

# DIN EN 14305:2016-03 (E)

## Thermal insulation products for building equipment and industrial installations - Factory made cellular glass (CG) products - Specification

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
<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 .....</b>	<b>8</b>
<b>3.1</b>	<b>Terms and definitions .....</b>	<b>8</b>
<b>3.1.1</b>	<b>Terms and definitions as given in EN ISO 9229:2007 .....</b>	<b>8</b>
<b>3.1.2</b>	<b>Additional terms and definitions .....</b>	<b>9</b>
<b>3.2</b>	<b>Symbols, units and abbreviated terms .....</b>	<b>9</b>
<b>3.2.1</b>	<b>Symbols and units used in this standard .....</b>	<b>9</b>
<b>3.2.2</b>	<b>Abbreviated terms used in this standard .....</b>	<b>11</b>
<b>4</b>	<b>Requirements .....</b>	<b>11</b>
<b>4.1</b>	<b>General .....</b>	<b>11</b>
<b>4.2</b>	<b>For all applications .....</b>	<b>11</b>
<b>4.2.1</b>	<b>Thermal conductivity .....</b>	<b>11</b>
<b>4.2.2</b>	<b>Dimensions and tolerances .....</b>	<b>12</b>
<b>4.2.3</b>	<b>Dimensional stability .....</b>	<b>13</b>
<b>4.2.4</b>	<b>Reaction to fire classification of the product as placed on the market .....</b>	<b>13</b>
<b>4.2.5</b>	<b>Durability characteristics .....</b>	<b>14</b>
<b>4.3</b>	<b>For specific applications .....</b>	<b>14</b>
<b>4.3.1</b>	<b>General .....</b>	<b>14</b>
<b>4.3.2</b>	<b>Maximum service temperature .....</b>	<b>14</b>
<b>4.3.3</b>	<b>Minimum service temperature .....</b>	<b>15</b>
<b>4.3.4</b>	<b>Compressive strength .....</b>	<b>15</b>
<b>4.3.5</b>	<b>Bending strength .....</b>	<b>16</b>
<b>4.3.6</b>	<b>Point load .....</b>	<b>16</b>
<b>4.3.7</b>	<b>Tensile strength parallel to faces .....</b>	<b>16</b>
<b>4.3.8</b>	<b>Tensile strength perpendicular to faces .....</b>	<b>17</b>
<b>4.3.9</b>	<b>Compressive creep .....</b>	<b>17</b>
<b>4.3.10</b>	<b>Water absorption .....</b>	<b>17</b>
<b>4.3.11</b>	<b>Water vapour diffusion resistance .....</b>	<b>17</b>
<b>4.3.12</b>	<b>Trace quantities of water soluble ions and the pH-value .....</b>	<b>18</b>
<b>4.3.13</b>	<b>Sound absorption .....</b>	<b>18</b>
<b>4.3.14</b>	<b>Release of dangerous substances .....</b>	<b>18</b>
<b>4.3.15</b>	<b>Continuous glowing combustion .....</b>	<b>18</b>
<b>5</b>	<b>Test methods .....</b>	<b>18</b>
<b>5.1</b>	<b>Sampling .....</b>	<b>18</b>
<b>5.2</b>	<b>Conditioning .....</b>	<b>18</b>
<b>5.3</b>	<b>Testing .....</b>	<b>19</b>
<b>5.3.1</b>	<b>General .....</b>	<b>19</b>
<b>5.3.2</b>	<b>Thermal conductivity .....</b>	<b>19</b>
<b>5.3.3</b>	<b>Reaction to fire .....</b>	<b>21</b>
<b>6</b>	<b>Designation code .....</b>	<b>22</b>
<b>7</b>	<b>Assessment and Verification of the Constancy of Performance (AVCP) .....</b>	<b>22</b>
<b>7.1</b>	<b>General .....</b>	<b>22</b>

7.2	Product Type Determination (PTD) .....	23
7.3	Factory Production Control (FPC) .....	23
8	Marking and labelling .....	23
Annex A (normative) Factory production control .....		24
Annex B (normative) Determination of minimum service temperature .....		27
B.1	Definitions .....	27
B.2	Principle .....	27
B.3	Apparatus .....	27
B.4	Test specimens .....	28
B.5	Procedure .....	28
B.6	Calculation and expression of results .....	29
B.7	Accuracy of measurements .....	29
B.8	Test report .....	30
Annex C (informative) Additional properties .....		31
C.1	General .....	31
C.2	Fire protection .....	31
C.3	Compressive strength .....	31
C.4	Shear strength .....	31
C.5	Dimensional stability under constant normal laboratory conditions .....	31
C.6	Coefficient of thermal expansion .....	32
C.7	Apparent density .....	32
Annex D (informative) Preparation of the flat test specimens to measure thermal conductivity .....		33
D.1	Introduction .....	33
D.2	Procedure to get flat test specimen faces: method of the three rulers .....	33
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation .....		34
ZA.1 Scope and relevant characteristic .....		34
ZA.2 Procedures for AVCP of factory made cellular glass products .....		35
ZA.3 CE Marking and labelling .....		43
Bibliography .....		45