

AS 1397:2021



Continuous hot-dip metallic coated steel sheet and strip — Coatings of zinc and zinc alloyed with aluminium and magnesium



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The following are represented on Committee MT-001:

- Australasian Corrosion Association
- Australian Building Codes Board
- Australian Industry Group
- Australian Steel Association
- Australian Steel Institute
- Bureau of Steel Manufacturers of Australia
- Materials Australia

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Continuous hot-dip metallic coated steel sheet and strip — Coatings of zinc and zinc alloyed with aluminium and magnesium

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Preface

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee MT-001, Iron and Steel, to supersede AS 1397—2011.

This Standard maintains the requirements of AS 1397 — 2011 and includes a reduction in the minimum aluminium content threshold for Type ZM coatings (from 5 % to 3 %). The expanded chemistry range for Type ZM coatings has resulted in nomination of two sub-Types, identified as “ZMa” and “ZMb”. The revised Standard also introduces an additional coating class for Type AM coatings, AM225.

Committee MT-001 has sought to align with the following international and national Standards, where applicable:

- (a) ISO 9364:2017, *Steel sheet, 55 % aluminium-zinc alloy-coated by the continuous hot-dip process of commercial, drawing and structural qualities*
- (b) ISO 4998:2014, *Continuous hot-dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of structural quality*
- (c) ISO 3575:2016, *Continuous hot-dip zinc-coated and zinc-iron alloy-coated carbon steel sheet of commercial and drawing qualities*
- (d) ASTM A1046/A1046M, *Standard specification for steel sheet, zinc-aluminium-magnesium alloy-coated by the hot-dip process*
- (e) ASTM A902-18a, *Standard terminology relating to metallic coated steel products*
- (f) ASTM A875/A875M-13, *Standard specification for steel sheet, zinc-5 % aluminium alloy-coated by the hot-dip process*
- (g) EN 10346:2015, *Continuously hot-dip coated steel flat products for cold forming — Technical delivery conditions*
- (h) JIS G 3323:2019, *Hot-dip zinc-aluminium-magnesium alloy-coated steel sheet and strip*

The major changes in this edition are as follows:

- (i) Inclusion of additional coating chemistries within the ZM Coating Type and division of that coating Type into two sub-Types, (ZMa and ZMb).
- (ii) Inclusion of ZM Type coatings with aluminium content (by mass) in the range of 3 % to less than 5 % to broaden compatibility with coating chemistries contained within ASTM A1046/A1046M. The expanded range of coating chemistries (Type ZMb) is reflected by ASTM A1046/A1046M Type 2 coating chemistries.
- (iii) The inclusion of an additional coating class within Type AM coatings of AM225.

The terms “normative” and “informative” are used in Standards to define the application of the appendices 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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