Steel: The obvious choice

No other structural material can match domestically fabricated structural steel.

Structural steel can **SUPERCHARGE YOUR PROJECT SCHEDULE** because you can design, fabricate, and construct a steel building 50% faster than you could just a few years ago.

Steel is the **MOST RESILIENT STRUCTURAL MATERIAL** because it boasts superior ductility, the highest strength-to-weight ratio, and can be easily repaired.

Structural steel is the **MOST SUSTAINABLE MATERIAL** because it is made from recycled scrap using pure electricity—in fact, it will continue to get greener as the power grid incorporates more renewable energy.

Structural steel is the **MOST EFFICIENT MATERIAL** because its high strength-to-weight ratio allows longer spans, fewer and smaller columns, and larger bays—you can maximize open space today and easily adapt for future reuse.

Structural steel is an **INCREDIBLY ECONOMICAL CHOICE** because its offsite fabrication streamlines the construction process, saving time and money. Bring a structural steel fabricator onto your project team early to save around 70% on your steel package!

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.

**DID YOU KNOW?**
All structural steel shapes produced in the U.S. are made in electric arc furnaces, which use electricity to melt cars, refrigerators, decommissioned bridges, and other scrap into new steel without any loss of quality. The average new member contains 93% recycled steel, and EAF steelmaking has 75% less emitted CO₂ than traditional steelmaking.

**DID YOU KNOW?**
The structural steel industry is serious about decarbonization—and its footprint will continue to decrease as the U.S. power grid becomes less dependent on fossil fuels. But American structural steel mills aren’t waiting for the power grid to catch up. They’re making their own public commitments to reduce greenhouse gas emissions or intensity:
- Nucor pledges to reduce greenhouse gas intensity by 35% by 2030
- Steel Dynamics pledges to go carbon neutral by 2050
- Cleveland Cliffs pledges to reduce greenhouse gas emissions by 25% by 2030
- Gerdau has just launched an 80-megawatt solar farm to generate clean, renewable electricity for its production line.

**DID YOU KNOW?**
The U.S. now offers the world’s first net-zero steel. You can get emissions-free steel products at scale.

**DID YOU KNOW?**
Steel is the most recycled material on the planet. Choose structural steel to keep waste out of landfills!
STEEL: THE MOST SUSTAINABLE CHOICE

EXCEEDING KYOTO PROTOCOL REQUIREMENTS—BY A FACTOR OF SEVEN
The Kyoto Protocol would have required U.S. industries to reduce emissions by 5.2% by 2012—but the iron and steel industries have cut theirs by a whopping 36% since 1990. They cut energy intensity by 31% during the same period.

Clean air is important, but so is clean water. The structural steel industry has worked hard to conserve water over the last few decades, and it’s paid off. Today, 95% of the water used to make structural steel is recycled with no external discharges, resulting in a net consumption of only 70 gallons of water per ton of steel.

THE FUTURE OF DECARBONIZATION
Because structural steel members are made with pure electricity, steel will just keep getting greener as the power grid incorporates more renewable energy.

And the steel industry is taking matters into our own hands to continue to improve with some mills building massive solar panel arrays to power their facilities today and tomorrow.

LEADING THE WORLD IN CLEAN, ENERGY-EFFICIENT STEEL PRODUCTION
Let’s talk about global steel production. Did you know that Chinese steel has three times the global warming impact of domestic steel?

American steel is the greenest option available from all major-steel producing countries. Domestic steel is made with the cleanest, least energy-intensive production methods—methods that leave the other major foreign sources far behind. American EAF steel benefits our workers, our climate, our communities, and our planet. The steel we make today will be remade and recycled again and again.

And that’s even before you consider the environmental impact—and added time and cost—of intercontinental shipping. American steel can get onto your jobsite faster while saving our planet.

More than any other major steel industry in the world, the American steel industry is on the right path—a sustainable path toward a cleaner, more prosperous future.

Environmental documentation with nothing to hide
Transparency matters. When choosing a sustainable structural material, you need the full story.

AISC works with some of the largest mills in the country to develop accurate industry-average environmental product declarations (EPDs) that consider a number of environmental impacts related to the manufacture of steel, including global warming potential, ozone depletion, acidification, eutrophication, and ozone creation.

Other materials’ documentation excludes important carbon emission sources, like decomposing harvest waste, and the release of embodied carbon at the end of a product’s service life. Steel waste goes right back in the supply chain, storing carbon for generations.

With steel, you get the complete picture. Learn more at aisc.org/EPD.

Innovative materials, innovative design
Extraordinary projects that take care of our planet today and for the future start with structural steel. Learn more at aisc.org/sustainability.

Smarter. Stronger. Steel.