testing tables (for strength, durability and safety)

TON

P.O.V.

421 464 American walnut

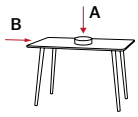
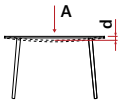
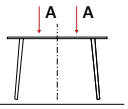
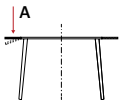
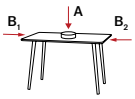
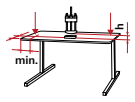
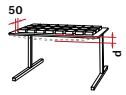
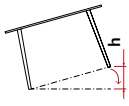
Complies with (level): EN 12521 (domestic tables) ✓ EN 15372 (non-domestic tables) ✓

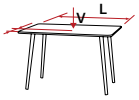
Made by (name): Markéta Ordáňová

Approved on (date): 12.4.2022

TON brand products undergo rigorous checks throughout the entire manufacturing process to ensure that they comply with international quality, safety and resistance standards. The tests are conducted in an external laboratory, where the table is repeatedly subjected to pressure on individual components.

✓ complies with the standard
× does not comply with the standard
– not applicable

			Load level						
			Domestic tables		Non-domestic tables				
Test no.	Standard	Test	Other domestic tables	Tables ≤ 600 mm in height or with a table top area of ≤ 0.25 m² type of use: general*	type of use: general*	EN 12521 domestic tables	EN 15372 non-domestic tables	Description	Illustration
1.	EN 1730, 6.2	horizontal static load test	A table top load: 50 kg B force: 400 N min. specified force: 200 N repeated 10×	A table top load: 50 kg B force: 200 N min. specified force: 100 N repeated 10×	A table top load: 50 kg B force: 400 N min. specified force: 100 N repeated 10×	✓	✓	The load is approximately in the centre of the table top. The legs are secured with braces. The force acts perpendicular to the leg joint and halfway between them. The structure is loaded in all four directions. Where there is a single central pedestal, the force acts at points on the table top axes.	
2.	EN 1730, 6. 3. 1	vertical static load test on the main surface	A force: 1000 N repeated 10×	A force: 1000 N repeated 10×	A force: 1250 N repeated 10×	✓	✓	Any table extension in the centre is considered the main surface. The legs are secured with braces. Vertical force acts on any place on the table top where failure is probable, but no closer to the edge than 100 mm.	
			When buckling is measured, the last load is left in place for a period of 30 min.						
3.	EN 1730, 6. 3. 2	additional vertical static load test for a main surface longer than 1600 mm			A force: 1000 N repeated 10×	✓	✓	Any table extension in the centre is considered the main surface. The legs are secured with braces. Two vertical forces act on the longitudinal axis of the table top, 400 mm from the transverse axis on each side.	
4.	EN 1730, 6. 3. 3	additional surface test with a vertical static load	A force: 200 N repeated 10× When buckling is measured, the last load is retained for a period of 30 min.		A force: 300 N repeated 10× When buckling is measured, the last load is left in place for a period of 30 min.	–	–	Any table extension in the centre is considered the main surface. The legs are secured with braces. Part of the main surface in the non-extended version may become the additional surface when extended. Vertical force acts on the place on the table top where failure is probable, but no closer than 100 mm from the edge.	
5.	EN 1730, 6. 4. 1. a 6. 4. 2.	horizontal durability test	A static surface load: 50 kg B force: 300 N repeated 10 000×	A static surface load: 50 kg B force: 150 N repeated 5 000×	A static surface load: 50 kg B force: 300 N repeated 15 000×	✓	✓	Fatigue test. The legs are secured with braces. Two vertical forces alternate against each other on the level of the main surface, 50 mm from the edge. This procedure is repeated in the remaining corner positions. For round or oval surfaces, it is conducted on the longitudinal and perpendicular axes.	
6.	EN 1730, 6. 5.	vertical durability test for tables with a base or pedestal	A table top load: as required B force: 300 N repeated 10 000×	A table top load: as required B force: 150 N repeated 5 000×	A table top load: as required B force: 300 N repeated 15 000×	✓	✓	Fatigue test. The legs are secured with braces. Tables with a central extension are tested when extended; other tables are tested without additional surfaces. The vertical force acts on the table top at the least favourable point, 100 mm from the edge. If the table rises, the surface is loaded.	
7.	EN 1730, 6. 6. 1. a 6. 6. 3.	vertical impact test	a 25 kg impact body dropped from a height of 180 mm, repeated 10×	a 25 kg impact body dropped from a height of 140 mm, repeated 10×	a 25 kg impact body dropped from a height of 180 mm, repeated 10×	✓	✓	There is foam between the impact body and the table surface. The impact device is freely dropped onto the surface of the foam at these points: – the closest point to the table top support, but no less than 100 mm from the edge, – 100 mm from the edge, as far as possible from the support, – 100 mm from the edge in one corner.	
8.	EN 1730, 6. 7.	table top buckling			Surface load: 1.5 kg/dm², evenly distributed load period: 1 week	–	–	Tables with a central extension are tested when extended; other tables are tested without additional surfaces. The table surface is loaded with a uniform load. Buckling is the difference in height between the initial unloaded state and the final loaded state.	
9.	EN 1730, 6. 9.	drop test			drop height: 100 m repeated 6×	–	✓	The table is lifted to the specified height at the point used to establish vertical force, and allowed to drop freely back onto the floor.	

Test no.	Standard	Test	Load level: Domestic tables: Other domestic tables	Load level: Domestic tables: Tables ≤ 600 mm in height or with a table top area of ≤ 0.25 m² type of use: general*	Load level: Non-domestic tables: type of use: general*	EN 12521 domestic tables	EN 15372 non-domestic tables	Description	Illustration
10.	EN 1730, 7. 2.	stability under a vertical load	Force V depends on the longest side of the table top and the table height. It is determined by a formula.	Force V depends on the longest side of the table top and the table height. It is determined by a formula.	Force V depends on the longest side of the table top and the table height. It is determined by a formula.	✓	✓	The vertical load is applied 50 mm from the edge, as far as possible from the pedestal, at the point with the greatest risk of overturning.	
	7.23		For tables higher than 950 mm, 50 % of the stated vertical load (V) is used.						

The longest side of the table top in the direction of overturning (L)	Vertical load (V)
0 mm – < 800 mm	V_1 = 200N
800 mm – 1 600 mm	$V_2-(V_2-V_1) \times \frac{(1\,600 - L)}{800}$
> 1600 mm	V_2 = 400N

Technical specifications:

ČSN EN 12521 Furniture – Strength, durability and safety – requirements for domestic tables

ČSN EN 15372 Furniture – Strength, durability and safety – requirements for non-domestic tables

*hotels, cafés, restaurants, banks, bars, public spaces such as halls, conference rooms

Testing procedures comply with:

ČSN EN 1730 Furniture-Tables -Testing methods to establish stability, strength and durability