

9 October 2020

Global Registry

Created on 18 November 2004, pursuant to Article 6 of the Agreement concerning the establishing of global technical regulations for wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles (ECE/TRANS/132 and Corr.1) done at Geneva on 25 June 1998

Addendum 6: United Nations Global Technical Regulation No. 6

United Nations Global Technical Regulation on Safety glazing materials for motor vehicles and motor vehicle equipment

Amendment 2

Established in the Global Registry on 24 June 2020



UNITED NATIONS

Paragraph 4.1.2.2.2., amend to read:

"4.1.2.2.2. "XI" for laminated glass. In addition, the appropriate application will be signified by:

/D For laminated-glass panes with enhanced mechanical properties

Paragraph 5., Table 1 (Summary of performance requirements), amend to read:

	Windscreens			Panels					
	Laminated glass		Glass plastics	Uniformly toughened glass		Laminated glass		Double glazed unit ¹	Glass plastics
Marking	II	II/P	IV		/P	XI	XI/P	VI	XII
Light transmittance	5.1.1.	5.1.1.	5.1.1.	5.1.1.	5.1.1.	5.1.1.	5.1.1.	5.1.1.	5.1.1.
Resistance to abrasion	5.1.2.	5.1.2.	5.1.2.		5.1.2.	5.1.2.	5.1.2.		5.1.2.
Resistance to temperature changes		5.2.1.	5.2.1.		5.2.1.		5.2.1.		5.2.1.
Resistance to fire		5.2.2.	5.2.2.		5.2.2.		5.2.2.		5.2.2.
Resistance to chemicals		5.2.3	5.2.3.		5.2.3.		5.2.3		5.2.3
Resistance to radiation	5.3.1.	5.3.1.	5.3.1.		5.3.1.	5.3.1.	5.3.1.		5.3.1.
Resistance to high temperature	5.3.2.	5.3.2.	5.3.2.		5.3.2.	5.3.2.	5.3.2.		5.3.2.
Resistance to humidity	5.3.3.	5.3.3.	5.3.3.		5.3.3.	5.3.3	5.3.3.		5.3.3.
Optical distortion	5.4.1.	5.4.1.	5.4.1.						
Image separation	5.4.2.	5.4.2.	5.4.2.						
Fragmentation				5.5.1.1.	5.5.1.1.				
Head-form	5.4.3. ²	5.4.3. ²	5.4.3. ²			5.5.2.2. ³	5.5.2.2. ³	5.5.3.2. ²	
2,260 g Ball	5.4.4.	5.4.4.	5.4.4.			5.5.2.3. ³	5.5.2.3. ³		
227 g Ball	5.4.5.	5.4.5.	5.4.5.	5.5.1.2.	5.5.1.2.	5.5.2.1.	5.5.2.1.		5.5.2.1

¹ Each component pane shall satisfy the appropriate tests for the type of glazing.

² See paragraph 4.2.2.

³ These tests shall only be carried out on laminated-glass panes bearing the additional symbol /D."

Insert new paragraphs 5.5.2.2. to 5.5.2.2.3.2. to read:

"5.5.2.2. Headform Test

The provisions concerning the headform test shall apply to laminated-glass panes bearing the additional symbol /D.

5.5.2.2.1. Number of test pieces

Eight flat test pieces measuring (1,100 mm x 500 mm) +10mm/-2mm shall be subjected to testing.

5.5.2.2.2. Test method

5.5.2.2.2.1. The method used shall be that described in paragraph 6.5.

- 5.5.2.2.2. The height of drop shall be $1.50 \text{ m} \begin{smallmatrix} + 0 \\ - 5 \end{smallmatrix} \text{ mm}$.
- 5.5.2.2.3. Interpretation of results
 - 5.5.2.2.3.1. This test shall be deemed to have given a satisfactory result if the following conditions are met:
 - 5.5.2.2.3.1.1. The test piece yields and breaks, displaying numerous circular cracks centered approximately on the point of impact,
 - 5.5.2.2.3.1.2. Tears in the interlayer are allowed, but the manikin's head shall not pass through,
 - 5.5.2.2.3.1.3. No large fragments of glass shall become detached from the interlayer.
 - 5.5.2.2.3.2. A set of test pieces submitted for approval shall be considered satisfactory from the point of view of the head form test if at least seven of the eight test pieces meet the requirements."

Insert new paragraphs 5.5.2.3. to 5.5.2.3.3.2., to read:

- "5.5.2.3. 2,260 g Ball Test
 - The provisions concerning the 2,260g ball test shall apply to laminated-glass panes bearing the additional symbol /D.
 - 5.5.2.3.1. Twelve square test pieces of 300 mm side shall be subjected to testing.
 - 5.5.2.3.2. Test method
 - 5.5.2.3.2.1. The method used shall be that described in paragraph 6.4.
 - 5.5.2.3.2.2. The height of drop (from the under-face of the ball to the upper-face of the test piece) shall be $4 \text{ m} \begin{smallmatrix} + 25 \\ - 0 \end{smallmatrix} \text{ mm}$.
 - 5.5.2.3.3. Interpretation of results
 - 5.5.2.3.3.1. The test shall be deemed to have given a satisfactory result if the ball does not pass through the glazing within five seconds after the moment of impact.
 - 5.5.2.3.3.2. A set of test pieces submitted for approval shall be considered satisfactory from the point of view of the 2,260 g ball test if at least eleven of the twelve tests have given a satisfactory result."