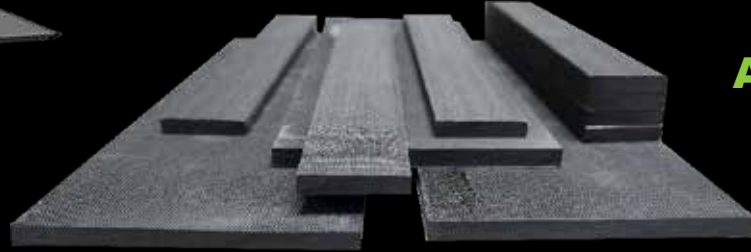
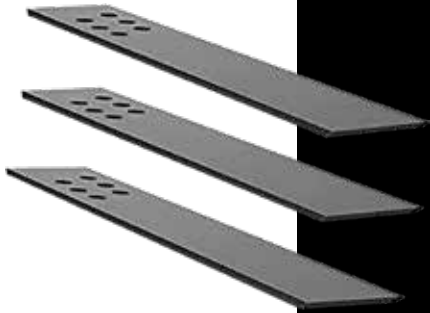




**SPAN**  
**CARBONFIBER™**

STRUCTURAL SOLUTIONS



Introducing the **NEW**

# **CF CARBON BAR™**

HIGH STRENGTH - LIGHT WEIGHT

**AFFORDABLE**



Superior Performance - Cost Competitive

## **Endless Sustainable Possibilities**

Carbon Bar outperforms traditional materials – like steel, aluminum and wood – and is now available at affordable pricing. When superior strength, light weight and durability are critical in your product design and production processes, CF Carbon Bar™ is your answer.

**4X**

**Stronger  
than Steel**

**5X**

**Lighter  
than Steel**

**50%**

**Lighter  
than Aluminum**

**25X**

**Stronger  
than Wood**

Visit us at: **CFSpan.com**

## Why Carbon Fiber?

Stronger material to make better and more reliable products:

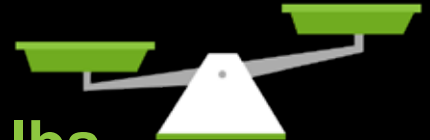
- 4X times stronger than steel
- 5X lighter than steel
- Corrosion resistant
- Weather proof
- Fatigue resistant
- Thermally stable
- Design flexibility
- Enables improved fuel efficiency
- Compatible with marine environment

## Superior Strength - Unmatched



## LIGHT WEIGHT

Material of choice for lightweighting



**3.2 lbs**

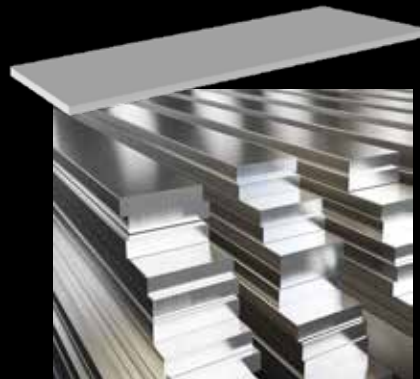
STEEL

**1.1 lbs**

ALUMINUM

**0.7 lbs**

CARBON FIBER



Bar size: 12" X 4" X .20"

## Proven Performance & Reliability

Material of choice for high-tech industries like aviation, automotive, aerospace, energy and infrastructure.



	ASTM A36 Steel	Aluminum 6061-T4	American Eastern Wht Pine Wood	Dow Aksa's Carbon Fiber Laminate
	<b>Steel</b>	<b>Aluminium</b>	<b>Wood (pine)</b>	<b>CF Carbon Bar™</b>
<b>Density</b>	7.86 g/cc	2.7	0.35	1.63
<b>Tensile strength (Ksi)</b>	73 ( max ultimate)	35 (ultimate)	11 (ultimate - axial)	272 (Axial)
<b>Tensile modulus (Ksi)</b>	29000	10000	1209	19725 (fibre direction)
<b>Compressive strength (Ksi)</b>	22 (@ yield)	8 (@ yield)	4.8	160
<b>Compressive modulus (Ksi)</b>	29000	10000	9 (@ rupture)	20595 (fibre direction)
<b>Flex modulus (Ksi)</b>	29000	10000	1241	19725

Selected for use in planes, cars, windmills, etc., due to its superior strength-to-weight ratio and other attributes. CF Span is now bringing affordable Carbon Fiber solutions to your markets and applications.



