

Testing scheme for office furniture – Work tables and desks

To application-no. 1583/12

Testing object (name, type)

DESK LYSIS PLUS
TYPE C – FIXED HEIGHT

Inspector

SPIROS BAKALEXIS

Receiving date of testing object

04.12.2012

End or period of testing

19.12.2012

Location of testing

TESTLAB DROMEAS S.A (Industrial Area of Serres)

Testing fundamentals (optional)

EN 527-1:2011
EN 527-2:2002
EN 527-3:2003

Statement to the testing result



Testing result

✓ = requirements are met
✗ = requirements are not met
— = requirements are not applicable

Thessaloniki, 31.12.2012

Inspector: Bakalexis S.

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Figure	Requirements	Notes	Testing result
EN 527-1:2011			
1	Dimensions		
1.1	Measurement procedure		
	Position the work table/desk on a flat horizontal and rigid floor surface, with levelling device(s) fully closed.		✓
	Inclinable desk top work surfaces shall be set to the horizontal or as near to the horizontal as possible.	N/A	✓
	Before commencing measurement procedure, it shall be determined whether the table/desk is for sitting, standing or sit/stand use.	Sitting only	✓
	The minimum and maximum height of work surface shall be measured at the front edge (see Figure 1) and the adjustment range shall be recorded. For height selectable work tables/desks type B and D the minimum height increments shall also be recorded.	Height of the work surface: 750 mm	✓
	The legroom depth shall be measured at the working position and with the rear edge of the work table/desk placed against a vertical wall.		✓
	Figure 1 shows the legroom for all work surfaces which have straight front edges at least all along the width, W, see Table 1. In these cases, the legroom shall be rectangular with dimensions as specified in Table 1.		✓
	Figure 2 shows the legroom for all work surfaces with non-straight front edges. In these cases, the legroom shall be curved with dimensions as specified in Table 1.		✓
1.2	Requirements		
	The dimensions of tables/desks shall be as specified in Table 1.	Type C, Sitting only	✓

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Figure	Requirements	Notes	Testing result							
	Table 1 — Table/desk dimensions in millimetres									
	Dimensions			Work table/desk type						
				Type A	Type B	Type C	Type D			
				Fully adjustable	Fully selectable	Fixed height	Limited adjustable or limited selectable ^e			
	h ₁	Height of the work surface	Sitting only	Minimum range	Minimum range	740 ± 20	-allow	Min	Max	+allow
				650 - 850	650 - 850 ^a		yes	680	760	yes
			Standing only	Minimum range	Minimum range	1050 ± 20	-allow	Min	Max	+allow
				950 - 1250	950 - 1250 ^a		yes	1000	1180	yes
			Sit/stand	Minimum range	N/a	N/a	Minimum range			
				650 - 1250			680 - 1180			
	t ₁ and t ₂	Maximum desk top thickness (see Figure 1)	At the front, t ₁	55 ^b	55 ^b	70	70			
			At 500 mm from the front edge, t ₂	80 ^b	90 ^b	100	100			
	k ₁	Minimum height of knee clearance for standing position only (see Figure 3)	Applies only to tables with a height more than 850 mm	700 ^d	700 ^d	700 ^d	700 ^d			
	k ₂	Minimum depth of knee clearance for standing position only (see Figure 3)		80	80	80	80			
	k ₃	Minimum depth of foot clearance for standing position only (see Figure 3)		150	150	150	150			
	f ₁ and f ₂	Minimum height of minimum foot clearance	Sitting only and sit/stand From 600 mm to 800 mm from the front edge, f ₁	120	120	120	120			
Standing only From front edge to 150 mm, f ₂			120	120	120	120				
g ₁	Minimum legroom depth ^c (see Figure 1)	Sitting only and sit/stand	800	800	800 ^f	800				
Table 1 — Table/desk dimensions in millimetres (continued)										
D	Minimum desk top depth ^g		800	800	800 ^f	800				
W	Minimum legroom width	Sitting only and sit/stand	1200	1000	850	850				
		Standing only	790	790	790	790				
^a Maximum increment of 20 mm										
^b Only applies to sitting and sit/stand work tables/desks										
^c The construction of the product shall ensure the minimum legroom depth										
^d Measured from the floor										
^e The minimum and maximum values shall be obtained										
^f 600 mm can in some situations be acceptable, e.g. when 17" or smaller flat screens are used, providing that the work surface is not against the wall and that two people are not sitting one in front of each other. Information about these limitations shall be provided with the product										
^g The dimension D is measured as the smallest dimension at the work area										
NOTE 1: Users outside of the range given in the introduction may need furniture of different dimensions.										
NOTE 2: There is no dimension specified for the width (length) of a work table/desk. The width and shape of the										
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Figure	Requirements	Notes	Testing result
	work tables/desks can vary greatly. The actual size of the work surface depends on the individual user's needs and task requirements (see EN ISO 9241-5).		
	Dimensions in millimetres Key h_1 height to the top of the work surface t_1 maximum desk top thickness at the front t_2 maximum desk top thickness at 500 mm from the front edge f_1 height of foot clearance g_1 minimum legroom depth w minimum legroom width Figure 1 — Legroom and height for work tables/desks with straight front edges		

