

# A-dec Inspire® 397 Specialty Cabinet and Related Modules

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A-dec Inspire 397 Specialty Cabinet and  
A-dec 341sp Specialty Delivery System  
*(with optional A-dec 578L Dental Light/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 [www.a-dec.com](http://www.a-dec.com).



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## 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 [www.a-dec.com](http://www.a-dec.com).

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

Models	Versions	Description
341sp	n/a	Delivery System
397	A	Dental Furniture

\* Equipment shown in this document may include optional features or accessories. Some products, versions, and options in this document may not be available in certain regions.

## Things to Note

As you use this document to guide you through the technical specifications, note the following:

- Estimated shipping weights in this document are for standard A-dec Inspire products. Modifications or customizations may affect these specifications.
- Local regulations provide that licensed plumbers and electricians shall install utilities.
- All utilities must conform to the National Fire Protection Association (NFPA), local fire codes, and local regulations, as applicable.
- Utilities must be plumbed through the base of the cabinet. See the Mini-Templates section for recommended plumbing locations.
- The drawings provided in this guide are for reference only. They are not drawn to scale.

### Intended Audience and Use of This Document

This guide is for contractors, plumbers, electricians, carpenters, designers, architects, and others who are involved in designing and remodeling dental treatment rooms that accommodate A-dec Inspire products.

### Disclaimer

This written material is not intended to be, and should not be, used as a substitute for compliance with local, state, federal code, and Americans with Disabilities Act. It is the responsibility of the user to integrate the A-dec equipment specifications presented herein with the regulations and codes overseen by local planning and inspection authorities.

### Mini-Templates

These illustrations include the following target symbol:



Indicates datum points for end of countertop or extent of cabinet.

### Other Sources of Information

In addition to this document, A-dec provides a number of other materials that support the installation of A-dec Inspire dental furniture.

#### A-dec 2D CAD Blocks and 3D Models –

A-dec provides 2D CAD blocks (DWG format) and 3D CAD models (DWG and RFA formats) of A-dec products. Authorized A-dec dealer personnel can download these CAD assets on the A-dec Partner Resources website (<https://partnerresources.a-dec.com>) under “Planning Resources.”

#### OrderNet Quote Packet –

When selecting Project for the Visual Content type, the quote packet provides the specific key dimensions and configuration details for the product(s) that will be delivered.

#### Full-Size Templates –

The full-size templates provide accurate footprints for the A-dec Inspire product line. They’re designed to assist you in spotting and positioning A-dec products whether on the construction job site or in a completed treatment room. They provide plumbing and utility locations, mounting clip positions, metal base structure, and critical dimensions. Authorized A-dec dealer personnel can order templates using the form available on the A-dec Partner Resources website (<https://partnerresources.a-dec.com>) under “Planning Resources > Templates.”

#### Installation Guides –

The installation guides provide instructions on how to install A-dec Inspire dental furniture. A-dec installation guides are available in the Resource Center at <https://www.a-dec.com/resource-center>.

## Pre-Installation Notes and Cautions



**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.



**CAUTION** Consult a licensed professional, e.g., a structural or architectural engineer, for mounting to metal studs or masonry walls.



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



**NOTE** Use only solid-top, carpeted dollies to move A-dec Inspire dental furniture. For product recommendations, contact A-dec Customer Service.

## Shipping Weights

Product/Box	Estimated Shipping Weight*
A-dec Inspire 397 Specialty Cabinet with A-dec 341sp Specialty Delivery System	325 lb (147 kg)
A-dec 378L/578L Dental Light and 381/482 Monitor Mount	46 lb (21 kg)

\* Estimated weights represent the maximum total weight of all items listed.

## Documentation References

Document Title	Part Number
<b>Template</b>	
<i>A-dec Inspire 397 Specialty Cabinet and Related Modules Template</i>	86.1083.00
<b>Installation Guides</b>	
<i>A-dec 482/381 Monitor Mount Installation Guide</i>	86.0410.00
<i>A-dec Inspire 397 Specialty Cabinet Installation Guide</i>	86.1084.00
<i>A-dec 341sp Specialty Delivery System Installation Guide</i>	86.1089.00
<i>A-dec 378L/578L Specialty Dental Light Installation Guide</i>	86.1090.00
<i>A-dec ICV on A-dec Inspire 397 or Preference Cabinets Installation Guide</i>	86.0025.00

## Utility Requirements

### Utility Specifications

Utility	Rough-In	Finish	Requirements
Air	Protrude 3" (76 mm))	1/2" (13 mm) compression to protrude 1 - 2" (25 - 50 mm)	<ul style="list-style-type: none"> <li>Right-angle manual shutoff valve with 3/8" compression outlet supplied and installed by the contractor.</li> <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> <li>Flush lines prior to making connections to dental equipment.</li> </ul>
Central vacuum	Protrude 3" (76 mm)	1" PVC pipe (1.315" OD) to protrude 2" (50 mm)	<ul style="list-style-type: none"> <li>Wet systems: 10 ± 2 inches of Hg (34 ± 7 kPa), 9 scfm (255 SL/min) minimum.</li> <li>Dry/semi-dry systems: 4.5 ± 1 inches of Hg (16 ± 3.5 kPa), 12 scfm (340 SL/min) minimum.</li> </ul>
Electrical	1/2" conduit to protrude 3" (76 mm)  Low voltage conduit (2" diameter)	1/2" (13 mm) conduit to protrude 1" (25 mm)	<ul style="list-style-type: none"> <li>Conduit, electrical box, and power receptacle supplied by A-dec and installed by the contractor (wired as per code).</li> <li>Electrical box should be oriented horizontally, with the top no higher than 5" (127 mm) above the finished floor.</li> <li>See the "Electrical Ratings" table for voltage and amperage ratings.</li> </ul>

## Utility Requirements *(continued)*

### Head Loss with Respect to Flow

The following table includes information about high volume evacuator (HVE) and saliva ejector (SE) head loss with respect to flow for A-dec 341sp assistant's instrumentation.

