

Suggestion for amendment of UN Regulation No. 43 (Safety glazing)

Test prescribed

I Proposal

Paragraph 8.2.1.2., amend to read :

8.2.1.2. Plastic glazing materials shall be subjected to the tests listed in the following table. In the case of the abrasion test, the applicant shall have the alternative between the Taber test and the set of three tests composed of the carwash, sand drop and the wiper test.

Test	Windscreens		Plastics other than windscreens						
	Rigid plastics	Laminated rigid plastics	Rigid plastics		Laminated rigid plastics		Multiple glazing		
	Motorised vehicles		Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Flexible plastics
Flexibility	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12
227 g ball	A17/5	A19/5.2	A14/5	A14/5	A18/5	A18/5	A16/5	A16/5	A15/4
2,260g ball	-	A19/5.1							
Headform ¹	A17/4	A19/4	A14/4	-	A18/4	-	A16/4	-	-
Light transmission ²	A3/9.1	A3/9.1	A3/9.1	-	A3/9.1	-	A3/9.1	-	A3/9.1
Optical distortion	A3/9.2	A3/9.2	-	-	-	-	-	-	-
Secondary image	A3/9.3	A3/9.3	-	-	-	-	-	-	-
Fire resistance	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10
Chemical resistance	A3/11	A3/11	A3/11.	A3/11	A3/11	A3/11	A3/11	A3/11	A3/11.2.1.
Abrasion ³	A17/6.1	A19/6.1	A14/6.1	-	A18/6.1	-	A16/6.1	-	A16/6.1
Weathering	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4
Humidity	A17/6.4	A19/6.4	A14/6.4	A14/6.4	A18/6.4	A18/6.4	A16/6.4	A16/6.4	-
Cross-cut ²	A3/13	A3/13	A3/13	-	A3/13	-	A3/13	-	-
High temperature	-	A3/5	-	-	A3/5	-	-	-	-
Radiation resistance	-	A3/6	-	-	A3/6	-	-	-	-
Resistance to temperature changes	-	A3/8	-	-	-	-	-	-	-

1 Test requirements are dependent on the location of the glazing within the vehicle.

2 Applies only if the glazing is to be used in a location requisite for driving visibility.

3 Either Taber test or the set of sand drop, carwash and wiper test.

II Justification

Experts from France submit to GRSG members a potential inconsistency regarding abrasion test requirements for flexible plastics other than windscreen.

In § 8.2.1.2., the tests list table mentions specifications of abrasion for flexible plastics under Annex 16 § 6.1 which is dedicated to rigid plastic multiple glazed units.

Test	Windscreens		Plastics other than windscreens						
	Rigid plastics	Laminated rigid plastics	Rigid plastics		Laminated rigid plastics		Multiple glazing		
	Motorised vehicles		Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Motorised vehicles	Trailers and unoccupied vehicles	Flexible plastics
Flexibility	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12	A3/12
227 g ball	A17/5	A19/5.2	A14/5	A14/5	A18/5	A18/5	A16/5	A16/5	A15/4
2.260g ball	-	A19/5.1							
Headform ¹	A17/4	A19/4	A14/4	-	A18/4	-	A16/4	-	-
Light transmission ²	A3/9.1	A3/9.1	A3/9.1	-	A3/9.1	-	A3/9.1	-	A3/9.1
Optical distortion	A3/9.2	A3/9.2	-	-	-	-	-	-	-
Secondary image	A3/9.3	A3/9.3	-	-	-	-	-	-	-
Fire resistance	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10	A3/10
Chemical resistance	A3/11	A3/11	A3/11.	A3/11	A3/11	A3/11	A3/11	A3/11	A3/11.2.1.
Abrasion ³	A17/6.1	A19/6.1	A14/6.1	-	A18/6.1	-	A16/6.1	-	A16/6.1
Weathering	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4	A3/6.4
Humidity	A17/6.4	A19/6.4	A14/6.4	A14/6.4	A18/6.4	A18/6.4	A16/6.4	A16/6.4	-
Cross-cut ²	A3/13	A3/13	A3/13	-	A3/13	-	A3/13	-	-
High temperature	-	A3/5	-	-	A3/5	-	-	-	-
Radiation resistance	-	A3/6	-	-	A3/6	-	-	-	-
Resistance to temperature changes	-	A3/8	-	-	-	-	-	-	-

In the opposite, abrasion tests seem not technically applicable to flexible plastics and are not required in annex 15, only focusing on flexible plastic panes.

This proposal aims to clarify this status by replacing the reference in the § 8.2.1.2. table “A16/6.1” by a single dash “-”.