

SUPERSTRUCTURE DEPTHS: LESS IS MORE

IF YOU NEED SHALLOW SUPERSTRUCTURE DEPTHS, YOU NEED STEEL.



Its unmatched span-to-depth ratio means smaller girders—in fact, the AASHTO *Bridge Design Specification's* recommended minimum depth for a continuous steel girder is 33% shallower than the recommendation for precast concrete!

THE SAVINGS ADD UP

Want to cut your right-of-way cost? Steel can do that. Need to use less approach fill? Steel can do that, too. Feeling constrained by retaining walls? You can cut their size—or even eliminate them entirely—with a steel bridge.



Steel bridges: The obvious choice

NO OTHER STRUCTURAL BRIDGE MATERIAL CAN MATCH DOMESTICALLY FABRICATED STRUCTURAL STEEL.

The steel industry has the pedal to the metal, with constant innovation making it faster and easier to design, fabricate, and construct a bridge with steel.

An economical choice, today and tomorrow: Steel's unmatched resilience and durability provide outstanding value that adds up fast during a service life of a century or more.

Bridges with nothing to hide:

Inspecting a steel bridge is much easier, faster, and less expensive than inspecting a concrete bridge. And if an inspector does find a potential issue, it's also much easier, faster, and less expensive to repair.

ABC—easy (and as fast as) 1, 2, 3:

When's the last time you replaced a bridge overnight? It's possible with accelerated bridge construction (ABC) techniques, like assembling a complete bridge offsite and moving it into place during a brief road or rail closure.

Less is, in fact, more: Steel's unmatched strength-to-weight ratio allows longer spans with fewer intermediate piers—and a smaller environmental footprint.

Ace your geometry test: Steel is ideal for both simple designs and complex geometry, and its high span-to-depth ratios mean your bridge can go the distance with a shallower superstructure.

Go with the sure thing: Structural steel is a reliable choice because it has the most robust quality certification program out there, which is designed to prevent errors instead of correcting them.

aisc.org/bridge-design-principles



**Smarter.
Stronger.
Steel.**

THE LONG AND SHALLOW OF IT

Shallower girders + longer spans = enormous benefits!

Longer spans can reduce or eliminate substructures—which cuts initial construction costs as well as future maintenance and inspection costs.

Longer spans also future-proof your bridge, allowing space for future new lanes, and eliminate roadway hazards, too.



Pfeiffer Canyon Bridge, Big Sur, Calif.
2020 Prize Bridge Merit Award – Long Span



Metro-North Railroad Bridge over Atlantic Street
Stamford, Conn.
2022 Prize Bridge National Award – Short Span



Vine Street Expressway (I-676) Bridge
Reconstruction Project – 18th to 22nd Streets
Philadelphia
2020 Prize Bridge National Award – Short Span



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