

APPLICATION BROCHURE

Installation Products

Total project cost reduction



Installation Products Division

- Wire and cable management
- Cable protection systems
- Boxes and fittings
- Connectivity and grounding
- Medium voltage

Thomas & Betts is now part of ABB's Installation Products Division, but our long legacy of quality products and innovation remains the same. From connectors that support wire buildings on Earth to cable ties that help put machines in space, we continue to work every day to make, market, design and sell products that provide a smarter, safer and more reliable flow of electricity, from source to socket.

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Depending on the scope of the project, keeping a handle on total costs can be a daunting, but always necessary, task.



ABB can help you realize significant project cost savings

ABB offers a wide array of electrical products designed to provide customers with significant and measurable project cost savings:

Labor savings: Industry-leading products utilize pre-assemblies, ergonomic designs and innovative technology to help our customers reduce their total installation and operating costs.

For example, Steel City® Pre-Fab Components are designed to significantly reduce project costs during the rough-in phase of a project. In addition, Steel City® Pre-Fab saves more money by shipping pre-assembled electrical rough-in products directly to a job site.

Material savings: Special ARRA and Buy America assemblies can help reduce overall material costs as much as 40%.

Logistics savings: ABB will work with you to streamline how your order is packaged, labeled and delivered to ensure the most efficient process possible.

Process improvements: ABB is a leader in developing and implementing Web-based catalogs, CAD tools and BIM models to get the job done efficiently.

Your challenge: cutting costs without cutting corners

Today's competitive environment requires everyone to work harder – and smarter. Every aspect of the way we do business must be examined to identify and eliminate waste.

Whether it's labor, material, logistics or the process, managers must look for the most efficient way to get the job done. At the same time, codes are becoming increasingly stringent, allowing little room for deviation.



Designed to perform

Installation Products business line

Thomas & Betts is now ABB Installation Products business line, but our long legacy of quality products and innovation remains the same. From connectors that help wire buildings on Earth to cable ties that help put machines in space, we continue to work every day to make, market, design and sell products that provide a smarter, safer and more reliable flow of electricity, from source to socket.

Wire and cable management

- Industry's broadest range of innovative solutions for bundling, securing and routing wire and cable
- Designed to perform in the most demanding conditions
- Overview in fastening, bundling and managing wires
- For electrical installers, panel builders, OEM professionals and many more

Connectivity and grounding

- Covering IEC/EN, NFC, UL and NFPA projects
- Reliable and high quality manufactured components
- Low installed costs through intelligent design
- Design services support and technical advice
- Protecting people, assets and electrical equipment

Boxes and fittings

- Highest quality, most versatile, innovative range of boxes, fittings and enclosures
- Comprehensive line of boxes – metallic/non-metallic, indoor/outdoor, weatherproof and floor
- Fast and flexible enclosure solutions
- Specified in the industrial, construction and utility markets

Cable protection systems

- Unsurpassed protection for wire and cables in the most demanding applications
- Customized specific solutions – through innovation & material science expertise
- Conform all international certifications – such as IRIS and end user approvals
- Comprehensive support service – worldwide close to the customer
- Over 12.000 high performance products – for outdoor & indoor, static & dynamic

Medium voltage

- Intelligent control and reliable connection of electrical power
- Reducing maintenance, repair and operational costs in the field – overhead or underground
- Cable accessories, apparatus, distribution and substation connectors
- Specified Industrial, construction and utility markets



ABBs' broad range of high-quality electrical products are designed to provide substantial value and significant project and material cost savings.

Total project cost reduction

T&B® Fittings



T&B® Fittings

LU® universal conduit elbow

- The LU® doesn't derate a conduit system through the wire fill rating of the fitting, making it possible to use smaller trade size conduit and significantly reduce costs
- 4-to-1 SKU reduction – replaces LL, LR, LB and C conduit bodies
- Functions as three elbows in one, going almost anywhere a 90° bend is required
- Radius is the same as the bent conduit
- Angles cover port – easier wire pulling and uses standard covers
- Available in BlueKote® and stainless steel versions
- UL® Listed as an enclosure – splices allowed inside the LU®

T&B® Fittings – Non-metallic expansion / deflection couplings

- Provides a fast, flexible and safer connection for rigid PVC conduit
- Accommodates axial or parallel deflection of up to ¾" and angular deflection of up to 30° from relaxed position

