



# 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

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

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