



## Bridge design

### Part 8: Rehabilitation and strengthening of existing bridges



This Australian Standard® was prepared by Committee BD-090, Bridge Design. It was approved on behalf of the Council of Standards Australia on 15 March 2017. This Standard was published on 31 March 2017.

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The following are represented on Committee BD-090:

- Australian Industry Group
  - Australian Steel Institute
  - Austroads
  - Bureau of Steel Manufacturers of Australia
  - Cement and Concrete Association of New Zealand
  - Cement Concrete & Aggregates Australia—Cement
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  - Consult Australia
  - 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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This Standard was issued in draft form for comment as DR AS 5100.8:2016.

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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AS 5100.8:2017

Australian Standard®

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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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