

CONSTRUCTION SPECIFICATION

C262

SIGNPOSTING

SPECIFICATION C262 - SIGNPOSTING

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CITATION

This document is named “Kempsey Shire Council, Construction Specification C262 – Signposting”.

ORIGIN OF DOCUMENT, COPYRIGHT

This document was originally based on PMHC AUS-SPEC. Parts of the AUS-SPEC document that remain are still subject to the original copyright.

VERSIONS, C262 SIGNPOSTING

VERSION	AMENDMENT DETAILS	CLAUSES AMENDED	DATE ISSUED (The new version takes effect from this date)	Authorised by the Director of Infrastructure
1.0	Version 1 – First Draft Version		March 2025	

SPECIFICATION C262: SIGNPOSTING

GENERAL

C262.01 SCOPE

1. This Specification is for:
 - (a) the supply and installation of road signs,
 - (b) the supply and installation of associated sign support and foundation structures to support the signs, and
 - (c) the adjustment of existing signs and sign support structures.

C262.02 REFERENCE DOCUMENTS

1. Documents referenced in this specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated.

*Documents
Standards Test
Methods*

(a) Council Specifications

- | | | |
|------|---|-----------------------|
| C201 | - | Control of Traffic |
| C212 | - | Clearing and Grubbing |
| C271 | - | Minor Concrete Works |

(b) Australian Standards

- | | | |
|-----------------------|---|---|
| AS/NZS 1163 | - | Cold-formed structural steel hollow sections |
| AS/NZS 1214 | - | Hot-dip galvanized coatings on threaded fasteners (ISO metric coarse thread series) (ISO 10684:2004, MOD) |
| AS 1379 | - | Specification and supply of concrete |
| AS/NZS 1554.1 | - | Structural steel welding - Welding of steel structures |
| AS 1580.108.2 | - | Paints and related materials - Methods of test - Dry film thickness - Paint inspection gauge |
| AS/NZS 1580.602.2 | - | Paints and related materials - Methods of test - Measurement of specular gloss of non-metallic paint films at 20 degrees, 60 degrees and 85 degrees |
| AS/NZS 1734 | - | Aluminium and aluminium alloys - flat sheet, coiled sheet and plate |
| AS 1742 Parts 1 to 15 | - | Manual of uniform traffic control devices |
| AS 1742.5 | - | Manual of uniform traffic control devices - Street name and community facility name signs |
| AS 1743 | - | Road Signs - Specifications |
| AS 1744 | - | Standard Alphabets for Road Signs |
| AS/NZS 1866 | - | Aluminium and aluminium alloys - extruded rod, bar, solid and hollow shapes |
| AS 2700 | - | Colour standards for general purposes |
| AS/NZS 3678 | - | Structural steel - hot-rolled plates, floorplates and slabs |
| AS/NZS 3679.1 | - | Structural steel - hot-rolled bars and sections |
| AS 4100 | - | Steel structures |
| AS/NZS 4680 | - | Hot-dip galvanised (zinc) coatings on fabricated ferrous articles |

- (c) State Authorities
- (d) Other
- (e) Standard Drawings

C262.03 ABBREVIATIONS

C262.04 DEFINITIONS

C262.05 PROVISION FOR TRAFFIC

1. The Principal Contractor shall provide for traffic in accordance with the requirements of Specification C201 CONTROL OF TRAFFIC while undertaking the work and shall organise the work to avoid or minimise delays and inconvenience to traffic.
2. After a sign is erected but before it becomes operational and if the sign is visible by traffic, completely and securely wrap the face of the sign in porous cloth (hessian, geo-fabric etc.), until the sign is actually required. Do not use black plastic sheeting to cover the face of the sign.

*Minimise
Inconvenience*

*Premature Sign
Exposure*

SUPPLY & DELIVERY

C262.06 SIGNS

1. The manufacture and delivery of signs shall conform to RMS 3400, except where alerted by this specification. The term 'Principal' in RMS 3400 shall be replaced with Principal Certifier.
2. The hold point at clause 7.1 of RMS 3400 does not apply.
3. All signs installed shall have a graffiti protection film as per clause 7.7.3 of RMS 3400.
4. Clause 7.9 of RMS 3400 shall apply to the installation of the signs whereby inspections may be carried out on site prior to installation. The Principal Contractor shall provide the Principal Certifier the manufacturers' certificate of compliance to RMS 3400 and the relevant warranties in accordance with section 10 of RMS 3400.

