# TÜV Rheinland Nederland B.V.



**TRN Report 89200308** 

Research at an office Furniture in accordance with the NEN 2449, the NEN-EN 527 and the Dutch code of practice NPR 1813, concerning the product with mark:

, type: work bureau

Date

November 16, 2012

Author

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Test period

Week 39 up to week 44, 2012

Principal

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Project number 89200308

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Item

Office furniture

Number appendici

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Chamber of commerce 27288788

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### 1. Introduction

#### 1.1. Purpose

The test has been carried out to judge whether or not this product fulfills the requirements of the Dutch standard NEN 2449 [1], the European standard NEN-EN 527 [2] and the recommendation of the Dutch code of practice (Nederlandse praktijkrichtlijn) NPR 1813 [3], as specified in table A.2 of the NPR 1813.

1.2. Description of the sample

Customer	
Mark	_
Туре	Work bureau
Version/construction	Office furniture
Serial number	-
Sample number	MT11.33562.02



Picture 1: A photograph taken of the sample, MT11.33562.02, a work bureau.

#### 1.3. Sample procedure

The product has been selected by the manufacturer. TÜV Rheinland Nederland B.V. has had no influence on the selection of the sample(s).

#### 1.4. Order

The request for testing had been confirmed by

on 22 november 2011.

### 1.5. Method of testing

All applicable tests have been performed according to the methods as described in the NEN 2449 [1], de European standard NEN-EN 527 [2] and the recommendations of the Dutch code of practice NPR 1813 [3].

# 2. Results

# Standard NEN 2449

Action	Definition	Measured value	Pass / Fail / N.a.
4	General requirements		
	<ul><li>No hurt or damage cloths</li><li>Moveable, adjustable parts lift able</li></ul>		Pass N.a.
	<ul> <li>Easy adjustability, concrete</li> </ul>		Pass
	Movable adjustable parts unintentional to change	Not to change with tools	Pass
	<ul><li>Smeared, lubricate parts protected</li><li>Finishing tabletop</li></ul>		Pass
	Normal maintenance performable	Diffuse is 0.53	Pass
5.2.1			Pass
	With of the work surface	1600 mm	Pass
5.2.2	Depth of the work surface	800 mm	Pass
5.2.3	Shape of the work surface	Rectangular	Pass
5.3	Height of the work surface	597 – 865 mm	Pass
5.4	Leg- and feet space	Width 1420 mm	Pass
		Depth > 800 mm	Pass
٩.2	Duration and break test middle work surface	1500 N, for 7 day's	Pass
	Duration and break test frame work surface	1500 N, for 7 day's	Pass
2	Tilt test	At frame 750 N	Pass
23	Vibration test	Amplitude 2,5 mm Vibration time 2 s	Pass
24	Durability adjustment	No electrical adjustment	N.a.
25	Drag test	200 x over 1 meter	Pass
P6	Drop test	Drop height 100	Pass
77	Torsion at under frame	Side load 100 N	Pass

## Standard EN 527

Action	Definition EN 527 Part 1	Measured value	Pass / Fail / N.a.
h1	Height of the work surface	Min. 597 mm Max. 860 mm	Pass
t1 – t2	Minimum desk top thickness t1 at front, t2 500 mm from front	t1 = 12 mm t2 = 97 mm	Pass
k1	Minimum height of knee clearance Table height > 850 mm	753 mm	Pass Pass
k2	Minimum depth of knee clearance	>800 mm	Pass
k3	Minimum depth of foot clearance	>800 mm	Pass
f1 – f2	Minimum height of minimum foot clearance	f1 = >120 mm f2 = >120 mm	Pass
g1	Minimum legroom depth	>800 mm	Pass
D	Minimum desk top depth	≥800 mm	Pass Pass
W	Minimum legroom width	1460 mm	Pass

Action	Definition EN 527 Part 2	Measured value	Pass / Fail / N.a.
3	General design requirement	No risk user	Pass
4	Safety requirements	See NEN-EN 527-3	Pass

Action	Definition EN 527 Part 3	Measured value	Pass / Fail / N.a.
5.1	Stability under vertical load	750 N	Pass
5.2.	Strengths under vertical force	1000 N, cycles 10	Pass
5.3	Strengths under horizontal force	1000 N, cycles 10	Pass
5.4	Fatigue under horizontal force	300 N, cycles 5000	Pass
5.5	Fatigue test at vertically load	400 N, cycles 10.000	Pass
5.6	Drop test	100 mm, cycles 5	Pass

## Standard NPR 1813

Action	Definition	Measured value	Pass / Fail / N.a.
h1	Height work surface	597 -865 mm	Pass
t1	Thickness work surface front side	12 mm	Pass
t2	Thickness work surface, 200 mm from front side	12 mm	Pass
k1	Height knee space		N.a.
k2	Depth knee space		N.a.
k3	Depth feet space		N.a
f1	Height feet space	≥ 800 mm	Pass
f2	Height feet space, standing 150 mm	≥ 800 mm	Pass
g1	Depth leg space	≥ 800 mm	Pass
D	Depth work surface	800 mm	Pass
N	Width leg space	1420 mm	Pass

Remarks: None.

## 3. Conclusion

The office furniture , trademark: , type: work bureau, has been tested and evaluated according to the NEN 2449 [1], de European standard NEN-EN 527 [2] and the recommendation of the Dutch code of practice NPR 1813 [3].

The conclusion is that the office furniture type: work bureau meets the requirements of the NEN 2449 [1], de European standard NEN-EN 527 [2] and the recommendation of the Dutch code of practice NPR 1813 [3].

### 4. References

- NEN 2449: 2006 Ergonomics Ergonomics criteria for office furniture's requirements for dimensions and performance trial methods.
- 2 EN 527-1: 2011 Office Furniture Work tables and desks Part 1: Dimensions. EN 527-2: 2002 – Office Furniture – Work tables and desks – Part 2: Mechanical safety requirements.
  - EN 527-2: 2003 Office Furniture Work tables and desks Part 3: Methods of test for the determination of the stability and the mechanical strength of the structure.
- Dutch code of practice NPR 1813:2009 (nl), "Ergonomic – Richtlijn voor kantoormeubelen en hun toepassing bij inrichting van administratieve ruimten en kantoren – Toelichting bij de NEN-EN 1335-reeks, de NEN-EN 527-reeks en NEN-EN 13761".

# 5. Signature

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Mrs. I. Pierik  Expert flooring	
accepted door	Simula
Mr. P. de Beer	Signature
Technical manager	