



The RIGHT SOLUTIONS for Canada's Oil and Gas Industry

T&B Cable Tray Systems



Thomas & Betts

A Member of the ABB Group

What if you could get all the **right solutions** from one reliable Canadian source?

Engineers, contractors and end-users working in Canada's oil and gas industry need to effectively manage wire and cable logistics, without compromising integrity or safety, and often within tight budgets and deadlines.

Selecting the right cable tray manufacturer is a key decision that directly impacts the overall quality of electrical systems as well as project costs and schedules.

T&B Cable Tray Systems deliver the right solutions for Canada's oil and gas industry.

What if you could **reduce project costs** and benefit from local expertise?

From unique tray features and high-performance products, to innovative splice plates and proven installation alternatives that minimize structural support requirements, T&B Cable Tray provides engineers, installers and end-users with significant opportunities to reduce material and labour costs.

What's more, because T&B Cable Tray Systems are designed and manufactured in Canada, Thomas & Betts can offer quick deliveries backed by local, expert service.

Thomas & Betts is committed to providing Canada's oil and gas industry with the right solutions.

the RIGHT

TRAY

T&B high-strength aluminum tray is an oil and gas industry standard.

- Ladder, ventilated or solid tray in copper-free aluminum
- Large-radius aluminum tray offers custom support for tanks and towers
- Extra-long span 30' (9.14 meters) ladder tray

PLUS added benefits that only Thomas & Betts offers:

- **H-Beam Siderail Profile**
 - Unique flange-out design for easy cable access
 - Factory-punched square holes and carriage bolt combination allow for easy, one-tool installation
- **Special Rung Design**
 - Extra-wide rung maximizes load-bearing surface, minimizing deflection
 - Continuous strut profile rung accepts standard strut accessories
 - Alternating rungs facilitate installation of accessories from top or bottom



the RIGHT

SPLICE

NEW!

Super-Duty Splice Plate™

- Dual purpose for expansion or mid-span splicing of aluminum trays
- Eliminates need for additional supports at expansion joints
- Saves material and labour costs

Over-Support Splice Adaptor

- Originally designed for modular aluminum system assemblies
- Supports are placed right under the joints on beams and struts
- Allows wider distribution of support, minimizing stress and deflection of the system
- No additional supports required

Snap-In Splice Plate

- Snaps into place for easy alignment and quick, hands-free installation
- 7" (177.8 mm) wide or 9" (228.6 mm) expansion splice
- Supplied standard with each straight length



Equal strength using less supports



More flexibility during installation



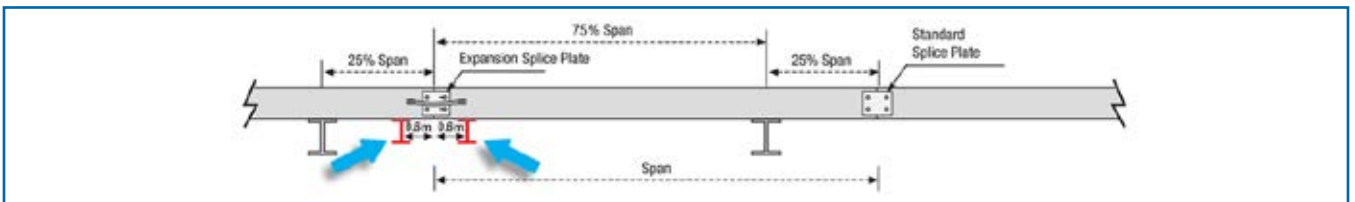
Ease and efficiency in a complete kit

REDUCE STRUCTURAL SUPPORTS AND SAVE

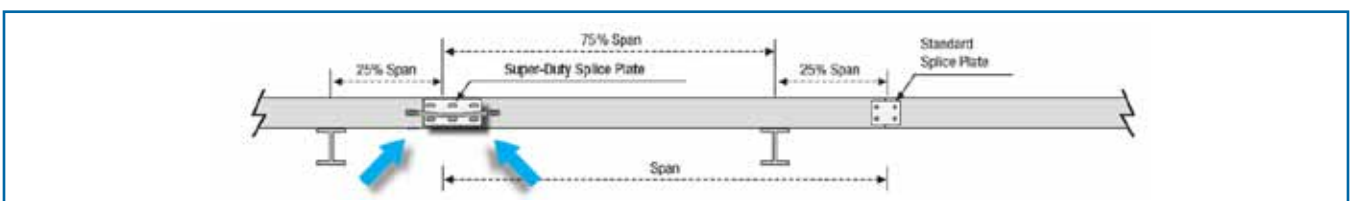
Expansion splicing with the Super-Duty Splice Plate™

Eliminate the need for additional supports at expansion joints with the Super-Duty Splice Plate™. Save on project material and labour costs.

NEMA INSTALLATION WITH ADDITIONAL SUPPORTS



NO ADDITIONAL SUPPORTS NEEDED WITH SUPER-DUTY SPLICE PLATE™



the RIGHT

SUPPORT SAVINGS

Reducing the number of structural steel supports required for cable tray runs significantly decreases project costs.

