
INTERNATIONAL STANDARD



3560

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Road vehicles — Frontal fixed barrier collision test method

Véhicules routiers — Essai de collision frontale sur barrière fixe

First edition — 1975-11-01

ITeH STANDARD PREVIEW
(standards.iteh.ai)

[ISO 3560:1975](https://standards.iteh.ai/catalog/standards/sist/b24fa4a3-35a4-48ef-913d-aeadccb11a47/iso-3560-1975)

<https://standards.iteh.ai/catalog/standards/sist/b24fa4a3-35a4-48ef-913d-aeadccb11a47/iso-3560-1975>

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 3560 was drawn up by Technical Committee ISO/TC 22, *Road vehicles*, and circulated to the Member Bodies in October 1974.

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

Austria	Hungary	ISO 3560:1975
Belgium	Iran	South Africa, Rep. of
Bulgaria	Ireland	Sweden
Canada	Italy	Switzerland
Chile	Japan	Turkey
Czechoslovakia	Netherlands	United Kingdom
France	Poland	Yugoslavia
Germany	Romania	

The Member Body of the following country expressed disapproval of the document on technical grounds :

Australia

Road vehicles — Frontal fixed barrier collision test method

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a uniform frontal fixed barrier collision test method for road vehicles which should ensure that results obtained from different test facilities are directly comparable.

2 REFERENCES

ISO 1176, *Road vehicles — Weights — Vocabulary*.

ISO 3784, *Road vehicles — Measurement of impact velocity in collision tests*.¹⁾

ISO . . ., *Road vehicles — Instrumentation used in test crashes*.²⁾

3 DEFINITIONS

3.1 angle of impact: Angle between a line drawn perpendicular to the barrier face and the line along which the test vehicle is travelling in a longitudinal forward direction.

3.2 barrier face: Face of the element immediately behind the plywood facing (see 4.2.2).

4 IMPACT TEST FACILITY

4.1 Testing site

4.1.1 The test area shall be large enough to accommodate the run-up track, barrier and technical installations necessary for the test.

4.1.2 The immediate crash site shall be hard, of a minimum length of 15 m and horizontal (no more than 3 % slope measured over any 1 m length of the last 15 m in front of the barrier).

4.2 Barrier specification

4.2.1 The barrier shall consist of a block of reinforced concrete at least 3 m wide, at least 1,5 m high and at least 600 mm thick.

4.2.2 The barrier face shall be flat and vertical, and shall be covered with plywood 20 ± 1 mm thick.

A metallic plate or structure at least 25 mm thick may be used between the plywood and the barrier.

4.2.3 The effective mass shall be not less than 70 t.

4.2.4 The barrier specification defined in 4.2.1 and 4.2.3 may be varied as required provided that the barrier face is large enough to accommodate the frontal crush area of the test vehicle.

4.3 Propulsion of vehicle

4.3.1 At the moment of impact, the vehicle shall be moving at essentially constant velocity and be disconnected from any external propulsion device.

4.3.2 The attachment to the vehicle of any external propulsion or guidance system shall not affect the vehicle's collapse characteristics.

4.4 Alignment of vehicle

The vehicle shall impact the barrier so that its longitudinal axis is within 2° of the intended angle of impact.

The lateral misalignment between the median longitudinal plane of the vehicle and the median longitudinal plane of the collision face shall not exceed ± 300 mm.

1) At present at the stage of draft.

2) In preparation.

5 STATE OF VEHICLE

5.1 Unless otherwise specified, the vehicle weight during test shall be the "complete vehicle kerb weight" defined in ISO 1176.

It is permissible to substitute for the fuel a non-flammable liquid having a density of from 0,7 to 1,0 kg/dm³.

5.2 The state of the vehicle shall be that specified in the appropriate standards or regulations.

6 VELOCITY

6.1 The velocity of the vehicle shall be measured prior to impact in the manner specified in ISO 3784.

6.2 The velocity at the time of impact shall be that specified in the appropriate test requirements.

7 INSTRUMENTATION

The instrumentation used for the test shall be as specified in ISO . . .

iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 3560:1975](#)

<https://standards.iteh.ai/catalog/standards/sist/b24fa4a3-35a4-48ef-913d-aeadccb11a47/iso-3560-1975>