



4MAX™ COMPOSITE REBAR

PRODUCT TECHNICAL DATA



4MAX™ Composite Rebar is a high-strength composite reinforcing bar from MST-BAR®, engineered for concrete flatwork. 4MAX™ Composite Rebar replaces steel rebar and welded wire mesh in flatwork, providing centuries of serviceability to your reinforced concrete.



ADVANTAGES

- **Rust-Proof**
Completely eliminates cracks from spalling.
- **200+ Years Service Life**
Engineered to last for generations.
- **Quick & Simple Installation**
Save up to 50% labor compared to steel rebar.
- **Transportation Savings**
75% lighter than traditional steel rebar.
- **High Performance in All Climates**
Stronger reinforcement in freeze-thaw regions & guaranteed longevity in coastal regions compared to steel rebar.
- **Stronger Than Steel**
Over 2X stronger than Grade 60 rebar.
- **Nonconductive & Nonferrous**
Ideal for projects with electromagnetic sensitivity.
- **Superior Crack Control**
80% less crack initiation compared to traditional steel rebar.
- **Chemical Resistant / No waterproofing**
Impervious to de-icing salts and corrosive chemicals and eliminates the need for costly waterproofing agents.



PHYSICAL & MECHANICAL PROPERTIES

BAR DIMENSIONS	1/2 in. from outside rib to outside rib, 7/16 in. load bearing core
CROSS-SECTIONAL AREA	0.16 in. ²
BAR PROFILE	Integral Rib Design (No Sand-Coating Required)
TENSILE STRENGTH (ASTM D7205)	165 ksi (1140 MPa)
ELASTIC MODULUS (ASTM D7205)	7550 ksi (52 GPa)
TRANSVERSE SHEAR STRENGTH (ASTM D7617)	27 ksi (186 MPa)
PULL-OUT CAPACITY (ASTM D7913)	2900 psi (20 MPa)



APPLICATIONS

4MAX™ Composite Rebar replaces welded wire fabric, #3, #4, and #5 steel rebar for all (but not limited to) the following applications:

- **Parking Lots**
- **Street Pavement**
- **Sidewalks**
- **Curb & Gutter**
- **Patios**
- **Decorative Concrete**
- **Slab on Grade**
- **Pool Decks**
- **Concrete Countertops**



HANDLING & INSTALLATION

Always wear gloves when handling 4MAX™ Composite Rebar to protect against fiberglass splinters. Avoid direct contact with skin. When cutting 4MAX™ Composite Rebar, use a diamond blade for best results. Tie and chair 4MAX™ Composite Rebar as you would steel rebar. Generally, minimum lap splice length of 15 inches is sufficient unless otherwise specified.



CERTIFICATIONS

ASTM Material Certifications available for every production lot of 3MAX™ Composite Rebar.



To learn more about 4MAX™ Composite Rebar and other MST-BAR® Composite Rebar Products, or to request pricing, give us a call or visit us on the web.

TUF-N-LITE, LLC

www.tufnlite.com

(513) 472-8400

info@tufnlite.com