Extensive testing of all T&B Cable Tray fittings demonstrated that, in addition to NEMA-V2 recommendations, all fittings can be safely installed using either of the following installation alternatives for support locations:

Eliminate Fitting Support

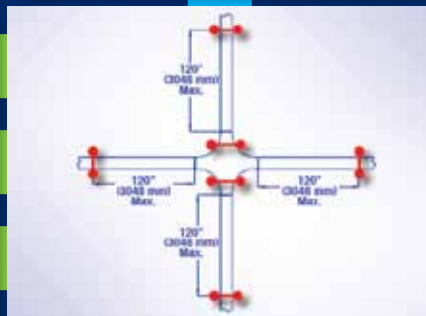
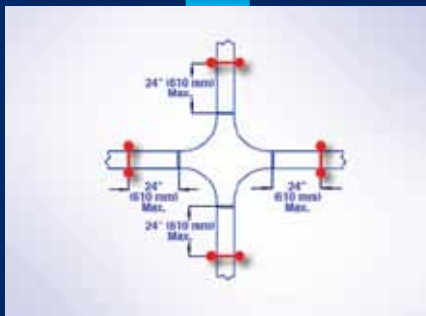
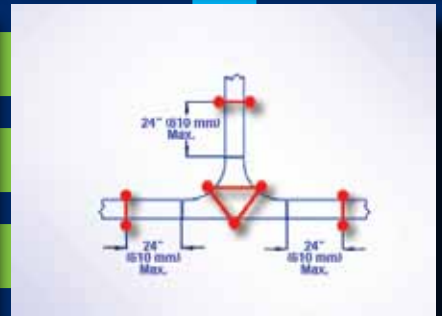
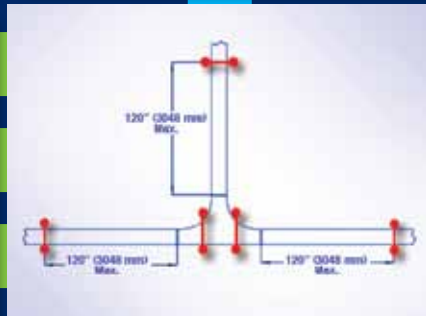
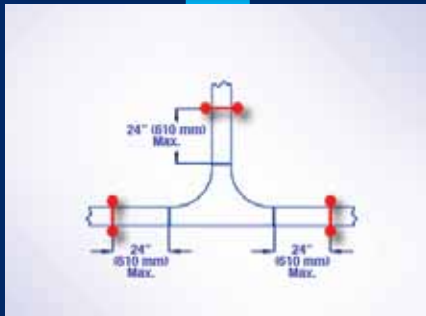
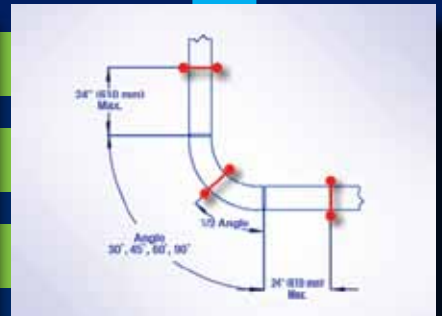
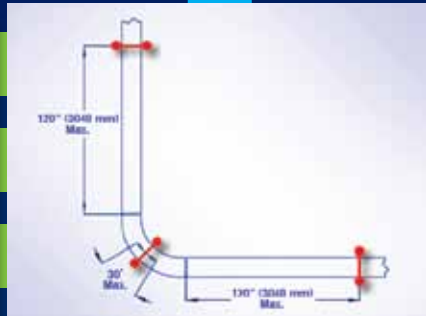
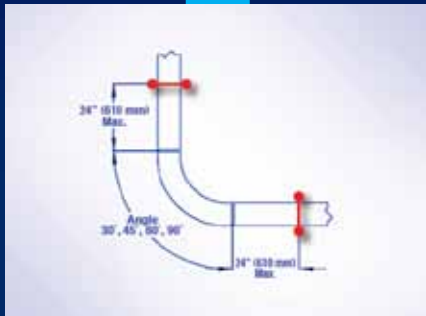
maintaining supports at a maximum distance of 24" (610 mm) from the splice

Extend Support Distance

to a maximum distance of 120" (3,048 mm) from the splice

NEMA-V2

Dedicated fitting support, supports at a maximum distance of 24" (610 mm) from the splice



Tested and approved for 6" siderail: Aluminum AH fittings for use with straight section series up to 56; aluminum AU fittings for use with straight section series up to 36; steel fittings for use with straight section series up to 46. A complete test report is available from your Thomas & Betts sales representative.

the RIGHT

DESIGN TOOLS

Integrate T&B Cable Tray product content into your designs.
Complete details at www.tnb.ca/en/cable-tray-design-tools/





Super-Duty Splice Plate™

For Strength,
Reliability and Savings

Reduce structural supports
and installation costs.
One splice plate,
two solutions.

The NEW ultra-robust **Super-Duty Splice Plate™** allows cost-efficient expansion by reducing the need for structural supports. It can also be used for sturdy mid-span splicing. Engineers, end users and contractors benefit from significant cost reductions without sacrificing quality or structural integrity.

Cost reduction – eliminate structural supports

Efficiency – less hardware

Flexibility – expansion or mid-span splicing

- Use less NEMA-recommended structural supports at expansion joint, significantly reducing material and labour costs
- Unique, reinforced design eliminates the need to drill and install additional hardware on the flange, saving time during installation
- Nylon washers make movement easier and reduce friction
- No lubrication of siderail required during installation or maintenance



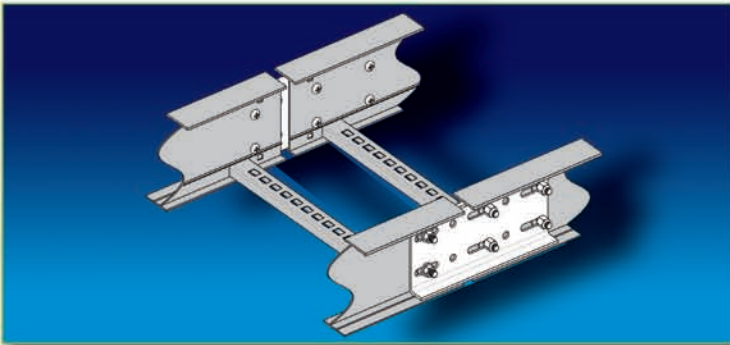
Thomas & Betts. Your best connection for innovative solutions.

Super strength, superior design

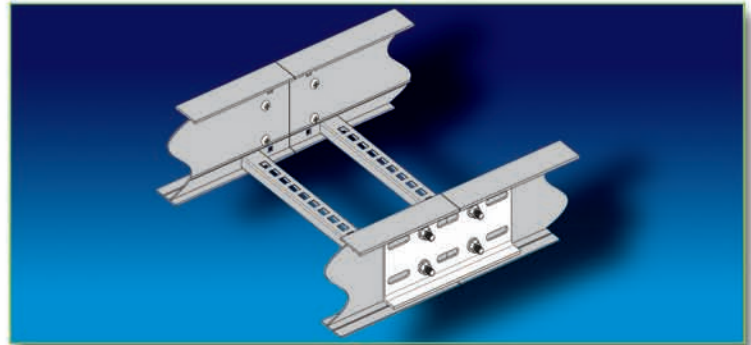
- Extra-wide (13") high-strength, heat-treated aluminum
- Unique design maximizes rigidity, resistance and overall strength
- Tested and rated for 6" aluminum side rails, Series AH36-AH66
- Nylon washers make movement easier and reduce friction
- No hardware required for installation on flange
- Allows for true contraction/expansion under full loads
- No lubrication of the side rail required during installation or maintenance
- Plate is pre-drilled for both expansion and mid-span applications
- Supplied with all hardware required for both types of installation

One splice plate, two solutions

EXPANSION SPLICE



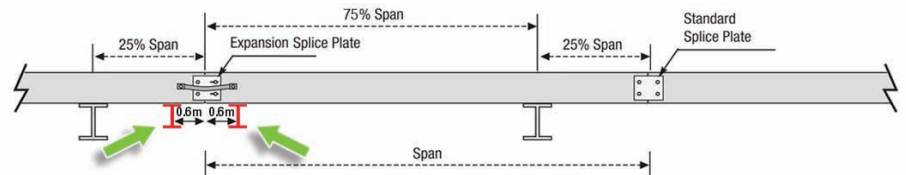
MID-SPAN SPLICE



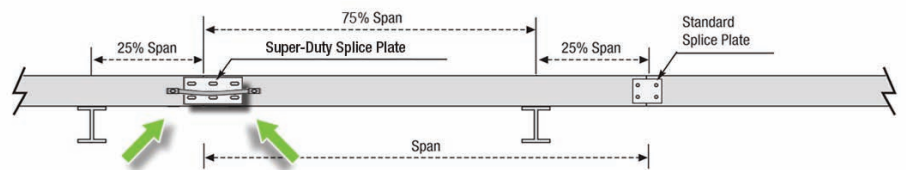
N.B.: For purposes of illustration, bonding jumper not shown but is required at expansion joints.

Expansion splicing - eliminate the need for additional supports

NEMA INSTALLATION WITH ADDITIONAL SUPPORTS



NO ADDITIONAL SUPPORTS NEEDED WITH SUPER-DUTY SPLICE PLATE™



The **Super-Duty Splice Plate™** comes complete with all hardware required, for either expansion or mid-span splicing. Kit includes :

- 2 Super-Duty Splice Plates™
- 12 ribbed-neck carriage bolts
- 8 nylon insert locknuts
- 8 serrated flanged locknuts
- 12 nylon washers (spacers)



ONE
CATALOGUE
NUMBER

ABW6SDP

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Go from horizontal to vertical, maximum cable protection, minimum space.

Introducing the **Helix™** cable tray fitting. Efficiency is in its DNA.

Making transitions from horizontal to vertical cable tray runs has never been easier or more efficient.

The latest evolution in cable tray fittings, the **Helix™** fitting assembly was developed specifically for use in confined areas. It allows installers to transition from horizontal to vertical surfaces in less time, using significantly less space.

