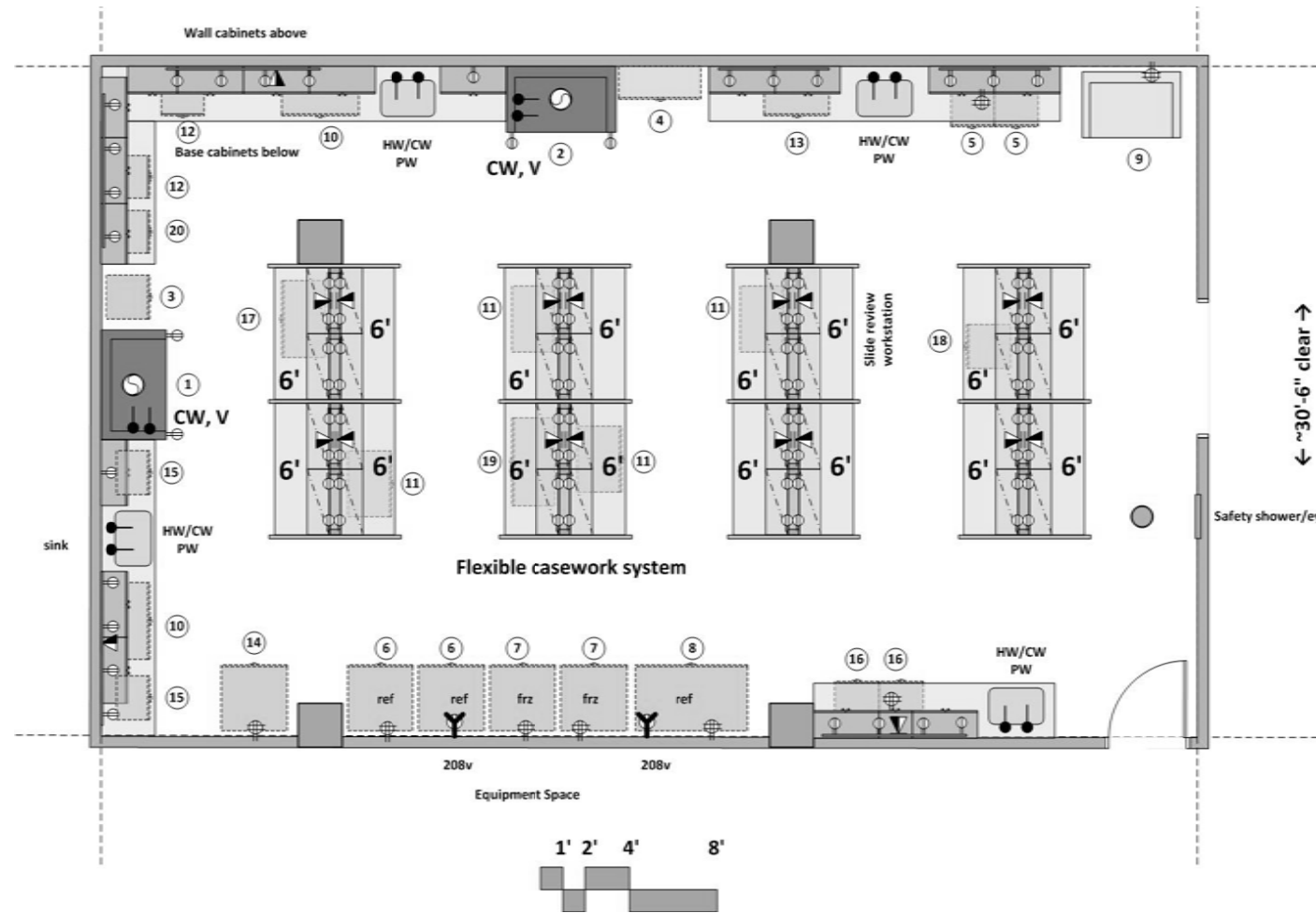


**Lab Sketchbook**  
**Clinical Laboratory Renovation**  
**VA Hospital Long Beach**  
**2012 Jan 02**



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## Summary



This is the third draft of the laboratory sketchbook for the proposed renovation of the Clinical Laboratory at the VA Hospital in Long Beach, California. It contains revisions based upon lab personnel review comments received on 2011 Dec 14, and interior laboratory elevations of the lab casework system.

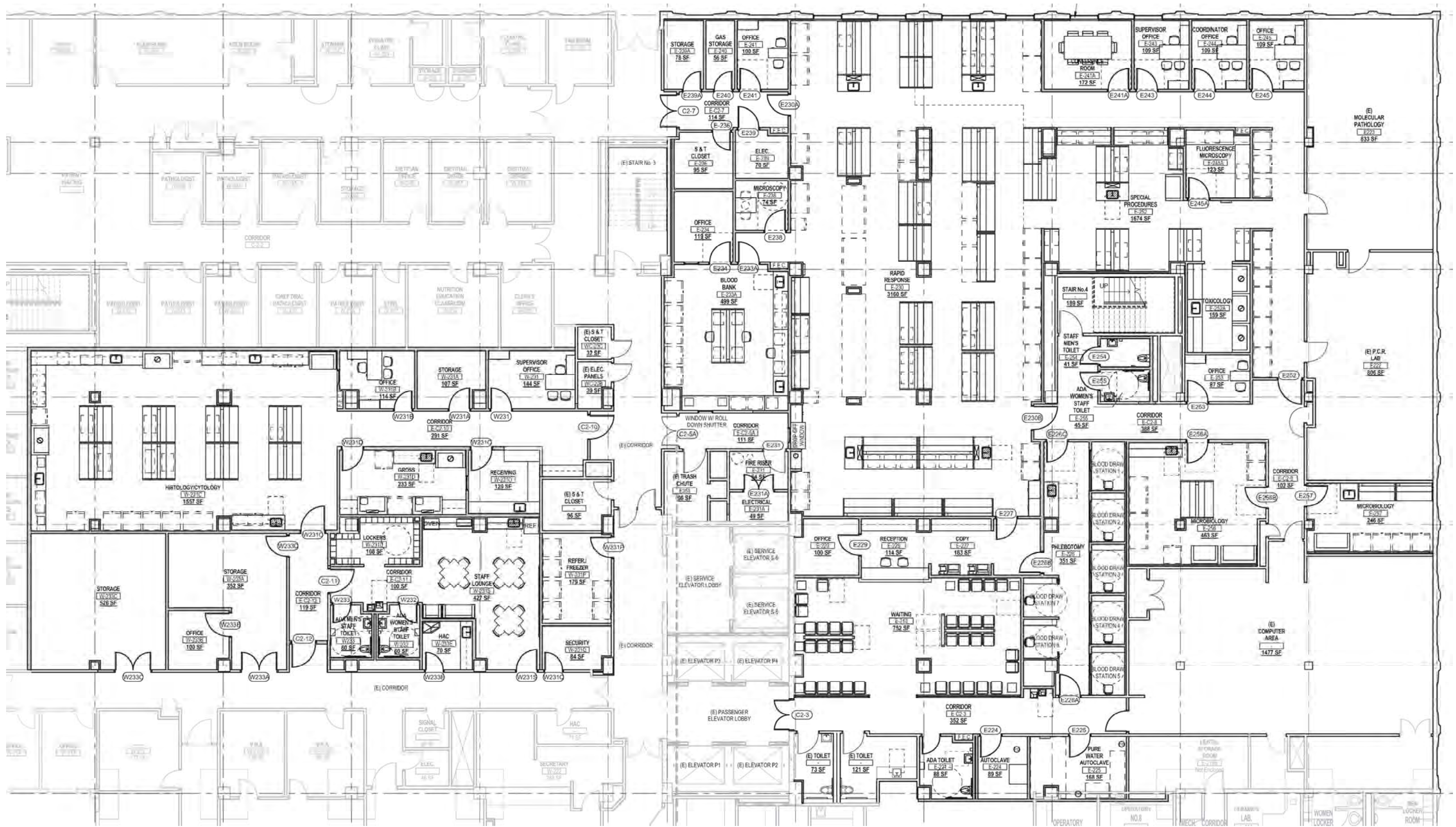
It contains plan diagrams of each laboratory room or area, equipment schedules, and manufacturers cut sheets for contractor furnished and owner furnished equipment.

All architectural, mechanical, electrical, and plumbing requirements are noted.



Glen Berry, AIA  
Design for Science  
Laboratory Consultant to GKK Works

# COMPOSITE PLAN



# Modular Lab Casework System



The Hamilton Max casework system will be used as the basis of design for the lab casework system. Features of the system include:

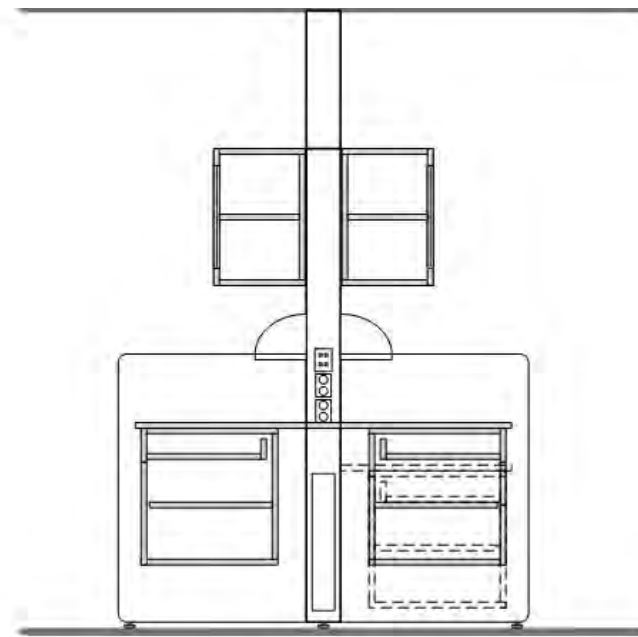
- 6" core for conduit and piping
- adjustable height work surfaces-cantilever
- Perimeter benches can be fixed

Herman Miller Co/Struc and Kewaunee Alpha brands will be listed as acceptable manufacturers in the Division 11 casework specification.

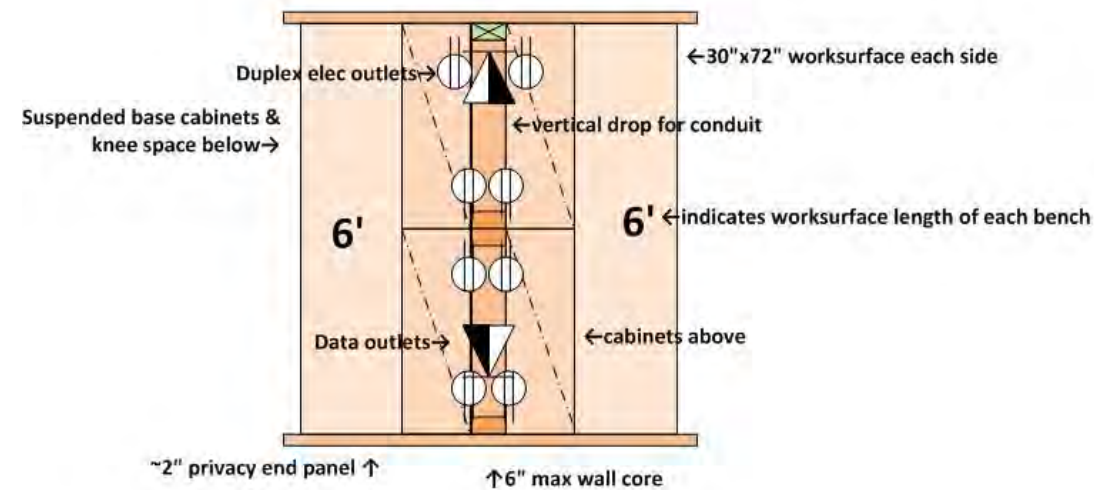


# Typical Lab Bench

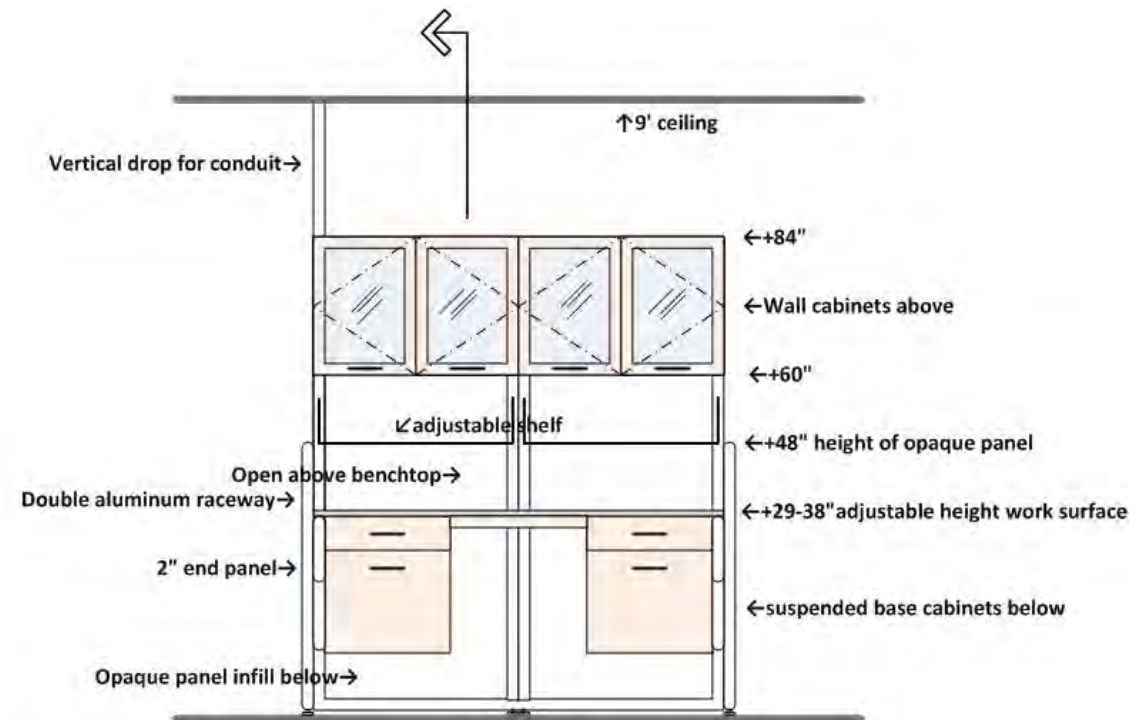
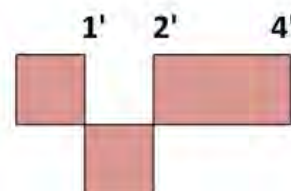
- Basis of Design: Hamilton Max Wall
- White epoxy powder coat metal frame
- Suspended metal base cabinets with simulated wood plam front
- 3mm PVC hot glue edge banding at all exposed door and drawer front edges
- Combination core plywood/MDF for door and drawer fronts
- 150 lb. accuride drawer glides
- Wall cabinets above with glass doors, simulated wood plam frame
- 6" center core
- Adjustable height work surface
- Power and data outlets at face of 6" column Max Wall frame
- No plastic drawers



Section



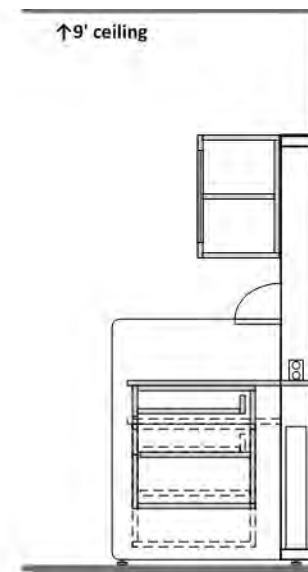
Plan



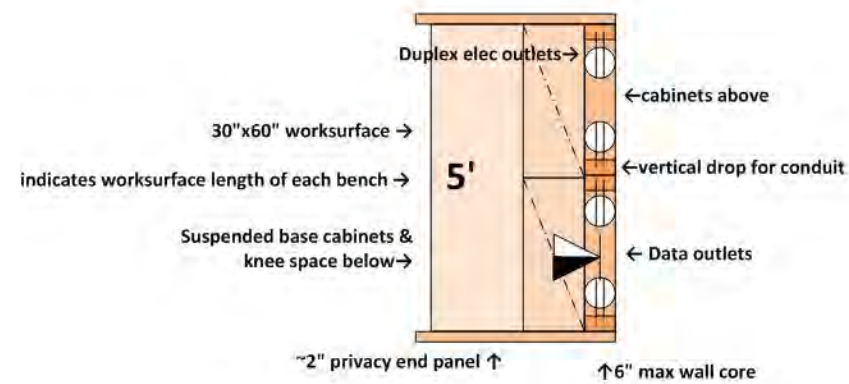
Elevation

# 5' Wall Bench

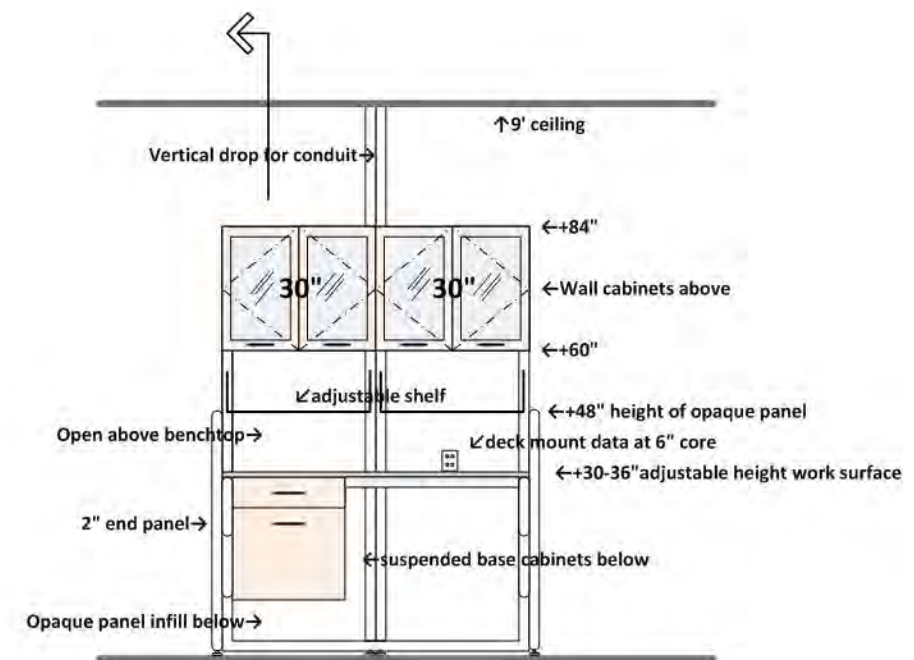
## Special Procedure Area



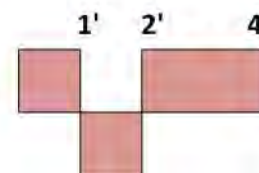
Section



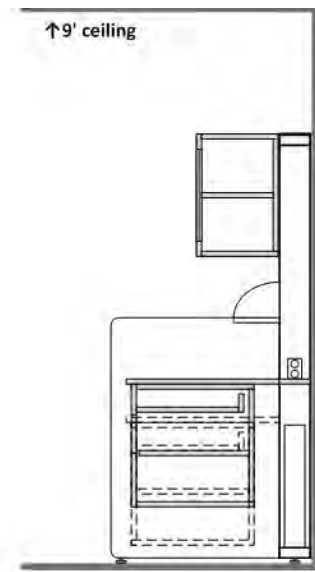
Plan



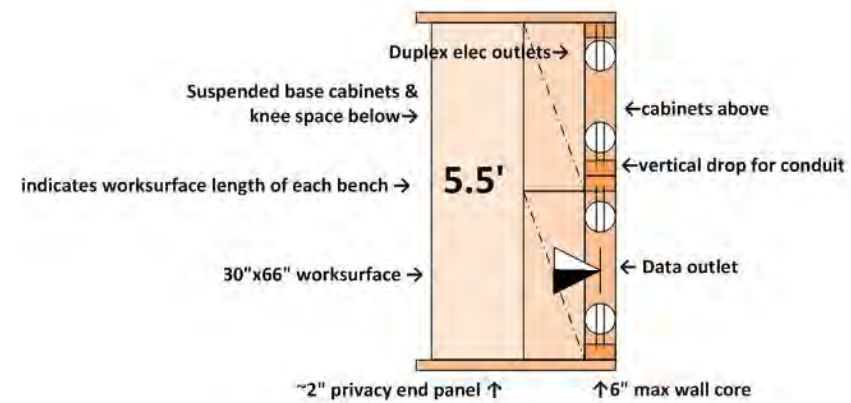
Elevation



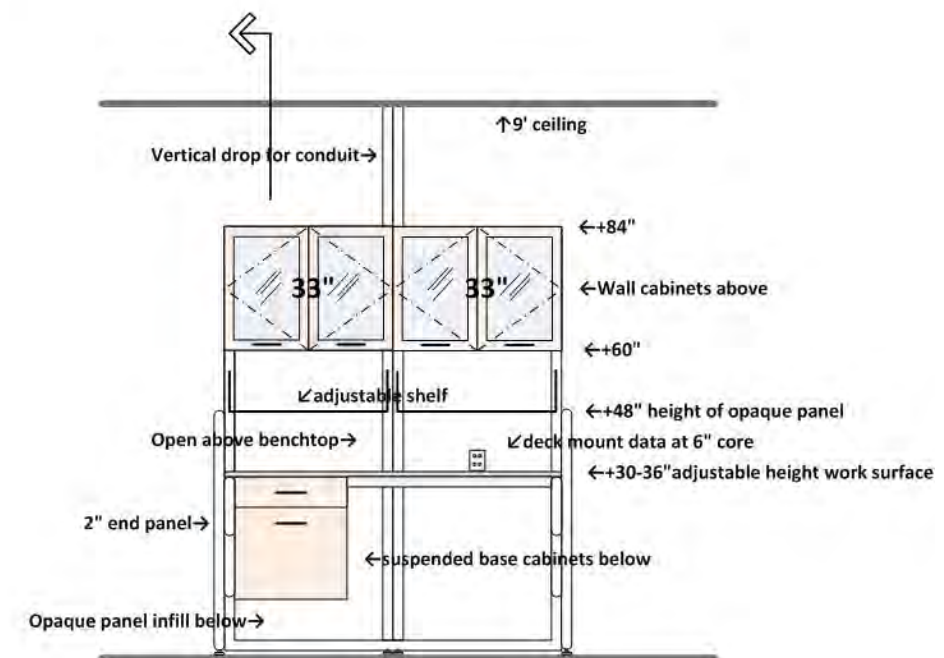
# 5.5' Wall Bench Special Procedure Area



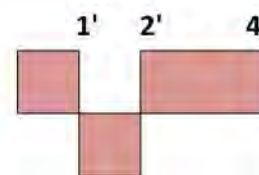
Section



Plan

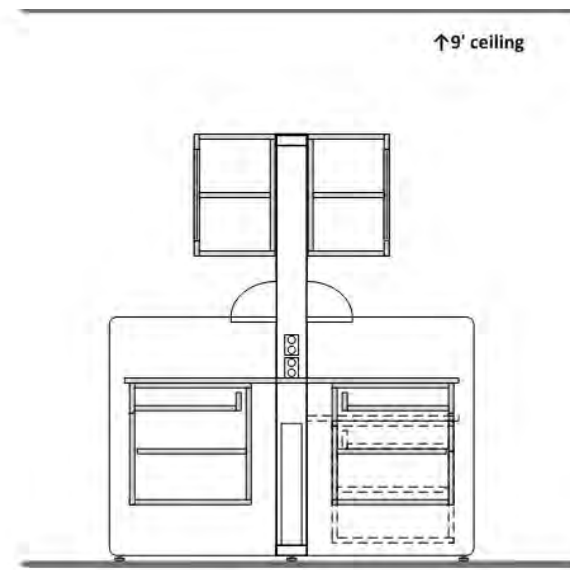


Elevation

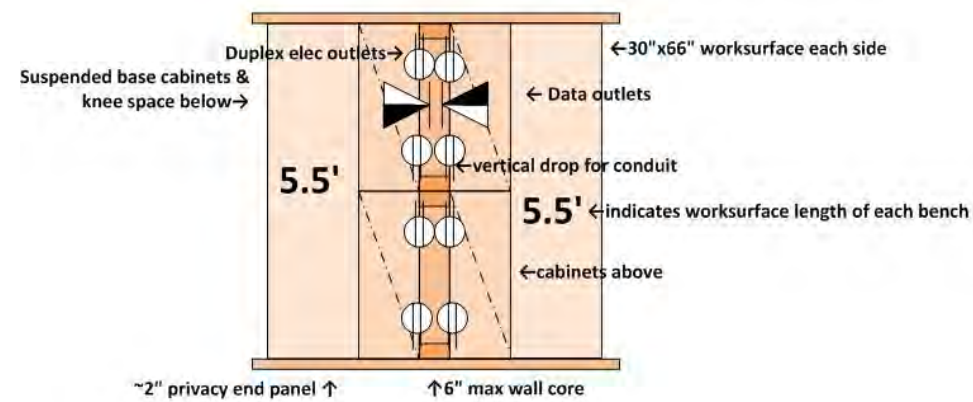




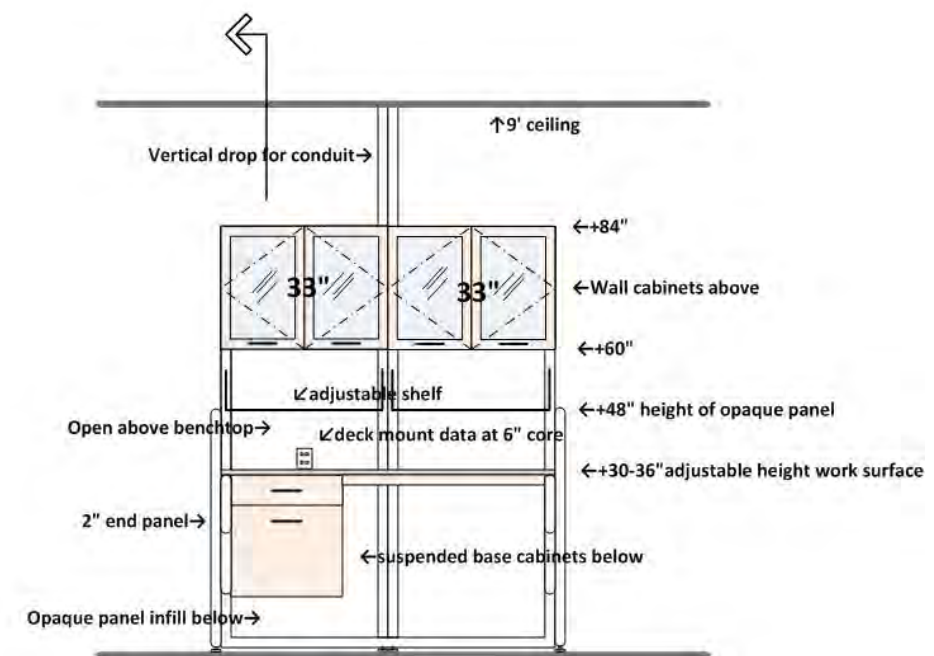
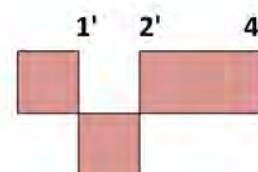
# 5.5' Peninsula Bench Special Procedure Area



Section



Plan

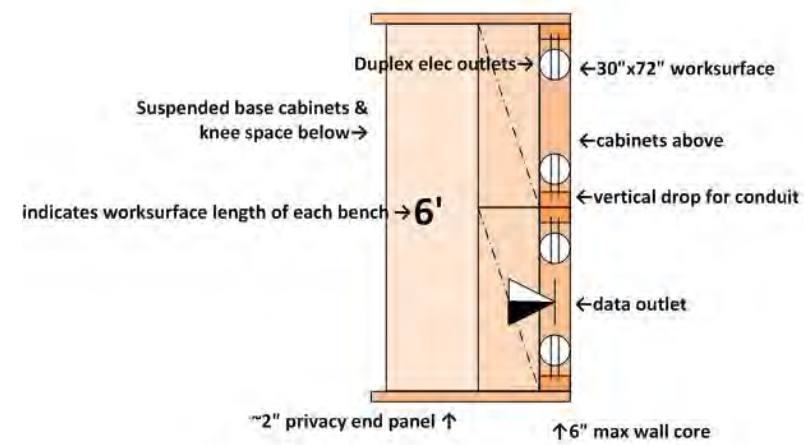


Elevation

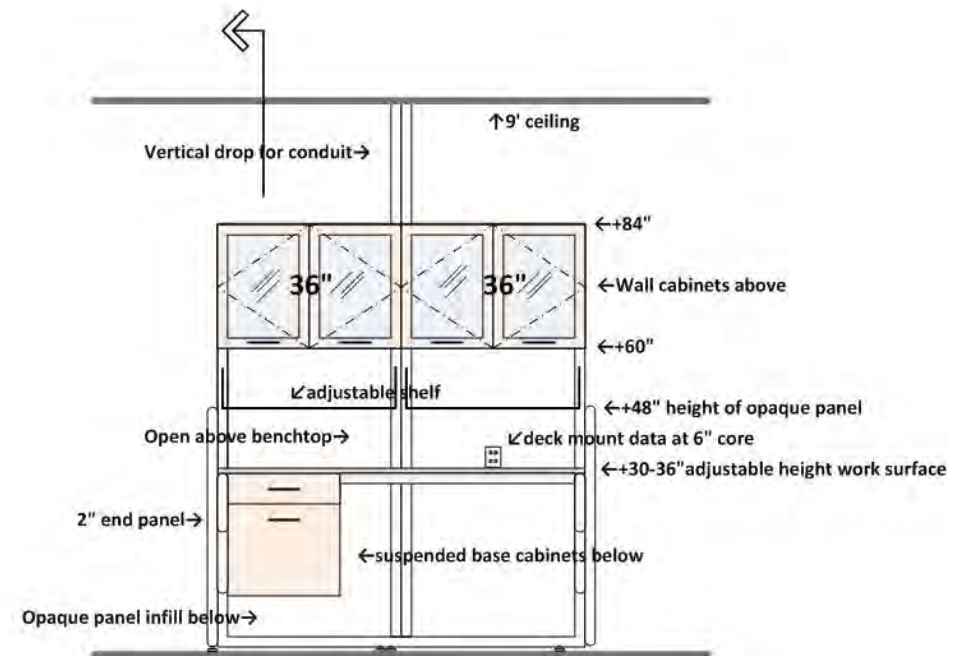
**6' Wall Bench**  
**Special Procedure Area**  
 Toxicology  
 Microbiology



