

# A-dec<sup>®</sup> 511flt/511B Dental Chair and Related Modules

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A-dec 511B Dental Chair with 533pro Delivery System, 551sta Assistant's Instrumentation, 572L Dental Light, and 482 Monitor Mount

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#### **Regulatory Information and Warranty**

For required regulatory information and the A-dec warranty, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at <u>www.a-dec.com</u>.



For quick access to this document online, scan, tap, or click this QR code, which points to: a-dec.com/regulatory-guide.

#### **Product Service**

Product service is available through your local authorized A-dec dealer. For service information, or to locate an authorized dealer, contact A-dec at 1.800.547.1883 in the USA and Canada or +1.503.538.7478 worldwide, or visit <u>www.a-dec.com</u>.

#### Product Models and Versions Covered in This Document \*

Model	Versions	Description
351	В	Assistant's Instrumentation
352/353/551	A	Assistant's Instrumentation
551sta	n/a	Assistant's Instrumentation
332pro/333pro 334pro/335pro 336pro/532pro 533pro	n/a	Delivery System
532/533	В	Delivery System
511	В	Dental Chair
511flt	n/a	Dental Chair
371L/372L 571L/572L	А	Dental Light
381/382/482	A	Monitor Mount
362/461	A	Support Center

\* Some products, versions, and options in this document may not be available in certain regions.

## **Structural Requirements**



**NOTE** Job site construction should be completed before the dental equipment installation (including finished floors, ceiling, plumbing, lighting, paint, etc.).

## **Dental Patient Chair Interface Requirement**

The dental chair requires a solid, level mounting surface that meets these minimum specifications:

- Support a nominal weight of 1192 lb (5302 N) for the chair, dental light, delivery system, and patient.
- Capability to anchor the chair to the floor, with a minimum pullout load of 350 lb (1557 N) for one anchor-bolt.

## **Utility Requirements**



**CAUTION** Local regulation may require licensed plumbers and electricians to install the utilities. All plumbing and utilities must conform to prevailing local codes.



**CAUTION** The manner and method for accessing the utilities within the wall is the responsibility of the design team working on the project (dental dealer, architectural services, and contractors). Utilities must be accessible without the use of tools.

General utility requirements and electrical ratings are provided on pages 2 and 4.



**IMPORTANT** For additional electrical specifications, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Resource Center at <u>www.a-dec.com</u>.

## **Utility Specifications**

Utility	Finish	Requirements	
Air	1/2" (13 mm) compression protruding 1" to 2" (25 mm to 51 mm)	<ul> <li>Right-angle manual shutoff valve with 3/8" compression outlet supplied and installed by the contractor, with the top of the handle no higher than 3-3/4" (95 mr above the finished floor.</li> </ul>	
		<ul> <li>80-125 psi (550 to 860 kPa), 2.5 scfm (71 SL/min) minimum, during normal use (7.5 scfm [210 SL/min] peak intermittent flow).</li> </ul>	
		<ul> <li>Flush lines prior to making connections to dental equipment.</li> </ul>	
Water*	1/2" (13 mm) compression protruding 1" to 2" (25 mm to 51 mm)	<ul> <li>Right-angle manual shutoff valve with 3/8" compression outlet supplied and installed by the contractor, with the top of the handle no higher than 3-3/4" (95 mm above the finished floor.</li> </ul>	
		<ul> <li>60±20 psi (410 ± 140 kPa), 1.5 gpm (5.7 L/min) minimum, not to exceed 40°C (104°F).</li> </ul>	
		<ul> <li>Flush lines prior to making connections to dental equipment.</li> </ul>	
Central vacuum	1" PVC Pipe (1.315" OD) protruding	• Wet systems: 10±2 inches of Hg (34±7 kPa), 9 scfm (255 SL/min) minimum.	
	2" (51 mm)	<ul> <li>Dry/semi-dry systems: 4.5±1 inches of Hg (16±3.5 kPa), 12 scfm (340 SL/min) minimum.</li> </ul>	
Gravity Drain**	1-1/2" (38 mm) nominal pipe	Place trap in line, conforming to local codes, contractor-supplied.	
	protruding 1" (25 mm)	<ul> <li>Waste water drain must have a minimum slope of 1/4" per foot (21 mm per meter) and accommodate a flow of 4.5 gpm (17 L/min) without overflow.</li> </ul>	
		<ul> <li>Floor mount only. Not recommended for wall mount utilities.</li> </ul>	
Electrical	1/2" (13 mm) conduit and electrical box with a hospital-grade quad power	<ul> <li>Conduit, electrical box, and power receptacle supplied and installed by the contractor (wired as per code).</li> </ul>	
	receptacle	<ul> <li>Electrical box should be oriented vertically, with the top no higher than 5" (127 mm) above the finished floor.</li> </ul>	
		<ul> <li>See the "Electrical Ratings" table for voltage and amperage ratings.</li> </ul>	

\* The delivery system comes with a self-contained water bottle. Municipal water is only required if the equipment configuration includes a cuspidor or if the facility has special requirements.

\*\* Gravity drains are needed only on systems with a cuspidor.

### **Head Loss With Respect to Flow**

The following tables include information about high volume evacuator (HVE) and saliva ejector (SE) head loss with respect to flow for assistant's instrumentation on an A-dec 511 chair.

