



Gern Glas
Industrivej 4
8641 Sorring
Danmark

Order no. 0302/736218
Page 1 of 2
Appendicis 1
Initials MMH/MJLD

Teknologiparken
Kongsvang Allé 29
8000 Aarhus C
+ 45 72 20 20 00
info@teknologisk.dk
www.teknologisk.dk

Test report

Material: 5 test specimens - 3 mm thick thermally toughened safety glass - for fragmentation test.

Sampling: The test material was forwarded by the client and received at the Danish Technological Institute on 2016-12-20. The test material was labelled 736218 by the laboratory.

Method: EN 12151-1 Glass in building – Thermally toughened soda lime silicate safety glass - Part 1: Definition and description

Period: The test was carried out at 2017-01-10.

Results: The results of the test fulfil the requirements of EN 12150-1
The results of the test are shown on page 2 and in Appendix 1.

Storage: As the test is destructive and non-reproducible the samples have been removed immediately after ending the test.

Terms: The test has been performed according to the rear side conditions, which are according to the guidelines laid down by DANAK (The Danish Accreditation). The testing is only valid for the tested specimen.

The test report may only be extracted, if the laboratory has approved the extract.

2017-01-13, Danish Technological Institute, Glass and Windows

Mads Møller Hansen

Consultant

Telephone: +45 7220 1141
E-mail: mmh@teknologisk.dk

Morten Jul Lægaard

Senior Consultant, BSc

Telephone: +45 7220 1132
E-mail: mjld@teknologisk.dk

Test proces

The test is made according to section 8 in EN 12150-1 for 5 test specimens with the dimensions 360 x 1100 mm - without holes, notches or cut-outs. Each specimen is impacted at the point illustrated in figure 1. 4-5 min after impact, the largest fragments within the area of 50 x 50 mm and the area illustrated in figure 2 are counted.

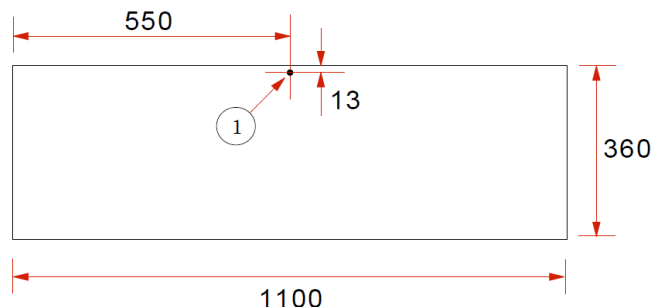


Figure 1. Impact point (1)

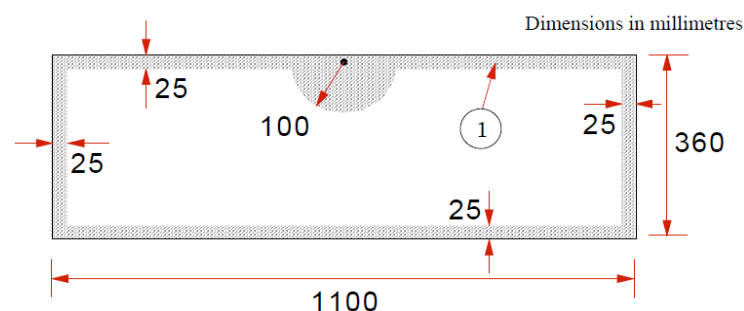


Figure 2. Excluded area (1)

Results

The test is passed, if the number of fragments are equal to or larger than the requirement in EN 12150-1. The results are shown in table 1.

Pictures of the fragmentations, are shown in appendix 1

Specimen	No. of perimeter fragments	No. of central fragments	No. of total fragments	Min. requirement	Result
1	38	74	93	15	Passed
2	22	71	82		Passed
3	39	76	95,5		Passed
4	46	77	100		Passed
5	47	83	106,5		Passed

Pictures



Figure 3. Fragmentation of specimen 1.



Figure 4. Fragmentation of specimen 2.



Figure 5. Fragmentation of specimen 3.



Figure 6. Fragmentation of specimen 4.



Figure 7. Fragmentation of specimen 5.

The general conditions pertaining to assignments accepted by Danish Technological Institute shall apply in full to the technical testing or calibration at Danish Technological Institute and to the completion of test reports or calibration certificates within the relevant field.

Danish Accreditation (DANAK):

DANAK is the national accreditation body in Denmark in compliance with EU regulation No. 765/2008.

DANAK participates in the multilateral agreements for testing and calibration under European co-operation for Accreditation (EA) and under International Laboratory Accreditation Cooperation (ILAC) based on peer evaluation. Accredited test reports and calibration certificates issued by laboratories accredited by DANAK are recognized cross border by members of EA and ILAC equal to test reports and calibration certificates issued by these members' accredited laboratories.

The use of the accreditation mark on test reports and calibration certificates or reference to accreditation, documents that the service is provided as an accredited service under the company's DANAK accreditation according to EN ISO IEC 17025.

Construction Product Regulation:

The Danish Technological Institute guarantees that employees carrying out tests to be used together with harmonized standards under notification no. 1235 according to EU regulation 305/2011, article 43, satisfy all the requirements made for capability, integrity and impartiality. You find the CPR here:

http://ec.europa.eu/growth/single-market/european-standards/harmonised-standards/construction-products/index_en.htm

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