Blackburn® Motor lead disconnects



- Cut labor time in half with the only pin-spring and insulation system in the market
- Quick change out of electric motors with no bolting, taping or loose connections
- Featuring the Color-Keyed® compression system that ensures proper connections

Blackburn® HEX-FLEX® Die system



- Reduces labor by providing a superior termination with fewer crimps
- Featuring the Color-Keyed® compression system that ensures proper connections

Blackburn®

Blackburn® Comfort Crimp® tools

- Designed for ergonomic ease of use and efficiency
- Featuring the Color-Keyed® Compression System that ensures proper connections

Blackburn® Compression connector and tool systems

- Reduce installation cost with a minimum amount of crimps and effort required to install
- Featuring the Color-Keyed® compression system that ensures proper connections



Total project cost reduction

Kindorf®

Kindorf® Modular framing system, fast set beam clamp and trapnut® strut fastener

Engineered electrical support system saves time, increases efficiency and cuts material costs

- **Labor savings**

Kindorf® Modular Metal Framing System can cut installation time by more than 40% over typical mechanical framing systems by Utilizing a series of proprietary innovative hardware, such as the Trapnut® Strut Fastener, Trap-Eze™ Connector, Cobra® Cable and Pipe Clamp, Fast Set Beam Clamp and unique punched channel

- **Material savings**

Fewer fittings are required on job site due to unique 1½ design

- **Reduced waste**

Integral and easy to use measuring system means exact cuts and less scrap

- **Sustainable finish**

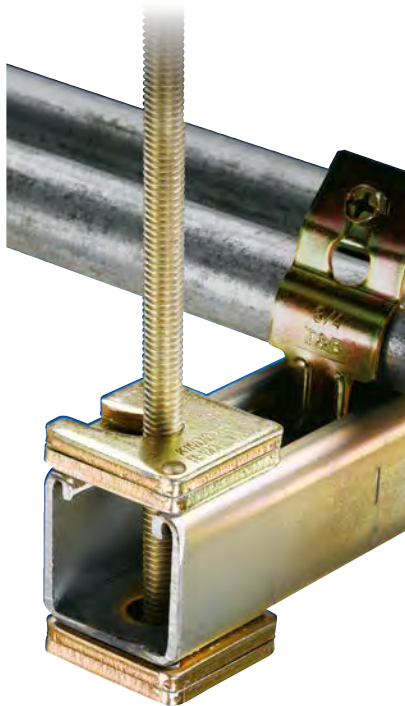
Trivalent Chromium finish has over twice the corrosion resistance the typical pregalvanized product, minimizing callbacks in more corrosive environments. Finish also saves on inventory management, as Kindorf® will unify with other products

Fast Set Beam Clamp

- Installs quicker than standard beam clamps due to the toolless design
- Threaded rod secures the clamp, eliminating an entire step in the process

Trapnut® Strut Fastener

- Reduces installation time by up to 43% as compared to traditional methods for many mechanical framing assemblies
- Unique scissor action closes at any point on the rod – no need to thread it on from the end
- Locking pin holds the Trapnut® fastener securely in the desired position



Ty-Rap®

Ty-Rap® Hand-held installation tools



- Designed for ergonomic ease of use and efficiency
- Ty-Rap® metal barb cable ties often outperform other brands in key areas such as high-heat environments, UV exposure and cold weather

Ty-Rap® Ty-tote® cable tie dispensers



- Allow for quick access to Ty-Rap® fastening products
- Heat Reactive ties offer visible confirmation of overheating, saving time and improving identification of potential risks

Sta-Kon®

Sta-Kon® Comfort crimp® tools



- Designed for ergonomic ease of use and efficiency

Total project cost reduction

Carlon®

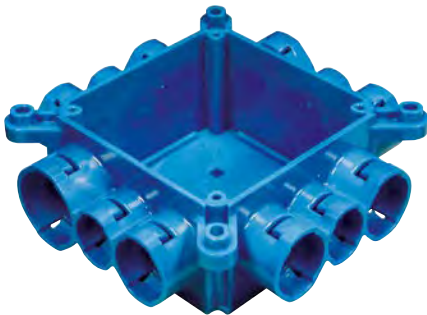
Carlon® Adjust-A-Boxes

- Eliminate set back rework and spacers
- Make installing floor outlets fast and easy by providing maximum installation flexibility
- Feature an adjustment screw designed to adjust the box from 0" to 1½" by simply turning the screw clockwise or counterclockwise, providing a flush mount every time
- Available with brass cover (B234BFBB) or stainless steel cover (B234BFSS)