#### A-dec 351 Assistant's Instrumentation

Tubing and HVE/SE	90 NL/min	150 NL/min	250 NL/min
	(3.18 SCFM)	(5.30 SCFM)	(8.83 SCFM)
15 mm HVE (large bore) valve with 16 mm EasyFlex Tubing	0.08 in-Hg	0.14 in-Hg	0.36 in-Hg
	(0.27 kPa)	(0.47 kPa)	(1.22 kPa)
11 mm HVE (standard bore) valve	0.03 in-Hg	0.7 in-Hg	0.40 in-Hg
with 16 mm EasyFlex Tubing	(0.10 kPa)	(0.24 kPa)	(1.35 kPa)
11 mm HVE (standard bore) valve with 13 mm EasyFlex Tubing	0.07 in-Hg	0.20 in-Hg	1.25 in-Hg
	(0.24 kPa)	(0.68 kPa)	(4.23 kPa)
11 mm HVE (standard bore) valve with 13 mm PVC Tubing	0.10 in-Hg	0.27 in-Hg	1.50 in-Hg
	(0.34 kPa)	(0.91 kPa)	(5.08 kPa)
SE (standard bore) valve with 6 mm PVC Tubing	1.15 in-Hg (3.89 kPa)	6.31 in-Hg (21.37 kPa)	Exceeds 12 in-Hg (40.64 kPa) at flow rates above ~175 NL/min.
SE (standard bore) valve with 10 mm EasyFlex Tubing	0.43 in-Hg (1.46 kPa)	2.00 in-Hg (6.77 kPa)	Exceeds 12 in-Hg (40.64 kPa) at flow rates above ~220 NL/min.

#### A-dec 352/353 Assistant's Instrumentation on A-dec 362 Support Center

Tubing and HVE/SE	90 NL/min (3.18 SCFM)	150 NL/min (5.30 SCFM)	250 NL/min (8.83 SCFM)
15 mm HVE (large bore) valve with 16 mm EasyFlex Tubing and 15 mm canister connection	0.05 in-Hg (0.17 kPa)	0.11 in-Hg (0.37 kPa)	0.47 in-Hg (1.59 kPa)
11 mm HVE (standard bore) valve with 16 mm EasyFlex Tubing and 15 mm canister connection	0.06 in-Hg (0.20 kPa)	0.13 in-Hg (0.44 kPa)	0.57 in-Hg (1.93 kPa)
11 mm HVE (standard bore) valve with 13 mm EasyFlex Tubing and 15 mm canister connection	0.09 in-Hg (0.30 kPa)	0.22 in-Hg (0.75 kPa)	1.09 in-Hg (3.69 kPa)
11 mm HVE (standard bore) valve with 13 mm PVC Tubing and 15 mm canister connection	0.10 in-Hg (0.34 kPa)	0.26 in-Hg (0.88 kPa)	1.21 in-Hg (4.10 kPa)
SE (standard bore) valve with 6 mm PVC Tubing and 15 mm canister connection	1.27 in-Hg (4.30 kPa)	6.39 in-Hg (21.64 kPa)	Exceeds 12 in-Hg (40.64 kPa) at flow rates above ~200 NL/min.
SE (standard bore) valve with 10 mm EasyFlex Tubing and 15 mm canister connection	0.66 in-Hg (2.24 kPa)	2.72 in-Hg (9.21 kPa)	Exceeds 12 in-Hg (40.64 kPa) at flow rates above ~250 NL/min.

#### A-dec 551 Assistant's Instrumentation

Tubing and HVE/SE	90 NL/min	150 NL/min	250 NL/min	
	(3.18 SCFM)	(5.30 SCFM)	(8.83 SCFM)	
15 mm HVE (large bore) valve	0.11 in-Hg	0.32 in-Hg	1.88 in-Hg	
with 16 mm EasyFlex Tubing	0.37 kPa	1.08 kPa	6.37 kPa	
11 mm HVE (standard bore) valve with 13 mm EasyFlex Tubing	0.33 in-Hg	1.09 in-Hg	2.97 in-Hg	
	1.12 kPa	3.69 kPa	10.06 kPa	
11 mm HVE (standard bore) valve with 16 mm EasyFlex Tubing	0.20 in-Hg	0.54 in-Hg	1.41 in-Hg	
	0.68 kPa	1.83 kPa	4.77 kPa	
11 mm HVE (standard bore) valve with 13 mm PVC Tubing	0.38 in-Hg	1.03 in-Hg	2.57 in-Hg	
	1.29 kPa	3.49 kPa	8.70 kPa	
SE (standard bore) valve	8.89 in-Hg	Exceeds 12 in-Hg	Hg (40.64 kPa) at	
with 6 mm PVC Tubing	30.10 kPa	flow rates ~100 N	O NL/min.	
SE (standard bore) valve with 10 mm EasyFlex Tubing	5.03 in-Hg 17.03 kPa	Exceeds 12 in-Hg (40.64 kPa) at flow rates above ~125 NL/min.		

## **Electrical Ratings**

Power	Required Electrical Supply		
240 Volt	220–240 VAC, 50–60 Hz, 10 Amps minimum		
120 Volt	110–120 VAC, 50–60 Hz, 15 Amps minimum		

## **Shipping Weights**

Product/Box		Estimated Shipping Weight	
A-dec 511B Den	tal Chair	422 lb (191 kg)	
• •	33pro/532B/533B (includes front mount weight)	95 lb (43 kg)	
A-dec 332pro/3 Delivery System	34pro/336pro	61 lb (28 kg)	
A-dec 333pro/3 Delivery System	35pro/333/335	55 lb (25 kg)	
A-dec 362 Supp	ort Center with Cuspidor	84 lb (38 kg)	
A-dec 461 Cuspi	idor with Support Center	66 lb (30 kg)	
A-dec 351 Assist (assistant's arm onl	tant's Instrumentation	28 lb (13 kg)	
A-dec 352 Assis (assistant's arm onl	tant's Instrumentation y)	15 lb (7 kg)	
A-dec 353 Assis (assistant's arm onl	tant's Instrumentation y)	7 lb (3 kg)	
A-dec 551sta/5 Instrumentation	51 Assistant's (assistant's arm only)	20 lb (9 kg)	
Back Mount and (required with 551 r		15 lb (7 kg)	
A-dec 371L/571	L Dental Light	35 lb (16 kg)	
A-dec 372L/572	L Dental Light	47 lb (21 kg)	
A-dec 381 Monit	tor Mount (without monitor)	9 lb (4 kg)	
A-dec 382 Monit	tor Mount (without monitor)	27 lb (12 kg)	
A-dec 482 Monit	tor Mount (without monitor)	11 lb (5 kg)	

