

Camatic Seating

# ACTIVA SEATING

SYSTEM SPECIFICATIONS

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**CAMATIC**  
S E A T I N G

# ACTIVA SEATING SPECIFICATIONS

## 1. THE SYSTEM:

- Injection moulded seat & back structure.
- Custom moulded polyurethane seat & back padding upholstered.
- Gravity tilt seat mechanism with concealed hinges.
- Tilt Seat mechanisms are safe guarded with no finger or clothing entrapments
- Chairs are mounted with shared standards at variable centres.
- Powder coated steel fabricated standards.
- Floor or optional riser mounted.
- Suitable for infinite centre positions from 560 mm to 610mm [22" to 24"].
- Standard lift up arm includes integral cup-holder. Lock down option available.
- Available with recliner back or fixed back options.
- Other options & accessories available.

## 2. CONFIGURATION / DIMENSIONS

### Seat Dimensions:

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

Seat Centres	- 560mm to 610mm	[22" to 24"]	
Seat Width	- 530mm	[21']	(Minimum)
Overall Dimension (Seat Up – Recliner Back)	- 625mm	[24 ¾"]	(Maximum)
Overall Dimension (Seat Up – Fixed Back)	- 650mm	[25 ¾"]	(Maximum)
Overall Dimension (Seat Down – Recliner Back)	- 725mm	[28 ½"]	(Maximum)
Overall Dimension (Seat Down – Fixed Back)	- 750mm	[29 ½"]	(Maximum)
Back Height (above floor) -	- 1060mm	[42"]	(Nominal)
Seat Height (Front edge)	- 450mm	[17 ¾"]	(Nominal)
Back Recliner Travel	- 140mm	[5 ½"]	(Nominal)
Radius Rows	- 7000mm	[23']	(Minimum)

## 3. MATERIALS

### Components:

#### **Standards:**

The standards shall be robotically welded from 65mmx65mm (2 ½"x2 ½") hollow section steel with a minimum of 2mm (0.079") wall thickness, 6mmx190mmx75mm (1/4"x7 ½"x3") flat section for the foot plate & 65mmx6mm (2 ½"x1/4") seat pivot mounting plate – polyester powder coated black over 5 stage pre-treatment.

Standards shall be of hollow construction to provide concealment of any required cabling.

Standards shall be delivered with back and seat hinges factory fitted, ready for installation of back and seat assemblies.

Footplates shall allow installation of a minimum two (2) anchor bolts into concrete substrate & two (2) coach screws into timber substrate - in accordance with manufacturer's recommendations. Standards to be fabricated to suit specified floor and optional riser angles +/- ½ degree.

Optional riser mounted standards are to be designed to allow adequate clearance for cleaning under the chairs and are to be configured to avoid trip hazards behind the row.

#### **Seat Component:**

A full width seat shall be provided at 560mm (22") chair spacing. The seat shall be a minimum 530mm (21") wide, with gravity tilt. The seat shall comprise a replaceable upholstered inner fitted to a structural outer. The seat depth as measured from the "s" point of the backrest shall be a minimum of 480mm [19"].

The seat outer panel is a structural component of injection moulded co-polymer polypropylene, providing location & concealment of the seat counterweight. It shall be black in color & textured to minimize potential for scuffing.

The inner shall be an ergonomically formed, injection moulded polypropylene panel complete with padding. The inner panel shall be provided with an integral tamper proof attachment system that allows removal and replacement of the upholstered inner from the seat outer without removal of fixings screws.

Padding shall be custom moulded polyurethane foam, of an agreed performance specification. Upholstery thickness shall be 100mm (4") nominal at ischial support.

The upholstery cover is to be fastened to the inner by means of an integrally sewn drawstring so as to facilitate reupholstering.

#### **Seat Pivot Mechanism:**

The seat outer shall be attached to the standard via a fully enclosed hinge mechanism providing automatic fold to ¾ uniform position without adjustment.

The pivot mechanism is constructed of composite materials including injection moulded glass reinforced polyamide black in colour providing a low friction bearing surface requiring no adjustment or lubrication.

Pivot mechanism will return the seat to a 3/4 position automatically through a gravity tilt counter-weight system, requiring no adjustment or lubrication for the life of the installation. Counter weight is fully enclosed in rear of seat component.

The hinge shaft assembly shall be robotically welded and comprise a 16mm [5/8"] steel shaft with an anticorrosive electro-zinc plating. The hinge shall provide incremental location of the seat outer allowing for proper centring of the seat assembly at all chair spacings.

Pivot mechanisms perform to the requirements of ASTM F851-87 (& remain operational after 100,000 cycles).

#### **Backrest Component:**

The backrest comprises a replaceable upholstered inner fitted to a structural outer. The backrest has a nominal height of 1060mm (42") from the floor & 670mm [26 ½"] above the seat component,

The outer panel shall be of injection moulded polypropylene, black in color. It shall extend below seat level and wrap around the sides and top of the back inner. The outer shall provide required structural support and impact resistance and be finished with a texture to minimize potential for scuffing.

In order to simplify facility management, one size only of backrest shall be provided to suit chair spacing of 560 to 610 mm [22" to 24"].

The inner shall be an ergonomically formed, injection moulded polypropylene panel complete with padding. The inner panel shall be provided with an integral tamper proof attachment system that allows removal and replacement of the upholstered inner from the seat outer without removal of fixings screws.

Padding to be custom moulded polyurethane foam with lumbar support. Upholstery thickness shall be 50mm (2") nominal with additional depth at the headrest.

The upholstery cover is to be fastened to the inner by means of an integrally sewn drawstring so as to facilitate reupholstering.

### **Back Hinge Mechanism:**

The back outer shall be attached to the standard via a fully enclosed hinge mechanism in order to provide angle adjustment and optional recline travel. The back hinge mechanism is constructed of composite materials including injection moulded glass reinforced polyamide black in color, progressive rate leaf springs & contoured moulded rubber.

The hinge shall provide incremental location of the back outer allowing for proper centring of the backrest assembly at all chair spacings.

In the case of fixed back chairs the hinge shall provide for two predetermined back angles, with a third customized position.

In the case of reclining back chairs the hinge is to provide for approximately 140mm [5 ½"] of backrest travel, with a smooth, progressive action and automatic return. The hinge is to be silent in operation.

### **Arm Rests**

The armrest 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 and an enhanced versatility within the row. Armrests shall be free of external ribbing and with smooth surfaces to prevent entanglement in clothing.

The all plastic armrest shall be constructed of composite injection moulded materials with integral cup-holder.

The optional fully upholstered armrest shall include a moulded polyurethane foam pad, with or without cup-holder.

The hinge mechanism shall include a facility to allow the armrest to be fixed in the down position

## **4. Anchors / Mounting Systems**

### **Concrete Tread/Riser Mounting:**

Anchors are to be installed to the Camatic specification, and meet the seat design loads. Std fixings are 2 x M10x40mm (3/8"x1 ½") HKD's zinc plated with High Tensile Hex Bolts.

### **Timber Tread Mounting:**

Anchors are to be installed to the Camatic specification, and meet the seat design loads. Std fixings are 2 x M10mmx35mm lg [3/8"x1 ¼" lg] coach screws.

### **Removable Mounting Brackets:**

One (1) & two (2) seat free standing removable units are available. These are centre mounted with M10 [3/8"] anchors & hand-wheels, that require no tools to remove and remain attached to bracket when not in use.

### **Shift Plates:**

When a standard falls directly on or immediately adjacent to an expansion joint or crack in the flooring substrate, a shift plate may be used to move the anchor location either left or right of the centre of the standard.

## 5. ACCESSORIES

### Cup-holders:

Cup-holders are designed specifically for attachment to the front of the Activa armrest. The cup-holder is injection moulded co-polymer. Standard colour is black to match that of the armrest.

### Seat Numbers:

Seat numbering is optional & is available in two (2) formats.

Option 1: The seat numbers may be located in the cup-holder. Each cup-holder has 2 blank inserts fitted which may be hot stamp printed with a white seat number. The blank provides for up to two (2) digits of nominal 10mm [3/8"] in height.

Option 2: The seat number may be located in the logo badge located in the forward centre edge of the seat. The logo badge may be hot stamp printed with a white seat number. The logo badge provides for up to two (2) digits of nominal 20mm [3/4"] in height.

### Row Identification:

A row identification disc is upward angled & mechanically fixed to the end of row panel. The disc is black injection moulded 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.

### Lift Up Armrest:

The lift up arm is a standard feature to provide an ADA facility at aisles & as enhanced versatility within the row.

### Writing Tablet:

The D2 writing tablet is designed specifically for attachment to the Activa chair utilising the purpose designed mounting bosses in the seat's side check. The writing tablet may be retro-fitted provided the seat centres are at 590mm [23 1/2"] or greater.

## 6. PERFORMANCE / STANDARDS / REFERENCES

### General:

The completed chair installation will provide the following minimum performance requirements.

Anchor Bolts:	All concrete fixings are non-corrosive material.
Fasteners:	All fasteners Non corrosive.
Metal Finishes:	All finishes are suitable for indoor applications.
Plastic Components:	Interior grade plastics.
Seat Pivot:	Seat tilt operates by a gravity system.
Seating Envelope:	Maximum chair envelope is 625mm (24 3/4"). (Recliner un-Occupied)

### Durability Testing:

The Activa range of seating complies with the following:

Available on request

### Flammability:

The Activa chair and / or materials used in its manufacture comply with the standards listed below:

Available on request

### Quality:

Camatic seating holds the following quality certifications

ISO 9001-2000                      Quality systems requirements

## 7. INSTALLATION

### General:

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

### Layout and Setting Fixings:

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

1. Seat centres along each row to be uniform.
2. Aisle seat to be aligned in all rows for any given section.
3. Aisle seat to be positioned so that it does not interfere with any intermediate steps, or create any excessive gaps or potential foot entrapments.
4. When riser mounting, seat height above treads to be constant along any given row, and within +/- 12mm [1/2"] of manufacturers recommendation.
5. Setting of anchor bolts to be as per manufacturer's specification.
6. Shift plates required to relocate fixing points from expansion joints to be approved by seat manufacturer.

### Testing:

Non destructive testing should be carried out to a total of 1% of all anchor bolts. The test load should exceed the design load by 30%, and any failures should be reported to the project manager.

### Installation of Seats:

On site installation should occur in the following sequence:

Available on request

### Cleaning

General: Removal of bags and final clean by others.

## 8. WARRANTY

### General:

The warranty shall be in addition to and not a limitation of the other rights the Owner may have against the Contractor, installer, or Manufacturer, under the Contract Documents.

Camatic provides a warranty for the replacement of chairs found to be defective in appearance or unusable due to defects in performance, as outlined below

Available on request