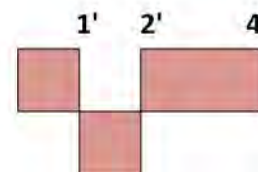
**Section**



**Plan**



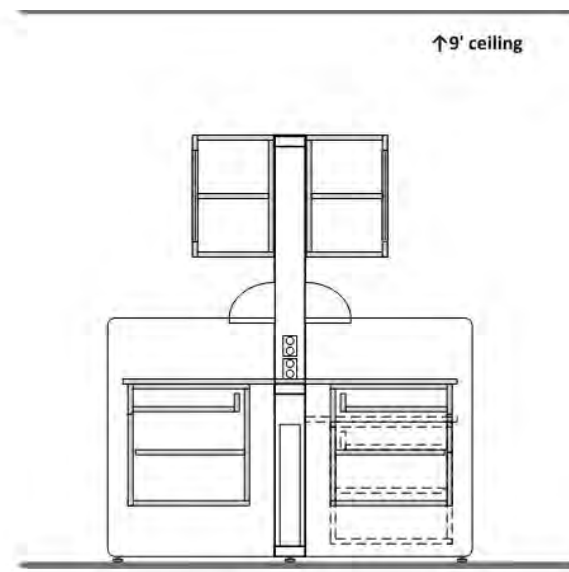
**Elevation**



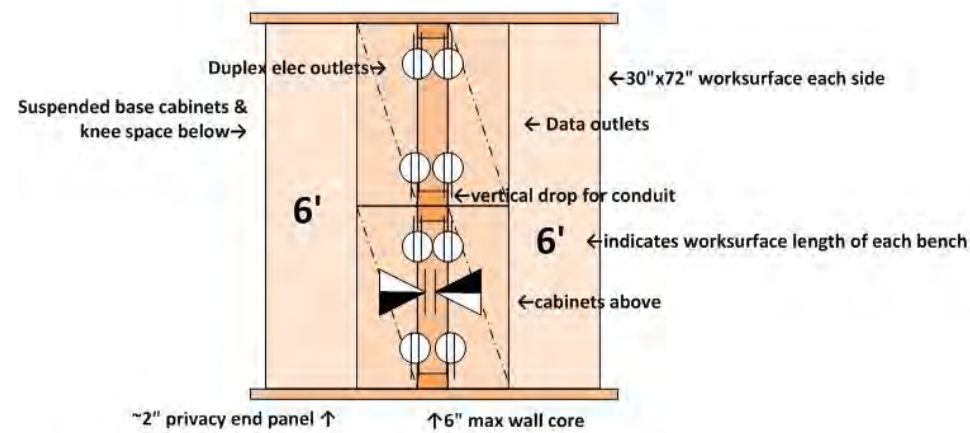
# 6' Island Bench

Rapid Response Area Center  
 Rapid Response Area North  
 Blood Bank  
 Histology/Cytology  
 Microbiology

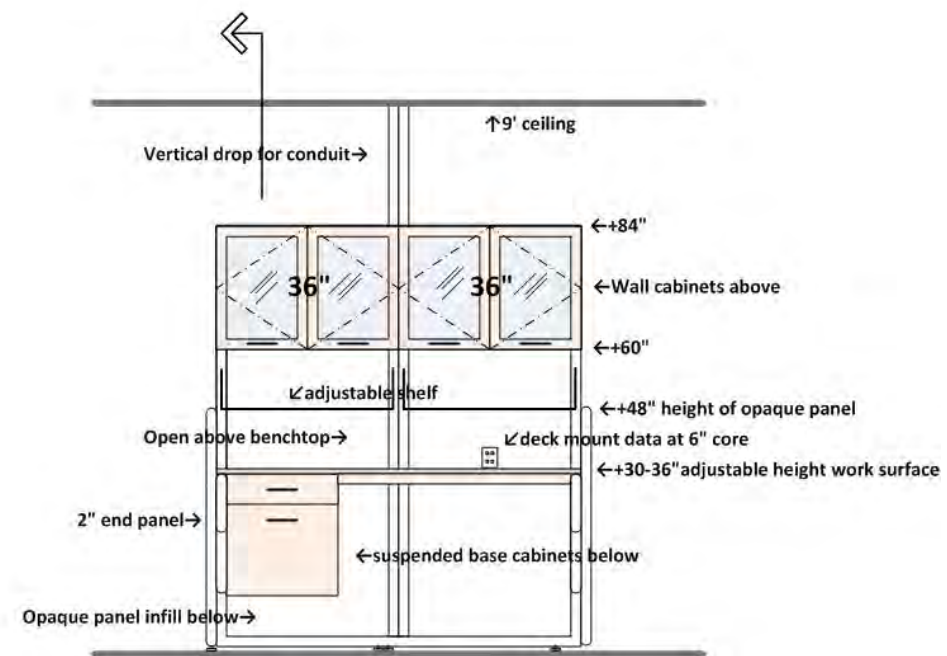
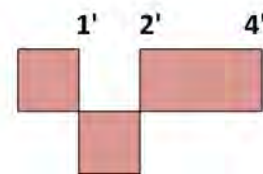
Similar for Rapid Response Area  
 Except no end panel at peninsula



Section



Plan

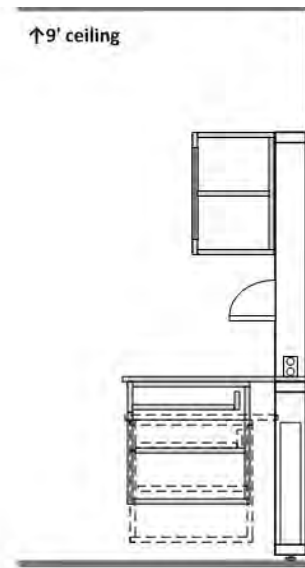


Elevation

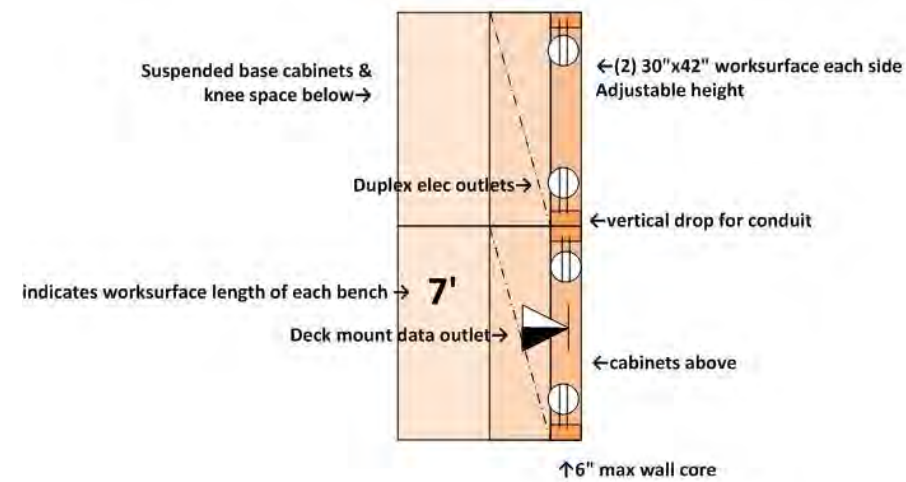
# 7' Wall Bench

## Special Procedure Area

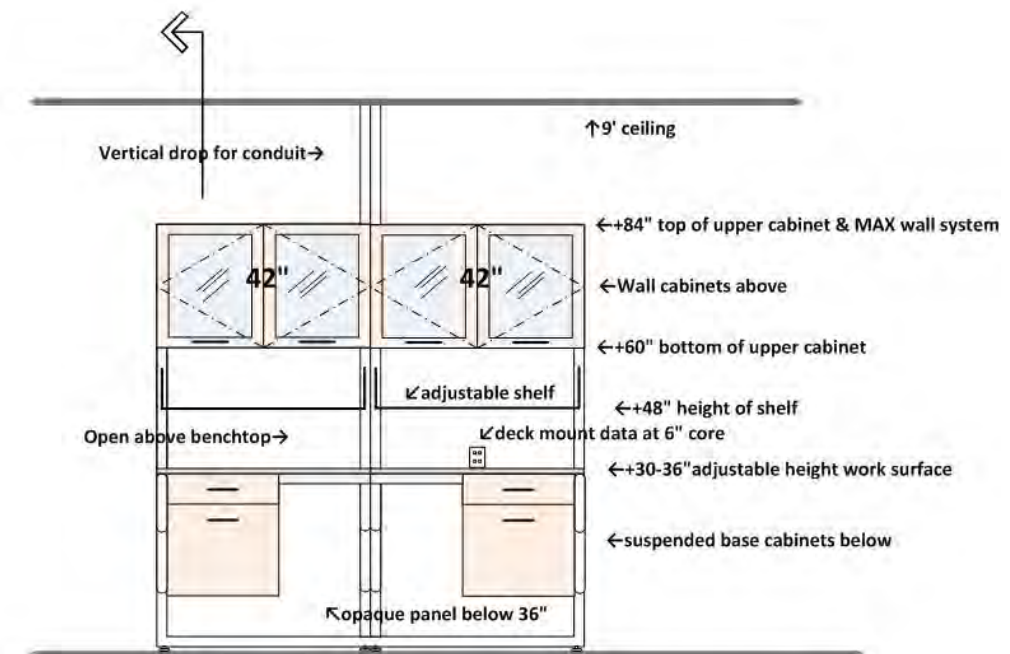
### Fluorescence Microscopy



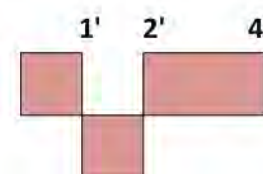
Section



Plan

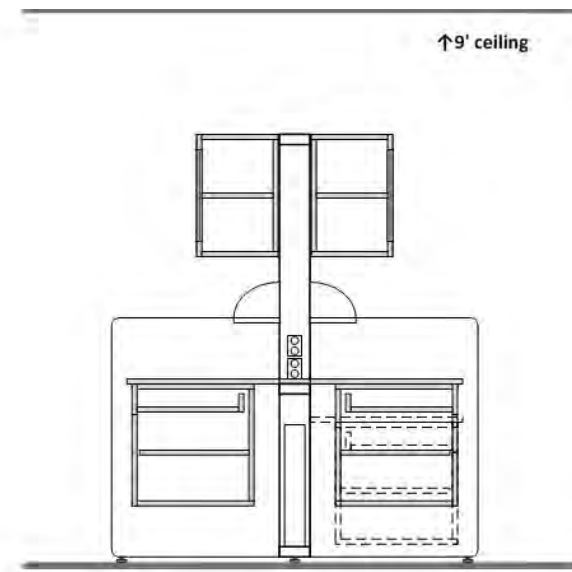


Elevation

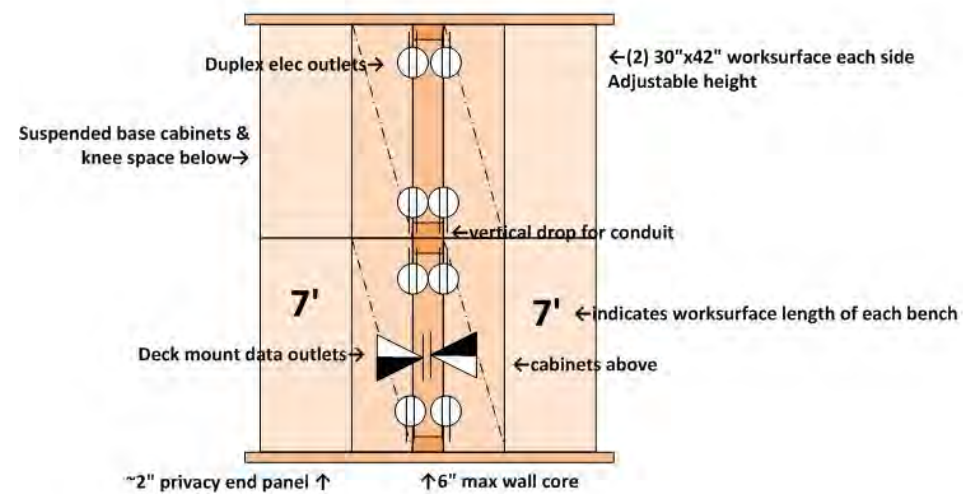


# 7' Island Bench

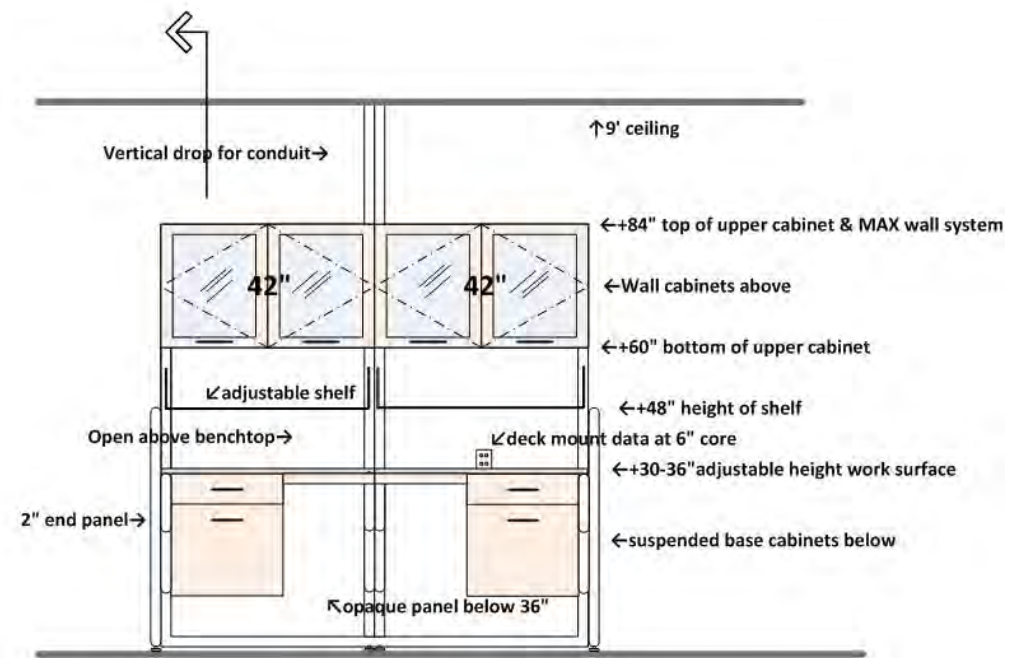
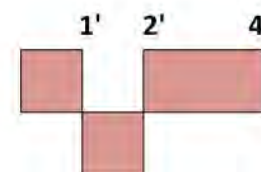
Rapid Response Area South  
 Rapid Response Area Center  
 Special Procedure Area



Section

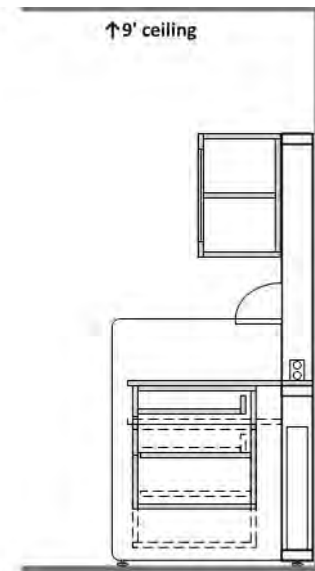


Plan

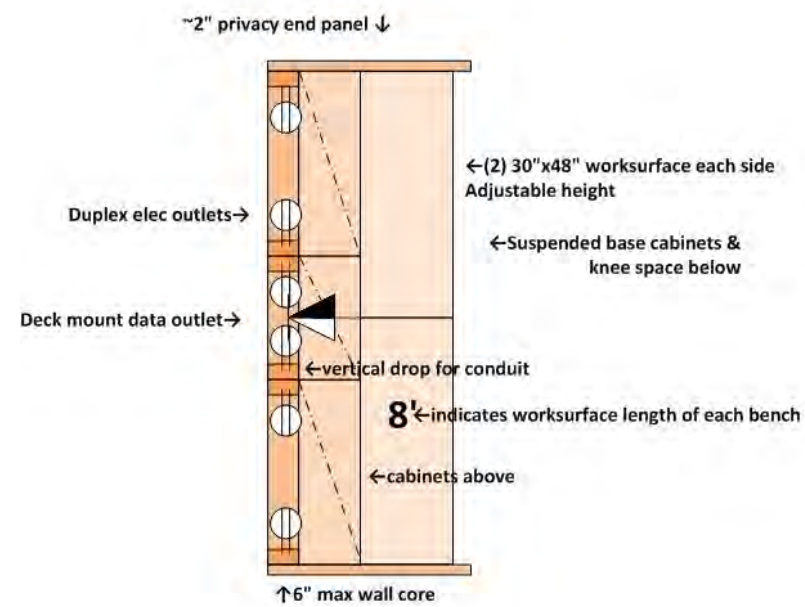


Elevation

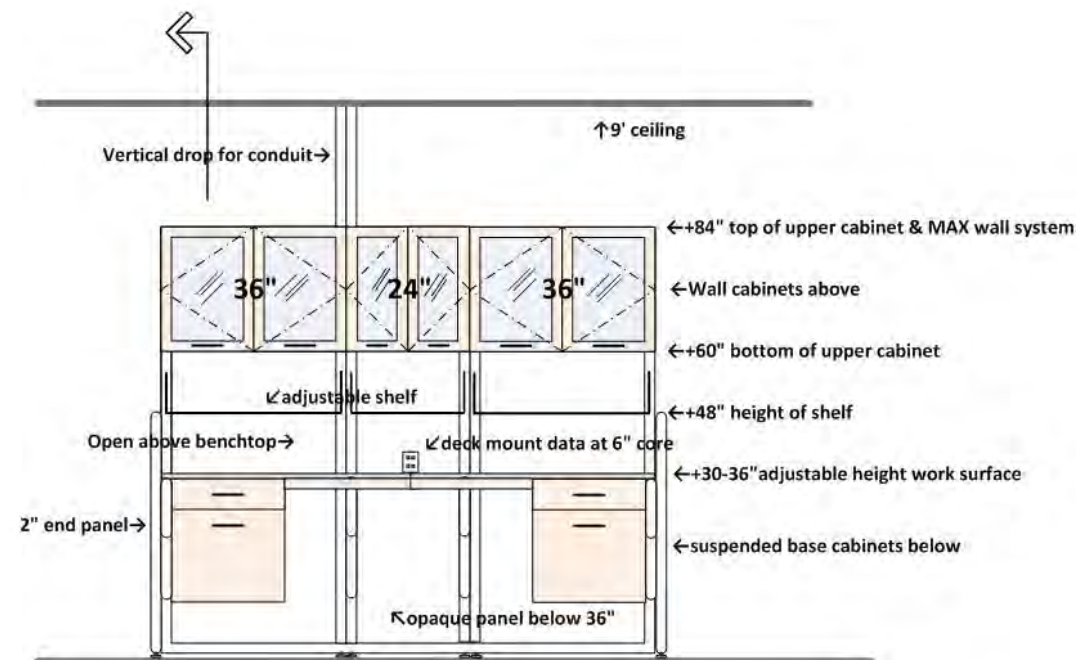
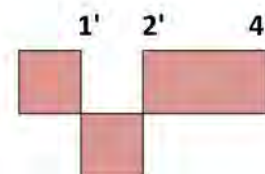
# 8' Wall Bench Accessioning Area



Section



Plan

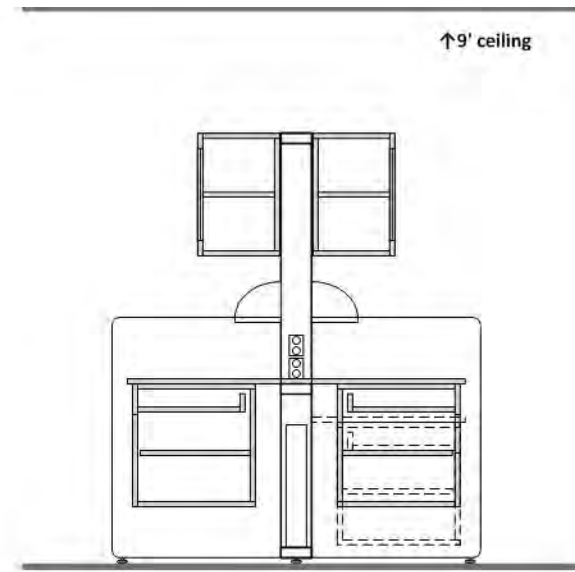


Elevation

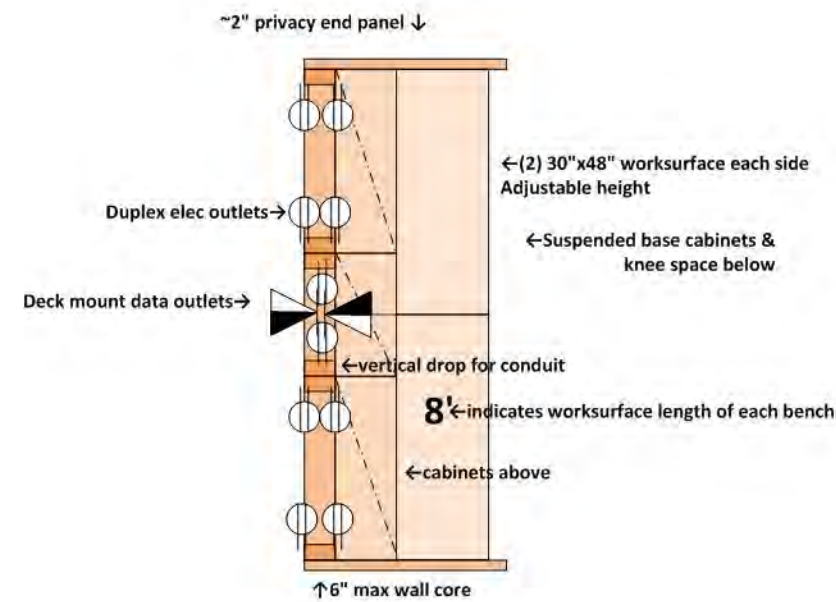
# 8' Island Bench

## Single Side

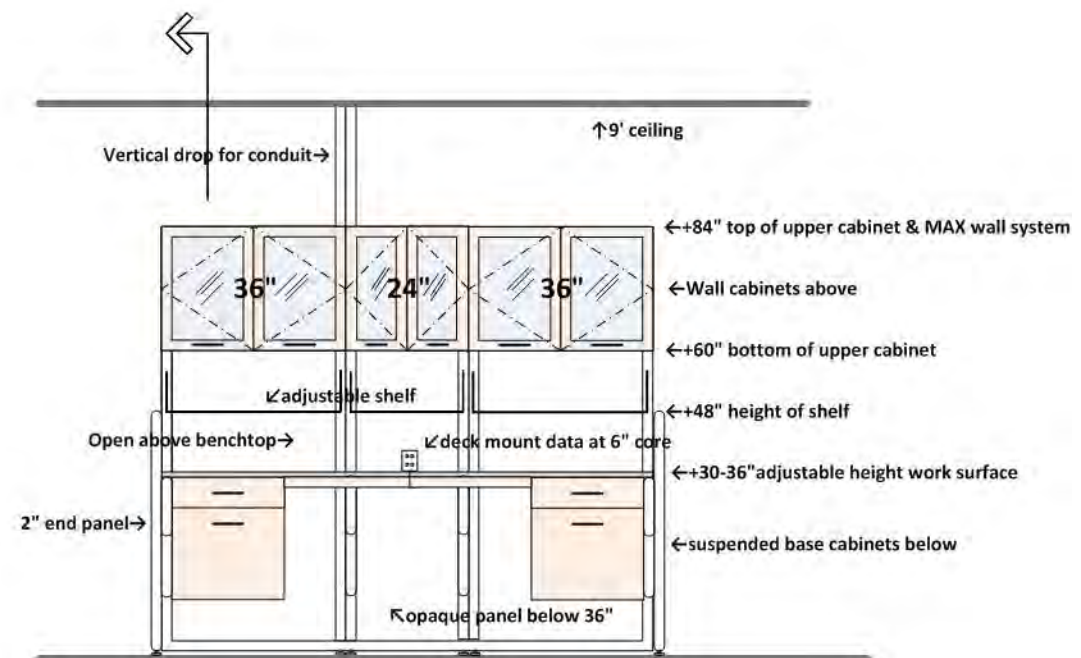
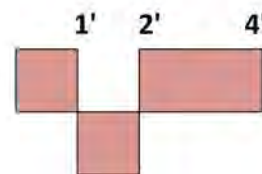
### Rapid Response Area Center



Section



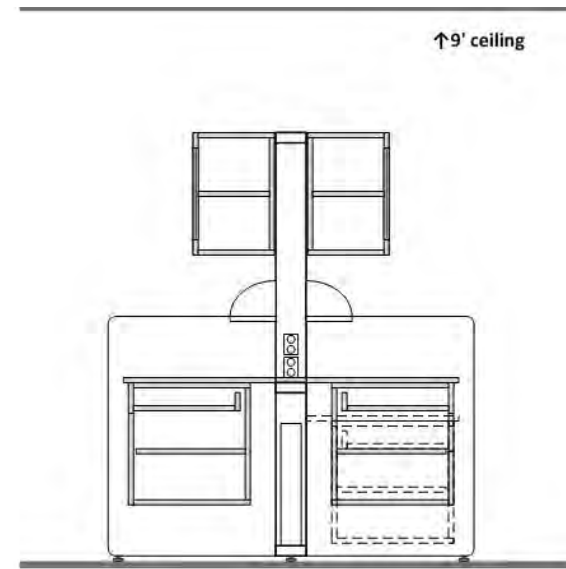
Plan



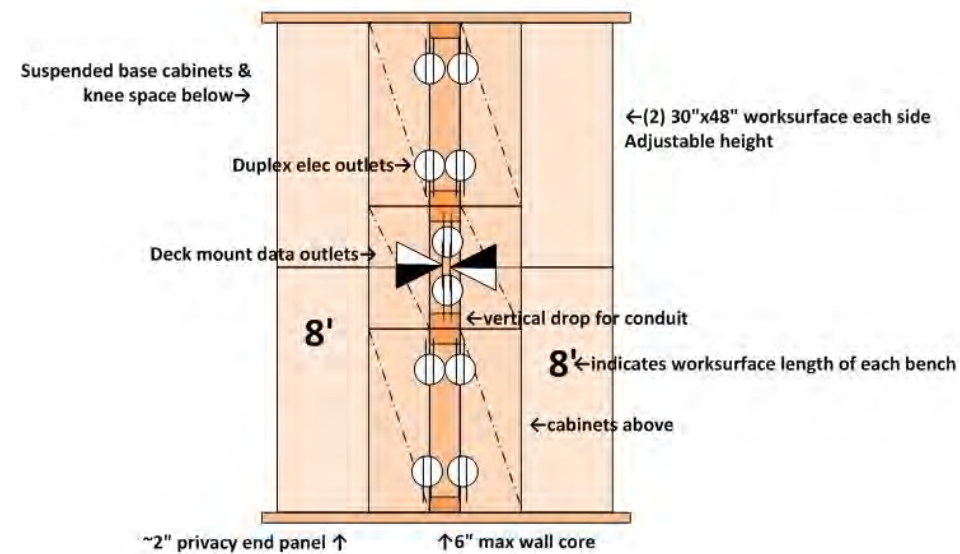
Elevation

# 8' Island Bench

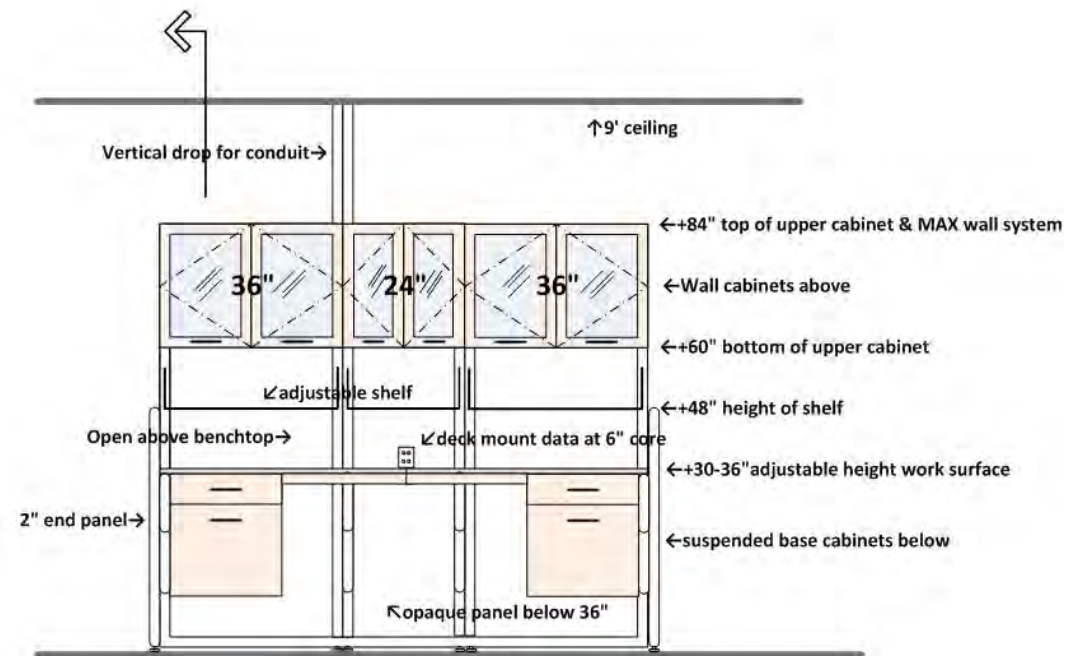
Rapid Response Area South  
Rapid Response Area Center



