



Building the world's largest Buried Metal Bridges

- ▶ Six-lane spans of over 35 m (115')
- ▶ "Greener" alternative to concrete structures
- ▶ Save on material, installation and life cycle maintenance

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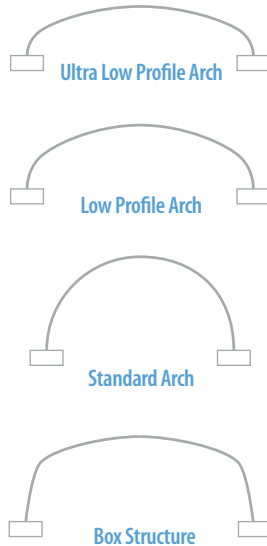
Atlantic Industries Limited
We Support You.





Recommended for

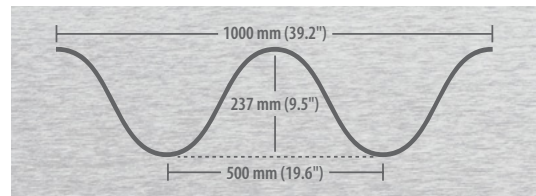
- ▶ Bridges and Tunnels
- ▶ Conveyor Covers and Overcasts
- ▶ Culvert Relines
- ▶ Fish Passages
- ▶ Grade Separations
- ▶ Heavy Haul Road Crossings
- ▶ Portals and Canopies
- ▶ Road or Rail Underpasses
- ▶ Stockpile and Escape Tunnels
- ▶ Storage Structures
- ▶ Stream Crossings
- ▶ Underground Structures
- ▶ Utilidor Systems
- ▶ Vertical Shafts and Vent Raises



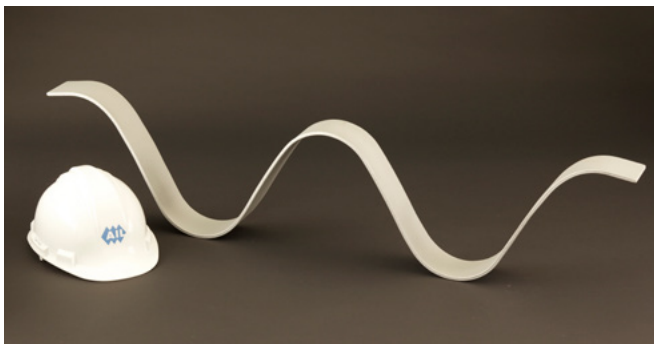
Recommended for larger applications.

With the introduction of Ultra-Cor[®] AIL has taken engineered Buried Metal Bridges to new dimensions in capability and performance. As the world's deepest corrugation profile, Ultra-Cor[®] combines all the advantages of lightweight construction with previously unheard-of strength and durability to create the largest Buried Metal Bridges in the world today.

With an impressive 500 mm (19.6") pitch and 237 mm (9.5") depth, its ultra-large corrugations allow it to reach greater spans and withstand the heaviest of loads. And, just like all AIL engineered solutions, Ultra-Cor[®] ships and installs easily with minimal equipment and labour requirements.



- ▶ The world's strongest corrugated steel plate
- ▶ Handles extreme loadings
- ▶ Spans can exceed 35 m (115')
- ▶ Stockpile heights can reach greater than 30 m (98')
- ▶ Corrugation profile of 500 mm (19.6") pitch × 237 mm (9.5") depth
- ▶ Bottomless designs are environmentally friendly
- ▶ Available with tested and approved protective coating systems
- ▶ Designed and manufactured to National Standards at our third-party quality-certified facility ISO 9001-2015



For project assistance, 1-877-245-7473, info@ail.ca
Outside Canada +1-778-355-7000, intl@ail.ca



