International Standard 6612

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Windows and door height windows — Wind resistance tests

Fenêtres et portes-fenêtres — Essais de résistance au vent

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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 6612 was developed by Technical Committee ISO/TC 162, *Doors and windows*, and was circulated to the member bodies in June 1979.

It has been approved by the member bodies of the following countries :

Australia	Germany, F.R.	Poland
Austria	India	Romania
Belgium	Ireland	South Africa, Rep. of
Bulgaria	Italy	Spain
Canada	Japan	Sweden
Denmark	Libyan Arab Jamahiriya	United Kingdom
Finland	Netherlands	
France	Norway	

The member body of the following country expressed disapproval of the document on technical grounds :

USA

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0 Introduction

Wind effects on windows are evidenced, among other reactions, by positive and negative pressures that may be conveniently simulated by the following tests.

These tests allow for the testing of the complete window to check that, under the influence of wind effects, the window :

— has an acceptable deformation;

— maintains its characteristics;

— does not endanger users.

1 Scope

This International Standard defines the method of testing to be used for assessing structural performance, under positive and/or negative static air pressure, of windows to be fitted in exterior walls and supplied in the form of completely assembled and finished units.

2 Field of application

This International Standard applies to all windows, including door height windows, made of any material, in their normal operating condition for which they are designed and installed according to the manufacturer's recommendations as in a finished building, bearing in mind the conditions of tests as defined below. This International Standard does not apply to the joints between the windows and surrounding components and materials.

3 Definitions

3.1 permanent residual deformation : Change in shape or dimension which does not disappear when pressures are no longer applied.

3.2 frontal displacement : Displacement of a point on a window measured normal to the plane of the window.

3.3 frontal deflection : Maximum difference between the frontal displacements taken along the same window.

3.4 relative frontal deflection : Value of the frontal deflection with respect to the distance between the two ends of the window under examination.

3.5 pressure differential : Difference between the absolute air pressure on the external surface of a window and the absolute air pressure on the internal surface of the same window.

The difference is positive when the external pressure is higher than the internal pressure. In the opposite case, it is negative. This pressure is expressed in Pascals[1].

1) 1 Pa = 1 N/m^2