



SLOVENSKI STANDARD
SIST EN 514:2001
01-september-2001

Profili iz trdega polivinilklorida (PVC-U) za izdelavo oken in vrat - Ugotavljanje trdnosti kotnih varov in varov T

Unplasticized polyvinylchloride (PVC-U) profiles for the fabrication of windows and doors - Determination of the strength of welded corners and T-joints

Profile aus weichmacherfreiem Polyvinylchlorid (PVC-U) zur Herstellung von Fenstern und Türen - Bestimmung der Festigkeit verschweißter Ecken und T-Verbindungen

Profilés de polychlorure de vinyle non plastifié (PVC-U) pour la fabrication de fenetres et de portes - Détermination de la résistance des assemblages soudés en angles et en T

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Ta slovenski standard je istoveten z: EN 514:2000

ICS:

83.140.99	Drugi izdelki iz gume in polimernih materialov	Other rubber and plastics products
91.060.50	Vrata in okna	Doors and windows

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en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 514

January 2000

ICS 83.080.20; 83.140.99

English version

Unplasticized polyvinylchloride (PVC-U) profiles for the
fabrication of windows and doors - Determination of the strength
of welded corners and T-joints

Profilés de polychlorure de vinyle non plastifié (PVC-U)
pour la fabrication de fenêtres et de portes - Détermination
de la résistance des assemblages soudés en angles et en

T

Profile aus weichmacherfreiem Polyvinylchlorid (PVC-U)
zur Herstellung von Fenstern und Türen - Bestimmung der
Festigkeit verschweißter Ecken und T-Verbindungen

This European Standard was approved by CEN on 7 June 1999.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters, building hardware and curtain walling", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2000, and conflicting national standards shall be withdrawn at the latest by July 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The requirements are incorporated in the appropriate product standards.

Annex A, which is normative, gives a method for the calculation of the failure stress.

Annex B, which is informative, is a bibliography.

This European Standard will result in one of a series of standards on test methods which supports product standards for PVC-U profiles for the fabrication of windows and doors.

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1 Scope

This European Standard specifies two test methods for the measurement of the failure load of welded corners and T-joints made from unplasticized polyvinylchloride (PVC-U) profiles for the fabrication of windows and doors. From the failure load the failure stress is calculated.

2 Definitions

For the purposes of this European Standard, the following definition applies

2.1 failure load : That load at which yield occurs, or, if yield does not occur, the load at which the test piece breaks.

3 Principle

Welded corners and T-joints made from unplasticized polyvinylchloride (PVC-U) profiles are subjected to a tensile bending or compression bending test at specified temperature and test speed.

The failure load is recorded and the failure stress is calculated.

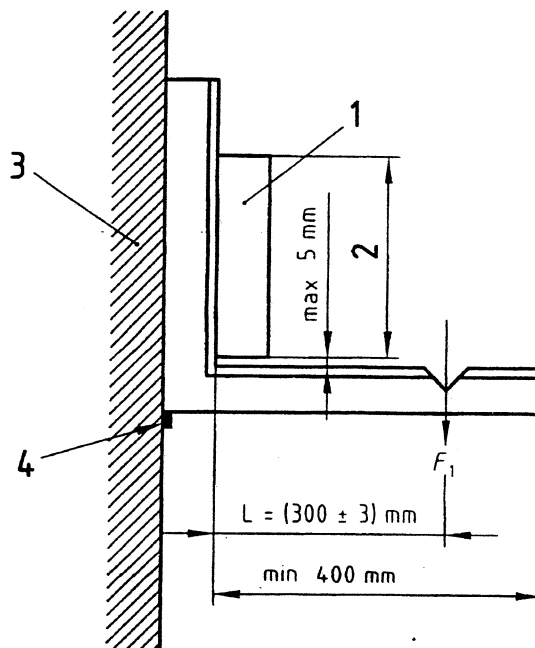
4 Apparatus

4.1 Tensile or compression testing machine with the following specifications:

- a) measuring range of load : 2 kN to 20 kN ;
- b) load indication with zero point setting and peak recording ;
- c) measurement accuracy : $\pm 3\%$;
- d) test speed : (50 ± 5) mm/min.

