

A-dec Submittal Packet

DENTAL FURNITURE AND EQUIPMENT COORDINATION DOCUMENTS

*Cherokee Nation - Stilwell Clinic
Stilwell, OK*

Submittal Packet Contents

UTILITIES COORDINATION MATRIX
FLOOR PLANS
DENTAL FURNITURE SHOP DRAWINGS
TEMPLATES

ENTER CUSTOM CONTENT HERE



YOUR REPRESENTATIVE:

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South Central School & Government Accounts

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DATE: 9/10/18

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Newberg, OR 97132

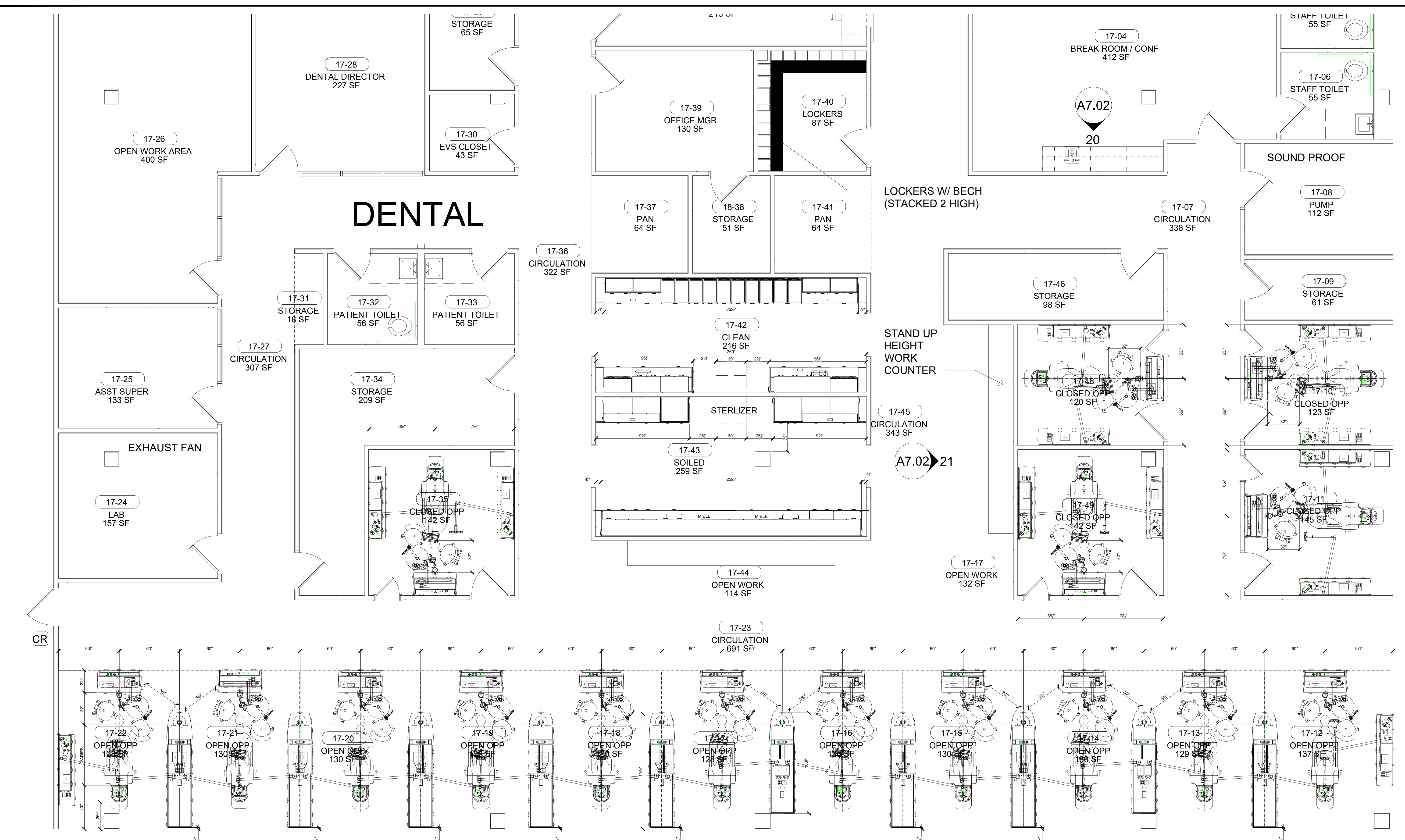
Customer Service: 800.547.1883
www.a-dec.com

A-DEC DENTAL TREATMENT ROOM EQUIPMENT AND DENTAL FURNITURE COORDINATION REFERENCE

Cherokee Nation - Stilwell Clinic	- Stilwell, OK	DATE:	9/10/18
Craig Nugen			
South Central School & Government Accounts			
Phone: 512-516-2147			
Fax: 503.537.2702			
E-mail: craig.nugen@a-dec.com			

LABEL	Item Description	JSN	Log Cat	Qty	AIR	VAC	DCW	DHW	DRAIN	PWR 110 VAC	VGA/HDMI	CONDUIT RACEWAY	MED GAS	STRUCTURAL	NOTES
	511 DENTAL CHAIR	D3320		16	✓	✓				✓Q		2"			
	541 DUO DR/ASST DEL SYS	D8250		16	✓	✓									
	575L DENTAL LIGHT, WALL MNT	D6165		6						✓W		1"		WALL	Backing needed
	585 MONITOR MNT, WALL	UNKN		6						✓D		1"		WALL	Backing needed
	591.42 12:00 CONSOLE	D0670		16	✓	✓				✓W		3 x 2"			
	592.100 CENTRAL CONSOLE, FULL	D0675		2	✓		✓	✓	✓	✓W		2 x 2"			
	592.114 CENTRAL CONSOLE, FULL	D0675		2	✓		✓	✓	✓	✓W		2 x 2"			
	592.114 CENTRAL CONSOLE, FULL	D0675		6	✓		✓	✓	✓	✓2 x W		2 x 2"			X-ray requires dedicated circuit
	593.70 SIDE CONSOLE, FULL, ST	D0680		6	✓		✓	✓	✓			2"			
	593.70 SIDE CONSOLE, LWR, S	D0680		6	✓		✓	✓	✓			2"			
	595.56 DISP/STORAGE, WALL MNT	UNKN		7										WALL	Backing needed
INSERT CUSTOM PRODUCTS															

UTILITIES KEY	TERMINATION	NOTES
AIR	Dental Air	1/2" Copper Pipe, 90° Stop Valve, 3/8" Comp. (GC Provided/Installed)
VAC	Dental Vacuum	5/8" OD Copper Pipe, capped
DCW	Domestic Cold Water	1/2" Copper Pipe, 90° Stop Valve, 3/8" Comp. (GC Provided/Installed)
DHW	Domestic Hot Water	1/2" Copper Pipe, 90° Stop Valve, 3/8" Comp. (GC Provided/Installed)
CWS	Central Water System	1/2" Copper Pipe, 90° Stop Valve, 3/8" Comp. (GC Provided/Installed)
DRAIN	Sink Drain	Sink Tail-Piece and P-Trap, Contractor-Provided/Installed
PWR		
D	Duplex Receptacle, 20A, 110 VAC, GFCI per code	As specified
Q	Quad Receptacle, 20A, 110 VAC, GFCI per code	As specified
W	Whip, 20A 110 VAC Circuit, GFCI per code	Provide 4' whip. Upon installation, GC to hardwire whip to jct box supplied with product. Shield whip with flex MC
X-RAY	Per mfg.	
MED GAS	Per mfg.	



PRELIMINARY FLOOR PLAN

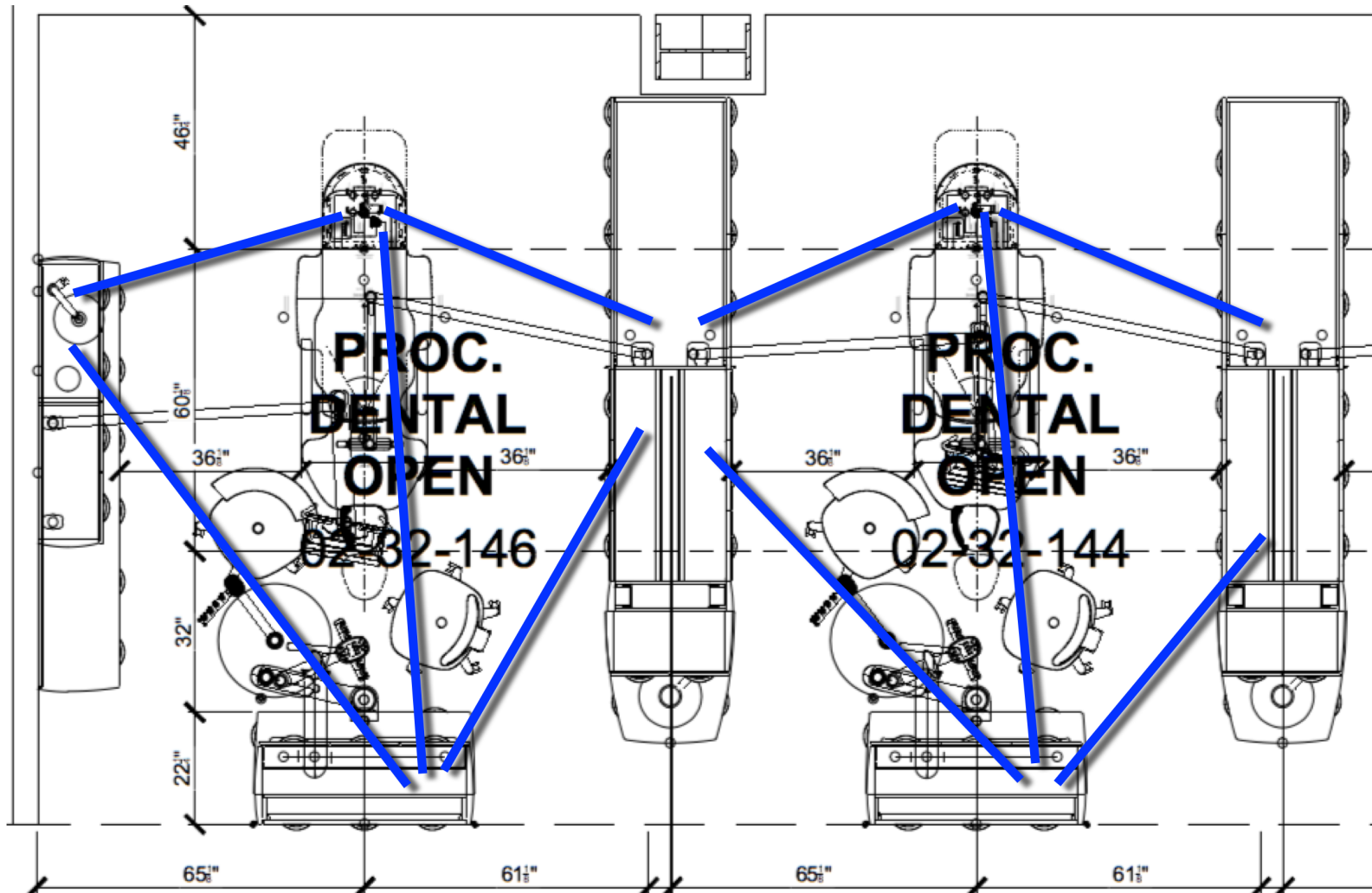
DATE: 9-10-18
DRAWN BY: PAV
CHECKED: MCS

