

Second edition
2014-01-15

Wheelchair seating —

Part 3:

**Determination of static, impact and
repetitive load strengths for postural
support devices**

Sièges de fauteuils roulants —

*Partie 3: Détermination des efforts statiques, d'impact et cycliques
pour les dispositifs de maintien de la posture*



Reference number
ISO 16840-3:2014(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Test apparatus	4
5 Failure modes	12
6 Preparation of PSD for testing	13
7 Test methods for static strength of PSDs	14
7.1 Preparation	14
7.2 Test procedure	14
7.3 Load application	14
7.4 Lateral and medial support surface test methods	15
7.5 Anterior pelvic and trunk support: anterior forces	17
7.6 Head support: posterior forces	21
7.7 Back support: posterior force	21
7.8 Back support: anterior forces	22
7.9 Arm supports, integral: downward forces	22
7.10 Foot supports, integral: downward forces	23
8 Test methods for impact strength	23
8.1 Preparation	23
8.2 Test procedure — general	23
8.3 Back support resistance: posterior impact	23
8.4 Foot supports: impact for PSDs with integral foot supports	25
8.5 Seat surface: impact	25
9 Test methods for repetitive load	26
9.1 Preparation	26
9.2 Test procedure	26
9.3 Seat surface: repetitive load	27
9.4 Back support: repetitive load	27
9.5 Anterior pelvic support: repetitive load	28
9.6 Anterior trunk support: repetitive load	28
10 Test report	29
11 Disclosure requirement	30