C262.07 SIGN SUPPORT STRUCTURES**(a) General**

1. Fabricate all sign support structures in accordance with the requirements of AS 4100. **Standards**

2. Support structures for signs can be one of the following:

(a) standard circular hollow sections (CHS), of grade C250L0 or C350L0 complying with AS/NZS 1163, and pre-galvanized in accordance with AS/NZS 4792.

(b) approved proprietary frangible post products - a list of RMS approved proprietary frangible post products can be found at:
<http://www.rms.nsw.gov.au/business-industry/partners-suppliers/design-documents/frangible-products.html>;

(c) purpose designed steel structures.

3. Splices in members shall be restricted to a maximum of one splice per member. Splices shall be full penetration butt welds. **Splices**

4. All welding shall be as shown on the Drawings and in accordance with the requirements of AS 1554.1, Category SP. **Welding Standard**

(b) Protective Treatment

1. Except for standard galvanised posts, all steel components including brackets and splices shall be protected by hot-dip galvanising after all fabrication processes are completed in accordance with AS/NZS 4680. **Hot-Dip Galvanising**

2. Finish the steel components after galvanizing to provide a bright finished surface free from white rust and stains. **Finish**

3. Bolts, nuts and washers and brackets shall be galvanised in accordance with AS 1214. **Bolts, Nuts etc.**

4. Scratched and slightly damaged surfaces of galvanised coatings shall be renovated by using a zinc-rich paint in accordance with Clause 8 of AS/NZS 4680 to provide a zinc-rich coating at least equal to the thickness specified for the galvanised layer. This method of renovation shall be restricted to areas not exceeding 2500 square millimetres. Any structure with totally-damaged coating areas exceeding 2500 square millimetres shall be regalvanised at no extra cost. **Damaged Surfaces**

(c) Attachment of Signs

1. Posts and other components shall be provided with the required sign attachment holes or fittings to suit the typical attachment systems as shown on the Drawings. Sign panels shall be attached to each supporting member at each extrusion section or bolt hole in the sign panel. **Typical Systems**

2. Submit details of the proposed attachment systems to the Principal Certifier for approval.

(d) Transport and Storage

1. Transport and store galvanized sign support structures in accordance with the guidelines in Appendix F of AS/NZS 4680.

ERECTION OF NEW SIGNS**C262.08 GENERAL**

1. The Principal Contractor shall provide for traffic in accordance with the requirements of Specification C201 CONTROL OF TRAFFIC while undertaking the work and shall organise the work to avoid or minimise delays and inconvenience to traffic.

***Minimise
Inconvenience***

2. After a sign is erected but before it becomes operational and if the sign is visible by traffic, completely and securely wrap the face of the sign in porous cloth (hessian, geo-fabric etc.), until the sign is actually required. Do not use black plastic sheeting to cover the face of the sign.

***Premature Sign
Exposure***

2. Set out the signs, and their support structures and associated footings, to the positions shown on the Drawings, or as directed by the Principal Certifier.

Alignment

Orientate the signs in the manner shown in RMS R143 Figure R143.1 on straight sections and curved sections of the road.

3. The Principal Contractor shall submit details of and set out, for the Principal Certifier's inspection and approval, the proposed location and alignment of each sign support structure.

***Location
Approval***

4. Work on the foundations of the sign support structure shall not commence until the Principal Certifier has approved the location and alignment of the sign support structure.

C262.09 CLEARING

1. Clear and remove any tree branches and undergrowth for a distance of 3 m from the front of the sign that can potentially obstruct the motorist's line of sight to the sign in accordance with Specification C212 CLEARING AND GRUBBING. Do not remove any existing trees without the prior approval of the Principal Certifier.

***Vegetation
Removal*****C262.10 SIGN STRUCTURE FOUNDATIONS**

1. The foundations for a simple pipe support or the footings for each post of a purpose-designed sign support structure shall be constructed in accordance with the Drawings or as directed by the Principal Certifier.