Protects and secures cables

Minimizes space requirements

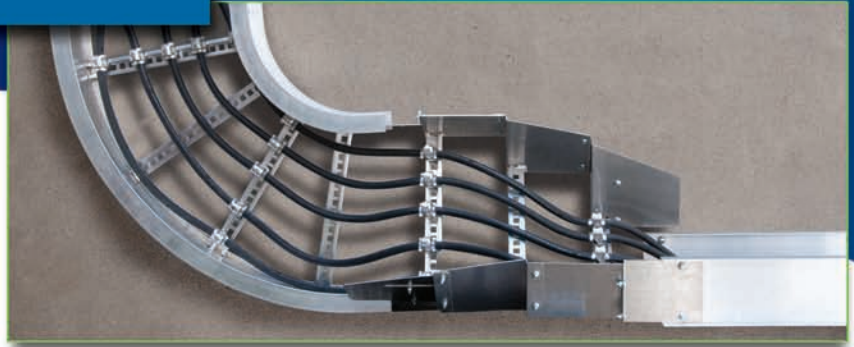
Facilitates transitions

- Enables installation close to walls and other surfaces, eliminating need for distance
- Provides enhanced cable protection in confined spaces
- Secures cables within fitting for clean, organized cable runs

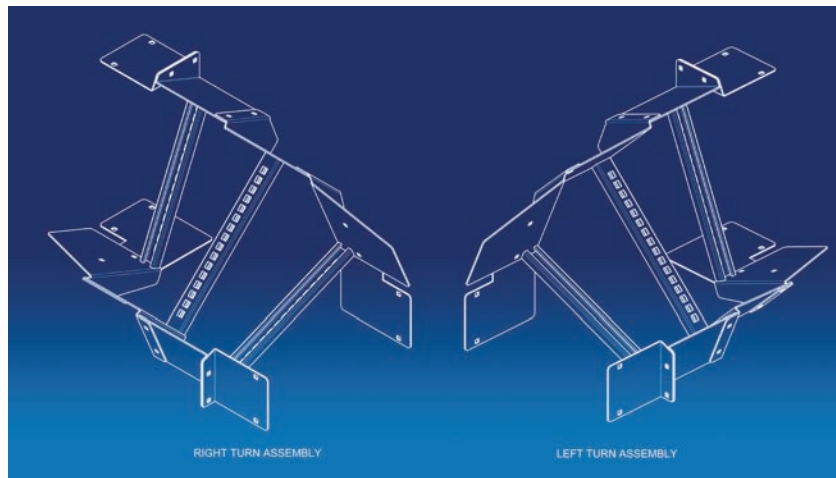


Thomas & Betts. Your best connection for innovative solutions.

Maximum speed, minimum space !



- Ideally suited for confined spaces - no need to distance cable runs from wall to make transition
- Efficient cable protection in areas where conventional fittings will not fit
- Convenient right or left turn configurations
- Available in aluminum, pregalvanized steel and stainless steel; 12" and 24" widths, 6" siderails
- Delivered pre-assembled and ready to install; drastically reduces time spent configuring fittings on site



Helix™ Cable Tray Fitting – Delivered ready to install

CATALOGUE NUMBER	MATERIAL	SIDERAIL (in.)	WIDTH (in.)	DIRECTION
AUF612LHVR	Aluminum	6	12	right turn
AUF612LHVL	Aluminum	6	12	left turn
AUF624LHVR	Aluminum	6	24	right turn
AUF624LHVL	Aluminum	6	24	left turn
SPF612LHVR	Pregalvanized Steel	6	12	right turn
SPF612LHVL	Pregalvanized Steel	6	12	left turn
SPF624LHVR	Pregalvanized Steel	6	24	right turn
SPF624LHVL	Pregalvanized Steel	6	24	left turn
SSF612LHVR	Stainless Steel	6	12	right turn
SSF612LHVL	Stainless Steel	6	12	left turn
SSF624LHVR	Stainless Steel	6	24	right turn
SSF624LHVL	Stainless Steel	6	24	left turn

Supports should be positioned within 24" (610 mm) of each Helix™ fitting extremity.