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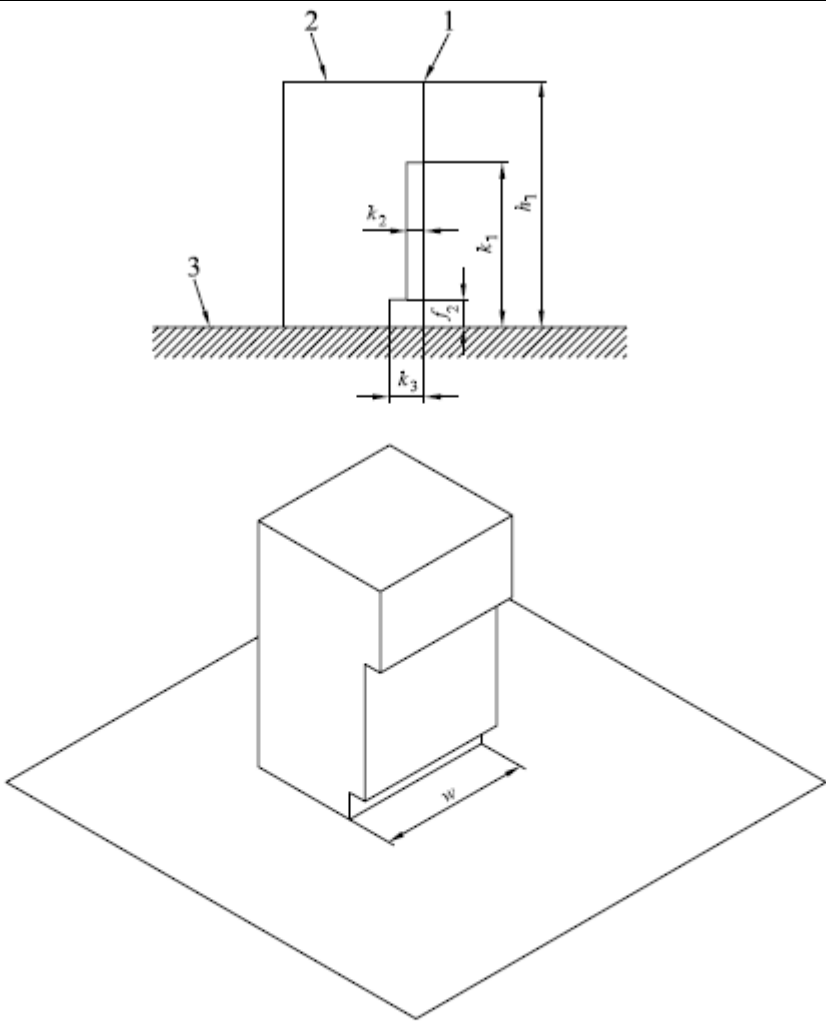
Job-No. 1583/12

Figure	Requirements	Notes	Testing result
	Dimensions in millimetres Key h_1 height to the top of the work surface t_1 maximum desk top thickness at the front t_2 maximum desk top thickness at 500 mm from the front edge f_1 height of foot clearance g_1 minimum legroom depth w minimum legroom width Figure 2 — Legroom and height for work tables/desks with non-straight front edges		

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Figure	Requirements	Notes	Testing result
	 Key 1 front edge 2 top of the work surface 3 floor h_1 height to the top of the work surface k_1 height of knee clearance k_2 depth of knee clearance k_3 depth of foot clearance f_2 height of foot clearance w minimum legroom width Figure 3 — Foot and knee clearance dimensions for standing position only		

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Figure	Requirements	Notes	Testing result
Annex A (informative)	General ergonomic principles and explanations to Table 1		
1.3.A.1	General		
	The functional dimensions of work tables/desks are shown in Table 1. There are four types of desks, A, B, C and D, based on their height adjustability/selectability. The dimensional requirements vary depending on how they are used i.e. whether the users are sitting or standing or can vary their posture from sitting to standing (and anything in between).	TYPE C – FIXED HEIGHT	✓
	The legroom clearance height is determined by the maximum desk top thicknesses t1 at the front edge and t2 at 500 mm from the front edge. The reason for this is to make the measurement process simpler. The maximum desk top thickness has been calculated by subtracting the legroom height requirement from height of the work surface of a fixed height desk. The work tables/desks complying with the Type A and B height of the work surface and the maximum desk top thickness requirements will accommodate the 95th percentile European male.	Legroom clearance height: 750 mm	✓
	The minimum foot clearance height is specified to allow a clearance under any part of the rear of the work surface/desk such as a modesty panel so that users can place their feet on the floor without hitting any part of the desk. For standing work tables/desks only, there is an additional requirement for the minimum foot clearance depth so that users standing in front of the table/desk can work without hitting any obstruction under the work table/desk.		✓
	The minimum legroom depth and width for sitting and sit/stand work tables/desks is shown in Figure 2. For these work tables/desks, only the legroom depth is specified at knee height and at floor level. This should be deeper than the depth at knee height in order to allow the users to stretch their legs forward at angle of 30 degrees between their lower leg and the vertical and without their feet hitting any part of the work table/desk at the floor level.	Legroom width: 924 mm Legroom depth: free	✓
	The minimum desk top depth (800 mm and 600 mm in some situations) can be different from the required minimum legroom depth. The minimum desk top depth is based on the comfortable eye to monitor distance which should be between 450 mm to 750 mm as specified in A.2.12 of EN ISO 9241-5:1999.		✓
	The minimum legroom width for sitting applications (i.e. the gap between the legs or any part or component of the work table/desk at the sides) is specified sufficiently large to allow users to rotate their chairs rather than twist their spines when reaching sideways. The minimum legroom width for standing applications is based on the distance between the outsides of users' legs when standing with their legs slightly apart.		✓
	The dimensions specified in Table 1 are based upon the following anthropometric data for sitting and standing work taking limitations in technology into account. Body dimensions shown in Table A.1 for the European populations are taken from		✓

