

# **Exothermic Welding Systems**

 Simple, self-contained systems to form high quality electrical connections

# **Mechanical Grounding Connectors**

- High-strength split-bolt connectors for copper-to-copper connections
- Service post connectors for steel structures, fence posts or transformers using one or two cables

# **Grounding Components**

- Ground rods
- · Metallic gradient control mat
- Electrode boxes
- · Compression tools and dies

# T&B° Fittings

# **Grounding Fittings**

- Bond Star® grounding lock-nut for use in data and control applications sensitive to floating voltage differences
- XD expansion/deflection coupling for rigid conduit with internal bonding strap
- Revolver® grounding ring allows for flexible positioning

# **IBERVILLE**

# **Grounding Fittings**

- Grounding bushings
- · Water pipe and ground rod connectors



# **Flexible Braided Connectors**

· A wide variety of grounding and bonding straps



Blackburn® Ground Rods



Blackburn® E-Z-Ground® Compression Connectors



Blackburn® Mechanical Grounding Connectors



**T&B® Fittings**Revolver® Grounding
Fittings



Iberville®
Water Pipe
and Ground Rod
Connectors



Boreal® Flexible Braided Connectors



# Thomas & Betts products for grounding and bonding

# Blackburn®

- E-Z-Ground® Compression Connectors
- Mechanical Grounding Connectors
- Exothermic Welding System
- Metallic Gradient Control Mat
- Ground Rods

## Boreal®

• Flexible Braided Grounding Connectors and Bonding Jumpers

#### lharvilla

- Grounding Bushings
- Water Pipe and Ground Rod Connectors

#### Sta-Kon

- Nylon, Vinyl and Non-Insulated Terminals
- Shield-Kon® Coaxial Grounding Connectors
- Comfort Crimp® Compression Tools

# T&B® Fittings

- Revolver® Grounding Fittings
- Bond Star® Grounding Lock-Nut
- Star Teck® and Star Teck XP® fittings for Jacketed Metal Clad and Teck Cable
- XD Expansion/Deflection Coupling



Thomas & Betts is committed to bringing to market solutions that provide a safer installation as well as a safer working or living environment. As an active participant in Canadian Electrical Code and National Building Code of Canada technical committees, as well as being a member of Electro-Federation Canada, Thomas & Betts helps drive industry-wide code changes or updates in design standards to support our commitment to industry-wide safety.



# **Emergency Lighting Systems**

- Energy-efficient and aesthetic concealed or surfacemount emergency lighting for healthcare facilities
- Energy-efficient, modern-design exit signage
- Custom signage with special wording configurations

# Nexus® Emergency Lighting Management System

- · Remote monitoring and control from one central unit
- Enhances safety while decreasing maintenance costs
- · Can contribute to LEED credits

# **Carlon**®

# Hal-Free Riser-Gard TM

- Halogen-free nonmetallic flexible raceway for use in riser and general purpose applications
- Ideal for applications in tunnels, laboratories and high-tech environments



# Ty-Rap

# **High-Performance Cable Ties**

- High-performance cable ties available in materials suitable for providing long-term premium support in any environment
- Plenum-rated for use in air-handling spaces above ceilings and under floors
- Weather-resistant for rooftops and other outdoor applications
- · Stainless steel for corrosive environments
- Ergonomic installation tool

# T&B° Fittings

# Liquatite® Flexible Conduit

- Type ZHLA and ACEA non-halogen, low-smoke, flame-retardant flexible conduits with metallic inner core for mechanical protection
- Ideal for installation in confined public areas

# Steel City®

# Fire Alarm Boxes and Fittings

 Bright red finish for long-lasting visibility in even the harshest environments



Nexus®
Emergency Lighting
Management System



Carlon® Hal-Free Riser-GardTM Raceway



**Ty-Rap®**High-Performance
Cable Ties



Steel-City® Fire Alarm Boxes



# Thomas & Betts products for safety

# Carlon®

 Hal-Free Riser-Gard™ Halogen-Free Nonmetallic Flexible Raceway

# Emergi-Lite®

- Emergency Lighting and Exit Signs
- Nexus® Emergency Lighting Management Systems

#### E-Z-Code<sup>©</sup>

 Danger/Warning Labels and Signs, Industrial/Wire Markers, Barricade/Burial Tape

## Lumacell®

- Emergency Lighting and Exit Signs
- Nexus® Emergency Lighting Management System

#### Marrette®

Luminaire disconnects

# Ready-Lite®

- Emergency Lighting and Exit Signs
- Nexus® Emergency Lighting Management System

## Steel City®

• Fire Alarm Boxes and Fittings

# Superstrut®

Seismic Bracing System

# T&B® Fittings

• Liquatite® ZHLA and ACEA Non-Halogen Flexible Conduit

## Ty-Rap®

- High-Performance Cable Ties
- Ty-Rap® Tote Dispensers and Ergonomic Installation Tools
- Flame-Retardant Cable Ties
- Halar® Cable Ties for Air Handling Spaces



# Power Quality, Efficiency & Reliability

Thomas & Betts power solutions provide peace of mind for building occupants that comes from knowing equipment is safe and secure from the consequences of unpredictable power. By designing the world-class standard in power equipment, Thomas & Betts has become a leader in custom-designed digital static transfer switches and power distribution systems.



