

# ISO 16932:2020-02 (E)

## Glass in building - Destructive-winds storm-resistant security glazing - Test and classification

---

Contents	Page
<b>Foreword .....</b>	v
1 <b>Scope .....</b>	1
2 <b>Normative references .....</b>	1
3 <b>Terms and definitions .....</b>	1
4 <b>Principle and significance .....</b>	3
4.1 <b>General .....</b>	3
4.2 <b>Purpose .....</b>	3
4.3 <b>Options .....</b>	3
5 <b>Apparatus .....</b>	3
5.1 <b>General .....</b>	3
5.2 <b>Equipment .....</b>	3
5.3 <b>Calibration .....</b>	4
5.3.1 <b>Speed-measuring system .....</b>	4
5.3.2 <b>Pressure transducers .....</b>	5
5.3.3 <b>Manometers .....</b>	5
6 <b>Test specimens .....</b>	5
6.1 <b>General .....</b>	5
6.2 <b>Glazing material .....</b>	5
6.3 <b>Number of samples .....</b>	5
6.4 <b>Order of testing .....</b>	5
7 <b>Test procedure .....</b>	5
7.1 <b>General .....</b>	5
7.2 <b>Preparation .....</b>	6
7.2.1 <b>Installation .....</b>	6
7.2.2 <b>Conditioning .....</b>	6
7.2.3 <b>Missile impact .....</b>	6
7.3 <b>Missile impact test .....</b>	6
7.3.1 <b>Projectile descriptions .....</b>	6
7.3.2 <b>Impact-speed tolerance .....</b>	7
7.3.3 <b>Impact angle .....</b>	7
7.3.4 <b>Impact location .....</b>	7
7.3.5 <b>Retesting .....</b>	7
7.4 <b>Air-pressure-cycling test .....</b>	8
7.4.1 <b>General .....</b>	8
7.4.2 <b>Leakage .....</b>	8
7.4.3 <b>Air-pressure differential .....</b>	8
7.4.4 <b>Cyclic test load .....</b>	8
8 <b>Test requirements .....</b>	9
8.1 <b>General .....</b>	9
8.2 <b>Openings .....</b>	9
8.3 <b>Edge releases .....</b>	10
9 <b>Classification .....</b>	10

9.1	<b>Requirements</b> .....	10
9.2	<b>Applicable missile</b> .....	10
9.3	<b>Levels of protection</b> .....	10
9.4	<b>Basic wind-speed zones</b> .....	10
10	<b>Report</b> .....	11
10.1	<b>General</b> .....	11
10.2	<b>Impact test</b> .....	12
10.3	<b>Air cyclic pressure test</b> .....	12
10.4	<b>Results</b> .....	12
	<b>Annex A (normative) Required information</b> .....	13
	<b>Annex B (normative) Standard test frame</b> .....	14
	<b>Annex C (informative) Recommended missile-propulsion devices</b> .....	16
	<b>Annex D (informative) Basic wind speed</b> .....	17
	<b>Bibliography</b> .....	18