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Figure	Requirements	Notes	Testing result
	PeopleSize 2008, by Open Ergonomics.		
1.3.A.2	Anthropometric data for sitting and standing work		
	The body dimensions which form the basis of the table/desk dimensions given in Table 1 are shown in Table A.1 for sitting and standing. This anthropometric data is taken from PeopleSize 2008, by Open Ergonomics.		✓
	All dimensions are in mm and appropriate ones include 30 mm shoe heel height as specified in EN ISO 14738.		✓

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Figure	Requirements	Notes	Testing result																			
Table A.1 — Anthropometric data (including 30 mm shoe thickness)																						
Symbol	Dimension	Dutch			Italian			French			German			Belgian			Swedish			British		
		5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	
a (see Figure A.1)	Seat to elbow	187	302	n/a	197	293	n/a	199	279	n/a	201	277	n/a	204	287	n/a	192	292	n/a	197	275	n/a
b (see Figure A.1)	Thigh thickness	128	169	n/a	112	159	n/a	140	220	n/a	131	195	n/a	133	175	n/a	130	184	n/a	132	194	n/a
c (see Figure A.1)	Posterior to knee	565	689	n/a	-	-	n/a	-	-	n/a	546	677	n/a	549	670	n/a	540	667	n/a	537	673	n/a
d (see Figure A.1)	popliteal height	399	521	n/a			n/a			n/a	390	503	n/a			n/a	430	550	n/a	383	500	n/a
e (see Figure A.1)	Body thickness	227	341	n/a	171	307	n/a	190	341	n/a	220	379	n/a	194	296	n/a	203	352	n/a	220	377	n/a
f (see Figure A.1)	Foot length	225	291	n/a	218	282	n/a	218	288	n/a	224	289	n/a	218	281	n/a	223	286	n/a	220	287	n/a
g (see Figure A.1)	Top of knee height	-	535	n/a	471	612	n/a	488	620	n/a	497	626	n/a	-	-	n/a	498	633	n/a	488	622	n/a
h (see Figure A.2)	Elbow height-stand	979	1230	n/a	-	-	n/a	963	1219	n/a	969	1215	n/a	-	-	n/a	987	1211	n/a	951	1208	n/a
-	hip breadth-sitting	366	437	464	304	394	412	336	432	464	348	435	472	354	412	463	372	445	466	346	432	469
-	hip breadth-stand	-	-	-	-	-	-	-	-	-	324	407	427	-	-	-	-	-	-	321	405	427

Testing result:

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Figure	Requirements	Notes	Testing result
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27-1

Table A.1 — Anthropometric data (including 30 mm shoe thickness) (continued)

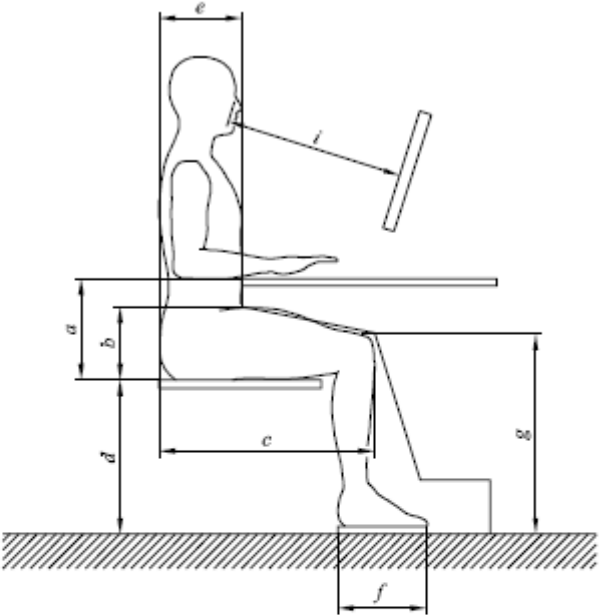
Symbol	Dimension	Dutch			Italian			French			German			Belgian			Swedish			British		
		5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female	5% female	95% male	95% female
Desk/table Dimensions																						
t_t (desk top thickness at front)	= a - b	59	133	-	85	134	-	59	59	-	70	82	-	71	112	-	62	108	-	65	81	-
t_b (desk top thickness at 500mm)	= a + d - g	188															124	209		92	153	
h_1 (desk top height sitting) (see Figure A.3)	= a + d	586	823						591	780							622	842		580	775	
h_2 (desk top height standing) (see Figure A.4)	= h	979	1230					963	1219		969	1215					987	1211		951	1208	
d_1 (legroom depth at knee) (see Figure A.5)	= c - e (using 95th%ile - 5th%ile within genders)	462		-	-	-	-	-		-	457			476		-	464	452		453	427	-

Source: PeopleSize 2008, Open Ergonomics Ltd

Note : All dimensions are in mm

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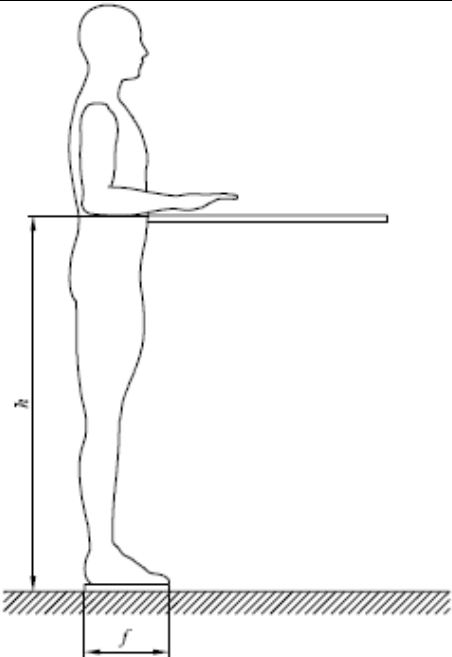
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Figure	Requirements	Notes	Testing result
	 Key - a dimension from seat to elbow - b thigh thickness - c dimension from posterior to knee - d popliteal height - e body thickness - f foot length - g top of knee height - i eye to monitor distance Figure A.1 — Dimensions for sitting posture NOTE (i) Eye to monitor distance is = 450 mm to 750 mm (EN ISO 9241-5)		

