



**Resilient and laminate floor coverings — Castor chair test**

**Task: Determinate the change of appearance of laminate floor joints under the movement of a castor chair by using ProVent underlay.**

Test	Test method	Task status
Laminate floor joints	EN 425:2002 / ISO 4918:2009, Test C, 25.000cycles	Pass



1-2. pictures of the test. 3. picture of the automatic control unit.

**Tested products:**

Underlay: ProVent underlay (sample size: 1200x970mm). Producer: PEPI RER SIA, Parka 25, VALKA, LV – 4701, LATVIA.

Flooring: EGGER e motion 32Classic 8mm laminate  
"MONTANA PINE SILBER" EM7192 just click.

Producer: EGGER (UK) Ltd, Anick Grange Road, Hexham, Northumberland, NE46 4JS

**Apparatus and materials:**

Circular plate, 750mm diameter, rotates at a speed of 20 r/min. The direction rotation reversed every 60r, with a pause of 5 s before restarting.

Triangular mobile platform, rotating in the same direction as the circular plate, at a faster nominal speed of 50 r/min. The platform is in contact with the test piece via a load exerted by a total mass of 90 kg (including the mass of the components) equally distributed between three castors.

**Castor set:**

diameter of castors	50 (±2)mm
width of castors	20 (±2)mm
radius of curvature of castor treat	130 (±5)mm
crank distance	32 (±2)mm
distance between any two castor mountings	225 (±5)mm



Type W castor, soft tread in accordance with 4.2.2 and 5.4.4.2 of EN 12529: 1998.  
Polyurethane castor treads, smooth surfaces of the castor wheels.

Suction device with adjustable height of nozzles.

A base for the test piece consists of 20mm plywood board.

Vacuum cleaner: Samsung SC4325 (1600W)

Materials:

Underlay: ProVent underlay. Sample size: 1200x970mm. Sample condition: New

Flooring: EGGER e motion 32Classic 8mm laminate. Sample area 1200x970mm.

Sample condition: New

Producer: EGGER (UK) Ltd, Anick Grange Road, Hexham, Northumberland, NE46 4JS

Automatic control unit:

Settings are set by menu control and shown in display.

Condition:

Test samples stored at a temperature of 23° C and 50% RH for 24 h.

Procedure:

New castors installed and the surface of the castors inspected.

Flooring material sample was assembled in accordance to figure 5, ISO 4918:2009

No adhesives used.

Test piece cleaned with vacuum cleaner.

The base for the test piece based on the circular plate and the triangular platform lowered to contact the test piece. The counter preset for 25 000 revolutions of the plate and the apparatus set in motion with the continuously operated suction device.

Results:

In reference to EN 425 standard at the end of the test, the test pieces were examined from a distance of 800 mm at an angle of 45° and from all directions by slowly rotating the viewing table. No detachment of layers, opening of joints nor crazing were found on samples.

Place of the test:

PEPI RER SIA, Parka 25, VALKA, LV – 4701, LATVIA.

Date of the test:

18.-19.04.2013.

Valka, 06.05.2013.

Reinis Dorss, research scientist.