

Camatic Seating

# AXIOM SEATING

SYSTEM SPECIFICATIONS

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

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# AXIOM SEATING SYSTEM SPECIFICATIONS

## 1. THE SYSTEM:

- Injection moulded seat & backrest.
- Spring tilt seat mechanism with concealed hinges.
- Tilt Seat mechanisms (with 'push-back' feature) are safe guarded with no finger or clothing entrapments
- Chairs mounted to continuous beam at fully adjustable, and allowing for uniform seat centres.
- All seats are independently mounted with no connection to adjoining chair
- Beam mount brackets totally independent of seat mount
- Floor (tread) or riser mount, beam support brackets available
- Suitable for infinite centre positions from a minimum of 465mm [18-5/16"]
- Accessories such as, Upholstery, Arms and Cupholders available.
- Approximate seat weight 4kg (8.8lbs) (excluding beam)

### 1a. INTENDED USE:

The Axiom seating system is intended for Stadium, Entertainment and Education venues.

## 2. CONFIGURATION / DIMENSIONS

### Seat Dimensions:

Seat dimensions meet the following requirements.

Seat Centres - without arm	- 465mm	[18 5/16"] (minimum)
Seat Centres - with arm	- 475mm	[18 11/16"] (minimum)
Seat Width	- 415mm	[16 5/16"] (minimum)
Overall Dimension (Seat up, no arm - 815 back)	- 310mm	[12 3/16"] (maximum)
Overall Dimension (Seat up, with arm - 815 back)	- 350mm	[13 3/4"] (maximum)
Overall Dimension (Seat up, with rear cupholder - 815 back)	- 405mm	[15 15/16"] (maximum)
Overall Dimension (Seat down, 815 back)	- 570mm	[22 7/16"] (maximum)
Standard Back Height (above floor)	- 815mm	[32 1/16"]
Standard Seat Height	- 455mm	[17 11/16"]

## 3. MATERIALS

### Mounting Beam:

Extruded, hollow section aluminium beam of alloy 6005A-T5, clear anodised to 20um.

Beam shall provide continuously variable location of mounting brackets to allow co-ordination of mountings with precast reinforcement and building fixtures. Seating to attach to beam independently of brackets, allowing infinitely adjustable, even seat spacing and accurate aisle alignment.

### Plastic Components:

Plastic seat and back components

Are injection moulded co-polymer polypropylene. Plastic formulation is fully compounded with ultra-violet inhibitors prior to the manufacturing process. UV inhibitors are added at a rate to ensure no significant colour or plastic deterioration for a period of 5 years.

When specified or required FR additives are also compounded into the plastic formulations.

### Hinge Mechanism:

The Hinge / pivot mechanism is injection moulded glass reinforced engineering grade nylon, black in colour and contains ultraviolet inhibitors.

Hinge / pivot mechanism returns the seat to a 3/4 position automatically through a spring tilt system. The spring also allows for push back of the unoccupied seat improving practical egress as patrons move through the aisles.

### Standards: (Side Supports)

The standards/ supports are injection moulded glass reinforced polyamide, black in colour and contain ultraviolet inhibitors. Standards provide tamper resistant quick action attachment to the beam, allowing reconfiguration of seating without disturbance of anchors, substrate or building finishes. Connection of supports to backrest is via two hidden corrosion resistant screws. The supports provide connection for armrests that may be installed (for armrest details refer to Accessories).

### Backrest Component:

The Axiom 815mm backrest has a minimum height of 360mm [14-3/16"] above the seat component. The backrest extends below the seating surface to provide foot protection. The upper face (sitting surface) is free of fasteners and textured to minimise slipping, and capable of accepting an upholstery pad. Rear face is free of dirt or water traps, smooth, with minimal texture.

### Seat Component:

The Axiom seat depth as measured from the point of the backrest is a minimum of 440mm [17-5/16"]. The seat upper face (sitting surface) is free of fasteners and textured to minimise slipping, and capable of accepting an upholstery pad. Lower face is free of dirt traps, smooth and with minimal texture. The leading edge of the seat includes an angled recessed location for seat number.

## 4. FIXINGS

### Concrete Riser Mounting:

Axiom is suitable for mounting to risers with minimum riser height 150mm [5-7/8"] and maximum height 600mm [23-5/8"]. Note: Clients remain responsible for ensuring the provisions of adequate fall barriers for each row behind Axiom Seating (applies particularly in high riser situations).

Anchors are to be installed to Camatic specification and meet the seat design loads. Standard fixings are, 2 x M10 mechanically galvanised studs per bracket (configuration depends on riser height), chemically set, to a minimum 55mm [2¼"] embedment, with mechanically galvanised nut and washer.