## **Documentation References**

Document Title	Part Number
Templates	
A-dec 511flt/511B Dental Chair Full-Size Template	86.0755.00
A-dec 511flt/511B Dental Chair Mini Template	86.0756.00
A-dec 511flt/511B Dental Chair and Related Modules Full-Size Template	86.0757.00
Installation Guides	
A-dec 511 Dental Chair Installation Guide	86.0648.00
A-dec 332pro/333pro/336pro and A-dec 332/333/336 Delivery System on A-dec 511 Dental Chair Installation Guide	86.0307.00
A-dec 532/533 Delivery System Installation Guide	86.0479.00
A-dec 362 Support Center Installation Guide	86.0563.00
A-dec 461 Support Center on A-dec 311/411/511 Dental Chair Installation Guide	86.0387.00
A-dec 351 Assistant's Instrumentation on 311/411/511 Dental Chair	86.0569.00
A-dec 551/551sta Assistant's Instrumentation on A-dec 311/411/511 Dental Chair Installation Guide	86.0388.00
A-dec 371L/571L Dental Light on A-dec 361/362/363 Support Center	86.0341.00
A-dec 372L/572L Dental Light on A-dec 511 Dental Chair Installation Guide	86.0795.00
A-dec 382 Monitor Mount on A-dec 311/411/511/Cascade/Decade Dental Chair Installation Guide	86.0413.00
A-dec 482/381 Monitor Mount Installation Guide	86.0410.00

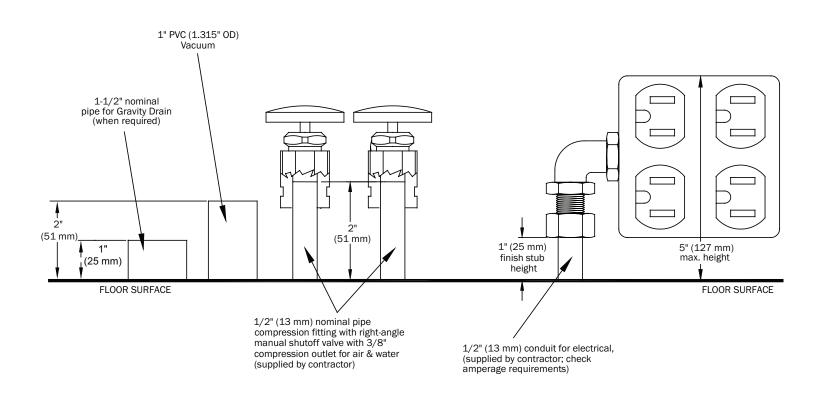
## **Plan Views and Dimensions**

**NOTE** The dimensional drawings in this section are not to scale and are for reference only. For complete accuracy, use the appropriate full-sized templates.

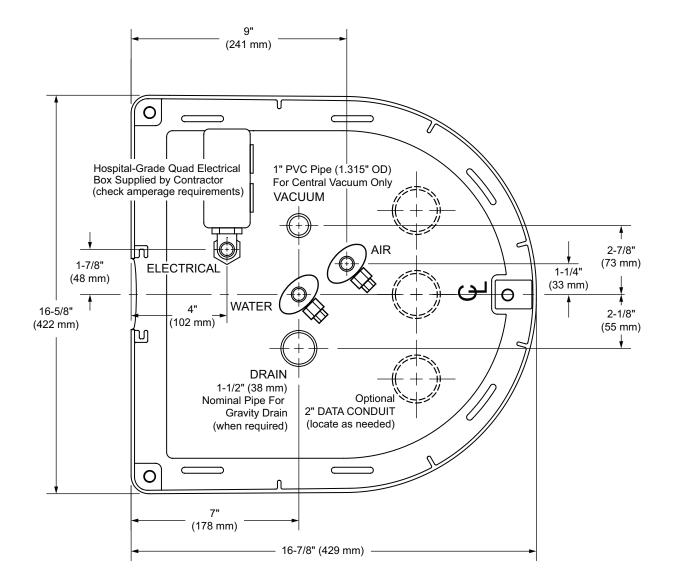
### **Utility Placement and Elevation**



**CAUTION** Due to specific plumbing elevation restrictions, the height and placement of utilities in the floor box can affect the ability to use the floor box cover. Failure to provide adequate space will prevent installation and removal of the cover. See the elevations provide here and reference the appropriate full-size template, which includes the required space constraints.

