Technical Report No. 68.190.16.0471.01

Rev. 00

Dated 2016-07-26

Client:	B.one Furniture Company Limited No.3 Youyi road, Gaoli industry area,Qinghutou village,Tangxia town,Dongguan city,Guangdong priovince.
Manufacturing place:	B.one Furniture Company Limited No.3 Youyi road, Gaoli industry area,Qinghutou village,Tangxia town,Dongguan.
Test subject:	Product: D00315E Meeting chair Type designation: D00315E Meeting Chair
Test specification:	ANSI/BIFMA X 5.1-2011
Purpose of examination:	Test according to the client's requirements.
Test result:	Pass Details see report Clause 3.

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1 Description of the test subject

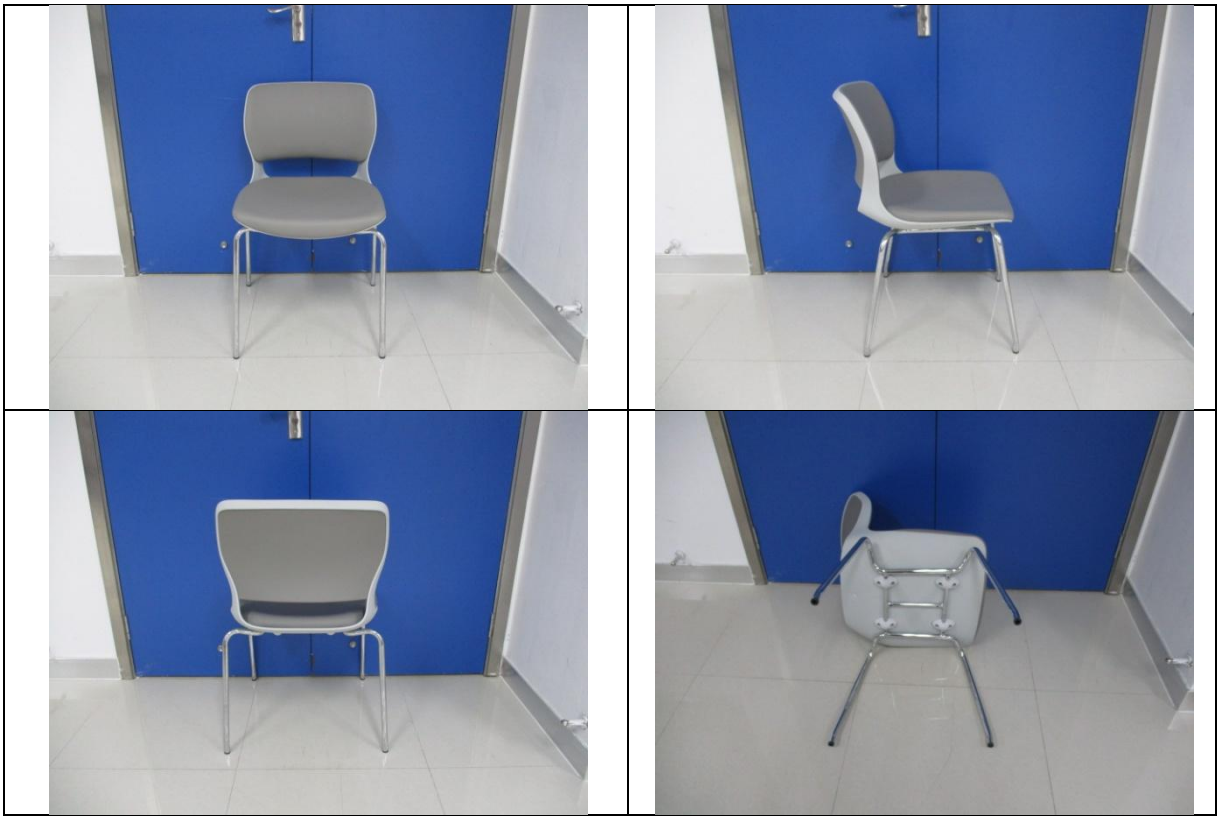
1.1 Function

☒ Manufacturer's specification for intended use:
Product: D00315E Meeting chair
Type designation: D00315E Meeting chair

1.2 Technical Data

Chair Type: Type III.
Height : 822 mm
Width : 540 mm
Depth : 578 mm
Net weight: 12.2KG

1.3 Product Photos



2 Order

2.1 Date of Purchase Order, Customer's Reference

2016-07-13

2.2 Receipt of Test Sample, Location

2016-07-13, TÜV SÜD Certification and Testing (China) Co., Ltd. Guanlan lab

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2.3 Date of Testing

From 2016-07-13 to 2016-07-26

2.4 Location of Testing

TÜV SÜD Certification and Testing (China) Co., Ltd. Guanlan lab

2.5 Points of Non-compliance or Exceptions of the Test Procedure

None

3 Test Results

Abbreviations:			
P(ass) = passed	F(ail) = failed	NA = not applicable	NT = not tested

