

**TCS 050-1-2002**



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**SPECIFICATION**

**FOR THE FABRICATION AND SUPPLY OF**

**STREET LIGHTING BRACKETS**

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**May 2002**

All equipment and associated components to be adopted under this specification and installed within the state of Victoria shall be Type Approved or separately exempted by the VicRoads Traffic and Road Use Management Department



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## 1 SCOPE AND GENERAL

This document covers the requirements for the fabrication and supply of street lighting brackets for use on VicRoads street lighting projects within the State of Victoria.

### 1.1 GENERAL

A VicRoads street lighting bracket comprises the riser, outreach arm(s), stiffening plate, weather cap, cable support bolt, draw wire, and clamp.

### 1.2 RELATED SPECIFICATIONS AND DRAWINGS

The fabrication and supply of all components for street lighting brackets shall conform with all relevant Australian Standards or, in the absence of same, with appropriate international standards.

Fabrication and supply shall conform to the following specifications, standards, standard drawings, and documents:

AS 1074	-	Steel tubes and tubulars for ordinary service
AS 1163	-	Structural steel hollow sections
AS/NZS 1554.1	-	Structural steel welding – Welding of steel structures
AS 1722	-	Pipe threads of Whitworth form
AS/NZS 4680	-	Hot-dip galvanized (zinc) coatings on fabricated ferrous articles.
Drawing TC-1060C	-	Street Lighting Bracket Type 1
Drawing TC-1061C	-	Street Lighting Bracket Type 2
Drawing TC-1067A	-	Street Lighting Bracket Stiffening Plate
Drawing TC-1108A	-	Weather Cap
SECV Drawing VX15/153/21	-	Draw Wire
SECV Drawing VX15/160/7c	-	Clamping Plate

## 2 ACCEPTANCE

The brackets supplied shall conform to a sample previously supplied to, and formally accepted by, the VicRoads Traffic and Road Use Management (TRUM) Department. Such acceptance shall be subject to the issue of a Certificate of Type Approval or Notification of Acceptance by the TRUM Department.

Sample units for evaluation shall be provided by the supplier.

All testing required for Type Approval shall be carried out at the manufacturers or suppliers expense.

References to “approved” within this specification shall mean individual components or methods that have been previously accepted by the VicRoads TRUM Department.

The brackets shall be manufactured and supplied under an approved Quality Assurance System and shall be subject to all requirements of audit therein.

## 3 MANUFACTURE

Brackets are to be manufactured in accordance with VicRoads standard drawings numbered:

- (a) TC-1060C and TC-1067A for Type 1 brackets, or with
- (b) TC-1061C and TC-1067A for Type 2 brackets, as appropriate.

All tubular work shall comply with AS1074 and AS1163.

Steel grade shall be as specified on the drawings.

All sharp edges and burrs shall be removed.

Unless otherwise specified, all welds shall meet the requirements of AS/NZS1554.1 Category P, comply with Table 4.5.1(A) therein, and shall be 6mm fillet.

All parts shall be galvanized after fabrication to AS/NZS4680. Excess galvanizing shall be removed.

The completed bracket assembly shall be clearly labelled “Type 1” or “Type 2” as appropriate.

#### **4 BRACKET LENGTH**

Bracket length is to be measured from the centre line of the bracket riser to the centre of the mounting spigot.

#### **5 WEATHER CAP**

All brackets are to be supplied complete with a galvanized steel weather cap manufactured in accordance with VicRoads standard drawing TC-1108A.

The weather cap is to be installed on the bracket after galvanizing and deburring of the bracket.

#### **6 CABLE SUPPORT BOLT**

All brackets are to be supplied complete with a M12 cable support bolt and nut, and installed in accordance with VicRoads standard drawings TC-1061 or TC-1062 as appropriate.

#### **7 DRAW WIRE**

All brackets are to be supplied complete with an approved draw wire. The draw wire is to be installed in accordance with SECV drawing VX15/153/21.

#### **8 CLAMP**

All brackets are to be supplied complete with a clamp for fixing to a standard bracket mounting spigot on a street lighting pole. The clamp is to be in accordance with SECV drawing VX15/160/7.

## **APPENDIX A**

### **INFORMATION TO BE SUPPLIED WITH ENQUIRY OR ORDER**

#### **(INFORMATIVE)**

The following information, as appropriate, should be provided with an enquiry or order for street lighting brackets conforming to the requirements of this specification:

- (a) Single or double outreach, the required outreach length(s) and the number(s) of each.
- (b) The luminaire mass to be supported.
- (c) The type of bracket (ie Type 1 or Type 2).
- (d) Place, date and time of delivery.