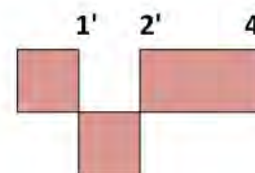
Section



Plan



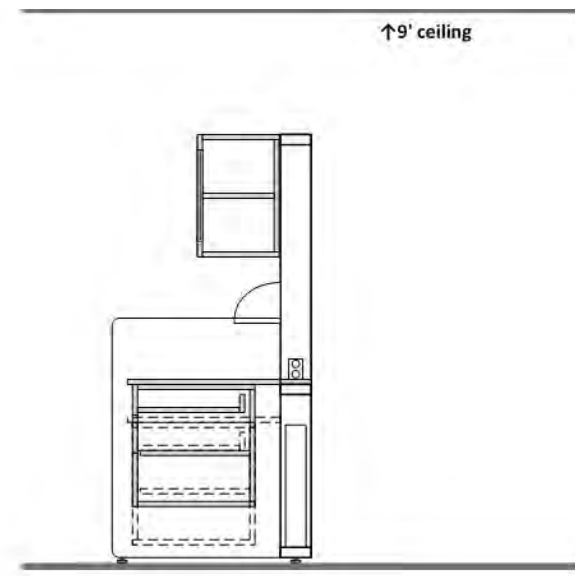
Elevation



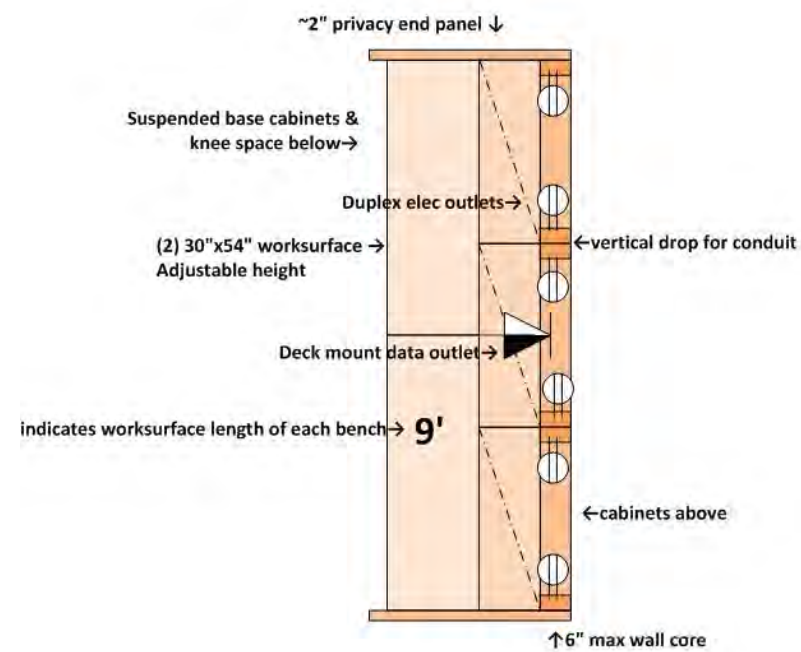


# 9' Wall Bench

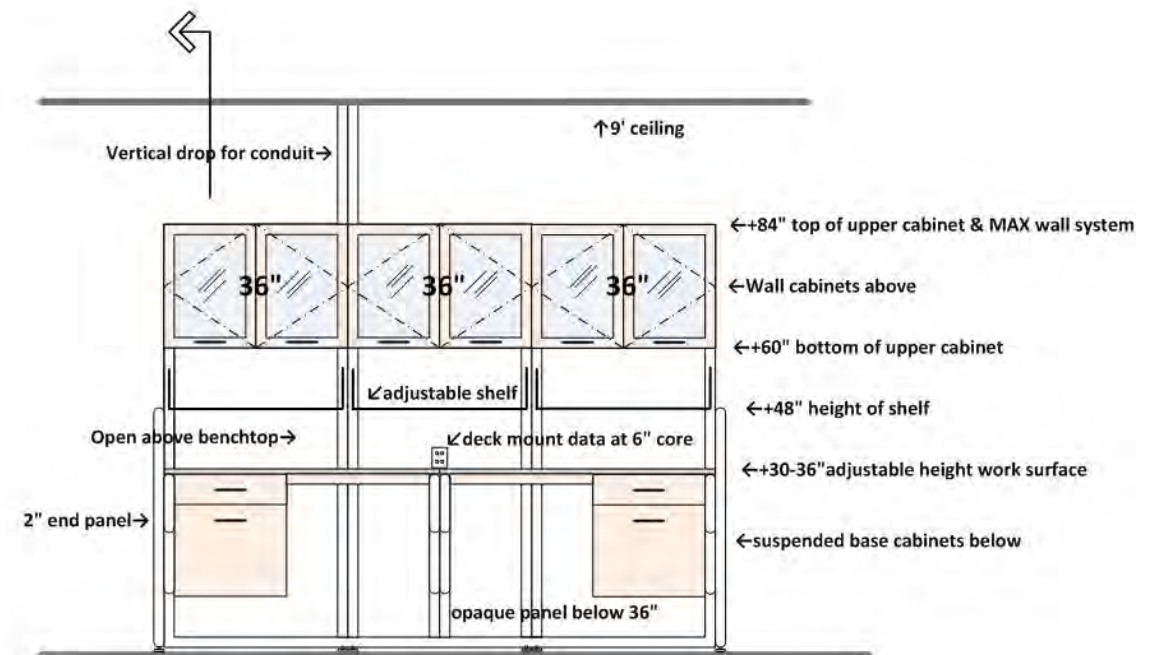
Rapid Response Area South  
 Single Side no wall behind  
 Special Procedure Area  
 Single Side at wall



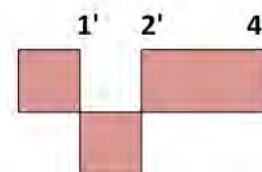
Section



Plan



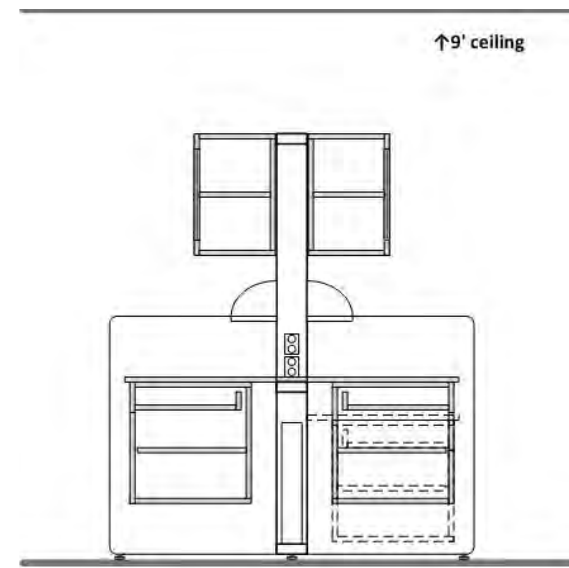
Elevation



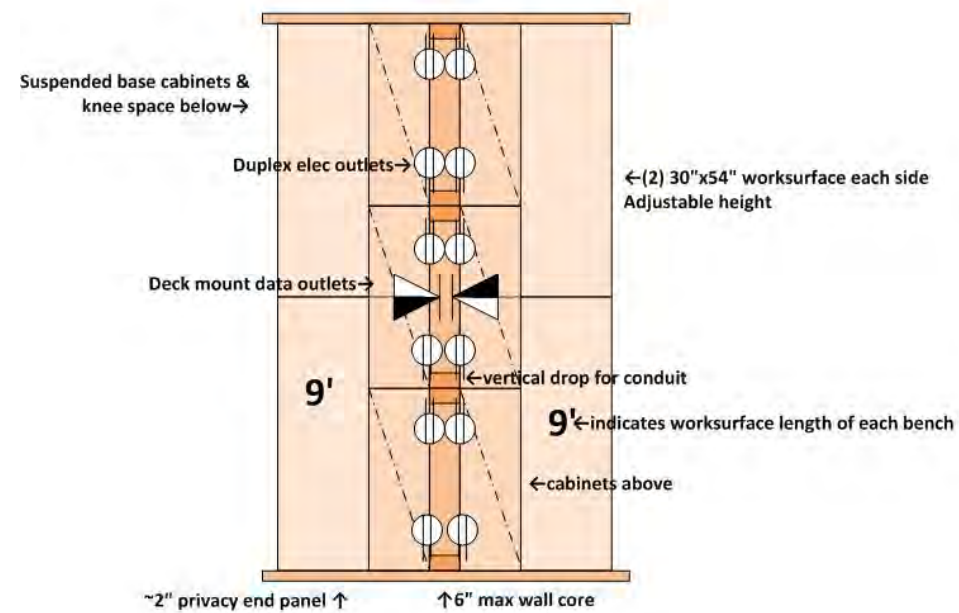
# 9' Island Bench

## Rapid Response Area Center

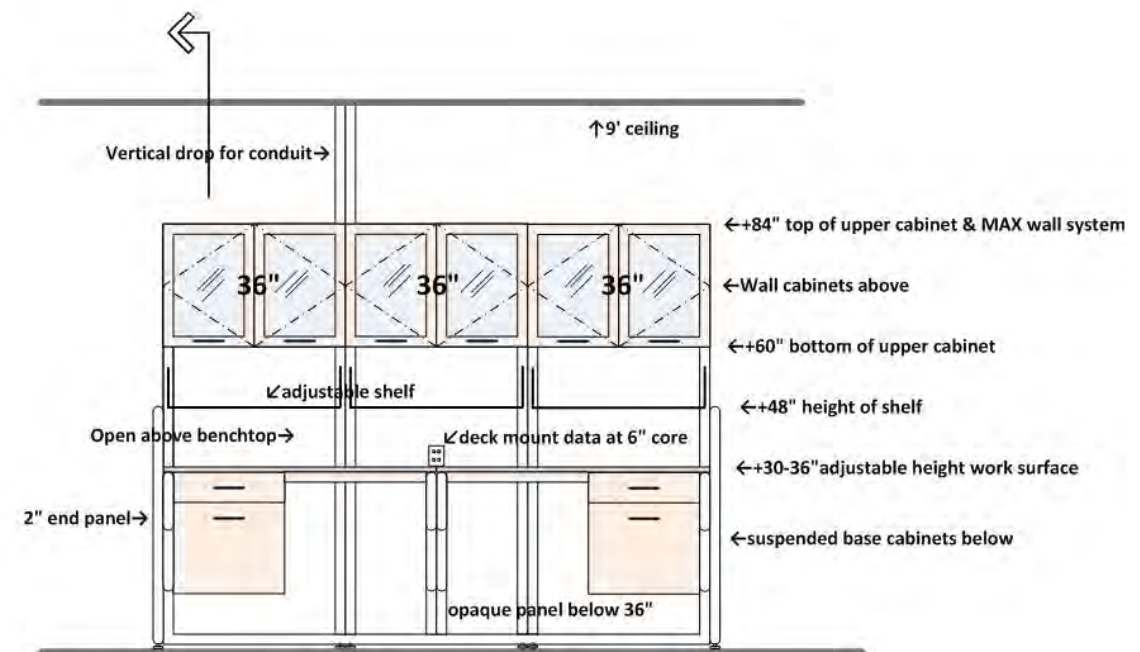
## Rapid Response Area North



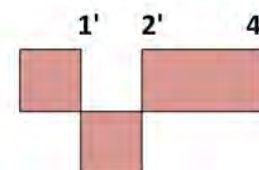
Section



Plan



Elevation



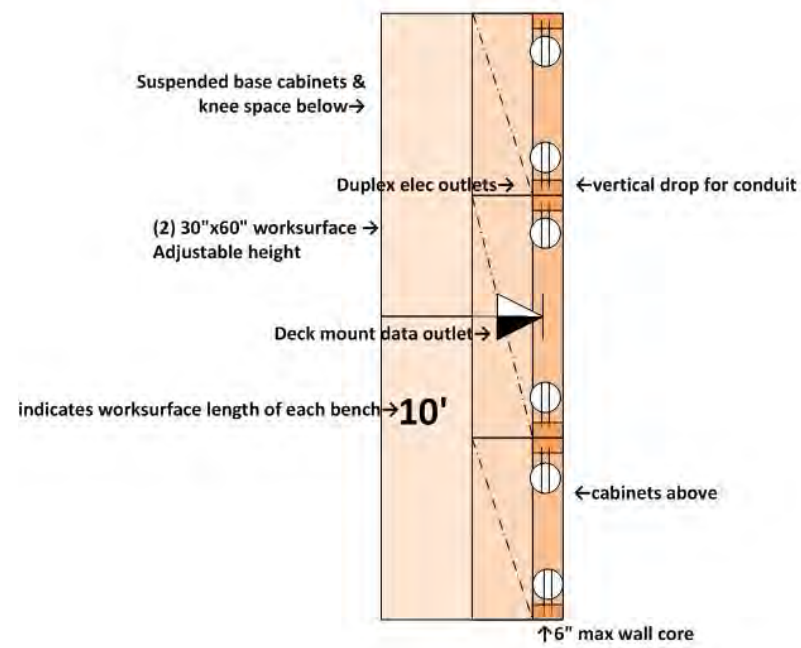
# 10' Wall Bench

## Special Procedure Area

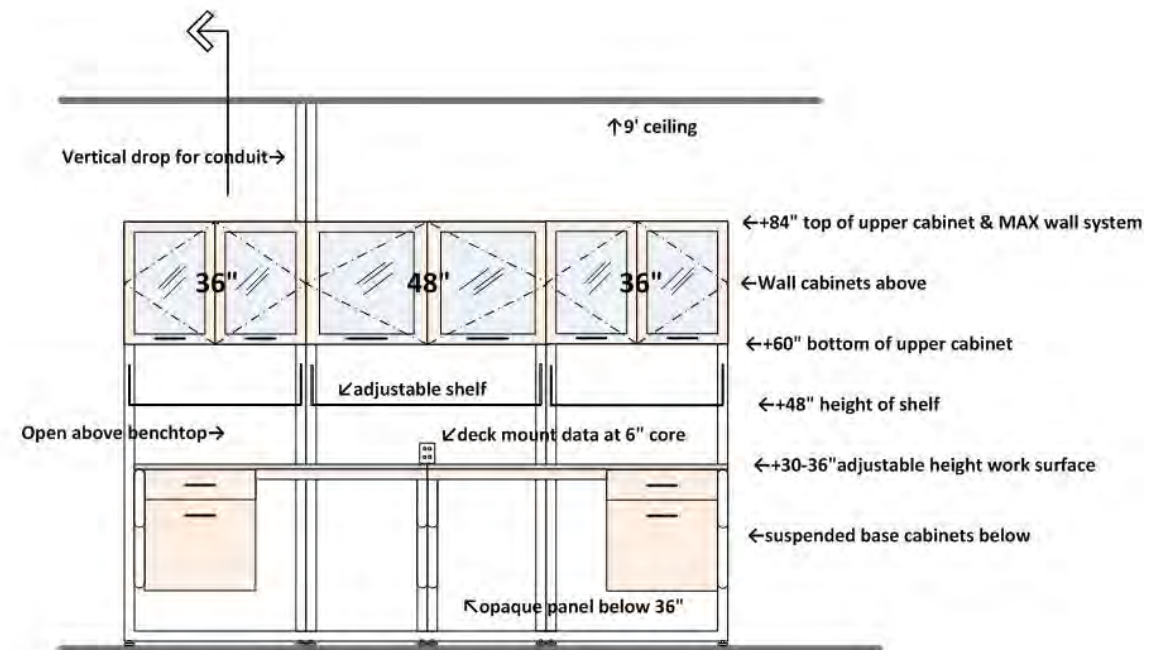
### Fluorescence Microscopy



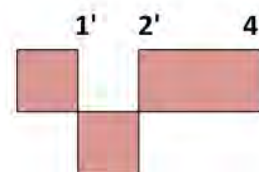
Section



Plan



Elevation



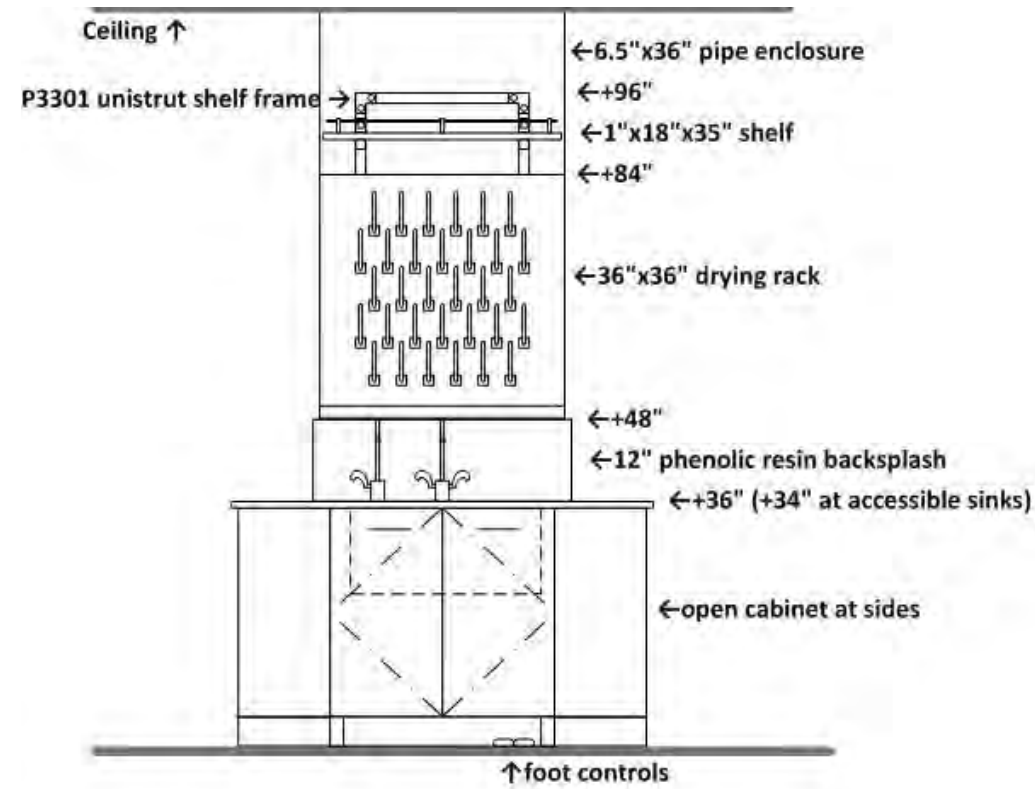
# Sink Bench

Adjacent to Modular Peninsula or Island Bench

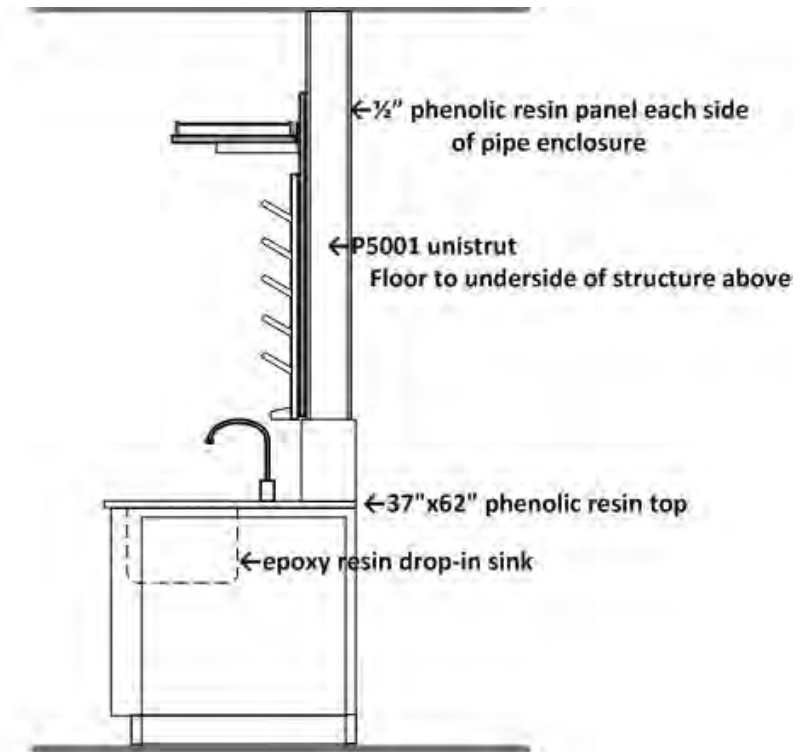
Accessioning Area

Rapid Response Area North

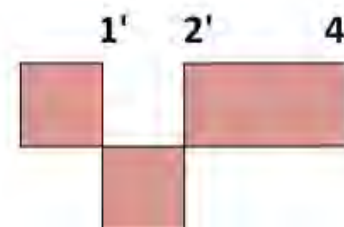
Special Procedure Area



Front Elevation



Side Elevation





# PRODUCT DIMENSIONS

DOMESTIC SIZES

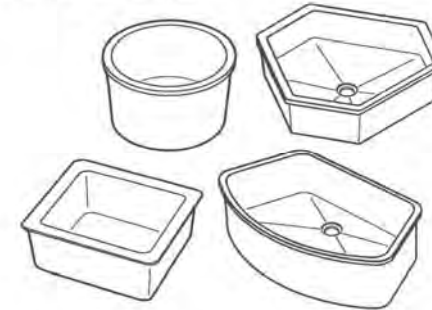
## Lab Sink Cut Sheet

- Sink A26: dual depth 5"11" accessible sinks at accessible work stations
- Sink D30: typical lab sink
- Sink drain and tail piece by Div. 11
- Connection by Div. 22

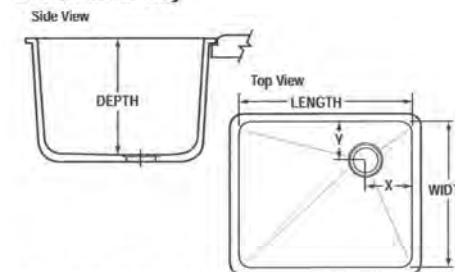
### Standard Dropln® Sinks

Sink No.	Outlet	Wgt (lb)	Dimensions (in)				
			Inside Bowl			Outlet Location	
			Length	Width	Depth	X	Y
D01C	Center	9	9.0	6.0	5.8	4.5	3.0
D03C	Center	16	12.0	8.0	5.8	6.0	4.0
A05	Corner	18	14.0	10.0	5.0	3.5	3.5
D05	Corner	22	14.0	10.0	6.2	3.5	3.5
D05C	Center	24	14.0	10.0	6.2	7.0	5.0
D10	End	20	16.0	8.0	6.8	4.5	4.0
D10C	Center	22	16.0	8.0	6.8	8.0	4.0
D15	Corner	30	16.0	12.0	8.0	3.5	3.5
D15C	Center	31	16.0	12.0	8.0	8.0	6.0
D19	Corner	42	16.0	16.0	9.6	3.5	3.5
D20	Corner	32	16.0	16.0	7.5	3.5	3.5
D22C	Center	30	18.0	6.5	6.8	9.0	3.3
D24(C)	Center	30	18.0	14.0	10.5	9.0	6.8
A25	Corner	35	18.0	15.0	5.0	3.5	3.5
D25	Corner	39	18.0	15.0	7.9	3.5	3.5
D30	Corner	53	18.0	15.0	11.0	3.5	3.5
D30C	Center	50	18.0	15.0	10.8	9.0	7.5
D33E	End	59	21.0	17.0	9.8	4.5	8.5
D45	Corner	64	21.5	15.5	11.0	3.5	3.5
D50C	Center	48	24.0	16.0	8.0	12.0	8.0
D52	Corner	77	24.0	18.0	11.0	3.5	3.5
A55	Corner	47	25.0	15.0	4.8	3.5	3.5
D55	Corner	61	25.0	15.0	10.0	3.5	3.5
D59	Corner	61	28.0	15.0	11.8	3.5	3.5
DRS12	Center	18	12.0	Round	7.8	Center	Center

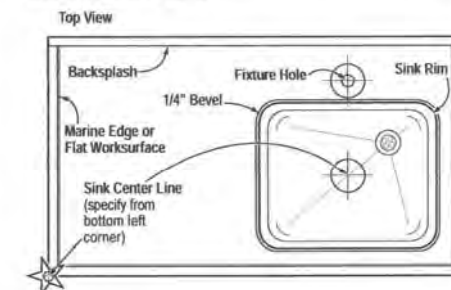
### Dropln® Sink Styles



### Dimensions Key



### Installation Detail

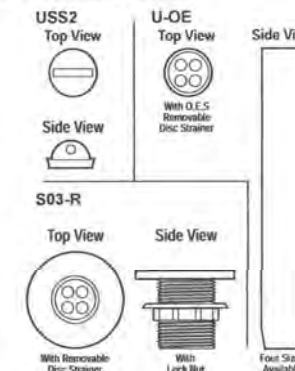


### Special Order Dropln® Sinks

Sink No.	Outlet	Wgt (lb)	Dimensions (in)				
			Inside Bowl			Outlet Location	
			Length	Width	Depth	X	Y
D06*	Center	34	12.0	12.0	12.0	6.0	6.0
A07*	Corner	24	14.0	14.0	5.0	3.5	3.5
D08*	Corner	25	15.0	8.0	6.0	3.5	3.5
D09*	Corner	25	15.0	8.0	10.8	3.5	3.5
D21*	Corner	58	16.0	16.0	15.0	3.5	3.5
A26*	Corner	39	18.0	15.0	5/11	4.5	5.5
D32	Corner	49	18.0	15.0	15.8	3.5	3.5
D51*	Corner	60	24.0	16.0	9.6	3.5	3.5
D54*	Corner	45	25.0	15.0	8.0	3.5	3.5
D57*	Corner	71	25.0	15.0	13.6	3.5	3.5
D58*	Corner	79	25.0	15.0	17.8	3.5	3.5
D61	End	94	30.0	16.0	17.8	4.5	7.5
D65C*	Center	98	35.5	19.5	9.8	17.8	9.8
D68**	End	70	30.0	16.0	10.0	4.75	8.0
D70C*	Center	95	24.0	16.0	15.5	8.0	12.0
D100**	Center	29	22.5	Hexagon	5.0	Center	Center
D200**	End	64	30.9	Hexagon	7.0	15.5	8.0
DRS10*	Center	14	10.0	Round	7.8	Center	Center
DHC20*	End	82	30.0	Hexagon	7.0	Center	Center
D99*	End	56	32.0	Semi-Circle	10.0	11.5	4.5

All sinks are available at both plants unless they are Special Order Sinks, available as noted:  
 \* Available only from Taylor, TX, plant (colors: Black Onyx, Gray, Graphite, Tan, Forest Green and Steel Blue).  
 \*\* Available only from Canton, MI, plant (colors: Black Onyx, Gray and Alpine White).  
 ♿ ADA compliant sinks are designated by this symbol.  
 All Dimensions are nominal. Exterior dimensions vary by MFG location. Cut sheets available upon request.

### Outlets & Accessories



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Rev. 02/08

# COLORTECH

701 West Erie Street Phone 312 666 6500  
Chicago, Illinois 60610 Fax 312 666 8597

Laboratory Service Fixtures by  
WaterSaver Faucet Co.

