







## **Innovative Bridging Solutions**

Algonquin Bridge designs and supplies a wide range of steel bridge products and crossing solutions across Canada and beyond. Our bridges can be divided into two major categories:

## **Custom Prefabricated Bridges**



Custom Prefabricated Bridges utilize steel trusses or beams as the main load carrying members and are available in a variety of styles and finishes for pedestrian or vehicular applications.

## **Modular Panel Bridges**



In partnership with AIL International, Algonquin Bridge is the exclusive Canadian Distributor of Mabey Modular Panel Bridges of the United Kingdom. Available for sale or rental, Mabey Bridges are ready to quick ship and assemble for temporary or permanent applications.

## Algonquin Bridge is your single source for virtually any type of bridging application.

- ► Pedestrian Bridges
- ► Girder Bridges
- ► Cyclist Bridges
- ► Highway / Municipal Bridges
- ► All Purpose Trail Bridges
- ► Snowmobile Trail Bridges

- ► Golf Course Bridges
- **▶** Utility Bridges
- ► Pipe Support Bridges
- ► Logging or Mining Bridges
- ► Railroad Bridges
- ► Marine Roll On / Roll Off Bridges

- Construction Site Bridges
- ► Emergency Bridge Replacements
- ► Military Logistic Support Bridges
- ► Floating Bridges
- ► Temporary Detour Bridges

## **RAPID RESPONSE EMERGENCY SOLUTIONS** 24/7 TOLL-FREE HOTLINE 1-844-274-3535

### Component inventory ready to ship from depots across Canada.

As Canada's go-to emergency bridging specialist, Algonquin Bridge is ready to respond with available inventories of Mabey Modular Panel Bridge Systems, in-house engineering teams and reliable field service. We are your single source to fast track a wide variety of permanent or temporary structures for sale or rent. Our pre-engineered Mabey Bridges are ideally suited to the fast replacement of damaged infrastructure and have been proven many times in emergency situations worldwide.









## **BRIDGE RENTALS**

## Short-term or long-term, renting can be your most viable option.

Algonquin Bridge stocks a wide range of Mabey Modular Panel Bridge components for both short and long-term rentals. We have steel bridges ready to deploy across Canada for virtually any application — highway, resource road, industrial, pedestrian or utility. These bridge components can also be used to construct modular piers or towers.

#### The benefits of renting

- ► Keep costs to timeframe of need
- ► Free up capital for other purposes
- ► No maintenance or storage expenses
- ▶ Improves project balance sheet and ROI

#### The benefits of renting from Algonquin

- ► A wide range of bridging options
- ► Canada-wide distribution and support
- ► Professional Engineer stamped drawings
- ► In-house engineering and design
- ▶ Dependable field service





Our Custom Prefabricated Bridges are available in a variety of finishes.







## A BRIDGE FOR EVERY APPLICATION

# Custom steel truss and beam bridges in a wide variety of styles and finishes

RECOMMENDED FOR

- ► Pedestrian Bridges ► Vehicular Bridges ► Girder Bridges
- ► Custom Vehicular Truss Bridges ► Covered Pedways
- ► Heavy Duty Vehicular Bridges ► Golf Course Bridges
- ► Recreational/Trail Bridges ► Seasonal Lift Span Bridges
- ► ATV/Snowmobile Bridges ► Utility Bridges

Algonquin Bridge has been specializing in the design and manufacture of high quality steel bridging solutions for over 20 years. Our bridges are designed for your site to keep fieldwork and extra costs to a minimum. Attention to detail is paramount. We focus on clear, concise communication with our customers.

