

REINFORCING STEEL MESH FEED



GRADE 500E MA (MICRO-ALLOY)

High tensile, high ductility plain carbon steel manufactured in coils to be further processed into high ductility reinforcing mesh. Available as plain (not deformed) coils, the product is processed by specialist manufacturers into ductile reinforcement for concrete. This steel meets the demanding requirements of the seismic structural design methods employed in New Zealand as required by the reinforcing steel

Standard AS/NZS 4671. This reinforcing derives its superior strength and ductility by micro-alloying the steel with small vanadium additions. Grade 500E MA steel is readily: weldable (refer AS/NZS 1554.3), identifiable by registered bar marks, hot or cold bent (for procedures refer to NZS 3109), threaded and galvanised. Test Certificates are available for every production batch of this product from Pacific Steel.

Chemical Analysis

Element	C	S	P	CE
Max %	0.22	0.050	0.050	0.49

All figures are weight percentage values

Where CE =

$$C + \frac{Mn}{6} + \frac{Cr}{5} + \frac{Mo}{5} + \frac{V}{5} + \frac{Ni}{15} + \frac{Cu}{15}$$

Specified Physical Properties

Yield Stress (MPa)	Tensile Ratio (MPa)	Uniform Elongation at Maximum Load (%)
500 - 600	1.15 - 1.40	min 10%

Yield, ratio and elongation limits are characteristic values

Mass Tolerance

Specific Mass Tolerance for all bar diameters = nominal mass per metre \pm 4.5%

Bar Diameters

Diameter	Plain
5.5mm	✓
6.1mm	✓
7.0mm	✓
7.5mm	✓
8.0mm	✓
9.0mm	✓

Coil Dimensions

Internal diameter (minimum)	900mm
External diameter (maximum)	1230mm
Coil depth (for 6mm through to 16mm)	900 - 1100mm
Winding direction	clockwise
Typical weight	1.46 t



Grade 500E MA Reinforcing Steel (micro-alloy) - Mesh Feed

Bar Marking Key:

○ 500E

○ Pacific Steel