Tubing and HVE/SE	90 NL/min (3.18 SCFM)	150 NL/min (5.30 SCFM)	250 NL/min (8.83 SCFM)
Long Tip 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.

# Electrical Specifications and Wiring

## Electrical Ratings

Power	Required Electrical Supply
120 Volt	110-120 VAC, 50-60 Hz, 10 Amps minimum



**NOTE** Specifications are subject to change without notice. Requirements may vary depending on your location. For more information, contact your authorized A-dec dealer.



**IMPORTANT** For additional electrical specifications, identification of symbols, and other regulatory requirements, see the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00) available in the Resource Center at [www.a-dec.com](http://www.a-dec.com).





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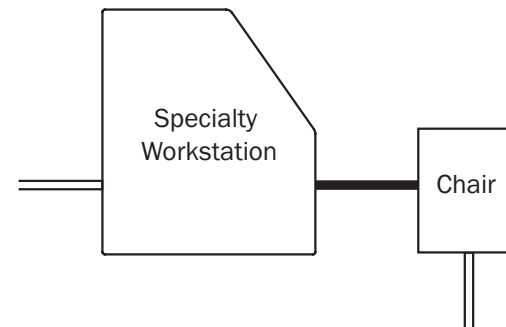
## Electrical Rough-In

A contractor should supply the flex conduit from the floor stub up to the quad/junction box. The conduit must protrude 3" (76 mm) at rough-in and 1" from the finished floor. Use 1/2" flex conduit, as required, to make connection to the junction box. Wire as per local and national electrical codes.

The low voltage conduit is used for routing data lines and touchpad wires, not for line voltage.

## Electrical Rough-In Operatory Example

-  = Line Voltage Conduit
-  = Low Voltage Conduit (2" diameter)



## Electrical Specifications and Wiring *(continued)*

### Electrical Connection to Mains

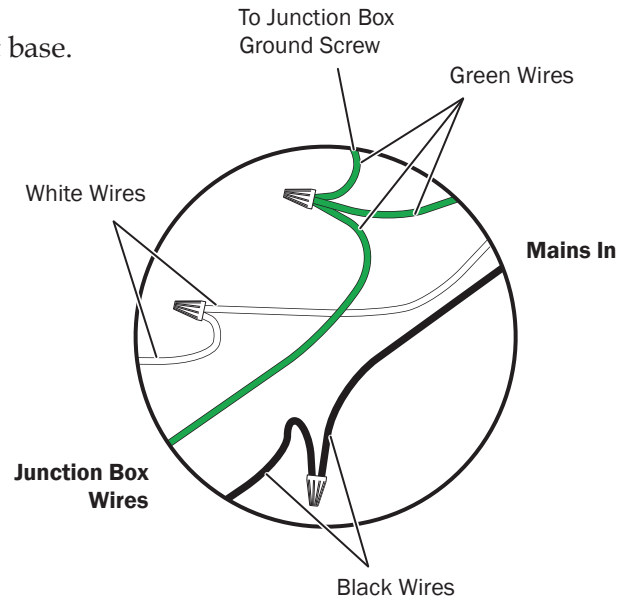
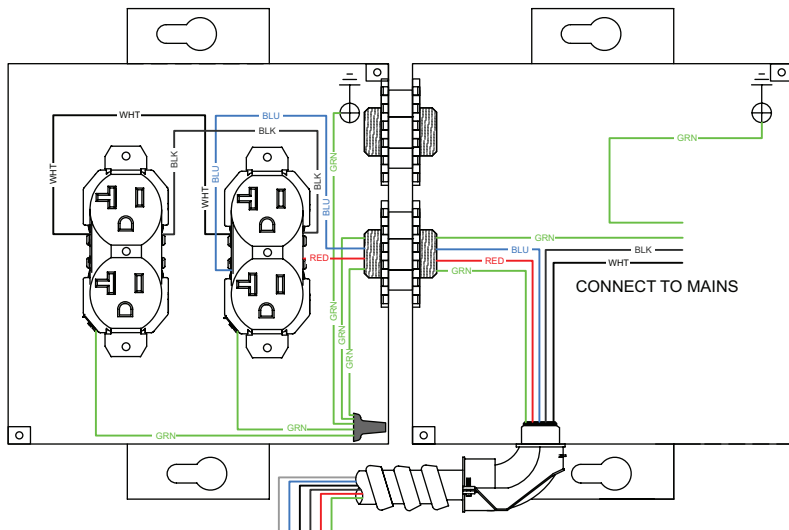


**CAUTION** Local regulation requires licensed electricians to install electrical utilities. All electrical utilities must conform to prevailing local codes. Final electrical connections will be required after the equipment is placed.



