

Specification for
SEISMIC RESISTANCE OF
ENGINEERING SYSTEMS IN BUILDINGS

Pr AA

AMENDMENT No. 1

August 1990

EXPLANATORY NOTE - Amendment No. 1 corrects the omission of fire sprinkler pipes from the provisions for piping systems, corrects errors and updates related documents.

APPROVAL

Amendment No. 1 was approved on 17 August 1990 by the Standards Council to be an amendment to NZS 4219:1983 pursuant to the provisions of section 10 of the Standards Act 1988.

RELATED DOCUMENTS

Delete the referenced New Zealand, British and Australian Standards and **substitute** the following:

"NEW ZEALAND STANDARDS

NZS 3404:- - - -	The steel structures code
Part 1:1989	New Zealand amendments to AS 1250:1981 (with commentary)
Part 2:1989	Sections 12, 13, 14. Means of compliance (with commentary)
NZS 4203:1984	Code of practice for general structural design and design loadings for buildings

BRITISH STANDARDS

BS 1387:1985	Specification for screwed and socketed steel tubes and tubulars and for plain end steel tubes suitable for welding or for screwing to BS 21 pipe threads
BS 3601:1987	Specification for carbon steel pipes and tubes with specified room temperature properties for pressure purposes
BS 6323:Parts 1 to 8:1982	Specification for seamless and welded steel tubes for automobile, mechanical and general engineering purposes

AUSTRALIAN STANDARDS

AS 1111:1980	ISO metric hexagon commercial bolts and screws
AS 1250:1981	The use of steel in structures"

(Amendment No. 1, August 1990)

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Table 2 SECTION PARAMETERS FOR ELASTIC DESIGN

In the last line, **delete** "BS 1775" and **substitute** "BS 6323".

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2.16 Piping systems

Delete the first paragraph of 2.16.2 and **substitute**:

"Pipes carrying toxic and flammable liquids and gases, acids, alkalis or other hazardous substances, and fire sprinkler and other fire service pipes, up to 200 mm nominal bore (nb) shall be fixed against seismically induced movement as follows:"

(Amendment No. 1, August 1990)

APPENDIX A

Table A2
SEISMIC FORCE FACTORS FOR PARTS AND PORTIONS OF BUILDINGS

Under item 7, after (a) (ii), **add** the following line:
 "(b). Multi-storey buildings where the height to"

Under item 8, in the second line, **delete** the comma after "structures" and **substitute** a semi-colon.

(Amendment No. 1, August 1990)

APPENDIX B

Example 3

On page 29, two-thirds down the page, **delete** the equation:

$$"T = 2\pi \frac{M_p}{K_p} \quad " \text{ and } \textbf{substitute} \quad "T = 2\pi \sqrt{\left(\frac{M_p}{K_p}\right)} \quad "$$

(Amendment No. 1, August 1990)

APPENDIX B

Example 7

On page 34, three-quarters down the page, **delete** the equation:

$$"\text{Stiffness } K = \frac{12EI}{3} \quad " \text{ and } \textbf{substitute} \quad "\text{Stiffness } K = \frac{12EI}{l^3} \quad "$$

On page 35 in the upper diagram, **delete** the horizontal force "0.9 kN" and **substitute** "0.7 kN".

On page 35, halfway down the page **delete** the equation for "load in CD" and **substitute** :

$$"P_{CD} = \frac{0.7 \times 1.25 + 1.54 \times 1.18/2 - 0.92 \times 1.18 \sin \theta}{1.18} \quad "$$

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