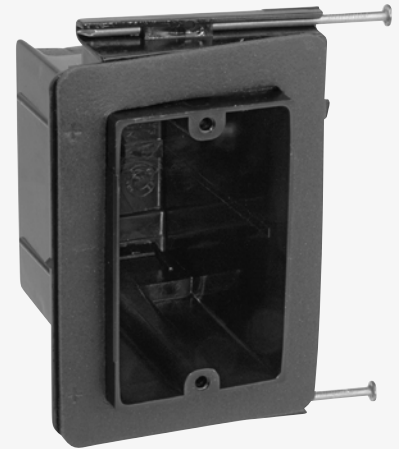


Carlon® ENT (Electrical Non-Metallic Tubing) System

- Cut installation time as compared to rigid PVC conduit
- Material-handling savings with lightweight, flexible coils
- Time savings with Quick Connect fittings, padmount or overhead transformers



Carlon® Vapor-proof boxes



- Reduce installation costs while ensuring a vapor-tight home
- High-strength polycarbonate construction – will not shatter when cold or distort in heat
- V-clamps provide self-clamping cable entry (multigang and fan/fixture box)
- ½" offset flange to ensure a flush fit in ½" drywall
- Angled side nails for rapid installation
- Pre-drilled flanges for additional mounting options
- Feature a drywall flange covered with a foam gasket and additional gaskets over the cable entry point
- The gaskets provide a draft-tight seal, preventing the free flow of air through the box, and eliminate the need for caulking and sealants.
- Help control heating costs in the winter and cooling costs in the summer

Sta-Kon®

Sta-Kon Dragon Tooth® insulation-piercing connectors

- Reduce labor by eliminating the need to strip conductors of insulation
- Reduce labor by eliminating the need to use agents such as acid to remove coatings on conductors like magnet wire can be installed in seconds
- Require minimal training for installation
- Penetrate all standard copper and aluminum magnet wire insulations
- Perfect for heavy Formvar, polythermaleze, polyester and polyurethane insulations



Total project cost reduction

HOMAC®

Homac

Lay-in type connectors

- Homac® offers a complete line of EZ-Keeper® lay-in type connectors for transformer applications that save time and labor
- Cables are easily placed into the keeper slot
- Minimize the hassle and hazards of having to force cables into the closed cable ports found on conventional mechanical connectors
- Require only a cable stripper and Allen hex wrench – no crimping tools or dies or other special tools are needed for installation
- Dual-rated for use with aluminum or copper cable
- Ball-bottom screws ensure even force distribution in the cable/connector interface



Homac

Flood-Seal® splicing kits

- RRK Flood-Seal® Splicing Kit's one-piece cover and connector allow for quick installation over other industry methods
- Radiating rib design dissipates heat, centers the watertight insulating cover and seals perfectly every time
- Rubber Flood-Seal® insulating cover fits snugly for maximum heat dissipation, no tape required
- Compact size allows you to install connectors on up to 4/0 AWG cable in only 10" of space using UT 3 M or UT 3 tools
- Prefilled with oxide inhibitor to prevent oxidation and keep out moisture
- Exceed ANSI C119.4 requirements and are RUS Accepted



PMA

PMA

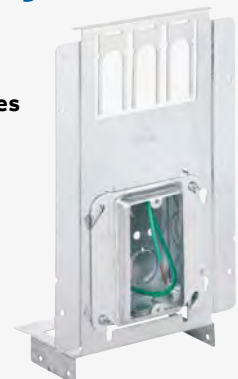
Flexible nylon conduit systems



- Snap-in installation provides a quick and secure connection, saving time and money
- PMA® has nylon conduit systems specifically designed for extreme-temperature environments
- Conduits for technically demanding applications and special requirements
- Conduit sizes range from 6mm to 125mm diameters, from lightweight to heavyweight, and pliable to highly flexible
- Standard colors are black and gray
- Many conduits are specially approved, e.g. CSA, UL® Recognition, NF, SNCF, DB, etc.

Steel City®

Steel City Boxes, covers and accessories



- Designed to significantly reduce labor during the rough-in phase of a project
- Steel City® Pre-Fab reduces labor by up to 40% for the rough-in phase of the project

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 needed to come together in a wall or ceiling to route, terminate,

support and protect a complicated commercial and institutional electrical system. Material handling aspects of the job – getting all the required components to the proper location on the jobsite – can be a time-consuming, labor-intensive process as well.