**NOTE** Connect incoming power to a 20 A circuit breaker.

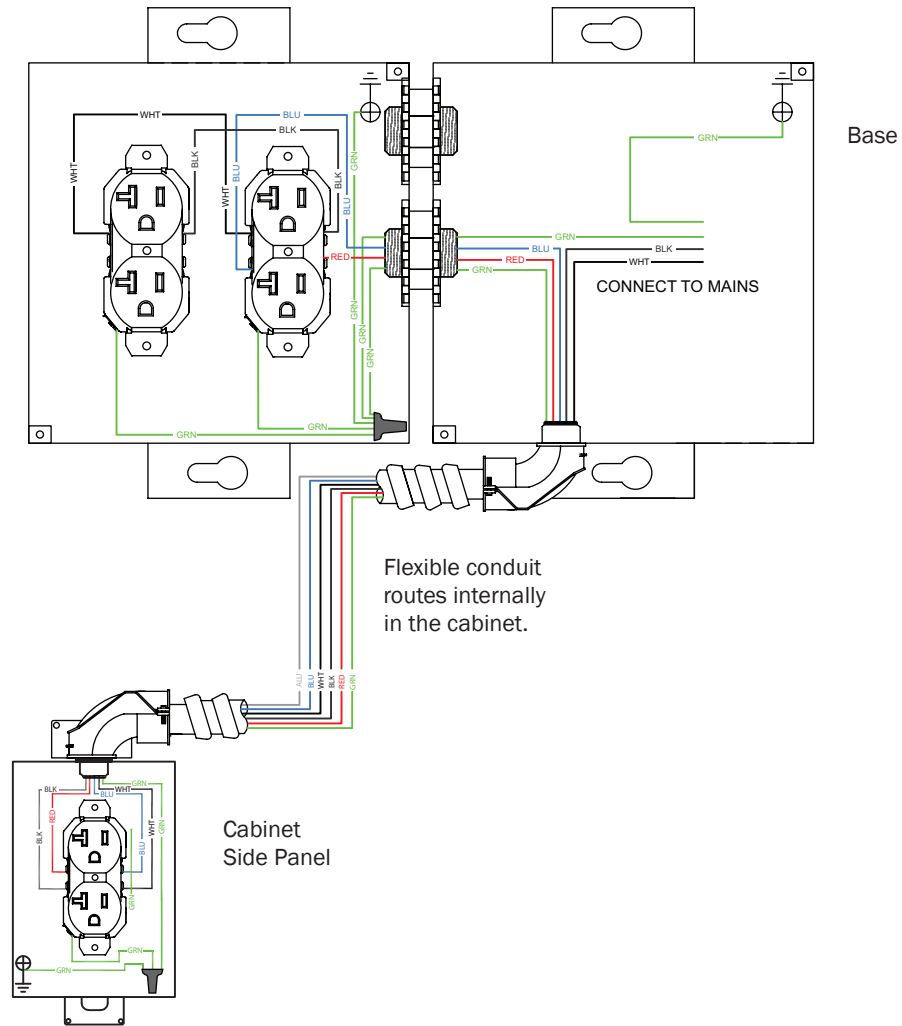
Mains power is connected at the junction box located in the cabinet base. See the example below:





## Electrical Specifications and Wiring (continued)

### Wiring Diagram

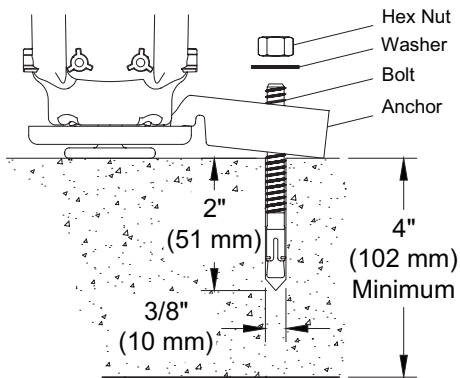


## Structural Requirements



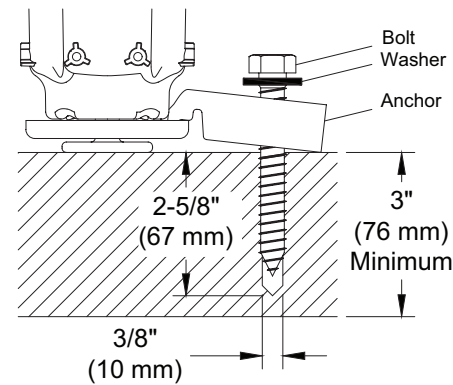
**NOTE** Anchoring requirements are determined by local seismic and structural codes and vary depending on the cabinet model and configuration. See the following section and the Plan View/Mini-Template section for potential anchoring locations for specific module configurations.

### Floor Anchoring – Concrete Floors



**NOTE** Anchors are only approved for use in slabs at least 4" (102 mm) thick. If concrete does not meet minimum requirements, consult with a licensed engineer for alternate anchors.

### Floor Anchoring – Non-Concrete Floors



**NOTE** Anchors are only approved for use in wood flooring at least 3" (76 mm) thick. The lag screw must exceed a minimum embedment depth of 2-5/8" (67 mm). If the flooring material does not meet minimum requirements, consult with a licensed contractor about adding reinforcements.