# elastimold

# **Switchgear and Cable Accessories**

- Solid-dielectric, maintenance-free switchgear for application in vault, riser pole and pad mount installations
- A full line of loadbreak and deadbreak separable connectors, cable joints and cable terminators
- Developed for 5 to 35 kV distribution systems

# MICROLECTRIC®

# **Meter Sockets**

- · Weatherproof under the NEMA Type 3R standard
- CSA-approved for copper or aluminum conductor
- Designed to accept conduit hubs up to 2-1/2 inches
- Four and five jaw configurations
- Available for overhead, underground or combined commercial services

# **♦** JOSLYN

# **Overhead Switches and Reclosers**

- · Capacitor switches for distribution and substations
- Reclosers
- Interrupter accessories for disconnect switches

# © EMERGI-LITE® / \$\times \times \tim

# **Central Battery Systems**

- Fully automatic charger, battery and specified transfer and distribution features
- Offer all of the advantages of a central location for maintenance with full supervision of all operating functions









Microlectric® Meter Sockets

Joslyn Hi-Voltage™ Recloser

Emergi-Lite®/ Lumacell®/ Ready-Lite® Central Battery Systems



# **Thomas & Betts products** for power quality, efficiency and reliability

# Blackburn®

- $\bullet \ E\text{-}Z\text{-}Ground^{^{\text{\tiny{TM}}}} \ Compression \ Connectors$
- Color-Keyed® Compression Lugs and Splices
- Exothermic Welding System
- Ground Rods

## Elastimold®

- High-Voltage Separable Connectors
- and Solid-Dielectric Switchgear

# Emergi-Lite®

• EMEX Central Battery Systems

# Fisher Pierce®

• Faulted Circuit Indicators

Current-Limiting Fuses

# Homac<sup>®</sup>

- Copper Flood-Seal Compression Splice Kits
- Substation Connectors

# Joslyn Hi-Voltage™

• Capacitor Switches and Air Disconnect Switches

ARGES Central Battery Systems

# Microlectric®

- Meter Sockets
- Pole Line Hardware and Accessories

# Ready-Lite®

• Central DC Battery Systems

• Computer System Plugs, Connectors and Receptacles



Allowing liquid to migrate into electrical components can have a significant impact on the reliability and longevity of electrical systems, resulting in premature deterioration, unscheduled maintenance and unplanned expense.

Thomas & Betts offers a complete catalogue of components specifically designed to protect electrical equipment and systems from the corrosion and damage caused by liquid ingress.



# **PVC Fittings and Flex Conduit**

- One-piece fitting body design requires no disassembly of components for installation
- · Liquidtight flexible nonmetallic conduit
- · Conduit is non-conductive, non-corrosive and resistant to oil, acid, ozone, and alkaline

# **T&B** Fittings

# Stainless Steel, Aluminum, Nonmetallic Fittings, Flexible Metallic and Nonmetallic Conduit

- Liquatite® flexible metallic PVC jacket conduit
- Star Teck® type 316 stainless steel fittings up to 2-inch hub sizes.
- PVC-coated portable cord, cable and conduit fittings offered in all sizes
- Silver Grip® fittings in stainless steel and aluminum for liquidtight installations when using portable cord



# Code-Keeper® Weatherproof While-in-Use Covers

- Superior weather and liquid ingress protection
- · Extra-duty metallic weatherproof covers
- Alloy A380 aluminum and stainless steel springs for increased corrosion resistance and durability







T&B® Fittings Stainless Steel, Aluminum. Nonmetallic Fittings, Flexible Metallic and Nonmetallic Conduit



Red•Dot® Code-Keeper® Weatherproof While-in-Use Covers



Russellstoll® Waterproof Pin and Sleeve Interconnections



# **Exit Signs and Emergency Lighting** for Wet Locations

- NEMA-4X certified for wall or ceiling mount
- NSF-certified for food processing
- High-efficiency MR16 lamps up to 12V, 12W or white LED emergency lights
- · Comes standard with tamperproof screw





Emergi-Lite®/ Lumacell®/ Ready-Lite® Exit Signs and Emergency Lighting for Wet Locations



# Thomas & Betts products for liquid ingress protection

# Carlon®

- PVC Fittings
- Flex Conduit

# Emergi-Lite®

• NEMA-4X Certified Emergency Lighting Systems

#### Homac

- Flood-Seal® Insulating Covers
- Flood-Seal® Multi-Port Connectors

#### Iberville®

- Liquidtight Fittings
- EMT Raintight Fittings

#### Lumacell

• NEMA-4X Certified Emergency Lighting Systems

#### Ocal®

Conduit Bodies with NEMA-4X Cover

#### PMA®

• Flexible Nylon Conduit Systems

# Ready-Lite®

• NEMA-4X Certified Emergency Lighting Systems

#### Red • Dot®

• Code-Keeper® Weatherproof While-in-Use Covers

# Reznor®

• EWHB Wet Environment/Washdown Area Heater

## Russellstoll

Waterproof Pin and Sleeve Interconnections

# Shrink-Kon™

- Self-Fusing Insulation Tape
- Heat-Shrinkable Tubing

## T&B® Fittings

- BlueKote® Conduit Bodies
- Cord Connectors
- Liquidtight Fittings
- Stainless Steel Liquidtight Fittings
- Type A Conduit Connectors

# Ty-Rap®

- Cable Ties
- Deltec® Outdoor Fastening System



# **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 for use in commercial and institutional facilities meet or exceed applicable industry specifications or codes detailed in the appropriate T&B 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.

Paper Logo Here.

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## **Atlantic Provinces**

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

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 Fleniak 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

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Thomas & Betts. Your best connection for innovative solutions.

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

