Fletcher Reinforcing

**CLASS 1**

# Building Product Information Statement

## PRODUCT NAME

Cut and bent high tensile seismic® reinforcing bar – grade 500 ductility class E (“HD”, “HR”, “RB”)

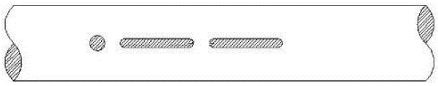
## PRODUCT DESCRIPTION

500E steel reinforcing bar manufactured to meet the requirements of AS/NZS 4671 “Steel for the reinforcement of concrete” – strength grade 500MPa and ductility class E – micro-alloyed reinforcing steel feed supplied by Pacific Steel (NZ) Ltd.

The bar is available as plain round profile bar in diameters: 6mm, 10mm, 12mm, 16mm & 20mm, deformed profile in diameters 10mm, 12mm, 16mm, 20mm, 25mm, 32mm & 40mm and ReidBar™ profile in diameters 12mm, 16mm, 20mm, 25mm & 32mm. Bar diameters less than 12mm have been processed by Fletcher Reinforcing from hot-rolled coil.

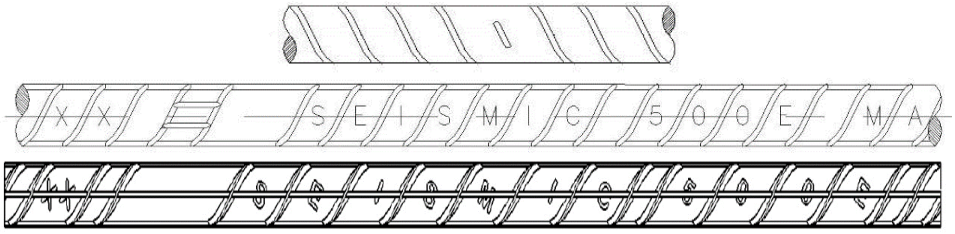
Bars of 12mm and 16mm diameter may have been processed from hot-rolled coil or hot-rolled as straight bar.

## PRODUCT IDENTIFIER



*Pacific Steel (NZ) Ltd R500E bar mark*

AS/NZS 4671: R500E6, R500E10, R500E12, R500E16, R500E20




*Pacific Steel (NZ) Ltd D500E bar marks - “XX” denotes bar nominal diameter*

AS/NZS 4671: D500E10, D500E12, D500E16, D500E20, D500E25, D500E32, D500E40

## PLACE OF MANUFACTURE

Aotearoa New Zealand

## MANUFACTURER

Fletcher Reinforcing (a division of Fletcher Steel Limited, NZBN 9429037626563)

Contacts: (64) 092704247

Website: https://www.fletcherreinforcing.co.nz/

Email: hello@fletchersteel.co.nz

Address: 8 Gabador Place, Mount Wellington, Auckland 1060

Fletcher Reinforcing

## RELEVANT BUILDING CODE CLAUSES AND COMPLIANCE

Past history of use and manufacture to appropriate product Standards indicates that provided the structural design and product installation, use and maintenance is in line with the guidelines of this Statement, 500E reinforcing bar can contribute to meeting the following performance criteria outlined in the New Zealand Building Code:

- B1 Structure: Performance clauses B1.3.1, B1.3.2 & B1.3.3 (a, b, d, f, g, h, m & q) and B1.3.4 (d). *500E reinforcing bar contributes to meeting the performance requirements of these clauses by being manufactured and certified to meet the requirements of AS/NZS 4671.*
- B2 Durability: Performance clauses B2.3.1(a).

## LIMITATIONS ON USE

- reinforcing steel, ("500E"), including mesh, can only be:-
  - bent to the provisions of NZS 3109 and NZS 3101.1. (if deformed bar is to be galvanized, note specific bend diameters in NZS 3101.1).
  - welded to the provisions of NZS 3109 and AS/NZS 1554.3
- 500MPa strength, class E ductility reinforcing steel, ("500E"), including 500E reinforcing mesh, cannot be re-bent cold. A suitable procedure for hot re-bending of 500E reinforcing steel can be found in NZS 3109 Clause 3.8.8.

## DESIGN AND INSTALLATION REQUIREMENTS

- 500E reinforcing bar should only be specified by suitably qualified Structural Engineers to meet the performance criteria set out in the New Zealand Building Code.
- 500E reinforcing bar should be installed by competent and experienced personnel familiar with the requirements and practices of NZ reinforced concrete construction.
- As a micro-alloyed steel, 500E reinforcing bar can be hot-dipped galvanized.

## DURABILITY AND MAINTENANCE REQUIREMENTS

- Avoid damage to the concrete that would reduce the cover depth or allow contaminant ingress through the concrete cover.
- 500E reinforcing bar should be stored in an essentially dry environment to avoid excessive surface corrosion forming.
- Reinforcing bar should not be used if physically damaged.
- Tightly adherent mill scale or surface corrosion are not detrimental to the mesh performance, but excessive loose and flaking surface corrosion should be avoided.

## WARNINGS & BANS

The 500E reinforcing bar is not subject to warning or ban under section 26 of the Building Act 2004.

## DISCLAIMER

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