

भारतीय मानक

एल्युमीनियम की नालीदार चदर

(पांचवां संशोधन)

Indian Standard

CORRUGATED ALUMINIUM SHEET

(Fifth Revision)

ICS 77.150.10

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**BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BHADUR SHAH ZAFAR MARG,
NEW DELHI 110 002**

Ores and Feed Stock for Copper Industry, Its Metals/Alloys and Products Sectional Committee, MTD 07

FOREWORD

This Indian Standard (Fifth Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by Ore & Feedstock for Aluminium Industry, its Metal/Alloys and products Sectional Committee had been approved by the Metallurgical Engineering Division Council.

This standard was first published in 1958 and revised in 1965, 1975, 1991 and 2007. While reviewing this standard, in the light of experience gained during these years, the Committee decided to revise it to bring in line with the present practices being followed by the Indian industry.

In this revision the following changes have been made:

- a) A new clause on Ordering information added
- b) Material clause has been modified
- c) New clauses on Packaging, Test Certificate and retest added
- d) Marking clause has been modified.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Draft Indian Standard

Corrugated Aluminium Sheet (Fifth Revision)

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**Last date for received of
comments is 29.05.22**

1 SCOPE

1.1 This standard specifies the material, profile dimensions and finish for the corrugated aluminum sheets meant for following uses:

- a) General purpose;
- b) Industrial;
- c) Building and
- d) High stiffness Industrial Sheet

2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

IS No.	Title
737: 2022	Wrought aluminium and aluminium alloy sheet and strip for general engineering purposes (Fifth revision)
2676: 1981	Dimensions for wrought aluminium and aluminium alloy sheet and strip (first revision)
10259: 1982	General condition for delivery and inspection of aluminium and aluminium alloy products
5052: 1993	Aluminium and its alloys - Temper designations

3 ORDERING INFORMATION

The ordering information shall include the following information

3.1 Alloy/ temper Quantity, in pieces or in kg

3.2 Cut length (m)

3.3 Packing mode

3.4 Profile Type

4 FREEDOM FROM DEFECTS

Corrugated sheet shall be clean and visibly free from harmful defects.

5 SUPPLY OF MATERIALS

5.1 General requirements for the supply of material shall be as specified in IS 10259.

6 PROFILE

6.1 Profile of the four types of sheet may preferably be as shown in Fig. 1. However, if agreed between the manufacturer and the purchaser other profiles can also be used.

6.2 The corrugations shall be uniform and parallel with the sides of the sheet.

7 MATERIAL

7.1 Corrugated Aluminum sheet shall be made from alloys 19000, 19002, 31000, 31200, 51300, 41352, 31500, 31500B, 53800 and 40800 as specified in IS 737.

7.2 Temper designated for Corrugated Aluminum Sheet shall be HX4 or HX6 or HX8 of IS 5052.

8 DIMENSIONS AND TOLERANCES

8.1 The thickness of the corrugated sheet shall be as agreed to between the purchaser and the supplier. Tolerance on the thickness of the sheet shall be subject to the general thickness tolerance specified in IS 2676.

8.2 Width

The overall width of sheet shall be as given in Fig. 2 subject to a tolerance of ± 10 mm for sheet of 0.45 mm and above in thickness. The tolerance on width for sheet less than 0.45 mm thick shall be subject to agreement between the purchaser and the supplier.

8.3 Length

The length of the sheet shall be as agreed to between the purchaser and the manufacturer, subject to a tolerance of +6 mm. However, preferred lengths are 1 800 mm, 2 400 mm, 3 000 mm, and 3 600 mm.

8.4 Squareness

Unless otherwise specified by the purchaser, the diagonal distance between comers of any finished sheet shall not differ by more than 20 mm for sheet of 0.45 mm and above in thickness. The

For comments only

tolerance on squareness for sheets less than 0.45 mm in thickness, shall be subject to mutual agreement between the purchaser and the supplier.

8.5 Depth and Pitch of the Corrugation

The depth and pitch of corrugation shall be as per details in figure 1, subject to a tolerance of +2.5 mm. The pitch of the corrugation shall be 75 mm subject to a tolerance of +5 mm.