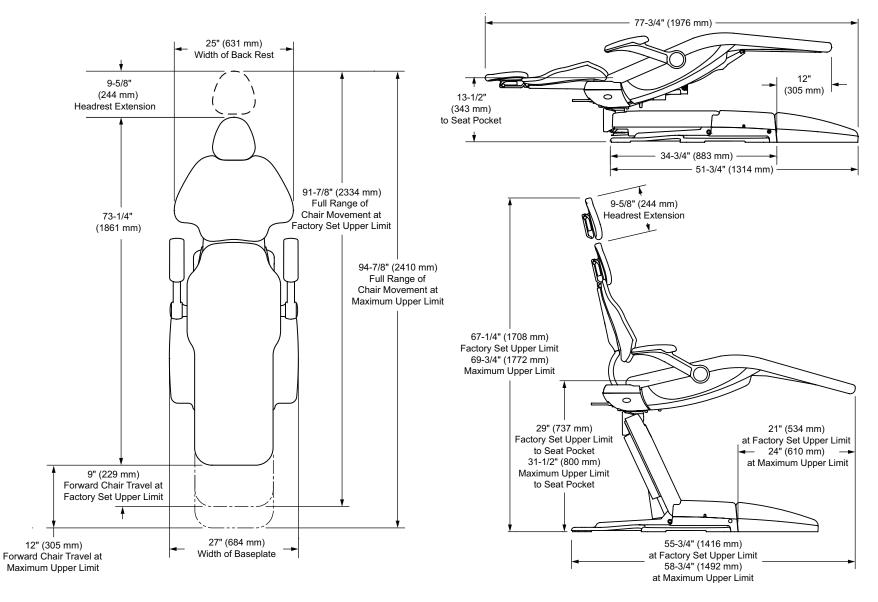


## **Floor Box Utility Connections**

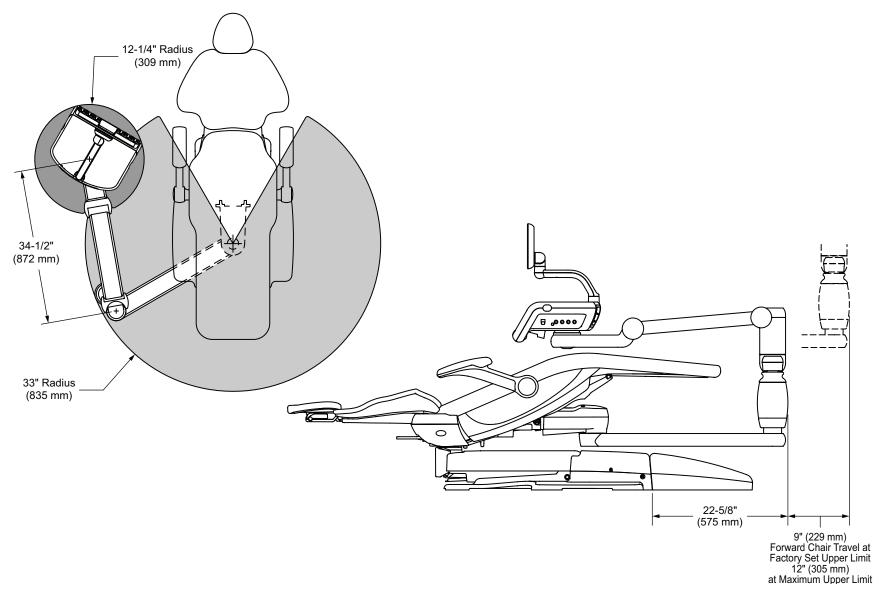


## A-dec 511flt/511B Dental Chair

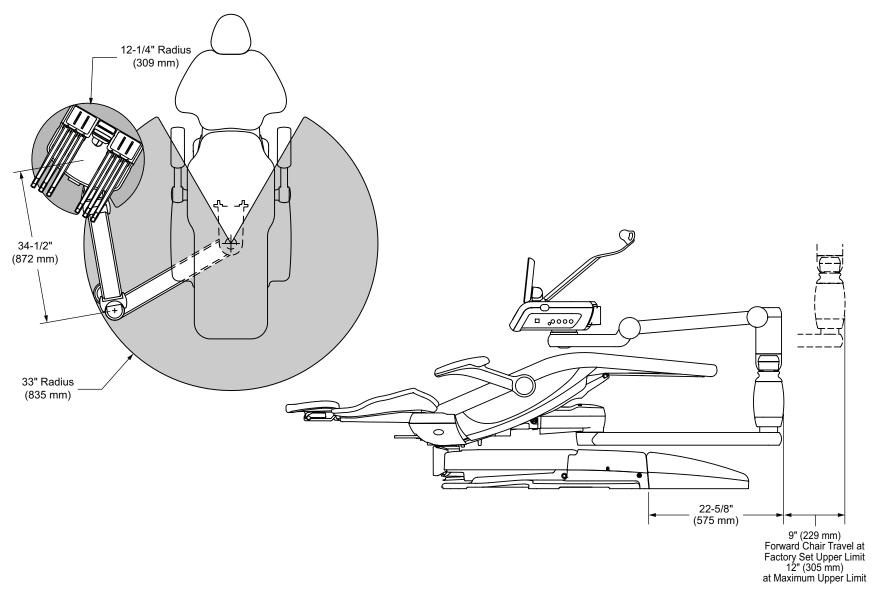
#### Plan View with Elevation (511B shown)