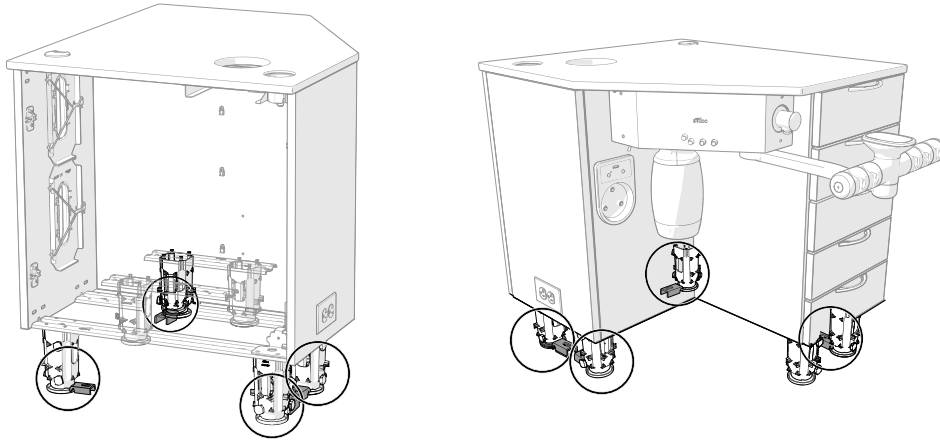


**NOTE** Some local seismic or structural codes may require additional anchoring, which may, in turn, require additional wood flooring support. Contact A-dec Customer Service for more information.

## Structural Requirements *(continued)*

### Anchoring Locations

For all 397 configurations, anchors will be placed on four of the cabinet corners, as shown below.



## Plan Views and Dimensions

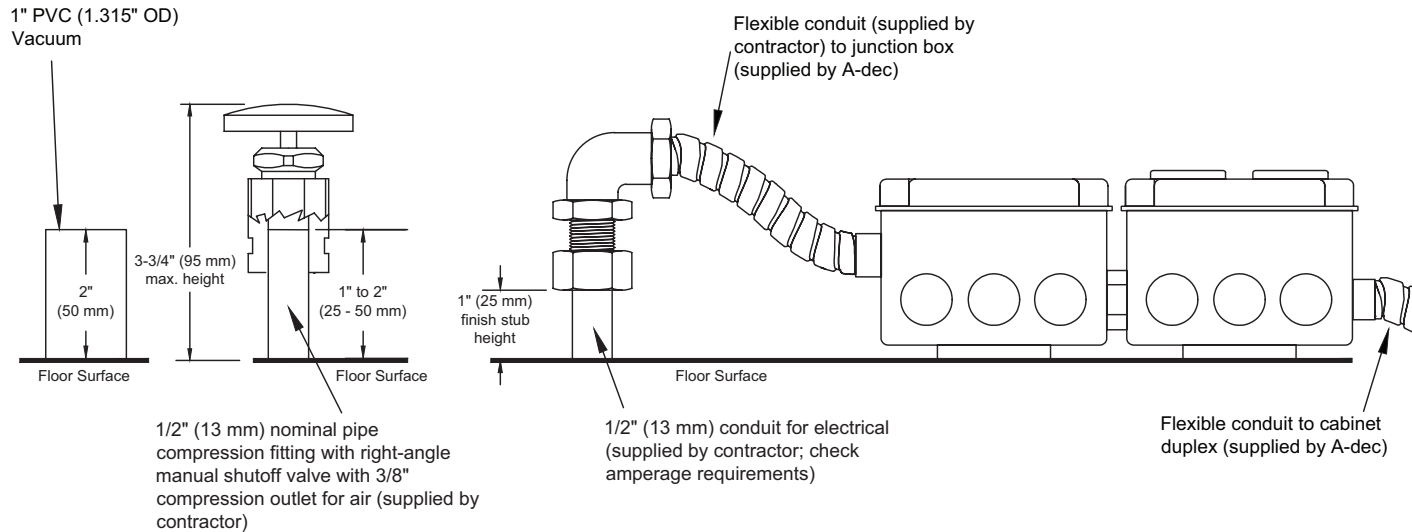


**NOTE** The dimensional drawings in this section are not to scale and are for reference only. For complete accuracy, use the appropriate full-sized template.

