DIN EN 17869:2025-08 (E)

Hardware for furniture - Test methods for strength and overload tests of connectors for furniture constructed from panel material

Contents

Page

European foreword 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 General test conditions 6
4.1 Preliminary preparation 6
4.2 Test equipment 7
4.2.1 Testing device 7
4.2.2 Default particle board properties 8
4.3 Application of forces 8
4.4 Tolerances 9

5 Test specimen 9
5.1 Test specimen 1 - perpendicular force 9
5.2 Test specimen 2 - lateral force and torque 10

6 Test procedures 10
6.1 General 10
6.2 Force application points, force directions and clamping devices 11
6.3 Strength tests 11
6.3.1 General 11
6.3.2 Perpendicular force F1 11
6.3.3 Lateral force F2 12
6.3.4 Torque loading F3 12
6.4 Overload test 12
6.5 Evaluation of results 13

7 Test report 13

Annex A (informative) Reference connector -- Glued dowel 14

A.1 Background and explanation 14
A.2 Test specimen for the test with wooden dowel 14
A.3 Test and evaluation 14

Annex B (informative) Ratio generation 16

B.1 Background and explanation 16
B.2 Formula 16

Annex C (informative) Stiffness calculation for further evaluation of overload 17

C.1 Background and explanation 17
C.2 Conversion of the clearance L in clearance in degree of deviation 17
C.3 Calculation of stiffness S 18

Annex D (informative) Evaluation by the characteristic value (5 % percentile) 19

D.1 Background 19
D.2 General information 19
D.3 Characteristic value for strength 19
D.4 Characteristic value for stiffness and clearance in degrees 21

Bibliography 25