CT4554VB-BH

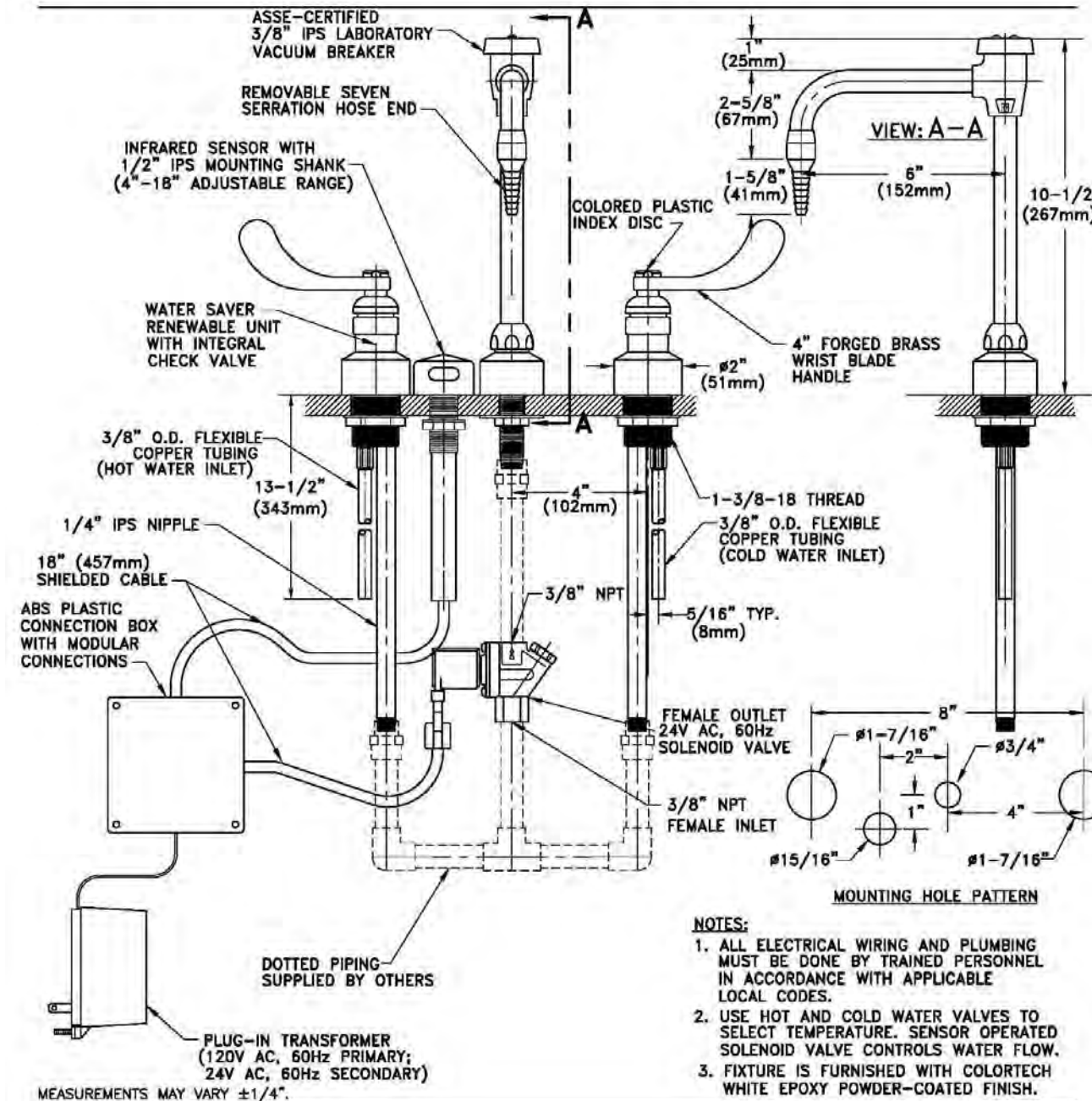
DECK MOUNTED SENSOR OPERATED AUTOMATIC MIXING FAUCET WITH 6" RIGID VACUUM BREAKER  
GOOSENECK, WRIST BLADE HANDLES, AND MANUALLY OPERATED MIXING VALVES

## Lab Faucet Cut Sheet

Infrared hands free

Provide at accessible sinks

Requires 120v outlet at sink



Drawing Number: \_\_\_\_\_

Revision Number: \_\_\_\_\_

030806-KJS

# COLORTECH

Laboratory Service Fixtures by  
WaterSaver Faucet Co.

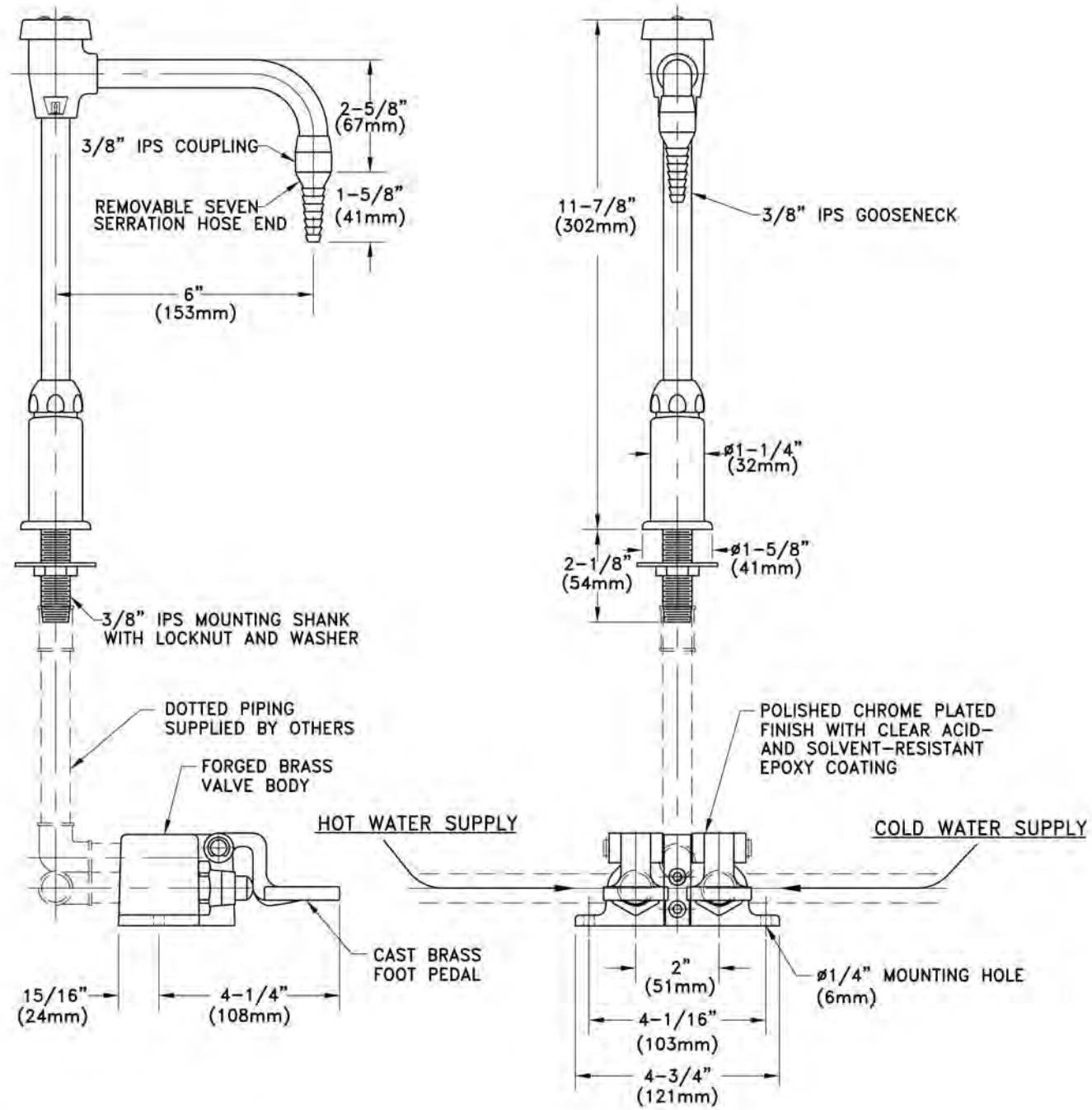
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## Lab Faucet Cut Sheet

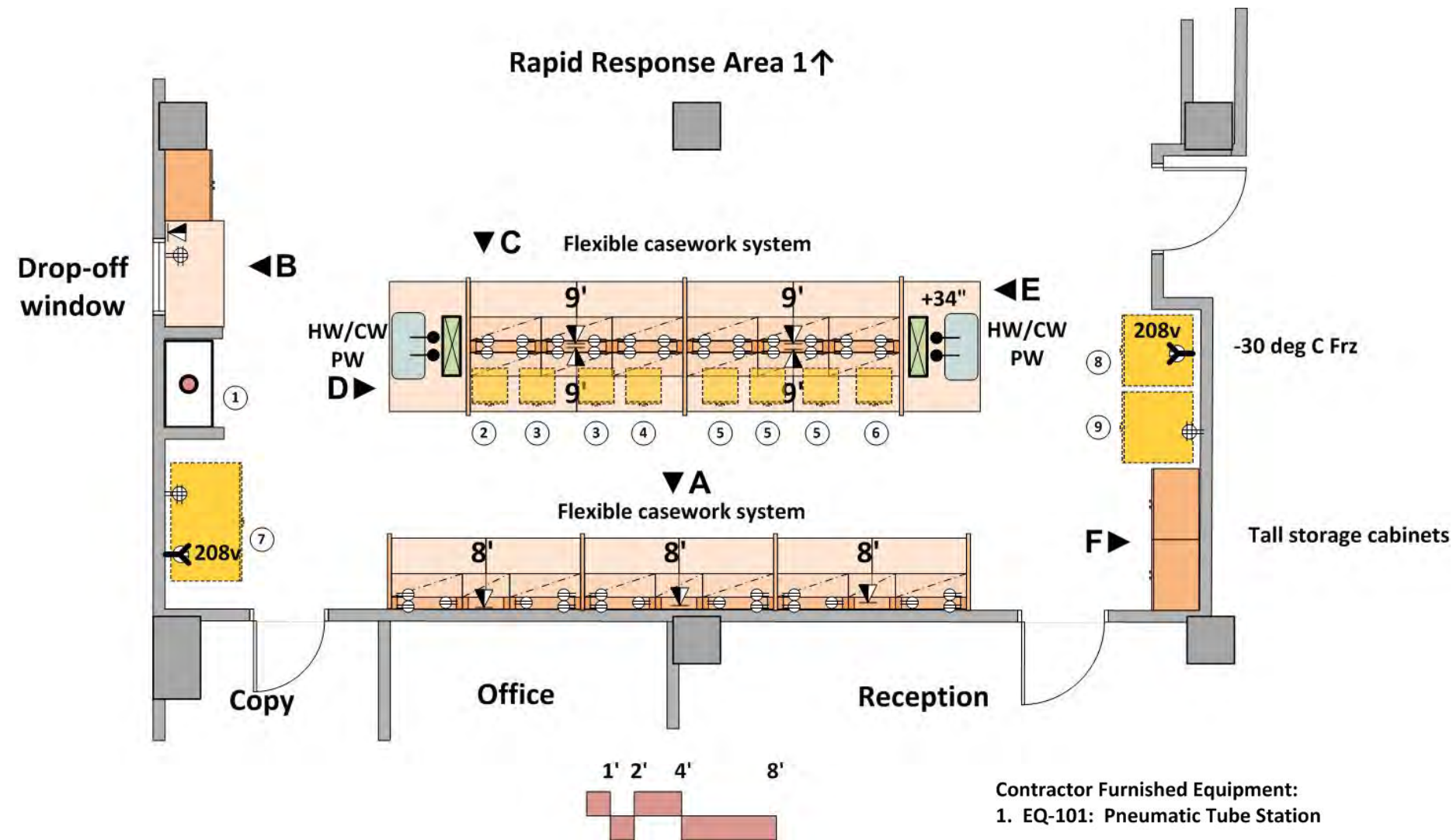
Foot controls  
Provide at non-accessible sinks

CT084VB-WSA-3001

DECK MOUNTED TURRET WITH 6" RIGID/SWING VACUUM BREAKER GOOSENECK, MOUNTING SHANK  
AND FLOOR MOUNTED FOOT-OPERATED SELF-CLOSING MIXING VALVE



# Accessioning Area Room #P210



## ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3'x8' pairs at entry  
 Acoustic Attenuation: NC 45 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 Pressure: Negative  
 6 air changes per hour minimum  
 Heat gain: 50 btuh/sf

## ELECTRICAL

115v duplex and fourplex outlets (maximum of (2) fourplex per circuit)  
 Standby power at all outlets  
 208v30a1ph  
 Dedicated circuits at floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

## PLUMBING

Hot/Cold water (HW/CW) at sinks with hands free controls  
 Pure water (PW) at sinks  
 Pneumatic tube system (PTS) Swiss Logic

## CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 Phenolic resin tops  
 Epoxy resin sinks  
 Faucets

## Contractor Furnished Equipment:

1. EQ-101: Pneumatic Tube Station

## Owner Furnished Equipment:

2. EQ-102: Benchtop Centrifuge #1
3. EQ-103: Benchtop Centrifuge #2 (x2)
4. EQ-104: Benchtop Centrifuge #3
5. EQ-105: Benchtop Centrifuge #4 (x3)
6. EQ-106: Benchtop Centrifuge #5
7. EQ-107: Freezer -20 deg C Double wide
8. EQ-108: Freezer -30 deg C
9. EQ-109: Refrigerator (new)

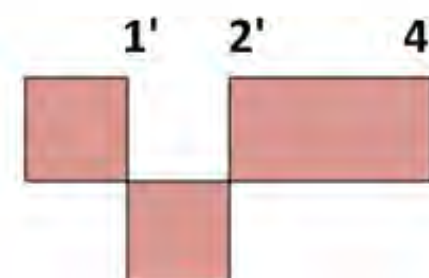
See Rapid Response Areas for other Accessioning refrigerators



# Accessioning Area

Room #P210

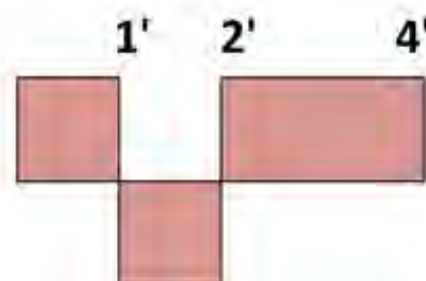
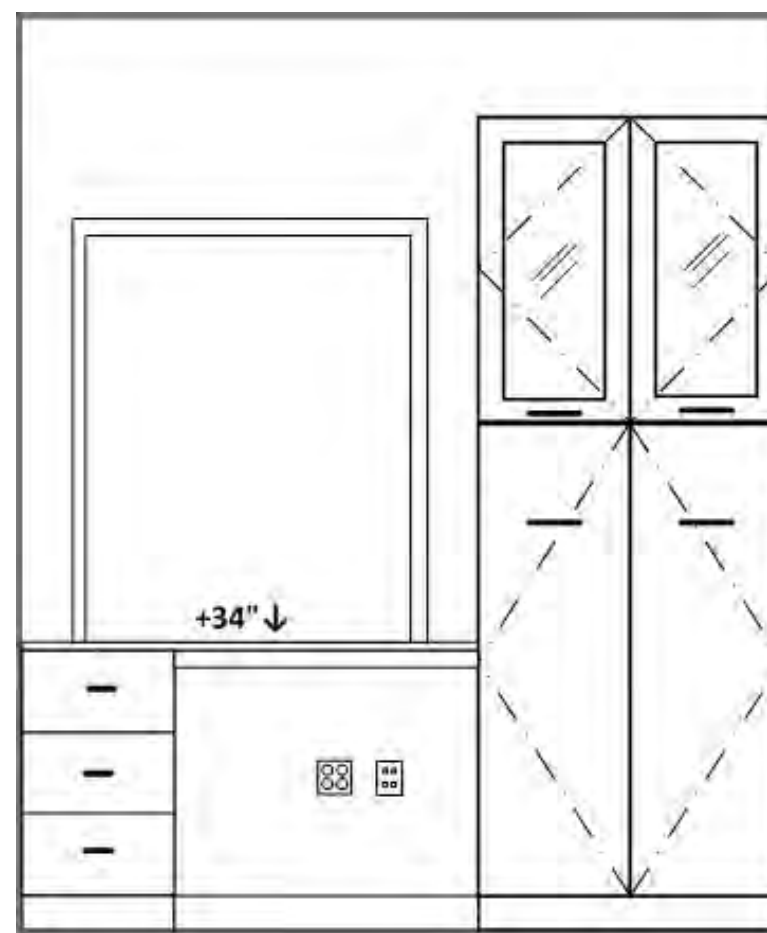
Elevation A



# Accessioning Area

Room #P210

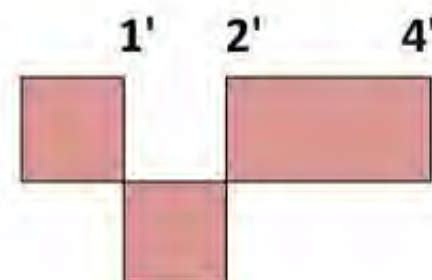
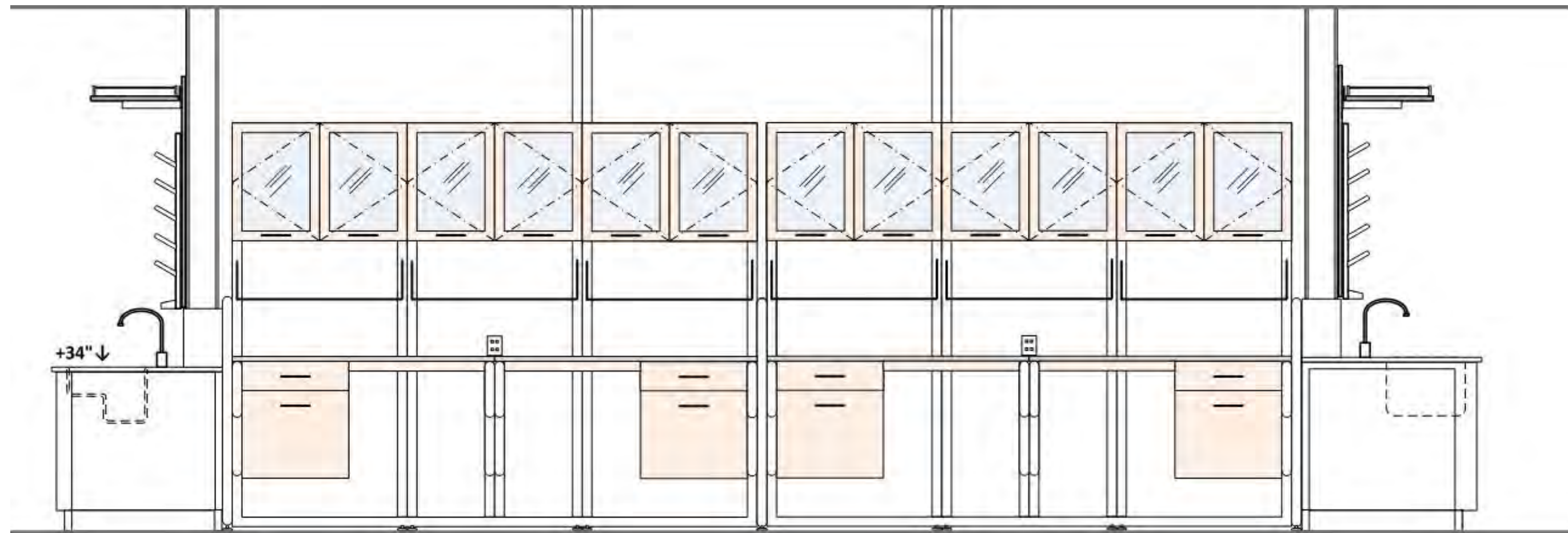
Elevation B



# Accessioning Area

Room #P210

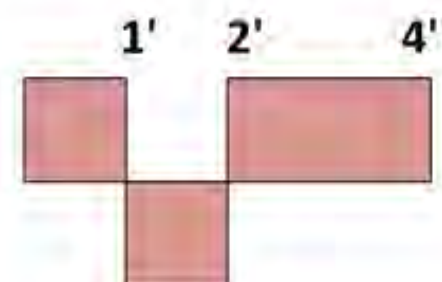
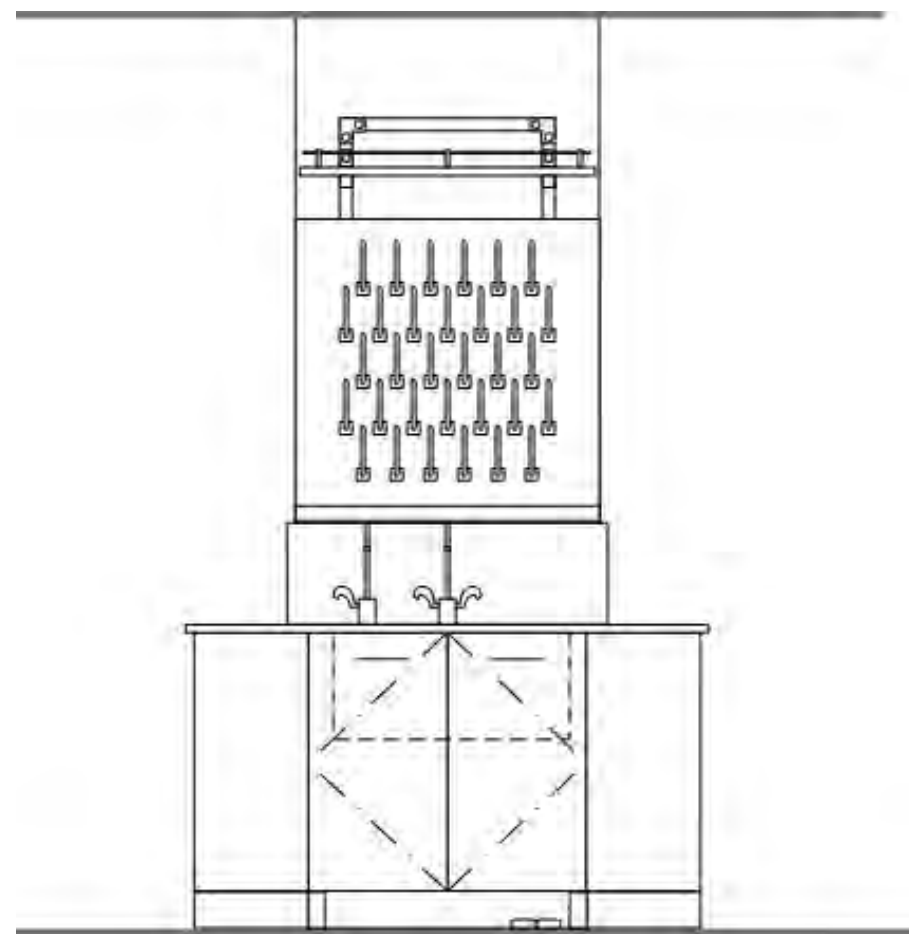
Elevation C



# Accessioning Area

Room #P210

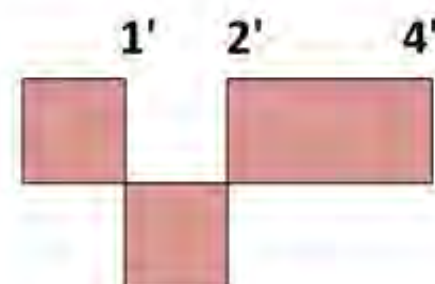
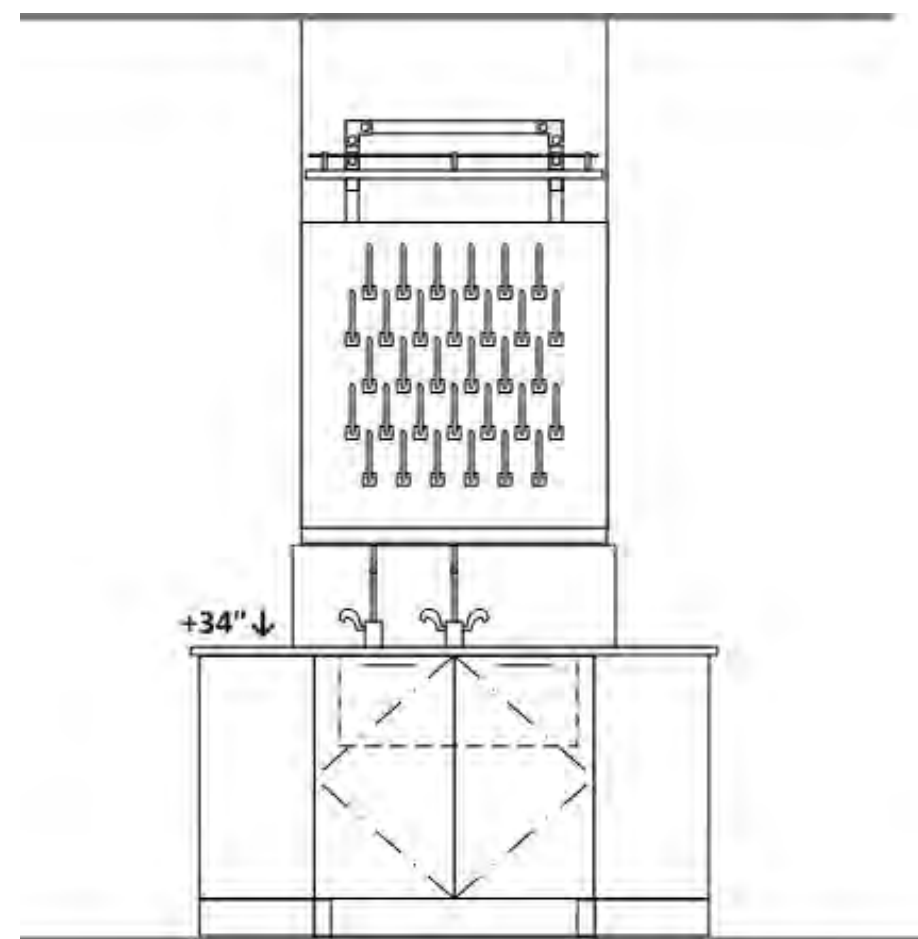
Elevation D



# Accessioning Area

Room #P210

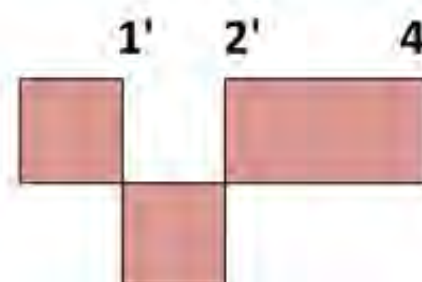
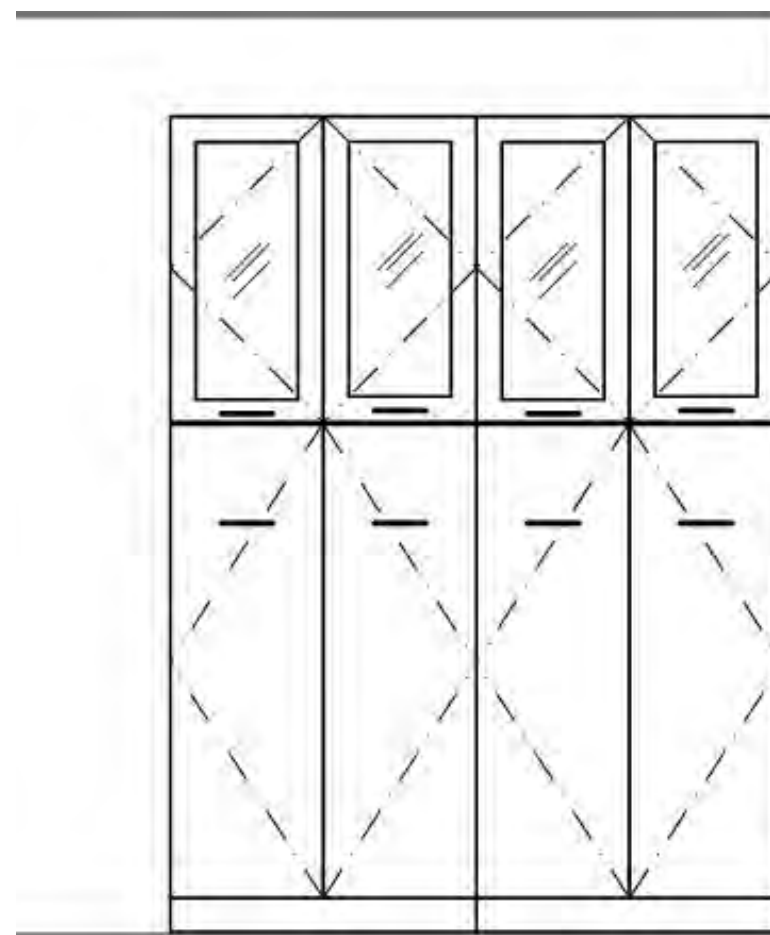
Elevation E



# Accessioning Area

Room #P210

Elevation F



# Equipment Schedule

Room/Area: <b>Accessioning Area- Room #P210</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
<b>EQ-101</b>	Pneumatic tube system	E-237	Varies	Varies	Varies	Varies	W	115v20a1ph standby power	vacuum				Contractor Furnished Contractor Installed
	Swiss Logic												
<b>Owner Furnished Equipment</b>													
<b>EQ-102</b>	Benchtop Centrifuge #1 Spinchron 15	E-241A	16.6"	19.3"	15"	110 lb.	B	120v20a1ph standby power					Owner Furnished Owner Installed
<b>EQ-103</b>	Benchtop Centrifuge #2 (x2) Spinchron DLX	E-241A	21.5"	26"	16"	144 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
<b>EQ-104</b>	Benchtop Centrifuge #3 Allegra 6	E-241A	~24"	~24"	~12"	~50 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
<b>EQ-105</b>	Benchtop Centrifuge #4 (x3) StatSpin Express 3	E-241A	21.5"	26"	16"	114 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
<b>EQ-106</b>	Benchtop Centrifuge #5 StatSpin Express 4	E-241A	13"	16"	8"	22 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
<b>EQ-107</b>	Freezer -20 deg C double wide Revco	E-241A	24.75"	35.5"	58.25"	475 lb.	F	208v30a1ph standby power					Owner Furnished Owner Installed
<b>EQ-108</b>	Freezer -30 deg C Helmer	E-241A	29.75"	38.5"	80"	475 lb.	F	208v30a1ph standby power NEMA 6-15					Owner Furnished Owner Installed
<b>EQ-109</b>	Refrigerator (new) Helmer HLR 125	New	29.5"	38.5"	78.75"	476 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed

# Pneumatic Tube System Cut Sheet

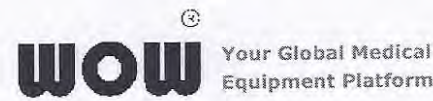
EQ-101

Accessioning Area

pending



12/14



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### Beckman Coulter, Spinchron 15 Manufacturer Specifications

*X1  
Accessioning Area*

View "Spinchron 15" Items

MODEL	Spinchron 15
SAMPLE VOLUME, mL (DETECTION PROCESS, HR)	180fixed/ swing
CYCLE DURATION, MIN	1-599
Adjustable (SASH)	Yes
POWER NEEDED, VAC (ENERGY)	120/220
Hz (OPERATING)	50/60
SAMPLES/RUN	Variable
WARNINGS	Imbalance - see comments for additionsrotor ID
SOUND LEVEL, DB	<=64
DIMENSIONS (HXWXD) CM, (IN) (DISPLAY)	38 x 42 x 49 (15 x 16.6 x 19.3)
WEIGHT, kg (lb) (DISPLAY)	50 (110.3)
SAFETY MEASURES	Lid interlock, imbalance
REVOLUTIONS	
Adjustable (SASH)	Yes
Max. speed (REVOLUTIONS)	4500(swinging), 14,500 (fixed angle)
OTHER ATTRIBUTES (Interference compensation)	Aerosol containment for biohazards; auto door interlock; rotor ID.
MARKETING REGION (Interference compensation)	Worldwide



Image is for illustration purpose only.

