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AS 5100.8:2017
AP-G51.8-17

AS 5100.8:2017

Australian STANDARD

Bridge design

Part 8: Rehabilitation and strengthening of existing bridges

STANDARDS Australia

Austroads

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- Australian Steel Institute
- Austroads
- Bureau of Steel Manufacturers of Australia
- Cement and Concrete Association of New Zealand
- Cement Concrete & Aggregates Australia—Cement
- Concrete Institute of Australia
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- Engineers Australia
- New Zealand Heavy Engineering Research Association
- Rail Industry Safety and Standards Board
- Steel Construction New Zealand
- Steel Reinforcement Institute of Australia
- Sydney Trains

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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PREFACE

This Standard was prepared by the Standards Australia Committee BD-090, Bridge Design, in response to numerous requests from industry, designers and representatives in the field of Bridge Design, especially those in the area of rehabilitation and strengthening of existing bridges.

This Standard is also designated as Austroads publication AP-G51.8-17.

The requirements of the AS(AS/NZS) 5100 series are based on the principles of structural mechanics and knowledge of material properties, for both the conceptual and detailed design, to achieve acceptable probabilities that the bridge or associated structure being designed will not become unfit for use during its design life.

The objectives of the AS(AS/NZS) 5100 series are to provide nationally acceptable requirements for—

(a) the design of road, rail, pedestrian and cyclist-path bridges;

(b) the specific application of concrete, steel, timber and composite construction, which embody principles that may be applied to other materials in association with relevant Standards; and

The objective of this Part (AS 5100.8) is to provide requirements for the assessment of the load capacity, and for the strengthening and rehabilitation of existing bridges.

In line with Standards Australia policy, the words ‘shall’ and ‘may’ are used consistently throughout this Standard to indicate respectively, a mandatory provision and an acceptable or permissible alternative.

Statements expressed in mandatory terms in Notes to tables are deemed to be requirements of this Standard.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix 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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CONTENTS

Page

SECTION 1 SCOPE AND GENERAL
1.1 SCOPE 5
1.2 NORMATIVE REFERENCES 6
1.3 DEFINITIONS 8
1.4 NOTATION 12
1.5 DURABILITY CONSIDERATIONS 13
1.6 SERVICE ENVIRONMENTS FOR BRIDGE STRUCTURES 13
1.7 MATTERS FOR RESOLUTION BEFORE DESIGN COMMENCES 14
1.8 APPROPRIATE SUPERVISION 14

SECTION 2 DESIGN REQUIREMENTS AND PROCEDURES
2.1 GENERAL 15
2.2 ASSESSMENT OF EXISTING STRUCTURAL CAPACITY 15
2.3 DESIGN 15

SECTION 3 CONCRETE STRUCTURES
3.1 GENERAL 17
3.2 CONDITION ASSESSMENT 17
3.3 ASSESSMENT FOR CATHODIC PROTECTION (CP) 22
3.4 ASSESSMENT OF FIRE-AFFECTED CONCRETE 23
3.5 METHODS OF REPAIR AND REHABILITATION OF CONCRETE STRUCTURES 25
3.6 STRENGTHENING OF CONCRETE STRUCTURES 34

SECTION 4 STEEL STRUCTURES
4.1 GENERAL 37
4.2 CONDITION ASSESSMENT 37
4.3 ASSESSMENT FOR CATHODIC PROTECTION (CP) 42
4.4 INSPECTION AND ASSESSMENT OF FIRE-AFFECTED STEEL 42
4.5 METHODS OF REPAIR, AND REHABILITATION OF STEEL STRUCTURES 43
4.6 STRENGTHENING OF STEEL STRUCTURES 45

SECTION 5 TIMBER STRUCTURES
5.1 GENERAL 47
5.2 CONDITION ASSESSMENT 47
5.3 TYPES OF REPAIRS AND STRENGTHENING WORKS 51

SECTION 6 MASONRY STRUCTURES
6.1 GENERAL 53
6.2 CONDITION ASSESSMENT 53
6.3 ASSESSMENT OF FIRE-AFFECTED MASONRY 55
6.4 METHODS OF REPAIR, PROTECTION AND STRENGTHENING OF MASONRY STRUCTURES 56
6.5 STRENGTHENING OF MASONRY STRUCTURES 60

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