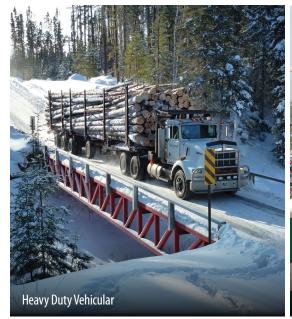
- ► Utilize steel trusses or beams as the main load carrying members
- ► Clear spans exceeding 65 m and multi-span crossings of any length
- ► Longer span bridges are designed in sections for easy placement by lower capacity equipment
- ▶ Bolted span splices are engineered to keep field splicing as simple as possible
- ► Can also supply steel piers and towers



















## **Bridge Options**

- ▶ Custom Prefabricated Vehicular or Pedestrian
- ▶ Mabey Modular Panel (Compact 200, Delta, Universal)

## **Abutment Options**

- ▶ Bolt-A-Bin (Bin Style)
- ▶ Vist-A-Wall MSE Structural Wall System
  - Wire Walls with Grid-Strip Soil Reinforcement
  - Precast Panel Walls with Grid-Strip Soil Reinforcement
- ▶ Timber\*

## **Decking Options**

- ► Epoxy Aggregate Coated Steel
- ► Timber: Typically shop-installed on Custom Prefabricated Bridges and site-installed for Modular Panel Bridges. Timber decking can also be provided in pre-assembled modules for site install.

## Package it up with The Algonquin Bridge System.

Save time and money on your next bridging project by asking us to supply your bridge as a complete package.

## **Bearing Pad Options**

- ▶ Concrete\*
- ▶ Precast Concrete Sleeper Slabs\*
- ► Timber (for temporary bridges)\*

## **Backwall Options**

- ► Timber (Untreated or Pressure-Treated)
- ► Corrugated Steel (Bolt-A-Plate)
- ▶ Precast Concrete\*
- ► Cast-in-Place Concrete\*

## **Pier/Tower Options**

- ► Concrete Pier\*
- ► Modular Panel Bridge Components

## **Guiderail Options**

- ► Flexbeam and Thrie-Beam Guiderail Components
- ► Parapet Rails, Posts, Terminal Sections, Transition Pieces and Fasteners
- ► Approach Rails\*

\* Some elements may be designed and supplied by others.

## mabey bridge

part of the mabey family

In partnership with AlL International Inc., Algonquin Bridge is the exclusive Canadian Distributor for the sale and rental of Mabey Modular Panel Bridges.

Available for sale or rental, our Mabey Bridge components are ready to ship quickly to any location in Canada.



# Adaptable and redeployable bridging solutions for virtually any application

RECOMMENDED FOR

- ► Detour Bridges ► Resource Road Bridges
- ► Emergency Bridge Replacements ► Stream Crossings
- ► Road or Rail Overpasses

Mabey Bridges are innovative and economical bridging solutions for a wide array of permanent or temporary applications. Their components are inventoried with Algonquin Bridge and ready to ship across Canada.

They are easy to handle/assemble and are completely reusable. Designs can be configured for a wide range of roadway widths up to three lanes. Driving surfaces can be either steel deck (usually epoxy aggregate coated for improved traction) or timber.

#### We distribute three Mabey Modular Panel Bridge Systems:

- ► Mabey Compact 200 Bridge System
- ► Mabey Universal Bridge System
- ► Mabey Delta Bridge System

### **PROJECT PROFILES**

## Compact 200 bridge provides quick solution for CN rail crossing.

When CN needed to replace a failing, century-old, right-of-way crossing on their main line near Amherst, NS, a Mabey Compact 200 System from Algonquin Bridge proved to be the most economical and versatile option for a speedy replacement. Once the old bridge was removed and cut-up for recycling, the new 31.9 m bridge was assembled at the site and lifted into place in one day — without interruption to rail traffic. Precast abutments and cambered end sections provided additional height to ensure maximum clearances for double-stack freight cars.



## **Mabey Compact 200 Bridge System**

## Our best-selling solution for a wide range of span and loading applications.

The Compact 200 is the most popular prefabricated steel panel bridge system in the world. It is the latest development of Sir Donald Bailey's original Bailey Bridge System that played a key part in Allied troop movements during the Second World War and in the reconstruction efforts that followed.

