SLOVENSKI STANDARD
oSIST prEN 514:2024

01-julij-2024

Polimerni materiali - Profili na osnovi polivinilklorida (PVC) - Ugotavljanje trdnosti kotnih varov in varov T

Plastics - Poly(vinyl chloride) (PVC) based profiles - Determination of the strength of welded corners and T-joints

Kunststoffe - Profile auf Basis von Polyvinylchlorid (PVC) - Bestimmung der Festigkeit verschweißter Ecken und T-Verbindungen

Plastiques - Profilés à base de poly(chlorure de vinyle) (PVC) - Détermination de la résistance des assemblages soudés en angle et en T

Ta slovenski standard je istoveten z: **prEN 514**

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

oSIST prEN 514:2024 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 514

May 2024

ICS 83.140.99

Will supersede EN 514:2018

English Version

Plastics - Poly(vinyl chloride) (PVC) based profiles - Determination of the strength of welded corners and T-joints

Plastiques - Profilés à base de poly(chlorure de vinyle) (PVC) - Détermination de la résistance des assemblages soudés en angle et en T

Kunststoffe - Profile auf Basis von Polyvinylchlorid (PVC) - Bestimmung der Festigkeit verschweißter Ecken und T-Verbindungen

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

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Ref. No. prEN 514:2024 E

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European foreword

This document (prEN 514:2024) has been prepared by Technical Committee CEN/TC 249 “Plastics”, the secretariat of which is held by SIS.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 514:2018.

This document includes the following significant technical changes with respect to EN 514:2018:

— term 3.1 "failure load" has been revised;

— in 5.1 the measuring range of load for the tensile or compression testing machine has been expanded.

1 Scope

This document specifies a tensile bending method and a compression bending method for determining the failure stress of welded corners and welded T-joints made from unplasticized poly(vinyl chloride) (PVC-U) profiles.

It is applicable to PVC based profiles used for the fabrication of windows and doors.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

3.1
failure load
load at which the test specimen breaks corresponding with the maximum load during test

4 Principle

Welded corners and T-joints made from unplasticized poly(vinyl chloride) (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.

5 Apparatus

5.1 Tensile or compression testing machine

Tensile or compression testing machines are used with the following specifications:

a) measuring range of load: 0,2 kN to 20 kN;

b) load indication with zero point setting and peak recording;

c) measurement accuracy: ± 3 %;

d) test speed: (50 ± 5) mm/min.

5.2 Test arrangements

5.2.1 Corner weld samples for tensile bending test (see Figure 1)