

Australian Standard™

**Electrogalvanized (zinc) coatings on  
ferrous hollow and open sections**

This Australian Standard was prepared by Committee MT-009, Metal Finishing. It was approved on behalf of the Council of Standards Australia on 3 June 2003 and published on 11 July 2003.

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The following are represented on Committee MT-009:

Australian Chamber of Commerce and Industry  
Australian Industry Group  
Australian Institute of Metal Finishing  
Australian Paint Manufacturers Association  
Department of Defence  
Galvanizers Association of Australia  
Institute of Materials Engineering Australia  
Powder Coaters Association  
The Royal Australian Chemical Institute  
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*This Standard was issued in draft form for comment as DR 02360 and DR 02361.*

STANDARDS AUSTRALIA

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**RECONFIRMATION**

**OF**

**AS 4750—2003**

**Electrogalvanized (zinc) coatings on ferrous hollow and open sections**

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Technical Committee MT-009 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 20 March 2017.

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Australian Industry Group  
Australian Steel Institute  
Bureau of Steel Manufacturers of Australia  
Galvanizers Association of Australia  
Galvanizing Association of New Zealand  
New Zealand Metal Roofing Manufacturers

## NOTES

Australian Standard™

## **Electrogalvanized (zinc) coatings on ferrous hollow and open sections**

Originated as AS 4750(Int)—2000 and AS 4751(Int)—2000.  
AS 4750(Int)—2000 and AS 4751(Int)—2000 revised, amalgamated  
and redesignated as AS 4750—2003.

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Published by Standards Australia International Ltd  
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5398 1

## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-009, Metal Finishing, to supersede AS 4750(Int)—2000, *Electrogalvanized (zinc) coatings on ferrous hollow sections* and AS 4751(Int)—2000, *Electrogalvanized (zinc) coatings on ferrous open sections*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

Attention is drawn to the fact that these Interim Australian Standards have been combined by the Committee due to their similar nature so that the new Standard will now cover hollow and open sections.

The objective of this Standard is to specify requirements for coatings on ferrous hollow and open sections, manufactured from electrogalvanized zinc strip as distinct from hot-dip galvanized strip.

There are no International (ISO) Standards that cover these electrogalvanizing processes.

Related Standards are AS/NZS 4791, *Hot-dip galvanized (zinc) coatings on ferrous open sections, applied by an in-line process* and AS/NZS 4792, *Hot-dip galvanized (zinc) coatings on ferrous hollow sections, applied by a continuous or a specialized process*.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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## STANDARDS AUSTRALIA

**Australian Standard****Electrogalvanized (zinc) coatings on ferrous hollow and open sections****1 SCOPE**

This Standard specifies requirements for the classification, mass, quality and testing of zinc coatings on welded hollow steel sections and on open steel sections produced from electrogalvanized strip.

Matters relating to the quality, properties, or dimensional requirements of the basis steel sections are outside the scope of this Standard.

## NOTES:

- 1 Advice and recommendations on information to be supplied by the purchaser at the time of enquiry or order are contained in the purchasing guidelines set out in Appendix A.
- 2 Alternative means for determining compliance with this Standard are given in Appendix B.
- 3 For requirements for the basis metal of hollow sections see relevant product Standards, e.g. AS 1074 and AS 1163.
- 4 General information on factors that affect the corrosion of zinc coated steel is given in Appendix C.
- 5 In this Standard, hollow and open sections will be referred to as 'sections' unless circumstances require clarification.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS

- |          |   |
|----------|---|
| 1074     | Steel tubes and tubulars for ordinary service   |
| 1163     | Structural steel hollow sections  |
| 1199     | Sampling procedures for inspection by attributes  |
| 1199.0   | Part 0: Introduction to the ISO 2859 attribute sampling system  |
| 1199.1   | Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection.                                 |
| 2331     | Methods of test for metallic and related coatings   |
| 2331.1.1 | Method 1.1: Local thickness tests—Micrographic examination of cross-sections  |
| 2331.1.3 | Method 1.3: Local thickness tests—Magnetic method   |
| 2331.1.4 | Method 1.4: Local thickness tests—Magnetic induction and eddy current methods   |
| 2331.2.1 | Method 2.1: Tests for average coating mass per unit area or for thickness—Dissolution methods—Strip and weigh, and analytical |
| 2331.2.3 | Method 2.3: Tests for average coating mass per unit area or for thickness—Hydrogen evolution method for zinc coatings         |
| 2331.3.1 | Method 3.1: Corrosion and related property tests—Neutral salt spray (NSS) test  |
| 2505     | Methods for bend and related testing of metals  |
| 2505.1   | Method 1: Sheet, strip and plate  |
| 2706     | Numerical values—Rounding and interpretation of limiting values   |