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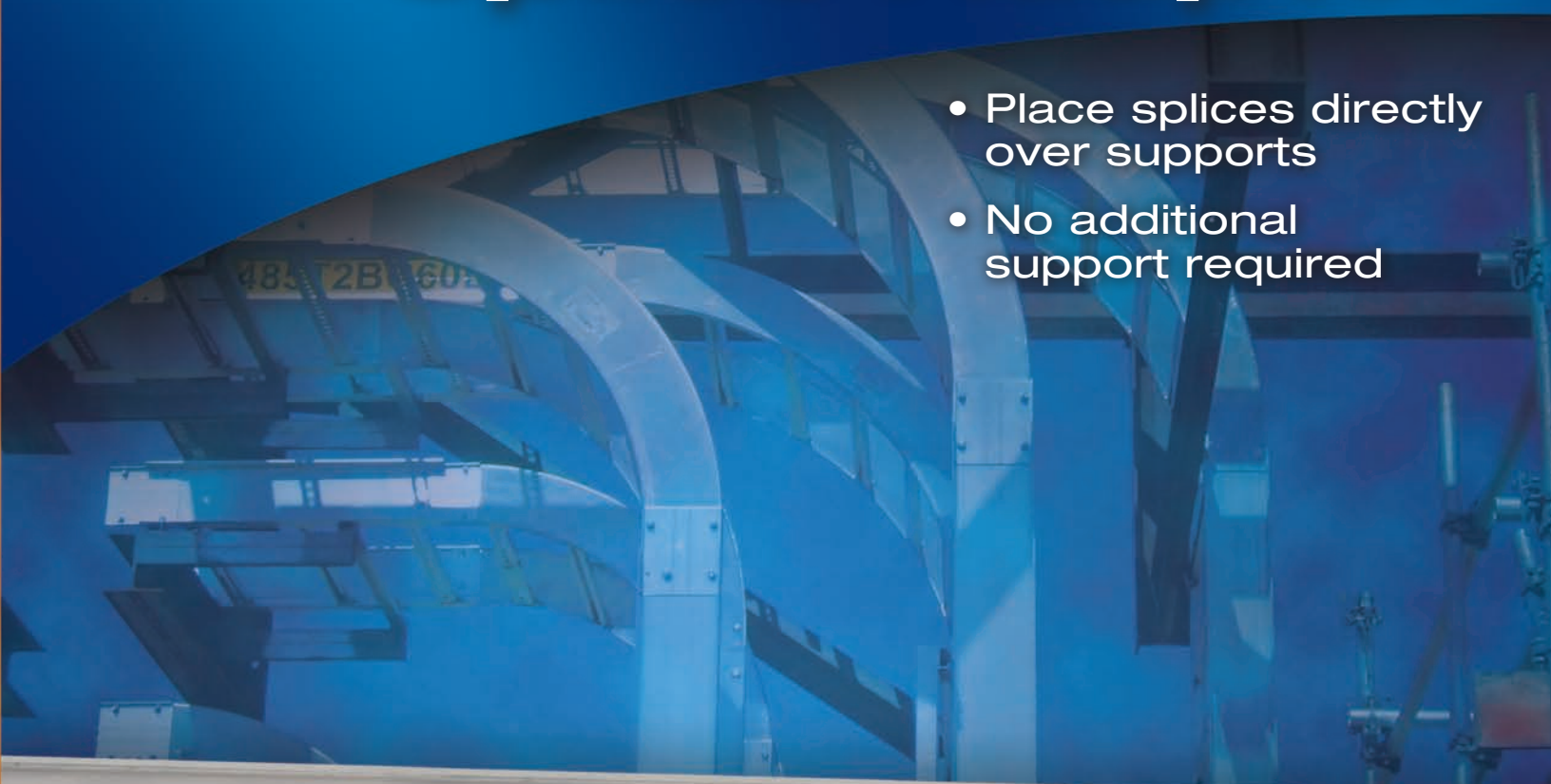
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Over-Support Splice Adaptor

- Place splices directly over supports
- No additional support required



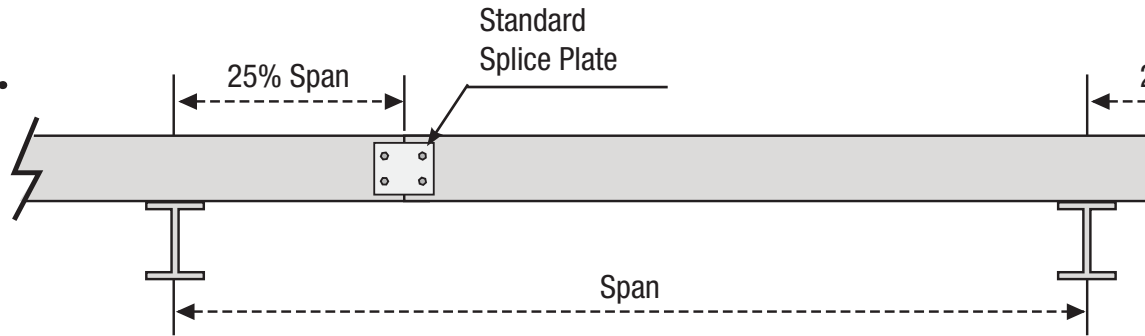
Over-Support
Splice Adaptor
(Beam Installation)

Standard 1/4 Span Typical Installation

Based on NEMA VE2

Supports are placed at 1/4 span (25%).

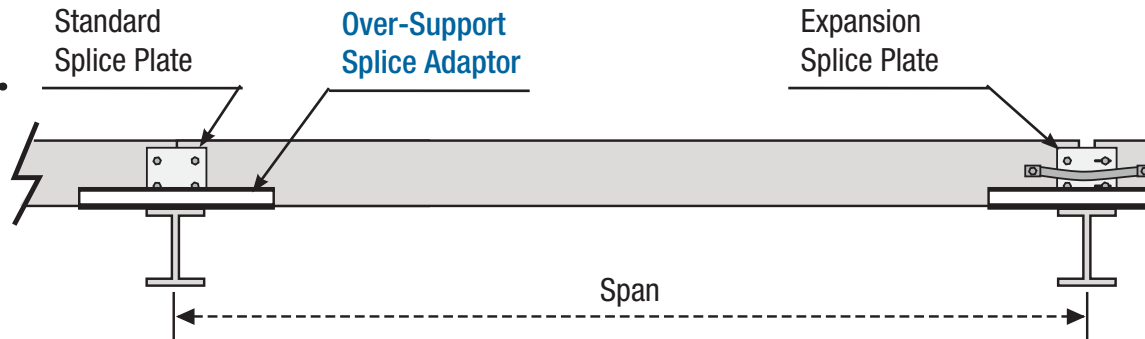
Supports should be located within 2 feet of each side of expansion splice plates.



