## GfE/CLEPA

Toughened bodyglass – comparison table on impact test 227g ball, 2015 November

Test	UNECE Regulation No. 43, 01- series of amendments	JAPAN Safety Regulations for Road Vehicles, Article 29	USA FMVSS 205 / ANSI/SAE Z26.1-1996	GLOBAL TECHNICAL REGULATION No. 6
Impact test 227 g Ball	<ul> <li>Test method:         ISO 3537 (identically to ISO, but ISO is not listed as reference inside R43)</li> <li>Test conditions: 20 °C ± 5 °C, 860 to 1060 mbar, h<sub>rel</sub>= 60 ± 20 per cent</li> <li>Drop height: 2.0 m</li> <li>Weight: 227 g± 2 g</li> <li>Flat 300 x 300 mm test pieces or finished products</li> <li>The point of impact shall be within 25 mm of the geometric centre of the test piece for a drop height less than or equal to 6 m, and within 50 mm of the centre of the test piece for a drop height greater than 6 m. The ball shall strike that face of the test piece which represents the outside face of the safety glazing pane when mounted on the vehicle. The ball shall be allowed to make only one impact.</li> </ul>	Japan is applying UNR43-01 series of amendments (from August 16 <sup>th</sup> , 2014)	<ul> <li>Test method:         ISO 3537 by reference</li> <li>Test conditions: 21-29         °C, pressure not         specified, humidity not         specified-</li> <li>Drop height: 3.05 m</li> <li>Weight: 224-230 g</li> <li>Flat 305 x 305 mm test         pieces</li> <li>shall be dropped 3.05         m, once, freely and from         rest, striking the         specimen within 25 mm         of its center. The steel         sphere shall strike the         face of the specimen         representing the face         mounted to the exterior         of the vehicle.</li> </ul>	<ul> <li>Test method: holding fixture according to ISO 3537 (ISO as base, due to link to R43)</li> <li>Test conditions: 20 °C ± 5 °C, 860 to 1060 mbar, h<sub>rel</sub>= 60 ± 20 per cent</li> <li>Drop height: 2.0 m</li> <li>Weight: 227g ± 2g</li> <li>Flat 300 x 300 mm test pieces or finished products</li> <li>The point of impact shall be within 25 mm of the centre of the supported area for a drop height less than or equal to 6 m, and within 50 mm of the centre of the supported area* for a drop height greater than 6 m. The ball shall strike the outer face of the test piece. The ball shall make only one impact.</li> <li>* proposed to be replaced by "test piece" =&gt; see informal document GRSG-107-23</li> </ul>