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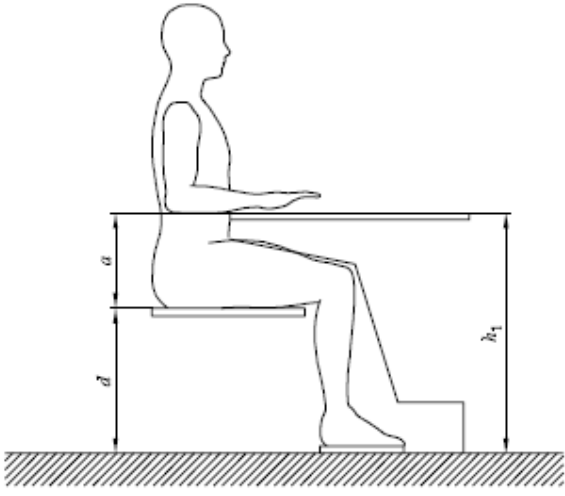
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Figure	Requirements	Notes	Testing result
	 The diagram shows a side profile of a person standing at a desk. A vertical dimension line labeled 'h' measures from the floor to the desk surface. A horizontal dimension line labeled 'f' measures from the vertical line of the body to the front edge of the desk. The desk surface is represented by a horizontal line, and the floor is indicated by a hatched area. Key f foot length h elbow height-stand Figure A.2 — Dimensions for standing posture The calculations used in determining the dimension of tables/desk are shown below. It should be noted that these are theoretical approximate dimensions.		

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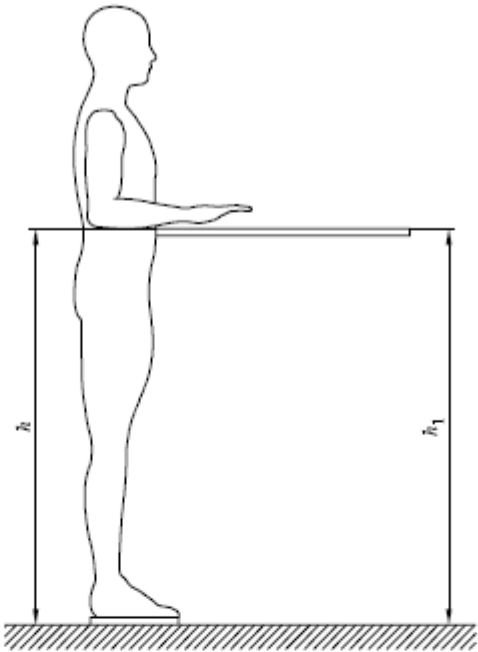
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Figure	Requirements	Notes	Testing result
	 Key a dimension from seat to elbow d popliteal height h₁ height to the top of the work surface Figure A.3 — Dimension h₁ for sitting posture Sitting Type C (fixed height): $h_1 = a \text{ 95}^{\text{th}} \text{ percentile} + d \text{ 95}^{\text{th}} \text{ percentile}$ As can be seen from Table A.1, the Swedish population has the largest seat to elbow height (a) and the largest popliteal height (d) Therefore $h_1 = 292 + 550 = 842$ Sitting Type A or B (fully adjustable or selectable): $h_1 \text{ minimum} = a \text{ 5}^{\text{th}} \text{ percentile} + d \text{ 5}^{\text{th}} \text{ percentile}$ As can be seen from Table A.1, the British population has the smallest seat to elbow height (a) and the smallest popliteal height (d) Therefore $h_1 \text{ minimum} = 197 + 383 = 580$ $h_1 \text{ maximum} = a \text{ 95}^{\text{th}} \text{ percentile} + d \text{ 95}^{\text{th}} \text{ percentile}$ As can be seen from Table A.1, the Swedish population has the largest seat to elbow height (a) and the largest popliteal height (d) Therefore $h_1 \text{ maximum} = 292 + 550 = 842$		

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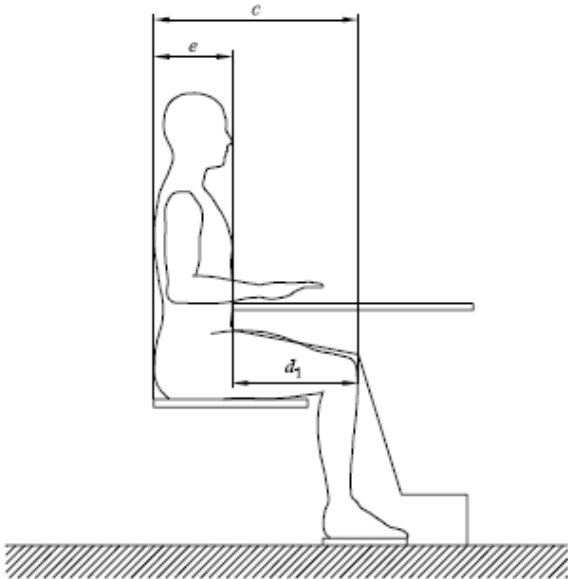
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Figure	Requirements	Notes	Testing result
	 Key h elbow height-stand h₁ height to the top of the work surface Figure A.4 — Dimension h₁ for standing posture Standing Type C (fixed height): $h_1 = (h \text{ 95}^{\text{th}} \text{ percentile} + h \text{ 5}^{\text{th}} \text{ percentile}) / 2 = 1061$ Standing Type A or B (Fully adjustable or selectable): $h_1 \text{ minimum} = h \text{ 5}^{\text{th}} \text{ percentile}$ As can be seen from Table A.1, the British population has the smallest standing elbow height (h) Therefore $h_1 \text{ minimum} = 951$ $h_1 \text{ maximum} = h \text{ 95}^{\text{th}} \text{ percentile}$ As can be seen from Table A.1, the Dutch population has the largest standing elbow height (h) Therefore $h_1 \text{ maximum} = 1230$		

