BenchPro
(Chair Test Report)

BIFMA INTERNATIONAL

General-Porpuse Office Chairs – Test
American National Standart for Office Furniture

CHAIR TEST NAME: Base Test -Static.

.

START DATE: JUNE-18-2013 START HOUR: 12:00

END DATE: JUNE -19-2013 END HOUR: 13:00

Chair tests:

___ Backrest Stregth Test – Static (Type I)

___ Backrest Stregth Test – Static (Type II, III)

__X_ Base Test – Static

___ Drop Test – Dynamic

___ Swivel Test – Cyclic

___ Tilt Mechanism Test – Cyclic

__ Seating Durability Test – Cyclic

___ Stability tests

___ Arm Stregth Test – Vertical – Static

___ Arm Stregth Test – Horizontal – Static

___ Backrest Durability Test – Cyclic (Type I)

___ Backrest Durability Test – Cyclic (Type II, III)

___ Caster/Chair Base Durability Test - Cyclic

___ Leg Straght Test – Front and Side Application

___ Footrest Durability Test – Vertical - Cyclic

___ Arm Durability Test - Cyclic

___ Out Stop Test for chairs with Manually Adjustable Seat Depth

___ Tablet Arm Static Load Test

___ Tablet Arm Load Ease Test Cyclic

Type chair:

_____X____ Type I - Tilting Chair

_____X___ Type II – Fixed seat angle, tilting backrest

_____X____ Type III – Fixed seat angle, fixed backrest

Apllicability: These test apply to all type of chair bases.

Purpose of the test:

The purpose of these test is to evaluate the ability of the pedestal base to withstand excessive vertical forces..

Test Setup:

a).- Remove the glides or casters (caster sockets may remain in place), and replace with blocks or supports. Casters systems are recommended for support. The blocks or supports shall be of sufficient height to prevent the center column and /or legs from touching the test platform during the test. Remove the seat support mechanism(s) and height adjustment mechanism (if applicable) from the base. Apply the load to the vertical support column, or test fixture that simulates the taper / base interface.

b).- The base legs shall be allowed to move laterally and the center of the base to move vertically as the force is applied. The blocks or supports shall support the base in a manner and location similar to the original casters / glides and shall not impede the deflection and / or lateral motion during the test. Blocks or supports shall not lessen the severity of the test.

Test Procedures:

a). A force of 11,120 N (2,500 lbf), shall be applied for 1 minute.

b). Remove the force.

c). Apply a second force of 11,120 N (2,500 lbf.) for 1 minute.

d). Remove the load and evaluate the product in accordance with the acceptable level.

Acceptable 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 applications.

Conclusion:

All These bases, were favorably passed after to apply the weight (11,120 N) = 80 PSI x 1 min. the nylon, aluminum and chrome bases didn't suffer any structural damage.

The nylon bases were broken until the third try increasing the force to 100 PSI x 1 min.

The aluminum and the chrome bases were not broken even third try with force 100 PSI x 1 min.

Test : PASS

Video: DONE