## Utility Placement and Elevation

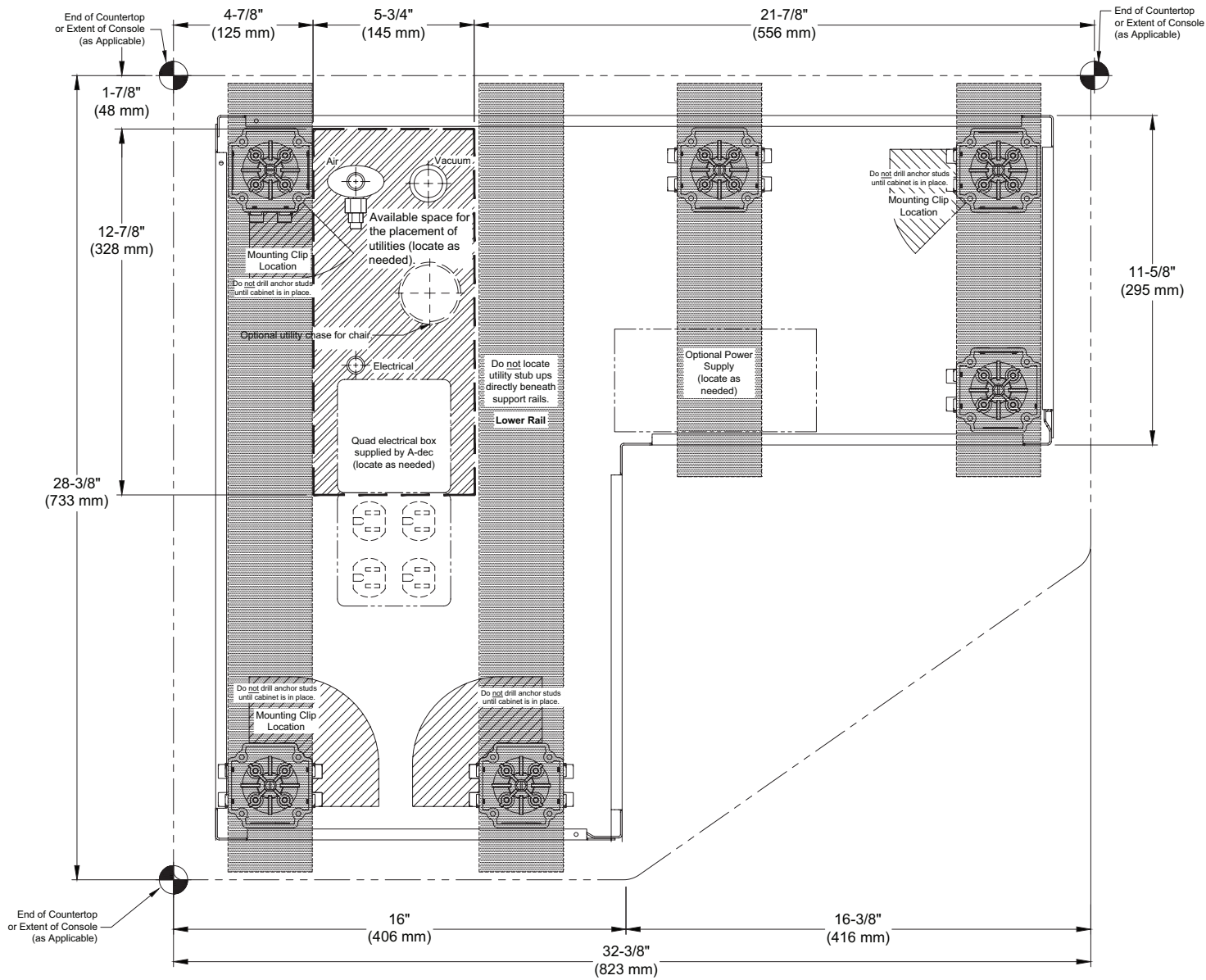


**CAUTION** Due to specific plumbing elevation restrictions, the height and placement of utilities under the cabinet can affect the ability to close the false bottom panel. Failure to provide adequate space will prevent proper installation of the cabinet. See the elevations provide here and reference the appropriate full-size template, which includes the required space constraints.