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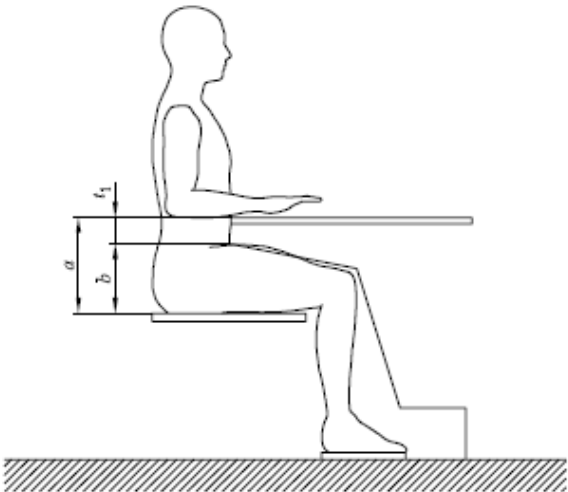
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Figure	Requirements	Notes	Testing result	
	 The diagram shows a side profile of a person sitting on a chair at a desk. Dimension 'c' is the horizontal distance from the back of the chair to the knee. Dimension 'e' is the horizontal distance from the back of the chair to the back of the torso. Dimension 'd1' is the horizontal distance from the back of the torso to the knee. The person's feet are on a footrest. Key c dimension from posterior to knee e body thickness d₁ minimum depth of legroom at knee Figure A.5 — Dimension d₁ d₁ = c 95th percentile – e 5th percentile As can be seen from Table A.1, the Belgian population has the largest difference between posterior to knee dimension (c) and the body thickness (e) Therefore d₁= 670 – 194 = 476			

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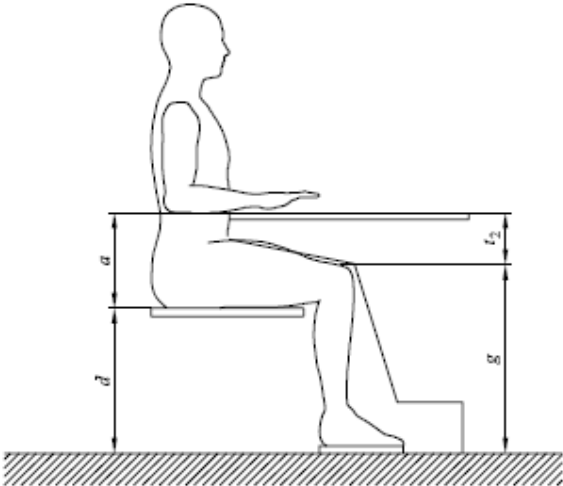
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Figure	Requirements	Notes	Testing result
	 Key - a dimension from seat to elbow - b thigh thickness - t₁ maximum desk top thickness at the front Figure A.6 — Dimensions t₁ Sitting: t₁ = a 5th percentile – b 5th percentile As can be seen from Table A.1, the Dutch and French 5th percentile females has the smallest dimension between the seat to elbow (a) and thigh thickness (b) Therefore t₁ = 187 - 128 = 59		

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Figure	Requirements	Notes	Testing result
	 Key a dimension from seat to elbow d popliteal height g top of knee height t₂ maximum desk top thickness at 500 mm from the front edge Figure A.7 — Dimension t₂ Sitting: t₂ = a 5th percentile + d 5th percentile – g 5th percentile As can be seen from Table A.1, the UK 5th percentile females has the smallest dimension between the sitting desk height (h₁) and top of knee height (g) Therefore t₂ = 197 + 383 – 488 = 92		

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Figure	Requirements	Notes	Testing result
EN 527-3:2003 (E)			
2	Test apparatus		
	Unless otherwise stated, the tests may be applied by any suitable device because results are dependent only upon correctly applied forces and loads and not upon the apparatus.		✓
2.1	Floor surface		
	Horizontal, flat and rigid with a smooth surface. For the drop test (5.6), a rubber mat (2 ± 0,5) mm thick, with hardness of IRHD ± 10 IRHD according to ISO 48 on top of a concrete floor.		✓
2.2	Stops		
	To prevent the article from sliding but not lifting, no higher than 12 mm expect in cases where the design of the item necessitates the use of higher stops, in which case the lowest that will prevent the item from moving shall be used.		✓
2.3	Loading pad for the application of vertical forces		
	A rigid object with a flat surface, 100 mm in diameter, with a 12 mm front edge radius.		✓
2.4	Horizontal force application device		
	A device, capable of applying a gradually increasing horizontal force. The device shall be capable of applying the force at the required angle of inclination of the horizontal and shall not hinder the free movement of the article.	Compression Testing Machine (Certificate Number: 04SK120216NC Date of Issue:20-02-12 ALGOSYSTEMS S.A.)	✓
2.5	Masses		
	Masses designed so that they do not reinforce the structure or redistribute the load.	Electronic Balance (Certificate Number: 01SK120216MC Date of Issue:20-02-12 ALGOSYSTEMS S.A.)	✓
3	Test methods		
3.1	Stability		
3.1.1	Purpose of the test		
	To check the ability of tables to resist forces which can cause overturning under the following conditions:		
	- Stability under vertical load: to demonstrate adequate resistance to being overturned by people using the table.		✓
	- Stability with drawers open: to demonstrate adequate resistance to overturning with drawers fully loaded and fully open.		—
3.1.2	Test procedure		
	Place the table on the floor surface (2.1), in normal position of use. There shall be no additional loads on the top or in the drawers except where otherwise stated (see 3.1.2.2).		✓
	All extra components e.g. pull-out trays and flaps shall be placed in the position most likely to cause overturning but they shall not be taken into account when determining the loading positions.		—
	Height adjustable tables shall be set to their highest position, but not more than 800 mm from the floor to the top surface.		—
	Levelling devices shall be set in the closed position.		✓
3.1.2.1	Stability under vertical load		
	Apply, by means of the loading pad (2.3), a vertical load of 750 N at any position 50 mm from the edge of the table top likely to cause overturning.		✓
	In the case of a sliding work surface, carry out the		—