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Rev B

SHEET NO.
1 of 1

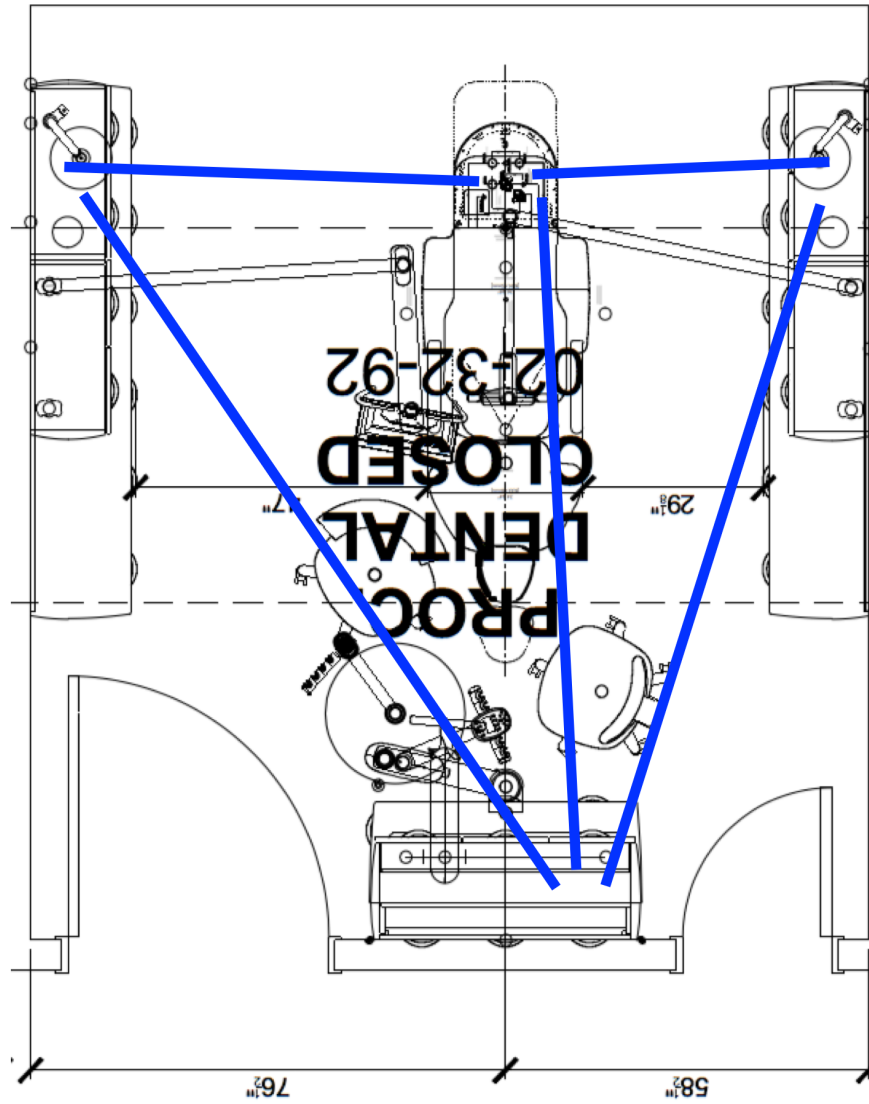
Open Bays with Centrals



FLOOR DATA CHASE LOCATIONS (2" ID Conduit)



Closed Rooms with Side Consoles



FLOOR DATA CHASE LOCATIONS ~~(2-30-12)~~

Customer Name: Direct US PHS - Tahlequah
Reference: Hastings Outpatient Clinic - Equipment and
Quote #: Inspire
WQAGR000021-1



Visual Document

Line	Item	Label
9	591	Pass-Thru



Hall View



Treatment Room



Hinge Orientation

This written material is not intended to be, and should not be, used as a substitute for the 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. A-dec, Inc. shall not be held liable for any errors contained herein or any consequential or other damages concerning, the furnishings, performance or use this material. The information in this document is subject to change without notice. If you find any problems with this document, please report them to us in writing. V797D-70087, exp. 02/09/2022

Customer Name: Direct US PHS - Tahlequah
Reference: Hastings Outpatient Clinic - Equipment and
Quote #: Inspire
WQAGR000021-1



Visual Document

Line	Item	Label
10	591	Non Pass-Thru



Hall View



Treatment Room



Hinge Orientation

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Visual Document

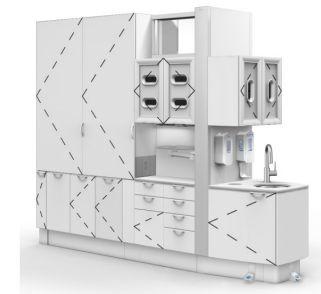
Line	Item	Label
11	592	X-ray Storage



A Side



B Side



Hinge Orientation

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Visual Document

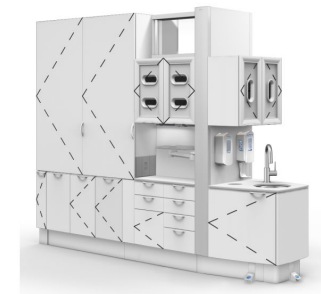
Line	Item	Label
12	592	Split-Storage



A Side



B Side



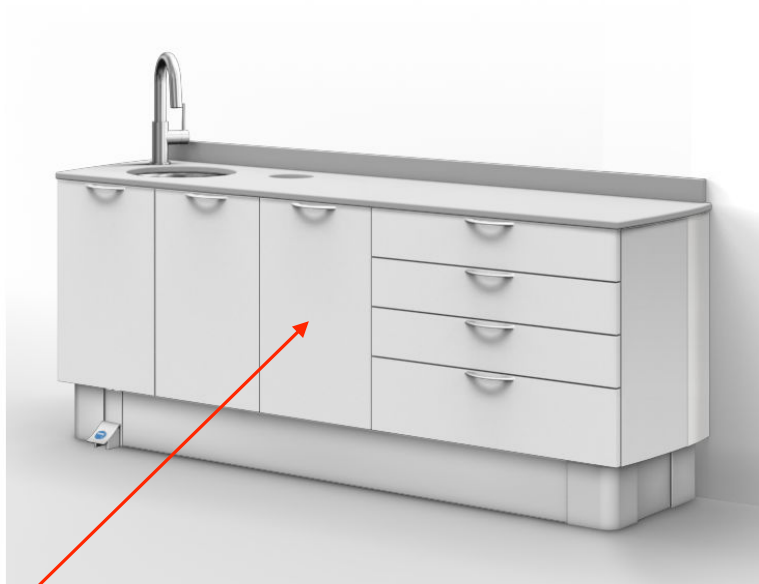
Hinge Orientation

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Reference: Hastings Outpatient Clinic - Equipment and
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Visual Document

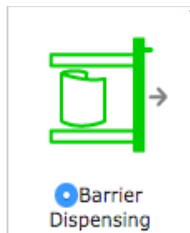
Line	Item	Label
13	593	Left Side Sink - Barrier



Treatment Room



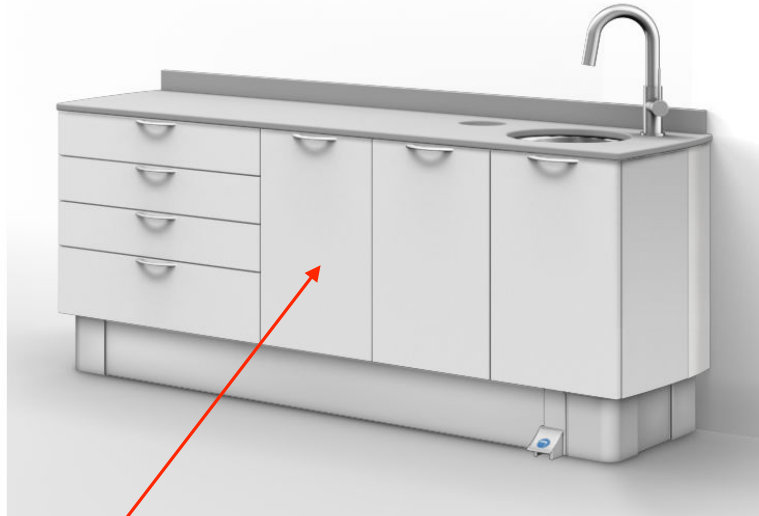
Hinge Orientation



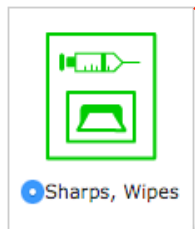
Customer Name: Direct US PHS - Tahlequah
Reference: Hastings Outpatient Clinic - Equipment and
Quote #: Inspire
WQAGR000021-1

Visual Document

Line	Item	Label
14	593	Right Side sink -Sharps



Treatment Room



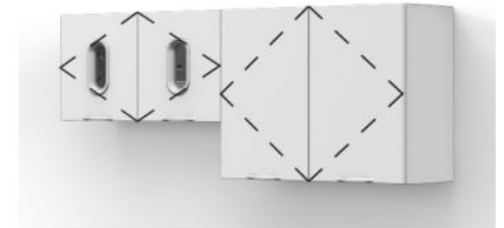
Hinge Orientation

Customer Name: Direct US PHS - Tahlequah
Reference: Hastings Outpatient Clinic - Equipment and
Quote #: Inspire
WQAGR000021-1



Visual Document

Line	Item	Label
15	595	



Hinge Orientation

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Customer Name: Direct US PHS - Tahlequah
Reference: Hastings Outpatient Clinic - Equipment and
Quote #: Inspire
WQAGR000021-1



Visual Document

Line	Item	Label
16	505	



Treatment Room

Hinge Orientation

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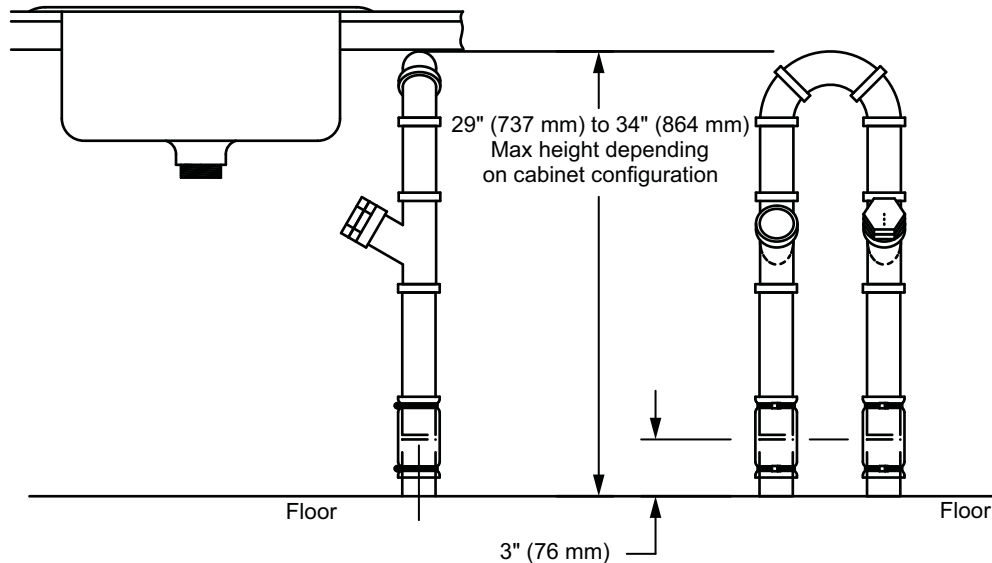
Utility Specifications

Specifications Table

Utility	Rough-In	Finish	Requirements
Air	Protrude 3" (76 mm)	Protrude 1" (25.4 mm) for 3/8" compression	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). Flush lines prior to making connections to dental equipment.
Water	Protrude 3" (76 mm)	Protrude 1" (25.4 mm) for 3/8" compression	60 ± 20 psi (410 ±140 KPa), 1.5 gpm (5.7 L/min) minimum, not to exceed 40 °C (104 °F). Flush lines prior to making connections to dental equipment.
Central vacuum	Protrude 3" (76 mm)	Protrude 1" (25.4 mm) for 5/8" (15.9 mm) O.D. tubing and other specified by the central vacuum supplier	Wet Systems: 10 ± 2 inches of Hg (34 ± 7 KPa) and 9 scfm (255 sL/min) minimum. Dry/Semi-dry Systems 4.5 ± 1 inches of Hg (16 ± 3.5 KPa) and 12 scfm (340 sL/min) minimum.
Electrical	1/2" conduit to protrude 3" (76 mm)	Protrude 1" (25.4 mm)	Make connection to junction box using 1/2" (13 mm) flexible conduit as needed. Wire box per code.
Gravity drain	Protrude 3" (76 mm)	Protrude 1" (25.4 mm)	Basket strainer connects to 1-1/4" or 1-1/2" flanged tailpiece.