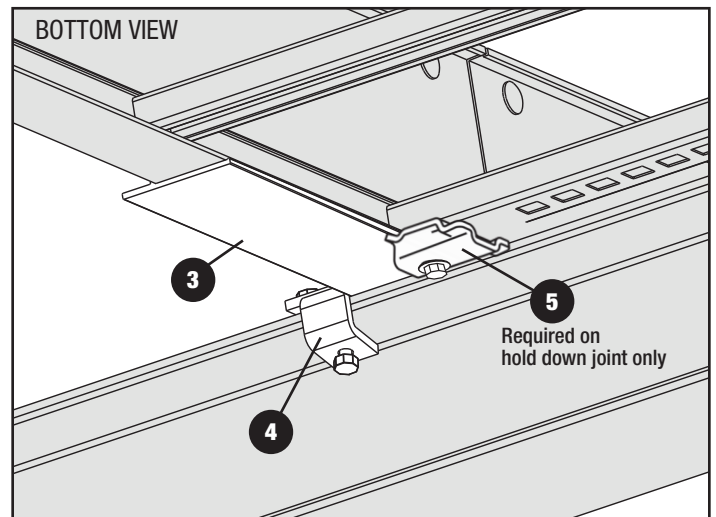
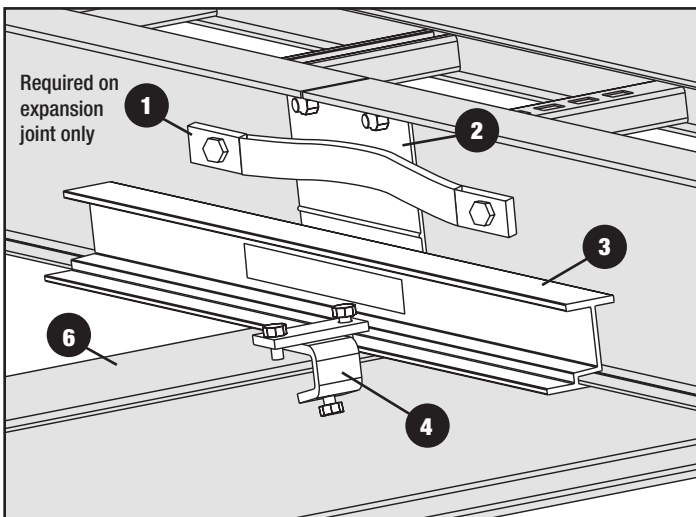
T&B Over-Support Installation method

Supports are placed right under the joints of the installation.

The splice adaptor allows a wider distribution of the support, therefore minimizing the stress and deflection of the assembly.

