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Wheelchair seating —

Part 12:
Envelopment and immersion characterization of seat cushions using a dual semispherical indenter

AMENDMENT 1

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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

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This document was prepared by Technical Committee ISO/TC 173, *Assistive products*, Subcommittee SC 1, *Wheelchairs*.

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Wheelchair seating —

Part 12: Envelopment and immersion characterization of seat cushions using a dual semispherical indenter

AMENDMENT 1

7.2.4.2

Replace the title of Figure 8 with the following:

Figure 8 — Load application represented as the stepwise targeted load magnitude (y axis) and loading time (x axis) with indicated data recording times

7.3.1

Replace the text with the following:

a) Calculate and report the average pressures during the last 10 s of the recording periods, at each elevation for 425 N ± 5 N load and 525 N ± 5 N load.

   — Elevation a: Average of the three trials of sensors (i.e. sensors 4 and 7 in Figure 6);

   — Elevation b: Average of the three trials of sensors (i.e. sensors 3, 5, 6, 8, 12, 13, 16, and 17 in Figure 6);

   — Elevation c: Average of the three trials of sensors (i.e. sensors 2, 9, 11, 14, 15, and 18 in Figure 6);

   — Elevation d: Average of the three trials of sensors (i.e. sensors 1 and 10 in Figure 6).

b) Calculate and report the average pressures during the last 10 s of the recording periods for the sensors in the cleft where the indenter halves are joined (gluteal cleft) for the 425 N ± 5 N load and 525 N ± 5 N load.

   — Gluteal cleft: Average of the three trials of sensors (i.e. sensors 5 and 6 in Figure 6).

NOTE The pressure averages at each of the elevations provide a quick reference to a cushion's ability to redistribute forces. A cushion where reported pressure values at each elevation are similar and which also distributes load to the gluteal cleft would be considered a high-envelopment cushion.

Clause 8

Replace the text with the following:

The test report shall contain the following information for each condition tested as per 7.2:

a) a reference to this document, i.e. ISO 16840-12:2021;

b) the name, address of the testing institution;

c) the accreditation status of the testing institution, if any;

d) the date of issue of the test report;

e) a unique test report reference;

f) date(s) of tests;

g) the name and address of the manufacturer of the cushion;

h) the model, type, and nominal size that uniquely describes the test cushion, including serial and batch number and internal tracking numbers, if available;

i) a colour photograph showing the cushion in isometric view with and without the cover (if removable);

j) the cushion cover used;

k) the preparation of the test cushion including environment, set up, and adjustment;

l) the model and specifications of the pressure sensors;

m) any deviations from the test methods of this document;

n) a list of the equipment used, and, where relevant, statement confirming that, prior to testing, the equipment was calibrated or verified against measurement standards traceable to international or national measurement standards (where applicable), and the respective calibration dates;

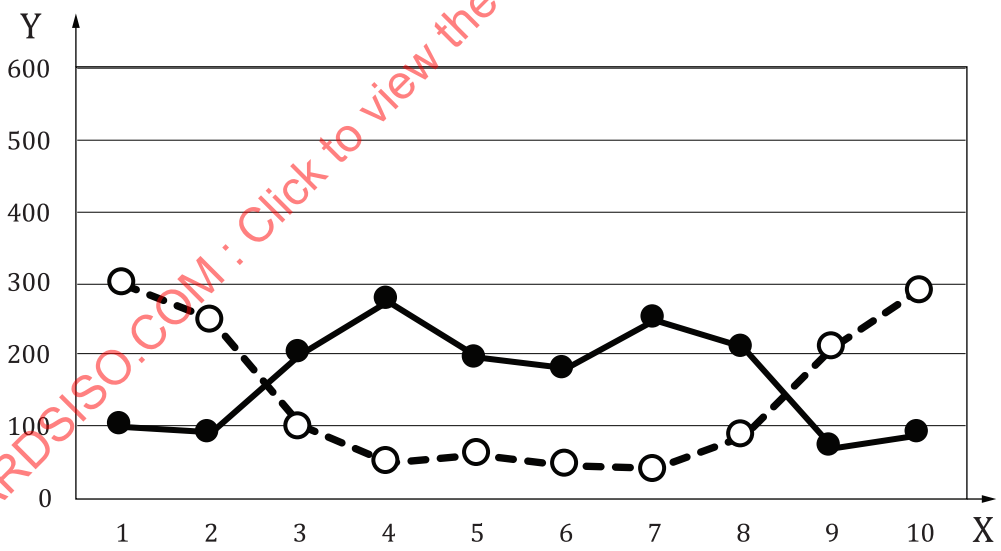
o) the results of the calculations in 7.3;

p) disclosure of measurement uncertainty (see Annex A for guidance).

NOTE Graphs of the data can be included. Suggested formats include the following:

1) a line graph of the average of each of the sensors 1 to 10 (Figure 9);

2) a bar graph of elevations a to d (Figure 10).



Key

X sensor number corresponding to sensors 1 through 10 indicated in Figure 6

Y pressure (in mmHg)

Figure 9 — Example of comparative line graph of pressure readings from the centre line of sensors for two different cushions