Loop Vent Diagram

Follow standard local codes for loop vent plumbing. Here's an example with the relative location to critical features:



Electrical Specifications

Electrical Rough-In

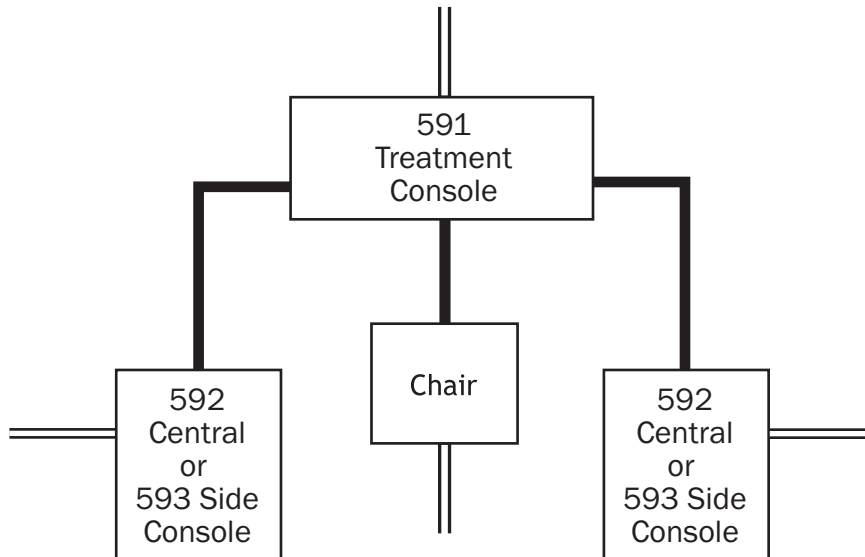
A contractor should supply the x-ray junction box, wiring, conduit and flex conduit. The conduit must protrude 3" (76 mm) from the finished floor.

Use the 1/2" flex conduit, as required, to connect the 3" (76 mm) piece from the floor 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.

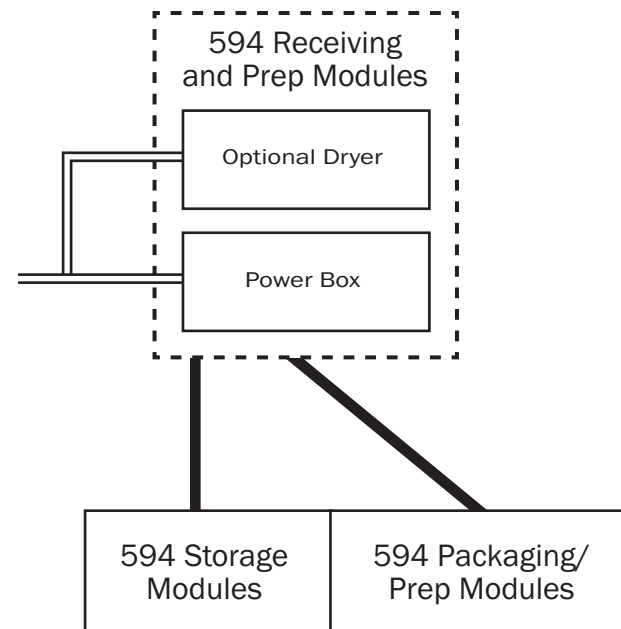
Electrical Rough-In Operatory Example

==== = Line voltage conduit
———— = Low voltage conduit (2" diameter)



Electrical Rough-In, Sterilization Center Example (galley)

==== = Line voltage conduit
———— = Low voltage conduit (2" diameter)



Electrical Connection to Mains

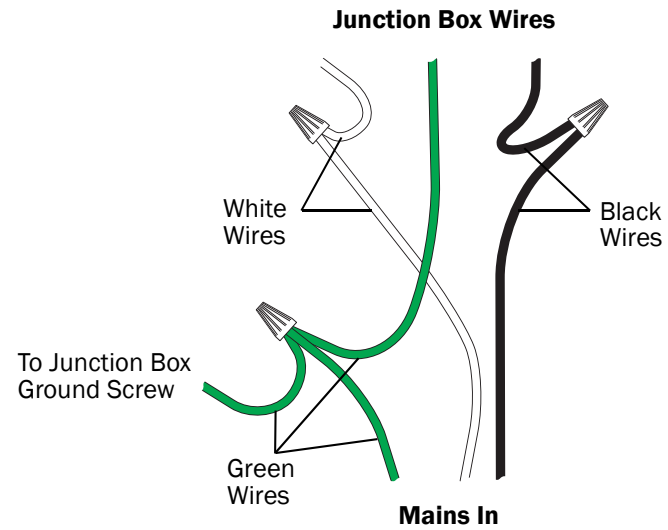
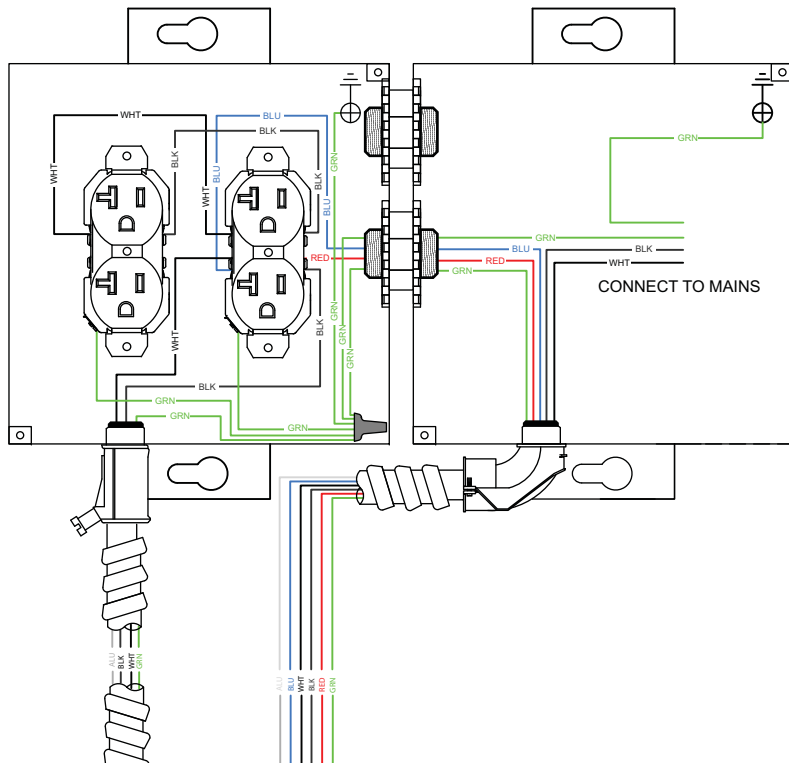


CAUTION Local regulation requires licensed electricians to install electrical utilities. All electrical utilities must conform to prevailing local codes. Final electrical connections will be required after the equipment is placed.



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:



Operating Current for Ancillary Devices/Operatory

Ancillary Device	Typical Operating Current (Amps) @ 110-120 VAC
Distribution Box <i>(control center, task lights, ICV®)</i>	2.0
Distribution Box <i>(control center, task lights, ICV, plus optional devices plugged into auxiliary outlets)</i>	9.0 duplex output = 7 A max
Monitor	1.1
Intraoral Camera	2.0
Curing Light	2.0
Amalgamator	2.3
Ultrasonic Scaler	0.9
X-Ray Viewer	0.4



NOTE Connect incoming power to each cabinet to a 20 A circuit breaker. The table above shows typical current draw for various devices that might be installed in a cabinet. Always consult the device nameplate for actual power requirements. Ancillary equipment may have substantial power requirements and should be considered when determining total treatment room branch circuits.

Operating Current for Ancillary Devices/ 594 Sterilization Center

Ancillary Device	Typical Operating Current (Amps) @ 110-120 VAC
Instrument Dryer	14.5
Power Box	4.5



NOTE When an instrument dryer is selected, the cabinet (dryer and power box) must be connected to a dedicated 20 A 120 VAC circuit. To prevent nuisance tripping of the circuit breaker and to ensure proper operation of the dryer and power box functions, no other loads can be included on this circuit.

Additional Electrical Requirements for the 594

Instrument Dryer

For the instrument dryer, A-dec provides a junction box in the sink module. A licensed electrician will need to connect the junction box to mains power.

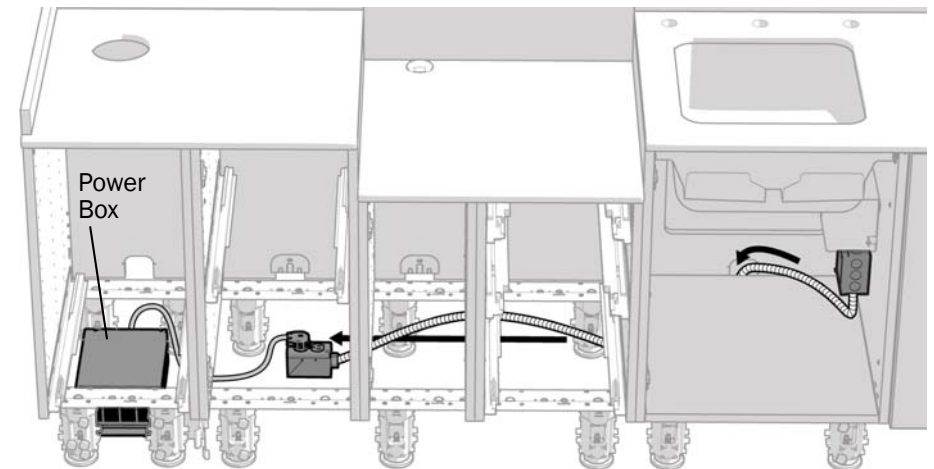
Power Box

For the power box, the contractor will need to locate a duplex outlet in the base area under the receiving module. Locate the duplex outlet:

- in the floor under the receiving modules,
- in the base of the wall behind the receiving modules, or
- on the end of a conduit provided by a licensed electrician, wired to the junction box under the sink, and long enough to reach the receiving modules.

Ancillary Devices

For ancillary devices, such as sterilizers and ultrasonic cleaners, provide the electrical supply in the space noted on the utility/back panel templates, or anchor it to the floor in the base area. Refer to the device manufacturer for supply requirements. There are no electrical duplex receptacles supplied with the A-dec Inspire 594 Sterilization Cabinets. These must be provided by the contractor.

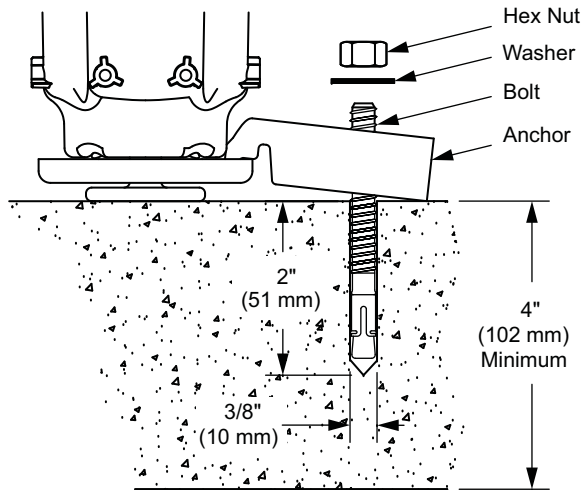


Structural and Other Construction Requirements



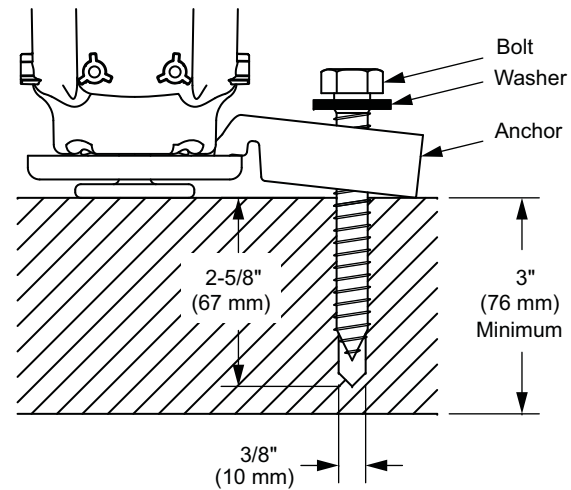
NOTE Anchoring requirements are determined by local seismic and structural codes and vary depending on the cabinet model and configuration. See the following section and the Plan View section for potential anchoring locations for specific module configurations.

