

# Test Report

No.: 64.190.22.1300.01-00

Dated: 2022-04-29



Greater China

**Applicant:** Guangzhou Musen Furniture Co.,LTD  
**Address:** Floor 16th, Xingguang yinjing Building, No.117, Shuiyin Road, Guangzhou, China  
**Sample Submission:** The samples were submitted by applicant and identified.  
**Product Name:** KD Outdoor Chair  
**Order No.:** ----  
**Identification/Style No.:** JC2121  
**Manufacturer:** ----  
**Country of Origin:** ----  
**Buyer:** ----  
**Export to:** ----  
**Receipt Date of Sample:** 2020-11-20  
**Date of Testing:** From 2020-11-20 to 2021-01-22  
**Test Result:** Refer to the data listed in following pages

## Test Specification(s) or Test Item(s):

1. EN 581-1: 2017 Outdoor furniture – Seating and tables for camping, domestic and contract use Part - 1: General safety requirements
2. EN 581-2: 2015+AC:2016 Outdoor furniture – Seating and tables for camping, domestic and contract use Part - 2: Mechanical safety requirements and test methods for seating – domestic use (Excluding Clause 8 & Annex B)
4. EN 1022: 2005 Domestic Furniture – Seating – Determination of Stability
5. EN 1022: 2018 Furniture – Seating – Determination of Stability

## Conclusions:

Pass

Pass

Pass

Pass

Hardline Laboratory

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch Testing Center

Tested By: \_\_\_\_\_

Reviewed By: \_\_\_\_\_

Tap Name here.

Test Engineer

Tap Name here.

Project Manager

Note: (1) "General Terms & Conditions" applied. For full version, please visit: <http://www.tuvsud.cn/cn-scn/terms-and-conditions>  
2) Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4. 3) The conclusion of test result was drawn according to corresponding regulation or standard method and/ or client's requirement

Laboratory:  
TUV SUD Testing Center, No. 63 Chuangqi  
Road, Shilou Town, Panyu Distric, Guangzhou,  
P.R. China

Telephone: +86 020 3832 0668  
Telefax: +86 020 3832 0478  
<http://www.tuv-sud.cn>

Regd. Office:  
TUV SUD Certification and Testing (China) Co.,  
Ltd. Guangzhou Branch 5F, Communication  
Building, 163 Pingyun Rd, Huangpu West Ave.

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Description of the test subject:

1	<b>Product Description</b>	KD Outdoor Chair
2	<b>Dimensions / Weight</b>	H x W x D (mm): 790 x 635 x 655 Weight (kg): 4.89
3	<b>Intended use</b>	Outdoor use
Front view		Side view
		
Back view		Bottom view
		

Sample preparation: the sample was stored in indoor ambient conditions for 24h

Test condition: 15~25°C 55~60%RH

Test Results:

1. EN 581-1: 2017 Outdoor furniture – Seating and tables for camping, domestic and contract use  
Part -1: General safety requirements

Item	Requirement-test item	Result, Remark	Evaluation
5	Safety requirement	Fulfilled	P
5.1	General	Fulfilled	P
5.2	Tubular components	Fulfilled	P
5.3	Shear and squeeze points	Fulfilled	P

Abbreviation: P=Pass; F=Fail; N/A=Not Applicable; N/T=Not Tested; N/R=Not Requested

2. EN 581-2: 2015+AC:2016 Outdoor furniture – Seating and tables for camping, domestic and contract use  
Part - 2: Mechanical safety requirements and test methods for seating – domestic use

Item	Requirement-test item	Result, Remark	Evaluation
1	Scope		/
2	Normative references		/
3	Terms and definitions		/
4	Testing		/
5	Test equipment		/
6	Safety, strength and durability requirements for loungers		N/A
6.1	General	See EN581-1 result.	N/A
6.2	Stability, strength and durability		N/A
6.2.1	Test sequence and test parameters		
	Seat and back static load test (EN 1728:2012, 8.2)	Specified seat load: 1 600 N Specified backrest load: 410 N Minimum specified force F2 (back): 360 N Cycles: 10 x 10 s Additional cycle :1 x (30 min ± 10 s)	N/A
	Additional seat and leg rest static load test (EN 1728:2012, 8.3)	Seat load on loading point: 750 N Force applied on D-E point: 900N	N/A
	Seat and back durability test (EN 1728:2012, 8.4.1)	Specified Seat load: 1 000 N Specified Backrest load: 333 N Minimum specified force F4 (back): 300 N Cycles: 25 000	N/A

Item	Requirement-test item	Result, Remark	Evaluation
	Additional seat durability test (EN 1728:2012, 8.4.2)	Specified force: 1 000 N Cycles: 10 000	N/A
	Durability test on back rest mechanism (EN 1728:2012, 8.5)	Specified force: 250 N Seat load: 1 000 N Cycles: 10 000	N/A
	Arm rest static load test (EN 1728:2012, 8.6)	Vertical specified Force: 700 N	N/A
	Arm rest durability test (EN 1728:2012, 8.7)	Specified force: 400 N Cycles: 10 000	N/A
	Impact test (EN 1728:2012, 8.8)	Drop Height: 180 mm Cycles: 10	N/A
	Lifting test for mobile loungers (EN 1728:2012, 8.9)	Load: 1 000N Cycle: 1 000	N/A
	Forward stability A.1.2	Force F <sub>B.3</sub> : 600 N Force F <sub>B.4</sub> : 20 N	N/A
	Rearward stability EN 1022:2005, 6.6 for upright position and 7.5 for most reclined position	See EN1022 result.	N/A
	Sideways stability A.1.1	Force F <sub>B.1</sub> : 600 N Force F <sub>B.2</sub> : 250 N (armrest)	N/A
6.2.2	Requirements		N/A
7	Safety, strength and durability requirements for other seating	Fulfilled	P
7.1	General	See EN581-1 result.	P
7.2	Stability, strength and durability	Fulfilled	P
7.2.1	Test sequence and test parameters		
	Seat static load and back static load test (EN 1728:2012, 6.4)	Specified seat load: 1 600 N Load applied on seat not being tested: 750 N Specified backrest load: 410 N Minimum specified force F <sub>2</sub> (back): 360 N Cycles: 10 Additional cycle 30 min±10 s	P
	Seat front edge static load (EN 1728:2012, 6.5)	Specified force: 1 300 N Seat load: 750 N Cycles: 10	P
	Combined Seat and back durability test (EN 1728:2012, 6.17)	Specified seat load: 1 000 N Seat load: 750 N Specified backrest load: 333 N Minimum specified force F <sub>4</sub> (back): 300 N Cycles: 25 000	P