You may also be interested in the following Manufacturer Specifications:

- 365303-03DLX Manufacturer Specification
- GS-6 Manufacturer Specification
- GS-15 Manufacturer Specification
- Spinchron Manufacturer Specification

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# Centrifuge Cut Sheet

## Spinchron 15

### EQ-102

#### Accessioning Area

### Beckman Coulter, Spinchron DLX Manufacturer Specifications

MODEL	Spinchron DLX
ROTOR HEADS AVAILABLE	PTS-2000, PTS-DLX, PTS-DLXA, microplate
Other (ROTORS)	1
Fixed angle (ROTORS)	3
Swinging bucket (ROTORS)	0.9 kW maximum
POWER USAGE	40.6 x 54.6 x 66 (16 x 21.5 x 26)
Dimensions (h x w x d), cm (in)	(ANTECHAMBER)
WEIGHT, kg (lb) (DISPLAY)	65.4 (144)
REVOLUTIONS	
Speed adjustment (REVOLUTIONS)	Digital
Max accel time, sec (REVOLUTIONS)	Variable
Max. force (REVOLUTIONS)	3200
Max. speed (REVOLUTIONS)	3750
CAPACITY, mL	3000
COVER LOCK (ACCELERATION)	Yes
BRAKES	
Max brake time, sec (BRAKING)	Variable
Type (CONFIGURATION)	Electric, disk
Settings avail. (BRAKES)	Variable
PROGRAMMING POSSIBILITIES (BRAKES)	less or equal to 10 programs 10 programs
SOUND LEVEL, DB	<62
TIMER	Yes
Increments, min	1
Range, min	0-10 hr or hold
POWER NEEDED, VAC (ENERGY)	120, 60 Hz
WARNING SIGNALS (REVOLUTIONS)	Different risks and other fault conditions. See comments Rotor imbalance
TACHOMETER	
Precision, rpm (TACHOMETER)	3
Kind of display (DISPLAY)	Digital
OTHER SPECIFICATIONS (AIR SUPPLY)	Aerosol containment; adapters available for blood bags, microplates; brushless induction drive.
CE MARK (MDD) (Interference compensation)	Yes
MARKETING REGION (Interference compensation)	Worldwide

### View "Spinchron DLX" Items



X2

Image is for illustration purpose only.

You may also be interested in the following Manufacturer Specifications:

- J6-MI Manufacturer Specification
- J6-HC Manufacturer Specification
- J6-MC Manufacturer Specification
- Avanti J-30 I Manufacturer Specification
- Avanti J-25 Manufacturer Specification

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<http://www.medwow.com/med/centrifuge/beckman-coulter/spinchron-dlx/1570.model-spec> 12/5/2011

# Centrifuge Cut Sheet

## Spinchron DLX

### EQ-103

### Accessioning Area

# Centrifuge Cut Sheet

## Allegra 6

## EQ-104

## Accessioning Area

### Specifications

	Allegra 6R	Allegra 6	Allegra 6KR
Refrigeration	Yes, CFC-Free	No	Yes, CFC-Free
Maximum Speed	6,100 rpm (Fixed-angle)	6,100 rpm (Fixed-angle)	6,100 rpm (Fixed-angle)
	3,750 rpm (Swinging-bucket)	3,750 rpm (Swinging-bucket)	3,750 rpm (Swinging-bucket)
Maximum g-Force	5,710 x g (Fixed-angle)	5,710 x g (Fixed-angle)	5,710 x g (Fixed-angle)
	3,210 x g (Swinging-bucket)	3,210 x g (Swinging-bucket)	3,210 x g (Swinging-bucket)
Maximum Capacity	4 x 750 mL	4 x 750 mL	4 x 750 mL
Run Time	Timed (0-30 min), Hold	Timed (0-30 min), Hold	Timed (0-30 min), Hold
Drive	Direct, Brush Type	Direct, Brush Type	Direct, Brush Type
Noise at Max Speed	≤ 65 dBa	≤ 65 dBa	≤ 65 dBa
Operating Temperature	-5°C to +25°C	Ambient	-5°C to +25°C
Set Temperature Range	-10°C to +40°C	N/A	-10°C to +40°C
Dimensions (cm) Lid Closed	76W x 66D x 39.4H	54.6W x 66D x 40.6H	54.6W x 66D x 67.3H
Dimensions (in) Lid Closed	30W x 26D x 15.5H	21.5W x 26D x 16H	21.5W x 26D x 26.5H
Weight without Rotor	75.8 kg (167 lbs)	51.7 kg (114 lbs)	90.3 kg (199 lbs)

### Ordering Information

Part No.	Description
366816	Allegra 6R Centrifuge, 120V/60Hz
366802	Allegra 6 Centrifuge, 120V/60Hz
366830	Allegra 6KR Centrifuge, 120V/60Hz

### Rotors and Accessories

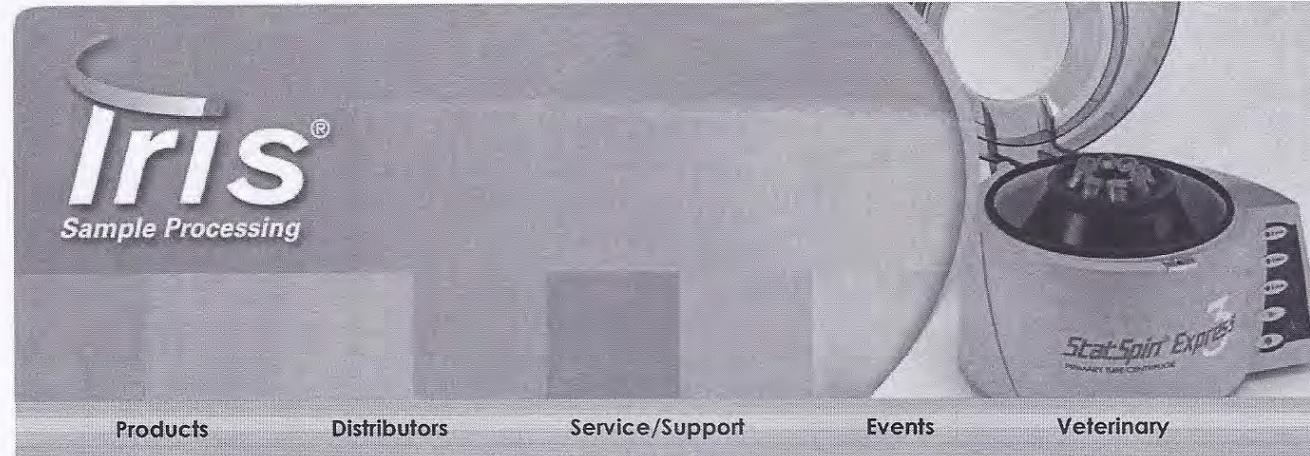
Part No.	Description	Max Speed (rpm)	Max RCF, g
360581	4 x 750 mL Swinging-bucket Rotor (GH-3.8) -11 Different Adapters Available	3,750	3,210
360585	Bucket Covers for GH-3.8 only (Set of 2)		
359232	Aerosolve Canisters for GH-3.8 only (Set of 4) -10 Different Adapters Available		
392806	Microplate Carriers (Set of 2) -Each Carrier Accommodates up to 4 Standard Microplates or 1 Deep-well Plate	3,750	2,890
367054	6 x 250 mL Fixed-angle Rotor (GA-6) -5 Different Adapters Available	6,100	5,710

For a complete listing of adapters, visit [www.beckmancoulter.com/centrifuge](http://www.beckmancoulter.com/centrifuge)



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## StatSpin® Express 3

X 4

### Primary Tube Centrifuge.

The StatSpin Express 3 provides faster turnaround time and greater productivity for your laboratory. Place it next to any of your STAT analyzers and serum or plasma is ready in just minutes.



With only three (3) settings, it is simple to use. Just select the 2, 3 or 5-minute button and press start. No fumbling with the settings or the need to readjust the speed. The unit beeps when it is done spinning. For safety, the lid remains locked until the rotor comes to a complete stop.

Samples can be processed as they arrive in the lab. Now you can process as many as eight (8) samples at once for high throughput. The StatSpin Express 3 holds tubes from 1.5 - 10mL in size.

The StatSpin Express 3 is powerful. The rugged brushless motor is maintenance free. The Express 3 comes with a 2-year warranty.

### Features:

- ▶ **Fast:** Rapid acceleration to optimal "g" forces produces sample separation in as little as 2 minutes!
- ▶ **Compact:** Small, round footprint takes up little bench space and fits well in small corners.
- ▶ **Quiet:** Won't disturb nearby workers.
- ▶ **Safe:** Cover interlock system, chamber gasket and proven mechanical containment for operator safety. UL listed (US/Canada), CE marked.
- ▶ **Simple to operate:** Load tubes, select time and press start!
- ▶ **Easy to maintain:** 10% bleach-compatible surfaces and polypropylene rotor make cleaning easy. Disposable bowl liners available for added efficiency.

[Click here for Express 3 animation \(2.9Mb\)](#)

3 - Accessioning Area  
1 - BD Affirm Rapid HIV Bench

### Documentation and Literature

- ▶ [Datasheet](#)
- ▶ [Parts](#)
- ▶ [Tube insert guide](#)
- ▶ [Blood Bank Study](#)
- ▶ [Case Studies 1 2 3 4](#)
- ▶ [Lean Articles : 1 2 3 4](#)
- ▶ [BD Vacutainer Tubes Study](#)
- ▶ [Operator manual: Choose Language](#)

Request more info

### Specifications

Spin Select	2 min:120 seconds@7,200rpm/4,440xg 3 min:180 seconds@7,200rpm/4,440xg 5 min:300 seconds@5,600rpm/2,685xg
Cycle Time	2, 3 and 5 minutes
Accel Time	25 seconds or less
Decel Time	30 seconds or less
Tube Sizes	1.5 to 10mL blood tubes
Regulatory	UL, cUL and CE marked
Warranty	2 Years
Power	100 to 240V, 50/60Hz, 3.0 amp.
Dimensions	7.0" H x 11" W x 10.0" D (8.75lbs)

Specification subject to change without prior notice. StatSpin is a registered trademark of Iris Sample Processing, Inc.

### Ordering Information

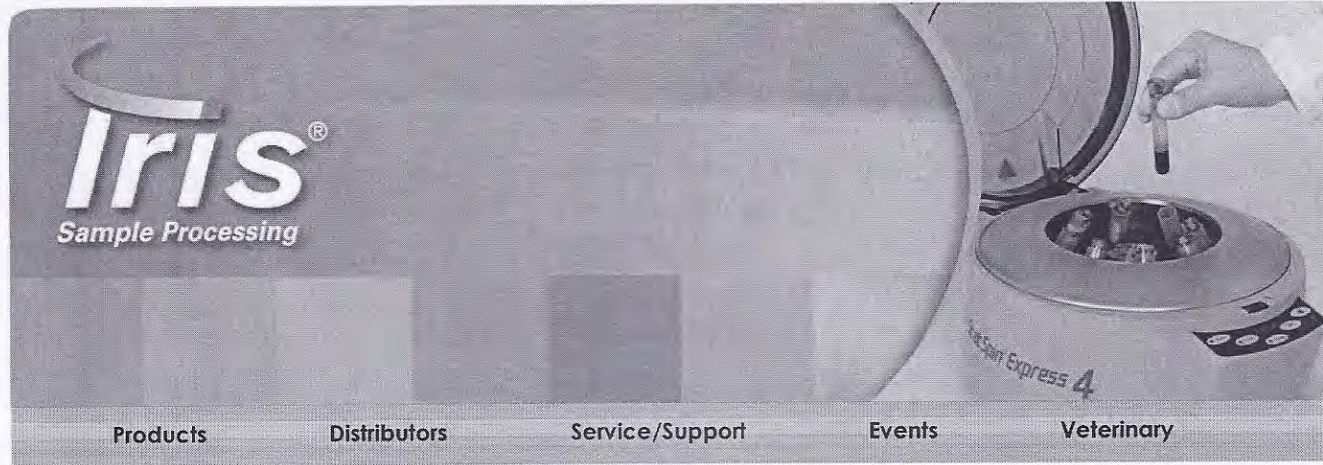
- SSX3 StatSpin Express 3 Centrifuge Includes 8-place rotor (RTX8), removable chamber liner, eight (8) 10mL inserts, eight (8) 5mL inserts and power cord.
- DL02 Disposable bowl liners for SSX3 3/pk.
- RTX8 Replacement Express 3 Rotor

# Centrifuge Cut Sheet

## StatSpin Express 3

### EQ-105

### Accessioning Area



Accessioning Area

### StatSpin® Express 4

#### High Speed Horizontal Centrifuge



The StatSpin Express 4, high speed horizontal centrifuge provides faster turnaround time and greater productivity for your "lean" laboratory. Place it next to any STAT analyzer and serum or plasma gel tubes are ready in just minutes.

With only three (3) settings, it is simple to use. Just select the 3, 5 or 10 minute button and press start. No fumbling with settings or the need to readjust the speed. For safety, the lid remains locked until the rotor comes to a complete stop. An audible alarm sounds when the cycle is completed. Samples can be processed as they arrive in the lab; no need for batching, no unproductive time spent waiting for the centrifuge....you'll have results in minutes. Now you can process as many as eight (8) samples at once for high throughput.

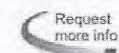
The StatSpin Express 4 is powerful. The rugged brushless motor is maintenance free.

#### Features:

- ▶ **Fast:** In just 3 minutes, the Express 4 can produce serum or plasma equal to tubes spun for 10 or more minutes in a conventional horizontal centrifuge.
- ▶ **Separates gel tubes-** rapid separation of gel tubes with flat gel barriers to ensure no cell interference.
- ▶ **Simple to operate -** Just 3 buttons - no fumbling with settings.
- ▶ **Versatile -** Adaptors for 7mL and 10mL tubes come with the unit. It can accommodate tubes from 1.5mL to 10mL.
- ▶ **Safe -** Shield interlock and steel bowl provide mechanical containment for operator safety. UL listed and CE marked.
- ▶ **Self-diagnostics -** Diagnostic error codes indicate imbalance and reduces chance of operator error.
- ▶ **Warranty:** complete 2-year warranty

#### Documentation and Literature

- ▶ Brochure
- ▶ Parts
- ▶ Tube insert guide
- ▶ Clinical Studies 1 2 3 4
- ▶ Lean Articles : 1 2 3
- ▶ Learning toward laboratory efficiency
- ▶ Improving laboratory efficiency
- ▶ BD Vacutainer Tubes Study
- ▶ Operator manual: Choose Language



#### Specifications

Spin Parameters	3 min: 180 sec @5,100rpm/4,000xg 5 min: 300 sec @5,100rpm/4,000xg 10 min: 600 sec @4,500rpm/3,100xg
Accel Time	30 seconds or less
Decel Time	30 seconds or less
Tube Sizes	1.5 to 10mL blood tubes
Regulatory	UL, cUL and CE marked
Warranty	2 Years
Power	100 to 240V, 50/60Hz, 2.5 amps.
Dimensions	8.0" H x 13" W x 16.0" D (22lbs)

Specification subject to change without prior notice. StatSpin is a registered trademark of Iris Sample Processing, Inc.

#### Ordering Information

- SSH4 StatSpin Express 4 centrifuge includes eight-place rotor (RTH8), (8) 7 mL inserts, (8) 10mL inserts, manual latch release tool, one hex key tool and powercord.
- RTH8 Replacement Express 4 Rotor

# Centrifuge Cut Sheet

## StatSpin Express 4

### EQ-106


### Accessioning Area

**Freezer Cut Sheet**  
**Revco Double Wide**  
**EQ-107**  
**Accessioning Area**

**Pending**

**FREEZERS  
LABORATORY - HORIZON SERIES™  
MODEL HLF125**

**SPECIFICATIONS**

Temperature Range	-15°C to -30°C
Interior Dimensions (w x h x d)	24.75" x 58.25" x 30.25"
Exterior Dimensions (w x h x d)	29.5" x 80" x 35.5"
Overall Exterior Dimensions (w x h x d) Includes door handle, electrical panel, and evaporation tray	30.75" x 80" x 38.5"
Interior Volume	25.2 cu ft / 714 liters
Door	Solid galvanized steel with bacteria-resistant powder coating
Interior Configuration	4 Epoxy Coated Wire Shelves
Electrical	208 / 230V 60Hz 6 FLA NEMA 6-15 Plug 
Net Weight	475 lb
Clearance Requirements	Minimum of 8" above and 3" behind freezer for ventilation
Certified to applicable UL and CSA standards by a NRTL	

**FEATURES**

- Microprocessor-based temperature controller with:
  - Programmable operating temperature
  - Programmable high temperature alarm with visual and audible indicators
  - LED display of chamber temperature
- Bacteria-resistant powder coated interior and exterior
- Dual, swivel locking casters
- Key lock

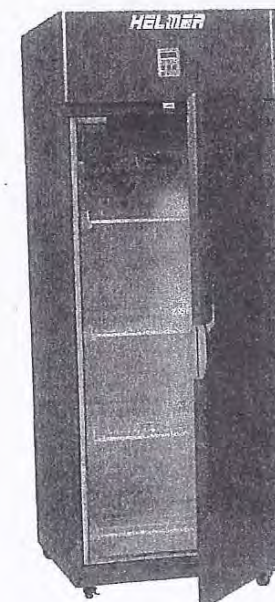
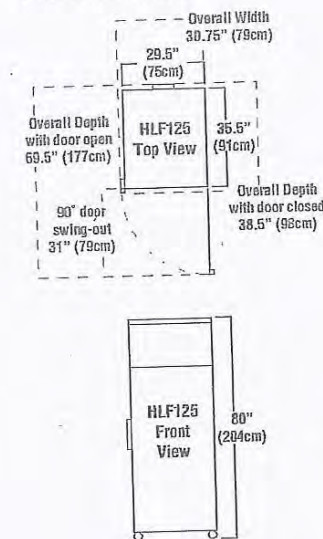
**WARRANTY**

- 3 Years Compressor
- 2 Years Parts
- 1 Year Labor



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**FOOTPRINT**



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Toll Free (US & Canada): 800.743.5637  
Email: sales@helmerinc.com • www.helmerinc.com

**Freezer Cut Sheet  
EQ-108  
Accessioning Area**

## LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 78.75" x 32.5" 75cm x 201cm x 83cm	29.5" x 78.75" x 38.5" 75cm x 201cm x 98cm	59.25" x 78.75" x 32.5" 151cm x 201cm x 83cm	59.25" x 78.75" x 38.5" 151cm x 201cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

## Refrigerator Cut Sheet

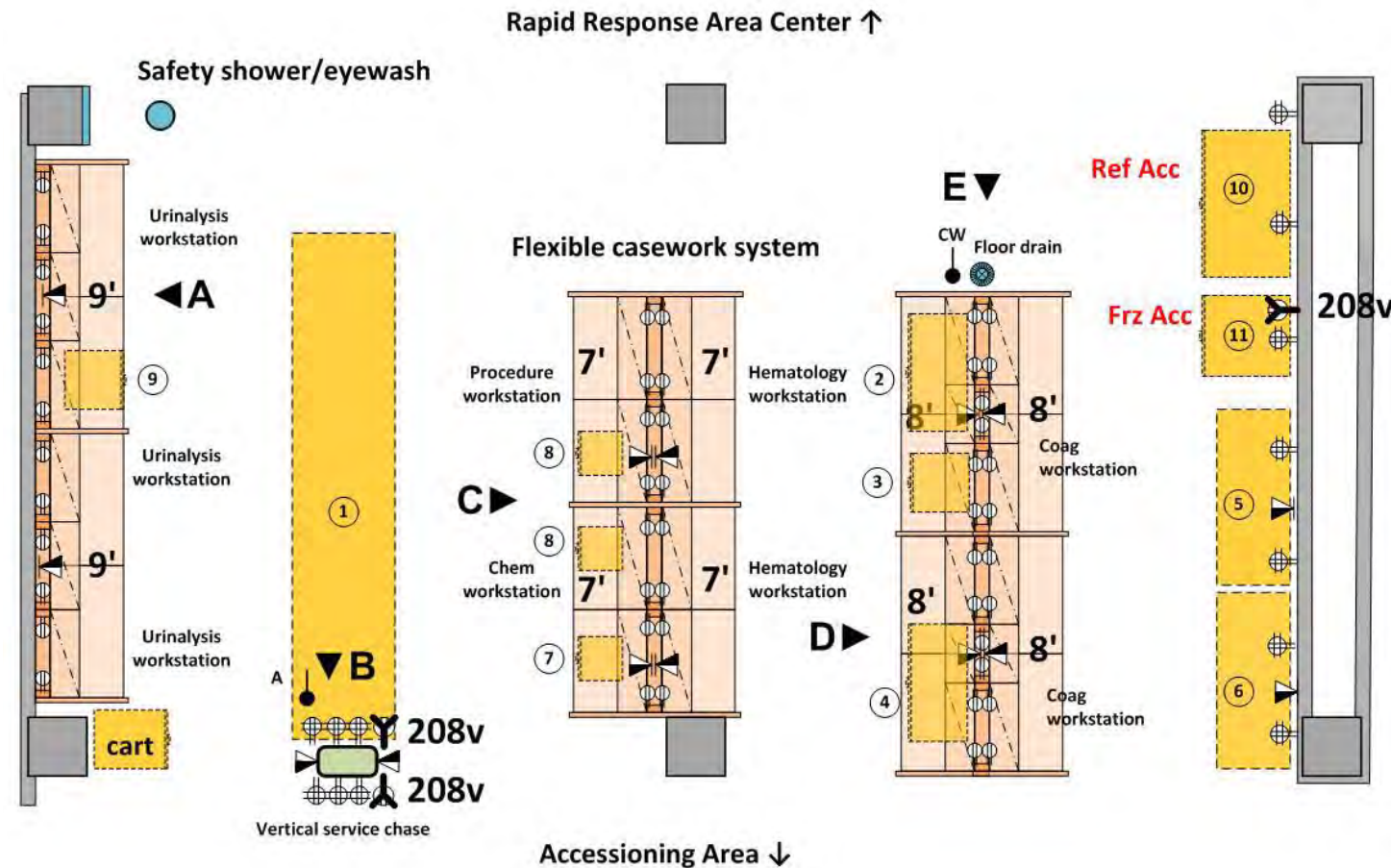
EQ-109

Model HLR 125

Accessioning Area



# Rapid Response Area- South Room #P210



## ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3<sup>0</sup>x8<sup>0</sup> pairs at entry  
 Acoustic Attenuation: NC 45 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 Pressure: Negative  
 6 air changes per hour minimum  
 Heat gain: 50 btuh/sf

## ELECTRICAL

110v duplex and fourplex outlets (maximum of (2) fourplex per circuit)  
 Standby power at all outlets  
 208v30a1ph  
 Dedicated circuits at all floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

## PLUMBING

Hot/Cold water (HW/CW) at sinks with hands free controls  
 Pure water (PW) at sinks and selected equipment locations  
 Compressed Air at Automate  
 Cold water & drain at Coulter 750

## CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 Phenolic resin tops  
 Safety Shower/Eyewash

## Rapid Response Area- South

Contractor Furnished Equipment:  
 None

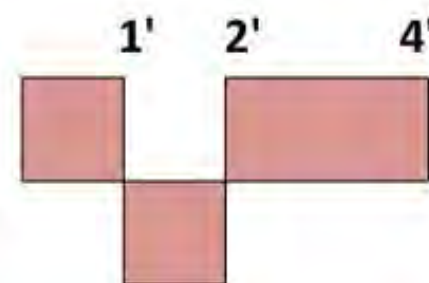
## Owner Furnished Equipment:

1. EQ-201: Automate
2. EQ-202: Hematology Machine #1 Coulter 750
3. EQ-203: Printer
4. EQ-204: Hematology Machine #2 Coulter 750
5. EQ-205: Coag Analyzer #1 Coulter 500
6. EQ-206: Coag Analyzer #2 Coulter 500
7. EQ-207: Electrolyte Analyzer
8. EQ-208: Micro Osmometer (x2)
9. EQ-209: Urinalysis machine

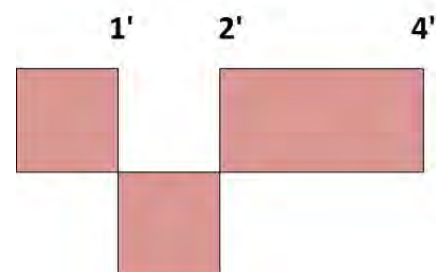
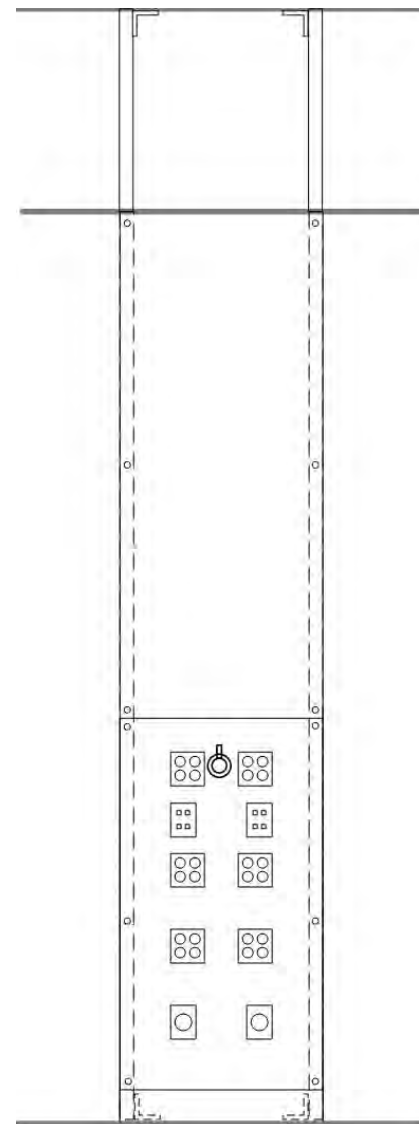
## Accessioning:

10. EQ-210: Freezer -80 deg C
11. EQ-211: Refrigerator Double Wide

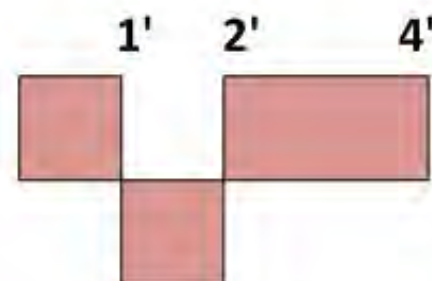
**Rapid Response Area- South**  
**Room #P210**  
**Elevation A**



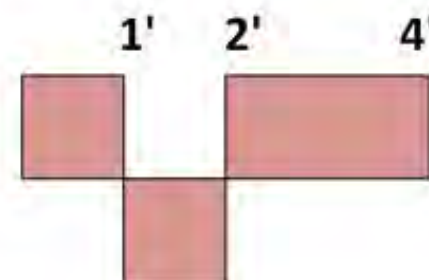
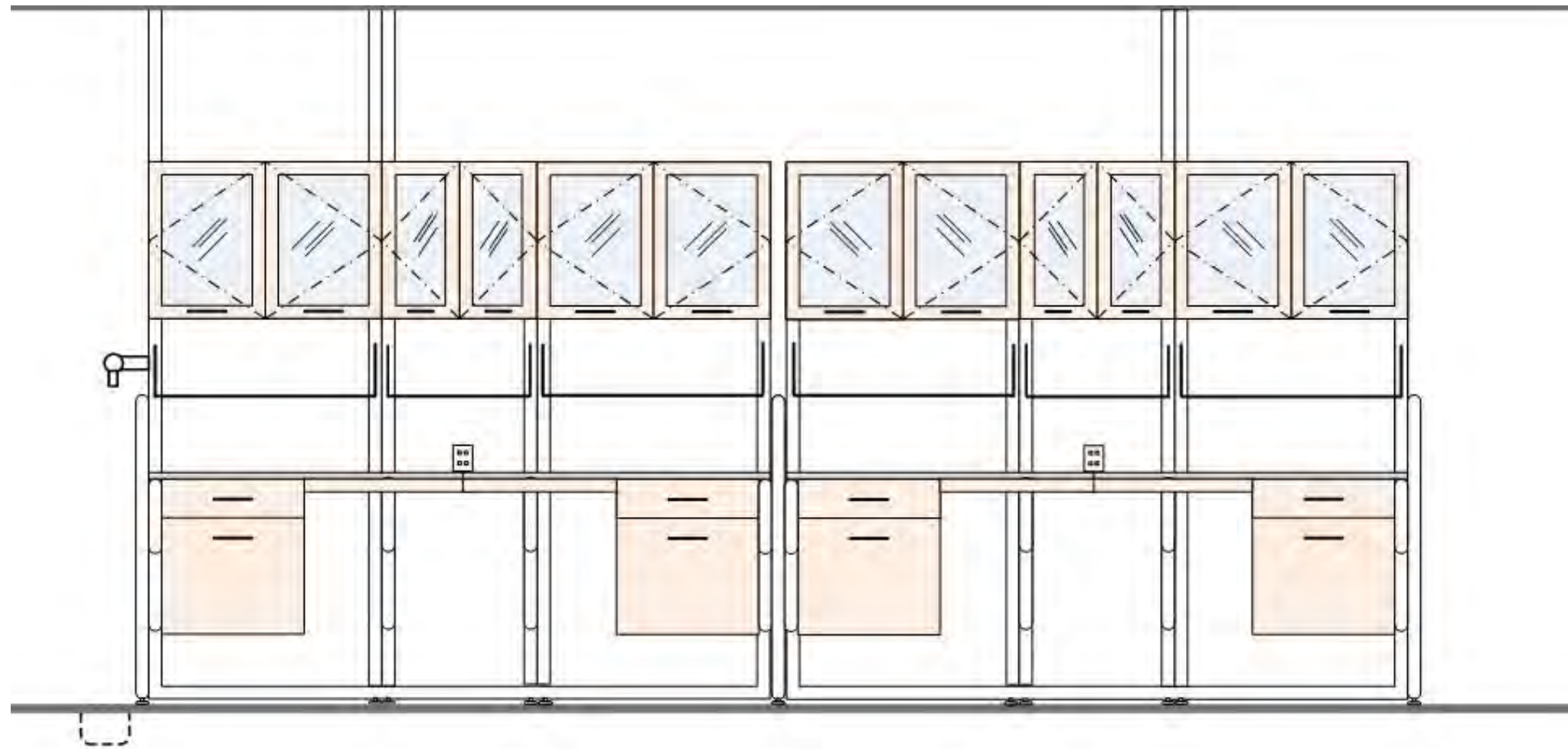
**Rapid Response Area- South**  
**Room #P210**  
**Elevation B**



