



# **Building Product Information**

## **PRODUCT NAME**

low tensile seismic® reinforcing bar – grade 300 ductility class E ("D", "R")

#### PRODUCT DESCRIPTION

300E steel reinforcing bar manufactured to meet the requirements of AS/NZS 4671:2019 "Steel for the reinforcement of concrete" – strength grade 300MPa and ductility class E – reinforcing steel bar.

The bar is available as:

Plain round profile bar in diameters: 10mm, 12mm, 16mm;

Deformed profile in diameters 10mm, 12mm, 16mm;

## PRODUCT IDENTIFIER

Grade R300E Microalloyed Plain Bar



Pacific Steel (NZ) Ltd R300E bar mark

Grade D300E Microalloyed Deformed Bar



Pacific Steel (NZ) Ltd D300E bar marks - "XX" denotes bar nominal diameter

#### PLACE OF MANUFACTURE

New Zealand

#### MANUFACTURE DETAILS

Legal Name:Pacific Steel Limited Contacts: 0800 7227 8335

NZBN: 9429040742786

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

Email: sales@pacificsteel.co.nz

Address: 21 Beach Road, Otahuhu, Auckland

# **IMPORTER DETAILS**

N/A

#### RELEVANT BUILDING CODE

- B1 Structure: Functional requirements clause B1.2 and performance clauses; B1.3.1, B1.3.2, B1.3.3(f) and B1.3.4(d)
- B2 Durability: Functional requirements clause B2.2
- S/NZS 4671:2019, Steel for the reinforcement of concrete.
- NZS 3101-1 and 2:2006, Concrete Structure Standard, incorporation Amendment No. 1, 2, and 3.
- AS/NZS 1554.3, Structural Steel Welding, Part3: Welding reinforcing steel

#### CONTRIBUTIONS TO COMPLIANCE

- Rebars are essential components in the construction of reinforced concrete structures, helping them withstand various types of loads and forces, including bending, shear, and axial loads. Their placement and quantity depend on the specific structural design requirements and the intended use of the concrete element.
- NZS 3101-part1:2006 specifies reinforcing bars are to comply to AS/NZS 4671 standard. Grade 500E MA
  meets the minimum product and testing requirements specified in AS/NZS 4671:2049 in order to
  satisfy the design requirements.
- NZS 3101:2006 requires reinforcing steel to comply with AS/NZS 4671:2019. "E" stands for "Earthquake".

#### LIMITATIONS ON USE

- reinforcing steel, ("300E"), including mesh, can only be:-
- o 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).
  - o welded to the provisions of NZS 3109 and AS/NZS 1554.3
- 300MPa strength, class E ductility reinforcing steel, ("300E"), can only be re-bent cold once.

## DESIGN AND INSTALLATION REQUIREMENTS

- 300E reinforcing bar should only be specified by suitably qualified Structural Engineers to meet the
  performance criteria set out in the New Zealand Building Code.
- 300E reinforcing bar should be installed by competent and experienced personnel familiar with the requirements and practices of NZ reinforced concrete construction.
- 300E 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.
- 300E 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 300E reinforcing bar is not subject to warning or ban under section 26 of the Building Act 2004.