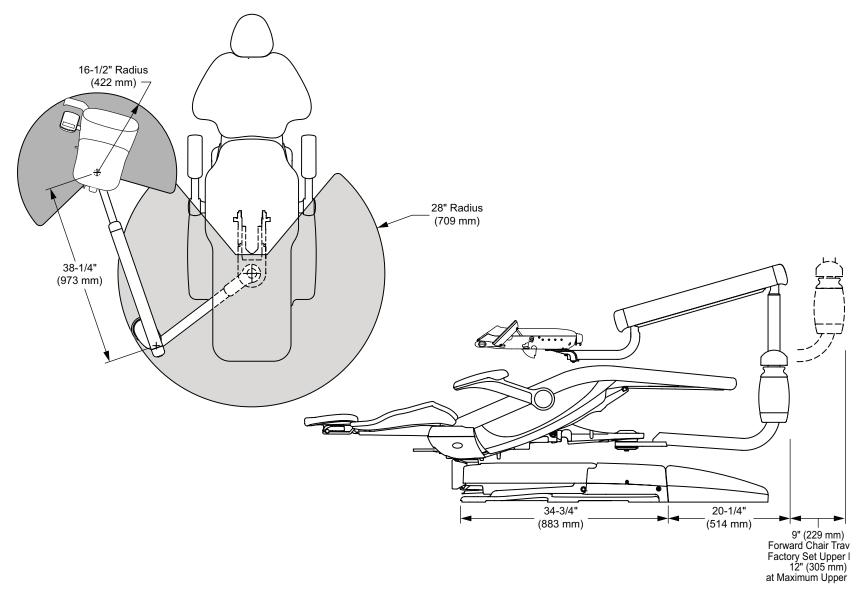
## A-dec 532pro/532B Delivery System



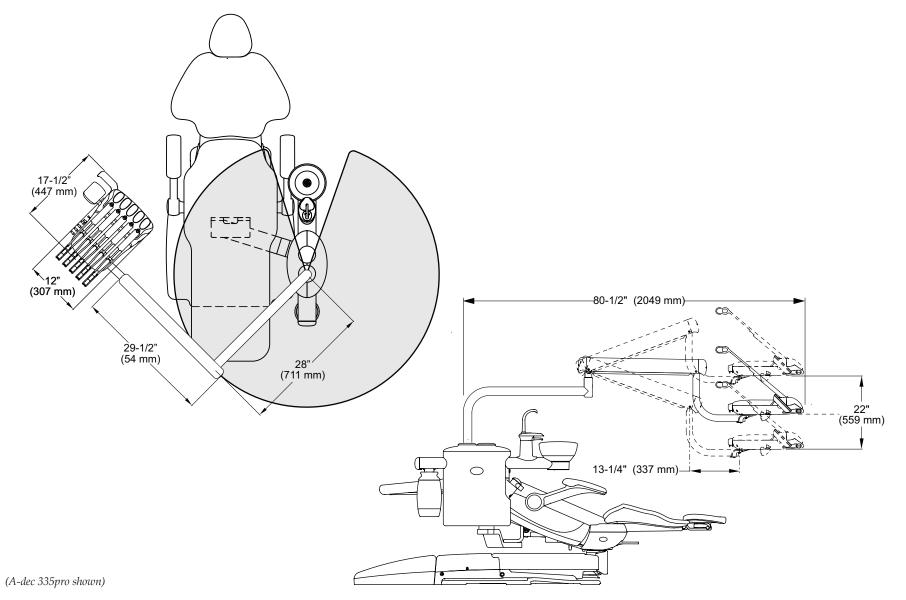
## A-dec 533pro/533B Delivery System



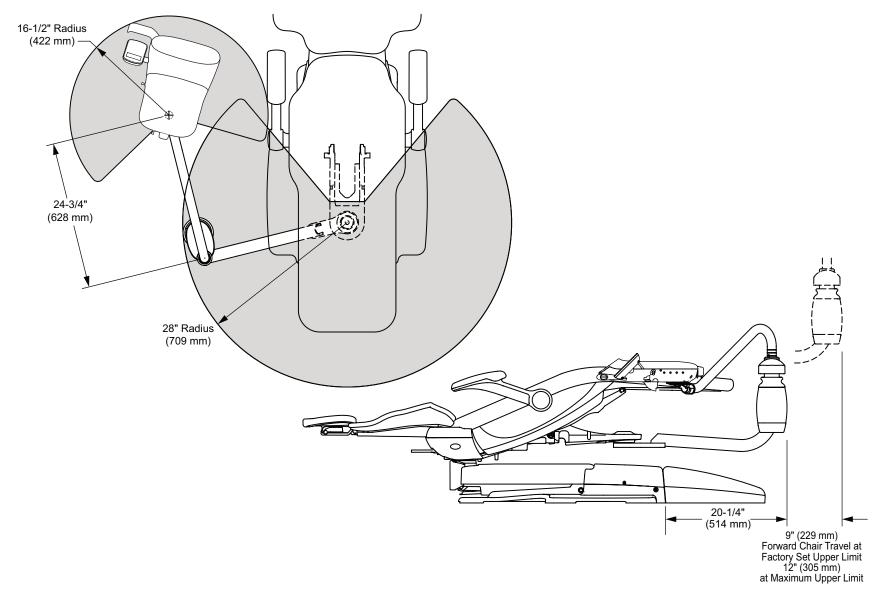
## A-dec 332pro/333pro Delivery System



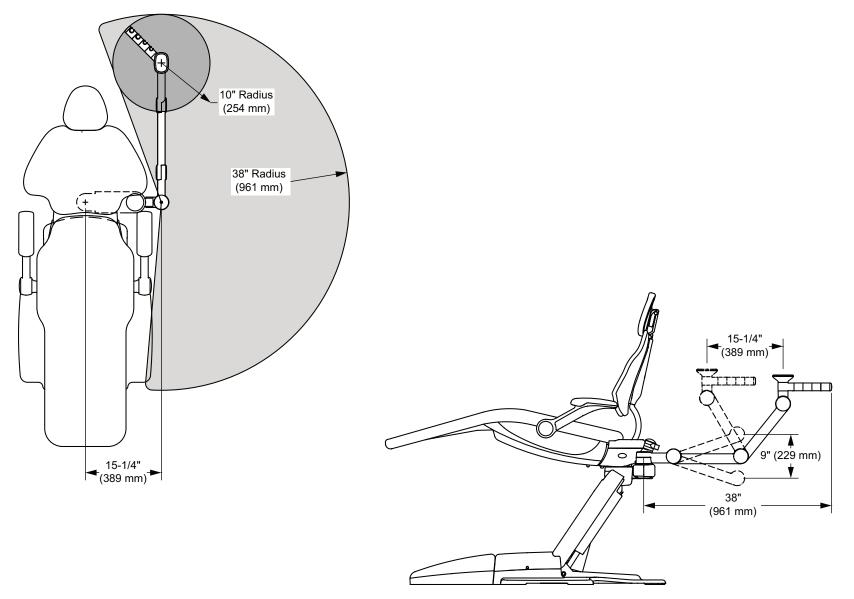
## A-dec 334pro/335pro Delivery System on A-dec 362 Support Center