**Rapid Response Area- South**  
**Room #P210**  
**Elevation C**



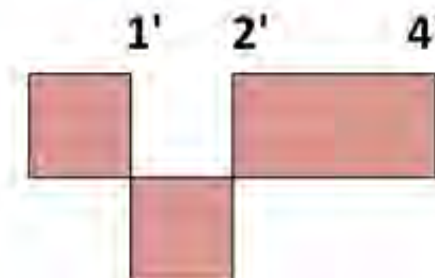
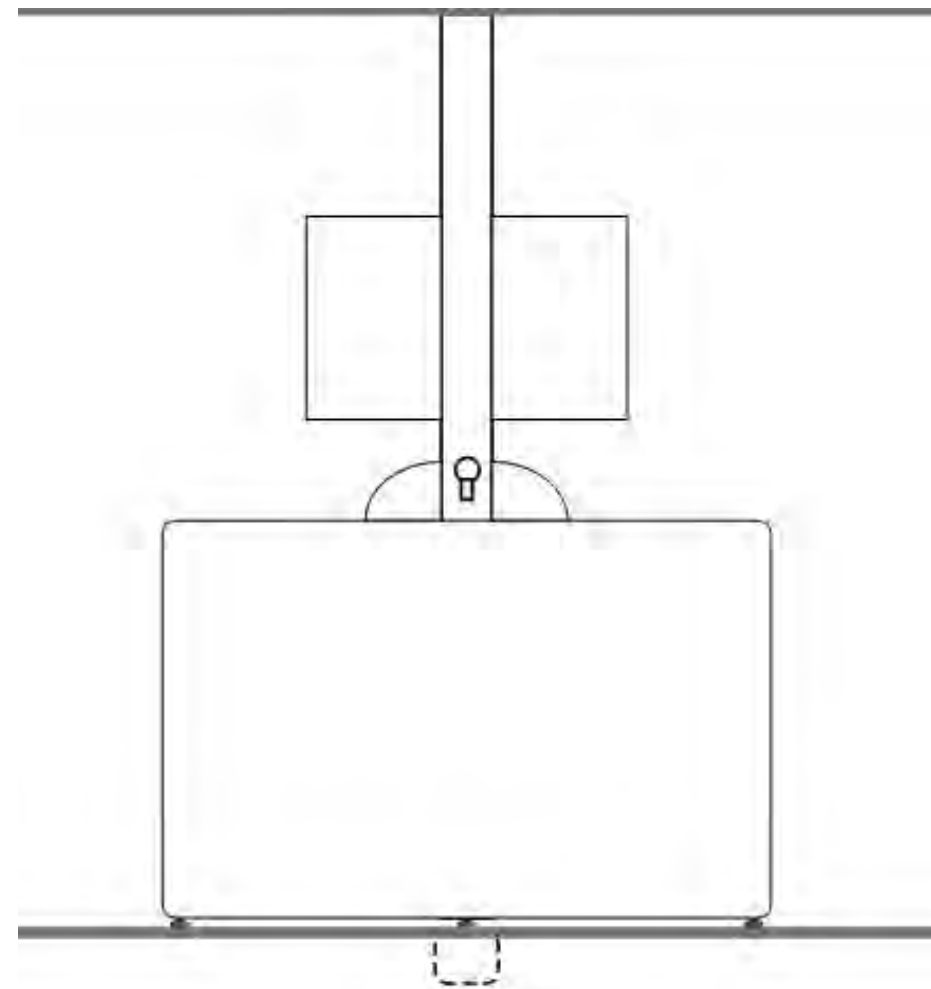
**Rapid Response Area- South**  
**Room #P210**  
**Elevation D**



# Rapid Response Area- South

Room #P210

Elevation E



# Equipment Schedule

## Rapid Response Area South- Room #P210

Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>												
None identified to date												
<b>Owner Furnished Equipment</b>												
EQ-201	Automate	E241A	13.3'	3.28'	5.5'	~3000 lb.	F	115v20a1ph 208v30a1ph data standby power	comp. air			Owner Furnished Owner Installed
EQ-202	Hematology machine #1 Coulter LH 750	E241A	54"	24"	35"	330 lb. with power supply	F	115v20a1ph data standby power	cold water drain		includes mobile bench new machines on order ~1/2 size of existing	Owner Furnished Owner Installed
EQ-203	Printer Shared between Coulter 750's	E241A	16.7"	20.1"	17.2"	51.6 lb.	F	115v20a1ph data standby power			includes mobile bench	Owner Furnished Owner Installed
EQ-204	Hematology machine #2 Coulter LH 750	E241A	54"	24"	35"	330 lb. with power supply	F	115v20a1ph data standby power	cold water drain		includes mobile bench new machines on order ~1/2 size of existing	Owner Furnished Owner Installed
EQ-205	Coag Analyzer #1 Beckman Coulter 500	E241A	74"	35"	29"	1,068 lb.	F	115v20a1ph data standby power			includes mobile bench includes printer shared with other Coag Analyzer	Owner Furnished Owner Installed
EQ-206	Coag Analyzer #2 Beckman Coulter 500	E241A	74"	35"	29"	1,068 lb.	F	115v20a1ph data standby power			includes mobile bench	Owner Furnished Owner Installed
EQ-207	Electrolyte Analyzer AVL 9180	E241A	14"	14"	14"	17 lb.	B	115v20a1ph data standby power				Owner Furnished Owner Installed
EQ-208	Micro Osmometer Model 3320	E-241A	14"	15"	14"	25 lb.	B	115v20a1ph standby power				Owner Furnished Owner Installed

# Equipment Schedule

**Room/Area: Rapid Response Area South- Room #P210**  
**Continued**

Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Remarks	Responsibility
<b>Owner Furnished Equipment</b>												
EQ-209	Urinalysis Machine IRIS IQ 200	E-241A	36"	24"	24"	~200 lb	B	115v20a1ph standby power			includes computer, monitor	Owner Furnished Owner Installed
EQ-210	Freezer -80 deg C Helmer	E-241A	30.75"	38.5"	80"	475 lb.	F	208v30a1ph standby power				Owner Furnished Owner Installed
EQ-211	Refrigerator Double Door LR558	New	59"	36"	80"	790 lb.	F	115v20a1ph standby power				Owner Furnished Owner Installed



# Automate Cut Sheet

## EQ-201

### Rapid Response Area- South

## System Specifications

### Dimensions

Table D.1 System Dimensions

System	Length	Height	Depth
AutoMate 600	11.3 ft (3.45 m)	5.5 ft (1.68 m)	3.28 ft (1.00 m)
* AutoMate 800	13.3 ft (4.05 m)	5.5 ft (1.68 m)	3.28 ft (1.00 m)
PC Work Station (PC, Monitor and Stand)	26 inches (66 cm)	67 inches (170 cm) to top of monitor	36 inches (91.4 cm) with monitor and keyboard arm

### Clearance

The following clearances gives adequate area for user movement with all drawers and doors open, and the centrifuge pulled out for maintenance.

Table D.2 Clearance Requirements

Area	Minimum Clearance (cm)
Right Side	24 inches (61 cm)
Left Side	48 inches (122 cm)
Rear	36 inches (92 cm)
Top	18 inches (46 cm)
Front	36 inches (92 cm)

Table D.4 Power Requirements (Continued)

Item	Requirement
UPS (Uninterrupted Power Supply)	<ul style="list-style-type: none"> <li>Range of Operation: 220 VAC RMS, single-phase, (220 VAC nominal)</li> <li>Power Line: 16A (Europe), 20A (North America)</li> <li>Consumption: 9A nominal</li> <li>Frequency: 50/60 Hz nominal</li> <li>Receptacle: Standard per local regulations</li> <li>Backup Time: 30 minutes minimum at full load</li> </ul>
AutoMate Control Computer, Instrument Manager (each)	<ul style="list-style-type: none"> <li>Range of Operation: 100–240 VAC RMS, single-phase, (115/230 nominal VAC)</li> <li>Power Line: 16A (Europe), 20A (North America)</li> <li>Consumption: 3A nominal, 6.3A peak</li> <li>Frequency: 50/60 Hz nominal</li> <li>Receptacle: Standard per local regulations</li> </ul>
Okidata LED Printer	<ul style="list-style-type: none"> <li>Range of Operation: 110 (99–140) VAC RMS, single-phase, OR 208 (220–240) VAC RMS, single-phase</li> <li>Power Line: 16A (Europe), 20A (North America)</li> <li>Consumption: 6A nominal @110 VAC, 9A peak, 3.2A nominal @220 VAC, 5.6A peak</li> <li>Frequency: 50/60 Hz nominal</li> <li>Receptacle: Standard per local regulations</li> </ul>
Compressor (Optional)	<ul style="list-style-type: none"> <li>Supplied from an external power distribution system.</li> <li>230 VAC, 60 Hz, 15A or 120 VAC, 60 Hz</li> </ul>

### Compressed Air Requirements

99.5 psi or 7 Bars at a flow rate of 2.8 cfm or 80 L/min minimum, and moisture content of less than 1%, that uses a 5 micron filter and mist separator with an auto drain.

### System Output

Table D.5 System Output

Item	Output
Heat Output	23,634 BTU/hr
Noise Output	<84.5 dB

## Environmental Requirements

**Table D.3** Environmental Requirements

Item	Requirement
Altitude	Must not exceed 6562 ft (2000 m)
Ambient Temperature	+18°C to +30°C; 2°C change within 30 minutes
Humidity	25% to 85%; no condensation
Location	Indoor use only; no direct sunlight or severe drafts. A level floor that does not vibrate.
Pollution Degree	2

## Power Requirements

The line voltage must be free of power surges (overvoltage category II), power changes, and loss of power for the protection of the electronic circuits.

**Table D.4** Power Requirements

Item	Requirement
Track System and Control Electronics	<ul style="list-style-type: none"> <li>• Range of Operation: 200–240 VAC RMS, single-phase, (220 VAC nominal)</li> <li>• Power Line: 16A (Europe), 20A (North America)</li> <li>• Consumption: 6.3A nominal</li> <li>• Frequency: 50/60 Hz nominal</li> <li>• Receptacle: Standard per local regulations</li> </ul>
Centrifuge Drive	<ul style="list-style-type: none"> <li>• Range of Operation: 200–240 VAC RMS, single-phase, (220 VAC nominal)</li> <li>• Power Line: 16A (Europe), 20A (North America)</li> <li>• Consumption: 8A nominal</li> <li>• Frequency: 50/60 Hz nominal</li> <li>• Receptacle: Standard per local regulations</li> </ul> <p><b>NOTE</b> The Centrifuge module requires a minimum of 205 VAC.</p>
Centrifuge Refrigeration	<ul style="list-style-type: none"> <li>• Range of Operation: 200–240 VAC RMS, single-phase, (220 VAC nominal)</li> <li>• Power Line: 16A (Europe), 20A (North America)</li> <li>• Consumption: 6A nominal</li> <li>• Frequency: 50/60 Hz nominal</li> <li>• Receptacle: Standard per local regulations</li> </ul>

# Hematology Machine Coulter 750 Cut Sheet

EQ-202; EQ-204

Rapid Response Area- South

**Sunlight and Drafts**

Do not place the system in direct sunlight or in drafts. Both of these conditions may affect the temperature control of the system.

**Drain**

The system should be located near a sink or floor drain to accommodate the waste effluent at a minimum rate of 6 liters/hour (16 liters/hour continuous flow).

The drain must not be placed any higher than 36 inches (91.4 cm) above the floor.

**Power Requirements**

**Table 1.3** Power Requirements – DxC 600 or 800 Analytic Unit

Item	Requirement
Operating range	200–240 VAC ± 10% (180–264 VAC) 14 A at low line, exclusive of power on surge
Frequency	50/60 Hz
BTU generated	10,500 BTU/hour
Power connector	20 A current rating, NEMA L6□20R twistlock in-line connector

**Table 1.4** Power Requirements – DxC Console (PC System and Monitor)

Item	Requirement
Operating range	100–120 VAC ± 10% (90–132 VAC); 4A OR 200–240 VAC ± 10% (180–264 VAC); 2A
Frequency	50/60 Hz
BTU generated	1,500 BTU/hour
Power connector	15 A current rating, IEC 320 standard connector

**4.1 PHYSICAL SPECIFICATIONS**

**Dimensions**

Unit	Height*	Width*	Depth*	Weight
Analyzer/Diluter	88.9 cm (35 in.)	101.6 cm (40 in.)	61 cm (24 in.)	93.2 k (205 lb)
Power Supply	59 cm (23.3 in.)	35.5 cm (14 in.)	60 cm (24 in.)	56.7 k (125 lb)

\* ±5.1 cm (2 in.)

**Power**

**Input**

Power Supply: 90 - 264 Vac, 47 - 63 Hz  
Workstation: 90-135 Vac, 47-63 Hz or 180-265 Vac, 47-63 Hz

**Consumption**

2080 W (5500 BTU/h) maximum

Installation Category: per IEC 1010-1, Category II

**4.2 PERFORMANCE SPECIFICATIONS--LH 700 Series**

The LH 700 Series consists of three subsystems, designated as "CBC" (Complete Blood Count), "WBC Differential" and "Retics." The CBC subsystem is based on the established Coulter principles of automated cell counting. The WBC differential subsystem is based on the Coulter principles of leukocyte differential counting as embodied in the COULTER VCS. The Retics subsystem is based on the Coulter volume, conductivity and light scatter technology.

Performance specifications stated apply only to an instrument that has been properly maintained as indicated in the COULTER LH 700 Series documentation, using the recommended reagents.

If the average room temperature should change more than 5.5°C (10°F) from the calibrating temperature, verify calibration and recalibrate if necessary to ensure conformance to specifications.

**Precision**

**Within-Run Precision**

Within-run Precision is based on at least 31 determinations of the same sample. See Table 4.1.

# Hematology Printer Cut Sheet

EQ-203  
Rapid Response Area- South

Product specifications

*Hematology Printer*  
Lexmark T650 Series *X2*

	Lexmark T650n	Lexmark T652n	Lexmark T654n
<b>Printing</b>			
Print Technology	Monochrome Laser		
Print Speed (Letter, Black): Up to	45 ppm	50 ppm	55 ppm
Time to First Page (Black)	As fast as 7.5 seconds		
Print Resolution, Black	1200 Image Quality, 1200 x 1200 dpi, 2400 Image Quality, 600 x 600 dpi		
Memory, Standard	128 MB	128 MB	256 MB
Memory, Maximum	640 MB	640 MB	1280 MB
Print Noise Level, Operating	53 dBA	54 dBA	55 dBA
Noise Level, Idle	26 dBA	30 dBA	30 dBA
Maximum Monthly Duty Cycle: Up to	200,000 pages per month	225,000 pages per month	300,000 pages per month
Recommended Monthly Page Volume	3,000 - 20,000 pages	3,000 - 30,000 pages	5,000 - 50,000 pages
<b>Supplies</b>			
Supplies Yield	25,000*-page High Yield Print Cartridge, *Average standard page yield value declared in accordance with ISO/IEC 19752., 7,000*-page Print Cartridge	25,000*-page High Yield Print Cartridge, *Average standard page yield value declared in accordance with ISO/IEC 19752., 7,000*-page Print Cartridge	25,000*-page High Yield Print Cartridge, *Average standard page yield value declared in accordance with ISO/IEC 19752., 7,000*-page Print Cartridge, 38,000*-page Extra High Yield Print Cartridge
Cartridge(s) Shipping with Product	7,000*-page Return Program Print Cartridge	10,000*-page starter Return Program Print Cartridge	10,000*-page starter Return Program Print Cartridge
<b>Paper Handling</b>			
Paper Handling Standard	100-Sheet Multipurpose Feeder, 250-Sheet Input Tray, 350-Sheet Output Bin	100-Sheet Multipurpose Feeder, 550-Sheet Input Tray, 350-Sheet Output Bin	100-Sheet Multipurpose Feeder, 550-Sheet Input Tray, 550-Sheet Output Bin
Paper Handling Optional	1,850-Sheet High-Capacity Output Stacker, 200-Sheet Universally Adjustable Tray with Drawer, 400-Sheet Universally Adjustable Tray with Drawer, 5-Bin Mailbox, 550-Sheet Drawer, Envelope Feeder, 250-Sheet Drawer, 250-Sheet Duplex Unit, Optional furniture required., 550-Sheet Output Expander, StapleSmart II Finisher, 2,000-Sheet High Capacity Feeder (Caster Base required)	1,850-Sheet High-Capacity Output Stacker, 200-Sheet Universally Adjustable Tray with Drawer, 400-Sheet Universally Adjustable Tray with Drawer, 5-Bin Mailbox, 550-Sheet Drawer, Envelope Feeder, 250-Sheet Drawer, Optional furniture required., 550-Sheet Output Expander, StapleSmart II Finisher, 2,000-Sheet High Capacity Feeder (Caster Base required)	1,850-Sheet High-Capacity Output Stacker, 200-Sheet Universally Adjustable Tray with Drawer, 400-Sheet Universally Adjustable Tray with Drawer, 5-Bin Mailbox, 550-Sheet Drawer, Envelope Feeder, 250-Sheet Drawer, Optional furniture required., 550-Sheet Output Expander, StapleSmart II Finisher, 2,000-Sheet High Capacity Feeder (Caster Base required)
Paper Input Capacity, Standard: Up to	350 pages 20 lb or 75 gsm bond	650 pages 20 lb or 75 gsm bond	650 pages 20 lb or 75 gsm bond
Paper Input Capacity, Maximum: Up to	4000 pages 20 lb or 75 gsm bond	4300 pages 20 lb or 75 gsm bond	4300 pages 20 lb or 75 gsm bond
Paper Output Capacity, Standard: Up to	350 pages 20 lb or 75 gsm bond	350 pages 20 lb or 75 gsm bond	550 pages 20 lb or 75 gsm bond
Paper Output Capacity, Maximum: Up to	2750 pages 20 lb or 75 gsm bond	2750 pages 20 lb or 75 gsm bond	2950 pages 20 lb or 75 gsm bond
Media Types Supported	Card Stock, Dual Web Labels, Envelopes, Integrated Labels, Paper Labels, Plain Paper, Polyester Labels, Transparencies, Vinyl Labels, Refer to the Card Stock & Label Guide		
Media Sizes Supported	10 Envelope, 7 3/4 Envelope, 9 Envelope, A4, A5, DL Envelope, A6 Card, Executive, Folio, JIS-B5, Legal, Letter, Statement, Universal		
Compatibility			
Network Protocol Support	TCP/IP IPv4, IPX/SPX, AppleTalk™, LexLink (DLC), TCP/IP IPv6, TCP, UDP		
Printer Languages (Standard)	PCL 5e Emulation, PCL 6 Emulation, Personal Printer Data Stream (PPDS), PostScript 3 Emulation, xHTML, PDF 1.6, Direct Image, Microsoft XPS (XML Paper Specification)		
Standard Ports	One Internal Card Slot, USB 2.0 Specification Hi-Speed Certified (Type B), Front USB Port Compatible with USB 2.0 Specification (Type A), Ethernet 10/100BaseTX (RJ-45), also works with 1000Base-T	One Internal Card Slot, USB 2.0 Specification Hi-Speed Certified (Type B), Front USB Port Compatible with USB 2.0 Specification (Type A), Ethernet 10/100BaseTX (RJ-45), also works with 1000Base-T	One Internal Card Slot, USB 2.0 Specification Hi-Speed Certified (Type B), Front USB 2.0 Specification Hi-Speed Certified Port (Type A), Rear USB 2.0 Specification Hi-Speed Certified Port (Type A), Ethernet 10/100BaseTX (RJ-45), also works with 1000Base-T
Microsoft Windows Operating Systems Supported	2000, XP, Server 2003, XP x64, Server 2003 running Terminal Services, 2000 Server running Terminal Services, Server 2003 x64, Server 2003 x64 running Terminal Services, Vista, Vista x64, Server 2008, Server 2008 x64, Server 2008 running Terminal Services, Server 2008 x64 running Terminal Services, Windows 7		
Apple Macintosh Operating Systems Supported	Mac OS X, Mac OS 9.2		
Other Operating Systems Supported	www.lexmark.com		
<b>General</b>			
Product Warranty	1-Year Exchange Service, Next Business Day		
Product Certifications	www.lexmark.com		
Size (in. - H x W x D)	13.7 x 16.7 x 19.4 in.	16.8 x 16.7 x 20.1 in.	17.2 x 16.7 x 20.1 in.
Weight (lb.)	40.6 lb.	50.7 lb.	51.6 lb.
Specified Operating Environment	Temperature: 16 to 32°C (60 to 90°F), Humidity: 8 to 80% Relative Humidity, Altitude: 0 - 3048 Meters (10,000 Feet)		

# ACL TOP 500 CTS System Specifications

**Throughput (Base Unit)**  
 PT Up to 240 samples/hour  
 APTT Up to 180 samples/hour  
 PT & APTT Up to 180 samples/hour

**Time to First Result**  
 PT: < 3 minutes  
 APTT: < 5 minutes  
 D-Dimer: < 7 minutes

**Capacity**  
 Samples on board 80 (10 samples per rack)  
 Reagents on-board 40 (refrigerated)  
 Cuvettes on-board 800  
 Tests per sample 30

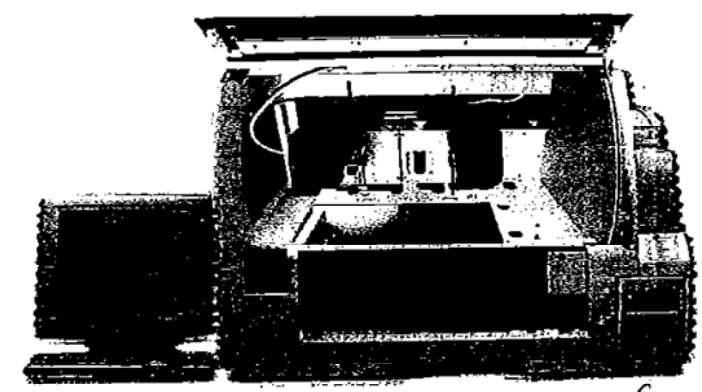
**Applications**  
 • On-board Up to 500  
 • User programmable Up to 250

**System Features**  
 • Continuous operation  
 • Continuous sample and reagent loading  
 • Sample predilution  
 • Calibration curve predilution  
 • STAT capability (at any time, in any position)

**Barcode Reader**  
 Integrated sample and reagent barcode reader  
 Barcoded reagent tracking includes material name, lot #, exp. date, vial size and on board volume

**Software Features**  
 • Rerun/Reflex testing (configurable)  
 • Clot Signature Curves  
 • Factor parallelism  
 • Quality control program (with configurable multi-rules)  
 • Results autovalidation  
 • Events log system  
 • Bi-directional interface  
 • Host query function  
 • Security system (configurable)

**Database**  
 Patient samples results up to 20,000 samples

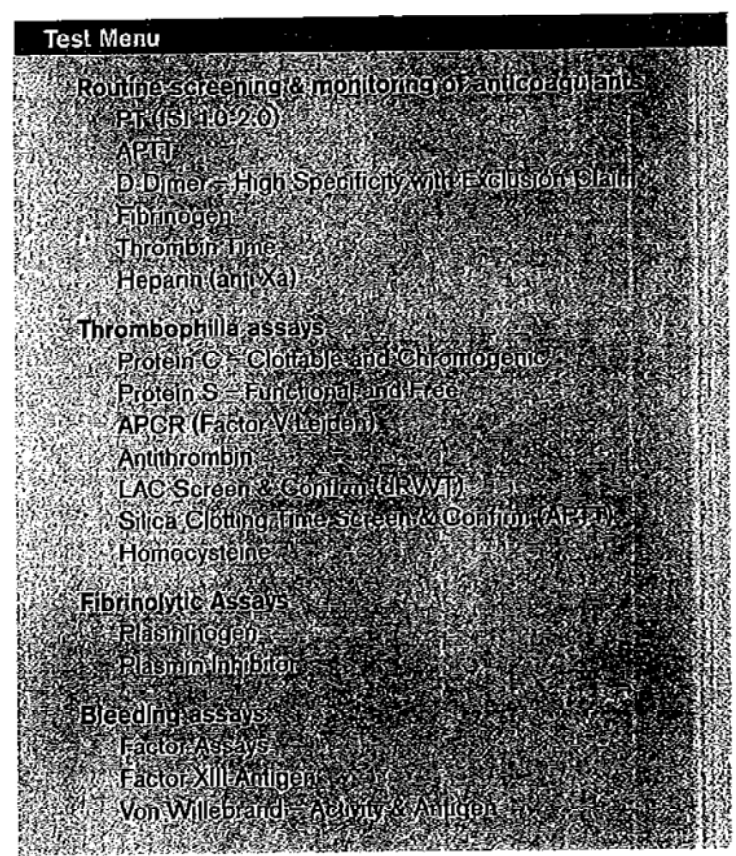


X2

Coagulation Analyzer

**Operator Interface**  
 Operating System Windows XP  
 Video Display 17" color LCD touch-screen (external)  
 Keyboard Standard  
 Printer External

**Dimensions/Weight (analyzer)**  
 Height 29 in. (73 cm)  
 Width 43 in. (110 cm)  
 Depth 35 in. (89 cm)  
 Weight 312 lbs. (141 kg)



# Coag Analyzer Coulter 500 Cut Sheet EQ-205; EQ-206 Rapid Response Area- South

**4 Ambient Specifications**  
 • In accordance with IEC 1010 safety standard, paragraph 1.4, there is no safety hazard in the temperature range 5-40° C.  
 • Operate at ambient temperature of 15°C to 32°C (59°F to 89°F)  
 • Altitude: Maximum 6560 feet (2000 meters)  
 • Relative humidity of 5% to 85% (non-condensing)

**5 Audible Noise Emission**  
 • Maximum of 70 dBA  
 • Meets specifications for the safety requirements for electrical and laboratory equipment, EN61010.1.

**6 Electrical Specifications**  
 • The ACL TOP is single phase, has current leakage of less than 500 µAmps, and produces 2,049 BTU's per hour.  
 • The instrument has been designed to operate correctly with electrical variations of up to ±10% on the nominal supply and with supply frequencies between 47 and 63 Hz.  
 • The supply voltage in the laboratory is required to be compatible with the label on the rear of the analyzer as shown in the following table:

Value of supply voltage for normal function	Current (A)	Value as shown on the label
240V AC ± 10%	5 A	100-240 VAC
115V AC ± 10%	10 A	100-240 VAC
100V AC ± 10%	10 A	100-240 VAC

• ACL TOP Volt-Amps Specifications (Volts, Amps, Volts/Amp, Watts, Frequency)

o ACL TOP 500 CTS Analytical Module

100 VAC	10A	1000 VA	600 W	50/60Hz
115VAC	10A	1150 VA	600 W	50/60Hz
240VAC	5A	1200 VA	300 W	50/60 Hz

o ACL TOP 500 CTS Control Module

100 VAC	6A	600 VA	600 W	50/60Hz
115VAC	6A	690 VA	600 W	50/60Hz
240VAC	3A	720 VA	300 W	50/60 Hz

o ACL TOP 500 CTS Monitor

12 VDC	4.16A	50 VA	50 W	50/60Hz
--------	-------	-------	------	---------

• The power cord provided with the instrument is a certified cord and three-prong, double insulated, grounded (NEMA) receptacle and plug.

## ACL TOP Family Specifications

### 1 Hardware

- Analytical unit
- Control module – external, Pentium IV
- Monitor - 17" color LCD, with touch screen
- PC keyboard/Mouse: Standard

### 2 Physical Specifications

	ACL TOP 700 LAS	ACL TOP Base	ACL TOP CTS	ACL TOP 500 CTS
<b>Weight</b>	184 kg 405 pounds	162 kg 356 pounds	166 kg 367 pounds	141 kg 312 pounds
<b>Height</b>	73 cm 29 inches	73 cm 29 inches	73 cm 29 inches	73 cm 29 inches
<b>Depth</b>	87 cm 34 inches	87 cm 34 inches	87 cm 34 inches	89 cm 35 inches
<b>Width</b>	188 cm 74 Inches (on table)	151 cm 59 inches	151 cm 59 inches	110 cm 43 inches

- Monitor
    - Height: 17 (43.1 cm)
    - Width: 14 (35.5 cm)
    - Depth: 3 inches (7.6 cm)
    - Requires an input voltage between 100-240V and amperage of 1.8-0.9A.
  - Control module:
    - Height: 17.5 (44.4 cm)
    - Width: 7.5 (19 cm)
    - Depth: 19 inches (48.2 cm)
    - Weight: 37 pounds (16.8 kg)
    - Requires an input voltage between 100-240V and an amperage of 3.5A
  - Cart
    - Height: 32 inches
    - Width: 60 inches
    - Depth: 30 inches
  - Shipping crate with instrument
    - Height: 68 inches
    - Width: 71 inches
    - Depth: 38 inches
    - Weight: ~1068 pounds
  - Spatial Requirements:
    - At least 6" must be allowed around the instrument for circulation of air
    - The instrument must be positioned so the waste tube can be connected on its right side
- ### 3 Interfaces (LIS)
- Host Communications Configuration
  - ASTM-1394 Configuration

## Coag Analyzer Coulter 500 Cut Sheet

EQ-205; EQ-206

Page 2


Rapid Response Area- South

Home > Electrolyte Analyzers > Electrolyte Analyzers - Recertified >

Search Products   **AVL 9180**

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 Hematology Analyzers  
 Hematology Reagents, Controls, Consumables  
 Histology and Cytology Disposables  
 Histology and Cytology Equipment  
 Hotplates



Roche AVL 9180

Roche AVL 9180  
**Our Price: \$2,750.00** X 1

Manufacturer: Roche Diagnostics  
 Shipping Info: Shipping Charges Extra  
 Shipping Weight: 17  
 Shipping Dimensions: 14x14x14  
 Product Code: AVL-9180

**AVL 9180**

**Description**

AVL 9180 offered at Block Scientific, is an electrolyte analysis system from Roche Diagnostics. AVL - the original manufacturer of this analyzer - is now acquired by Roche Diagnostics. AVL 9180 is a small system intended for use in various health care centers, physician office lab settings, and point of care units.

The analyzer is the best solution for performing electrolytic analysis from whole blood as well as plasma, urine dialysate, serum or aqueous standards. This medical instrument is easy to use and provide fast sample analysis. It has the capability to provide accurate, and yet consistent results within one minute. This instrument's enhanced microprocessor-based technology and easy to use design provides top performance and operational flexibility. Quick change of analyte, user friendliness, flexibility, and low maintenance are other important features that can be attained with the use of AVL 9180.

- Electrodes not included, but available from Block Scientific

**Features**

- Test panel
- Cuvette holder for 18 positions
- Cassette system (SnapPak)
- Maintenance free electrodes
- Recertified with 90 day parts warranty
- Reagents, controls, and consumables may be available
- Service contracts may be available

**Accessories & Consumables for this product...**

Na Electrode Our Price: \$358.00 Add <input type="checkbox"/>	Cleaning Solution Our Price: \$19.00 Add <input type="checkbox"/>	Reagent Cal Pack 9140 Our Price: \$143.50 Add <input type="checkbox"/>	K Electrode Our Price: \$295.00 Add <input type="checkbox"/>
Cl Electrode Our Price: \$269.00 Add <input type="checkbox"/>	Na/pH Conditioning Sol Our Price: \$19.00 Add <input type="checkbox"/>	Reagent Cal Pack 9130 Our Price: \$143.50 Add <input type="checkbox"/>	Reference Electrode Our Price: \$410.00 Add <input type="checkbox"/>
Peri Pump Tubing Our Price: \$96.20 Add <input type="checkbox"/>	Thermal Printer Paper Our Price: \$42.00 Add <input type="checkbox"/>	Reagent Cal Pack 9180 Our Price: \$143.50 Add <input type="checkbox"/>	Reference Housing Our Price: \$467.00 Add <input type="checkbox"/>

**Related Products...**

Medica EasyElectrolytes Our Price: \$2,350.00 Add <input type="checkbox"/>	AVL 9130 Our Price: \$2,450.00 Add <input type="checkbox"/>
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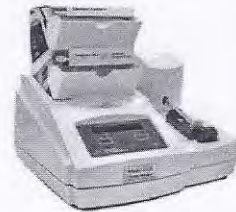
# Electrolyte Analyzer Cut Sheet

## EQ-207

### Rapid Response Area- South

### Advanced® Micro-Osmometer, Model 3320, Advanced Instruments

Supplier: Advanced Instruments



Determines the osmolality of solutions using freezing point depression (FPD). Ideal for serum, urine, or other bodily fluids in clinical applications, and media or formulations in pharmaceutical, biotech, or industrial applications.

Automated, single-sample instrument is designed to process a sample with a one-minute test time. Features ease-of-use, internal diagnostics, automated calibration, on-board statistical analysis, and an ergonomic and compact design. Recalls up to the last 30 test results. Multi-language operation. Password lock-out.

CE marked. ETL listed.

**Ordering Information:** One-year limited manufacturer's warranty on workmanship and all parts except glass, plastic, and parts warranted by their makers. For additional calibration standards, reference and control solutions, or accessories, contact your VWR representative.

X2

#### ORDER

Description	Supplier No.	Cat. No.	Unit	Price	Quantity
Micro-Osmometer	3320	80090-640	Each	\$11,228.85	<input type="text" value="0"/>

Please verify that you have logged in. This item is restricted for purchase to customers with an established account and the proper documentation on file. If you are logged in and believe you should have access to this item, please contact us for additional help at 1-888-320-4357.

#### SPECIFICATIONS

Dimensions	35.5H x 35.5W x 38.1D cm (14 x 14 x 15")
Drift	-
Electrical	100-240V, 50-60Hz, 60W
Humidity Range	5-80% relative humidity (non-condensing)
Linearity	<math>\pm 1\%</math> from a straight line over calibrated range (at reference conditions)
Operating Temperature Range	18 to 35°C (64 to 95°F)
Range	0-2000 mOsm
Repeatability	0-400 mOsm: $\pm 2$ mOsm/kg (1 S.D.); 400-2000 mOsm: $\pm 0.5\%$ (1 S.D.) (at reference conditions)
Sample Volume	20 $\mu$ L
Start delay	-
Test Time	60 sec.
Weight	11.4 kg (25 lbs.) shipping, 6.1 kg (13.4 lbs.) net

#### ACCESSORIES

Description	Supplier No.	Cat. No.	Unit	Price	Quantity
Osmolality Linearity Set, 5 Level, 10 x 5 mL	3LA028	52198-164	Each	\$74.40	<input type="text" value="0"/>
Sampler Plunger Wire	3M0828	52197-456	Pack of 2	\$98.68	0
50 mOsm Calibration Standard, 2 mL	3MA005	52196-124	Pack of 10	\$53.14	<input type="text" value="0"/>
Protinol® Osmometer Serum Control Kit, 3 Level, 9 x 3 mL	3MA028	52196-130	Each	\$181.10	<input type="text" value="0"/>
Clinitrol™ 290 Reference Solution, 2 mL	3MA029	52196-126	Pack of 10	\$67.23	<input type="text" value="0"/>
850 mOsm Calibration Standard, 2 mL	3MA085	52196-128	Pack of 10	\$53.14	<input type="text" value="0"/>
Sample Tips and Chamber Cleaners, Box of 500	3MA800	52196-122	Each	\$418.34	<input type="text" value="0"/>

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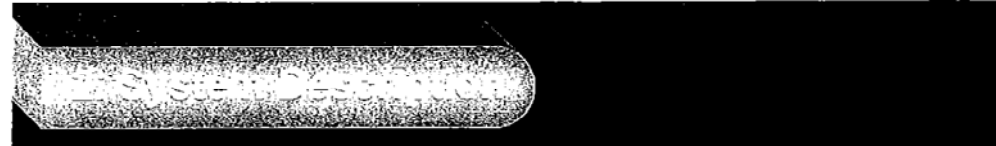
# Micro Osmometer Cut Sheet

## EQ-208

### Rapid Response Area- South



# IRIS IQ200 Urinalysis



## Urinalysis Machine Cut Sheet

EQ-209

Rapid Response Area- South

### Installation Requirements

#### Space Requirements

The *iQ<sub>200</sub>* is a tabletop unit requiring free space on a standard (36 inch; 0.9m) height countertop of approximately 36 inches wide by 24 inches deep (91cm by 61cm), with vertical clearance of at least 24 inches (61cm).

The unit with the Load/Unload Stations attached will increase the width by 26.4 inches (67cm).

#### PC Module

The PC Module is a desktop computer, video monitor, keyboard and mouse. It requires a suitable counter or desktop that provides comfortable access and a good viewing angle. It is suggested that, if possible, the PC Module Monitor, Keyboard and Mouse be placed in a work area that can be semi-darkened to increase screen display visibility and reduce glare.

The data connections are made between the Microscopy Module, the PC Module, and the AX-4280, if applicable, via the special cables provided.

#### Location

For most laboratories, the *iQ<sub>200</sub>* is placed near an open benchtop work area which can be allocated for filling and labeling urine tubes and preparing sample racks. All data transmissions from the *iQ<sub>200</sub>* (and the AX-4280, if used) are routed to the Analysis Processor, which manages and controls all communications to the Laboratory Information System (LIS) via serial connections.

#### Requirements

The system has few special environmental requirements. It uses alternating current at 100V to 240V and 50 Hz to 60 Hz. (Input voltage and frequency selection does not require customer intervention.)

Uninterruptible power supplies are recommended for the *iQ<sub>200</sub>* and the Analysis Processor (and the AX-4280, if applicable) to maintain system operation during short power outages and brownouts. This allows for an orderly shutdown of instruments without the loss of data.

Input power of the instrument is 110VAC @ 1.4A, 220VAC @ 0.7A.

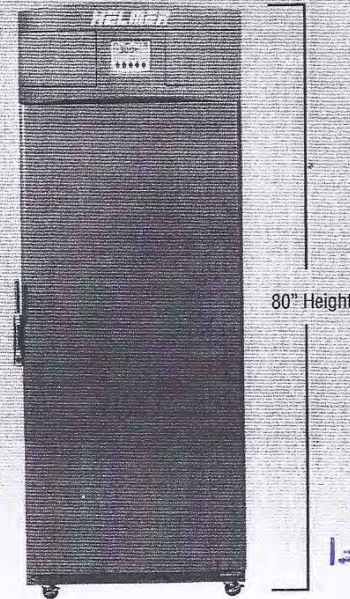
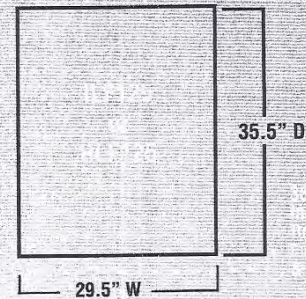
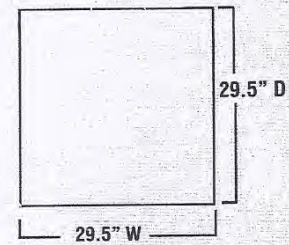
There are no special air conditioning requirements.



**CAUTION:** The equipment inside fixed covered areas of the instrument is not operator serviceable and may present electrical shock hazards.

# SPECIFICATIONS

## FOOTPRINT



X2  
1 = Accessioning A  
1 = Chem A

## LABORATORY FREEZER SPECIFICATIONS (-30°C)

HORIZON SERIES	HORIZON SERIES		HORIZON SERIES	
	HL125	HL175	HL125	HL175
Control Monitor System	i.Center		Standard	
Exterior Material	Solid Galvannealed Steel with Bacteria-Resistant Powder Coating			
Temperature Range	-15°C to -30°C			
Interior Material	Galvannealed Steel with Bacteria-Resistant Powder Coating			
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 80" x 29.5" 75cm x 204cm x 75cm	29.5" x 80" x 35.5" 75cm x 204cm x 91cm	29.5" x 80" x 29.5" 75cm x 204cm x 75cm	29.5" x 80" x 35.5" 75cm x 204cm x 91cm
Exterior Dimensions (w x h x d) (Includes door handle, electrical panel, and evaporation tray)	30.75" x 80" x 32.5" 79cm x 204cm x 83cm	30.75" x 80" x 38.5" 79cm x 204cm x 98cm	30.75" x 80" x 32.5" 79cm x 204cm x 83cm	30.75" x 80" x 38.5" 79cm x 204cm x 98cm
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter
Casters	4 Dual, Swivel Locking			
Shelves	4 Zinc-Plated, Powder-Coated Wire			
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Refrigerant	1.25HP Air-Cooled, R404 Non-CFC			
Temperature Control System	Programmable, Electric			
Power Requirements	208 / 230V 60Hz 6 FLA / NEMA 6-15 Plug 230V 50Hz 6 FLA / CEE 7/7 Plug			
Net Weight	455 lb / 207 kg	475 lb / 216 kg	455 lb / 207 kg	475 lb / 216 kg

Specifications subject to change  
 Certified to UL and CSA standards by Entela  
 Meets IEC 61010 Standard  
 \*External transformers are not utilized



## Freezer Cut Sheet

EQ-210

Rapid Response Area- South  
 Belongs to Accessioning

# LABORATORY AND BIOLOGICAL REFRIGERATORS AND FREEZERS

## GENERAL-PURPOSE LABORATORY REFRIGERATORS

- Ideal for a wide range of life science, clinical and industrial applications.
- Four upright models (capacities from 16.9 to 55 cu. ft.) feature galvanized steel interior and exterior with textured beige enamel exterior finish and white enamel interior finish. Stainless steel optional.
- Adjustable stainless steel wire shelves.
- 5.4 cu. ft. capacity undercounter and 6.6 cu. ft. capacity wall-mounted models available in standard and pass-through designs.

## CYLINDRICAL REFRIGERATORS

- With rotating shelves and triple-pane, cloud-proof glass doors.

## PHARMACY AND BIOLOGICAL REFRIGERATORS

- Ideal for biotechnical and pharmaceutical cold storage applications.
- Four upright models (capacities from 16.9 to 55 cu. ft.) with galvanized steel interior and exterior. Stainless steel optional.
- Adjustable stainless steel drawers.

## CHROMATOGRAPHY REFRIGERATORS

- Ideal for gel permeation for cancer and DNA separations as well as for reverse-phase chromatography.
- Two upright models (capacities of 24.8 and 55.0 cu. ft.).
- Two vapor-proof covered access portholes.
- Interior multiple-outlet power receptacles with external switches for interior lights and power.

## FLAMMABLE MATERIAL STORAGE REFRIGERATORS AND FREEZERS (FMS)

- Features coldwall cooling system to provide an interior safe from explosion due to sparking of interior finishes and fixtures.
- Three upright models (capacities from 16.9 to 55 cu. ft.), one undercounter model (5.4 cu. ft.) and five wall-mounted models (1.5 and 3.2 cu. ft.) including two pass-through designs and one freezer.

## EXPLOSION-PROOF REFRIGERATORS

- All controls and wiring fully sealed outside cabinet in U.L. listed conduit or cast aluminum housing.
- Two upright refrigerators (capacities 11.8 and 21.0 cu. ft.) and one undercounter refrigerator (4.9 cu. ft.) available.
- Built to meet all specifications of U.L. and the National Fire Underwriters Code.

## DUAL-TEMP LAB/BIO REFRIGERATORS/FREEZERS

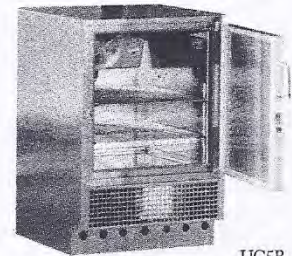
- Convenience of two separate cooling compartments in choice of two space-saving units (11.0 and 30.5 cu. ft. capacity refrigerators; 4.7 cu. ft. freezer for each).
- Stainless steel interior standard.
- Features adjustable stainless steel drawers and wire shelves.

## LABORATORY FREEZERS

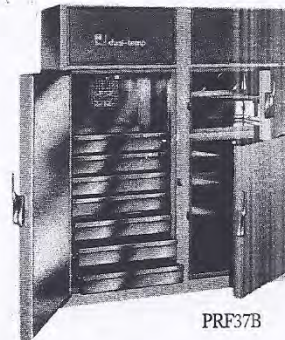
- Four upright models (capacities from 16.9 to 55.0 cu. ft.), two 4.6 cu. ft. capacity undercounter models (including FMS unit) and one 3.2 cu. ft. capacity wall-mounted model. All feature stainless steel interior construction.



CR25B



UC5B



PRF37B

Model No.	Style	Capacity cu. ft./ltr.	Dimensions WxDxH in/cm	Amperage/Breaker 115V, 60Hz.	220V, 50/60Hz.	Condensing Unit	BTU/Hr.	Refrigerant	Drawers (Shelves)	Shipping Weight lbs/kg
GENERAL-PURPOSE LABORATORY REFRIGERATORS (+4°C)										
LR17B	Upright Single door	16.9 cu. ft. 479 ltr.	29" x 30" x 73.6" 74 x 76 x 195	6.5/15.0	3.3/15.0	1/3 HP	2400	134a	(4)	570 lbs. 258 kgs.
LR25B	Upright Single door	24.8 cu. ft. 702 ltr.	29" x 36" x 82.6" 74 x 91 x 203	10.0/15.0	5.0/15.0	1/3 HP	2400	134a	(5)	670 lbs. 304 kgs.
LR37B	Upright Double door	37.4 cu. ft. 1060 ltr.	59" x 30" x 73.6" 150 x 76 x 195	10.0/15.0	5.0/15.0	1/2 HP	3800	134a	(8)	860 lbs. 390 kgs.
LR55B	Upright Double door	55.0 cu. ft. 1558 ltr.	59" x 36" x 82.6" 150 x 91 x 203	10.0/15.0	5.0/15.0	1/2 HP	3800	134a	(10)	1015 lbs. 460 kgs.
UC5B	Undercounter Single door	5.4 cu. ft. 152 ltr.	24" x 24" x 34.5" 61 x 61 x 87	4.3/15.0	2.1/15.0	1/6 HP	900	134a	(2)	210 lbs. 95 kgs.
UC5BD	Undercounter Pass-Through	5.4 cu. ft. 152 ltr.	24" x 24" x 34.5" 61 x 61 x 87	4.3/15.0	2.1/15.0	1/6 HP	900	134a	(2)	220 lbs. 100 kgs.
WM7B	Wall-mounted Double door	6.6 cu. ft. 186 ltr.	54" x 13" x 30" 137 x 33 x 76	4.7/15.0	2.3/15.0	1/6 HP	900	134a	(4)	314 lbs. 142 kgs.
WM7BD	Wall-mounted Pass-Through	6.6 cu. ft. 186 ltr.	54" x 13" x 30" 137 x 33 x 76	4.7/15.0	2.3/15.0	1/6 HP	900	134a	(4)	326 lbs. 148 kgs.

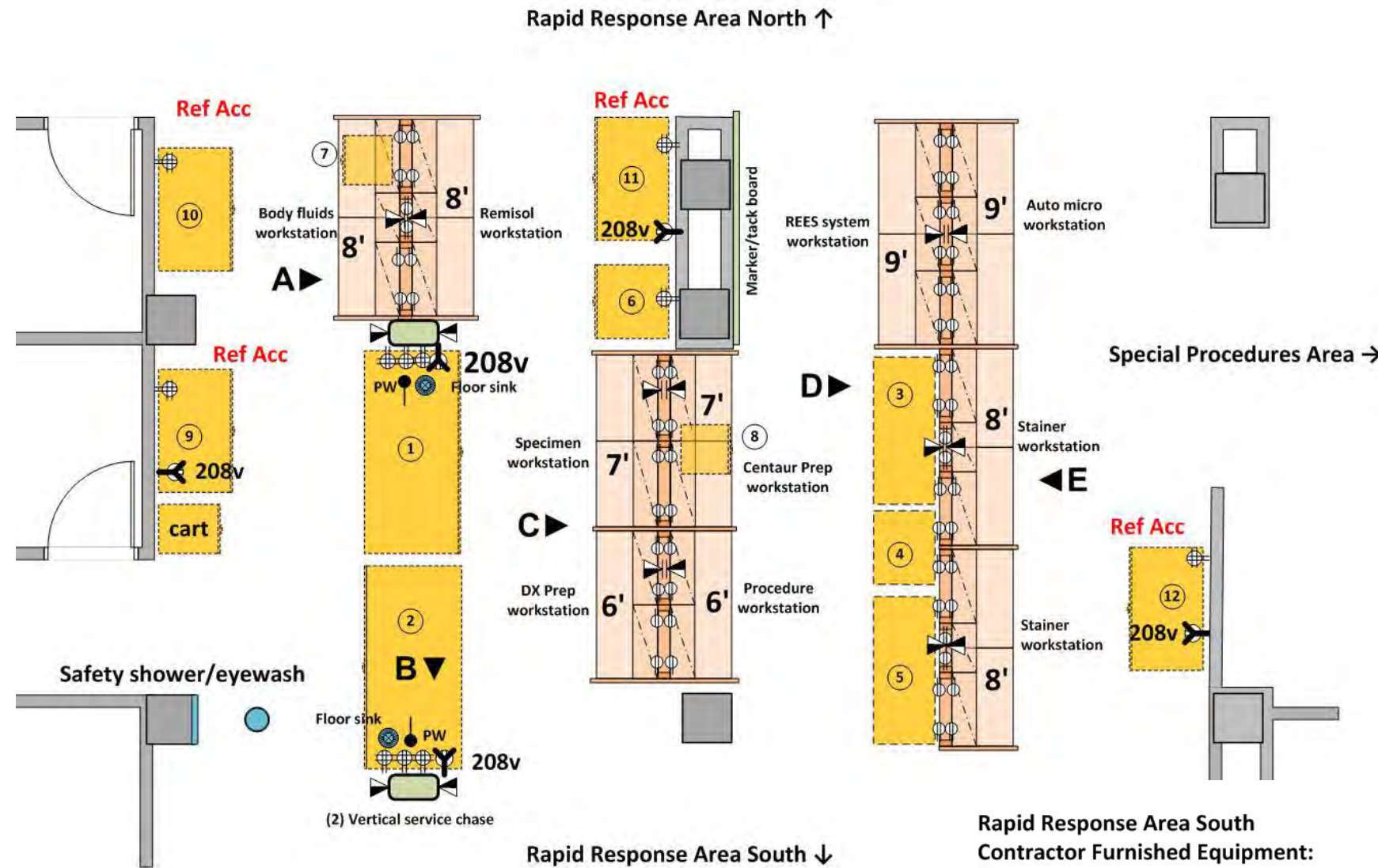
NEED MORE INFORMATION? Call Jewett's Direct Link Service. Toll-Free at 1-800-879-7767

# Refrigerator Cut Sheet

EQ-211

Rapid Response Area- South  
Belongs to Accessioning

# Rapid Response Area- Center Room #P210



## ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3'0"x8'0" pairs at entry  
 Acoustic Attenuation: NC 45 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 Pressure: Negative  
 6 air changes per hour minimum  
 Heat gain: 50 btuh/sf

## ELECTRICAL

110v duplex and fourplex outlets (maximum of (2) fourplex per circuit)  
 Standby power at all outlets  
 208v30a1ph  
 Dedicated circuits at floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

## PLUMBING

Hot/Cold water (HW/CW) at sinks with hands free controls  
 Pure water (PW) at sinks  
 Pure water, floor sink at chemistry analyzers

## CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 Phenolic resin tops  
 Safety Shower/Eyewash

## Rapid Response Area South

Contractor Furnished Equipment:  
 None

## Owner Furnished Equipment:

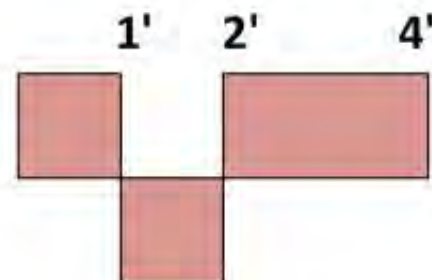
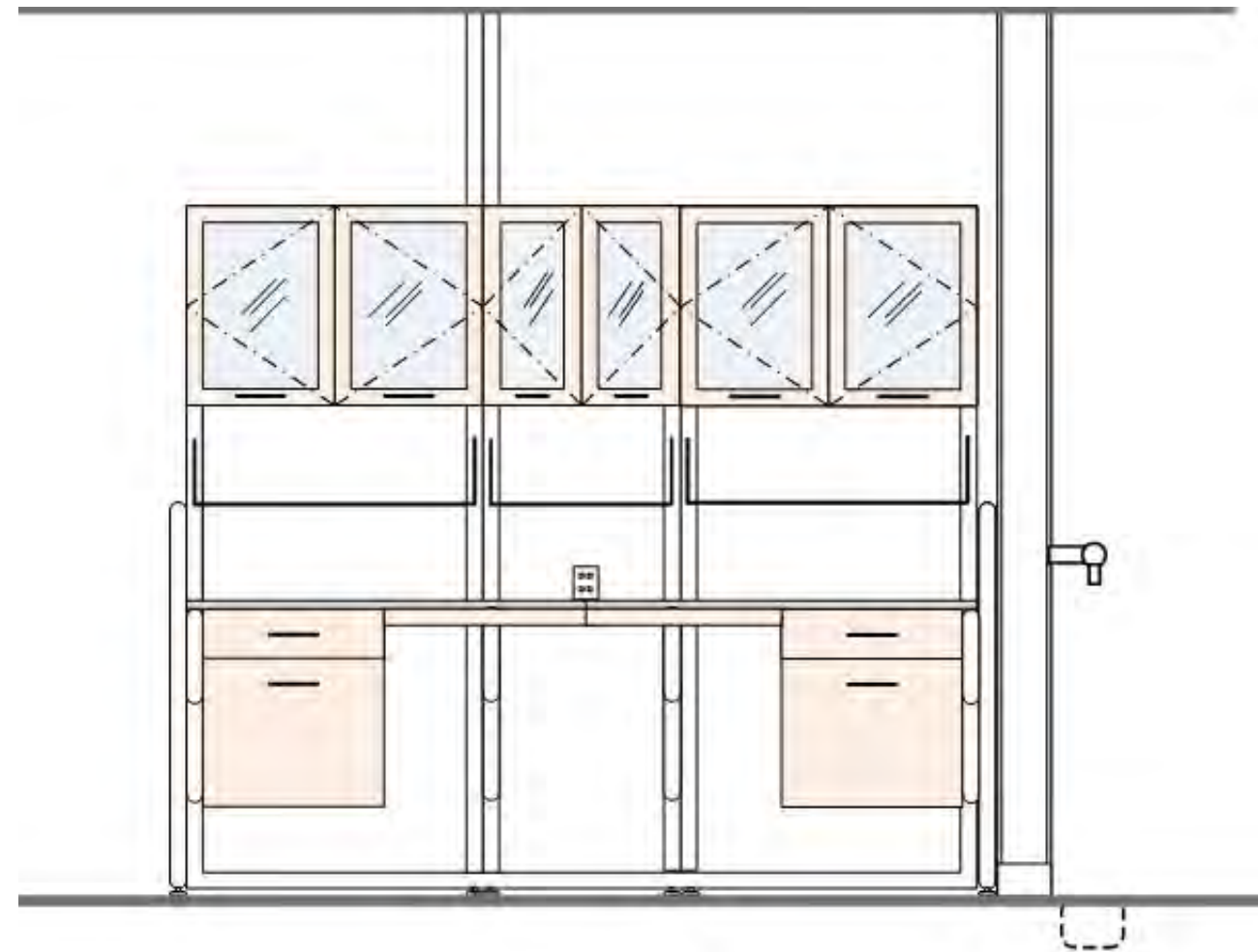
1. EQ-301: Chem Analyzer #1 DXC 800
2. EQ-302: Chem Analyzer #2 DXC 800
3. EQ-303: Immunoassay System #1 Centaur XP
4. EQ-304: Printer
5. EQ-305: Immunoassay System #2 Centaur XP
6. EQ-306: Freezer
7. EQ-307: Centrifuge
8. EQ-308: Cellavision DM96

## Accessioning:

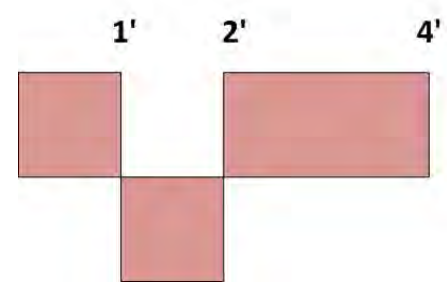
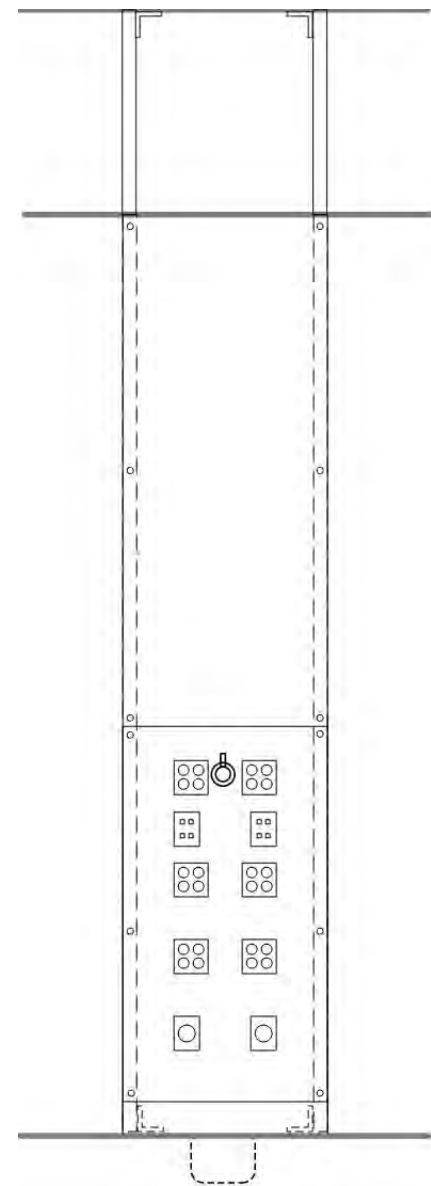
### Owner Furnished Equipment:

9. EQ-309: Refrigerator #1 Double
10. EQ-310: Refrigerator #2 Double
11. EQ-311: Refrigerator #3 Double
12. EQ-312: Refrigerator #4 Double

