

# ISO 28278-1:2011-12 (E)

## Glass in building - Glass products for structural sealant glazing - Part 1: Supported and unsupported monolithic and multiple glazing

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>2</b>
<b>4</b>	<b>Symbols and abbreviated terms .....</b>	<b>6</b>
<b>5</b>	<b>Principle .....</b>	<b>8</b>
<b>6</b>	<b>Required characteristics of glass products .....</b>	<b>10</b>
<b>6.1</b>	<b>Appropriate glass products .....</b>	<b>10</b>
<b>6.2</b>	<b>Dimensional tolerances .....</b>	<b>11</b>
<b>6.3</b>	<b>Glass shapes .....</b>	<b>12</b>
<b>6.4</b>	<b>Corners, notches and holes .....</b>	<b>12</b>
<b>7</b>	<b>Verification of the suitability of glass products for use in SSG systems when exposed to ultra-violet (UV) radiation .....</b>	<b>13</b>
<b>7.1</b>	<b>General .....</b>	<b>13</b>
<b>7.2</b>	<b>Insulating glass unit (IGU) .....</b>	<b>13</b>
<b>7.3</b>	<b>Laminated glass or monolithic glass -- Situation 3 (see Figure 3) .....</b>	<b>15</b>
<b>7.4</b>	<b>Assessment of the adhesion between the sealant and the glass .....</b>	<b>15</b>
<b>8</b>	<b>Design .....</b>	<b>16</b>
<b>8.1</b>	<b>Calculation of the thickness of the glass .....</b>	<b>16</b>
<b>8.2</b>	<b>Calculation of the height of the outer sealant of the IGU for supported and unsupported glazing .....</b>	<b>16</b>
<b>8.3</b>	<b>Calculation of the height of the outer sealant of the IGU for unsupported glazing .....</b>	<b>20</b>
	<b>Annex A (informative) Assembly requirement .....</b>	<b>21</b>
	<b>Annex B (normative) Structural and/or ultra-violet (UV) -resistant sealant (for use with structural sealant glazing and/or IGUs with exposed seals) .....</b>	<b>26</b>
	<b>Annex C (normative) Evaluation of tests results .....</b>	<b>42</b>
	<b>Annex D (normative) Shear at 23 °C -- Test method .....</b>	<b>46</b>
	<b>Annex E (normative) Factory production control (FPC) requirements for sealants .....</b>	<b>48</b>
	<b>Annex F (normative) Outer seal of an IGU -- Category differentiation .....</b>	<b>53</b>
	<b>Annex G (normative) Formation of bubbles .....</b>	<b>56</b>
	<b>Annex H (informative) Sealing, structural bonding and UV resistance schematic illustrations .....</b>	<b>57</b>
	<b>Annex I (normative) Initial testing of the bonding of sealant to a non-glass substrate .....</b>	<b>60</b>
	<b>Bibliography .....</b>	<b>62</b>