

AS 3826—1998

Australian Standard™

**Strengthening existing buildings
for earthquake**

This Australian Standard was prepared by Committee BD/76, Strengthening Existing Buildings for Earthquake. It was approved on behalf of the Council of Standards Australia on 15 May 1998 and published on 5 June 1998.

The following interests are represented on Committee BD/76:

The Association of Consulting Engineers
Australian Building Codes Board
Bureau of Steel Manufactures of Australia
Department of Local Government W.A.
Institution of Engineers Australia
Master Builders Australia
Newcastle City Council
NSW Department of Public Works and Services
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PREFACE

This Standard was prepared by the Standards Australia Committee BD/76, Strengthening Existing Buildings for Earthquake. It should be read in conjunction with the following Standards:

AS

1170 Minimum design loads on structures (known as the SAA Loading Code)

1170.1 Part 1: Dead and live loads and load combinations

1170.4 Part 4: Earthquake loads

1720 Timber structures (known as the SAA Timber Structures Code)

1720.1 Part 1: Design methods

3600 Concrete structures

3700 Masonry structures

4100 Steel structures

AS/NZS

4600 Cold-formed steel structures

The objective of this Standard is to provide users with specifications covering the assessment and analysis of the earthquake resistance of existing buildings, and the design and detailing of any required strengthening in accordance with the strength limit state. In the event of an earthquake, the strengthening is intended to minimize the risk of loss of life and injury due to structural collapse or damage. This Standard is not intended to prevent damage to the building.

For loads resulting from these infrequent events, a greater degree of risk is acceptable in existing buildings than that implied in the design of new buildings. This is achieved by requiring the building be able to resist only a portion of the loads specified in the loading Standards. For live loads, the existing load capacity of the structure is not reduced.

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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