

Main Roads Specification

MRS71A

Stainless Steel Reinforcing

June 09

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FEEDBACK

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Stainless Steel Reinforcing

1 INTRODUCTION

This Specification applies to the supply, fabrication and placing of stainless steel reinforcing bar used in concrete road and bridge structures.

This Specification shall be read in conjunction with MRS01 *Introduction to Specifications* and other Specifications as appropriate.

This Specification forms part of the Main Roads Standard Specifications and Technical Standards Manual.

2 MEASUREMENT OF WORK

2.1 Standard Work Items

This Specification contains no Standard Work Items. Subject to the provisions of Clause 2.1, supply and installation of stainless steel reinforcing shall be measured by Standard Work Items associated with particular elements of work contained in the following Specifications –

- a) MRS03 *Drainage, Retaining Structures and Protective Treatments*;
- b) MRS40 *Concrete Pavements – Base*;
- c) MRS62 *Bridge Substructure*;
- d) MRS63 *Cast-In-Place Piles*; and
- e) MRS77 *Bridge Deck*.

2.2 Stainless Steel Reinforcing Not Always Measured Separately

The supply and installation of stainless steel reinforcing bars shall be measured under a separate Standard Work Item only when incorporated in the following elements of work –

- a) bored and cast-in-place piles;
- b) bridge abutment and pier footings;
- c) bridge abutments;
- d) bridge piers;
- e) bridge deck;
- f) bridge cross girders; and
- g) bridge parapets, in situ kerbs and medians.

In all other structures, slabs, footings and precast elements payment for stainless steel reinforcing bars shall be deemed to be included in the rate or lump sum amount for the relevant Standard Work Item(s) for that structure, slab, footing or precast element.

2.3 Calculation of Quantities

The quantity of stainless steel reinforcing bar represented by any Standard Work Item included in the Specifications referred to in Clause 2.1, shall be the mass calculated from the actual lengths shown in the Drawings and the unit mass of each bar size as shown in Table 2.3. Where a continuous bar or welded or other type of splice is used instead of a lapped splice, the mass shall be calculated as for a lapped splice.

Table 2.3 - Unit Mass of Stainless Steel Reinforcing Bar

Bar Size (mm)	Unit Mass (kg/m)
10	0.617
12	0.888
16	1.58
20	2.47

Bar Size (mm)	Unit Mass (kg/m)
24	3.55
28	4.83
32	6.31
36	7.99
40	9.86

When calculating quantities, no allowance shall be made for any additional stainless steel reinforcing used –

- a) in cutting and/or bending processes; or
- b) by the Contractor to improve the rigidity of a reinforcing cage or to suit the proposed installation procedure.