

AS 1445—1986

Australian Standard<sup>®</sup>

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**HOT-DIPPED ZINC-COATED OR  
ALUMINIUM/ZINC-COATED STEEL  
SHEET—  
76 mm PITCH CORRUGATED**

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This Australian standard was prepared by Committee MT/I, Iron and Steel. It was approved on behalf of the Council of the Standards Association of Australia on 17 December 1985 and published on 3 March 1986.

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The following interests are represented on Committee MT/1:

Australasian Institute of Metals  
Australian Foundry Institute  
Bureau of Steel Manufacturers of Australia  
Confederation of Australian Industry  
Department of Defence  
Institute of Steel Service Centres of Australia  
Metal Trades Industry Association of Australia  
Railways of Australia Committee  
Society of Automotive Engineers–Australasia

Representatives of the following interest also participated in the drafting of this standard:

Metal Building Products Manufacturers Association

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## PREFACE

This edition of this standard was prepared by a subcommittee of the Association's Iron and Steel Committee to supersede AS 1445-1977. It applies to 76 mm pitch corrugated steel sheet manufactured from hot-dipped zinc-coated or aluminium/zinc-coated steel sheet in accordance with AS 1397.

The subcommittee recognized that guidance was needed in selection of available sheet sizes, materials, coating classes and so on and that it was essential to limit the number of parameters to avoid proliferation. Consequently, rationalization of thicknesses and coating classes has been carried out with the object of facilitating availability. However, it should be noted that other combinations were not precluded from meeting the standard except that they had to meet requirements of Codes such as AS 1170 or AS 1562.

Appendix A presents purchasing guidelines 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 purchaser and supplier.

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## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard**  
for  
**HOT-DIPPED ZINC-COATED OR ALUMINIUM/ZINC-COATED**  
**STEEL SHEET—76 mm PITCH CORRUGATED**

**1 SCOPE.** This standard specifies requirements for 76 mm pitch corrugated steel sheet manufactured from hot-dipped zinc-coated or aluminium/zinc-coated steel sheet in accordance with AS 1397.

Three classes of product are specified and these represent materials in common use for roofing (Class R), tankmaking (Class T), and walling (Class W).

**NOTES:**

- Other combinations of dimensions and steel properties not covered by this standard may be appropriate when designed to comply with AS 1170 and AS 1562 in accordance with wind loading and support requirements.
- Attention is drawn to the fact that aluminium/zinc coatings are not solderable.
- Guidelines to purchasers on requirements that are to be specified by the purchaser at the time of enquiry and/or order are given in Appendix A.

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

AS 1170	Minimum Design Loads on Structures
AS 1397	Steel Sheet and Strip - Hot-dipped Zinc-coated or Aluminium/zinc-coated
AS 1562	Design and Installation of Metal Roofing
AS 2338	Preferred Dimensions of Wrought Metal Products

**3 DESIGNATION.**

**3.1 Material.** The steel base and metal coating shall be designated in accordance with AS 1397.

**3.2 End use.** End use designation shall be in accordance with the following:

Roofing	— Class R
Tankmaking	— Class T
Walling	— Class W

**4 PROFILE OF CORRUGATED SHEET.**

**4.1 General.** Profiles shall be either 8 corrugations × 76 mm pitch (G300 only) or 101/2 corrugations × 76 mm pitch (both G300 and G550).

**4.2 Depth of corrugation.** The depth of corrugation (see Fig. 1) shall be in accordance with the following:

G300	— 16 mm minimum, 18 mm maximum
G550	— 16 mm minimum

NOTE: Deviation under the minimum specified corrugation depth causes a serious loss of load bearing capacity.

**5 TOLERANCES ON PROFILE.** The accumulative pitch tolerances shall be as follows:

8 corrugations × 76 mm pitch (G300)— $610 \pm 2$  mm (see Fig. 2)

101/2 corrugations × 76 mm pitch (G300)— $762 \pm 2$  mm (see Fig. 3)

101/2 corrugations × 76 mm pitch (G550)— $762 \pm 4$  mm (see Fig. 4)

NOTE: When G300 is not required for curving, tolerances of  $610 \pm 4$  or  $762 \pm 4$ , as appropriate may be used.

**6 SHEET FOR ROOFING (CLASS R).** Sheet for roofing shall comply with Table 1.

NOTE: Curved sections should be fabricated from grade G300.

**TABLE 1**  
**SHEET FOR ROOFING (CLASS R)**

Profile	Minimum base thickness mm	Steel base	Coating class
101/2 × 76 mm	0.60	G300	Z275 Prefinished
	0.42	G550	Z450 AZ150

**7 SHEET FOR TANKMAKING (CLASS T).** Sheet for tankmaking shall comply with Table 2.

NOTE: Curved sections should be fabricated from grade G300.

**TABLE 2**  
**SHEET FOR TANKMAKING (CLASS T)**

Profile	Minimum base thickness mm	Steel base	Coating class
8 × 76 mm	0.60	G300	Z600 AZ200

**8 SHEET FOR WALLING (CLASS W).** Sheet for walling (or siding) shall comply with Table 3.

**TABLE 3**  
**SHEET FOR WALLING OR SIDING (CLASS W)**

Profile	Minimum base thickness mm	Steel base	Coating class
101/2 × 76 mm	0.35	G550	Z275 AZ150

**9 LENGTH TOLERANCE.** For all lengths, the length tolerance shall be  $\pm 10$  mm.

**10 IDENTIFICATION.** The following information shall be marked on the pack containing the corrugated steel sheets or on a nameplate securely attached thereto:

- Name or registered trade name or mark of the manufacturer.
- Base steel grade and thickness.
- Coating class.

In addition, product to Base Grade G550 (hard rolled) shall be clearly marked 'NOT FOR CURVING'.