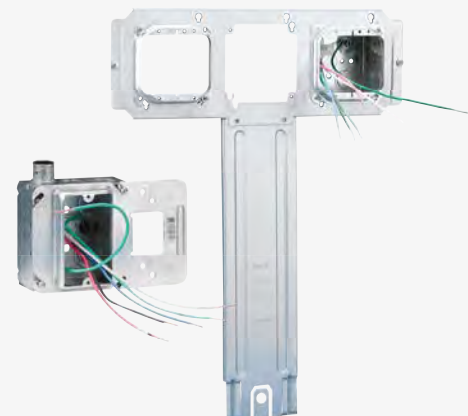
Steel City®

Steel City® Prefabricated Electrical Rough-In Solutions dramatically reduce the amount of time and labor required for the rough-in phase of the project. Instead of cartons of individual components being transported, stored and assembled all over the jobsite, Steel City® Pre-Fab offers custom pre-assembled rough-in components shipped from our factory directly to the jobsite. They can even be labeled with the exact location (i.e. building, room, wall, etc.) where they will be installed to ensure an efficient and streamlined installation. With a single SKU (assembly), an electrician can install one to even six locations for power and data with all accessories (pigtailed, fittings, etc.) in a matter of seconds. Multiply that

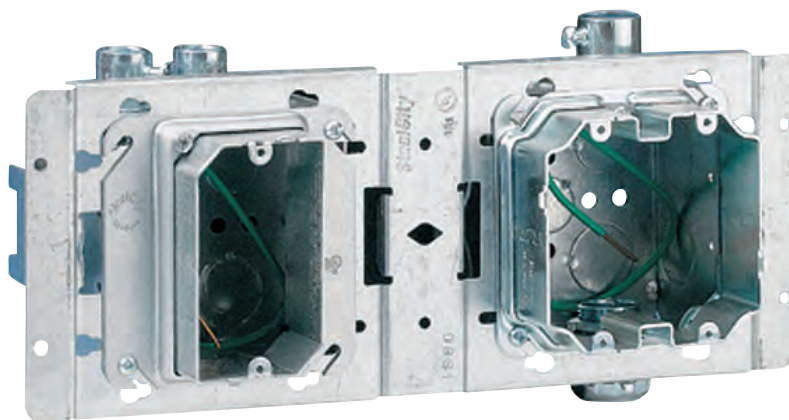
savings by thousands of locations around a typical commercial or institutional project, and the benefits of Steel City® Prefabricated Solutions are clear:

- **Labor savings**
Custom-designed boxes, covers, grounding, fittings and positioning accessories
- **Material savings**
Special ARRA and Buy America assemblies reduce overall material costs
- **Logistics savings**
Project-specific packaging and labeling offer significant savings

Configuration Name	Product	Project	Status	Status Date & Time	Configuration Options	Serial Number	Owner
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26841.2	Box to Box Assembly	3008	Configured	3/5/2013 10:49:08 AM CST	view edit delete	7160-014203-17134502341488	Archer, John C. - Thomas & Betts
26841.5	Box to Box Assembly	3008	Configured	3/5/2013 10:47:12 AM CST	view edit delete	7160-014203-17134502341488	Archer, John C. - Thomas & Betts
26841.2	Power Mount Assembly	3008	Configured	3/5/2013 10:44:12 AM CST	view edit delete	7160-014203-17134502341488	Archer, John C. - Thomas & Betts
26841.2	Power Mount Assembly	3008	Configured	3/5/2013 10:43:59 AM CST	view edit delete	7160-014278-17134502341488	Archer, John C. - Thomas & Betts
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ad807	Power Mount Assembly	3008	Configured	10/14/2011 1:16:59 PM CST	view edit delete	7160-013625-17134502341488	Archer, John C. - Thomas & Betts
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ad807	Box to Box Assembly	3008	Configured	10/14/2011 1:08:50 PM CST	view edit delete	7160-013366-17134502341488	Archer, John C. - Thomas & Betts



Total project cost reduction



PreFabricator

- PreFabricator**
Design/build/quote/order/manage your “in-wall” rough-in system using the Steel City PreFabricator online tool
- ARRA/Buy America assemblies**
Extend savings into material costs on integrated components transformed into compliant product
- Life safety system support, protection and termination**
NEC® compliant and save on labor and material costs with pre-identified components
- Custom-designed assemblies to specifically save money unique to every project
- Superior logistics for material handling provides inventory savings
- Palletized/packaged/identified per floor, room or location to save time with material handling
- Shipments on site, on or before the day needed, to minimize costly waiting periods




Installation Products for applications

- 01 Continuous operation and sustainability.
- 02 Corrosion and harsh environment protection.
- 03 Safety and contamination.
- 04 Emergency electrical solutions.
- 05 Total project cost reduction.
- 06 Liquid ingress protection.
- 07 Extreme temperature protection.
- 08 Grounding and bonding.
- 09 SKU Reduction.