ANSI/BIFMA X5.1-2011			
Clause	Requirement ~Test	Measuring result -Remark	Verdict
5.4.1	Back Strength Test - Static - Type I - Functional Load Back force: 890 N (200 lbf.), 90 degree to the backrest, max 16 inch above the seat. Loading period: 1 minute Acceptance level: No loss of serviceability.		NA
5.4.2	Back Strength Test - Static - Type I - Proof Load Back force: 1334 N (300 lbf.), 90 degree to the backrest, max 16 inch above the seat. Loading period: 1 minute Acceptance level: No sudden and major change in the structural integrity of the chair. Loss of serviceability is acceptable.		NA
6.4.1	Back Strength Test - Static - Type II & III - Functional Load Back force: 667 N (150 lbf.), 90 degree to the backrest, max 16 inch above the seat. Loading period: 1 minute Acceptance level: No loss of serviceability.		P
6.4.2	Back Strength Test - Static - Type II & III - Proof Load Back force: 1112 N (250 lbf.), 90 degree to the backrest, max 16 inch above the seat. Loading period: 1 minute Acceptance level: No sudden and major change in the structural integrity of the chair. Loss of serviceability is acceptable.		P

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7	Base Test – Static Test force: 111,20 N, on the center of base via a vertical column. Loading period: 2 times, each time 1 minute. Acceptance level: There shall be no sudden and major change in the structural integrity of the base. The center column may not touch the test platform during the load application.		NA
8.4.1	Drop Test - Dynamic - Functional Load Weight of test bag: 102 kg (225 lb.) Drop height: 152 mm (6 in.) Acceptance level: No loss of serviceability.		P
8.4.2	Drop Test Dynamic - Proof Load Weight of test bag: 136 kg (300 lb.) Drop height: 152 mm (6 in.) Acceptance level: No sudden and major change in the structural integrity of the chair. Loss of serviceability is acceptable.		P
9	Swivel Test – Cyclic Seat load: 113 kg (250 lb.) Cycles: 60,000 cycles when seat at highest position, and another 60,000 cycles when seat at lowest position. Acceptance level: No loss of serviceability.	Non swivel.	NA
10	Tilt Mechanism Test - Cyclic - Type I & II Seat load: 102 kg (225 lb.) Cycles: 300,000 cycles Accptance level: No loss of serviceability to the tilt mechanism.	Non tilt.	NA
11.3	Seating Durability Tests – Cyclic - Impact Test - Cyclic Test bag: 57 kg (125 lb.) Drop height: 30 mm (1,2 in.) above the seat Cycles: 100,000 cycles. Accptance level: no loss of serviceability.		P
11.4	Seating Durability Tests – Cyclic - Front Corner Load Ease Test - Cyclic - off Center Test load: 734 N (165 lbf.) Test points: two front corners of seat Cycles: 20,000 cycles on each corner. Acceptance level: no loss of serviceability. Note: this test is done after “Impact test” on the same sample.		P

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12.3.1	Stability Test – Rear Stability for type III Apply only to chairs with backrests greater than 200mm Type III: Load the chair with 6 disks, apply a horizontal force to the highest disk. The location of the force application is 6 mm (0.25 in.) from the top of the disk. The force shall be: • F = 0.1964 (1195 – H) Newton. H is the seat height in mm. • [F = 1.1 (47 – H) pounds force.]. H is the seat height in inches. For chairs with seat height equal to or greater than 710 mm (28.0 in.), a fixed force of 93 N (20.9 lbf.) shall be applied. The chair shall not tip over.		P
12.3.2	Stability Test – Rear Stability for type I and II Apply only to chairs with backrests greater than 200 mm. Load the chair with 13 disks (each 10 kg), the chair shall not tip over.		NA
12.4	Stability Test - Front Stability The chair is obstructed with a 13mm (½ in.) obstruction to the chair casters/legs. A downward load of 600 N (135 lb.) is centered 60mm (2.4in.) from the seat front center edge. The seat shall withstand a 20N (4.5lbf.) horizontally from the front seat edge without tipping.		P
13.4.1	Arm Strength Test Vertical - Static - Functional Load Test load: 750 N (169 lbf.) at weakest point of arm with all adjustments set at normal use conditions. Loading period: 1 minute. Acceptance level: no loss of serviceability	Without arm.	NA
13.4.2	Arm Strength Test Vertical – Static - Proof Load Test load: 1125 N (253 lbf.) at weakest point of arm with all adjustments set at normal use conditions. Loading period: 1 minute. Acceptance level: no sudden and major change in the structural integrity of the unit. Loss of serviceability is acceptable.	Without arm.	NA