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

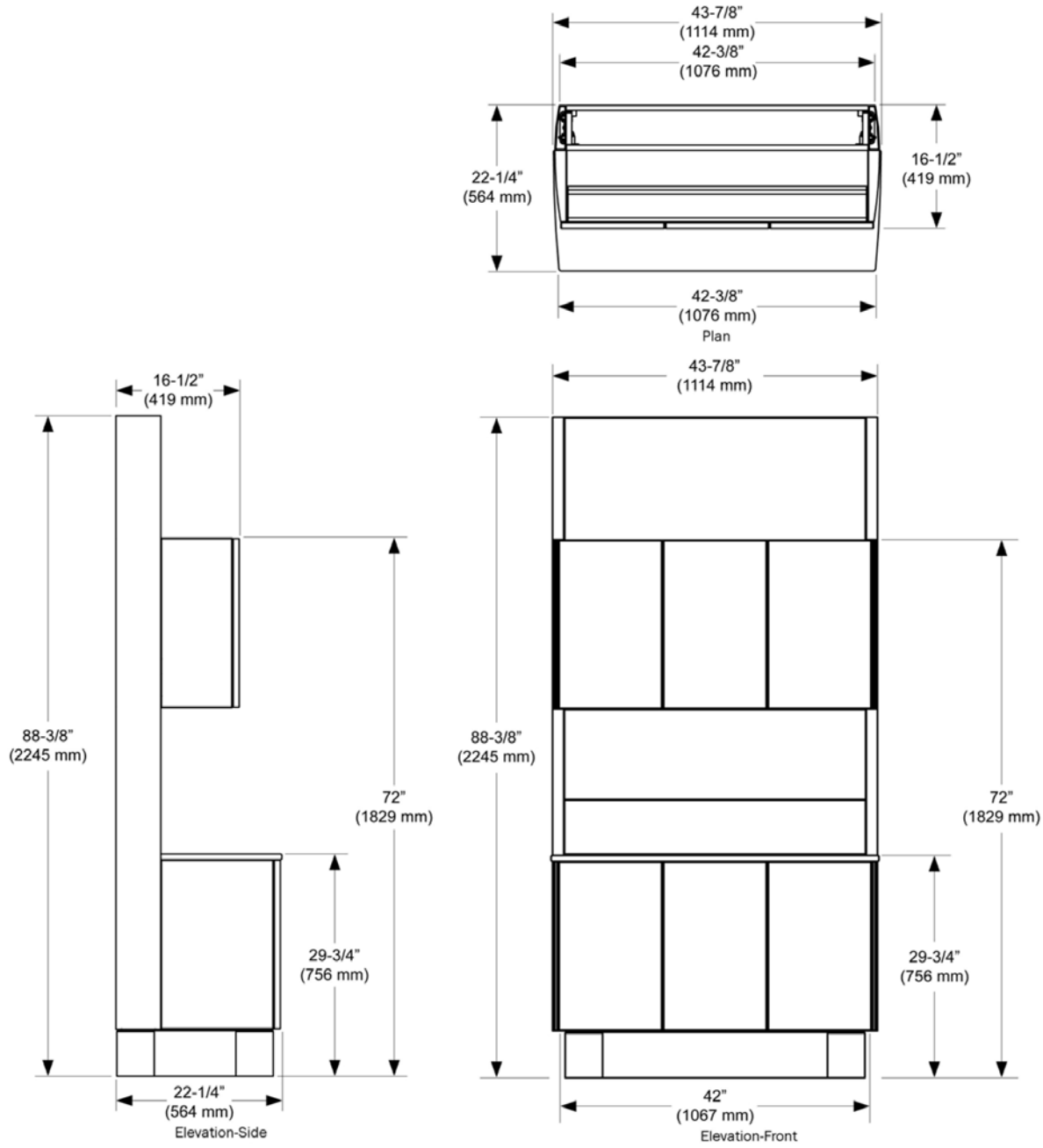


NOTE Anchors are only approved for use in wood flooring at least 3" (76 mm) thick. The lag screw must exceed a minimum embedment depth of 2-5/8" (67 mm). If the flooring material does not meet minimum requirements, consult with a licensed contractor about adding reinforcements.



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.

591 - 42" Full Treatment Console



Mini-Templates

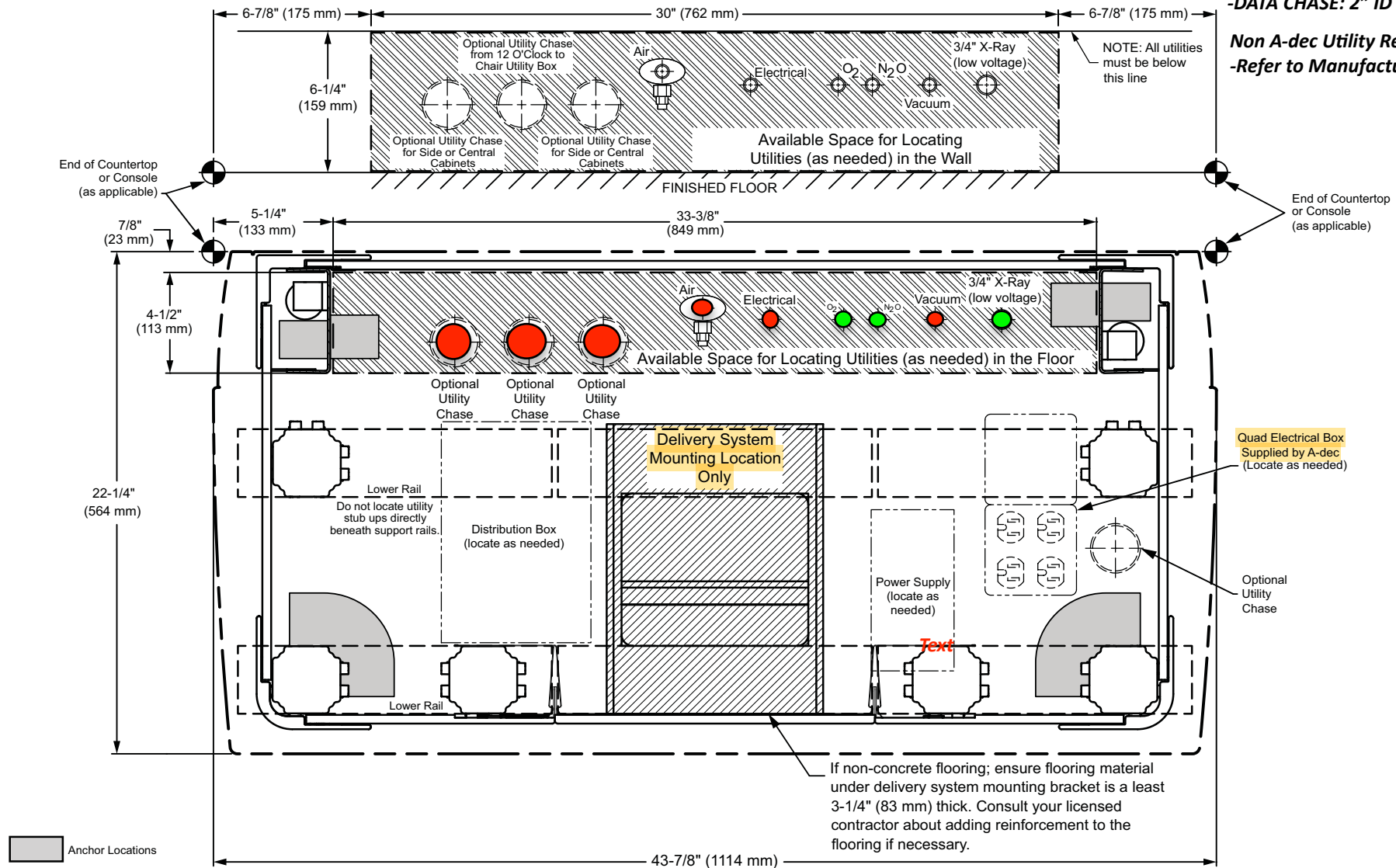
591 - 42" Treatment Console

A-dec UTILITY REQUIREMENTS:

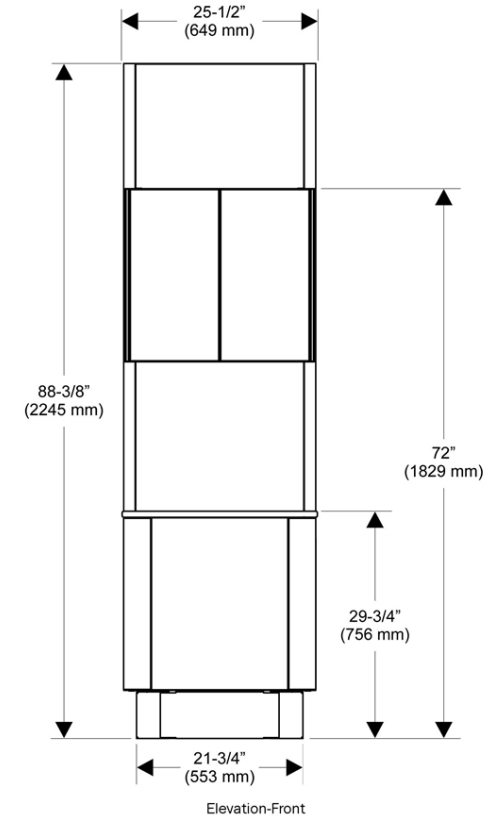
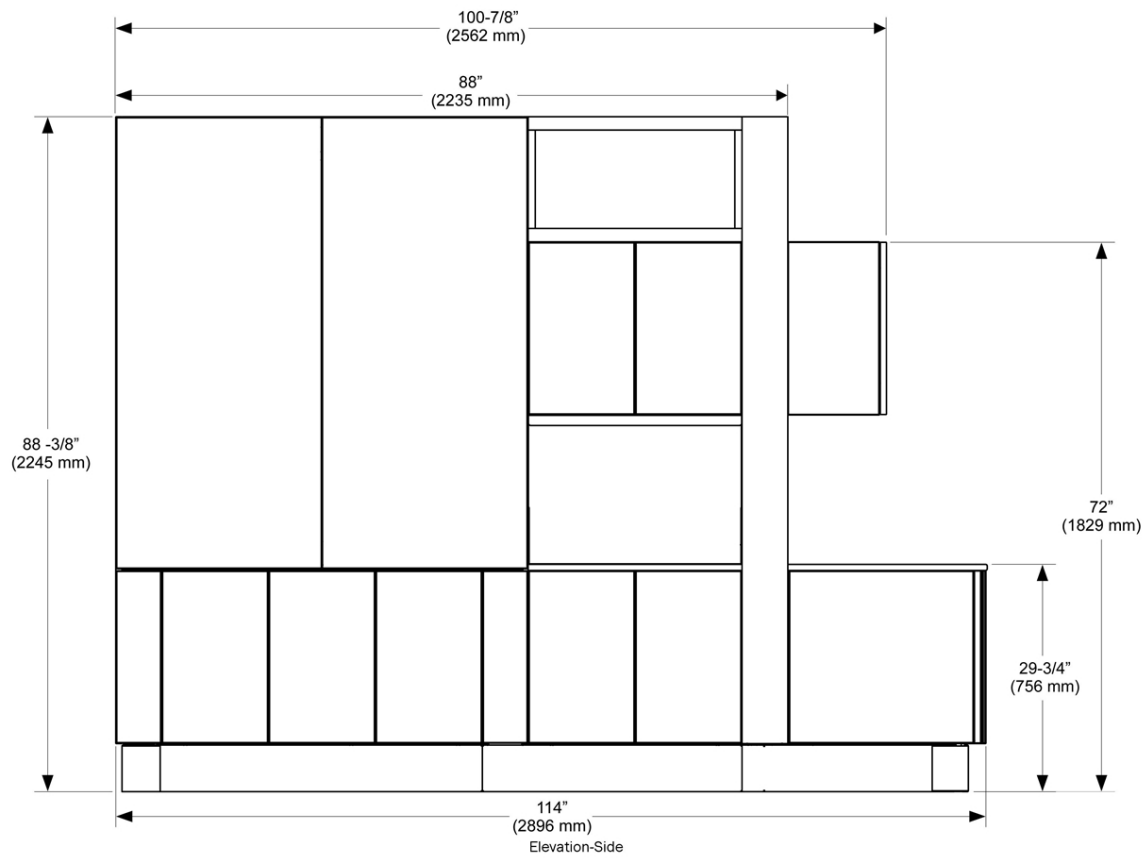
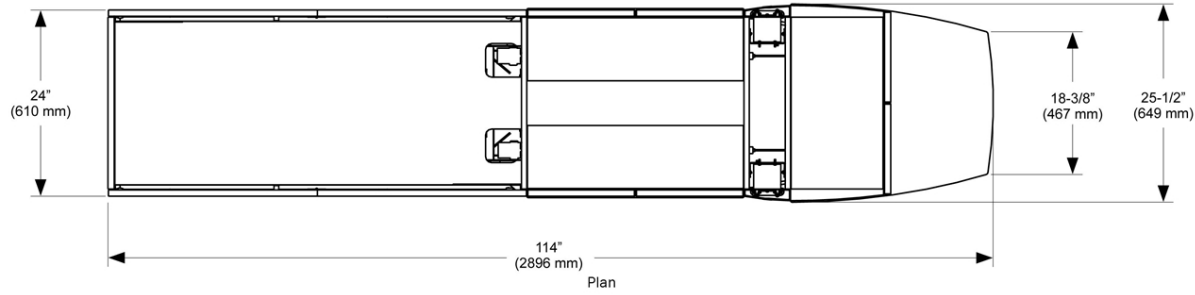
- AIR: 1/2" Copper Stub;
- 3/8" Compression Angle Stop
- VACUUM: 1/2" Copper Stub
- ELECTRICAL: 3' Flexible Whip
- DATA CHASE: 2" ID Conduit

