

STN	Pomocné výrobky na zachovanie integrity tkanív imobilných pacientov Časť 4: Skúšobné metódy na trvanlivosť (ISO 20342-4: 2026)	STN EN ISO 20342-4 84 7008
------------	---	--

Assistive products for tissue integrity when lying down - Part 4: Test methods for durability (ISO 20342-4:2026)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/26

Obsahuje: EN ISO 20342-4:2026, ISO 20342-4:2026

142357

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD

EN ISO 20342-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2026

ICS 11.180.01

English Version

**Assistive products for tissue integrity when lying down -
Part 4: Test methods for durability (ISO 20342-4:2026)**

Produits d'assistance pour l'intégrité des tissus en
position allongée - Partie 4: Méthodes d'essai de
durabilité (ISO 20342-4:2026)

Hilfsmittel zur Gewebeintegrität im Liegen - Teil 4:
Testmethoden für Haltbarkeit (ISO 20342-4:2026)

This European Standard was approved by CEN on 6 February 2026.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 20342-4:2026 (E)

Contents	Page
European foreword.....	3

European foreword

This document (EN ISO 20342-4:2026) has been prepared by Technical Committee ISO/TC 173 "Assistive products" in collaboration with Technical Committee CEN/TC 293 "Assistive products and accessibility" the secretariat of which is held by SIS.

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 August 2026, and conflicting national standards shall be withdrawn at the latest by August 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Endorsement notice

The text of ISO 20342-4:2026 has been approved by CEN as EN ISO 20342-4:2026 without any modification.



International Standard

ISO 20342-4

Assistive products for tissue integrity when lying down —

Part 4: Test methods for durability

*Produits d'assistance pour l'intégrité des tissus en position
allongée —*

Partie 4: Méthodes d'essai de durabilité

**First edition
2026-02**

ISO 20342-4:2026(en)**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2026

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO 20342-4:2026(en)**Contents**

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Common test equipment	2
5 Test method for determining the durability of an APTI placed on an articulated support platform	3
5.1 Principle.....	3
5.2 Test equipment – Test support platform.....	3
5.3 Test specifications.....	4
5.3.1 Number of cycles required.....	4
5.3.2 Evaluation criteria.....	5
5.4 Procedure.....	5
5.5 Test report.....	6
6 Test method for determining the durability of an APTI to withstand user movement	6
6.1 Principle.....	6
6.2 Test equipment – Loading pad.....	6
6.3 Test specifications.....	7
6.3.1 Number of cycles required.....	7
6.3.2 Evaluation criteria.....	8
6.4 Procedure.....	8
6.5 Test report.....	9
7 Test method for determining the durability of an APTI to withstand storage and operating environmental conditions	9
7.1 Principle.....	9
7.2 Test equipment – Environmental chamber.....	9
7.3 Test specifications.....	9
7.3.1 Testing conditions.....	9
7.3.2 Evaluation criteria.....	9
7.4 Procedure.....	9
7.5 Test report.....	10
8 Test method for determining the durability of an APTI to withstand user repositioning on an APTI toward the head end of a bed	10
8.1 Principle.....	10
8.2 Test equipment.....	10
8.3 Test specifications.....	11
8.3.1 Testing conditions.....	11
8.3.2 Evaluation criteria.....	11
8.4 Procedure.....	12
8.5 Test report.....	12
9 Test report	12
Bibliography	14

ISO 20342-4:2026(en)**Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

ISO draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at www.iso.org/patents. ISO shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 173, *Assistive products*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 293, *Assistive products and accessibility*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 20342 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 20342-4:2026(en)**Introduction**

Assistive products for tissue integrity (APTIs) play an integral role in any care plan for the prevention and treatment of pressure injuries. They can make a difference in quality of life for any user with limited mobility. Since no one APTI is best for all users, a wide variety of APTIs, including mattresses, mattress overlays and integrated bed systems, are available in a broad array of materials. Choosing from this growing list of alternatives has become a daunting task for clinicians, care givers and users. Selecting from the available alternatives is further complicated by the lack of consistent information regarding APTI characteristics.

Clinicians, manufacturers, distributors and users all stand to benefit from the development of standardized procedures to evaluate the characteristics of APTI. Detailed information provided by standardized testing will help clinicians objectively match the characteristics of an APTI to the needs of individual users. Testing standards will also aid manufacturers by guiding new product development and in the redesign of existing products. Testing standards will promote quality assurance within the manufacturing process. Distributors too, will benefit by being able to clearly describe and compare products from multiple manufacturers. Lastly, users will benefit by having APTIs that truly support their needs.

This document includes the test methods for the evaluation of the durability of APTIs in the lying position in different application environments, such as hospitals, home care and institutions. Some of the devices can be used or reused in more than one application environment. This means that different test methods can be applied to the same APTI depending on the application environment. This document offers several test methods, not all of which are appropriate for all APTIs, and, therefore, the manufacturer should determine which are appropriate for their APTIs' construction and use.

APTIs play a very important role in the prevention and treatment of pressure injuries. Healthcare workers implement prevention and treatment strategies, which include risk assessment, skin monitoring and repositioning. Guidance on the role of APTIs can be found in Reference [6].

Assistive products for tissue integrity when lying down —

Part 4: Test methods for durability

1 Scope

This document specifies conditions and test methods for the durability of assistive products for tissue integrity (APTIs) when lying down. These methods are additional to the ones in ISO 20342-1.

This document is applicable to both reactive and active APTIs, such as mattresses and overlays, and includes single-patient multiple-use products.

This document does not apply to single-use products.

NOTE This document is intended to help differentiate the durability characteristics between APTIs. It is not intended for determining overall performance or for ranking or scoring of such APTIs.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN