

GUIDE SPECIFICATIONS - JURY SEATS

SAUDER MANUFACTURING CO. ARCHBOLD, OH

1.0 THE SYSTEM

- Injection molded seat & back structure.
- Custom molded polyurethane seat & back padding upholstered.
- Available in a swivel or non-swivel mount
- Available with or without arm.
- Two predetermined fixed back angles.
- Other options & accessories available.



2.0 PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

Sauder Manufacturing Co. 930 W Barre Rd. P.O. Box 230 Archbold, OH 43502 800-537-1530

2.2 SEAT DIMENSIONS

Seat dimensions meet the following minimum requirements and conform to any local statuary regulations.

Overall Widths

- 603mm [23 ¾" max.] and 629mm [24 ¾" max.]

- 451mm [17 ¾"] and 489mm [19¼"]

Standard Height Back Configuration (from floor)

Overall Dimension (Clarity Back)

Overall Dimension (Clarity Back 20 reclined.)

Overall Dimension (Vista Back)

Overall Dimension (Vista Back)

Overall Dimension (Vista Back – 20 reclined.)

- 953mm [37 ½"]

- 946mm [37 ½"]

- 908mm [35 ¾"]

- 901mm [35 ½"]

High Back Configuration (from floor)

Overall Dimension (Clarity Back)

Overall Dimension (Clarity Back – 20 reclined.)

Overall Dimension (Vista Back)

Overall Dimension (Vista Back – 20 reclined.)

- 1105mm [43 ½"]

- 1105mm [43 ½"]

Seat Height - 495mm [19 ½"] (Nominal)

Rotational Diameter

Standard Height Back Configuration

Standard Width (Clarity Back)

Standard Width (Clarity Back 20 reclined.)

Wide Width (Clarity Back)

Wide width (Clarity Back)

Wide width (Clarity Back 20 reclined.)

Standard Width (Vista Back)

Standard Width (Vista Back)

Wide Width (Vista Back)

Standard Width (Vista Back)

Wide Width (Vista Back)

Standard Width (Vista Back)

Wide Width (Vista Back)

Standard Width (Vista Back)

Wide width (Vista Back 2o reclined.) - Ø 870mm [34 ¼"]

High Back Configuration

Standard Width (Clarity Back)

Standard Width (Clarity Back 20 reclined.)

Standard Width (Vista Back)

Standard Width (Vista Back)

Standard Width (Vista Back 20 reclined.)

- Ø 876mm [34 ½"]

Standard Width (Vista Back 20 reclined.)



3.0 MATERIALS

COMPONENTS:

3.1 UPRIGHTS

The Uprights shall be welded from 50 mmx 25 mm (2"x1") hollow section steel with a minimum of 2 mm (0.079") wall thickness, $50.8 \text{mm} \times 15.8 \text{mm}$ (2" x 5/8") flat section for upright to seat attachment and 65 mmx 6 mm (2"x1/4") seat mounting plate – black polyester powder coated in color.

3.2 SEAT BASE FRAME

The Seat Base Frame shall be welded into an assembly, comprised of 10 gauge flat sheet, formed into a base frame and incorporating a machined taper cylinder mounting hub 38.1mm (1 $\frac{1}{2}$ ") diameter - black polyester powder coated in color.

3.3 CYLINDER

The gas spring cylinder shall be offered in a fixed version as well as a rotating version that will return to center, and shall be 48.7mm (1.92") diameter with a force of 750N – black in color.

3.4 MOUNTING BASE

The Mounting Base shall be 4.6mm (3/16") thick plate steel, welded to a machined taper cylinder mounting hub, 57.2mm (2.25") diameter– black polyester powder coated in color.

3.5 SEAT COMPONET

The seat shall be a minimum 450mm (17 $\frac{3}{4}$ ") wide. The seat depth as measured from the "s" point of the backrest is a minimum of 420mm [16 $\frac{1}{2}$ "]. A 490mm (19 $\frac{1}{4}$ ") wide seat shall also be available.

The seat inner panel is an ergonomically formed structural component of injection molded co-polymer polypropylene.

Padding shall be custom molded polyurethane foam, of an agreed performance specification (3.4pcf, 45lb. IFD). Upholstery thickness shall be 100mm (4") nominal at ischial support.

The upholstery cover is to be secured by means of an integrally sewn zipper so as to facilitate reupholstering.

3.6 BACKREST COMPONET

The back inner panel is an ergonomically formed structural component of injection molded co-polymer polypropylene.

Padding to be custom molded polyurethane foam with lumbar support. Upholstery thickness to be 40mm (1 $\frac{1}{2}$ ") nominal with additional depth at the lumber area. Foam shall be of an agreed performance specification (3.4pcf, 45lb. IFD).

The upholstery cover is to be secured by means of an integrally sewn zipper so as to facilitate reupholstering.



3.7 BACK HINGE MECHANISM

The back hinge mechanism is constructed of composite materials including injection molded glass reinforced co-polymer polypropylene black in color with black powder coated slide plates to facilitate adjustment for varying seat centers & radius rows.

The back hinge mechanism also provides for two predetermined back angles – standard configuration & an additional 2 degree lean back.

3.8 ARM RESTS

The armrest shall attach directly to & cap the upright to form an integral structural element of the upright & back slide mechanism. Armrests to be two (2) piece, free of external ribbing and with smooth top and front surfaces to prevent entanglement in clothing.

The armrest body shall be of injection molded glass filled polyamide construction, black in color, secured with one (1) concealed fastener.

The armrest cap shall be of injection molded co-polymer polypropylene construction secured to the armrest body with two (2) concealed fasteners.

Optional armrests include an upholstered & wood armrest cap.

Upholstered armrest cap shall utilize the above-listed co-polymer polypropylene construction, which shall then be covered with 1/4" foam and fabric, and attached to the armrest body with two (2) concealed fasteners.

Wood armrest cap shall be of two-ply solid lumber construction, profiled to fit the armrest body and attached to the armrest body with two concealed fasteners



4.0 ANCHORS

4.1 CONCRETE FLOOR MOUNTING

Anchors are to be installed to the Sauder specification, and meet the seat design loads. Standard anchors are 4 – 1/4"-20 x 2 1/2" expansion bolts, black zinc plated/ with self locking nut.

4.2 WOOD FLOOR MOUNTING

Anchors are to be installed to the Sauder specification, and meet the seat design loads. Standard anchors are 4 x 6mm (1/4") Type 17 self drilling screws. 5.0 ACCESSORIES

5.1 ROW IDENTIFICATION

A row identification disc is upward angled & mechanically fixed to the aisle panel. The disc is black injection molded polypropylene with a black self adhesive label & white numbering. The label provides for up to two (2) digits of nominal 12mm [1/2"] in height. Alternatively, the row identification disc may be used to designate ADA facility at aisles, in which case a blue self adhesive label with white symbol is employed.

5.2 BACK TRIM

Back Trim options shall include wood and polymer back outer panels. (Polymer back is available only on standard width Clarity style back) Wood back shall be made of molded plywood construction, contoured to fit the back profile, and attached with concealed fasteners. Injection molded back shall be of co-polymer polypropylene plastic construction. Black in color.

5.3 ARMLESS CAP



When an installation does not require armrests, an armless cap shall be fitted to finish the standard. The arm cap's body and top shall be of injection molded glass filled polyamide construction, black in color. The cap shall be secured to the body with one (1) concealed fastener. The body shall be secured to the standard with one (1) fastener.

5.4 LIFT UP ARMREST

The lift up arm option shall be attached to the standard via a fully enclosed hinge mechanism allowing the arm to be lifted to provide an ADA facility at aisles & as enhanced versatility within the row. The lift up arm shall be of injection molded glass filled polyamide construction. Black in color.

5.5 AISLE PANELS

Aisle panels shall be available in wood and upholstered versions, each available in three different sizes.

Wood aisle panels shall be of solid lumber edge-glued panel construction, 25mm (1") thick, attached to standards two places with $\frac{1}{4}$ "-20 machine screws. Fasteners shall be completely concealed from face side of panel.

Upholstered aisle panels shall be of $\frac{3}{4}$ " medium density fiberboard construction, covered with $\frac{1}{4}$ " foam and fabric, attached to standards three places with $\frac{1}{4}$ "-20 machine screws. Fasteners shall be completely concealed from face side of panel.

5.6 TABLET ARM

The Tablet Arm shall be available in both right hand and left hand options. The Tablet Arm shall fold down to the side of the seat when not in use for storage, and when in use fold up to allow clear access to the seat. The writing surface shall be a minimum of 310mm (12 $\frac{1}{4}$ ") wide x 330mm (13") deep, and be constructed of



a phenolic laminate material. Tablet arm shall include an integral arm pad. All of the components are black in color.

5.7 COLOR

All components (except seat & back inner panels) shall be black in color as standard.

5.8 FINISH OPTIONS FOR WOOD COMPONENTS

Components constructed from wood shall be available in the following species: Red Oak, Maple, Cherry, Mahogany, White Oak, Rift Red Oak, Rift White Oak, Walnut, and European Beech. Each shall be available in any Sauder standard wood stains, with custom stain colors available. In addition to wood stain, wood components shall be coated with a high solids catalyzed clear sealer, sanded, and top coated with a high solids catalyzed topcoat.

6.0 PERFORMANCE / STANDARDS / REFERENCES

6.1 GENERAL

The completed Jury seat installation will provide the following minimum performance requirements.

Anchor Bolts: All concrete anchors are non-corrosive material.

Fasteners: All fasteners non corrosive.

Metal Finishes: All finishes are suitable for indoor applications.

Plastic Components: Interior grade plastics.

6.2 MANUFACTURING

The following manufacturing standards are adhered to:

AS 1442-1992	Carbon steels and carbon-manganese steels - Hot-rolled bars and semi-finished products.
AS 1517-1991	Tinplate and blackplate.
AS 1365-1996	Tolerances for flat-rolled steel products.
AS 1450-1983	Steel tubes for mechanical purposes.
AS 1163-1991	Structural steel hollow sections.
AS 1554-2000	Structural steel welding.
AS 3834-1999	Quality requirements for welding - Fusion welding of metallic materials.
AS 4506-1998	Metal finishing - Thermoset powder coatings.
ISO 3834-1:1994	Quality requirements for welding - Fusion welding of metallic materials



6.3 DURABILITY TESTING

The Jury seating offering complies with the following:

- A) ANSI/BIFMA X5.4-2012
 - Test 15 Drop Test Dynamic

Functional load - 225 lbs.

Proof load - 300 lbs.

• Test 7 - Back Durability Horizontal - Cyclic

Load 75 lbs. – 120,00 cycles

- B) ANSI/BIFMA X6.1-2012
 - Test 10 Seating Durability Test Cyclic

Load 165 lbs. – 20,000 cycles, each front corner

- C) Development Testing –(in house)
 - Test to verify the durability and repeatability of rotational cylinder
 Load Empty Seat 10,000 cycles
- D) EN 12727:2000 Level 4 "Furniture Ranked Seating Test methods and requirements for strength and durability" which includes the following loadings:

Seat Static Load (front edge of seat) - 200 Kg [440 lbs.]
 Back Static Load (forward) - 75 Kg [165 lbs.]

Seat Cyclic Load times (SLP)
 Back Cyclic Load times (BLP)
 Seat Cyclic Load times (SLP)
 33 Kg [75 lbs.] applied 300,000

Arm Static Load (Vertical) - 100 Kg [220 lbs.]
Arm Static Load (Horizontal) - 90 Kg [200 lbs.]
Arm Static Load (Vertical) - 100 Kg [220 lbs.]
Arm Static Load (Horizontal) - 90 Kg [200 lbs.]

6.4 FLAMMABILITY

The Jury seat and/or material used in its manufacture comply with the following:

• Plastics: FMVSS 302 Federal Motor Vehicle Safety Standard No. 302

• Upholstery: TB117-2013 Bureau of Home Furnishings, Californian Technical Bulletin 117-2013

Note: Other standards are available upon request including CAL 133.



7.0 INSTALLATION

7.1 GENERAL

Install chairs in locations indicated and fasten securely to substrates according to manufacturer's recommendations and approved submittals.

7.2 LAYOUT AND SETTING ANCHORS

The Layout of chairs and setting of anchor bolts must be completed in such a way to achieve the following:

- A) Aisle seat to be aligned in all rows for any given section.
- B) Aisle seat to be positioned so that it does not interfere with any intermediate steps, or create any excessive gaps (potential foot entrapments).
- C) Setting of anchor bolts to be as per manufacturer's specification.

7.3 INSTALLATION OF SEATS:

On site installation should occur in the following sequence:

- A) Layout, drill & install anchor bolts.
- B) Fix mounting base and tighten bolts.
- C) Insert gas cylinder into mounting base
- D) Install Seat base frame onto cylinder
- E) Install Uprights to seat base frame
- F) Fit back assembly to uprights. Centralize back & lock back cam.
- G) Check back alignment.
- H) Fit armrest & secure.
- I) Insert seat to pivot blocks, centralize seat & lock in pivot cap.
- J) Fit aisle identification discs.
- K) Insert identification symbols, as per approved seating drawing.
- L) Ensure seats are clean and re-bag if necessary.
- M) Obtain client signoff.

7.4 CLEANING

General: Disposal of bags/cartons and final clean by others.