Australian Standard®

STEEL SHEET AND STRIP—TERNE (LEAD-TIN ALLOY) COATED

[Title allocated by Defence Cataloguing Authority: TERNEPLATE—Coil's and Cut Lengths)]

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The following interests were represented on the committee responsible for the preparation of this standard:

Australian Farmers Federation

Australian Institute of Steel Construction

Australian Lead Development Association

Confederation of Australian Industry

Society of Automotive Engineers—Australasia

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PREFACE

This standard was prepared by a subcommittee of the Association's Committee on Iron and Steel to supersede AS G28-1969. It provides for the supply of flat steel sheet and strip, terne-coated by the hot-dip process.

During the preparation of this standard, cognizance was taken of ISO 4999, Continuous Hot-dip Terne (Lead Alloy) Coated Cold-reduced Carbon Steel Sheet of Commercial and Drawing Qualities, issued by the International Organization for Standardization, but it was felt that alignment of the standard with the ISO standard was not practicable at this time, since designation, grades, coating masses and dimensional tolerances were not compatible with Australian practice. However, this standard specifies the composition of the terne coating, and adopts the ISO 4999 method for determining the composition of the coating (Appendix D).

Appendix A presents purchasing guidelines, including contractual requirements, and directs attention to matters requiring consideration at the time of enquiry and/or order. The intention is to avoid misinterpretation or other problems and to ensure a clear understanding of product requirements by both supplier and purchaser.

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
STEEL SHEET AND STRIP—TERNE (LEAD-TIN ALLOY) COATED

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for flat steel sheet and strip terne (8 percent to 20 percent tin, remainder lead) coated by the hot-dip process, in thicknesses from 0.6 mm up to and including 2.0 mm and up to 1220 mm wide. It provides for four grades of steel, the chemical composition and mechanical properties of which are in accordance with the grades of cold rolled material in AS 1595. Provision is made for three classes of terne coating based on the mass per unit area of the coating metal applied.

NOTE: Guidelines to purchasers on requirements that must he specified by the purchaser and those that must be agreed at the time of enquiry and/or order are given in Appendix A.

1.2 APPLICATION. The material shall be supplied in accordance with the requirements of this Section 1.

The steel base shall comply with the requirements of Section 2.

The terne coating shall comply with the requirements of Section 3.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1050 Methods for the Analysis of Iron and Steel
AS 1213 Methods for the Sampling of Iron, Steel, Permanent Magnet Alloys and Electrical alloys
AS 1365 Tolerances for Hot-rolled and Cold-rolled Unalloyed Low Carbon Steels (Coils and Cut Lengths)
AS 1391 Methods for the Tensile Testing of Metals
AS 1397 Hot-Dipped Zinc-coated or Aluminium/zinc-coated Steel Sheet in Coil and Cut Lengths
AS 1595 Cold-rolled Unalloyed Low Carbon Steel Sheet and Strip
AS 1650 Galvanized Coatings
AS 1812 Lead Ingot
AS 1815 Method for Rockwell Hardness Test
Part 1—Testing of Metals
AS 2021 Method for Rockwell Superficial Hardness Test
Part 1—Testing of Metals, N and T Scales
AS 2331 Methods of Test for Metallic and Related Coatings
AS 2338 Preferred Dimensions of Wrought Metal Products
AS 2505 Methods for Bend Testing of Metals
Part 1—Sheet, Strip and Plate
AS KI Methods for the Sampling and Analysis of Iron and Steel.

1.4 DESIGNATION.

1.4.1 Steel Base. The steel base shall be designated in terms of the grade designation as given in Clause 2.2 and Table 2.1.

1.4.2 Terne Coating. The terne coating shall be designated in terms of the coating class as given in Clause 3.2 and Table 3.1.

1.5 DEFINITIONS. For the purpose of this standard, the following definitions apply:

Cold-rolled sheet—a rolled product of any width and thickness, supplied in cut lengths and terne-coated prior to cutting to length. Edges available are mill, sheared or slit.

Cold-rolled strip—a rolled product of any width and thickness, supplied in coil form. Edges available are mill or slit.

Test batch—consists of one grade of the same product form and thickness processed under similar conditions.

1.6 IDENTIFICATION.

1.6.1 Package. Each package for delivery shall be marked or tagged as follows to enable it to be identified with this standard:

(a) A number to enable it to be traced to the ladle of steel from which it was made.

(b) The steel quality and grade, coating class, the ordered dimensions and the manufacturer's name or trademark.

1.6.2 Product. Each coil or cut length shall have a brand or sticker showing the number of this Australian standard, i.e. AS 2552, the base steel thickness, the steel quality and grade, and the coating class.

NOTE: Manufacturers who place the number of this Australian standard on steel sheet or strip, its packaging or literature related thereto should ensure that the steel sheet or strip complies with the standard.

1.7 ROUNDING OF RESULTS OBTAINED BY INSPECTION AND TESTING. For the purpose of deciding whether a particular requirement of this standard is complied with, the determined value, observed or calculated, shall be rounded off in accordance with Appendix E. The number of significant places retained in the rounded-off value shall be the same as that of the specified value in this standard.