

# DIN 18008-1:2010-12 (E)

## Glass in building - Design and construction rules - Part 1: Terms and general bases

---

<b>Contents</b>		<b>Page</b>
Foreword .....		4
<b>1</b>	<b>Scope .....</b>	<b>5</b>
<b>2</b>	<b>Normative references .....</b>	<b>5</b>
<b>3</b>	<b>Terms and definitions, symbols and units .....</b>	<b>6</b>
3.1	Terms and definitions .....	6
3.2	Symbols .....	6
<b>4</b>	<b>Safety concept .....</b>	<b>7</b>
4.1	General .....	7
4.2	Design by testing .....	7
<b>5</b>	<b>Construction materials .....</b>	<b>7</b>
5.1	Glass .....	7
5.1.1	Products .....	7
5.1.2	Material properties .....	8
5.1.3	Strength properties and fracture pattern .....	8
5.1.4	Edge damage .....	8
5.2	Interlayers in contact with the glass .....	8
<b>6</b>	<b>Actions .....</b>	<b>9</b>
6.1	External loads .....	9
6.2	Insulating glass units .....	9
6.2.1	Pressure differences .....	9
6.2.2	Combinations of actions .....	9
<b>7</b>	<b>Determination of stresses and deformations .....</b>	<b>10</b>
7.1	General .....	10
7.2	Shear interaction .....	10
7.3	Insulating glass units .....	10
<b>8</b>	<b>Verification of load-bearing capacity and serviceability .....</b>	<b>11</b>
8.1	General .....	11
8.2	Design values .....	11
8.3	Ultimate limit states .....	11
8.4	Serviceability limit states .....	13
<b>9</b>	<b>Verification of residual load-bearing capacity .....</b>	<b>13</b>
9.1	General .....	13
9.2	Structural provisions and verifications .....	13
<b>10</b>	<b>General structural provisions .....</b>	<b>14</b>
10.1	Glass support .....	14
10.2	Glass drill holes and recesses .....	14
<b>Annex A (informative)</b>	<b>Explanations regarding the minimum values of climatic actions .....</b>	<b>15</b>
A.1	Action combination "summer" .....	15
A.1.1	Installation conditions: .....	15
A.1.2	Conditions of production: .....	15

<b>A.2</b>	<b>Action combination "winter"</b> .....	<b>15</b>
<b>A.2.1</b>	<b>Installation conditions:</b> .....	<b>15</b>
<b>A.2.2</b>	<b>Conditions of production:</b> .....	<b>15</b>
<b>Tables Table 1 -- Symbols, designations and units</b> .....		<b>6</b>
<b>Table 2 -- Material properties for different types of glass</b> .....		<b>8</b>
<b>Table 3 -- Combinations of actions</b> .....		<b>9</b>
<b>Table 4 -- Consideration of special temperature conditions present at the place of installation</b> .....		<b>10</b>
<b>Table 5 -- Factors</b> .....		<b>12</b>
<b>Table 6 -- Calculation values for modification factor <math>k_{mod}</math></b> .....		<b>12</b>