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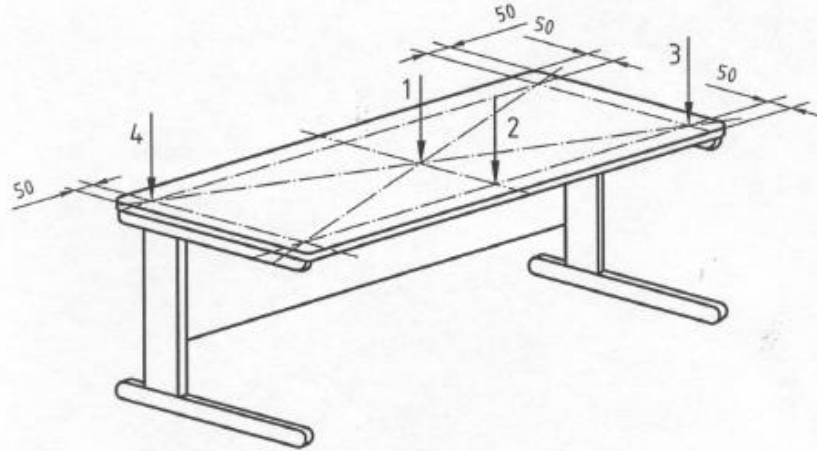
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Figure	Requirements	Notes	Testing result
	test in the most adverse position in which the work surface can be locked and used.		
	Record whether the table overturns.	No overturn	✓
3.1.2.2	Stability with drawers open		
	When the table is equipped with drawers or file suspension frames, load each drawer with the test load M specified in 3.2.		—
	Open the drawers in accordance with the following instructions:		
	a) Furniture with drawers without interlocks: Open all drawers in the least favourable combination.		—
	b) Furniture with drawers with interlocks: Open, in the least favourable combination, the largest drawer of each pedestal, or that which is likely to overturn the table.		—
	The drawers shall be opened as far as the open stop will allow and a vertical load of 200 N shall be applied to the centre of the front of the table, 50 mm from the edge.		—
	Record whether the table overturns.		
3.2	Strength under vertical force		
3.2.1	Purpose of the test		
	To check the strength of the worktop and the structure of the table, under occasional vertical loads of short duration.		✓
3.2.2	Test procedure		
	Place the table on the floor surface (2.1), in normal position of use.		✓
	Levelling devices shall be opened 10 mm.		✓
	Load all drawers with the test load M specified in 3.2. Close the drawers and keep the drawers closed throughout the test.		—
	Apply to the work surface, by means of the loading pad (2.3), a downwards vertical force of 1000 N, 10 times. The force application shall be maintained for 10 s ± 2 s.		✓
	Carry out the test at the four points shown in figure 1, or anywhere else on the work surface that is considered likely to cause failure.		✓
	The forces shall be applied 50 mm from the edges.		✓
	Record any defect.	No defects	✓

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Figure	Requirements	Notes	Testing result
	Maße in Millimeter  Legende 1, 2, 3, 4 Kraftangriffspunkte Bild 1 — Festigkeit bei vertikalem Kraftangriff		
3.3	Strength under horizontal force		
3.3.1	Purpose of the test		
	To check the ability of office tables to withstand horizontal forces applied for example by a person pushing or pulling the table.		✓
3.3.2	Test procedure		
	Place the table on the floor surface (4.1), in normal position of use.		✓
	Height adjustable tables shall be set to their highest positions, but not more than 800 mm from the floor to the top surface.		—
	Levelling devices shall be opened 10 mm.		✓
	Restrain the base/legs of the table by stops (2.2) placed on one short side.		✓
	Load all drawers with the test load M specified in 3.2. Close the drawers and keep the drawers closed throughout the test.		—
	Apply a force of 450 N by means of the horizontal force application device (2.4) horizontally and alternately from the centre of the short sides.		✓
	One application from one short side and from the other short side represent one cycle.		✓
	Carry out 10 cycles.		✓
	Each force application shall be maintained for at least 10 s.		✓
	If the table tends to overturn, incline the test force downwards gradually until the table is just prevented from overturning.		✓
	If the table is non-symmetrical with regards to its transverse centre line, carry out the test first with the stops positioned at one end and then repeat with the stops at the opposite end.		—
	Move the stops to one long side.		✓
	Repeat the test as described above with the force of 450 N applied at the centre of the long sides.		✓
	Record any defects.	No defects	✓