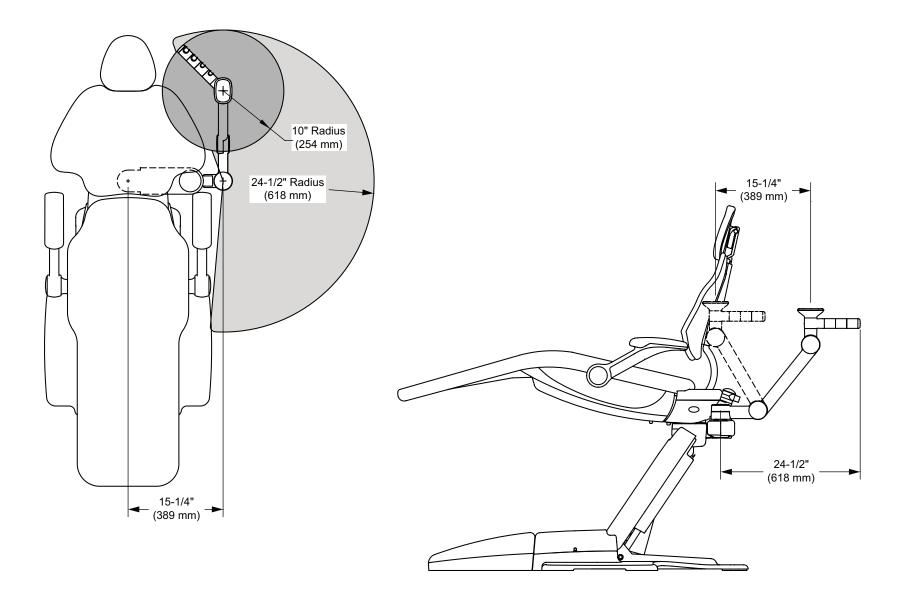
## A-dec 336pro Delivery System



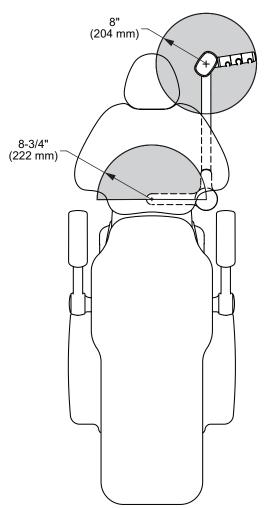
## A-dec 551sta/551 Assistant's Instrumentation – Long Arm

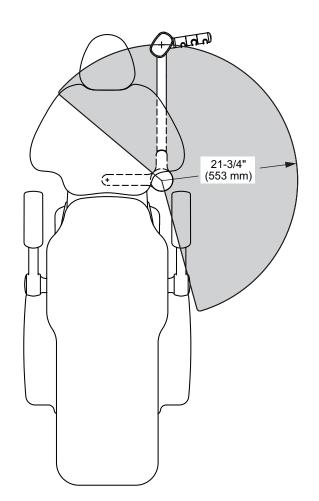


## A-dec 551sta/551 Assistant's Instrumentation – Short Arm



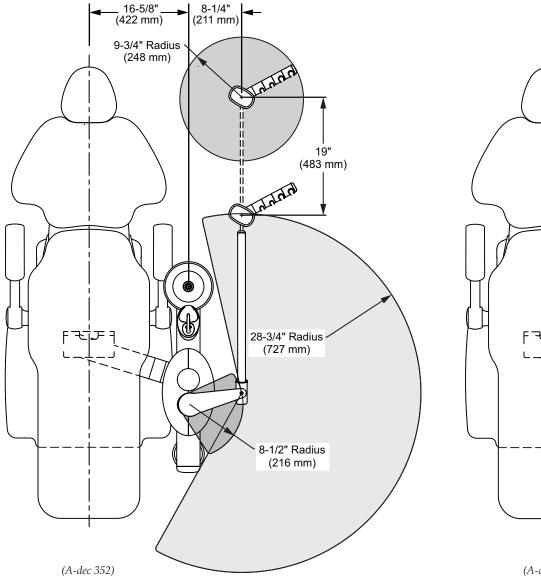
## A-dec 351 Assistant's Instrumentation

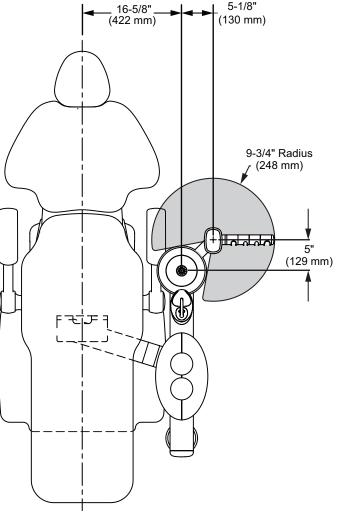




## A-dec 352/353 Assistant's Instrumentation on A-dec 362 Support Center

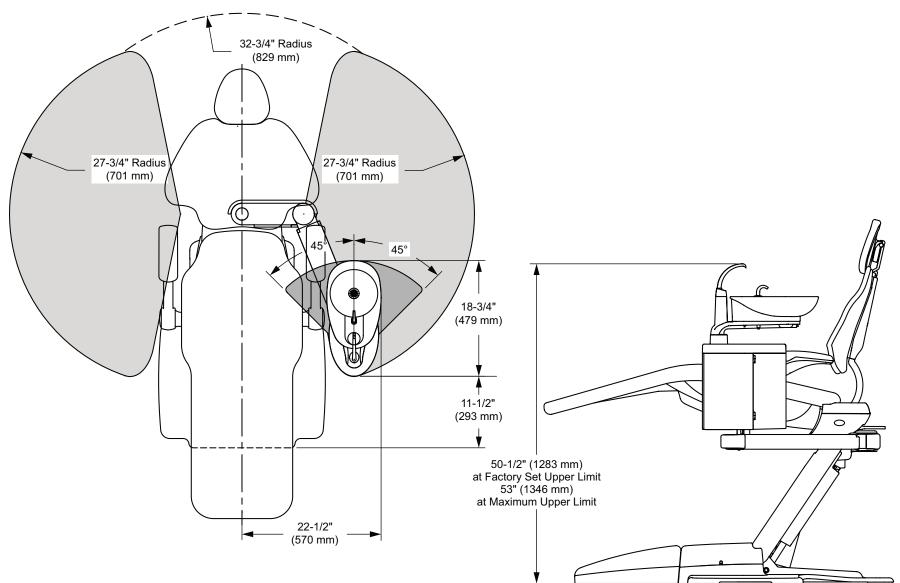
#### **Plan View with Elevation**





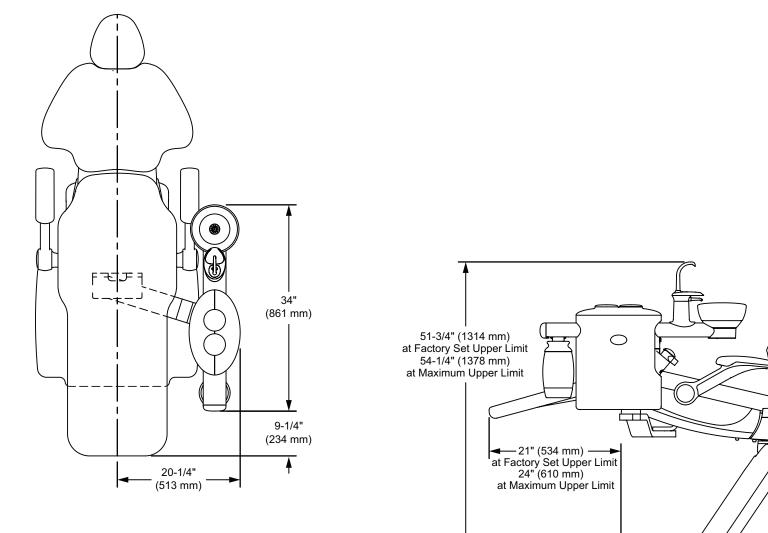
5-1/8"