### Concrete Tread Mounting:

Anchors are to be installed to the Camatic specification and meet the seat design loads. Standard fixings are 2 x M10 'drop-in' Mechanically Galvanised with High Tensile Hex Bolts.

## Removable Mounting Brackets (Tread Mounting Only):

Mounting brackets can be supplied to convert fixed stadium chair design to 2 or 3 seat removable units. These units are fixed with 2 x M10 anchors with hand-wheels that require no tools to remove and remain attached to bracket when not in use.

## 5. AXIOM ACCESSORIES – (where chosen and installed)

### **Arm Rests**

Injection moulded glass reinforced polyamide armrests attach directly to the chair at the point provided on the standard. Armrests are closed hollow section and free of external ribbing, with smooth top and front surfaces to prevent entanglement in clothing. Polyamide is black and contains ultraviolet inhibitors.

All seating units are capable of accepting armrests.

### **Cup-holders:**

Rear-mount Cup-holders are designed specifically for attachment to the chair; the plastic is injection moulded co-polymer polypropylene and is compounded with ultra-violet inhibitors for outdoor applications prior to the manufacturing process. Colour to match that of the seat and backrest.

Arm mount cup-holders are designed specially for attachment to the Axiom arm. These cup-holders are generally used in the front rows and companion chairs. The cup-holder is of injection moulded Polyamide, black to match the arms and contains ultraviolet inhibitors.

### **Seat Pad:**

Seat pad is fixed at four (5) positions, one (1) in each corner and an additional centre front fixing point. The seat pad is constructed of injection moulded polypropylene inner (typical wall thickness 3.5mm) with approx. 25mm [1"] moulded polyurethane foam cushion.

The Upholstery Cover is typically upholstered in an easy clean UV stabilised marine grade vinyl suitable for indoor and outdoor applications. Fabric to client's requirements may be specified for indoor applications.

It is recommended that the customer choose an Eco Preferred Fabric in order for the chair to obtain a high Green Star rating.

### **Backrest Pad:**

Back pad is fixed at four (4) positions, one (1) in each corner. The backrest pad is constructed of injection moulded polypropylene inner (typical wall thickness 3.5mm) with an 8mm [5/16"] foam covering.

The Upholstery Cover is typically upholstered in an easy clean UV Stabilised marine grade vinyl suitable for indoor and outdoor applications. Fabric to client's requirements may be specified for indoor applications.

It is recommended that the customer choose an Eco Preferred Fabric in order for the chair to obtain a high Green Star rating.

### **Seat Numbers**

Seat Numbers snap into front edge of seat and angle upward for optimum viewing by the patron.

### **Row Identification**

Row Number plate is black with white numbering and provides for up to 3 digits 12 mm [1/2"] in height

## 6. PERFORMANCE / STANDARDS / REFERENCES

### General:

The completed Axiom 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 outdoor exposure / marine environments.
Plastic Components:	Exterior grade plastics. UV Stable
Seat Pivot:	Seat will rise without assistance. Spring system used.
FIFA	The Axiom complies with the FIFA recommendations for stadium seating.

### Manufacture:

The following manufacturing standards are adhered to:

Available on request

### Durability Testing:

The Axiom range of stadium seating complies to the following.

Available on request

### Plastic Ultraviolet Deterioration:

Axiom seat and backrest exceed the following test requirements:

Available on request

### Flammability:

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

Available on request

### Management Systems:

Camatic seating is accredited through DLCS for the following:

Available on request

## 7. INSTALLATION

### Mounting Brackets and Beam:

1. For Axiom the outboard bracket (centre-line) to be inset 200mm [8"] from aisle to aid cleaning and subsequently at a maximum spacing of 1250mm [49"] for both tread mount and riser mount.
2. Riser mount brackets to be set out to provide uniform height across each row.
3. Brackets to be attached with a minimum of 2 x M10 anchors in accordance with manufacturer's instruction.
4. Anchor type to be determined in accordance with service environment and strength & configuration of reinforced concrete substrate.
5. Brackets to be located so as to avoid conflict with expansion joints and hence eliminate the use of carrier plates
6. Mounting beam to be trimmed on site to suit row lengths and installed in continuous straight lengths. Visible beam ends to be capped

## **Chairs**

1. To be delivered fully assembled in manufacturers packaging and able to be placed directly on beam.
2. Seating positions to be adjusted to ensure accurate aisle alignment and maximum even spacing in each row
3. Maintain spacing at mid row angle changes up to XX degrees by positioning seating across the angle as required

## **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