

PART R80**SUPPLY OF GUIDE POSTS AND DELINEATORS****CONTENTS**

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1. GENERAL

- .1 This Part specifies the requirements for the supply of semi-flexible and flexible (buried or driven) guide posts and delineators.
- .2 The following definitions apply

"Flexible guide post" means a guide post which deflects when impacted by a vehicle and then returns to a vertical position, without maintenance intervention.

"Semi-flexible guide post" means a guide post which fails by bending when impacted by a vehicle and can be straightened with maintenance intervention.
- .3 Documents referenced in this Part are listed below:

AS 1348	Road and Traffic Engineering – Glossary of Terms
AS 1906.2	Retroreflective Materials and Devices for Road Traffic Control Purposes – Retroreflective Devices (Non – Pavement Application)
AS 1742.2	Manual of Uniform Traffic Control Devices – Traffic Control Devices for General Use
AS 2312	Guide to the Protection of Structural Steel against Atmospheric Corrosion by use of Protective Coatings
AS 2700S	Colour Standards for General Purposes.

2. QUALITY REQUIREMENTS

- .1 Guide posts must be approved by the Principal. A list of approved products is included in the DPTI Approved Products List, available from:
<http://www.dpti.sa.gov.au/documents/contractsandtenders/specifications/general>.
- .2 The Contractor may apply for approval of a guide post not included in the Approved Products List.
- .3 The Contractor acknowledges that for efficiency of maintenance, the Principal requires that the number of types of guide posts on the road network is kept to a minimum. The Principal reserves the right to withhold approval of any proprietary product at its absolute and unfettered discretion.
- .4 To obtain approval of a proprietary guidepost, the Contractor must provide a copy of:
 - (a) the details and dimensions of the guide posts;
 - (b) certification (not older than 3 years) that the guide posts have been tested in accordance with Clause 3.3 "Testing Requirements" and conform with all requirements of this Part (records of the Vehicle Impact testing must be included);
 - (c) Manufacturer's Warranty in accordance with Clause 4 "Performance Warranty"; and
 - (d) the manufacturer's installation and disposal instructions.
- .5 This documentation must be submitted at least 21 days prior to the supply of the guide posts. Any request for approval of a post must include all necessary supporting information and shall constitute a **HOLD POINT**. New documentation must be provided whenever a change in product formulation or design is made.

- .6 If a DPTI approved product will be used, the Contractor must nominate the manufacturer and model of the guidepost at least 7 days prior to the supply of the guide posts to the Site. Submission of this information shall constitute a **HOLD POINT**.

3. GUIDE POSTS

Design and Materials

- .1 Guide posts must be:
- (a) manufactured from recycled or recyclable material that is resistant to heat, low temperature, mould growth and breakage due to vehicle impact,
 - (b) designed to resist bending, twisting and displacement due to wind,
 - (c) resistant to vertical removal by persons other than authorised personnel using approved removal tools, and
 - (d) designed and manufactured such that there is no risk of injury to installers during the installation process or once in service.
- .2 Guide posts may be flexible or semi-flexible.

Dimensions and Shape

- .3 The guide posts must meet the following dimensional requirements:
- (a) a minimum projected width of 100 mm.
 - (b) a minimum thickness of 4 mm, unless it can be demonstrated that a smaller thickness will not adversely affect the free-standing performance of the post.
 - (c) a minimum overall length of 1 350 mm.
- .4 The tops of guide posts must be flat but, depending on the method of installation recommended by the manufacturer, the bottom may be either rectangular or pointed over a length of approximately 80 mm. The shape must be such that approved delineators can be permanently and securely attached to the guide post.

Testing Requirements

- .5 Guide posts must be tested to demonstrate compliance with TP 966 "Test Procedures for the Evaluation of Guideposts" and Clause 9.3.3.7 "Vehicle Impact" of Queensland Department of Main Roads Specification MRS11.14 "Roadside Furniture", available from www.mainroads.qld.gov.au. Records of the Vehicle Impact Testing must be provided.

Finish and Colour

- .6 The surface of the guide posts must have a smooth gloss or semi-gloss finish over the entire length. It must be free of roughness, sharp edges, discolouration and other objectionable marks or defects which may affect appearance, serviceability and attachment of delineators. The surface of guide posts must be easily cleaned and the colour of the exposed portion of the guidepost must be whiter than Y35 (off white) of AS2700.

Steel Post Coatings

- .7 Steel posts must be coated with a system which will protect from corrosion and provide impact and abrasion resistance sufficient to withstand normal storage, handling and installation without damage. Only coating systems recommended in AS 2312, for Category D exposure and 5-10 years to first maintenance (or better) are allowable. The guarantee provided in accordance with Clause 4 "Manufacturer's Warranty" must warrant that the coating will be free from corrosion, blistering, cracking, checking, flaking, peeling or any other defect for a period of at least 3 years.

Markings

- .8 The guide posts must be marked with the month and the year of manufacture. A horizontal depth line, or other instructions necessary to correctly install the post at a height of 1 000 mm above ground must be marked on one of the faces of the guide post.

4. MANUFACTURER'S WARRANTY

- .1 The Contractor must provide a Manufacturer's Performance Guarantee Statement for the Guideposts. At a minimum, it must provide for full replacement of the guide post should any defect relating to manufacture become apparent within 3 years. The statement must include full details of the guarantee and the service life expectancy.

5. DELINEATORS

- .1 Guideposts must be fitted with a delineator. Delineators must:
- comply with the requirements of AS 1742.2;
 - be either Retroreflector - discrete device type or Retroreflector - sheeting type as defined in AS 1906.2;
 - be placed centrally between the edges of guide posts, with the top of the delineator 50 mm below the top edge; and
 - be attached to guide posts following completion of final protective coatings by a vandal-proof and weatherproof means so they can be replaced if necessary without damaging the post.
- .2 Where reflective sheeting is used, it must have a minimum area 100 cm² and minimum width 50 mm when measured on a flat surface and installed such that the sheeting manufacturer's preferred orientation for optimum performance is followed.

6. TEST PROCEDURES

- .1 The Contractor must use the following test procedures (refer http://www.dpti.sa.gov.au/contractor_documents) to verify conformance with the Specification:

TEST	TEST PROCEDURE
Evaluation of Guide Posts	TP 966

7. HOLD POINTS

- .1 The following is a summary of Hold Points, referenced in this Part:

CLAUSE REF	HOLD POINT	RESPONSE TIME
2.	Supply of guidepost details with an application for approval of the product.	21 days
2	Nominate guidepost manufacturer and model where an approved product to be used	7 days