9 REJECTION & RETEST

For the purpose of this standard, the clauses as given in IS 10259 shall apply.

10 CERTIFICATION

For the purpose of this standard, the clause as given in IS 10259 shall apply

11 FINISH

The finish shall be 'as rolled' unless a special surface finish has been agreed to between the manufacturer and the purchaser.

12 PACKAGING

12.1 For the purpose of this standard, the packaging methods given in IS 10259 shall apply.

12.2 The packing mode should be such as to ensure prevention of water corrosion and mechanical damage during transit and storage.

13 MARKING

13.1 The material shall be marked with the following:

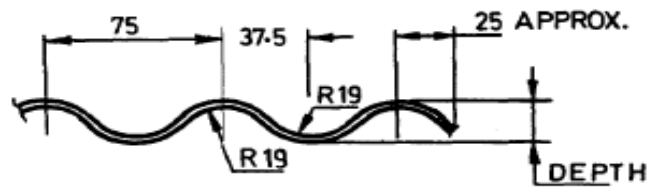
- a) Indication of the source of manufacture,
- b) Grade designation, cast or lot and size details,
- c) Quantity,
- d) Date of manufacture, and
- e) Shelf life, if applicable

14 BIS CERTIFICATION MARKING

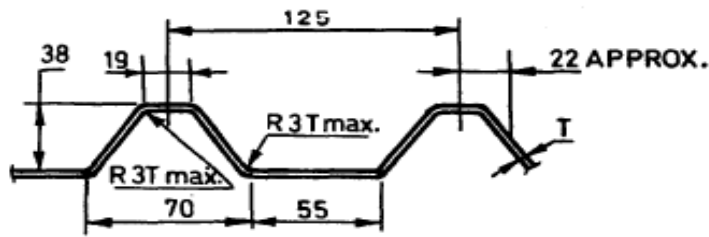
The material may also be marked with the Standard Mark.

14.1.1 The products (s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provision of the BIS Act, 2016 and the Rules and Regulations framed thereunder, and the product may be marked with the standard mark.

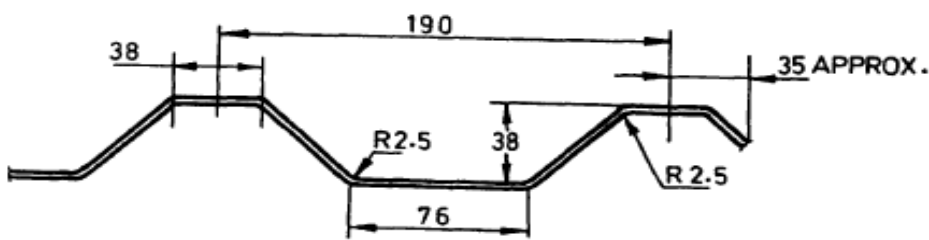
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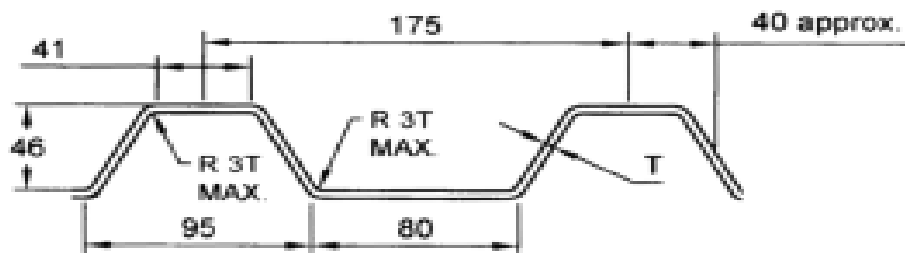
General Purpose Sheet



