

IKATES, s.r.o. – Laboratory for glass and building products testing



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*Testing laboratory No.1139 accredited by Czech Institute of Accreditation
acc. to ČSN EN ISO(IEC 17025 for glass and selected building products testing*

TEST REPORT

No. : 135 / 2015

Test item : **Thermally toughened safety glass**
- initial type tests according to ČSN EN 12150-2

Client (address): SIA GLAZERI BT
Jelgavas street 74,
Riga, LV-1004, Latvia

Producer (address): SIA GLAZERI BT, Jelgavas street 74, Riga, LV-1004, Latvia
plant „Pinki“, babites pag., Pinki, Rigas raj., LV-2107, Latvia

Place of test performance : IKATES, s.r.o., Teplice

Date of sample receiving : 2015-06-15

Date of test performance : 2015-06-19 to 2015-06-23

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Page No. : 1

Manager of testing laboratory : Jiří Stránský

L.S.

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Normative foundations :

ČSN EN 1288-3 (2001): Determination of bending strength of glass - Part 3 : Test with specimen supported on two points (four points bending)

ČSN EN 12150: Glass in building – Thermally toughened soda lime silicate safety glass – Part 1 (2001): Definition and description; Part 2 (2005): Evaluation of conformity

Sampling :

Following test specimens of thermally toughened safety glass, produced by horizontal process from float glass, were supplied to the testing:

- for fragmentation test, dimensions 360 mm x 1100 mm :

- toughened float glass clear 4 mm; 5 mm; 6 mm; 8 mm; 10 mm; 12 mm – per 5 pcs.

- for bending strength test, dimensions 360 mm x 1100 mm :

- toughened float glass clear 4 mm; 5 mm; 6 mm; 8 mm; 10 mm; 12 mm – per 2 pcs.

Metrological provision of tests :

Fragmentation test was performed using of hammer with mass of 75 g. Mass was determined using of scales Scaltec and Kern. Bending strength test was performed using of universal test machine EU 20 with metrological traceability.

Test results :

1. Fragmentation test (according to ČSN EN 12150-1, cl. 8)

Test specimen No. / Nominal thickness	particles count (pcs.) / the longest particle (mm)				
	1	2	3	4	5
4 mm	59/21	55/23	89/16	75/20	51/22
5 mm	68/23	71/18	65/15	70/20	63/21
6 mm	75/18	71/20	80/16	74/12	70/15
8 mm	62/15	70/18	75/14	72/12	69/16
10 mm	42/22	51/18	45/20	46/21	50/16
12 mm	64/14	53/15	58/18	51/20	56/21

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2. Bending strength test (according to ČSN EN 1288-3)

Specimen / stamp position	Average thickness (mm)	Mass (g)	Density (g/cm ³)	Max. load (N)	Bending strength (MPa)
toughened float glass					
1↑	3,85	3860	2,53	620	144,4
2↓	3,85	3840	2,52	610	142,1
3↑	4,85	4860	2,53	1020	148,5
4↓	4,83	4820	2,52	950	139,7
5↑	5,83	5880	2,55	1590	159,2
6↓	5,84	5900	2,55	1490	148,9
7↑	7,78	7740	2,51	2750	153,9
8↓	7,78	7860	2,55	2860	160,0
9↑	10,02	10040	2,53	4500	151,3
10↓	9,92	10020	2,55	4880	167,2
11↑	11,86	11860	2,53	6720	160,8
12↓	11,91	11900	2,52	7130	169,1

Note: Position of stamp - ↓ in the tension zone ; ↑ in the pressure zone

Expert viewpoint:

The results are in agreement with requirements of the standard EN 12150-1.

Statement : Test results, given in this report, apply only to the tested items and do not replace other documents, e.g. administrative characters, issued from other bodies, according to particular regulations. The official version is in the Czech language.

Distribution list :

2 x SIA GLAZERI BT

1 x Laboratory for glass and building products testing IKATES, s.r.o. (archive)

Tests were carried out by :

Jiří Šnajdr

Report was prepared by :

For correctness and validity of report is responsible :

Jiří Stránský

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 End of the test report
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