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**Safety glazing materials for road vehicles**

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## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Flat Glass Manufacturers Association of Japan (FGMAJ)/ Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS R 3211:1998** is replaced with this Standard.

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# Safety glazing materials for road vehicles

## Introduction

This Japanese Industrial Standard was established in 1979 and has gone through four revisions. The last revision was made in 1998, and the revision at this time aims to clarify the required product quality.

No corresponding International Standard has been established at this point.

## 1 Scope

This Standard specifies the safety glazing materials to be used mainly for the windows of road vehicles (hereafter referred to as "safety glass").

## 2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

JIS R 3212 *Test methods of safety glazing materials for road vehicles*

## 3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

### 3.1 safety glazing materials

generic term for laminated glass, toughened glass, zone-toughened glass, plastic glazing and glass-plastics, that are processed glass products intended for alleviating corporal injuries caused by breakage of window glass

### 3.2 laminated glass

glass manufactured by bonding two or more layers of glass through an interlayer of plastics so as to minimize the scattering of fragments in cases of breakage due to external force

An interlayer is a material for bonding a layer of glass with another layer of glass or with plastics (either a plate or a film).

Laminated glasses are classified into glass A, of which the interlayer has an enhanced penetration resistance, and glass B, of which the interlayer has an enhanced adhesiveness.

### 3.3 toughened glass

glass processed by controlled thermal treatment to form a strong compressive stress layer on the surface, so as to increase its strength against external force and temperature variation, and so that it crumbles into small granular chunks when broken