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14.4.1	Arm Strength Test Horizontal –Static – Functional Load Test load: 445 N (100 lbf.) Loading period: 1 minute. Acceptance level: no loss of serviceability	Without arm.	NA
14.4.2	Arm Strength Test Horizontal – Static –Proof Load Test load: 667 N (150 lbf.) Loading period: 1 minute. Acceptance level: no sudden and major change in the structural integrity of the unit. Loss of serviceability is acceptable.	Without arm.	NA
15	Backrest Durability Test - Cyclic - Type I Seat load: 102 kg (225lb.) secured in the center of the seat Back load: 445 N (100 lbf.) Cycles: total 120,000 cycles. Acceptance level: no loss of serviceability		NA
16	Back Durability Test - Cyclic - Type II & III Seat load: 102 kg (225lb.) secured in the center of the seat Back load: 334 N (75 lbf.) Cycles: total 120,000 cycles. Acceptance level: no loss of serviceability		P
17.1	Caster / Chair Base Durability Test For Pedestal Base Chair Load: 113 kg (250 lb.) Cycles: 2,000 cycles with 3 obstacles and 98,000 cycles over a smooth hard surface without obstacles. Acceptance level: no part of the caster shall separate from the chair as a result of the application of the 22 N (5 lbf.) force.	Without caster.	NA
17.2	Caster / Chair Base Durability Test for Chairs with Legs No loss of service after 2,000cycles over a hard surface with 2 obstacles and 98, 000cycles over a smooth hard surface without obstacles under a 113kg (250lbs.) load on the seat. Test stroke is 762mm (30in.) minimum. The caster should not separate under 22N (5lbs.) pulling force in line with the caster stem after the cycling test.	Without caster.	NA

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18.3.2.1	Leg Strength Test – Front Load Functional Load Load: a force of 334 N (75 lbf.) is applied to each front leg individually for 1 minute. Acceptance level: No loss of serviceability		P
18.3.2.2	Leg Strength Test – Front Load – Proof Load Load: a force of 503 N (113 lbf.) is applied to each front leg individually for 1 minute. Acceptance level: no sudden and major change in the structural integrity of the unit. Loss of serviceability is acceptable.		P
18.4.2.1	Leg Strength Test-Side Load- Functional Load Load: a force of 334 N (75 lbf.) is applied to each front leg individually for 1 minute. Acceptance level: No loss of serviceability		P
18.4.2.2	Leg Strength Test -Side Load- Proof Load Load: a force of 503 N (113 lbf.) is applied to each front leg individually for 1 minute. Acceptance level: no sudden and major change in the structural integrity of the unit. Loss of serviceability is acceptable.		P
19.3	Footrest Static Load Test – Vertical- Functional Load Test load: 445 N (100 lbf) for 1 minute Acceptance level: no loss of serviceability or sudden loss of footrest height.	No footrest.	NA
19.4	Footrest Static Load Test – Vertical – Proof Load Test load: 1334 N (300 lbf) for 1 minute Acceptance level: no sudden and major change in the structural integrity of the unit.	No footrest.	NA
20	Footrest Durability Test Test load: 890 N (200 lbf) Cycles: 50,000 cycles Acceptance level: there shall be no loss of serviceability. Adjustable footrests that move more than 25 mm in the first 500 cycles shall be considered to have lost their serviceability.	No footrest.	NA
21	Arm Durability Test – Cyclic Test load: 400 N (90 lbf) on each arm at 10° angle. Cycles: 60,000 cycles. Acceptance level: no loss of serviceability.	Without arm.	NA

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22	Out Stop Tests for Chairs with Manually Adjustable Seat Depth Place a 74 kg (163 lb) rigid mass in the center of the seat. Hold the seat at its most position. A cable is attached to the most rigid point of the vertical centerline of the seat. Hang a weight of 25 kg (55 lb) on the opposite end of the cable. Release the weight so it can drag the seat move forward rapidly and impact	Not applicable.	NA
23	Tablet Arm Static Load Test Test load: 68 kg (150 lb.) at apparent weakest point for 1 minute The load applied once shall cause no sudden and major change in the structural integrity of the chair. After performing the test, the tablet arm must allow egress from the unit; other losses of serviceability are acceptable.	No tablet arm.	NA
24	Tablet Arm Load Ease Test – Cyclic Test load: 343 N (77 lbf.) Cycles: 100,000 cycles Acceptance level: No loss of serviceability	No tablet arm.	NA

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

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Project Handler

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Designated Reviewer

--- End of Report ---

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