Non A-dec Utility Requirements:

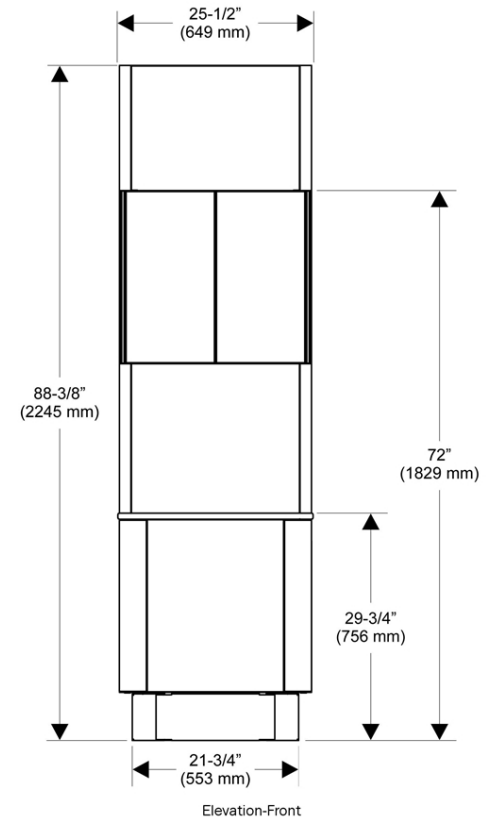
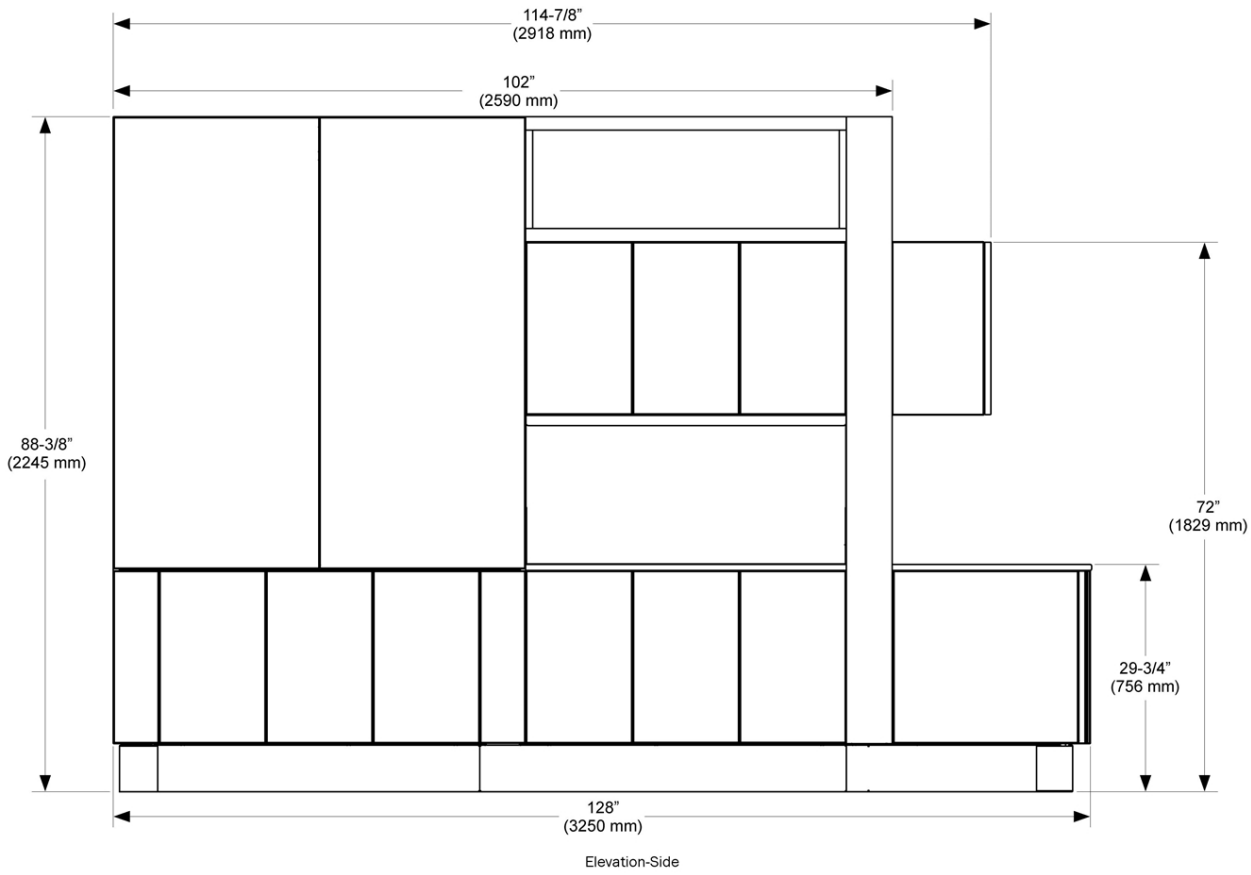
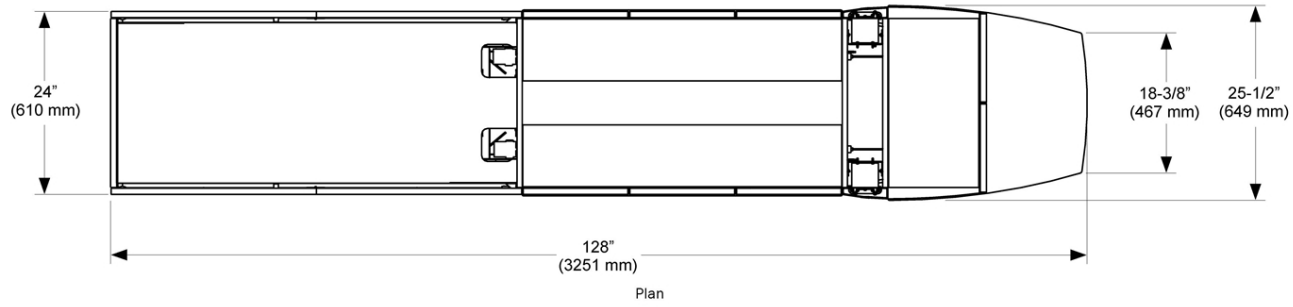
-Refer to Manufacturer's Specs



592 - 114" Full Central Console



592 - 128" Full Central Console



592 - 100", 114", and 128" Full Central Consoles

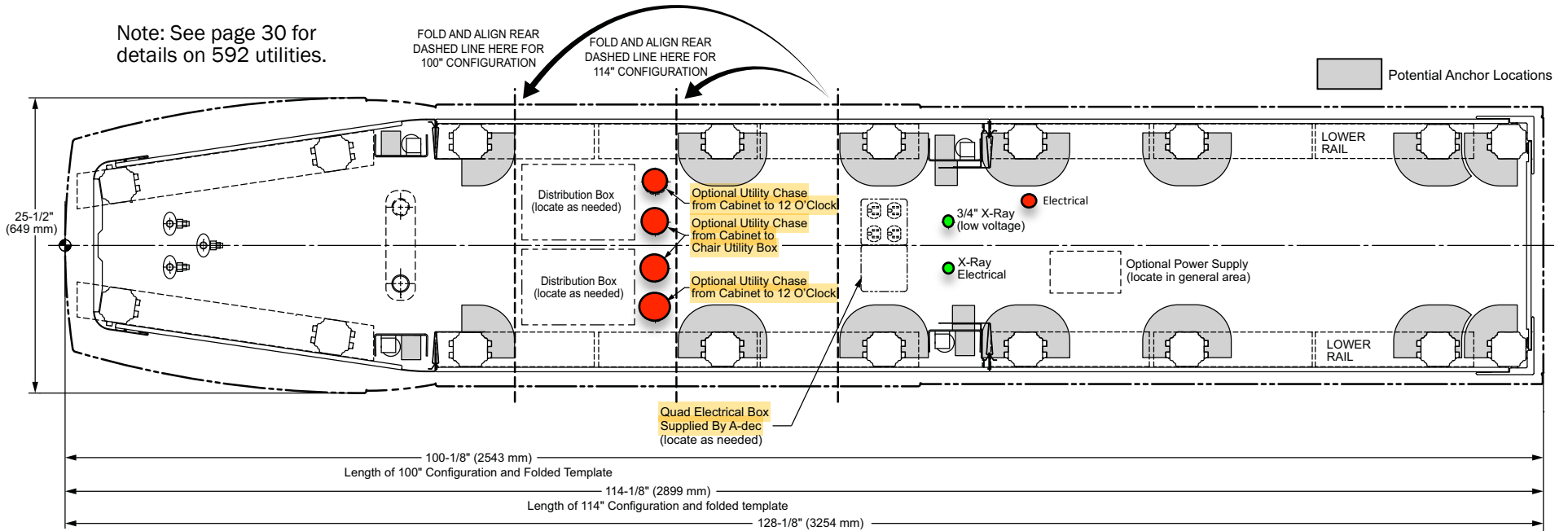
A-dec UTILITY REQUIREMENTS:

- ELECTRICAL: 3' Flexible Whip
- DATA CHASE: 2" ID Conduit

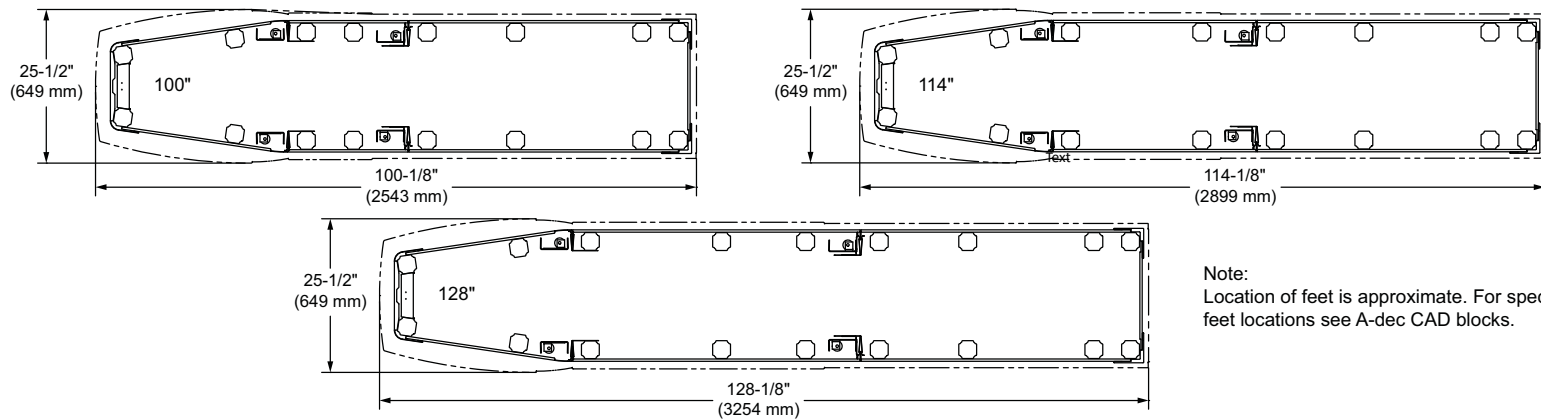
Non A-dec UTILITY REQUIREMENTS:

