

Australian Standard[®]

Earth-retaining structures



This Australian Standard® was prepared by Committee CE-032, Reinforced Soils and Retaining Structures. It was approved on behalf of the Council of Standards Australia on 16 November 2001.

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The following are represented on Committee CE-032:

- Association of Consulting Engineers, Australia
 - Australian Industry Group
 - Australian Geomechanics Society
 - AUSTROADS
 - Cement and Concrete Association of Australia
 - Concrete Institute of Australia
 - Concrete Masonry Association of Australia
 - Construction Industry Advisory Council
 - Institution of Engineers Australia
 - Master Builders Australia
 - University of New South Wales
 - University of Technology, Sydney
-

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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, CE-032, Reinforced Soils and Retaining Structures, in response to a call from the building industry for the establishment of a Standard on earth-retaining systems, including reinforced soils.

This Standard incorporates Amendment No. 1 (July 2003) and Amendment No. 2 (August 2008). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide designers of earth-retaining structures with design criteria and guidance for use in design applications.

The terms 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

As far as practicable, this Standard has been made consistent with the approach taken in the loading code for structures, AS 1170, *Minimum design loads on structures*. This enables the Standard to be used in combination with structure design Standards such as AS 1720, *Timber Structures*, AS 3600, *Concrete Structures*, AS 4100, *Steel Structures*, and AS 3700, *Masonry structures*. Some specific applications are covered by other Standards and documents. For example, HB 77, *Australian Bridge Design Code*, should be used to design earth-retaining structures associated with road bridges.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	5
1.2 APPLICATION	6
1.3 REFERENCED DOCUMENTS	7
1.4 DEFINITIONS	7
1.5 NOTATION	11
SECTION 2 INVESTIGATION AND TESTING	
2.1 INVESTIGATIONS	15
2.2 TESTING	17
SECTION 3 DESIGN REQUIREMENTS	
3.1 GENERAL	18
3.2 DESIGN CONSIDERATIONS FOR ULTIMATE LIMIT STATE	18
3.3 DESIGN CONSIDERATIONS FOR SERVICEABILITY LIMIT STATE	19
3.4 DESIGN LIFE	27
3.5 DURABILITY AND PERFORMANCE OVER TIME	28
3.6 DRAINAGE	28
3.7 INFLUENCE OF CONSTRUCTION ON ADJACENT GROUND AND STRUCTURES	29
3.8 SUBMERGED STRUCTURES	29
3.9 CONNECTIONS	30
SECTION 4 DESIGN LOADS	
4.1 LOADS	31
4.2 LOAD COMBINATIONS	32
SECTION 5 MATERIAL DESIGN FACTORS	
5.1 GENERAL	33
5.2 MATERIAL STRENGTH FACTORS FOR SOIL SHEAR STRENGTH	33
5.3 MATERIAL FACTORS FOR STRUCTURAL COMPONENTS	34
5.4 STRUCTURE CLASSIFICATION FACTOR	34
5.5 STRENGTH FACTORS FOR SOIL REINFORCEMENT	35
SECTION 6 CONSTRUCTION	
6.1 GENERAL	39
6.2 CONSTRUCTION TOLERANCES	39
6.3 SPECIFIC REQUIREMENTS	40
SECTION 7 PERFORMANCE MONITORING	42
APPENDICES	
A STRUCTURE CLASSIFICATION	43
B GROUND ANCHORS	46
C SOIL NAILING FOR EARTH-RETAINING STRUCTURES	55
D SOIL AND MATERIAL PROPERTIES	61
E DESIGN MODELS AND METHODS	70
F MATERIAL SELECTION AND DURABILITY	77

	<i>Page</i>
G DRAINAGE OF EARTH-RETAINING STRUCTURES	80
H REINFORCED SOIL FACING SYSTEM CONNECTION LOADS	92
I EARTHQUAKE DESIGN	93
J LOAD COMBINATIONS	104
K PARTIAL MATERIAL STRENGTH FACTOR DETERMINATION FOR SOIL REINFORCEMENT	119

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STANDARDS AUSTRALIA

Australian Standard
Earth-retaining structures

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out requirements and recommendations relating to the design and construction of structures required to retain soil, rock and other materials. It also includes requirements and recommendations for the reinforcement of soil and rock materials.

This Standard does not prescribe specific methods of analysis.

NOTE: Various organizations and authorities may develop detailed guides and specifications based on the principles set out in this Standard.

This Standard is in limit state format.

This Standard does not provide requirements and recommendations for 'revetment type' structures, which are sometimes used to retain soil, rock and other materials at slopes steeper than that which the soil, rock or other material would naturally assume.

The retaining structures encompassed by this Standard are indicated in Figure 1.1.

- A1 | Facings constructed up to 800 mm high in a Type 2 structure application are not covered by this Standard.

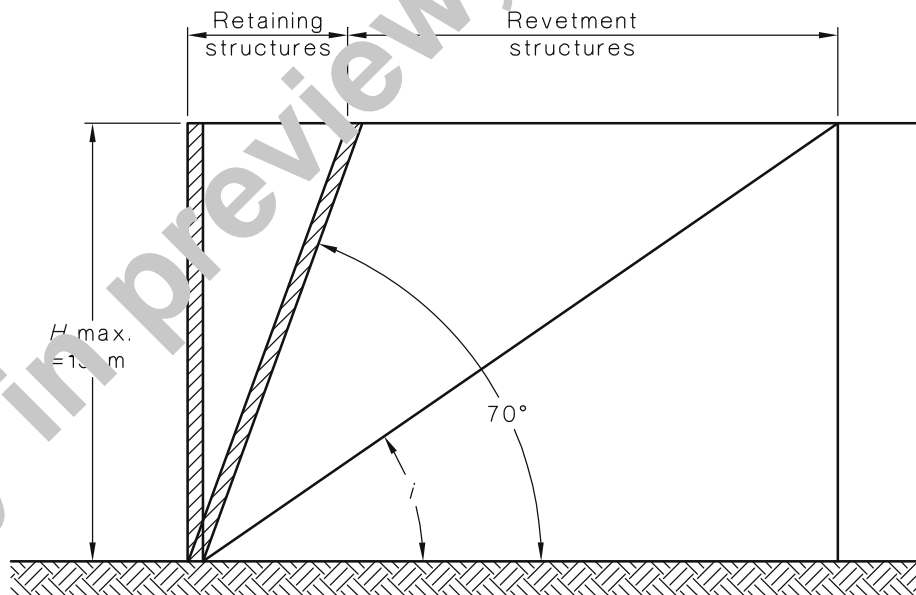


FIGURE 1.1 RETAINING AND REVETMENT STRUCTURES