



**International  
Standard**

**ISO 16840-13**

**Wheelchair seating —**

**Part 13:**

**Determination of the lateral  
stability property of a seat cushion**

**AMENDMENT 1**

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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 13:

## Determination of the lateral stability property of a seat cushion

### AMENDMENT 1

#### 8.3

Replace the text with the following:

Calculate the lateral tilt,  $\Delta T_L(t)$ , for each time point, as the mean difference between baseline medial-lateral tilt angle,  $\theta_{m,l}^0$ , and lateral tilt angle after the lateral load shift,  $\theta_{m,l}^t$ , where  $t$  is the time.

$$\Delta T_L(t) = \left| \theta_{m,l}^t - \theta_{m,l}^0 \right|$$

Calculate the anterior-posterior tilt,  $\Delta T_{AP}(t)$ , after 60 seconds, as the mean difference between baseline anterior-posterior tilt angle,  $\theta_{a,p}^0$ , and anterior-posterior tilt angle after the lateral load shift,  $\theta_{a,p}^t$ , at the 60 second ( $t$ ) time point.

$$\Delta T_{AP}(t) = \left| \theta_{a,p}^t - \theta_{a,p}^0 \right|$$

#### 8.4

Replace the text with the following:

The test report shall contain the following information:

- a) reference to this document, i.e. ISO 16840-13:2021;
- b) name and address of the testing institution;
- c) accreditation status of the testing institution, if any;
- d) date of issue of the test report;
- e) a unique test report reference;
- f) date(s) of tests;
- g) model, type, and nominal size that uniquely describes the test cushion, including serial and batch numbers, and internal tracking numbers, if available;
- h) the name and address of the manufacturer of the cushion;
- 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, and RCLI used for test;

- l) sample photos of the testing, and test cushion including set up and adjustment, and RCLI used for test;
- m) a list of the equipment used, and where relevant, a 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;
- n) lateral tilt and anterior-posterior tilt as calculated in 8.3;
- o) calculation and disclosure of measurement uncertainty;

NOTE When ensuring that the sources of variability in reported results are identified, controlled and reported, the reported values can be the accumulation of natural variation in the article being tested and the test process including instrumentation and operator variability. When test history data on multiple test articles are available, the ISO 5725 series and ISO 21748 can be used to identify, control, and report sources of uncertainty.

- p) any deviations from the test methods of this document.

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