

THE EDGE



Four-Flange Structural Liner

Build from either side

Diameters in excess of 25 m/82 ft

Custom sizes and shapes available

Leak resistant options available

Fabricated fittings

10x STIFFER • 5x STRONGER
than traditional steel liner plate



Underground Tunnels and Support



Road or Rail Tunnels



Mine Shafts

STRUCTURAL STEEL TUNNEL, SHAFT AND RELINE SOLUTIONS

ail.ca



Atlantic Industries Limited
We Support You.

Give your projects THE EDGE

In response to industry demand, THE EDGE Four-Flange Structural Liner is the latest innovation from AIL's research and development teams. It's revolutionizing traditional liner plate



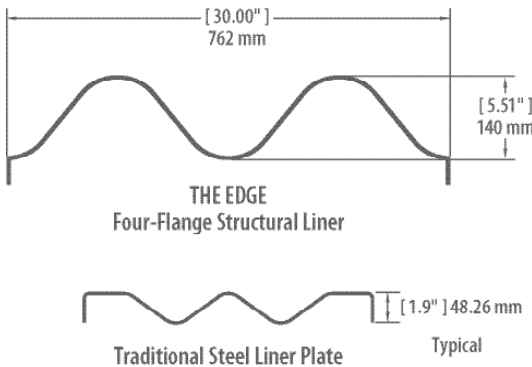
construction methods and application ranges for the civil and mining sectors.

Build faster, safer and more accurately

THE EDGE is the addition of flange connections to our 30-year-field-proven Super•Cor® Structural Steel Plate. It allows for better fitting and assembly

of plates. Structures can be built entirely from either side when access is restricted. Underground tunnels, supports and liners can be completely built from the inside. Structures over functioning rail lines, conveyors or streams can be completely built from the outside. As options, custom flanged plates can be incorporated to facilitate curved structures and gaskets can be added to the flange seams to provide leak-resistance for a wide array of applications.

THE EDGE is 10 times stiffer
and 5 times stronger than
traditional steel liner plate.



THE EDGE is available on Super•Cor® Structural Steel Plate

- ▶ Handles extreme loadings
- ▶ Spans can exceed 25 m (82')
- ▶ Corrugation profile of 381 mm (15") pitch × 140 mm (5.5") depth
- ▶ Available in traditional and custom shapes
- ▶ Available uncoated or with hot-dip galvanized or Best•Kote Polymer coatings
- ▶ Suitable for field-applied coatings
- ▶ Grout coupling sizes and placement to suit site conditions
- ▶ Custom fittings



**STEEL VS.
CONCRETE**
**THE RESULTS
ARE IN**

A recent Shaft Liner Study confirms that THE EDGE Four-Flange Structural Liner is faster, easier and more economical than conventional concrete construction methods.

- ▶ No capital investment required for conventional concrete forms
- ▶ Reduced set-up time compared to conventional concrete construction
- ▶ Allows for faster sub collar construction, as it becomes the form for the sub collar

Civil projects are benefitting from using THE EDGE Four-Flange Structural Liner

RECOMMENDED FOR

► Tunnels ► Vertical Shafts for CSO and Commuter Rail Projects ► Rail and Road Underpasses ► Relines of Existing Structures
► Ground Support and Control ► Protection Structures ► Storage Structures ► Water Intake Structures ► Bridges ► Grade Separations

Tunnels and Underpasses

THE EDGE Four-Flange Structural Liner makes tunnels, underpasses and other underground projects easier and safer to construct. A wide variety of structure shapes and sizes are available for road, light rail and pedestrian or wildlife applications. Because structures can be built entirely from either side, THE EDGE system allows roads or rail lines to stay open during construction, eliminating the need for detours or bypasses. THE EDGE is also well-suited for relining older structures. Relines include integrated couplings and ports for filling the void between the liner and the existing structure.



