

Menu

- [Home Home](#)
- [About this portal](#)
- [Latest updates](#)

Print

[Save](#)

Email

[Resource detail](#)

[Citations](#)

NZS 6703:1984 Code of practice for interior lighting design

Table of Contents

[View on Information Provider website](#) `{{ linkText }}`

Abbreviation

NZS 6703:1984

Amendment

NZS 6703:1984 C1 . - appended. Published 29/11/1985.

Valid from

28/02/1985

Information provider

Standards New Zealand

Author

Standards New Zealand

Information type

New Zealand Standard

Format

PDF

Cited By

[This resource is cited by 8 documents \(show Citations\)](#)

Cites

[This resource cites 19 documents \(show Citations\)](#)

Description

This Code of Practice deals with the design of interior lighting, primarily in workplaces, taking into account both natural and artificial lighting, and relates the lighting to energy use.

The Code of Practice also covers the maintenance of lighting systems and their measurement.

The Code of Practice is concerned primarily with workplaces, but can have application to many recreational and circulation spaces (but not where special effects are to be designed). Extensive tables for lighting level and glare index are included, along with detached calculation charts and procedures.

Scope

The Code of Practice also covers the maintenance of lighting systems and the measurement of illuminance and luminance. While a nearly complete range of interior lighting situations is covered, some buildings have particular lighting requirements which are too specialized to be included. Guidance for the lighting of such buildings is to be found in other publications.

For assistance with locating previous versions, please contact the information provider.

[Table of Contents](#) [View on Information Provider website](#) `{{ linkText }}`

For assistance with locating previous versions, please contact the information provider.

This resource is cited by:

NZS 6703:1984 Code of practice for interior lighting design

This document is CITED BY:

- [G7/AS1 \(First Edition, Amendment 2\)](#)

NZS 6703:1984 is cited by Acceptable Solution G7/AS1: Natural Light from 01/07/1992

- [G7/AS1 \(First Edition, Amendment 1\)](#)

NZS 6703:1984 is cited by Acceptable Solution G7/AS1: Natural Light from 01/07/1992

- [G7/VM1 \(First Edition, Amendment 2\)](#)

NZS 6703:1984 is cited by Verification Method G7/VM1: Natural Light from 01/07/1992

- [G7/VM1 \(First Edition, Amendment 1\)](#)

NZS 6703:1984 is cited by Verification Method G7/VM1: Natural Light from 01/07/1992

- [G8/VM1 \(First Edition, Amendment 2\)](#)

NZS 6703:1984 is cited by Verification Method G8/VM1: Artificial Light from 01/07/1992

- [G8/VM1 \(First Edition, Amendment 1\)](#)

NZS 6703:1984 is cited by Verification Method G8/VM1: Artificial Light from 01/07/1992

- [AS/NZS 1680.1:2006](#)

NZS 6703:1984 is cited by AS/NZS 1680.1:2006 Interior and workplace lighting - Part 1: General principles and recommendations

- [NZS 4121:2001](#)

NZS 6703:1984 is cited by NZS 4121:2001 Design for access and mobility - Buildings and associated facilities

Back

NZS 6703:1984 Code of practice for interior lighting design

Show what documents this resource is CITED BY

Show what documents this resource CITES

Description

This Code of Practice deals with the design of interior lighting, primarily in workplaces, taking into account both natural and artificial lighting, and relates the lighting to energy use.

The Code of Practice also covers the maintenance of lighting systems and their measurement.

The Code of Practice is concerned primarily with workplaces, but can have application to many recreational and circulation spaces (but not where special effects are to be designed). Extensive tables for lighting level and glare index are included, along with detached calculation charts and procedures.

[View on Information Provider website](#)

[NZS 6703:1984 Code of practice for interior lighting design](#)

Description

This Code of Practice deals with the design of interior lighting, primarily in workplaces, taking into account both natural and artificial lighting, and relates the lighting to energy use.

The Code of Practice also covers the maintenance of lighting systems and their measurement.

The Code of Practice is concerned primarily with workplaces, but can have application to many recreational and circulation spaces (but not where special effects are to be designed). Extensive tables for lighting level and glare index are included, along with detached calculation charts and procedures.

[View on Information Provider website](#)

This resource cites:

NZS 6703:1984 Code of practice for interior lighting design

This document CITES:

New Zealand Standards

- [NZS 4220:1982](#)

NZS 6703:1984 cites NZS 4220:1982 Code of practice for energy conservation in non-residential buildings

- [NZS 6501:1982](#)

NZS 6703:1984 cites NZS 6501:1982 Units of measurement

Other

- CIBS Building Energy Code Part 1 (1977). (a link to this resource is not available)
- IES Technical Report No. 11 The calculation of direct illumination from linear sources (1968). (a link to this resource is not available)
- IES Code for interior lighting (1977). (a link to this resource is not available)
- CIE Publication No.16 (E-3.2) (1970). (a link to this resource is not available)
- CIE Publication No.17 (E-1.1) (1970). (a link to this resource is not available)
- CIE Publication No.29 (1975). (a link to this resource is not available)
- BRE Digest No.41 Estimating daylight in buildings - 1 (1970). (a link to this resource is not available)
- BRE Digest No.42 Estimating daylight in buildings - 2 (1971). (a link to this resource is not available)
- [BS 4727-4 Group 03:1972](#)