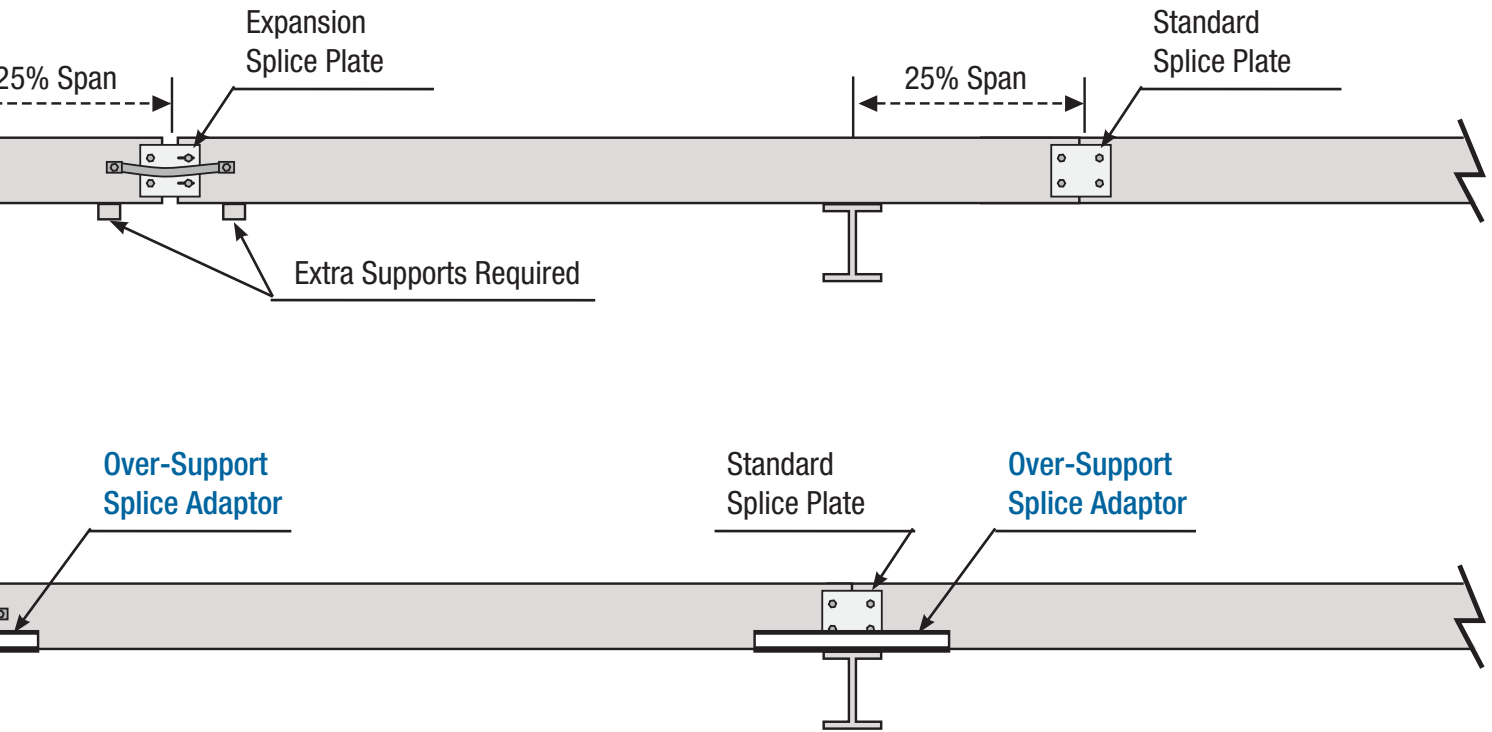


Over-Support Splice Adaptor Beam Installation – ABW46-OSS-B



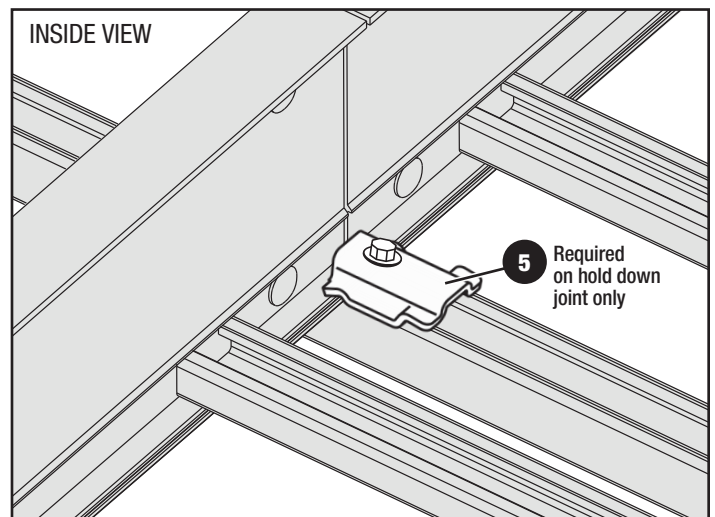
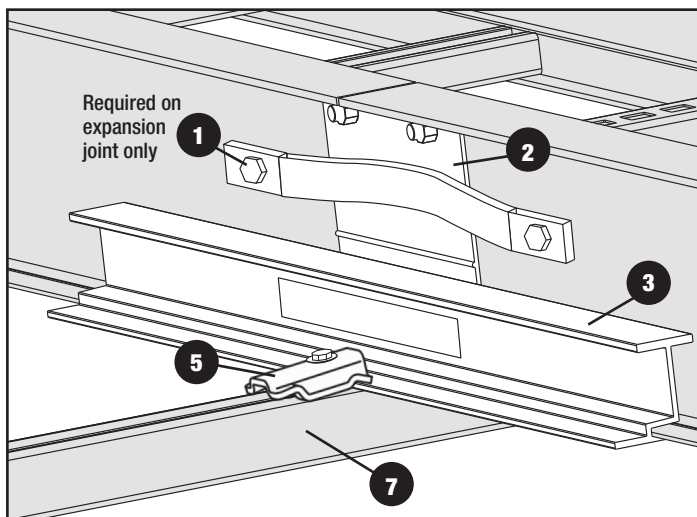
Installation Components

- | | |
|--------------------------------|---------------------------|
| 1. Bonding jumper | 5. Hold down clamp |
| 2. Splice plate | 6. Structural beam |
| 3. Over-support splice adaptor | 7. Strut (see right page) |
| 4. Beam clamp | |



NEMA VE2: Splice joints should be designed and placed so as to maximize the rigidity of the cable tray over support. Splice plates and adaptors are part of a system specifically designed for placement directly over supports.

Over-Support Splice Adaptor Strut Installation – ABW46-OSS-S



Cable Tray Installation

- For gap setting at expansion joint, refer to NEMA chart on the back cover.
- Every tray-support joint must have a pair of over-support splice adaptors (both standard splices and expansion splices).

