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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11793-2008

Replacing GB 11793.2-1989

**Test methods on mechanical and weathering properties for
unplasticized polyvinyl chloride (PVC-U) doors and windows**

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Foreword

This standard replaces GB/T 11793.1-1989 "PVC plastic window building physical performances", GB/T 11793.2-1989 "PVC plastic windows mechanical properties, weather resistance and technical conditions", GB/T 11793.3-1989 "plastic windows mechanical properties, weather resistance test methods." This standard and GB/T 11793.1-1989, GB/T 11793.2-1989, GB 11793.3-1989 main differences are as follows:

- Remove the GB T 11793.1-1989, GB/T content/11793.2-1989, preserving the GB/T 11793.3-1989 of main content;
- Increased requirements for mechanical properties test project sequence;
- Increasing the relevant test methods for unplasticized polyvinyl chloride (PVC-U) plastic door;
- Increasing the locking device (handle) switching force test;
- Switch fatigue tests modified to repeated opening and closing performance test;
- Modify the results of experiment and calculation method of the mechanical properties of welded angle destructive;
- Artificial aging test by the aging time of 1000h modify the sample received cumulative radiation energy M class 8GJ/m², S class 12GJ/m²; modify test after aging double V Charpy impact strength and color change spectrophotometer assay;
- Natural weathering test is modified by exposure to two years to receive a sample accumulated in the UV wavelength range between 300nm ~ 800nm Radiant energy of light and visible light. M class 8GJ/m², S class 12GJ/m²; aging test after adjustment for the double V simply supported beam Impact strength and color changes in a spectrophotometer assay;
- Added Appendix A "calculated radiation intensity artificial aging tests and exposure time measurement", B "China's major gas Appendix Designate the type. " The Standard Appendix A, Appendix B is an informative annex. The standard proposed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China. This standard is

under the jurisdiction of Housing and Urban products and components and parts of products Standardization Technical Committee of Ministry of Construction. This standard drafting unit. China Academy of Building Research. Participated in the drafting of this standard. Vicat Plastics (Shanghai) Co., Ltd., the National Chemical Building Materials Testing Center (Construction test unit). The main drafters of this standard. Huangjia Wen, Chen Qi, Jin Qian, Li Xin, Li Cong laugh. This standard replaces the standards previously issued as follows:

--- GB/T 11793.1-1989;

--- GB/T 11793.2-1989;

--- GB/T 11793.3-1989. Unplasticized polyvinyl chloride (P Vp CU) plastic doors and windows Mechanical properties and weathering test method

1 Scope

GB/T 11793-2008 is the Chinese national standard on test methods on mechanical and weathering properties for unplasticized polyvinyl chloride (pvc-u) doors and windows, in the field of construction materials and building. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 24 December 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2009. Classification: ICS 91.060.50, CCS Q74. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the unplasticized polyvinyl chloride (PVC-U) plastic doors and windows (hereinafter referred to as the plastic doors and windows) mechanical properties and weatherability term And definitions, test methods and test reports. This standard applies to unplasticized polyvinyl chloride (PVC-U) profiles produced by the mechanical properties of building doors and windows and weather resistance testing.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 2918 plastic sample conditioning and testing of the standard environment

GB/T 3681-2000 Plastics atmospheric exposure test methods

GB/T 14155-2008 entire door jamb Soft heavy body impact test

GB/T 22632-2008 doors anti-collision performance hard object detection method

GB/T 16422.2-1999 Plastics - Methods of exposure to laboratory light sources - Part 2. Xenon arc lamp JG/T 192-2006 repeatedly opening and closing doors and windows performance test method

ISO 179-1:2000 Determination of strength Charpy impact plastic

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 Sash opening degree of the restriction device.

3.2 Material mounted at a fixed angle or angle change with the seasons of the test stand in a natural environment of long-term exposure.

3.3 Doors and windows open and close several times under the effect of maintaining normal function of the capacity to affect the normal use of deformation does not occur, and failure Damaged expressed repeatedly opening and closing times. Mechanical Properties Test Method 4 windows

4.1 Test items and the order Mechanical properties of various types of plastic window pilot project are shown in Table 1; the order of the pilot project should be in accordance with the locking device (handle) power switch, window open Off force, overhang hoist, warping or bending, twisting, diagonal deformation, spreaders, open the stopper, repeatedly starting and closing performance, vigorously closed sequentially.