4.2 Test arrangements

4.2.1 Corner weld samples for tensile bending test (see figure 1)



1 clamping device

2 rigid support over a minimum clamping
length of 400 mm

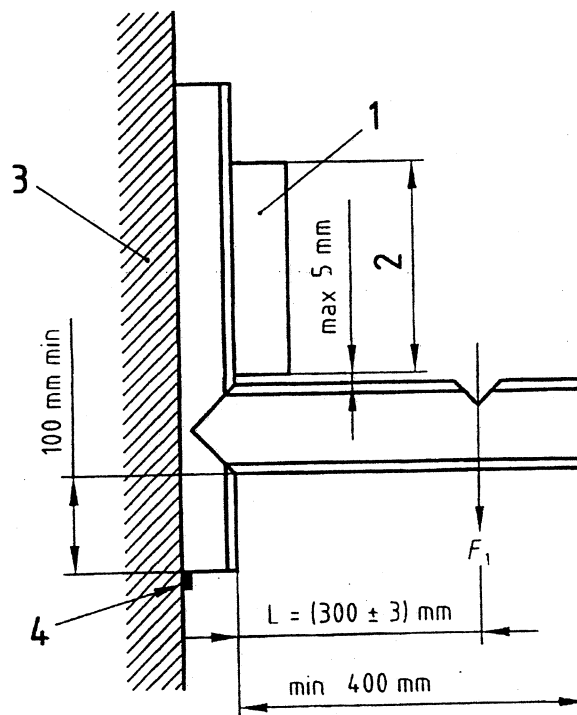
3 frame

4 optional support block ($5 \pm 0,5$) mm

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Figure 1: Example of a test rig for a tensile bending test of corners

4.2.2 T-joint weld samples for tensile bending test (see figure 2)



1 clamping device

2 rigid support over a minimum clamping length of 400 mm

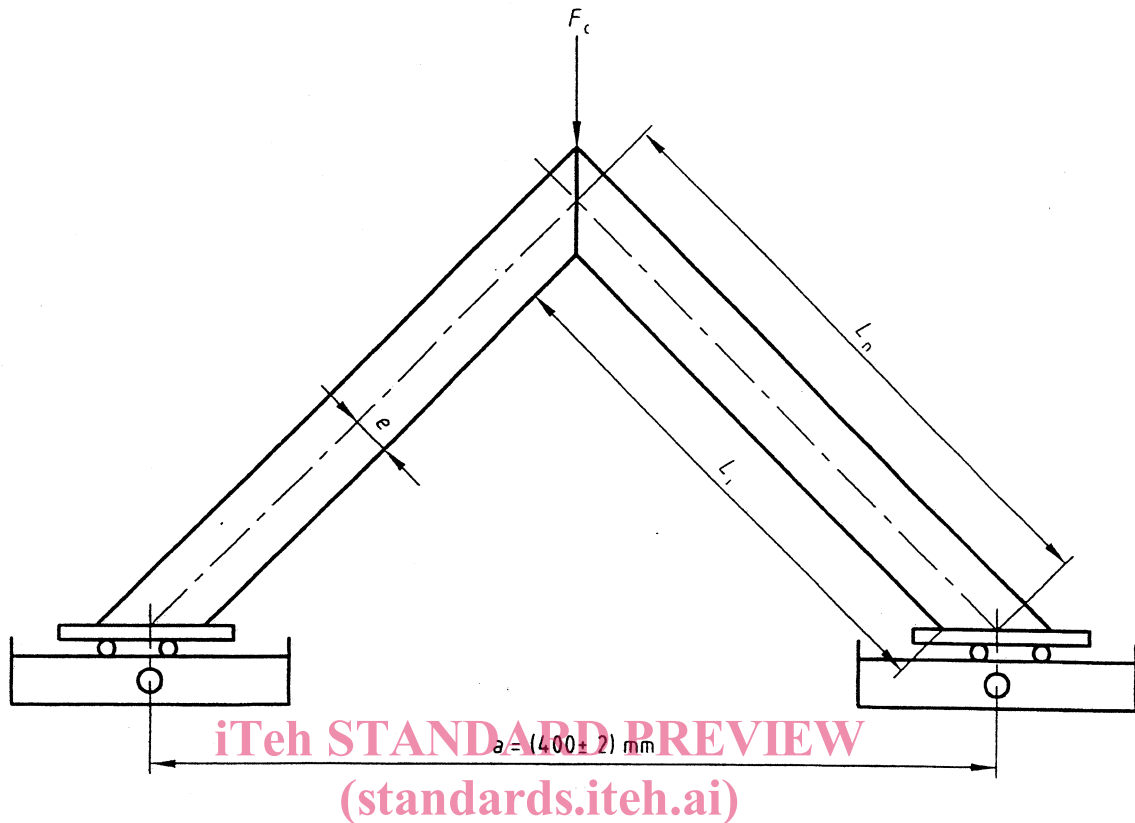
3 frame

4 optional support block ($5 \pm 0,5$) mm

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Figure 2: Example of a test rig for a tensile bending test of T-joints

4.2.3 Corner weld samples for compression bending test (see figure 3)



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Figure 3: Example of a test rig for compression bending test of corners joints