ABW46-OSS-B

Over-Support Splice Adaptor – Beam Installation

Expansion over support beam 29 in.	2
SHWCTC, Heavy-duty hold down clamp (complete with mounting hardware)	2
ABWCHGC, Combination Hold Down / Expansion Guide Clamp	2
E142-3/8X100EG, 3/8 in. – 16 x 1 in. hex cap screws	2
AC100-3/8EGC, 3/8 in. strut nut	2

NOTE: Every expansion joint requires the use of a bonding jumper such as FBD16-1 (16 in., 600 A)

ABW46-OSS-S

Over-Support Splice Adaptor – Strut Installation

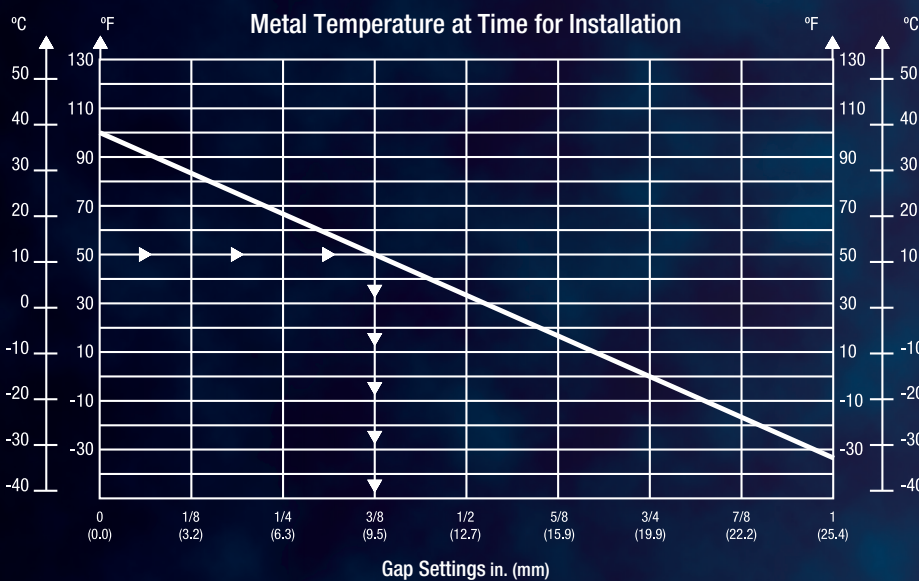
Expansion over support beam 29 in.	2
ABWCHGC, Combination Hold Down / Expansion Guide Clamp	4
E142-3/8X100EG, 3/8 in. – 16 x 1 in. hex cap screws	4
AC100-3/8EGC, 3/8 in. strut nut	4

NOTE: Every expansion joint requires the use of a bonding jumper such as FBD16-1 (16 in., 600 A)

Over-Support Splice Adaptor – Safe Working Load

Cable Tray Series	Safe Load Rating When Used with ABW46-OSS at 20-ft. Span
AH36	80 lb./ft.
AH46	100 lb./ft.
AH56	120 lb./ft.
AH66	165 lb./ft.

Expansion Plate Gap Chart



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CONNECT WITH CHOICES

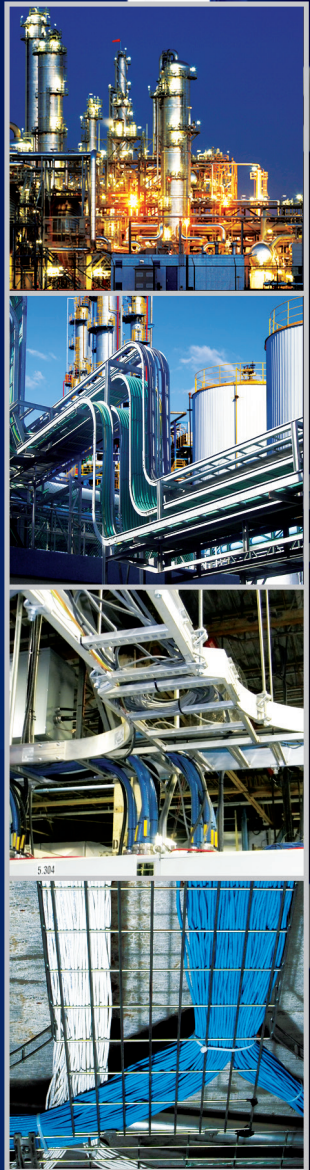
For virtually any industry application, Thomas & Betts offers a complete range of wire and cable management solutions.

- **T&B Ladder Tray Systems**
 - Aluminum, steel and stainless steel cable tray
 - Large-radius and long support span cable tray
 - Nonmetallic cable tray
- **T&B One-Piece Tray and Channel Tray**
- **ExpressTray® Wire Basket Tray**
- **Superstrut® Metal Framing Channel and Accessories**
- **Complementary products including tray/teck cable termination products, grounding products, metal framing and hardware, and more**

CONNECT WITH THOMAS & BETTS

With a variety of providers to choose from, industry leaders often see Thomas & Betts as the logical first choice, for a variety of reasons:

- Preferred supplier to Canadian industry for close to a century
- A wide range of ever-evolving quality products and superior solutions customized to meet application-specific challenges
- An established company invested and committed to helping engineers, contractors and end-users reduce costs while increasing performance and safety
- T&B Cable Tray designed and manufactured in Canada, with manufacturing facilities strategically located in Edmonton, Alberta, and another near Montreal, Quebec
- Fast turnaround, custom delivery schedules, local services and support
- 80% of products sold in Canada are also manufactured here



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