

DIN EN 673:2011-04 (E)

Glass in building - Determination of thermal transmittance (U value) - Calculation method

Contents		Page
Foreword		3
Introduction		4
1	Scope	4
2	Normative references	5
3	Terms and definitions	5
4	Symbols, dimensionless numbers and subscripts	5
4.1	Symbols	5
4.2	Dimensionless Numbers	6
4.3	Subscripts	6
5	Basic formulae	7
5.1	General	7
5.2	U value	7
5.3	Radiation conductance h_r	8
5.4	Gas conductance h_g	8
5.4.1	General	8
5.4.2	Vertical glazing	9
5.4.3	Horizontal and angled glazing	9
6	Basic material properties	9
6.1	Emissivity	9
6.2	Gas properties	10
6.3	Infrared absorption of the gas	12
7	External and internal heat transfer coefficients	12
7.1	External heat transfer coefficient h_e	12
7.2	Internal heat transfer coefficient h_i	12
7.3	Design values	13
8	Declared values: standardized boundary conditions	13
9	Expression of the results	14
9.1	U values	14
9.2	Intermediate values	14
10	Test report	14
10.1	Information included in the test report	14
10.2	Identification of the glazing	14
10.3	Cross section of the glazing	15
10.4	Results	15
Annex A (normative)	Iteration procedure for glazing with more than one gas space	16
Bibliography		18