## A-dec 461 Cuspidor with Support Center

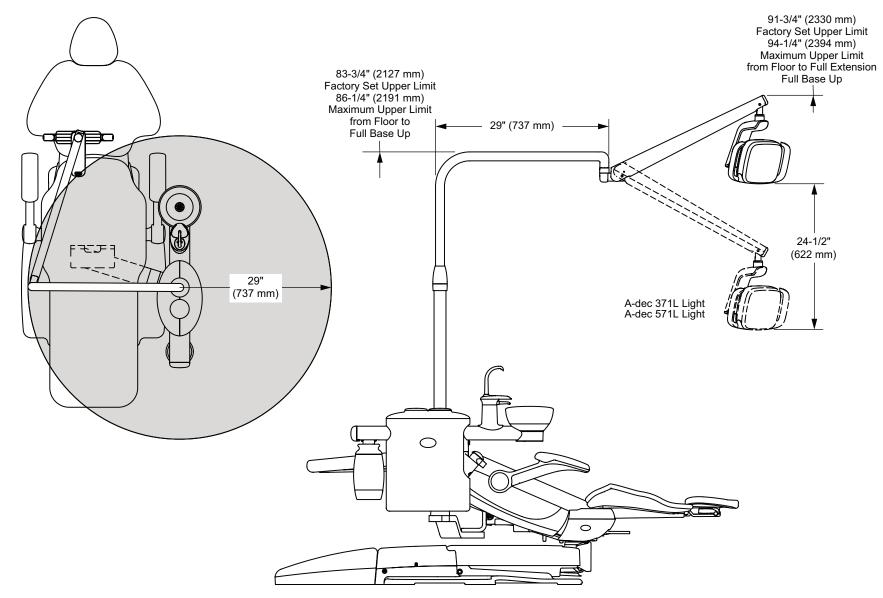


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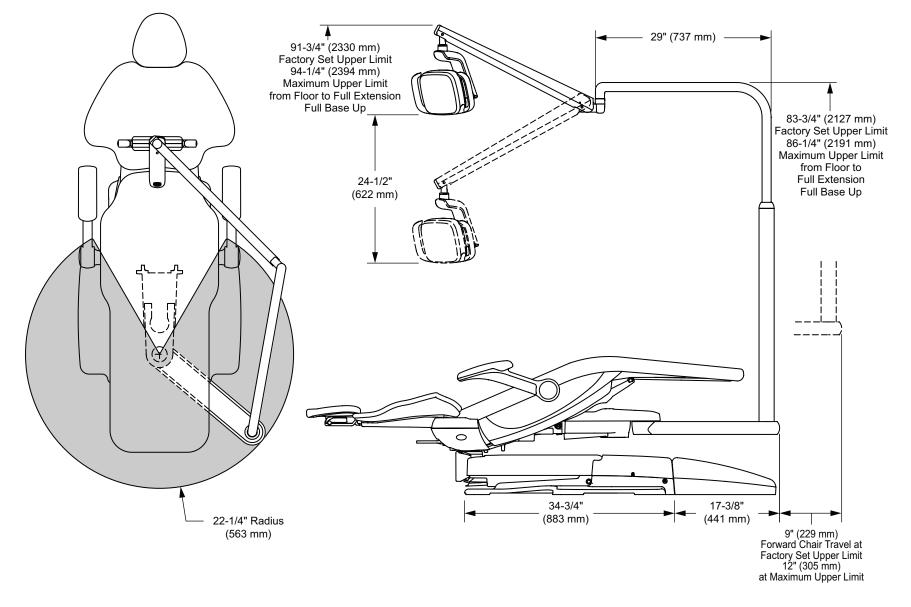
## A-dec 362 Support Center with Cuspidor



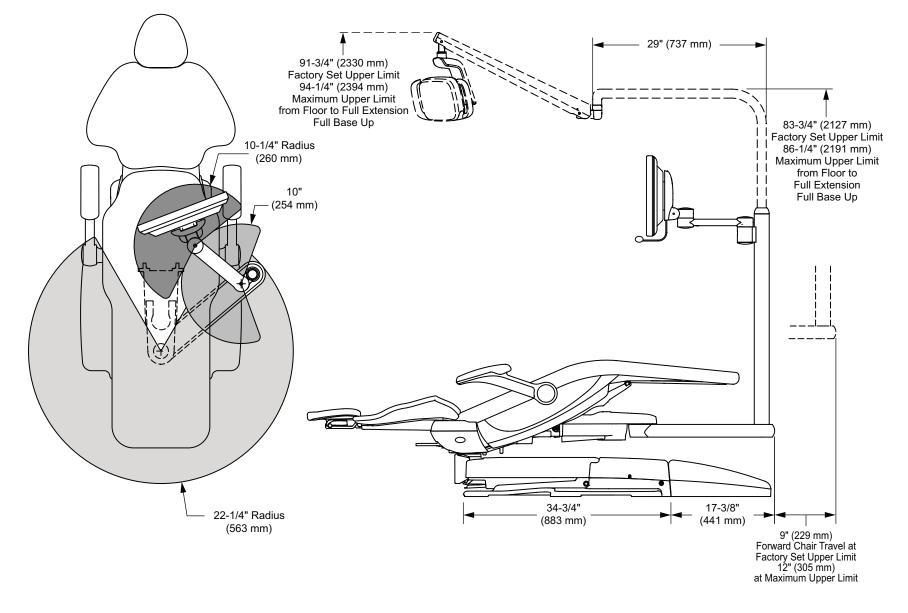
## A-dec 571L/371 Dental Light on A-dec 362 Support Center