ABB

APPLICATION BROCHURE
Installation Products
Continuous operation and sustainability




① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

01

ABB

APPLICATION BROCHURE
Installation Products
Corrosion and harsh environment protection



① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

02

ABB

APPLICATION BROCHURE
Installation Products
Safety and contamination



① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

03

ABB

APPLICATION BROCHURE
Installation Products
Emergency electrical solutions




① Installation Products Division
• Easy-clearing cable and cable protection for walk-down areas
• Supporting and diverting power to temporary structures
• Cable bundling/trimming and identification components
• Temporary power systems

04

ABB

APPLICATION BROCHURE
Installation Products
Total project cost reduction



① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

05

ABB

APPLICATION BROCHURE
Installation Products
Liquid ingress protection




① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

06

ABB

APPLICATION BROCHURE
Installation Products
Extreme temperature protection



① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

07

ABB

APPLICATION BROCHURE
Installation Products
Grounding and bonding



① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

08

ABB

APPLICATION BROCHURE
Installation Products
SKU Reduction



① Installation Products Division
• Wire and cable management
• Cable protection systems
• Boxes and fittings
• Connectivity and grounding
• Medium voltage

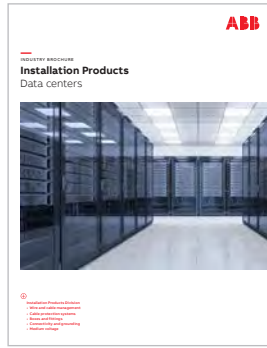
09

Installation Products for industries

- 01 Commercial and institutional buildings.
- 02 Data centers.
- 03 Food and beverage industry.
- 04 Food and beverage industry - plant assessment.
- 05 Utility industry.
- 06 Power generation industry.
- 07 Chemical industry.
- 08 Oil and gas industry.
- 09 Wind power industry.
- 10 Renewable energy industry.
- 11 Water and wastewater treatment industry.
- 12 Single and multi-family housing industry.
- 13 Rail industry.
- 14 Civil infrastructure industry.
- 15 Metals and mining industry.



01



02



03



04



05



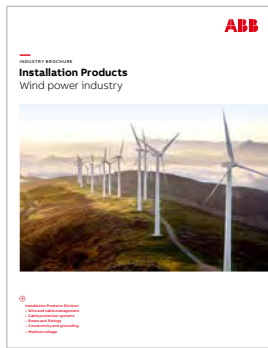
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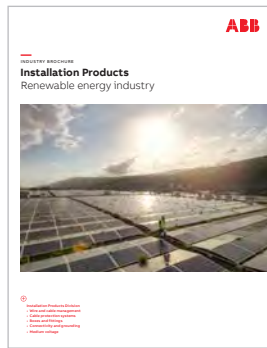
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08



09



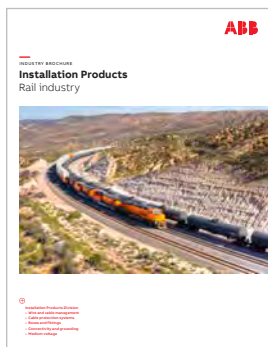
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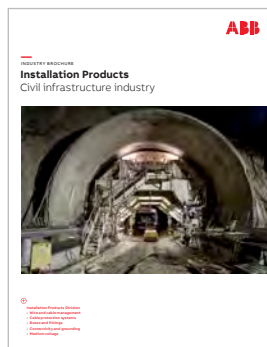
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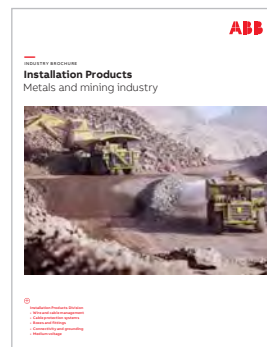
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13



14



15



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US

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