Item	Requirement-test item	Result, Remark	Evaluation
	Durability test on seating with a multi-position back rest (EN 1728:2012, 6.19)	Seat load: 750 N Specified force: 250 N Cycles: 10 000	N/A
	Arm rest static load test (EN 1728:2012, 6.11)	Vertical specified Force: 700 N Cycles: 10	P
	Arm rest durability test (EN 1728:2012, 6.20)	Specified force: 400 N Cycles: 10 000	P
	Leg forward static load test (EN 1728:2012, 6.15)	Seat load: 1 000 N Horizontal specified force: 300 N Minimum specified force: 175 N Cycles: 10	P
	Leg sideways static load test (EN 1728:2012, 6.16)	Seat load: 1 000 N Horizontal specified force: 300 N Minimum specified force: 175 N Cycles: 10	P
	Seat impact test (EN 1728:2012, 6.24)	Drop height: 180 mm Cycles: 10	P
	Foot rest static test (EN 1728:2012, 6.8)	Vertical specified force: 1 000N Cycles: 10	N/A
	Forward stability	See EN1022 result.	P
	Rearward stability	See EN1022 result.	P
	Sideways stability	See EN1022 result.	P
7.2.2	Requirements	Fulfilled	P
8	Information for use		/
8.1	General	No provided.	N/T
8.2	Marking for loungers		N/A
Annex A	Forward and sideways stability tests for loungers		N/A
A.1	Test procedure		/
A.1.1	Sideways stability	See clause 6.2.1 result.	N/A
A.1.2	Forward stability	See clause 6.2.1 result.	N/A
Annex B	Purchase information (guidelines)	No purchase information for use was provided.	N/T

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3. EN 1022: 2005 Domestic Furniture – Seating – Determination of Stability

Item	Requirement-test item	Result, Remark	Evaluation
1	Scope		/
2	Terms and definitions		/
3	General test conditions		/
4	Test equipment		/
5	Determination of seat and back loading points		/
6	Test procedure and requirements, all seating: experimental method		P

Item	Requirement-test item	Result, Remark	Evaluation
6.1	Requirements	No overturning was found during the test.	P
6.2	Forwards overbalancing, all seating	No overturned under the force of 20 N.	P
6.3	Forwards overturning for seating with footrest		N/A
6.4	Sideways overbalancing, all seating without arms		N/A
6.5	Sideways overbalancing, all seating with arms	No overturned under the force of 20 N.	P
6.6	Rearwards overbalancing, all seating with backs	Fulfilled	P
7	Test procedures and requirements for seating with variable geometry: experimental method		N/A
7.1	Requirements		N/A
7.3	Tilting chairs		N/A
7.4	Rocking chairs		N/A
7.5	Reclining chairs with footrest		N/A
7.6	Footrest test		N/A
7.7	Reclining chairs without footrest		N/A

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**4. EN 1022: 2018 Furniture – Seating – Determination of Stability**

Item	Requirement-test item	Result, Remark	Evaluation
1	Scope		/
2	Normative references		/
3	Terms and definitions		/
4	General test conditions		/
5	Test equipment		/
6	Determination of seat and back loading points		/
7	Test methods for assessing stability of all seating except loungers		P
7.2	Requirements	No overturning was found during the test.	P
7.3.1	Forwards overturning	No overturned under the force of 20 N.	P
7.3.2	Forwards overturning for seating with foot rest		N/A
7.3.3	Corner stability test		N/A
7.3.4	Sideways overturning, all seating without arm rests		N/A
7.3.5	Sideways overturning, all other seating		P
7.3.5.2	Seating with arm rests	No overturned under the force of 20 N.	P
7.3.5.3	Seating with raised side edges		N/A
7.3.6	Rearwards overturning all seating with back rests	Fulfilled	P



Item	Requirement-test item	Result, Remark	Evaluation
7.4	Additional test procedures for seating with reclining back rests		N/A
7.4.2	Tilting seating		N/A
7.4.3	Reclining seating with leg rest		N/A
7.4.4	Reclining seating without leg rest		N/A
7.4.5	Rearwards stability test for rocking chairs		N/A
8	Loungers		N/A
8.2	Requirements		N/A
8.3.1	Forwards overturning		N/A
8.3.2	Sideways overturning		N/A

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**Remark:**

1. The test results exclusively base on the submitted samples.
2. Stability test were conducted before and after the mechanical safety test, and the test result was pass.
3. The test data is extracted from report 68.190.20.4513.01-00 issued on 2021-01-29, and only the information of applicant and address were modified.

-End of Test Report-

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