Structures can be built from the inside without impacting surrounding infrastructure or greenspace

THE EDGE Four-Flange Structural Liner is helping today's mine operators build more efficiently and safely

RECOMMENDED FOR

► Mine Shafts, Vent Raises, Escape-Ways ► Portals and Canopies ► Ground Support Structures ► Relines of Existing Structures
► Road or Rail Underpasses ► Heavy Haul Road Arches ► Stockpile Tunnels ► Storage Structures ► Protection Structures

Mine Shafts, Vent Raises, Escape-Ways

THE EDGE Four-Flange Structural Liner is ideal for creating underground structures such as mine shafts, ventilation raises and escape-ways. THE EDGE is stronger, faster and more economical than continuous smooth steel or concrete alternatives. The resulting structures are strong, versatile and safer, because they can be assembled from the inside.



Integrated Equipment and Utilities: Brackets can be easily attached to mine shafts or vent raises to support Alimak rails or climbers. Similarly, brackets or hangers can be attached to drifts or tunnels to support mine air, water or electrical utility services.

Ground Support Structures

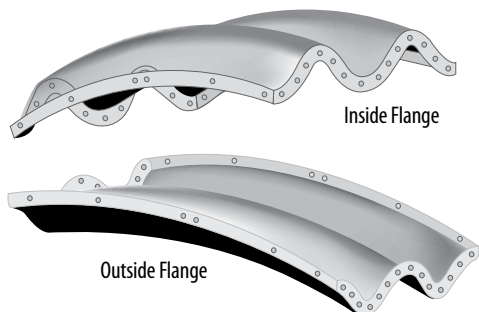
THE EDGE Four-Flange Structural Liner provides a safe and cost-effective addition for ground support in hazardous areas. Components transport easily to remote sites, where they can be assembled quickly and safely from the inside. Structures can be completely assembled and moved into an area of unsupported ground, or they can be assembled and advanced one section at a time. For added strength and support, fill material is pumped through grout couplings or ports.



Structures can be advanced to unsupported areas

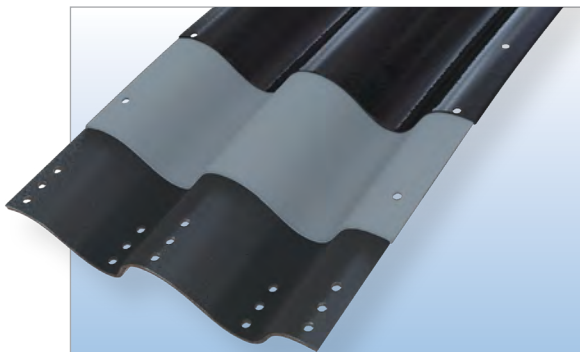


Flanged seams instead of conventional plate overlaps



THE EDGE Four-Flange Structural Liner is an alternative to structural plate's traditional lapped seams that extends application ranges with several key advantages:

- ▶ Easy to ship and install
- ▶ Accelerated assembly, easier fitting of plates
- ▶ Smaller crews needed, lower installed costs
- ▶ Added strength eliminating the need for ring beams
- ▶ Added safety, structures can be built from one side
- ▶ Facilitates deflection angles (horizontal and vertical)
- ▶ Allows for leak-resistant structures
- ▶ Ideal for remote sites resulting in fewer trucks and less handling
- ▶ Lower cost tank storage option
- ▶ Structures can be dismantled and removed

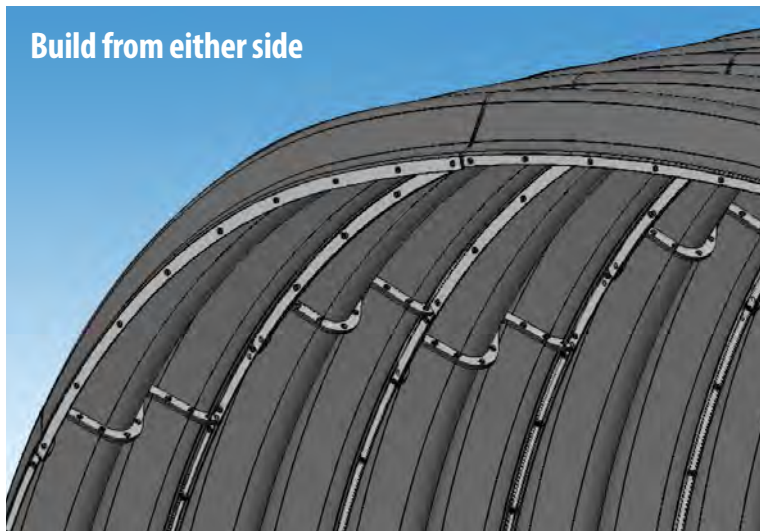


Best•Kote Polymer Coating

Best•Kote Polymer Coating can be used on all or part of structures to enhance their performance and extend their design service lives under harsh or corrosive conditions.

