INTERNATIONAL STANDARD 3536/I

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Road vehicles — Safety glasses — Vocabulary — Part I

Véhicules routiers — Vitres de sécurité — Vocabulaire — Partie I

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3536 was drawn up by Technical Committee ISO/TC 22, *Road vehicles*, and circulated to the Member Bodies in July 1974.

It has been approved by the Member Bodies of the following countries :

Austria	Hungary	South Africa, Rep. of
Brazil	Iran	Spain
Bulgaria	Israel	Sweden
Canada	Italy	Switzerland
Czechoslovakia	Netherlands	Turkey
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France	Portugal	U.S.A.
Germany	Romania	Yugoslavia

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Australia
Belgium

Printed in Switzerland

Road vehicles – Safety glasses – Vocabulary – Part I

1 SCOPE AND FIELD OF APPLICATION

This International Standard defines terms relating to safety glasses for road vehicles.

2 DEFINITIONS

2.1 safety glass (safety glazing material) : A product consisting of organic and/or inorganic materials, which, when used in a vehicle, is likely to reduce the risk of severe injury in case of an accident, and for which special requirements regarding visibility, strength and abrasion resistance are laid down.

2.2 vision area : That part of the windscreen used in driving the vehicle.

2.3 primary vision area : That part of the windscreen immediately in front of the driver through which his principal field of view is obtained.

2.4 optical deviation : The angle between the true and the apparent direction of a point viewed through the safety glass, the magnitude of the deviation being a function of the angle of incidence of the line of sight, the thickness and inclination of the glass and the radius of curvature at the point of incidence.

2.5 wedge : Departure from parallelism of the surfaces of the glass, that may be inherent in the raw material or may result from the bending techniques employed in producing the designed glass curvature.

2.6 light transmittance : The regular light transmittance τ_r of a safety glass is the quotient of the light flux ϕ_t transmitted by the glass, by the incident light flux ϕ_i.

$$\tau_r = \frac{\phi_t}{\phi_r}$$

2.7 secondary image : A phenomenon in which a distant light source viewed through a safety glass is seen as a bright primary image with at least one less bright juxtaposed secondary image. This secondary, or "ghost", image is a spurious image, usually seen at night when the object being viewed is very bright in relation to its surroundings, for example the headlights of an approaching vehicle.

2.8 optical distortion in a given direction MM′ : The algebraic difference in angular deviation $\Delta\alpha$ measured between two points M and M′ on the surface of the glass, the distance between them being such that their projections on a plane at right angles to the direction of vision are separated by a given distance Δx (see the figure).

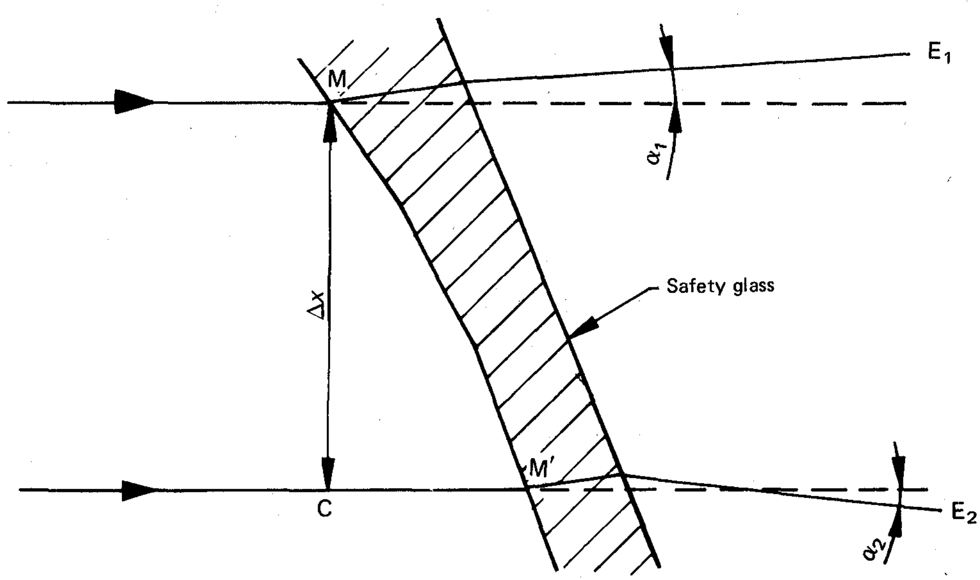

FIGURE – **Diagrammatic representation of optical distortion**

NOTES

$\Delta\alpha = \alpha_1 - \alpha_2$, i.e. the optical distortion in the direction MM′.

Δx = MC, i.e. the distance between the two straight lines parallel to the direction of vision and passing through the points M and M′.