- Refer to Manufacturer's Specs

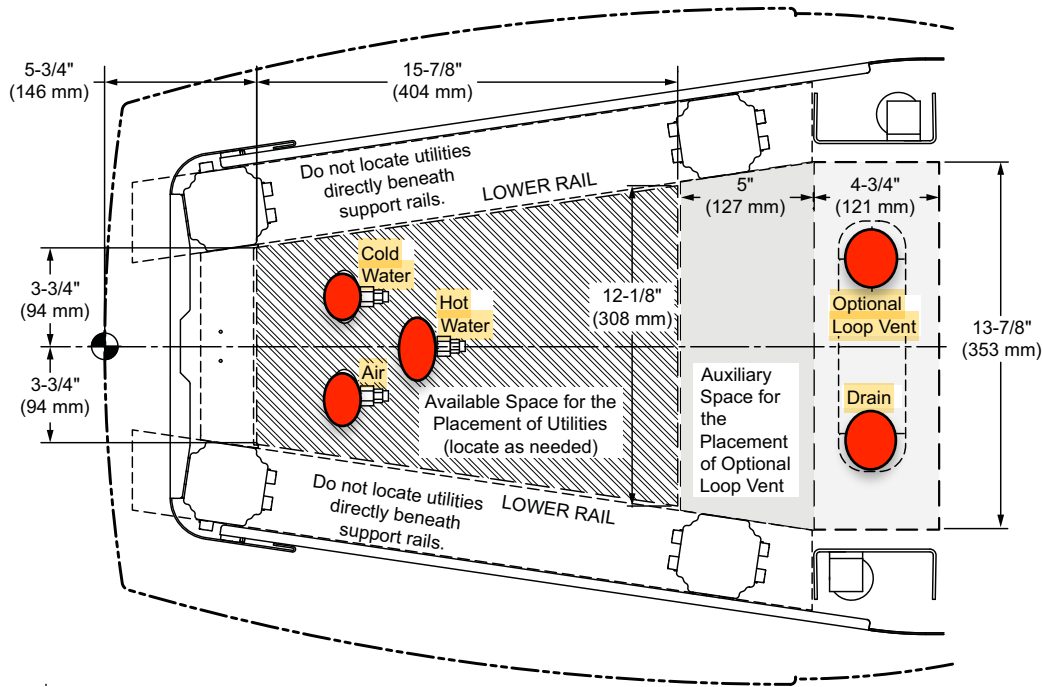
Note: See page 30 for details on 592 utilities.



DETAIL FOR DIFFERENT CABINET CONFIGURATIONS



592 Central Console Utilities

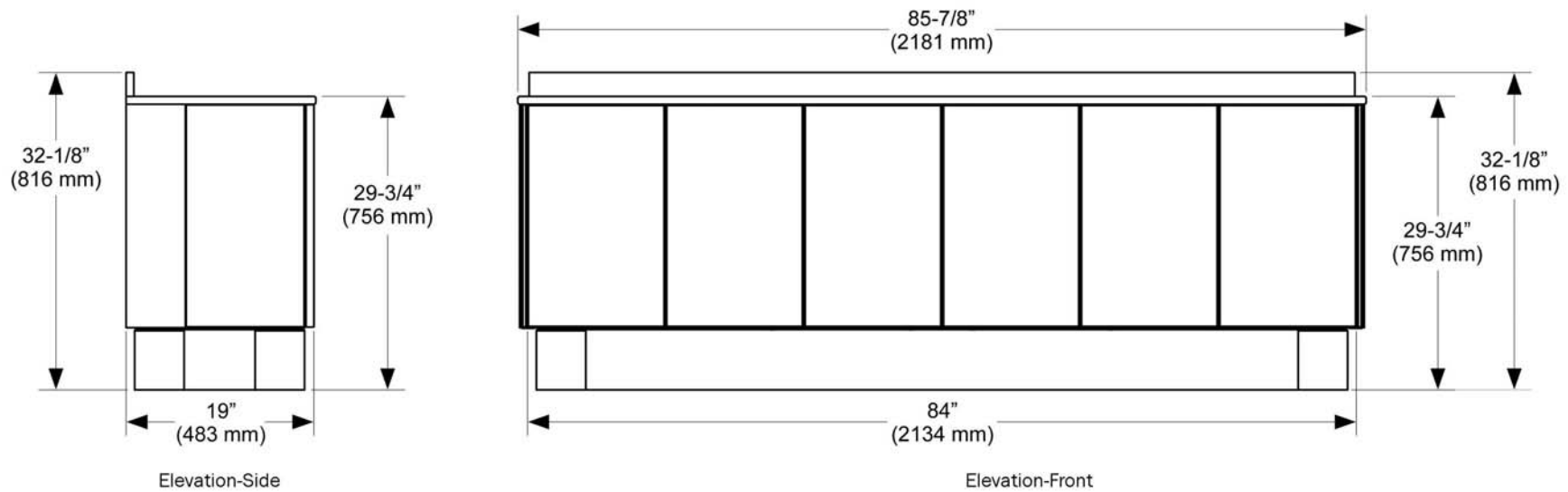


A-dec UTILITY REQUIREMENTS:

- AIR: 1/2" Copper Stub;
3/8" Compression Angle Stop
- WATER: 1/2" Copper Stub;
3/8" Compression Angle Stop
- DRAIN



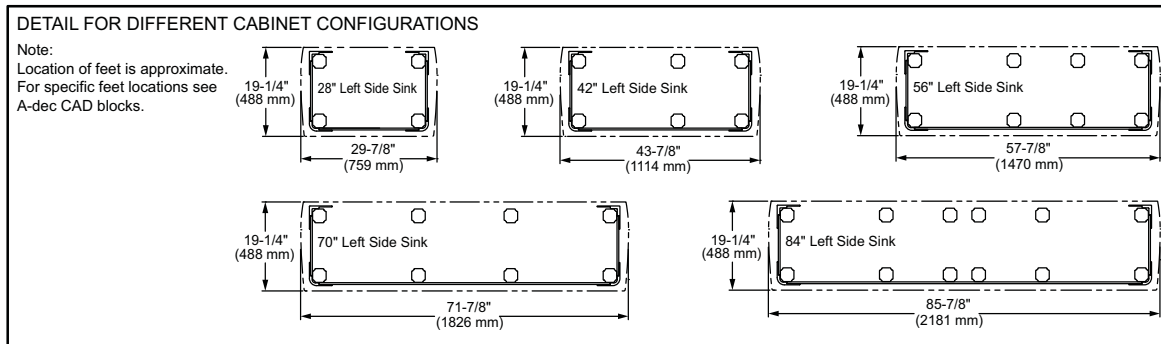
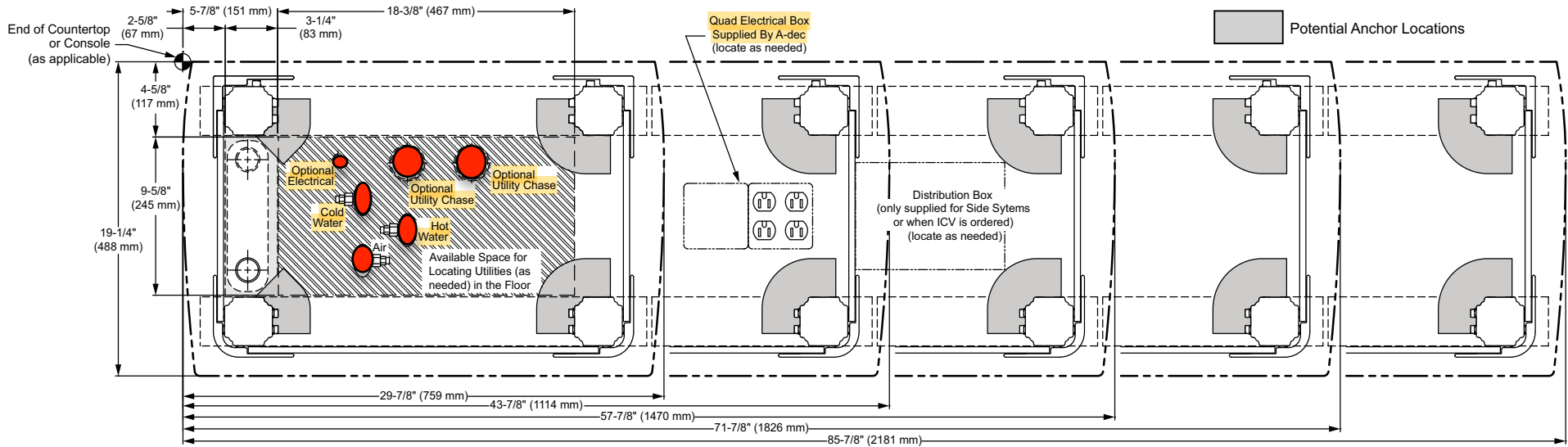
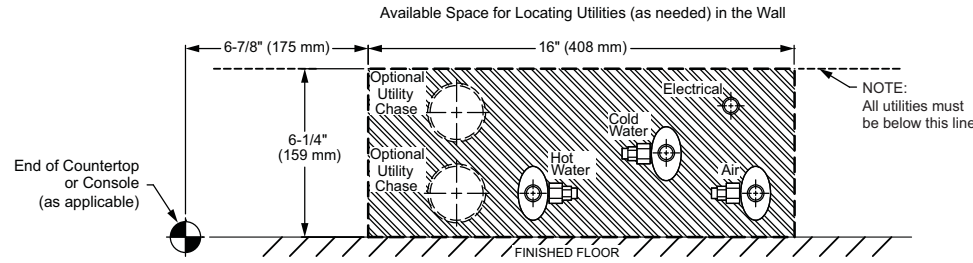
593 - 84" Lower Side Console, 19" Depth with 30" Countertop Height



593 Side Console, 19" Depth with Left Sink

A-dec UTILITY REQUIREMENTS:

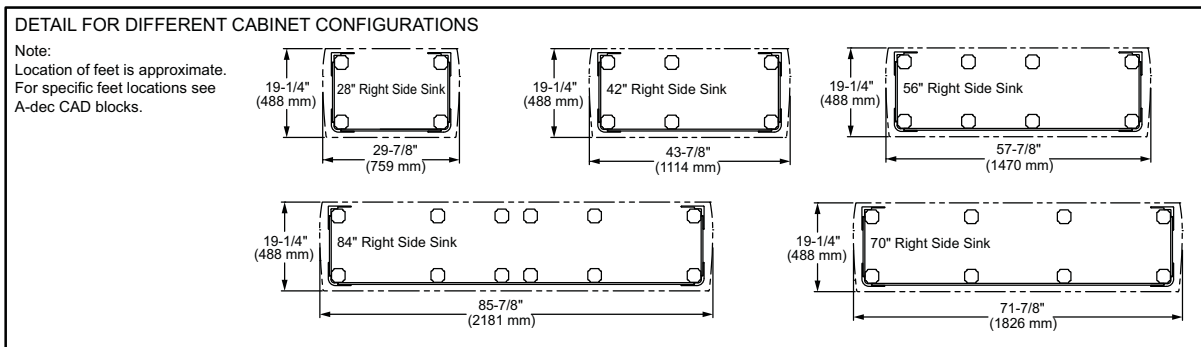
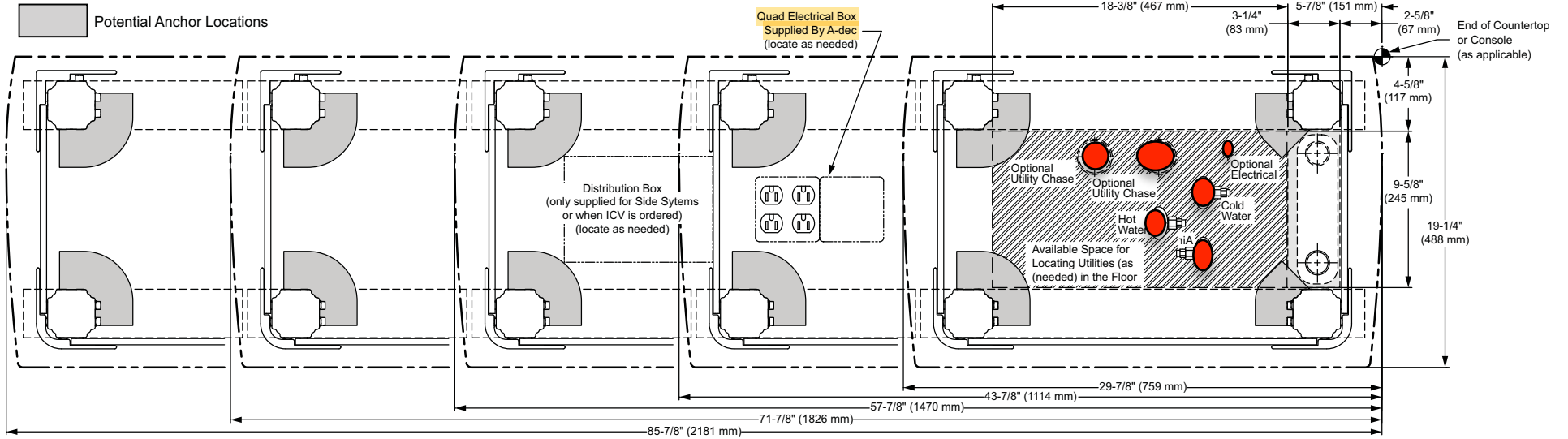
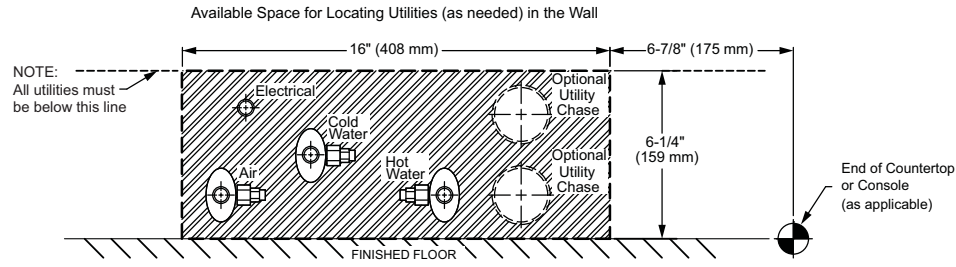
- AIR: 1/2" Copper Stub;
3/8" Compression Angle Stop
- WATER: 1/2" Copper Stub;
3/8" Compression Angle Stop
- DRAIN
- ELECTRICAL: 3' Flexible Whip
- DATA CHASE: 2" ID Conduit



