

DIN EN 17037:2022-05 (E)

Daylight in buildings

Contents

Page

European foreword	5
Introduction	6
1 Scope	7
2 Normative references	7
3 Terms and definitions	7
4 Symbols and abbreviations	10
5 Assessment of daylight in interior spaces	12
5.1 Daylight Provision	12
5.1.1 General	12
5.1.2 Criteria for daylight provision	12
5.1.3 Daylight Provision Calculation Methods	13
5.1.4 Verification of daylight provision	13
5.2 Assessment for view out	13
5.2.1 General	13
5.2.2 Criteria for view out	14
5.2.3 Verification of view out	14
5.3 Exposure to sunlight	14
5.3.1 General	14
5.3.2 Criteria for exposure to sunlight	14
5.3.3 Verification of sunlight duration	14
5.4 Protection from glare	15
5.4.1 General	15
5.4.2 Criteria for protection from glare	15
5.4.3 Verification for protection from glare	15
Annex A (informative) Recommendations	16
A.1 General	16
A.2 Recommendations for daylight provision in a space	16
A.3 Recommendations for view	20
A.4 Recommendation for exposure to sunlight	21
A.5 Recommendation for glare protection	21
Annex B (informative) Daylight	23
B.1 General	23
B.2 Calculation grids	23
B.3 Calculation methods	24
B.3.1 General	24
B.3.2 Calculation method using daylight factor (method 1)	24
B.3.3 Calculation method using illuminance level (method 2)	25
B.4 Daylight availability	25
B.5 Validation of actual daylighting performance	26
Annex C (informative) View out	27

C.1	General	27
C.2	Quality of view out	27
C.3	Width of view out	27
C.4	Verification of view out	32
C.4.1	Simplified verification method	32
C.4.2	Advanced verification method	33
Annex D (informative) Exposure to sunlight		36
D.1	General	36
D.2	Principle of assessment of hours of sunlight	36
D.3	Method using software	38
D.4	Method using manual geometric constructions	40
D.5	Determination of the position of the sun in the sky	40
D.6	Evaluation rules for sunlight duration	45
D.7	Sunlight duration in the reference point P	47
D.7.1	Example	47
D.7.2	Calculation	47
D.7.3	Result	47
D.8	On-site verification of duration of exposure to sunlight	49
Annex E (informative) Glare		50
E.1	General	50
E.2	Daylight Glare Probability	50
E.3	Annual evaluation	51
E.3.1	General	51
E.3.2	Simplified annual glare evaluation	52
E.3.2.1	General	52
E.3.2.2	Solar protection device being opaque in the extended and close position	53
E.3.2.3	Solar protection device where the curtain is made of textile, film or perforated opaque material	53
E.3.2.4	Non-diffusing glazing device with a low variable light transmittance (e.g. electrochromic glazing)	56
E.3.2.5	Sunshine zones	59
E.4	Reflections or veiling glare	60
E.5	Verification of the glare protection capability of shadings	60
Annex F (informative) A-deviations		63
Annex G (normative) "Special national conditions"		64
Bibliography		65