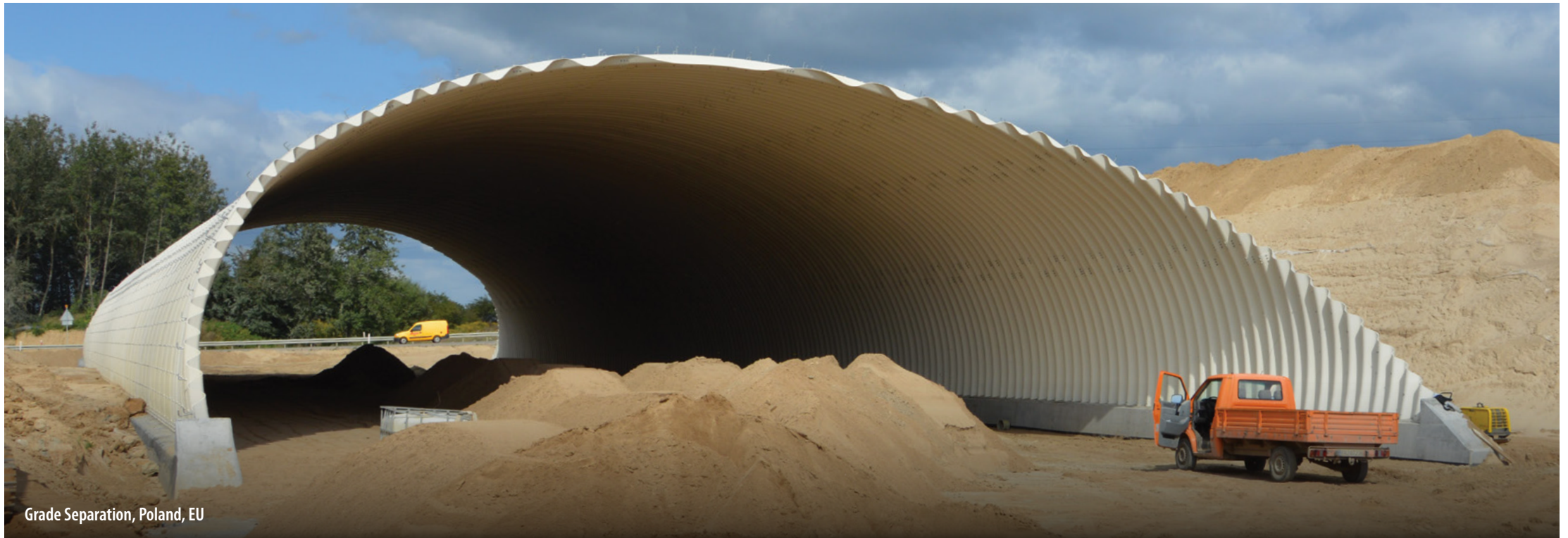
PLAY ULTRA-COR
PRODUCT VIDEO

Innovative Ultra-Cor® creates the world's largest
metal buried bridge span: 32.39 m (106.3'), Dubai, UAE.





Shamal Bridge, RAK Ring Road, Dubai, UAE



Grade Separation, Poland, EU



Heavy Haul Road Arch, Northern Quebec



Easy to ship and install



Available with protective coatings

OVER
75
YEAR
SERVICE LIFE



Visit our Buried
Bridge Design
Ideas Gallery



Grade Separation, near Corner Brook,
Newfoundland and Labrador

Buried Metal Bridge Benefits

All's Buried Metal Bridges offer many advantages over concrete structures and girder style bridges.

- ▶ Save time and money on all aspects of the structure: material, shipping, foundations and footings, labour and equipment and life cycle maintenance
- ▶ “Greener” alternatives to concrete structures
- ▶ Seamless, wider and safer road surface than girder style bridges
- ▶ More flexible and resilient than concrete structures or girder style bridges
- ▶ Minimized site impact
- ▶ Ideal for Accelerated Bridge Construction
- ▶ Customized geometries to meet site-specific requirements
- ▶ Lightweight, easy to ship and install
- ▶ Larger, stronger for the heaviest loads
- ▶ Can accept a range of backfill materials
- ▶ A proven technology with global acceptance
- ▶ Value Engineering opportunities
- ▶ Equally suitable for urban, rural and remote locations
- ▶ Enhanced aesthetic treatments inside and out



SEE ALL BENEFITS



Buried Steel Bridges have a substantially lower life cycle carbon footprint than concrete bridges.

- ▶ Steel is the world's most recycled material*
- ▶ Less energy is used in the production and shipping of Buried Steel Bridges than concrete bridges
- ▶ Buried Steel Bridges can be built in significantly less time, reducing disruption time and detours and expediting construction schedules
- ▶ Buried Steel Bridges require less maintenance than concrete beam bridges
- ▶ Zinc used in galvanizing is a naturally occurring material and is 100% recyclable**



*Reference: www.aisc.org

**Reference: <https://galvanizeit.org/hot-dip-galvanizing/is-galvanizing-sustainable/hdg-environmental-advantages>



Virtually no maintenance; minimized life cycle costs.

- ▶ Eliminates recurring life cycle costs to maintain and repair bridge decks, expansion joints, bearings, girder fatigue, de-icing agent corrosion issues, concrete durability, fracture issues, approach slabs and freeze/thaw or wet/dry cycles
- ▶ No differential settlement “bridge bump” to maintain between decks and approach slabs
- ▶ Wider spans eliminate need for bridge piers that restrict hydraulic flow and trap debris
- ▶ Open-bottom shapes can offer longer design service life
- ▶ Design service life can exceed 75 years with protective coatings
- ▶ Structure length can be extended to accommodate future road widening; increased functional service life

Seamless, wider and safer road surface than girder style bridges.

- ▶ Allows roadway construction to extend subgrade materials directly over buried bridge elements
- ▶ Road section provides uniform driving lane and shoulder widths over buried bridges
- ▶ Pavement structure is continuous and seamless
- ▶ No bridge deck freezing issues
- ▶ No freeze/thaw differential with roadway approaches
- ▶ No need to narrow roadway at crossing

More flexible and resilient than concrete structures or girder style bridges.

- ▶ Unmatched performance, especially in less-than-ideal foundation conditions
- ▶ Settlement tolerance is much higher than concrete structures or girder style bridges
- ▶ Little differential movement, settlement or frost heave between buried bridge and adjacent approach fills
- ▶ Headwalls and wingwalls offer more resiliency in flood events
- ▶ Geotextile Reinforced Soil (GRS) backfill technology also increases resiliency

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



Buried Metal Bridges & Tunnels



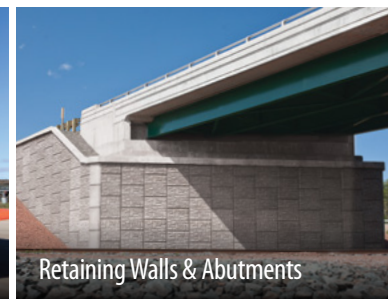
Prefabricated Bridges



Modular Panel Bridges



Pipe & Drainage



Retaining Walls & Abutments



Sound Barrier Walls



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INTERNATIONAL



SOUNDWALLS



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PRINTED IN CANADA AIL-1154 09/2021