Corrigenda - May 1980.

AS 2327, Part 1 — 1980
UDC 624.016 : 693.9
SfB Ab3

Australian Standard 2327, Part 1–1980

SAA COMPOSITE CONSTRUCTION CODE

PART 1–SIMPLY SUPPORTED BEAMS

STANDARDS ASSOCIATION OF AUSTRALIA
Incorporated by Royal Charter

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

Association of Consulting Engineers, Australia

Confederation of Australian Industry

Division of Building Research, CSIRO

Experimental Building Station, Department of Housing and Construction

National Association of Australian State Road Authorities

Railways of Australia Committee

University of Sydney

This standard, prepared by Committee BD/32, Composite Construction, was approved on behalf of the Council of the Standards Association of Australia on 9 November 1979, and was published on 1 February 1980.

This standard was issued in draft form for public review as DR 78062.

AUSTRALIAN STANDARD

COMPOSITE CONSTRUCTION IN STRUCTURAL STEEL AND CONCRETE

(known as the SAA Composite Construction Code)

Part 1
SIMPLY SUPPORTED BEAMS

AS 2327, Part 1—1980

First published 1980

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

ISBN 0 7262 1821 9

PREFACE

This standard was prepared by the Association's Committee on Composite Construction as one of a series of standards applying to composite construction in structural steel and concrete. It is a revision of and supersedes Supplement No 1 to AS 1480—1974.

This Part 1 details rules for the use of simply supported steel beam-concrete slab construction in structures; other Parts are as follows:

Part 2—Continuous Beams*
Part 3—Slabs*
Part 4—Columns*

Topics covered include design of encased beams and composite beams with slabs incorporating profiled steel sheeting; flexural design by either the load factor method or working strength method; serviceability; shear connection design; longitudinal shear transfer; construction; and the testing of shear connectors.

This standard may require reference to the following standards:

AS 1000	The International System of Units (SI) and its Application
AS 1131	Dimensions of Hot-rolled Structural Steel Sections
AS 1163	Welded and Seamless Hollow Steel Sections for General Structural Purposes
AS 1170	SAA Loading Code
	Part 1—Dead and Live Loads
	Part 2—Wind Forces
AS 1204	Structural Steels—Ordinary Weldable Grades
AS 1250	SAA Steel Structures Code
AS 1252	General Grade High-strength Steel Bolts with Associated Nuts and Washers for Structural Engineering (ISO Metric Series)
AS 1443	Carbon Steels and Carbon-manganese Steels—Bright Bars
AS 1480	SAA Concrete Structures Code
AS 1481	SAA Prestressed Concrete Code
AS 1530	Methods for Fire Tests on Building Materials and Structures
	Part 4—Fire-resistance Test of Structures
AS 1538	SAA Cold-formed Steel Structures Code
AS 1554	SAA Code for Welding in Buildings
	Part 1—Manual Welding
	Part 2—Automatic and Semi-automatic Welding
	Part 3—Welding of Reinforcing Steel

* In course of preparation.

CONTENTS

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
COMPOSITE CONSTRUCTION IN STRUCTURAL STEEL AND CONCRETE

PART 1 — SIMPLY SUPPORTED BEAMS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard sets out rules for the use of simply supported composite steel beam/concrete slab construction in structures, including applications where the slab incorporates profiled steel sheeting and also where the steel beam is concrete encased. For the purposes of this standard, the concrete slab may be either normal-weight or lightweight concrete as defined in AS 1480.

This standard does not apply to the following structures and materials:

(a) Dynamically loaded structures.
(b) Road and railway bridges.
(c) Material less than 3 mm thick used in the steel beam.
(d) Steel used in the steel beam for which the value F_Y used in design exceeds 450 MPa.
(e) Cold-formed members used as the steel beam other than those complying with AS 1163.

NOTES:
1. For the design and construction of composite concrete flexural members, see AS 1480; and of composite prestressed concrete flexural members, see AS 1481.
2. The design and construction of composite slabs using profiled steel sheeting is covered in Part 3 of this standard.*

1.2 NEW MATERIALS OR METHODS. This standard shall not be interpreted to prevent the use of materials or methods of design or construction not specifically referred to herein. If it is desired to seek the opinion of the SAA Committee on Composite Construction as to whether materials other than those specified or methods of design or construction not covered herein, are deemed to comply with the intention of this standard, details of such materials or methods, including relevant test results, shall be submitted to the committee.

NOTE: It may be necessary to seek approval from the appropriate building authority for the use of new materials or methods.

1.3 DESIGN AND SUPERVISION.

1.3.1 Design. The design of a structure or part of a structure to which this standard is applied shall be the responsibility of an engineer experienced in the design of such structures.

1.3.2 Supervision. All stages of construction of a structure or the part of a structure to which this standard is applied shall be adequately supervised to ensure that all the requirements of the design are satsified in the completed structure. Supervision shall be the responsibility of either—

(a) the design engineer, or
(b) the supervising engineer.

NOTES:
1. Although the execution of supervision may be delegated to persons who need not necessarily be qualified but nominated by the supervising engineer, Clause 1.3 requires that design and supervision be the responsibility of qualified and experienced persons.
2. Clause 1.3 does not require the design engineer to be also responsible for supervision unless he has been specifically assigned this responsibility. The design engineer and the supervising engineer need not be the same person.

1.4 DEFINITIONS.

1.4.1 General. For the purpose of this standard, the definitions in Clauses 1.4.2 and 1.4.3 shall apply.

NOTE: Other terms having special meanings are defined in the clause in which they occur.

1.4.2 Administrative Definitions.

Approved — except as may be otherwise stated approved either by the design engineer or the Building Authority.

Building Authority — the body having statutory powers to control the design and erection of the building or structure.

Contract drawings — the drawings forming part of the document in which is set out the work to be executed.

Design engineer — the engineer responsible for the design.

Engineer — a person qualified for Corporate Membership of the Institution of Engineers, Australia.

NOTE: The definition of 'engineer' does not require that an engineer be a Corporate Member of the Institution of Engineers, Australia.

Supervising engineer — the engineer responsible for supervision of construction, or his nominated representative.

Specification — the specification forming part of the documents in which is set out the work to be executed.

* In course of preparation.