NZS 6703:1984 cites BS 4727-4 Group 03:1972 Glossary of electrotechnical, power, telecommunication, electronics, lighting and colour terms - Part 3: Terms particular to lighting and colour - Lighting technology terminology

- [BS 4800:1981](#)

NZS 6703:1984 cites BS 4800:1981 Specification for paint colours for building purposes

- [BS 5252:1976](#)

NZS 6703:1984 cites BS 5252:1976 Framework for colour co-ordination for building purposes

- [BS 5252F:1976](#)

NZS 6703:1984 cites BS 5252F:1976 Colour matching fan

- [BS 667:1968](#)

NZS 6703:1984 cites BS 667:1968 Portable photoelectric photometers

- [CP 290:1973](#)

NZS 6703:1984 cites CP 290:1973 Code of practice for suspended ceilings and linings of dry construction using metal fixing systems

- [IES Technical Report No 10](#)

NZS 6703:1984 cites IES Technical Report No 10 - Evaluation of discomfort glare: the IES Glare Index System for artificial lighting installations

- [IES Technical Report No 4 \(Second Edition\)](#)

NZS 6703:1984 cites IES Technical Report No 4 - Daytime lighting in buildings

- [IES Technical Report No. 2](#)

NZS 6703:1984 cites IES Technical Report No 2 - The Calculation of Utilization Factors: The BZ method

Back

Close

Table of Contents

1 Scope

2 References

3 Definitions

4 General design considerations

5 Natural light in lighting design

6 Classification of lighting installations

7 Design of lighting installations

8 Glare

9 Allowance for light loss with time

10 Luminaires

11 Measurement of illuminance

12 Measurement of luminance

13 Lighting and energy

14 Lighting specifications

Table

1 Values of outdoor illuminance E_o exceeded for various percentages of standard year

2 Characteristics of light sources used for general lighting

3 Colour characteristics of tubular fluorescent lamps manufactured in New Zealand

4 Suggested luminaire and room depreciation (LRD) factors for luminaires in various ambient conditions

5 Relationship between room index and the number of measurement points

6 Recommended minimum circuit efficacies

7 Recommended minimum utilization factors

8 Precautions to be taken when seeking to minimize energy consumption

A1 Daylight factor estimation

A2 Minimum internally reflected component of daylight factor: BRS simplified IRC table

A3 Factors to allow for dirt accumulation on glazing

B1 Recommended standard service illuminances

C1 Approximate Reflectances of typical New Zealand building finishes

D1 Glare indices for symmetrical distributions – floor reflectance 14%

D2 Glare indices for asymmetrical distribution – floor reflectance 14%

D3 Glare indices for symmetrical distribution – floor reflectance 30%

D4 Glare indices for asymmetrical distribution – floor reflectance 30%

D5 Tabular presentation of interpolation for glare index

E1 Table for calculation of aspect factors

E2 E/L values – reference plane perpendicular to the plane of the light source

E3 E/L values – reference plane parallel to the plane of the light source

Figures

1 Availability of daylight in New Zealand

2 Selection of type of installation

3 Adjustment of illuminance for certain factors

4 Useful region of viewing for a particular adaptation level

5 Louvres prevent direct glare, but indirect glare can still occur by reflection from glossy surfaces

6 Luminaires in the offending zone can cause veiling reflections

7 Range of lamp lumen depreciation for fluorescent and other discharge lamps

8 Light loss due to dirt accumulation for various luminaire types

9 Combined depreciation curves showing the effect of cleaning and lamp replacement schedules for an installation using fluorescent lamps

10 Pro-forma lighting specification

A1 BRE sky component protractor for vertical glazing (CIE overcast sky)

A2 Use of BRE Protractor No. 2 to determine the sky component from a vertically glazed window

A3 Derivation of sky component of daylight factor for a vertical rectangular window

A4 Nomogram for the calculation of the average internally reflected component of daylight factor in side-lit rooms

A5 Nomogram for the calculation of the minimum internally reflected component of daylight factor in side-lit rooms

D1 Equivalent ceiling for a rectangular room

D2 Conversion graph for reflectances and flux fraction ratios: floor reflectance factor of 14%

D3 Conversion graph for reflectances and flux fraction ratios:

floor reflectance factor of 30%

D4 Conversion graph for downward flux

D5 Conversion graph for luminous area

D6 Conversion graph for height

D7 Transverse and axial polar curves of an asymmetrical luminaire

D8 Asymmetry control distributions ACG 1-4

**D9 Asymmetry control distributions ACG 5 and 6:
representative prismatic luminaires**

**D10 Asymmetry control distributions ACG 7 and 8:
representative louvred luminaires**

D11 Glare worksheet

E1 Illuminance due to a single point source

E2 Vertical tubular sources

E3 Horizontal tubular source

E4 Narrow strip source: point within the luminaire length

E5 Narrow strip source: point outside the luminaire length

E6 Luminous intensity ratios

E7 Aspect factors for parallel planes

**E8 Area source with the reference plane perpendicular to the
plane of the light source**

E9 Area source with the reference plane parallel to the plane of the light source

F1 Typical mortality curve for fluorescent lamps

Appendix

A Methods of daylight factor calculation

B Recommended standard service illuminances

C Surface colours and reflectances

D Calculation of glare index

E Lighting calculations

F Maintenance of lighting installations

[Save](#)

[Feedback](#)

- [Contact us](#)
- [Privacy policy](#)
- [Disclaimer](#)
- [Copyright](#)

[Feedback](#)