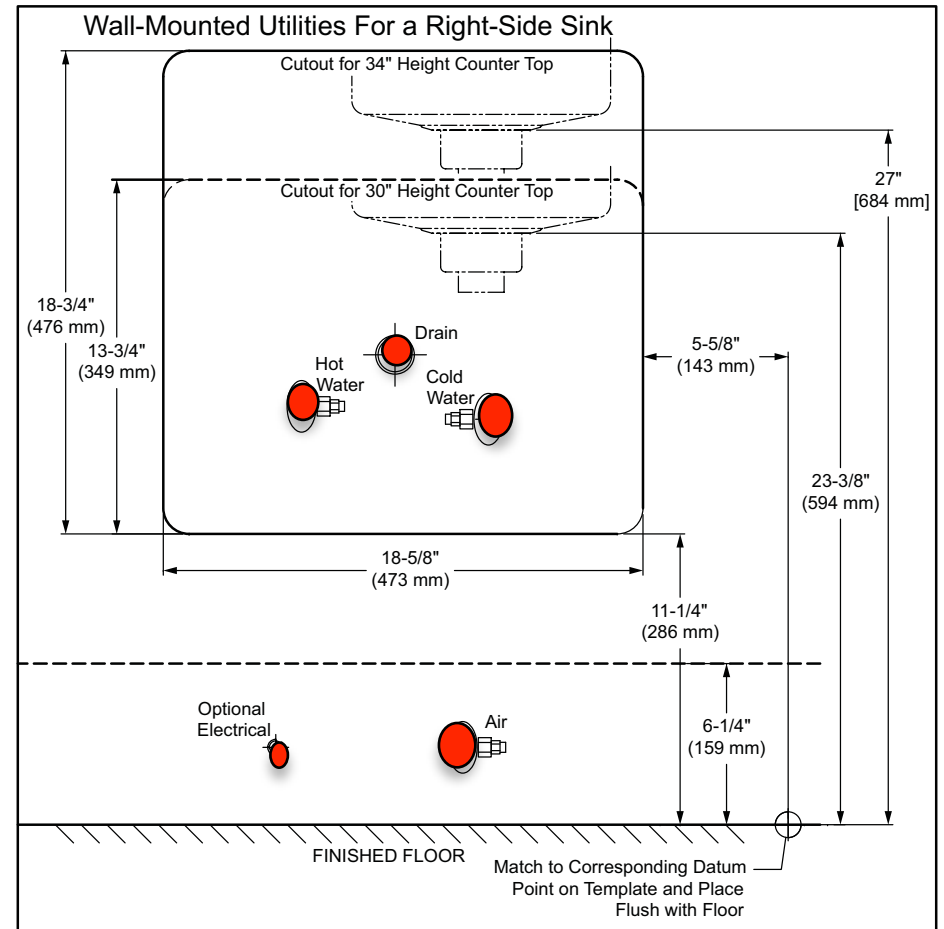
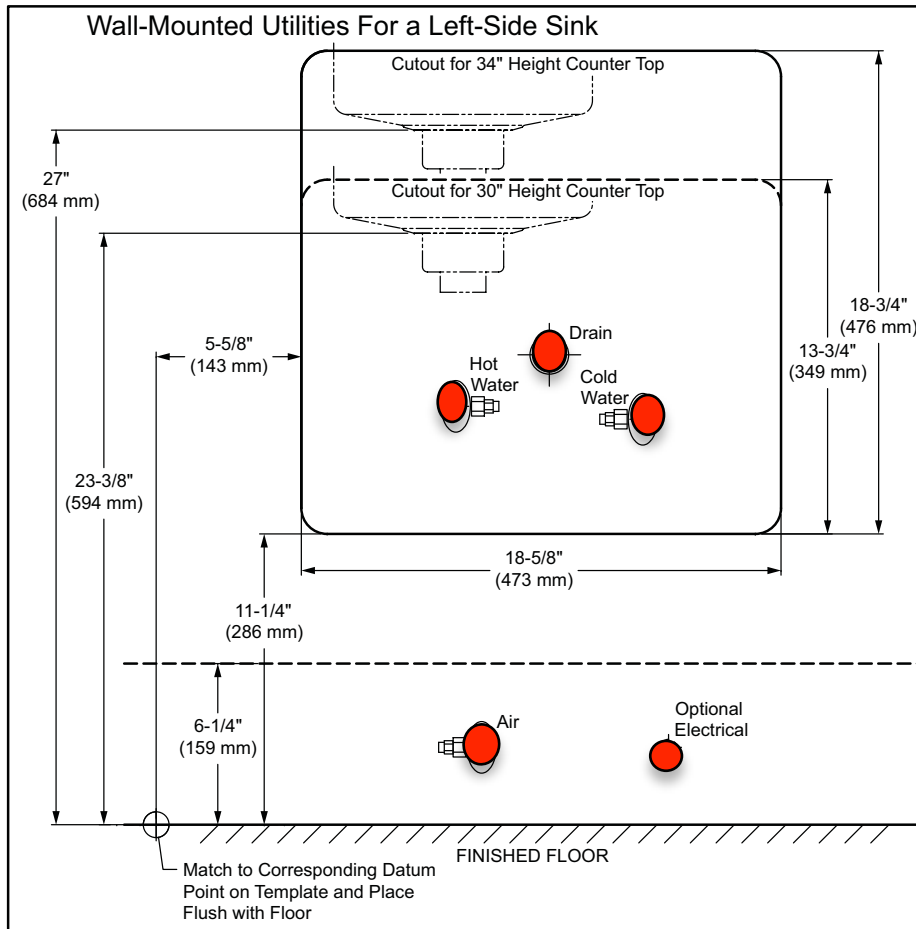
593 Side Console, 19" Depth with Right Sink

A-dec UTILITY REQUIREMENTS:

- AIR: 1/2" Copper Stub;
- 3/8" Compression Angle Stop
- WATER: 1/2" Copper Stub;
- 3/8" Compression Angle Stop
- DRAIN
- ELECTRICAL: 3' Flexible Whip
- DATA CHASE: 2" ID Conduit



593 Side Console, Utilities/Back Panel



A-dec UTILITY REQUIREMENTS:

- AIR: 1/2" Copper Stub;
3/8" Compression Angle Stop
- WATER: 1/2" Copper Stub;
3/8" Compression Angle Stop
- DRAIN
- ELECTRICAL: 3' Flexible Whip
- DATA CHASE: 2" ID Conduit





Framing/Wall Mounting (cont.)

595 Wall-Mounted Storage

Minimum requirements for attachment and for wall construction have been determined by an independent structural engineering company. Documented detail is available from A-dec Customer Service.

Metal Stud Wall

- Minimum Stud: 1-1/4" x 3-1/2" x 22 ga @ 24" (610 mm) o.c.
A-dec-Provided Fasteners: 1/4"-20 x 2" button head screw with 1/4"-20 toggle bolt anchor

Wood Stud Wall

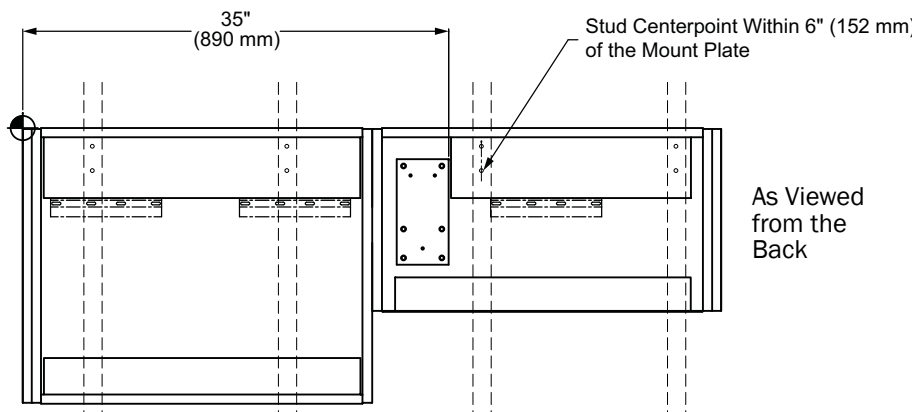
- Minimum Stud: standard or better 2" x 4" @ 24" (610 mm) o.c.
A-dec-Provided Fasteners: #10 x 3" Phillips head screw (for cleat)
 1/4" x 4" hex head lag screw (for cabinet)



NOTE Due to seismic and structural requirements, a 2" embedment is required for securing the 595 cabinets to wood studs. If the wood studs cannot be located to allow for this requirement, additional bracing will be required. Contact A-dec Customer Service for specific load requirements and additional information.

Framing and Mounting Requirements

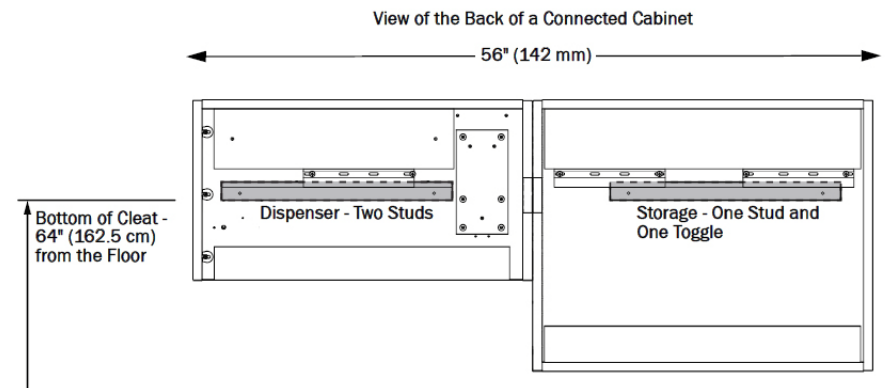
Use the following as a guide to meet minimum framing requirements.



WARNING If the installer cannot make the proper number of stud attachments, the wall framing will require reinforcements. Contact A-dec Customer Service for additional information.

For 595 wall-mounted cabinets, the installation must meet the following mounting requirements:

Cabinet	Minimum Mounting Requirements
Single Cabinet	Cleat anchored to two studs
Connected Cabinets	
• Dispenser	Cleat anchored to two studs
• Storage	Cleat anchored to one stud and one toggle anchor



For single 28" modules, the wall cleat must be mounted directly to two wall studs (with one screw for each stud). For dual, connected 56" cabinet combinations, the wall cleat must be mounted directly to two wall studs for the dispenser module, and at least one stud for the storage module, plus an additional toggle bolt anchor installed approximately 10" (254 mm) from the direct stud attachment point in the storage module.

In addition to the cleat mounting, the 28" dispenser modules must be mounted directly to two wall studs (with two hex fasteners for each stud). To accommodate an integrated dental light or monitor mount, the 28" dispenser modules require the stud centerpoint located within 6" (152 mm) of the mounting plate.

