



The Right Bridge. Built Right.



BIG R Manufacturing LLC

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Big R Manufacturing provides complete bridging solutions for customers from the Rocky Mountain Region, through the whole Western USA including Alaska. In our Greeley, Colorado plant we fabricate three different bridge types (portable/modular, truss, and rolled beam superstructures)—in a variety of spans and widths—available in weathering steel, or painted to any specification. We also provide bridge abutments.

Thanks to our engineering support and many years of experience, Big R bridges and abutments are designed for quick and easy installation.



Portable/Modular Bridges

Big R portable/modular temporary and permanent replacement bridges serve a variety of applications: forestry, resort, oil and gas, county, to name a few. Available in spans from 16 ft to over 150 ft, our bridges come with a 4 1/4-inch deep steel deck and are available with square or skewed ends. Big R bridges are strong yet lightweight. For temporary installations we shop-install a timber running surface over the steel deck. Permanent structures can be covered with asphalt.

Our portable/modular bridges allow for better fish passage than culvert and, due to ease of installation, streambeds and water quality are safeguarded during placement. Installation is easy and more cost effective than for large culverts.

- 1 Portable bridges up to 50' long, shipped on a single truck. Unloading and placement is achieved with readily available equipment.
- 2 100' long bridge in the Mt. Baker-Snoqualmie National Forest in Washington State features asphalt surface over galvanized steel deck.
- 3 Located on Prince of Wales Island in Alaska, the main span of this bridge is 157' long, and was designed to carry extremely heavy logging loads. All Bolt-A-Bin® abutments were very practical in this remote location.
- 4 Short-span portable bridges can be handled with a single excavator.
- 5 Temporary 40' long bridge on timber sills in East Texas, removed every rainy season.
- 6 Modular detour bridge leased to Sedgwick County, Kansas carried over 10,000 vehicles per day. Bridge was three span 160' x 30' and was later installed as three permanent structures.
- 7 Painted portable bridge used on an oil exploration road in Utah.
- 8 Four-panel modular bridge with skewed ends, placed in one morning.



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STANDARD FEATURES

- Heavy duty loading
- Galvanized steel deck
- Weathering steel structurals
- Bearing plates and pads
- Curb or rail system
- 14-foot width

OPTIONS

- Painted to customer specifications, including special paint for coastal or tropical areas
- Timber or galvanized steel back walls
- Running plank
- Precast sills
- Special bridge rail system
- Any width (may require more than two sections)
- Full-width running plank
- Bolt-A-Bin® abutments
- Atlantic Wire Wall abutments



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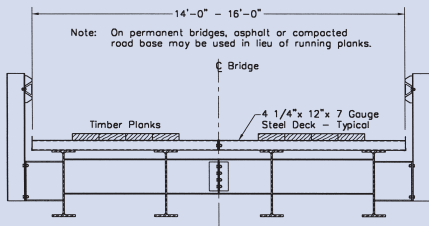


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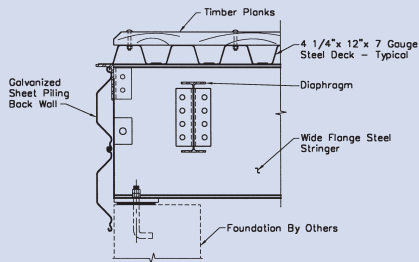


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Portable Bridge Two Piece Typical Section

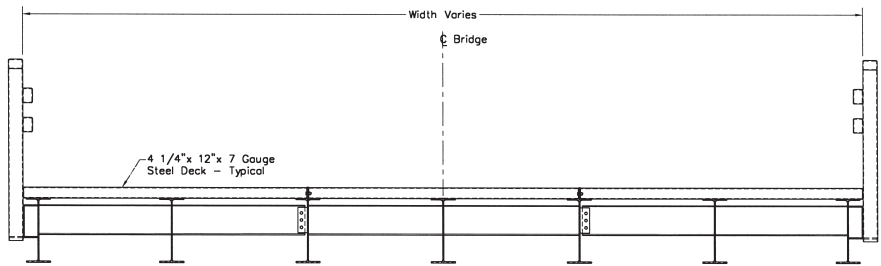


Typical Side View



Typical Portable Bridge Design Vehicles						
HS 20-44 - GVW 36 TONS	8,000 LBS.	16,000 LBS.	16,000 LBS.	16,000 LBS.	16,000 LBS.	16,000 LBS.
HS 30-44 - GVW 54 TONS	12,000 LBS.	24,000 LBS.	24,000 LBS.	24,000 LBS.	24,000 LBS.	24,000 LBS.
U80 OFF HIGHWAY TRUCK GVW 80 TONS	12,000 LBS.	37,000 LBS.	37,000 LBS.	37,000 LBS.	37,000 LBS.	37,000 LBS.
U102 OFF HIGHWAY TRUCK GVW 102.5 TONS	8,000 LBS.	42,500 LBS.	42,500 LBS.	56,000 LBS.	56,000 LBS.	
L90 OFF HIGHWAY LOG LOADER GVW 90 TONS	90,000 LBS.	90,000 LBS.	GROSS 180,000 LBS.			