+75 YEAR DESIGN SERVICE LIFE

Build from either side



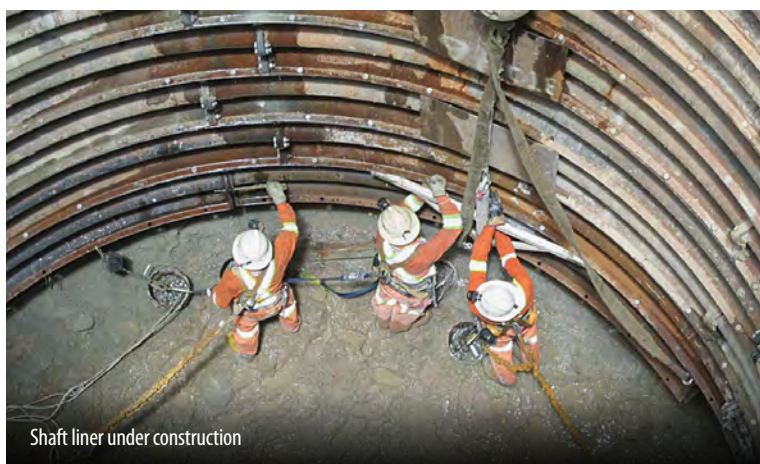
Easier fitting of plates



Easy to ship and install



Structural strength shaft liners



Shaft liner under construction

**FOR PROJECT GUIDANCE AND ASSISTANCE, CALL TOLL-FREE IN CANADA 1-877-245-7473,
AND INTERNATIONALLY +1-778-355-7000**

Give your projects THE EDGE with our Four-Flange Structural Liner. Contact an AIL Representative to learn more.

AIL's Technical Sales Representatives and Engineers are well-positioned to ensure your project's success through every phase. With product innovation, in-house engineering strength and expertise since 1965, we provide efficient infrastructure solutions with a difference.

Toll-free in Canada: 1-877-245-7473

International: +1-778-355-7000

E-mail: info@ail.ca

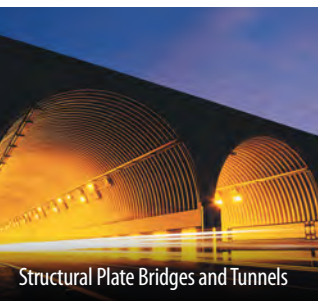
Website: ail.ca



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 Atlantic Industries Limited Technical Sales Representative before making any design and purchasing decisions.



AIL products contain recycled content and are 100% recyclable.



Structural Plate Bridges and Tunnels



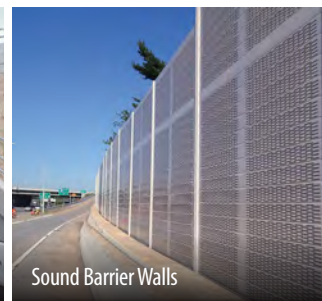
Prefabricated Bridges



Culvert Bridges



Retaining Walls and Abutments



Sound Barrier Walls

Get AIL's innovative engineered solutions working for your better bottom line.



Atlantic Industries Limited

Head Office:

PO Box 6161, 32 York St.
Sackville, New Brunswick
Canada E4L 1G6
Phone: (506) 364-4600

Locations across Canada:

St. John's, NL • Deer Lake, NL • Halifax, NS • Dorchester, NB
Louisville, QC • Mirabel, QC • Ottawa, ON • Toronto, ON • Ayr, ON
Kenora, ON • Winnipeg, MB • Saskatoon, SK • Calgary, AB • Edmonton, AB
Westlock, AB • Armstrong, BC • Prince George, BC • Vancouver, BC

Atlantic Industries Limited is a member of
THE AIL GROUP OF COMPANIES



Atlantic Industries Limited



INTERNATIONAL



SOUND WALLS

