

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



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Notified testing laboratory No. 1394

Accredited testing laboratory No. 1139

*accredited by Czech Institute of Accreditation in Prague
for glass and selected building products testing*

TEST REPORT

No. : A – 143F / 2007

Test item : **Laminated safety glass – BULLETPROOF GLASS 79 mm BR7
- bullet resistance test EN 1063 class BR7**

Client (address): BAŞKENT
OTO EMNİYET CAMLARI SANAYİ VE TİCARET A.Ş.
Organize Sanayi Bölgesi Türkmenistan Cad. No:31
Sincan-ANKARA, Turkey

Producer (address): BAŞKENT
OTO EMNİYET CAMLARI SANAYİ VE TİCARET A.Ş.
Organize Sanayi Bölgesi Türkmenistan Cad. No:31
Sincan-ANKARA, Turkey

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

Date of sample receiving : 2007-07-25

Date of test performance : 2007-09-07

Date of issue : 2007-09-10

Number of pages : 4

Page No. : 1

Manager of testing laboratory : Jiří Stránský



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Normative foundations :

ČSN EN 1063 (2000): Glass in building - building - Security glazing – Testing and classification of resistance against bullet attack

Sampling :

To the bullet-resistance test were supplied following test specimens with dimensions 500x500 mm

4 pcs. 3 x float 10 mm+ 5 x float 8 mm + polycarbonate 3 mm

Note: 3 pieces were used for the test. Interlayer between glasses - PVB 0,76 mm

Metrological provision of tests :

Calibrated measuring gauges were used to the testing. Bullet velocity was measured by the calibrated optical gates BMC-17.

Test was performed using of rifle 7,62x51 mm. Used ammunition: 7,62x51 mm, FJ/PB/HC, bullet mass 9,75 g.

Test results :

Bullet resistance (ČSN EN 1063) Class : BR7 – 7,62x51 mm (hard core)

specimen No.	shot No.	bullet velocity (m/s)	state after shot
1	1	828,9	no penetration, no splinters
	2	825,0	no penetration, no splinters
	3	821,2	no penetration, no splinters
2	1	821,9	no penetration, no splinters
	2	818,6	no penetration, no splinters
	3	826,0	no penetration, no splinters
3	1	827,0	no penetration, no splinters
	2	823,7	no penetration, no splinters
	3	823,0	no penetration, no splinters

Classification:

The product is classified into class of bullet-resistance EN 1063 BR7-NS



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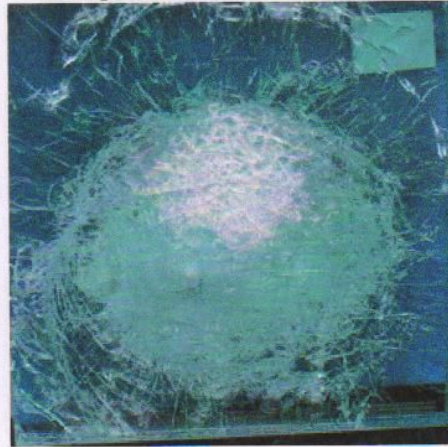
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specimen No.1
attack face



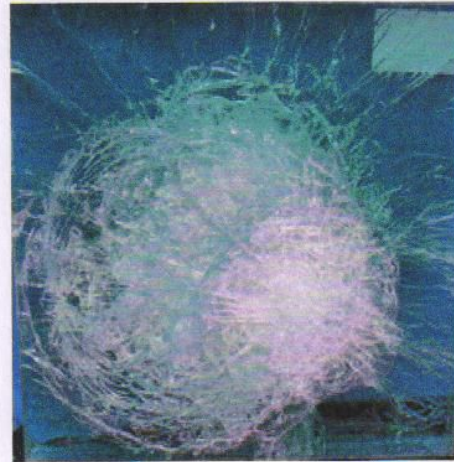
protected face



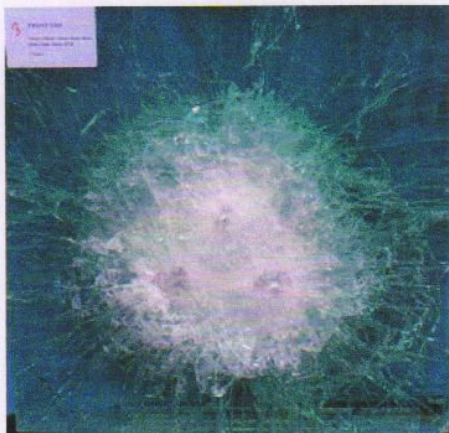
specimen No.2
attack face



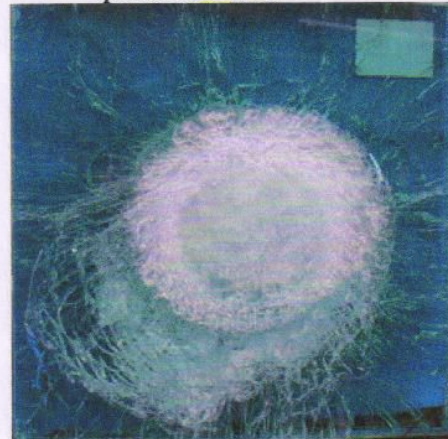
protected face



specimen No.3
attack face



protected face



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Statement : Test results, given in this report, apply only to the tested items and does not replace other documents, e.g. administrative characters, issued from other bodies, according to particular regulations.

Distribution list :

2 x BAŞKENT, OTO EMNİYET CAMLARI SANAYİ VE TİCARET A.Ş.
1 x IKATES, s.r.o. (archive)

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Michal Dufek, Jiří Šnajdr, Jiří Stránský

Report was performed by :

For correctness and validity of report is responsible :

Jiří Stránský