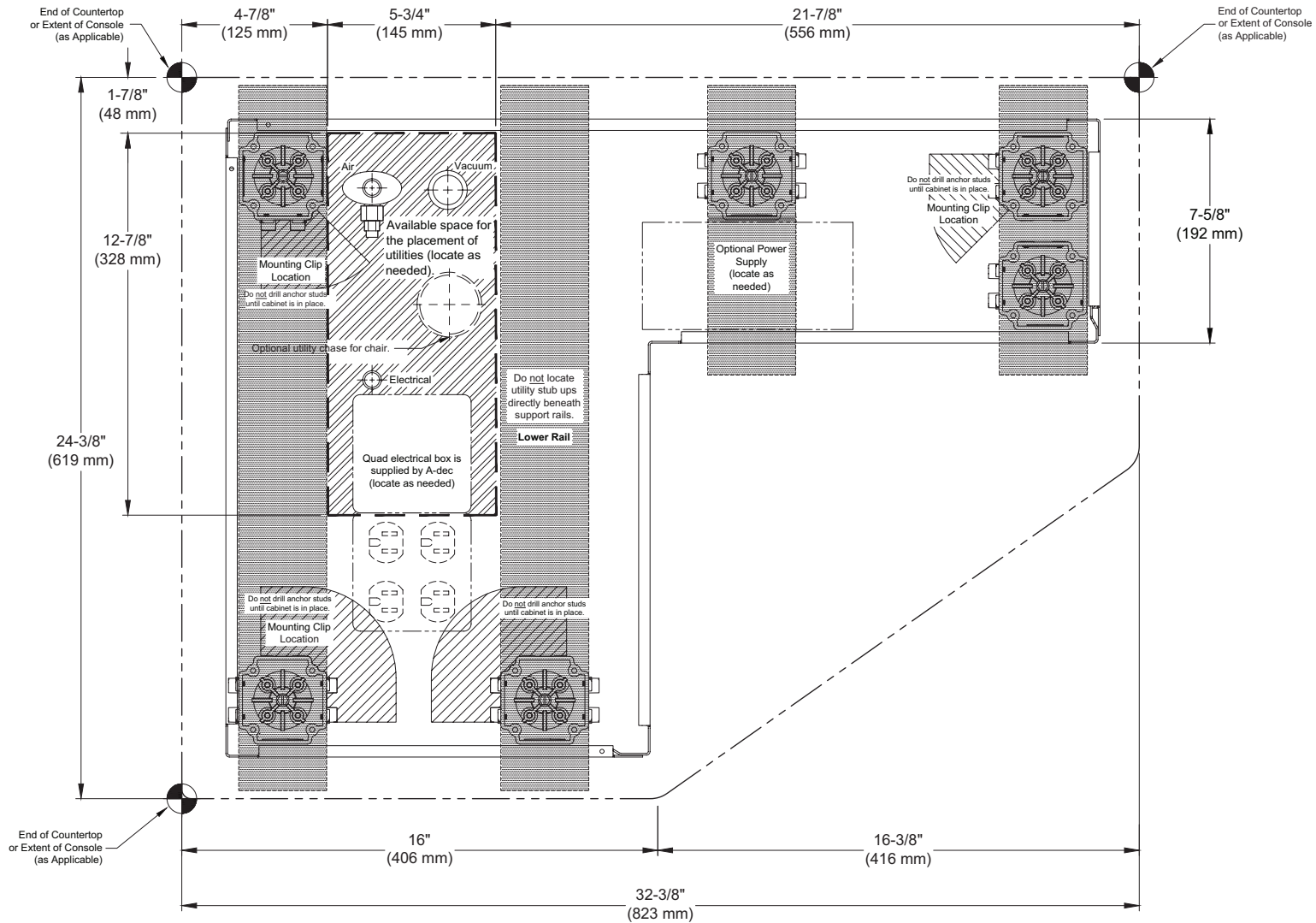


**PLEASE NOTE: This drawing is for reference purposes ONLY. It is NOT TO SCALE.**

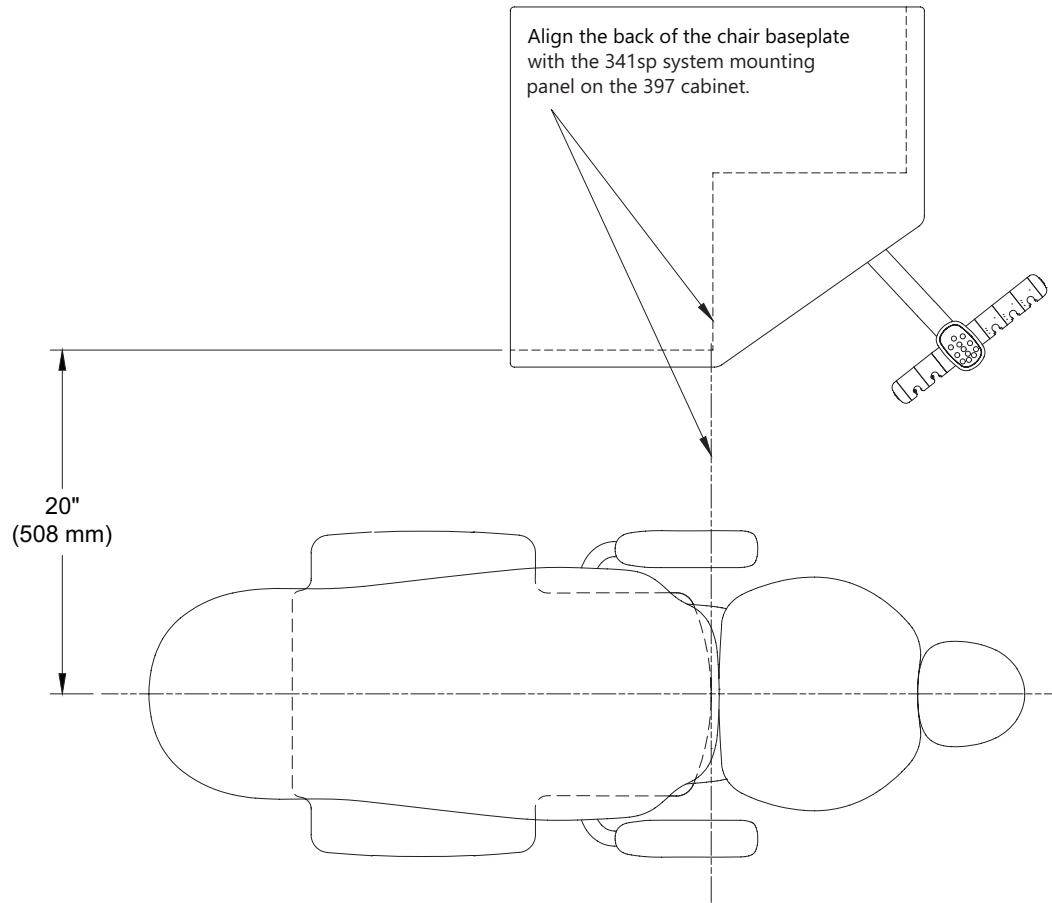
### 397 - 28" Cabinet - Mini-Template



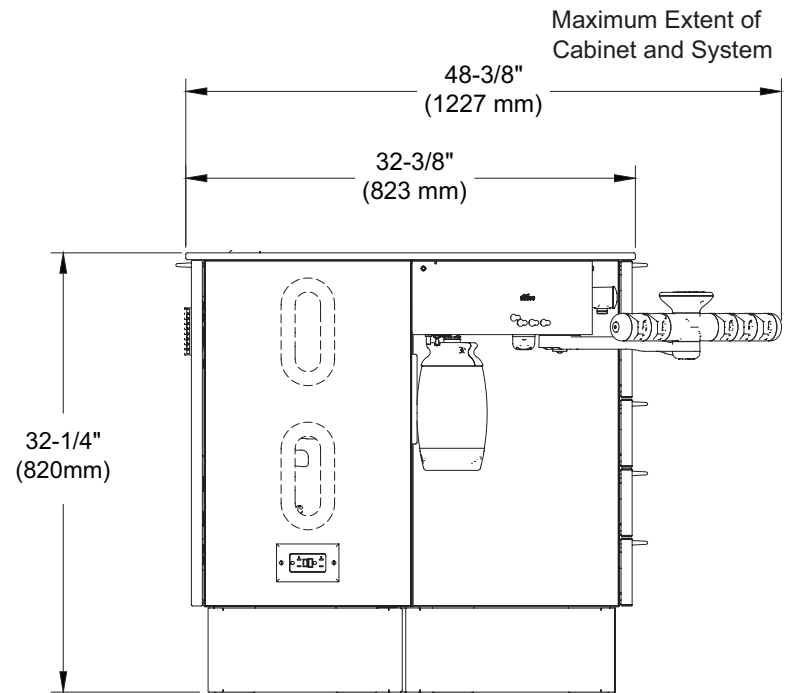
