

# Technical Information Security Technology

## Burglar Resistant Glazing



Basis of testing and certification:

VdS-Guidelines for Physical Security, Burglar Resistant Glazing  
Requirements and test methods, VdS 2163  
(available only in German language)

<b>Approved feature of the glazing: Impact resistance</b>			
<b>Test</b>	<b>Ball drop test</b>		
<i>Classes</i>	<b>EH 01</b>	<b>EH 02</b>	
<i>Weight of balls</i>	4,11 kg	4,11 kg	
<i>Diameter of balls</i>	100 mm	100 mm	
<i>Drop level</i>	9,5 m	12,5 m	
<i>Total number of impacts</i>	3	9	
<i>Test cycles</i>	1	3	
<i>Performance</i>	<p>Depending on the test three steel balls are dropped one times one after another vertically and undamped onto the test specimen which is positioned horizontally and supported only at the edge. The impact characteristic of the hitting balls delivers an equilateral triangle with an edge length of 130 mm.</p> <p>The so dropped balls shall not strike through the test specimen if the requirements are to be fulfilled.</p>		
<b>Approved feature of the glazing: Penetration resistance</b>			
<b>Test</b>	<b>Axe impact test</b>		
<i>Classes</i>	<b>EH 1</b>	<b>EH 2</b>	<b>EH 3</b>
<i>Number of hits</i>	30 – 50	51 – 70	> 71
<i>Breakthrough square, edge length</i>	400 mm	400 mm	400 mm
<i>Construction of the axe</i>	<p>The axe meets DIN 7294, Form B2-A</p> <p>The shaft is made of steel. Thereby a deformation of the shaft during the impact is almost avoided.</p>		
<i>Performance</i>	<p>The specimen is subjected with the determined number of axe impacts (hits for loosening the glazing assembling as well as for cutting are equal).</p> <p>During the test no openings of the mentioned dimensions shall be reached if the requirements are to be fulfilled.</p>		

The complete guidelines (in German language) may be ordered by mail at [verlag@vds.de](mailto:verlag@vds.de).