Details

2. Excavate for the sign support structure foundations at the locations and to the depth and width shown on the Drawings. Dispose of any surplus excavated material by spreading it out neatly within the road reserve and compacting it lightly, unless directed otherwise by the Principal Certifier.

Excavation

3. If the base or the sides of the excavation are composed of material which is not adequate for supporting the proposed structure, excavate and remove the material to the extent directed by the Principal Certifier. Replace the excavated material with

materials acceptable to the Principal Certifier, and compact to at least the same relative compaction as the surrounding material.

4. Prior commencing any excavation, contact Dial Before You Dig and obtain the plan locations of all existing utilities. Carry out investigations, including potholing or other non-destructive digging as may be necessary to locate and identify all existing utilities in the vicinity of the sign location(s).

5. When anchor bolt assemblies are specified they shall be accurately placed and firmly supported with the bolt housing 100mm above the topsoil to provide access for future sign replacement. Prior to placing concrete, accurately align the holding down bolts within the concrete footing to suit the sign structure baseplate. Set the bolts within the footing such that at least two threads will project above the top of the nut after installation of the support structure. Anchor bolt assemblies shall be provided with levelling nuts under the sign structure baseplates to allow adjustment of the structure after installation.

Anchor Bolt Assemblies

6. Steel reinforcement shall be placed as shown on the Drawings.

Steel Reinforcement

7. Concrete in the footings of sign support structures shall comply with Specification C271 MINOR CONCRETE WORKS and have a minimum compressive strength at 28 days of 20MPa for pipe support footings and 32MPa for purpose-designed support footings.

Concrete Quality

8. If ready mixed concrete is used, the concrete shall be mixed and delivered in accordance with AS 1379.

Ready Mixed Concrete

C262.11 ERECTION

1. All components shall be accurately positioned and supported during erection. Carry out erection of modular sign structures and purpose designed sign structures in accordance with AS 4100. Do not enlarge the baseplate holes or crank the bolts to correct any misalignment of the holding down bolts.

Position and Support

2. Regularity signage shall be installed generally in accordance with Standard Drawings ASD 204.

3. The top of each pipe support post shall extend sufficiently beyond the upper extrusion section or bolt holes on the sign panels to enable attachment of the signs. The top of each post shall be below the top edge of the sign panel.

Top of Post Level

4. For pipe support multi-post installations, the tops of the posts shall be at the same level except where sign shape or the arrangement of sign panels dictates otherwise.

Multi-Post Installation

5. After erection of the sign support structure is complete and has been adjusted to its final position, completely fill the resulting void between the underside of the baseplate and the top of the concrete footing with non-shrink grout. Submit to the Principal for approval details of your proposed method of filling the void under the baseplate.

Baseplate Grout

6. Cap the tops of galvanized steel posts to minimise the ingress of water and other matter which would prematurely corrode the post.

Post Caps

7. During erection, sign panels shall be suitably supported and braced and the sign face protected from damage. Signs damaged during erection shall be repaired to a standard equivalent to the original sign or replaced by the Subdivider.

Sign Damage

8. Repair or re-galvanize any damaged galvanized coatings of sign structures in accordance with Clause C262.07 (b) 4. Repair or replace at no additional cost any sign panels damaged during erection to a standard equivalent to the original sign.

*Treatment of
Damaged
Areas*

REMOVAL, MODIFICATION AND RELOCATION OF EXISTING SIGNS

C262.12 EXISTING SIGNS

1. Where shown on the Drawings or where directed by the Principal Certifier, carry out the removal, modification and/or relocation of existing signs, including their support structures and/or foundations.

Existing Signs

STREET AND COMMUNITY FACILITY

C262.13 STREET AND COMMUNITY FACILITY NAME SIGNS

1. All street and community facility name signs shall comply with Council's requirements with the details as shown on the Drawings.
2. Street signs shall be in accordance with Standard Drawing ASD 203.
3. Proprietary signs shall be manufactured and installed in accordance with the requirements of AS 1742.5.

*Signage
System*

*Proprietary
Sign
Requirements*