

DIN 5034-3:2007-02 (E)

Daylight in interiors - Part 3: Calculation

Contents	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Structural geometric relationships for windows	5
3.1 General	5
3.2 Daylight factor	5
3.3 Room parameters	5
3.4 Window dimensions	6
3.5 Geometric parameters for obstructions	8
3.6 Angular parameters for windows and obstructions	9
3.6.1 Window angle	9
3.6.2 Obstruction angle	9
3.7 Reduction factors	10
3.8 Reflectances and window factors	11
4 Calculation of the daylight factor for rooms with windows	13
4.1 Components	13
4.2 Consideration of reduction factors	13
4.3 Determination of the sky component DHr	14
4.4 Determination of the externally reflected component DVr	14
4.5 Determination of the internally reflected component DRr	14
4.6 Determination of the daylight factor in rooms with diffusing glazing	15
5 Average daylight factor for rooms with rooflights	15
6 Period of exposure to sunlight	15
7 Periods of use and relative annual period of use	15
8 Usable luminous exposure and relative usable luminous exposure	16
9 Solar gain	17
Bibliography	18
Figures	
Figure 1 -- Geometric parameters of a window	7
Figure 2 -- Geometric parameters for obstructions	8
Figure 3 -- Determination of the window width angle	12
Figure 4 -- Components of the daylight factor	13