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

Testing scheme for office furniture – Work tables and desks

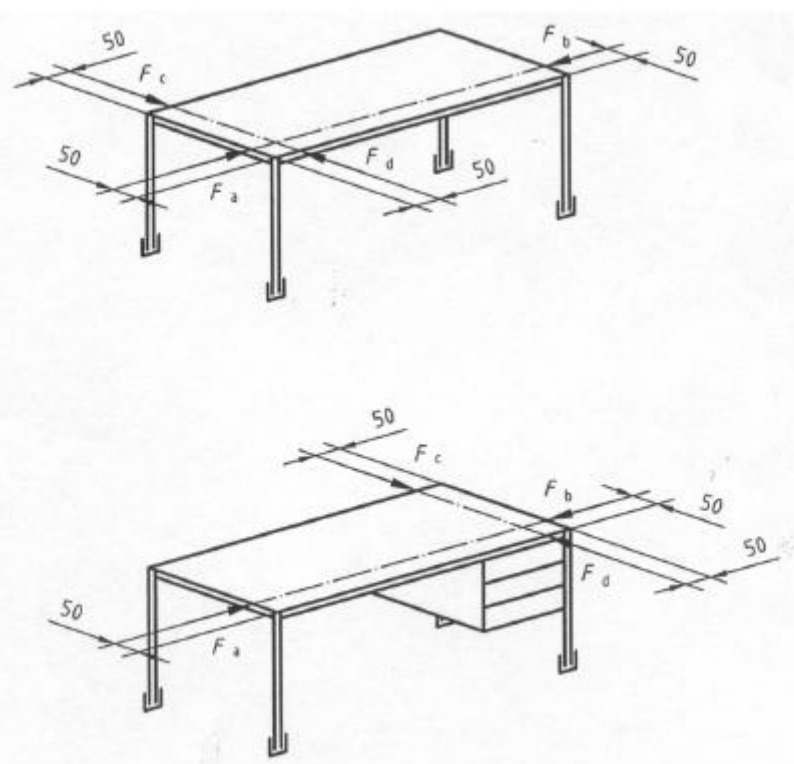
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Figure	Requirements	Notes	Testing result
3.4	Fatigue under horizontal force		
3.4.1	Purpose of the test		
	To check the durability of tables under small cyclic forces (opening and closing of drawers, careful movement, etc...), to ensure that, during use, they can absorb displacements without a significant deformation of the top.		✓
3.4.2	Test procedure		
	Place the table on the floor surface (2.1) in normal position of use.		✓
	Height adjustable tables shall be set to their highest position, but not more than 800 mm from the floor to the top surface.		—
	Levelling devices shall be opened 10 mm.		✓
	Block the legs with stops (2.2) in all directions of forces to prevent the table from sliding.		✓
	Load the table top uniformly with a mass of 100 kg max. to prevent the table from overturning. The mass or loads shall not overhang the edges and shall not be capable of moving during the test.		✓
	With the horizontal force application device (4.4), apply horizontally and at right angles to the top edge of the table surface at 50 mm from the corners, a force of 300 N. Apply the force alternately to points a/b and then to the points c/d (see figure 2). The forces shall increase gradually from 0 to 300 N.		✓
	If the table, with the mass of 100 kg, tends to tilt, reduce the force in that direction sufficiently to just prevent tilting and carry out the test with this reduced force in that direction only. Record this force.		—
	If the table only includes one suspended drawer pedestal, points c and d shall be chosen on the side on which the pedestal is located.		—
	Carry out 5000 cycles F(a) + F(b) and 5000 cycles F(c) + F(d) with a frequency of not more than 8 cycles/minute.	Test Frequency = 7 cycles / min.	✓
	Record any defects.	No defects	✓

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

Testing scheme for office furniture – Work tables and desks

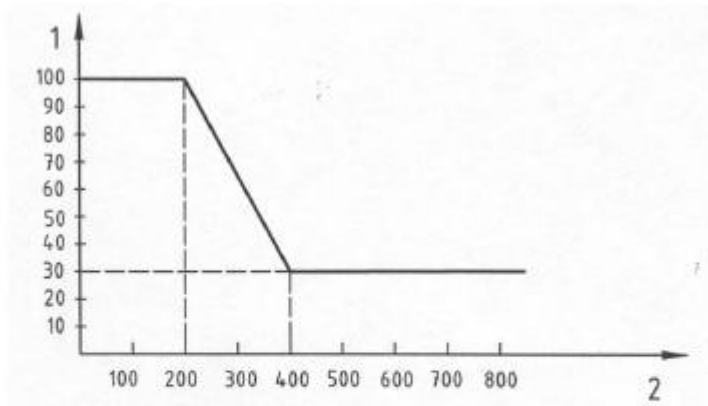
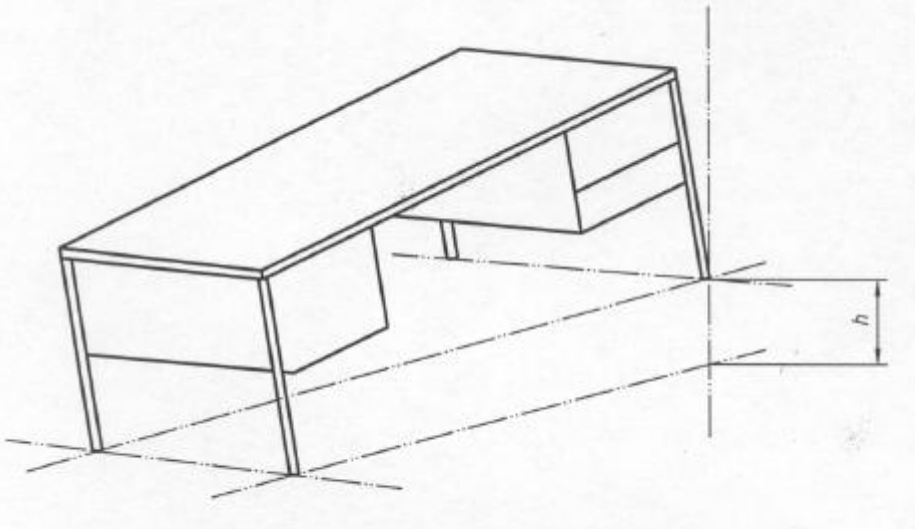
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Figure	Requirements	Notes	Testing result
	Maße in Millimeter  Bild 2 — Ermüdung bei horizontalem Kraftangriff		
3.5	Fatigue under vertical force		
3.5.1	Purpose of the test		
	To check the durability of the worktop and of the structure of the table, under downwards vertical forces.		✓
3.5.2	Test procedure		
	Place the table on the floor surface (2.1), in normal position of use.		✓
	Height adjustable tables shall be set to their highest position, but not more than 800 mm from the floor to the top surface.		—
	Levelling devices shall be opened 10 mm.		✓
	The legs/base may be blocked to prevent sliding.		✓
	Load all drawers with the test load M specified in 3.2. Close the drawers and keep the drawers closed throughout the test.		—
	Apply to the tabletop a vertical force of 400 N at a position where it is considered most likely to cause failure, with the loading pad (2.3) at 100 mm from the worktop edge. Maintain the force for at least 2 seconds. Remove it for at least 2 seconds before the next application.		✓
	Carry out 10 000 cycles with a frequency of not more than 10 cycles per minute.		✓
	Record any defects.	No defects	✓
3.6	Drop test		
3.6.1	Purpose of the test		
	To check the ability of tables to withstand drops.		✓
3.6.2	Test procedure		
	Place the table on the surface (2.1), in normal position of use.		✓
	Height adjustable tables shall be set to their		—