Industrial Sheet



Building Sheet

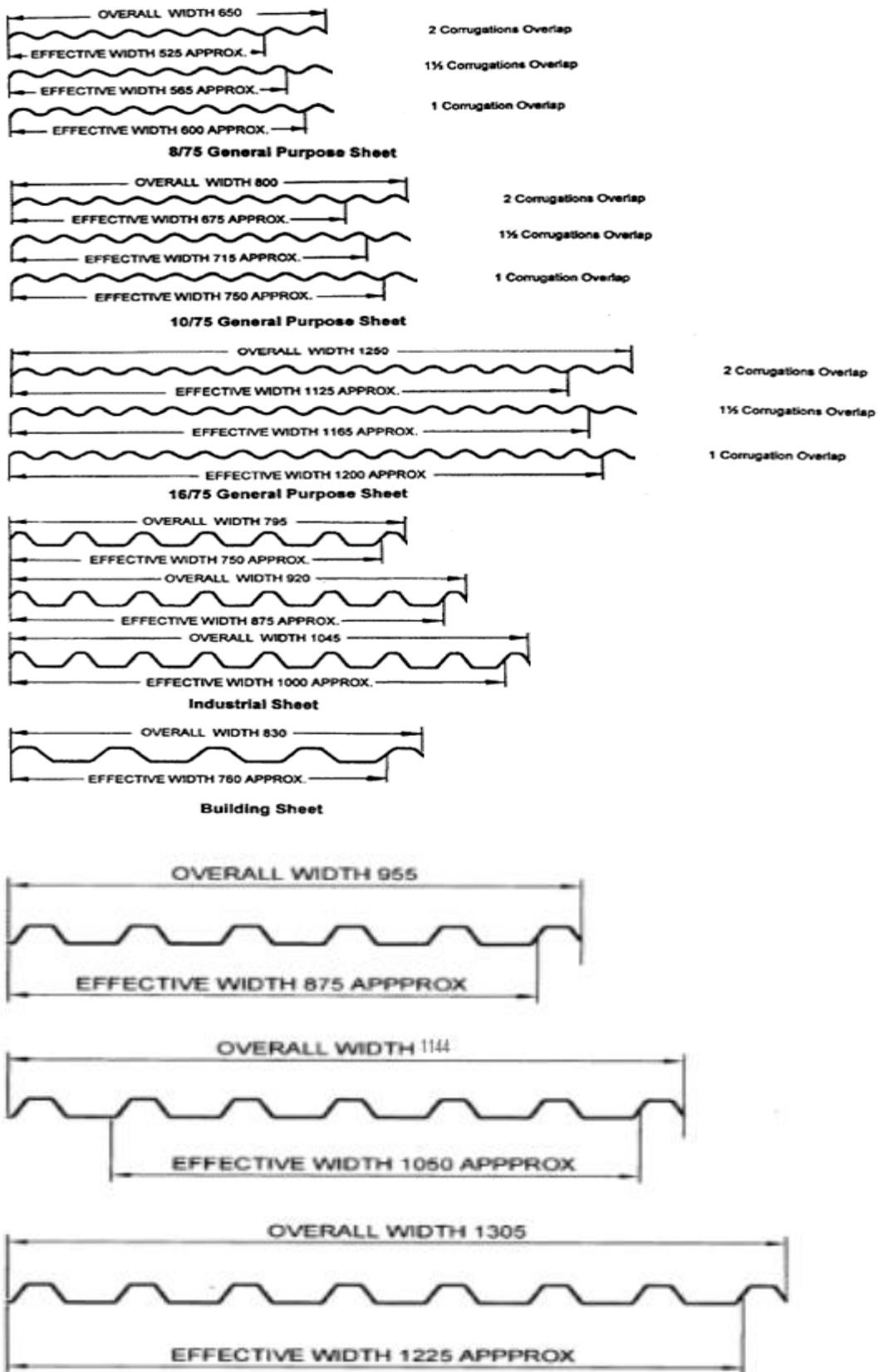


T = thickness of sheet

All dimensions in millimetres.

FIG. 1 PROFILES OF CORRUGATED ALUMINIUM SHEET

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High Stiffness Industrial Sheet

FIG. 2 WIDTHS FOR CORRUGATED ALUMINIUM SHEET