## Affordability - Value

- Improved safety
- Superior product at affordable price
- Reduced maintenance and replacement costs
- Lighter weight leads to energy efficiency
- Reduced logistics costs
- Improved ergonomics
- Thermally stable



Visit us at: [CFSpan.com](http://CFSpan.com)



# Spanning Across Markets

CF Span is ready to collaborate with you and explore new opportunities, building on your strengths to make your products even better. Our affordable CF Carbon Bars will give you a competitive advantage – and make a difference for you and your customers.

**KITCHEN SUPPORTS**  
- Countertops - Stone - Toe Kicks - Floating Shelves

Countertop Supports

Stone Supports

Floating Shelves

Custom Toe Kicks

**BUILDING & CONSTRUCTION**

X Cross Bridging  
X Solid Blocking  
X Strapping

Innovation in Action

**MARINE**  
Pontoons/Boats

The Future of BOAT making



# & Industries

## Lightweighting

The New Carbon Bar reduces weight and optimizes strength – resulting in decreased emissions, and better fuel efficiency and handling while maintaining safety and comfort.

### DOCKS Floating - Cantilever - Conventional

**SUSTAINABLE Solution**

**The FUTURE Floating Dock**

### INDUSTRIAL Parts & Pallets

**INNOVATION in Action!**

**Endless Possibilities**

### BRIDGE Structures

**Footbridges**

STRENGTHENING OF FULL SCALE CONCRETE BRIDGES WITH CF Span LAMINATES & WRAP

**Reinforcement**

### RECREATIONAL Travel Trailers

**Reinforcement**

### E - MOBILITY Structures

**Reinforcement**



## Durability

- Weather and chemical resistant
- Maintains form in hot/cold weather – no warping or change in size
- Temperature stability (low thermal expansion)
- Does not corrode or rot
- Impervious to water, snow, wind and rain

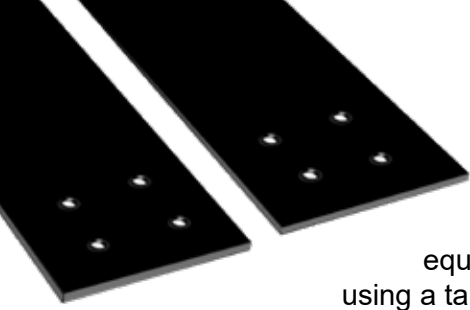


## Ease of Use

- Lightweight, safe and easy to manage in the field
- Flexible - easy to cut and size to fit
- Modular solution
- Minimal maintenance/upkeep
- Easy to build on existing materials to make them stronger, longer lasting
- Rapidly scalable
- Do it once – and you're done!
- Less prone to wear and tear compared to traditional materials

## Build on your Innovative Strengths

- 1 Easy to build on existing materials to make them stronger, longer lasting
- 2 Incorporate CF Span products with existing construction techniques to dramatically improve performance and results
- 3 Adds tangible value with minimal effort
- 4 Elevates your product and services with innovative technology that benefits your customers and will span far into the future
- 5 One of the strongest reinforcing fibers with higher stiffness per density than metal, plastic or wood
- 6 Adhesion without welding



## Versatile

On-site drilling, cutting, handling, sizing and finishing

For best results - standard carbide tipped construction tools or tile cutting equipment can be used to cut, trim and drill Carbon Bar material on the job site using a table saw, chop saw, drill or skill saw.



## Assembling & Fastening

**Bonding & fastening agents include:**

Commonly used adhesives like polyurethane, epoxy and acrylates. Common fasteners can also be used - predrilling is recommended when possible. Self tapping screws are also an option.

- Can add strength with multiple layers
- Adhesion without welding
- Can bond to metal, wood, stone



## Standard PPE

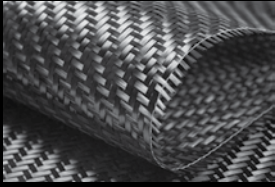


Standard PPE recommended



Visit us at: [CFSpan.com](http://CFSpan.com)





Explore the  
**POSSIBILITIES**  
with us!

## Weighing the **BENEFITS**

Our 1.5 inch I-Beam Carbon Bar solution can hold up a mature elephant weighting over 18,000 lbs. Our superior strength and light weight features allow immense possibilities.



**Order today**

**(833) 4CFSPAN**

**(833) 423-7726**



Visit us at:

**CFSpan.com**

33 S. Five Mile Rd. Midland, MI 49642

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