Modular Sections



Modular Steel Bridge Superstructures

- Widths up to 28' available in as few as two modular panels
- Wider superstructures using three or more modular panels also available
- Can be placed on steel or concrete foundations
- Can be fabricated with square or skewed ends
- No waiting for concrete to cure
- Easy installation in rugged terrain
- Erection by local contractors or county forces using semi or unskilled labor
- Quick installation resulting in shorter road closures



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Modular Superstructures

9 Modular superstructures can be installed in any weather.

Rolled Beam Superstructures

Big R rolled beam superstructures, for field erection, fill the need of many state D.O.T. projects as well as county, municipal and private installations. Girders for superstructures are pre-fabricated. All fabrication is done in accordance with the current standard requirements for highway bridges adopted by AISC/AASHTO, applicable to the project. After fabrication, girders are blast-cleaned then primed or painted if specifications require.



Rolled Beam Superstructures

- 10 Steel girder bridge, with a timber deck, carries ski traffic at Telluride Resort in Colorado.
- 11 Big R rolled beam bridge, with concrete deck and steel rail system, provides many years of maintenance-free service.
- 12 Rolled beam steel girders deliver strength on a project on I-25 in Denver, Colorado.



Truss Bridges

- 13 Long-span truss bridge installed for a Colorado Department of Transportation project.
- 14 Truss-type bridges are available to carry pedestrians or utilities.
- 15 Two-span trail bridge allows hikers to cross busy I-225 in Aurora, Colorado.

Other Bridging Solutions

- 16 Large diameter culvert installed to reroute Colorado state highway around a damaged truss bridge.
- 17 Stone-faced wire wall abutment at Telluride in Colorado.
- 18 Big R roll-formed steel sheet piling, behind bearing piling, supports this county bridge.
- 19 Modular bridge on MSE wire wall abutment near Park City, Utah.
- 20 AIL Bolt-A-Bin® abutments are cost effective, especially in remote areas. Assembly can be done quickly with no pile driving or concrete pouring.

Structural Plate

- 21 63' span AIL Super•Cor® arch, with Atlantic Wire Wall retaining walls, cast-in-place concrete headwalls, and precast concrete wingwalls, replaced an aging concrete girder bridge for this grade separation project on the Trans Canada Highway in Newfoundland.
- 22 Super•Cor® box culverts are available in spans from 10' to 40'. This 38' span is on a county road in Wyoming.
- 23 AIL Bolt-A-Plate® being installed as golf cart underpass in California. Bolt-A-Plate® is available for bridging solutions in underpass, pipe, pipe-arch and several arch shapes.

Truss Bridges

Truss bridges use either structural tubes or rolled sections and serve a variety of uses: hiking trails, jogging and bicycle paths, golf courses, walkways and overpasses. Contact us for a complete brochure on our pedestrian and recreation bridges.



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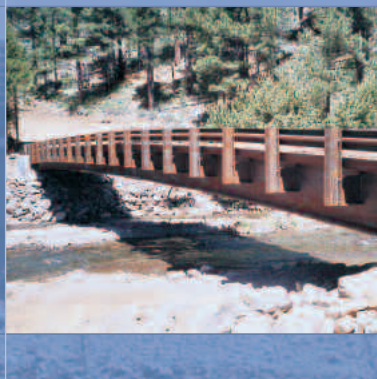
Other Big R Bridging Solutions

Big R, through its association with Atlantic Industries Ltd (AIL), provides a variety of bridge abutments and bridging solutions for the most complicated projects. Abutment options include Bolt-A-Bin®, Atlantic Wire Wall, and steel piling with Big R sheet piling. Other solutions include: Super•Cor® boxes and arches, Bolt-A-Plate®, and large diameter culvert for bridge replacements. The combined product lines of Big R and AIL mean one-stop-shopping for most bridge projects.





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No matter how big the challenge, go no further than Big R for your complete bridging needs. For more information on any of our products, or to seek out solutions, please visit our Web sites or give us a call.



BIG R Manufacturing LLC

US: 1 800-234-0734

Canada: 1 877 AIL-PIPE (1 877 245-7473)

www.bigrmfg.com

www.ail.ca

Address: P.O. Box 1290, Greeley, Co 80632-1290

Fax: 970-356-9621

E-mail: bigrmfg@bigrmfg.com



Atlantic Industries Limited