

# DIN 18008-1:2020-05 (E)

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

---

<b>Contents</b>		<b>Page</b>
Foreword .....		4
Introduction .....		5
<b>1</b>	<b>Scope .....</b>	<b>6</b>
<b>2</b>	<b>Normative references .....</b>	<b>6</b>
<b>3</b>	<b>Terms and definitions, symbols and units .....</b>	<b>8</b>
<b>3.1</b>	<b>Terms and definitions .....</b>	<b>8</b>
<b>3.2</b>	<b>Symbols .....</b>	<b>9</b>
<b>4</b>	<b>Construction materials .....</b>	<b>9</b>
<b>4.1</b>	<b>Glass .....</b>	<b>9</b>
<b>4.1.1</b>	<b>Products .....</b>	<b>9</b>
<b>4.1.2</b>	<b>Material properties .....</b>	<b>10</b>
<b>4.1.3</b>	<b>Strength properties and fracture pattern .....</b>	<b>10</b>
<b>4.1.4</b>	<b>Edge damage .....</b>	<b>10</b>
<b>4.2</b>	<b>Interlayers in contact with the glass .....</b>	<b>10</b>
<b>5</b>	<b>Safety concept .....</b>	<b>11</b>
<b>5.1</b>	<b>General .....</b>	<b>11</b>
<b>5.2</b>	<b>Verification by testing .....</b>	<b>11</b>
<b>5.3</b>	<b>Construction technique-related requirements .....</b>	<b>11</b>
<b>6</b>	<b>Actions .....</b>	<b>11</b>
<b>6.1</b>	<b>External loads .....</b>	<b>11</b>
<b>6.2</b>	<b>Insulating glass units .....</b>	<b>11</b>
<b>6.2.1</b>	<b>Pressure differences .....</b>	<b>11</b>
<b>6.2.2</b>	<b>Combinations of actions .....</b>	<b>12</b>
<b>7</b>	<b>Determination of stresses and deformations .....</b>	<b>13</b>
<b>7.1</b>	<b>General .....</b>	<b>13</b>
<b>7.2</b>	<b>Shear interaction .....</b>	<b>13</b>
<b>7.3</b>	<b>Insulating glass units .....</b>	<b>13</b>
<b>8</b>	<b>Verification of structural resistance and serviceability .....</b>	<b>13</b>
<b>8.1</b>	<b>General .....</b>	<b>13</b>
<b>8.2</b>	<b>Design values .....</b>	<b>13</b>
<b>8.3</b>	<b>Ultimate limit states .....</b>	<b>14</b>
<b>8.4</b>	<b>Serviceability limit states .....</b>	<b>15</b>
<b>9</b>	<b>Verification of residual load-bearing capacity .....</b>	<b>16</b>
<b>9.1</b>	<b>General .....</b>	<b>16</b>
<b>9.2</b>	<b>Structural provisions and verifications .....</b>	<b>16</b>
<b>10</b>	<b>General structural provisions .....</b>	<b>16</b>
<b>10.1</b>	<b>Glass support .....</b>	<b>16</b>
<b>10.2</b>	<b>Glass drill holes and recesses .....</b>	<b>16</b>
<b>Annex A (informative)</b>	<b>Designations of glass products .....</b>	<b>17</b>

<b>A.1</b>	<b>General</b> .....	<b>17</b>
<b>A.2</b>	<b>Single glass pane</b> .....	<b>17</b>
<b>A.3</b>	<b>Insulating glass unit</b> .....	<b>17</b>
<b>A.4</b>	<b>Glazing</b> .....	<b>18</b>
<b>Annex B</b>	<b>(normative) Verification by testing to ensure compliance with construction technique-specific requirements</b> .....	<b>19</b>
<b>B.1</b>	<b>Verification of residual load-bearing capacity by testing</b> .....	<b>19</b>
<b>B.1.1</b>	<b>Test conditions and test set-up</b> .....	<b>19</b>
<b>B.1.2</b>	<b>Procedure</b> .....	<b>19</b>
<b>B.1.3</b>	<b>Test report</b> .....	<b>21</b>
<b>B.2</b>	<b>Conditions for non-application of verification by testing</b> .....	<b>21</b>
<b>Annex C</b>	<b>(informative) Explanation of climatic action values</b> .....	<b>22</b>
<b>C.1</b>	<b>Combinations of action "summer"</b> .....	<b>22</b>
<b>C.1.1</b>	<b>Installation conditions</b> .....	<b>22</b>
<b>C.1.2</b>	<b>Conditions of production</b> .....	<b>22</b>
<b>C.2</b>	<b>Combinations of action "winter"</b> .....	<b>22</b>
<b>C.2.1</b>	<b>Installation conditions</b> .....	<b>22</b>
<b>C.2.2</b>	<b>Conditions of production</b> .....	<b>23</b>
<b>Bibliography</b> .....		<b>24</b>