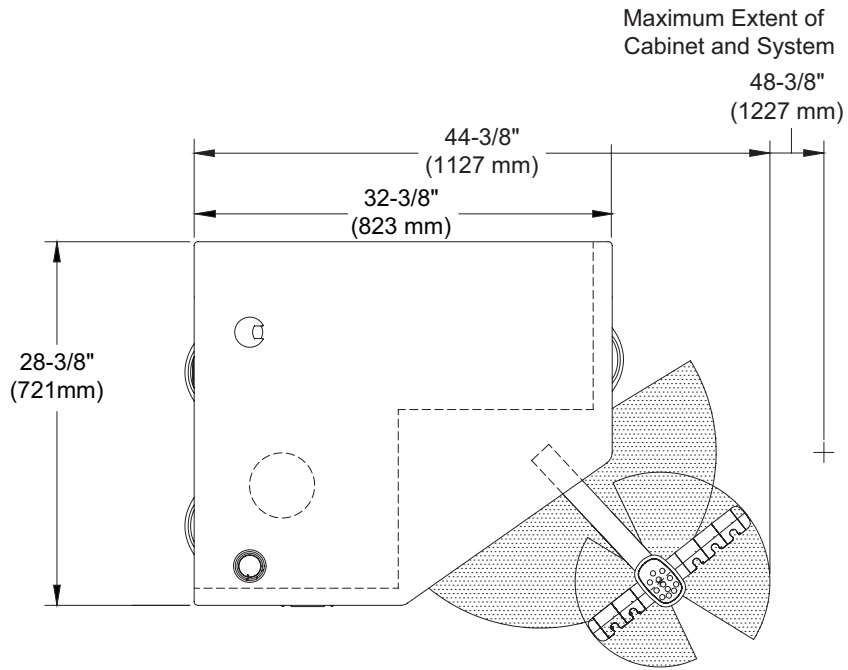
### 397 - 24" Cabinet - Mini-Template



### 397 Cabinet with 341sp System – Cabinet-to-Chair Plan View

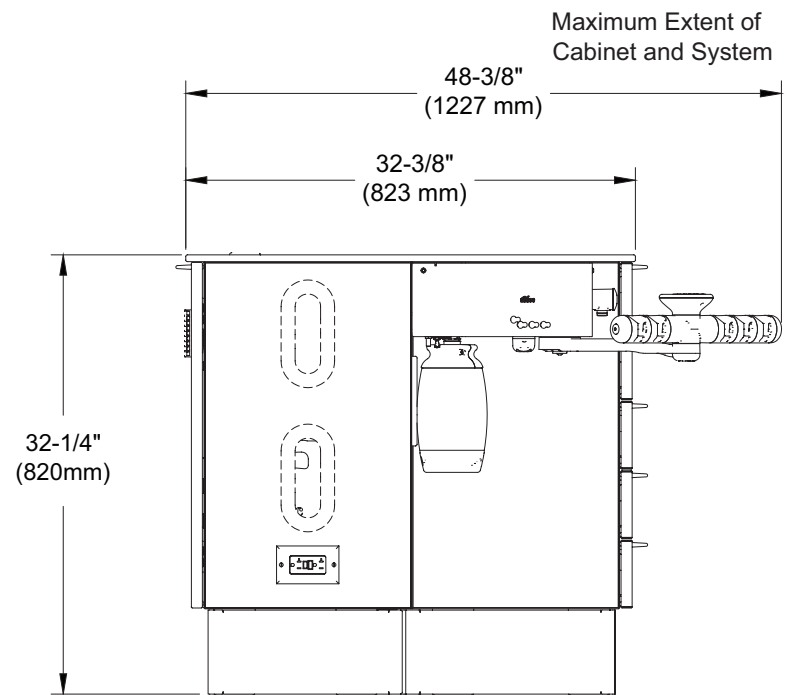
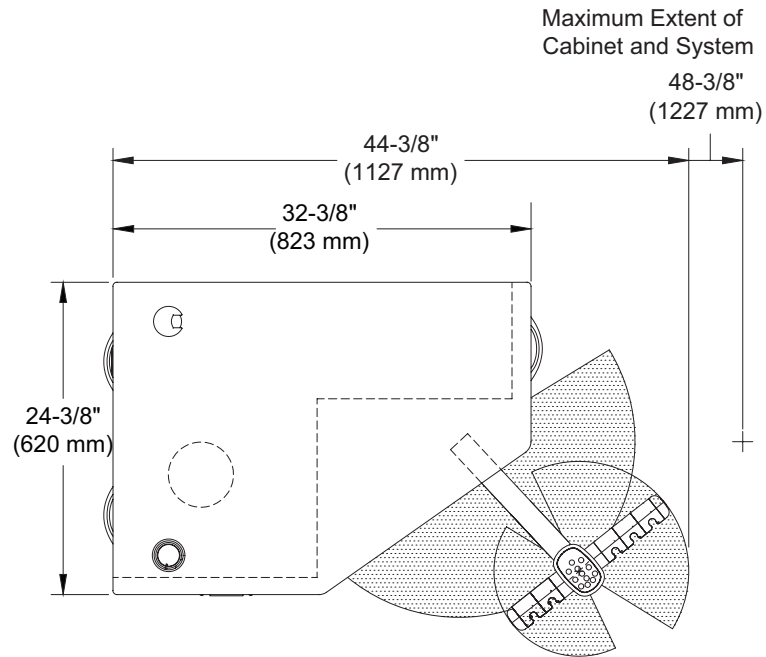