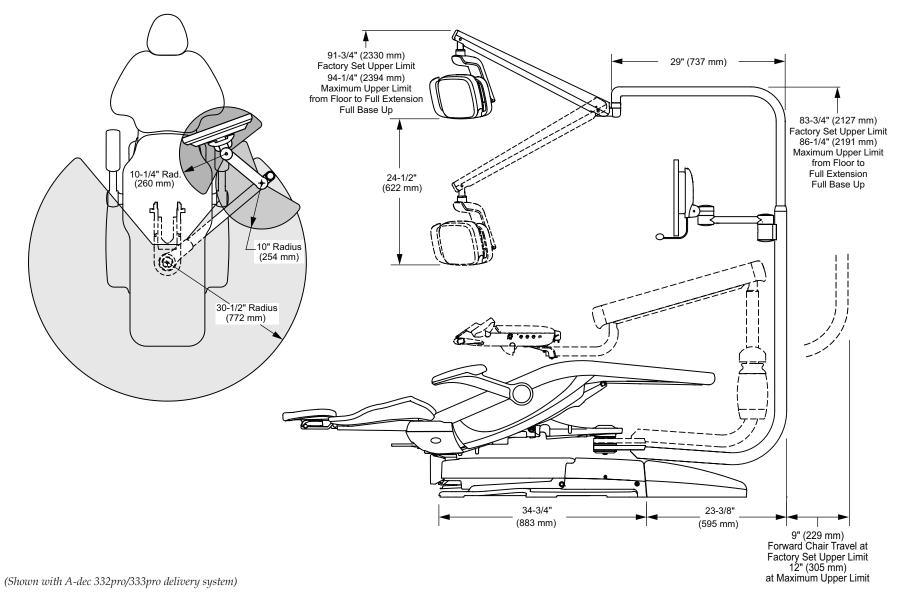
## A-dec 572L Dental Light



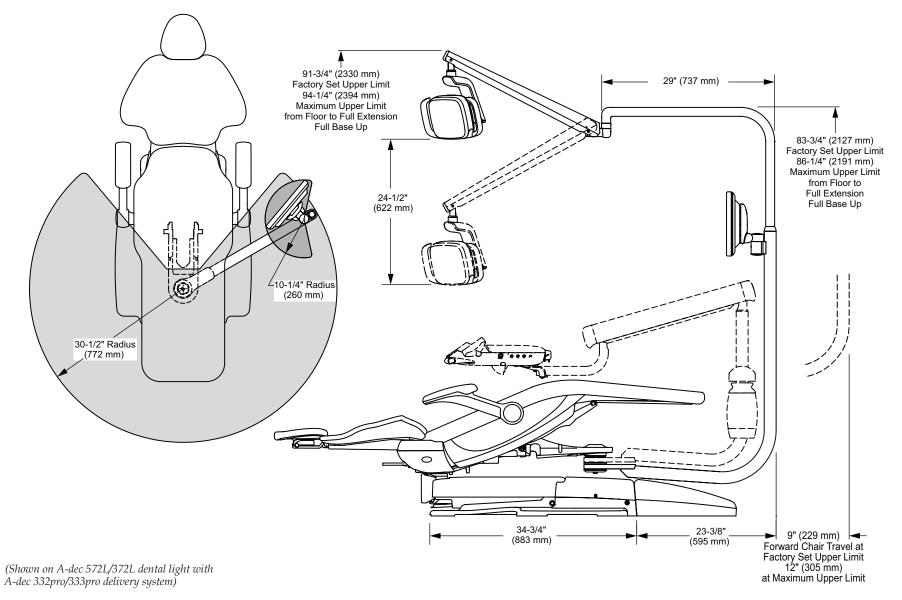
### A-dec 482 Monitor Mount on A-dec 572L Dental Light



### A-dec 482 Monitor Mount on A-dec 572L Dental Light with A-dec 300 Pro System

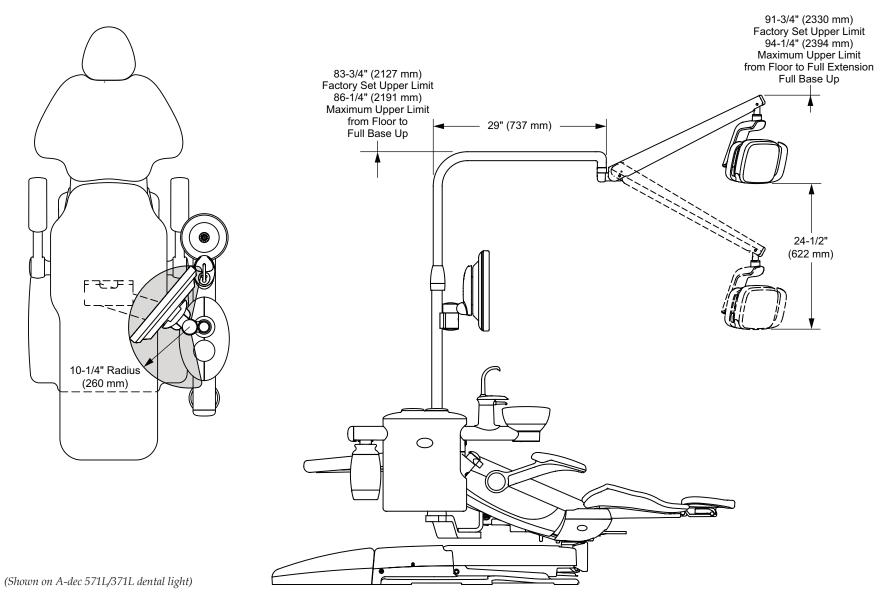


### A-dec 381 Monitor Mount on A-dec Dental Light with A-dec 300 Pro System



### A-dec 381 Monitor Mount on A-dec Dental Light and 362 Support Center

#### **Plan View with Elevation**



86.0753.00 Rev F



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