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

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Figure	Requirements	Notes	Testing result
	lowest position.		
	Levelling devices shall be opened 10 mm.		✓
	Apply an upwards vertical force sufficiently large to lift the table on the edge of one longitudinal centreline. Measure this force.	Force=380N measured with the Force gauge (Load cell 100kg) (Certificate N.: 02SK120209NA Date of Issue:09-02-12 ALGOSYSTEMS S.A.)	✓
	Determine the drop height (H) on the diagram figure 3 according to this force.	Drop Height(H)=40mm	✓
	Lift the same side of the table to the drop height (H) determined as such, so that the 2 legs lifted are on an horizontal plane (see figure 4).		✓
	Let it drop freely onto the floor surface (4.1).		✓
	Carry out the test 5 times.		✓
	Repeat the same test on the opposite side. Repeat the test 5 times.		✓
	Record any defects.	No defects	✓
	 Legende 1 Fallhöhe (mm) 2 Notwendige Kraft um den Büro-Arbeitstisch an einer Schmalseite anzuheben (N) Bild 3 — Fallhöhe		
	 Bild 4 — Fallprüfung		
4	Test report		
	The test report shall include at least the following information:		

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

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Figure	Requirements	Notes	Testing result
	a) reference to this European Standard;		✓
	b) details of the unit tested;		✓
	c) test results according to the applicable clauses;		✓
	d) details of any deviations from this European Standard;		✓
	e) the name and address of the test facility;		✓
	f) the date of the tests.		✓

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

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Figure	Requirements	Notes	Testing result
EN 527-2:2003 (E)			
5	General design requirements		
	The table shall be so designed as to minimise the risk of injury to the user. Supporting elements shall be so placed as not to restrict the movement of users. Intermediate supporting elements under the work top shall either be visible or be placed where the risk of injury to the users legs or feet is minimised. The requirement is satisfied when, for example, the intermediate supporting elements are positioned less than 100mm or more than 450mm from the front edge of the table. All parts of the table with which the user comes into contact during intended use shall be so designed that physical injury and damaged to property are minimized. These requirements are met when: - all edges and corners are free from burrs and rounded or chamfered; - in order to avoid points of high pressure under the forearms, during prolonged contact with work tops, the edges and corners of the top surfaces are rounded with a radius of not less than 2mm; - movable and adjustable parts are designed to minimize the risk of injuries and inadvertent operation or release; - the safety distance between accessible movable parts is either < 8mm or > 25mm in any position during movement. This applies to any elements moving relative to each others, with the exception of doors(including hinges) and extension elements (including runners); - the handles are designed so that they cannot trap fingers during intended use; - the ends of feet and hollow components are closed or capped;		✓
5	Structural safety requirements		
5.1	Test sequence		
	The table shall be tested in the following sequence of tests of EN527-3: - stability (optional) - strength under horizontal force - fatigue under horizontal force - fatigue under vertical force - stability - drop test		✓
5.2	Requirements for structural tests		

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

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Figure	Requirements	Notes	Testing result
	The structural design of all tables shall comply with minimum safety requirements. This includes demonstration of adequate structural strength. These requirements are fulfilled when: after the tests specified in 5.2 to 5.6 of EN527-3:2002: - there is no fracture of any member, joint or component; - there is no loosening of joints intended to be rigid; - no major structural element is significantly deformed; - the table fulfils its functions after removal of test loads; - adjusting screws fulfil their functions.		✓
5.3	Stability requirements		
	During the stability test specified in 5.1 of EN527-3:2002 - the table does not overbalance or rest supported on the drawers and all feet return to the ground when the loads are removed.		✓

Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable

Testing scheme for
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Figure	Requirements	Notes	Testing result
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Annex B (informative)	Product Drawings
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Testing result: ✓ = Requirements are met ✗ = Requirements are not met — = Requirements are not applicable