### 397 - 28" Cabinet with 341sp System – Plan View with Elevation

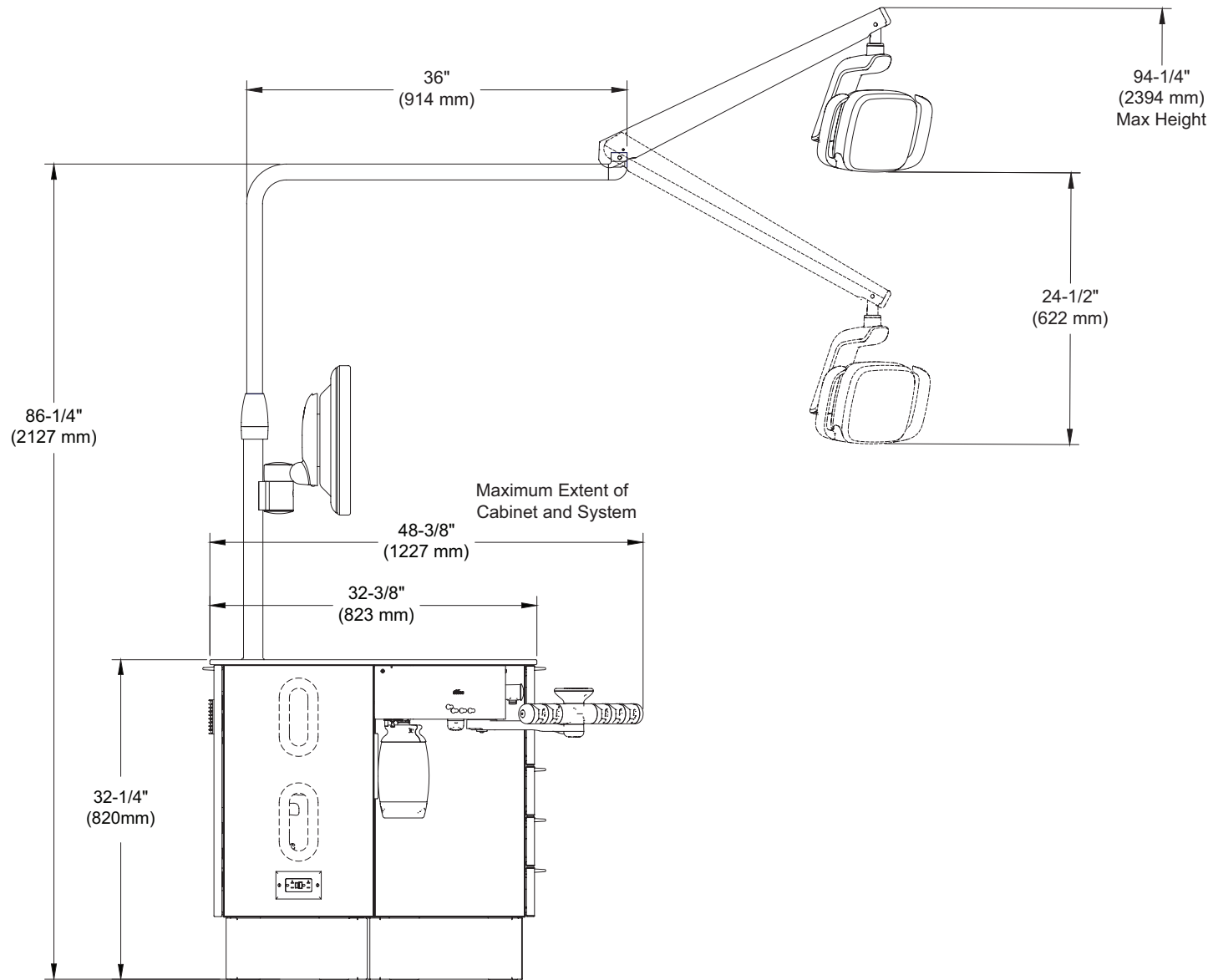




### 397 - 24" Cabinet with 341sp System – Plan View with Elevation



### 397 Cabinet with 341sp System, Dental Light, and Monitor Mount - Elevation





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