DUP

Superseded by AS/NZS 4256.1:1994, AS/NZS 4256.2:1994, AS/NZS 4257.1:1994, AS/NZS 4257.2:1994, AS/NZS 4257.4:1994, AS/NZS 4257.6:1994 and AS/NZS 4257.7:1994

AS 2376, Part 1—1980
UDC 691.175—415: 677.521: 678.674

Australian Standard 2376, Part 1—1980

PLASTICS BUILDING SHEETS
Part 1—EXTRUDED PVC

[Title allocated by Defence Cataloguing Authority:
PLASTICS SHEETS (EXTRUDED PVC FOR BUILDING PURPOSES)]

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

d

THE FOLLOWING SCIENTIFIC, INDUSTRIAL AND GOVERNMENTAL ORGANIZATIONS and departments were officially represented on the committee entrusted with the preparation of this standard:

Australian Institute of Building Surveyors

Department of Housing and Construction

Division of Building Research, CSIRO

Experimental Building Station

Plastics Institute of Australia Inc.

This standard, prepared by Committee PL/22, Plastics Building Sheets, was approved by the Plastics Standards Board on behalf of the Council of the Standards Association of Australia on 15 January 1980, and was published on 1 August 1980.

This standard was issued in draft form for public review as DR 78168.

AUSTRALIAN STANDARD

PLASTICS BUILDING SHEETS

Part 1
EXTRUDED PVC

AS 2376, Part 1—1980

First published.....1980

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

ISBN 0 7262 1986 X

PREFACE

This standard was prepared by the Association's Committee on Plastics Building Sheets under the direction of the Plastics Standards Board. It sets out types and designations, requirements for appearance, colourfastness, dimensions, retention of profile, light transmission and impact resistance. It is the first of a series of standards relating to plastics building sheets of different materials and to their installation.

At this time no acceptable laboratory weathering test has been found in Australia or overseas, which is able to reproduce, in a short time, the same effects as that produced by natural weathering. Where natural weathering tests are required, they should be carried out in accordance with AS CK24, Code of Practice for Outdoor Weathering of Plastics in the Australian Environment, Part 1—Commercial Products. Consideration will be given, for later inclusion, to any laboratory test of proven validity that is developed in the future. In the interim, an ultraviolet (UV) exposure test has been included which can be used as a quality control check.

This standard may require reference to the following standards:

AS 1145	Method for Determination of Tensile Properties of Plastics Materials
AS 1199	Sampling Procedures and Tables for Inspection by Attributes
AS 1399	Guide to AS 1199, Sampling Procedures and Tables for Inspection by Attributes.
AS 1530	Methods for Fire Tests on Building Materials and Structures Part 3—Test for Early Fire Hazard Properties of Materials
AS 1562	Code of Practice for Design and Installation of Self-supporting Metal Roofing without Transverse Laps
AS 1821-1823	Suppliers Quality Control Systems (Levels 1-3)
AS 2000	Guide to AS 1821-1823, Suppliers Quality Control Systems
AS 2001	Methods of Test for Textiles 2001.4.1—Colourfastness Tests—Definitions and General Requirements
AS 2193	Methods for Calibration and Grading of Force-measuring Systems of Testing Machines
AS CK24	Code of Practice for Outdoor Weathering of Plastics in the Australian Environment Part 1—Commercial Products
AS	Plastics Building Sheets—General Installation Requirements—Design of Roofing*
AS	Exposure of Plastics to Ultraviolet Lamps*

*In course of preparation.

CONTENTS

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
PLASTICS BUILDING SHEETS

PART 1—EXTRUDED PVC

1 SCOPE. This standard sets out the requirements for general purpose uncoated opaque, coated opaque and coated translucent PVC sheets extruded and formed into profiles for use in roofing and cladding applications. Sheets complying with this standard are intended to be fixed in accordance with AS ....., Plastics Building Sheets—General Installation Requirements—Design of Roofing.*

NOTE: Advisory information on the determination of compliance of a 'lot' with this standard is given in Appendix A.

2 TYPES AND DESIGNATIONS.

2.1 Type. The sheets shall be classified as Type D (Domestic) or Type I (Industrial) according to the sheet thickness (see Clause 5.2).

2.2 Designation of Surface Treatments and Optical Properties. The letters to be used in the designation of surface treatments and optical properties shall be in accordance with the following:

(a) CT, to indicate surface coated translucent sheets.

(b) CO, to indicate surface coated opaque sheets.

(c) O, to indicate opaque sheets with no additional surface treatment.

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

3.1 Surface coating—any material applied to the surface of the sheet before or after profiling for the purpose of enhancing durability, appearance or other property indicated in this standard.

3.2 Nominal sheet width—the total width after profiling or manufacturing to finished goods width.

3.3 Cover width—the total amount of cover available from the sheet after allowing for side laps.

4 APPEARANCE. The sheet shall be uniform in colour, translucency or opacity, and finish. The sheet shall also be substantially free from scratches, dents, blisters and inclusions which would affect performance in service.

5 DIMENSIONAL REQUIREMENTS.

5.1 Tolerance on Nominated Length and Cover Width. When measured in accordance with Appendix B, the tolerance on a nominated length of any sheet shall be + 10 −5 mm, and on a nominated cover width shall be ± 5 mm for any sheet.

5.2 Nominal Thickness. When measured in accordance with Appendix B, the minimum thickness of the sheet shall be as follows:

Type D (Domestic)..... 0.75 mm
Type I (Industrial)..... 1.4 mm

5.3 Squareness. The corners of the sheet shall conform to a right angle such that the gap between a side of the sheet and a true right angle shall not exceed 5 mm for each metre run of width. In addition, the difference in measurement of the diagonals, as measured at the corners of a sheet, shall not exceed 20 mm.

5.4 Profile. The profiles shall be uniform. When measured in accordance with Appendix B, the distance between the centrelines of ribs, or between the coincident points of the outer ribs, shall not vary by more than 5 mm.

NOTES:

1. The cross-section of the finished sheet profile is a matter for agreement between the manufacturer and the purchaser.
2. PVC building sheets are capable of conforming to minor deviations in profiles of the sheets to be matched. Matching of profiles with that of sheets or other materials which deviate from their nominated profile dimensions is not implied by the requirements of the above clause. This clause applies to sheet to be matched as produced; sheets damaged or spread due to storage, handling, transport or installation procedures are excluded.

6 DURABILITY. Where a claim of life expectancy is made, it shall be based upon outdoor exposure testing in accordance with AS CK24, Part 1. The claim shall relate only to the Australian climatic zone and less severe zones corresponding to the test exposure site as defined in the standard, and to the duration of the exposure test. After exposure, the sheet shall comply with Clauses 4, 9.3, 9.4 and 9.5 and, where applicable, the light transmission, when measured in accordance with Appendix C, shall be not less than 90 percent of the initial value after an exposure duration of 2 years.

7 FIRE PERFORMANCE. Where a fire performance test is required, nominally flat test specimens of the nominal thickness of the formed sheeting material shall be tested in accordance with AS 1530, Part 3, and the following indexes reported:

Ignitability index
Spread of flame index
Heat evolved index
Smoke developed index

NOTE: Reference should be made to the appropriate State Uniform Building Regulations for requirements that are mandatory in relation to this test.

9 TEST REQUIREMENTS.

9.1 Light Transmission (Applicable only to Translucent Sheets). When determined in accordance with Appendix C, the light transmission of the sheet shall

*In course of preparation.