

Bernù Aero

Specifications

US Design Patent - US D498077 S Registered Design Designer

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OVERVIEW





Central beam mounted seating that offers:

An innovative aeronautical statement in design Exceptional seating comfort

A durable structure in function

Ergonomically contoured to Dreyfuss Scale Ergonomic Standards for notable comfort and support for long waiting periods.

Bernù Aero offers single straight (2-5) or curved (concave 4 seat or convex 5 seat) units. They can be configured as back-to-back straight or curved units. The design is based on a modular approach that enables designers and end users to achieve a wide variety of configurations with a limited number of parts. The unit is supported by a central beam on which all the other elements are fixed using a unique "pin" system. The 21" table can replace any seat position for ultimate flexibility.

All castings are offered in satin aluminum finish with bright accents. All painted parts are in environmentally friendly electro-statically applied powder coating.

Bernù Aero has passed all required ANSI-BIFMA and VOC tests for Lounge Seating units.

CONSTRUCTION DETAILS









Supporting Beam

- The supporting beam is made from a robust 3" x 1 1/2" (76mm x 38mm) rectangular aluminum extrusion with 3/16" (4.8mm) thick walls. The extrusion design includes two internal webs to maintain the rectangular shape when forming the curved versions of the beams. The beams are heat treated to T5 temper for maximum strength.

Legs

 Legs are cast aluminum to the specification listed below, and fixed to the beam with a 3/4" (19mm) diameter steel pin. All legs have adjustable leveling glides. Optional antislide glides for hard floors and glides for floor mounting are also available.

Seat and Back Supports

- Bernù Aero seats and backs are supported by cast aluminum brackets fixed to the beam by 3/4" (19 mm) diameter steel pins.
- The Bernù Aero seat and back pans are made from 11 gage (3 mm) cold rolled steel. They are laser cut and roll formed to the Bernù profile. Upholstered seat and back pads are constructed from urethane foam bonded to 1/4" (6 mm) plywood forms. All seats and backs follow the ergonomic curves of the equivalent Bernù metal seat and back parts.
- The Bernù Aero Wood seats and backs are made from laminated hardwood plywood. The seat and back are cut from a single molded plank. This ensures that the seat and back match in color and that the grain runs continuously from one piece to the other.
- The Bernù Aero Perforated seats and backs are made from 11 gage (3 mm) High Strength Low Alloy Steel. They are laser cut and roll formed to the Bernù profile. The steel seats and back are pretreated with yellow zinc chromate for corrosion resistance and then powder coated to color as ordered.











Upholstery

- Upholstered pads for the Bernù Aero seats and backs are made from ¼" (6 mm) plywood inserts matching the curved profile of the seat or back. Commercial foam sheets are bonded to the insert before the upholstery is installed using staples. Damaged upholstery pads can be changed out by one-for-one replacement of the pads. Alternatively, it is easy to remove a pad and re-upholster. A seat or back pad can be removed and replaced without disassembling the seat.
- Upholstered pads can be used with wood or steel seats and/or backs.

Arms

- The three arm designs (loop, cantilever and drink-holder) are of cast aluminum to the specifications listed below. They are fixed to the beam using 3/4" (19mm) diameter steel pins.
- The loop arm has a sculpted aerodynamic shape enclosing an open loop. All surfaces are satin polished with bright accents.
- The cantilever arm sweeps up from the beam to form a thin horizontal armrest. All surfaces are satin polished with bright accents.
- The drink-holder follows the same design language as the cantilever arm. The all-aluminum arm has an integrated drink-holder that extends further forward for comfort. All surfaces are satin polished with bright accents.

Tables

- Tables are of 3/4" (20 mm) particle board with plastic laminate or 3/4" (20 mm) plastic based solid surface. Tables are 21" wide at a height of 18" (460mm). Tables can replace a seat in any position.
- Similar 9" wide tables are also provided for the centre of 4 seat concave units.

Lounger

- Compatible with any Bernù Aero beam mounted seating system
- Upholstered pads are seamless for maximum service life
- Modular system allows any seat or back pad to easily be replaced without disassembling the whole seat
- Available with or without arms and all legs have adjustable leveling glides
- Seats and backs are roll formed steel covered with injected molded foam
- Back is 44.5" (113 cm) high and length is 51.5" (13 cm).

Assembly

- Units are shipped knocked-down (KD) and accompanied by detailed assembly

Finish

- Aluminum Castings satin with bright highlights
- Aluminum Extrusions Clear anodized
- Steel Parts Powder coating





Aluminum Specifications

- All aluminum alloy castings exhibit the following minimum properties.

Tensile Strength 37,000 PSI
Yield Strength 26,000 PSI
Elongation 5.0%

Brinell Hardness 70 (500 kg load 10 mm ball)

Molded Foam Specifications

- The high resiliency urethane foam is reactively formed with an environmentally friendly water technology. It exhibits the following ratings:

 I.L.D.
 27/34 lbs

 Density
 3.5 lbs/cu.ft

Compression Set 5 at 80% max and 10 at 90% max

Tear Strength0.75 PPIHysteresis Loss22% maxTensile Strength10 PSIMinimum Compression Modulus2.2 lbs

PRODUCT CONFIGURATIONS

Depth of single units 28 3/8" (720 mm) Depth of curved units 33" (840 mm) 59 1/8" (1500 mm) Depth of back-to-back units Height of units 33 1/16 (840 mm) Height of seat 17 1/8" (435 mm) 48 34" (1240 mm) Width of two seat units Width of three seat units 71 3/4" (1820 mm) Width of four seat units 94 3/4" (2410 mm) Width of four curved seat units 105" (2680 mm) Width of five seat units 117 3/4" (3000 mm) Width of five curved seat units 119 1/4" (3030 mm)