- ► Uses 3 m pinned panels
- ► Clear spans in excess of 70 m
- ▶ Roadway widths of 3.15 m to 10.5 m
- ▶ Internal and cantilevered footwalks
- ▶ Configurable for vehicular, pedestrian or utility support uses









# Temporary and permanent bridges used on Trans Labrador Highway.

The Newfoundland and Labrador Department of Transportation and Works was able to take full advantage of Mabey Modular Panel Bridges on this project. At Paradise River, they deployed a 67 m Compact 200 system as a temporary crossing to facilitate road construction on the opposite side. Subsequently, a much larger and heavier-duty 81 m Delta System was installed as a permanent crossing for the new highway.



## **Mabey Universal Bridge System**

## Heavy-duty bridging for temporary or permanent rural/industrial applications.

The Mabey Universal Bridge system is the 'big brother' of the Mabey Compact 200 Bridge system. Developed in the 1970s, the Universal Bridge system combines large, deep, modular panel units with a selection of decking systems to create a robust heavy-duty modular steel bridge system able to take heavy axle-load vehicles over spans of up to 81 m.

- ► Uses deeper 4.5 m long pinned panels
- ► Clear spans of up to 81 m\* in increments of 4.5 m
- ▶ Roadway widths of 4.2 m to 10.5 m
- ▶ Internal and cantilevered footwalks







# Large Universal rental bridge figures into MTO rehab savings.

Reducing busy Highway 17 down to one-lane for the duration of the Petawawa River Bridge Restoration project was not something that The Ministry of Transportation — Ontario (MTO) was very keen on. Renting a two-lane detour bridge helped avoid traffic congestion, but it also provided some relief on capital expenses, with only the shorter-term rental cost to allocate. At almost 140 m over three spans, this is one of the largest temporary detour bridges in Canada.



## Mabey Delta Bridge System

## Pre-cambered truss system with friction-grip, pre-tensioned bolting system for permanent applications.

The Mabey Delta Bridge system is the latest addition to Mabey Bridge's range of modular steel panel bridges. Developed in 2003, it uses the innovative 4.5 m long 'Delta' panel. These connectable panels are bolted to top and bottom chord members to form the side trusses that carry the applied loads between abutments and intermediate piers. Delta trusses are provided with a positive pre-camber to counter the effects of dead load deflection.

- ▶ Friction grip, pre-tensioned bolting system
- ► Uses deeper 4.5 m long bolted 'side-truss' panels
- ► Clear spans of up to 90 m\*
- ▶ Roadway widths of 4.2 m to 10.5 m
- ▶ Internal and cantilevered footwalks
- \*One-lane configuration with CL-625 loading. Ask for details.







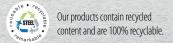
# Mabey Delta detour bridge reaches 67.5 m over Quebec river on Autoroute 40.

When the Ministère des Transports Quebec (MTQ) required a temporary, twolane detour solution for their bridge replacement project on Autoroute 40, near Berthierville, a Mabey Delta Bridge System from Algonquin Bridge filled the gap. The bridge was assembled on one side of the river and pushed across using a cantilevered launch sequence without the need for lifting equipment. The MTQ already has plans to reconfigure and redeploy the system for future projects.



#### CALL OUR 24/7 TOLL-FREE NUMBER: 1-844-274-3535, OR EMAIL: INFO@ALGONQUINBRIDGE.COM

The information and suggested applications in this brochure are accurate and correct to the best of our knowledge, and are intended for general information purposes only. These general guidelines are not intended to be relied upon as final specifications, and we do not guarantee specific results for any particular purpose. We strongly recommend consultation with an Algonquin Bridge Technical Sales Representative before making any design and purchasing decisions.







## COAST TO COAST, THERE'S AN ALGONQUIN BRIDGING SOLUTION NEAR YOU.



#### **Algonquin Bridge**

Toll-Free: 1-844-274-3535 Email: info@algonquinbridge.com On the web: algonquinbridge.com

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