Wall-Mount

Recommended Tools

- Drill
- 3/16" and 1/2" bits
- 1/8" hex key
- Level

A-dec UTILITY REQUIREMENTS:
-BACKING: 3/4" Plywood
-ELECTRICAL: Flexible Whip in wall
-DATA CHASE: 1" ID Conduit

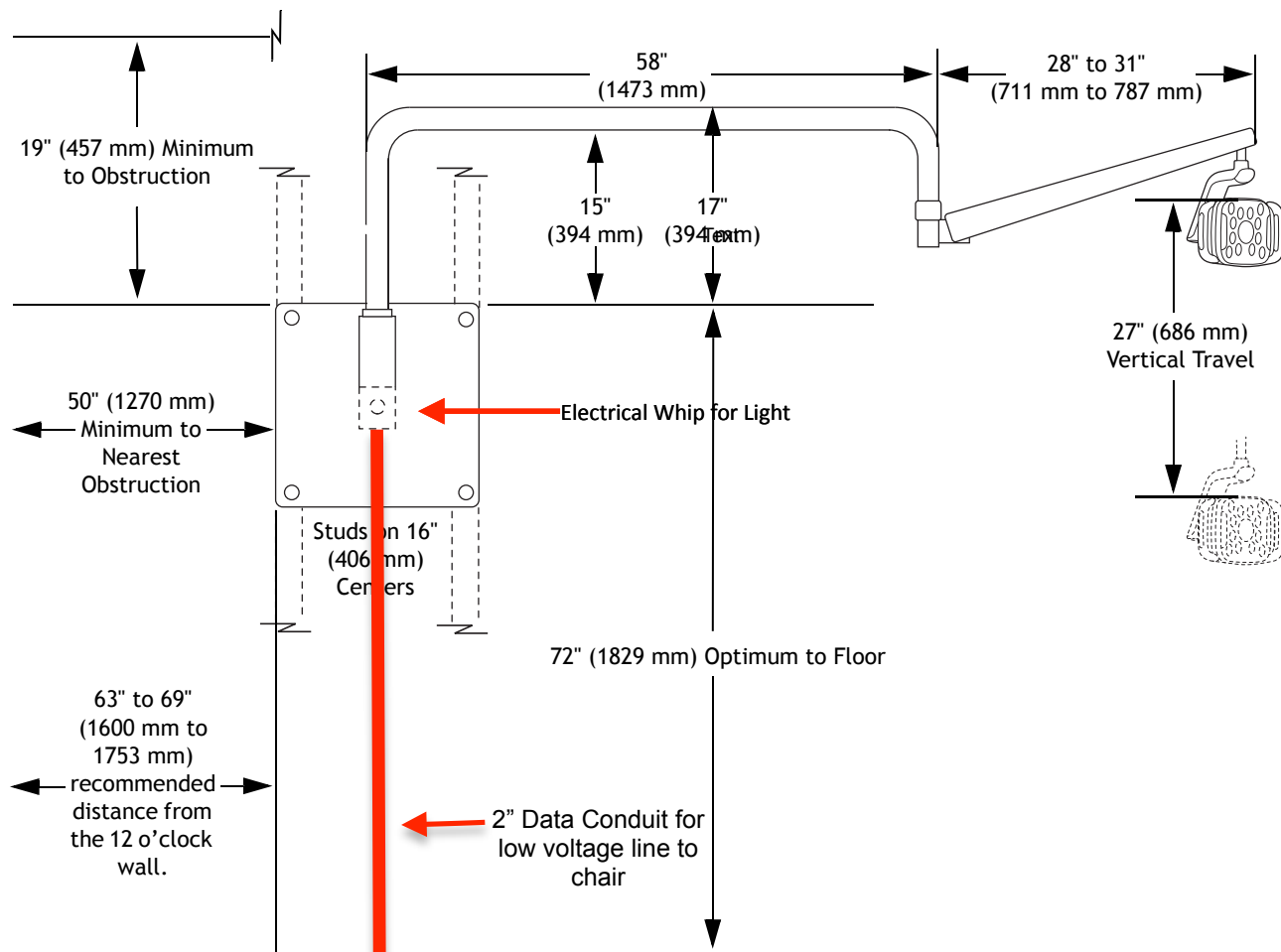


WARNING Do not use hollow wall fasteners that rely on non-structural elements. A-dec is not responsible for any damage resulting from the use of hollow wall fasteners.



WARNING Consult a licensed professional, i.e. structural or architectural engineer, for mounting to metal stud or masonry walls. Ensure that all installations conform to local codes. Walls must be designed to support a minimum shear load of 38 lb (169 N) and a minimum moment of 150 ft-lb (203 N-M).

Task 1. Determine where to mount the backboard.



■ **Determine Mounting Location**

The mounting location must allow the backboard to be securely mounted to permanent structural members, ie. wall studs.

The optimal backboard location:

- 55" from the floor to the bottom of the backboard
- 60" recommended distance from the 12 o'clock wall or back of the 12 o'clock cabinet to the edge of the backboard
- 51" minimum clearance to perpendicular wall to the edge of the backboard

■ **Determine Stud Spacing**

Determine the stud spacing in the wall to which you are installing the monitor mount. The wall mount must have all four lag screws installed into the wood wall studs. If the stud spacing is not 16", you must create a support structure.



WARNING Ensure that the wall and/or framing can support the dead weight of the monitor mount 55 lb. (25 kg) and the additional force of movement and positioning of the monitor.

Do not use hollow wall fasteners that rely on non-structural elements. A-dec is not responsible for any damage resulting from the use of hollow wall fasteners.

Consult a licensed professional, i.e. structural or architectural engineer, for mounting to metal studs or masonry wall. Ensure that all installations conform to local code requirements. Mounting structure must be designed to support a minimum 55 lb. (25 kg) static load and a minimum moment of 203 ft.-lb. (275 Nm)

Figure 2 Proper Installation Height and Location

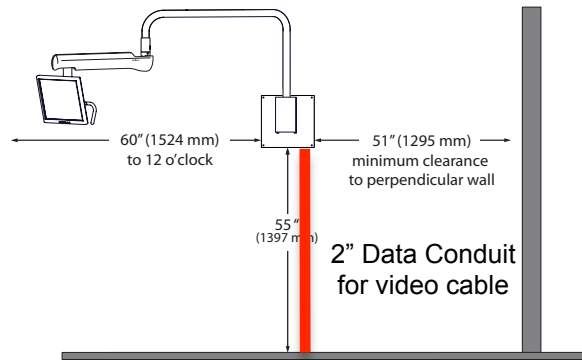
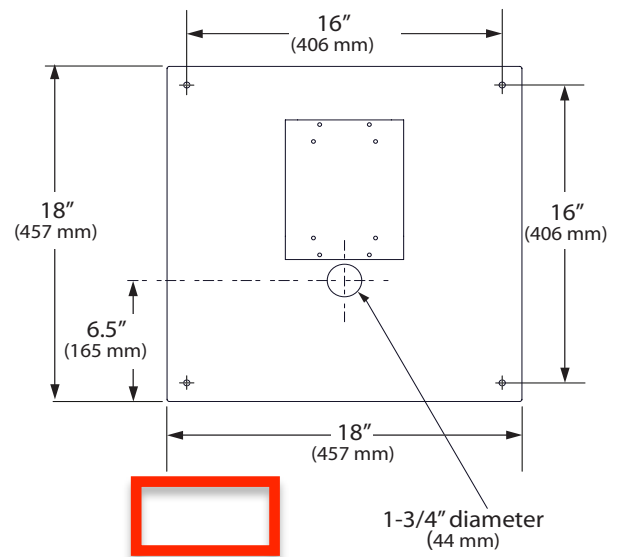


Figure 3 Backboard Dimensions



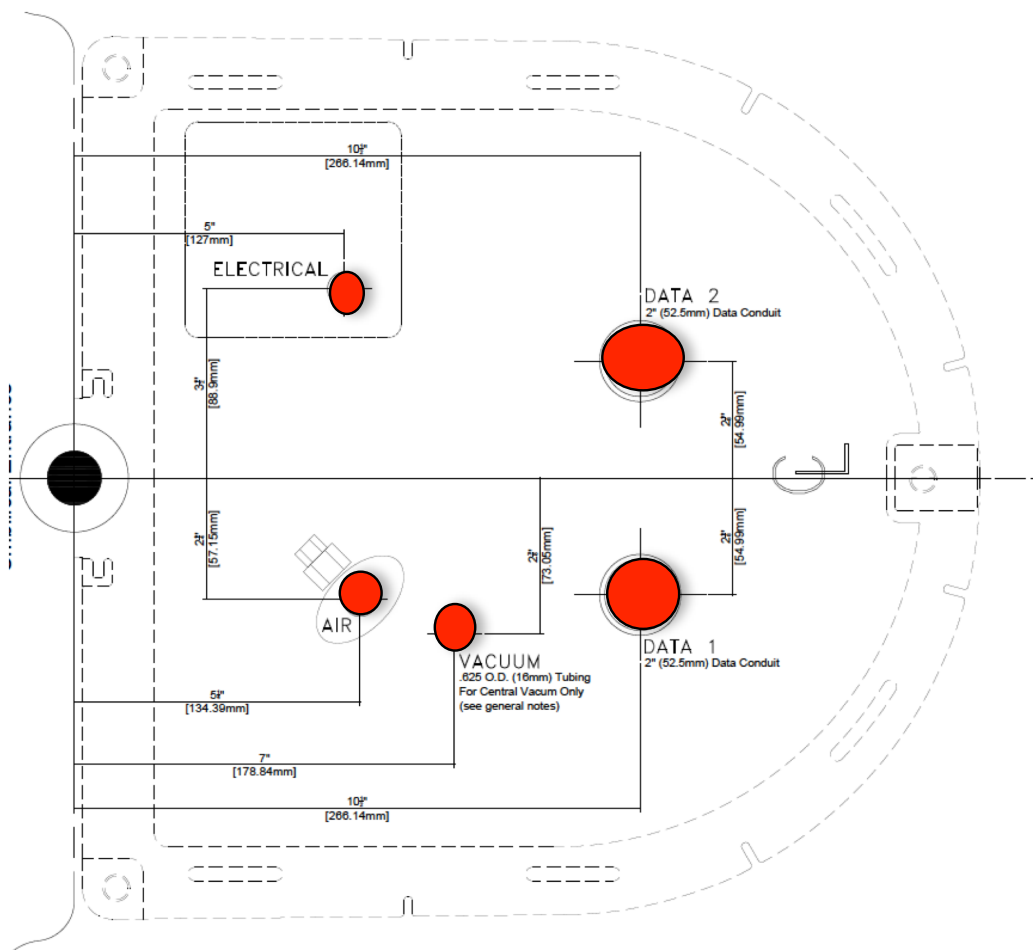
Duplex Outlet needed to power Monitor (not provided by A-dec)

A-dec UTILITY REQUIREMENTS:

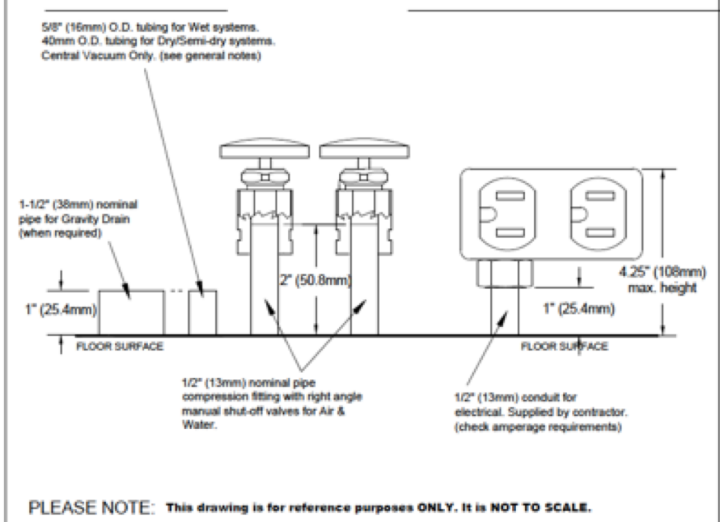
- BACKING: 3/4" Plywood
- ELECTRICAL: Duplex Outlet for Monitor (IT Requirement)
- DATA CHASE: 2" ID Conduit

A-dec UTILITY REQUIREMENTS:

- AIR: 1/2" Copper Stub; 3/8" Compression Angle Stop
- VACUUM: 1/2" Copper; Capped
- ELECTRICAL: 3' Flexible Whip
- DATA CHASE: 2" ID Conduit



A-dec 500 Plumbing Elevations:



A-DEC 511 FLOOR BOX TEMPLATE