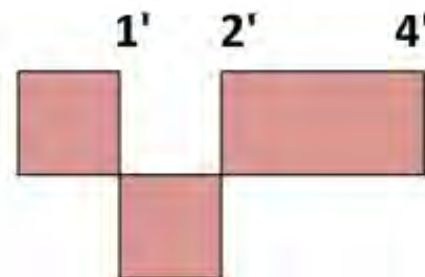
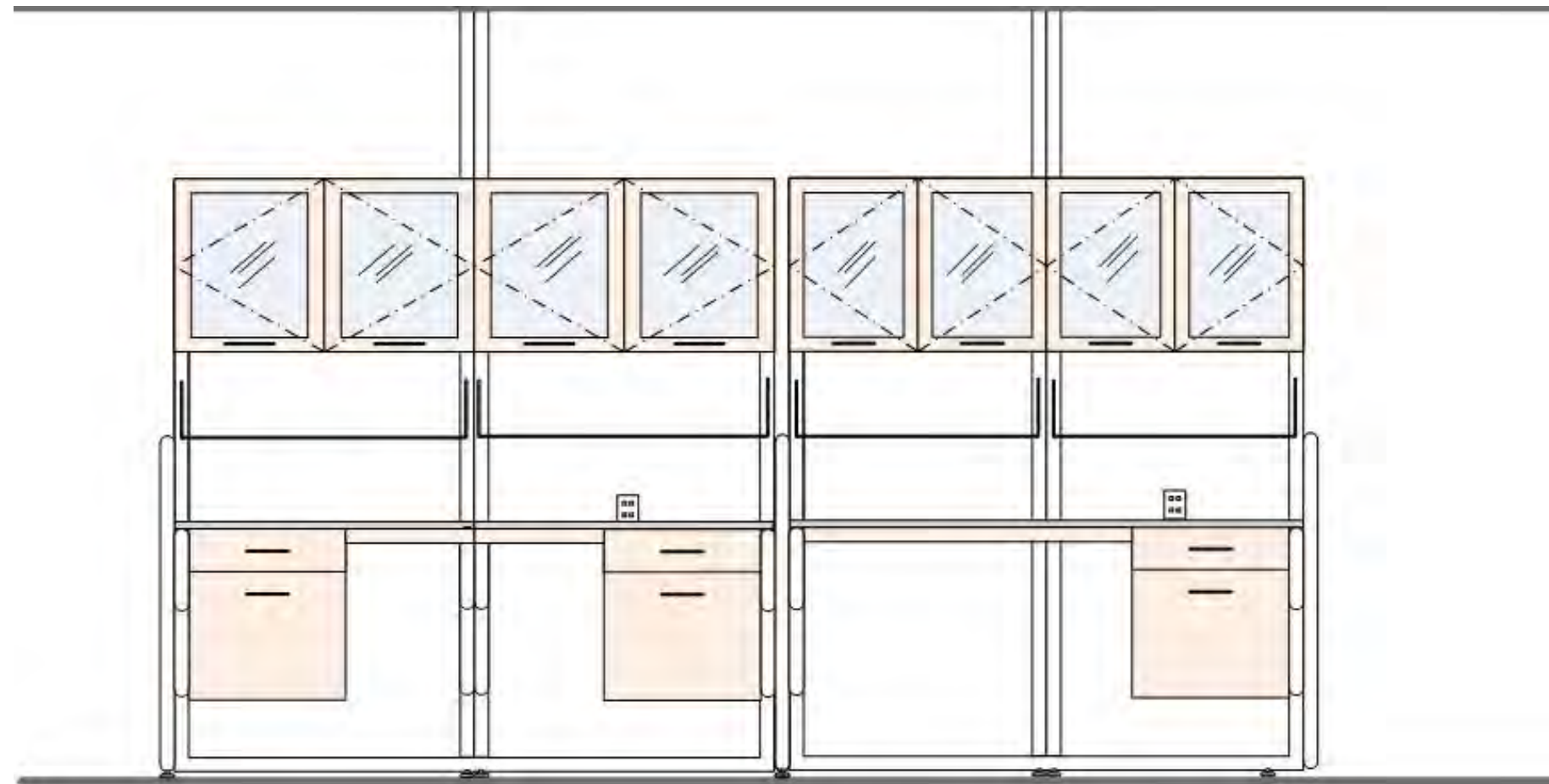
**Rapid Response Area- Center**  
**Room #P210**  
**Elevation A**



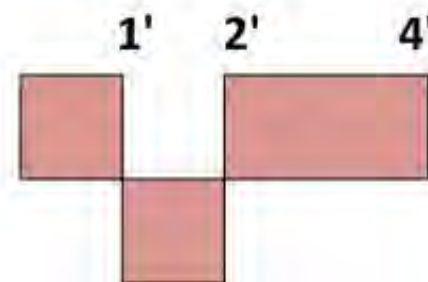
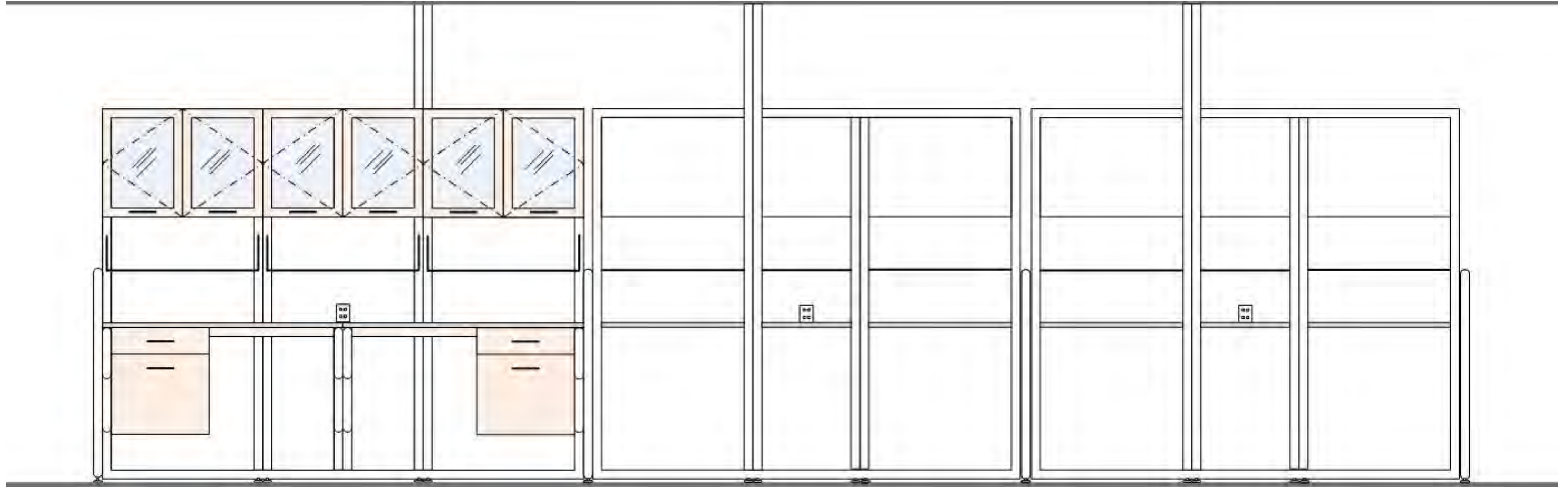
**Rapid Response Area- Center**  
**Room #P210**  
**Elevation B**



**Rapid Response Area- Center**  
**Room #P210**  
**Elevation C**

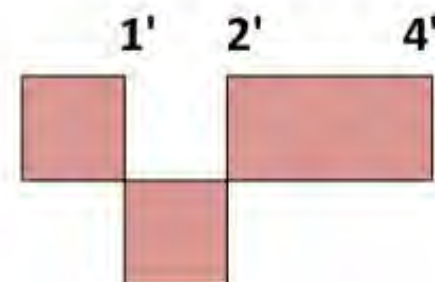


**Rapid Response Area- Center**  
**Room #P210**  
**Elevation D**





**Rapid Response Area- Center**  
**Room #P210**  
**Elevation E**



# Equipment Schedule

Room/Area: <b>Rapid Response Area Center- Room #P210</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical		Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
None identified to date													
<b>Owner Furnished Equipment</b>													
EQ-301	Chemistry Analyzer #1	E-241	~6'	~3'	~4'	~500 lb.	F	115v20a1ph	pure water			Printer table with shared printer for both analyzers	Owner Furnished Owner Installed
EQ-302	Chemistry Analyzer #2 Unicell DXC 800							208v30a1ph data standby power					
EQ-303	Immunoassay system #1	E-241	76.5"	41"	51.5"	1,232 lb.	F	115v20a1ph				includes mobile bench	Owner Furnished Owner Installed
EQ-305	Immunoassay system #2 Advia Centaur XP							208v30a1ph data standby power					
EQ-304	Printer Shared between Centaur's	E-241	~4'	~3'	~4'	~250 lb.	F	115v20a1ph data standby power				includes mobile bench	Owner Furnished Owner Installed
EQ-306	Freezer -30 deg C Helmer	E-241	30.75"	38.5"	80"	475 lb.	F	208v30a1ph standby power NEMA 6-15					Owner Furnished Owner Installed
EQ-307	Benchtop Centrifuge Shandon Cytospin 4	E-241A	16"	25.5"	9.5"	26.5 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-308	Cellavision DM96	E-241A	~18"	~18"	~18"	~25 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-309	Refrigerator	E-241	59"	36"	82.6"	1015 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-310	Jewett LR55B												
EQ-311	Double wide Belongs to Accessioning												
EQ-312	Refrigerator Double Door Helmer #246 Belongs to Accessioning	E-241	59.25"	38.5"	78.75"	790 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed

# Chem Analyzer DXC 800 Cut Sheet

## EQ-301; EQ-302

### Rapid Response Area- Center

#### Sunlight and Drafts

Do not place the system in direct sunlight or in drafts. Both of these conditions may affect the temperature control of the system.

#### Drain

The system should be located near a sink or floor drain to accommodate the waste effluent at a minimum rate of 6 liters/hour (16 liters/hour continuous flow).

The drain must not be placed any higher than 36 inches (91.4 cm) above the floor.

#### Power Requirements

**Table 1.3** Power Requirements – DxC 600 or 800 Analytic Unit

Item	Requirement
Operating range	200–240 VAC ± 10% (180–264 VAC) 14 A at low line, exclusive of power on surge
Frequency	50/60 Hz
BTU generated	10,500 BTU/hour
Power connector	20 A current rating, NEMA L6□20R twistlock in-line connector

**Table 1.4** Power Requirements – DxC Console (PC System and Monitor)

Item	Requirement
Operating range	100–120 VAC ± 10% (90–132 VAC); 4A OR 200–240 VAC ± 10% (180–264 VAC); 2A
Frequency	50/60 Hz
BTU generated	1,500 BTU/hour
Power connector	15 A current rating, IEC 320 standard connector

Item	Requirement
Operating range	110–127 VAC ± 10% (99–140 VAC); 3A OR 220–240 VAC ± 10% (198–264 VAC); 1.6A
Frequency	50/60 Hz
BTU generated	1228 BTU/hour (printing); 34 BTU/hour (standby power save)
Power connector	15 A current rating, IEC 320 standard connector

#### Notes on the System Power

The system can operate from any standard 3-wire electrical outlet and is wired as shipped from the factory to operate on 220 VAC, 50/60 Hz.

#### IMPORTANT

Line Voltage from the electrical outlet should be free of spikes, fluctuations, and dropouts for protection of the electronic circuitry.



**Only operate the system from a 3-wire power source. DO NOT use a 2-prong adapter or a 2-wire AC power source.**

#### Environmental Conditions

**Table 1.6** Temperature, Humidity and Elevation

Item	Specification
Environment	Indoor use only
Ambient temperature	+18°C to +32°C
Warm-up time	30 minutes (time to reach operating temperature)
Relative humidity	20–85% relative, non-condensing
Elevation	Up to 4,200 ft (1280 m)

**Water Requirements**

**Table 1.7** Water Requirements

Item	Specification
Flow Rate	0.6 L/min peak flow rate, 16 L/hr minimum continuous flow rate
Temperature	+15°C to +25°C
Water pressure	Deionized water entering the system must be 30-90 psi.

**Table 1.8** Water Quality Requirements

CLSI (CLRW) 4TH Ed. C03 --A4		
Formerly NCCLS (Type I & II)		
Notes	Replaces Type I & II.	
	4th Ed. C03 --A4	
	CLSI	Beckman Coulter Requirements
	CLRW	
Organic Impurities	500 ng/g TOC (Total Organic Carbon) parts per billion (ppb)	Not Applicable
Total Organic Carbon (TOC)		
Microbiological Impurities	10 CFU/mL	10 CFU/mL
Maximum microbial content colony forming unit (CFU/mL)		
Ionic Impurities	10 MΩ.Cm	1.0 MΩ.Cm
Minimum resistivity, megohm.centimeter (MΩ.Cm@25C)		
Particulate & Colloid Content	Purification process requirement only: water filtration using 0.22 μm pore size to remove microorganisms and particulates	Purification process requirement only: water filtration using 0.22 μm pore size to remove microorganisms and particulates
pH	Not Applicable	Not Applicable
Maximum silicate (mg/mL) SiO <sub>2</sub>	Not Applicable	Not Applicable

# Chem Analyzer DXC 800 Cut Sheet

EQ-301; EQ-302; Page 2

## Chem Analyzer Printer

### Rapid Response Area- Center

Product specifications

*Chemistry Printer*  
Lexmark T650 Series *x2*

	Lexmark T650n	Lexmark T652n	Lexmark T654n
<b>Printing</b>	Monochrome Laser		
Print Technology	Monochrome Laser		
Print Speed (Letter, Black): Up to	45 ppm	50 ppm	55 ppm
Time to First Page (Black)	As fast as 7.5 seconds		
Print Resolution, Black	1200 Image Quality, 1200 x 1200 dpi, 2400 Image Quality, 600 x 600 dpi		
Memory, Standard	128 MB	128 MB	256 MB
Memory, Maximum	640 MB	640 MB	1280 MB
Print Noise Level, Operating	53 dBA	54 dBA	55 dBA
Noise Level, Idle	26 dBA	30 dBA	30 dBA
Maximum Monthly Duty Cycle: Up to	200,000 pages per month	225,000 pages per month	300,000 pages per month
Recommended Monthly Page Volume	3,000 - 20,000 pages	3,000 - 30,000 pages	5,000 - 50,000 pages
<b>Supplies</b>			
Supplies Yield	25,000 <sup>1</sup> -page High Yield Print Cartridge, <sup>2</sup> Average standard page yield value declared in accordance with ISO/IEC 19752, 7,000 <sup>1</sup> -page Print Cartridge	25,000 <sup>1</sup> -page High Yield Print Cartridge, <sup>2</sup> Average standard page yield value declared in accordance with ISO/IEC 19752, 7,000 <sup>1</sup> -page Print Cartridge	25,000 <sup>1</sup> -page High Yield Print Cartridge, <sup>2</sup> Average standard page yield value declared in accordance with ISO/IEC 19752, 7,000 <sup>1</sup> -page Print Cartridge, 30,000 <sup>1</sup> -page Extra High Yield Print Cartridge
Cartridge(s) Shipping with Product	10,000 <sup>1</sup> -page Return Program Print Cartridge	10,000 <sup>1</sup> -page starter Return Program Print Cartridge	10,000 <sup>1</sup> -page starter Return Program Print Cartridge
<b>Paper Handling</b>			
Paper Handling Standard	100-Sheet Multipurpose Feeder, 250-Sheet Input Tray, 350-Sheet Output Bin	100-Sheet Multipurpose Feeder, 550-Sheet Input Tray, 350-Sheet Output Bin	100-Sheet Multipurpose Feeder, 550-Sheet Input Tray, 550-Sheet Output Bin
Paper Handling Optional	1,850-Sheet High-Capacity Output Stacker, 200-Sheet Universally Adjustable Tray with Drawer, 400-Sheet Universally Adjustable Tray with Drawer, 5-Bin Mailbox, 550-Sheet Drawer, Envelope Feeder, 250-Sheet Drawer, 250-Sheet Duplex Unit, Optional furniture required, 550-Sheet Output Expander, StapleSmart II Finisher, 2,000-Sheet High Capacity Feeder (Caster Base required)	1,850-Sheet High-Capacity Output Stacker, 200-Sheet Universally Adjustable Tray with Drawer, 400-Sheet Universally Adjustable Tray with Drawer, 5-Bin Mailbox, 550-Sheet Drawer, Envelope Feeder, 250-Sheet Drawer, Optional furniture required, 550-Sheet Output Expander, StapleSmart II Finisher, 2,000-Sheet High Capacity Feeder (Caster Base required)	1,850-Sheet High-Capacity Output Stacker, 200-Sheet Universally Adjustable Tray with Drawer, 400-Sheet Universally Adjustable Tray with Drawer, 5-Bin Mailbox, 550-Sheet Drawer, Envelope Feeder, 250-Sheet Drawer, Optional furniture required, 550-Sheet Output Expander, StapleSmart II Finisher, 2,000-Sheet High Capacity Feeder (Caster Base required)
Paper Input Capacity, Standard: Up to	350 pages 20 lb or 75 gsm bond	650 pages 20 lb or 75 gsm bond	650 pages 20 lb or 75 gsm bond
Paper Input Capacity, Maximum: Up to	4000 pages 20 lb or 75 gsm bond	4300 pages 20 lb or 75 gsm bond	4300 pages 20 lb or 75 gsm bond
Paper Output Capacity, Standard: Up to	350 pages 20 lb or 75 gsm bond	350 pages 20 lb or 75 gsm bond	550 pages 20 lb or 75 gsm bond
Paper Output Capacity, Maximum: Up to	2750 pages 20 lb or 75 gsm bond	2750 pages 20 lb or 75 gsm bond	2950 pages 20 lb or 75 gsm bond
Media Types Supported	Card Stock, Dual Web Labels, Envelopes, Integrated Labels, Paper Labels, Plain Paper, Polyester Labels, Transparencies, Vinyl Labels, Refer to the Card Stock & Label Guide		
Media Sizes Supported	10 Envelope, 7 3/4 Envelope, 9 Envelope, A4, A5, DL Envelope, A6 Card, Executive, Folio, JS-B5, Legal, Letter, Statement, Universal		
Compatibility			
Network Protocol Support	TCP/IP PWT, IPX/SPX, AppleTalk™, LexLink (LJC), TCP/IP PWT, TCP, UDP		
Printer Languages (Standard)	PCL 5e Emulation, PCL 6 Emulation, Personal Printer Data Stream (PPDS), PostScript 3 Emulation, xHTML, PDF 1.6, Direct Image, Microsoft XPS (XML Paper Specification)		
Standard Ports	One Internal Card Slot, USB 2.0 Specification High-Speed Certified (Type B), Front USB Port Compatible with USB 2.0 Specification (Type A), Ethernet 10/100BaseTX (RJ-45), also works with 1000Base-T	One Internal Card Slot, USB 2.0 Specification High-Speed Certified (Type B), Front USB Port Compatible with USB 2.0 Specification (Type A), Ethernet 10/100BaseTX (RJ-45), also works with 1000Base-T	One Internal Card Slot, USB 2.0 Specification High-Speed Certified (Type B), Front USB 2.0 Specification High-Speed Certified Port (Type A), Rear USB 2.0 Specification High-Speed Certified Port (Type A), Ethernet 10/100BaseTX (RJ-45), also works with 1000Base-T
Microsoft Windows Operating Systems Supported	2000, XP, Server 2003, XP x64, Server 2003 running Terminal Services, 2000 Server running Terminal Services, Server 2003 x64, Server 2003 x64 running Terminal Services, Vista, Vista x64, Server 2008, Server 2008 x64, Server 2008 running Terminal Services, Server 2008 x64 running Terminal Services, Windows 7		
Apple Macintosh Operating Systems Supported	Mac OS X, Mac OS 9.2		
Other Operating Systems Supported	www.lexmark.com		
<b>General</b>			
Product Warranty	1-Year Exchange Service, Next Business Day		
Product Certifications	www.lexmark.com		
Size (in. - H x W x D)	13.7 x 16.7 x 19.4 in.	16.8 x 16.7 x 20.1 in.	17.2 x 16.7 x 20.1 in.
Weight (lb.)	40.6 lb.	50.7 lb.	51.6 lb.
Specified Operating Environment	Temperature: 16 to 32°C (60 to 90°F), Humidity: 8 to 80% Relative Humidity, Altitude: 0 - 3048 Meters (10,000 Feet)		

Siemens Advia Centaur XP X2

**Immunoassay System Centaur XP Cut Sheet**  
**Immunoassay System Printer Cut Sheet**  
 EQ-303; EQ-304; EQ-305  
 Rapid Response Area- Center

**Appendix E: Specifications**

*Immunoassay Analyzer*

This section summarizes the design specifications for the ADVIA Centaur XP system.

**Safety Certifications**

Refer to the DECLARATION OF CONFORMITY shipped with the ADVIA Centaur XP system.

**Electromagnetic Compatibility (EMC)**

Refer to the DECLARATION OF CONFORMITY shipped with the ADVIA Centaur XP system.

**Dimensions**

Depth	104.2 cm (41.0 in)
Height	130.9 cm (51.5 in)
Width	194.3 cm (76.5 in)
Weight	559 kg (1,232 lbs); system has casters

**Environmental Specifications**

Ambient Operating Temperature	18.0 to 30.0°C
Relative Humidity	20% to 80%, non-condensing, actively controlled
Storage Temperature	0.0 to 50.0°C
Indoor Use Only	
Altitude	up to 2000 meters
Ventilation	10,000 BTU/hour
IEC 1010-1 Installation Category II	
IEC 1010-1 Equipment Classification Class I	
IEC 1010-1 Pollution Degree 2	

	supply with US cord, EasyLan Wireless 802.11b, 1MB DRAM, 128KB Flash, 203 dpi printhead and Self-strip assembly kit, Color: Dark gray	Availability
3400E11000200	EasyCoder 3400e, Thermal transfer printer, 220 VAC UK power package, Cover over I/O slot, 1MB DRAM, 128KB Flash, 203 dpi and Peripheral kit, Color: Medium Gray	Check Availability
3400E01002400	EasyCoder 3400e, Thermal transfer, 406 dpi, 6 ips, 4.5" print width, Serial interface and Peripheral Kit. Color: Medium Gray.	Check Availability

**Intermec EasyCoder 3400e Details**

X2

**Intermec EasyCoder 3400e**

- Rugged metal frame and enclosure
- Field proven 3400 reliability
- Industrial gray metallic color
- Up to 10 times improved throughput compared to 3400
- IEEE 1284 Parallel port and Serial port standard
- Internal Ethernet adapter optional
- Free LabelShop™ label design and print software
- Industry leading InterDriver™ Windows driver included
- 200 or 400 dpi printhead option

The EasyCoder 3400e is a versatile industrial strength printer based on the rugged, field-proven EasyCoder 3400. The attractive gray metallic color of the 3400e fits in industrial or office environments. The Intermec EasyCoder 3400e features up to 10 times faster printing throughput compared to the 3400, making it ideal for today's increasingly complex labels combining 2D barcodes, mixed fonts and graphics – no waiting for labels.

The 3400e continues to offer the legendary reliability of the 3400 print mechanism. The steel frame enclosure gives the 3400e a rugged platform to withstand harsh industrial environments. The attractive gray metallic enclosure is designed to mask dirt and grime for ease of maintenance.

The Intermec EasyCoder 3400e features dramatically improved label processing speed and printing throughput compared to the 3400 and the competition. The standard high-speed IEEE 1284 parallel port and enhanced serial port ensure fast host communications. The Internal Ethernet adapter provides high throughput and network management without the complexity, space requirements and fragility of external print servers. A heavy-duty cutter with tray option is available on the 3400D or 3400e printers. And of course, the 3400e is fully backward compatible with 3400A/B/C/D printers.

It all adds up to a powerful printer that is designed and built to be the right solution for a large variety of industrial barcode applications.

**Applications** General Purpose Industrial Direct Thermal/Thermal Transfer Printer. Prints high quality barcodes on pressure sensitive labels and tags.

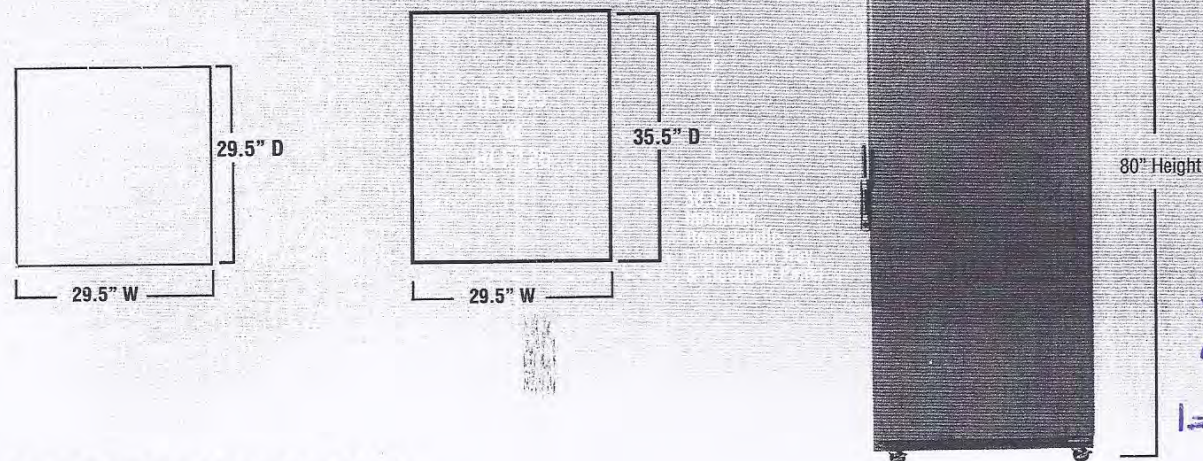
**Model** EasyCoder 3400e

**Physical Characteristics** Length: 43.8 cm (17.25") Width: 24.9 cm (9.8") Height: 27.7 cm (10.9") Weight: 15.8 kg (35 lbs.)

**Print Specifications** Element: 0.125 mm (0.00492") Resolution: 8 dots/mm (203 dpi); 16 dots/mm (400 dpi) "X" Dimension: 0.13 to 1.27 mm (5 to 50 mil) Max. Length: Unlimited Max. Width: 104 mm (4.1") 203 dpi; 112 mm (4.4") 406 dpi Speed: 51, 77, 102, 128, 153 or 204 mm/sec (Select 2", 3", 4", 5", 6" or 8")

# SPECIFICATIONS

## FOOTPRINT



X2  
1 = Accessing A  
1 = Chem A

## LABORATORY FREEZER SPECIFICATIONS (-30°C)

FEATURE	VERTICAL SERIES		HORIZON SERIES	
	VF125	VF175	HUT20	HU
Control / Monitor System	i.Center		Standard	
Exterior Material	Solid Galvannealed Steel with Bacteria-Resistant Powder Coating			
Temperature Range	-15°C to -30°C			
Interior Material	Galvannealed Steel with Bacteria-Resistant Powder Coating			
Exterior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm
Interior Dimensions (w x h x d)	29.5" x 80" x 29.5" 75cm x 204cm x 75cm	29.5" x 80" x 35.5" 75cm x 204cm x 91cm	29.5" x 80" x 29.5" 75cm x 204cm x 75cm	29.5" x 80" x 35.5" 75cm x 204cm x 91cm
Clearance Dimensions (w x h x d) (Includes door handle, electrical panel, and evaporation tray)	30.75" x 80" x 32.5" 79cm x 204cm x 83cm	30.75" x 80" x 38.5" 79cm x 204cm x 98cm	30.75" x 80" x 32.5" 79cm x 204cm x 83cm	30.75" x 80" x 38.5" 79cm x 204cm x 98cm
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter
Locks	4 Dual, Swivel Locking			
Shelves	4 Zinc-Plated, Powder-Coated Wire			
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Compressor	1.25HP Air-Cooled, R404 Non-CFC			
Control Panel	Programmable, Electric			
Electrical	208 / 230V 60Hz 6 FLA / NEMA 6-15 Plug 230V 50Hz 6 FLA / CEE 7/7 Plug			
Net Weight	455 lb / 207 kg	475 lb / 216 kg	455 lb / 207 kg	475 lb / 216 kg

Specifications subject to change  
 Certified to UL and CSA standards by Entela  
 Meets IEC 61010 Standard  
 \*External transformers are not utilized



# Freezer Cut Sheet

## EQ-306

### Rapid Response Area- Center

**Centrifuge Cut Sheet**  
**EQ-307**  
**Rapid Response Area- Center**

*Shandon Cytospin 4*

12/14

**Chapter 8 Specification, Accessories and Spares**

**Specification**

**Physical**

<b>Width</b>	405 mm (max)	(16 ins)	
<b>Depth</b>	620 mm	(24½ ins)	
<b>Height</b>	240 mm	(9½ ins)	<i>(lid down)</i>
	625 mm	(25 ins)	<i>(lid up)</i>
<b>Weight</b>	12 kg	(26½ lbs)	

**Electrical**

**Power Supply Voltages** 100 - 240 V a.c. (-); 5A 50/60 Hz; 150VA

*Note Maximum supply voltage fluctuations not to exceed ±10% of nominal voltage range. ▲*

**Fuses** Mains plug fuse 5A 250V *(where applicable)*  
 Mains fuses (x 2) T5A 250V  
 (Thermo part number for Fuse Spares Kit - A78310021)

*Note Fuses should only be replaced by technically competent personnel. ▲*

**Switch Convention** I Power On  
 O Power Off

**Sound Power Level** <53dB (this should not present any hazard to the user)

**Program Details** Time 1 - 99 minutes  
 Speed 200 - 2000 rpm *(in increments of 10rpm)*  
 Acceleration High, Medium, Low

Specification and Accessories

**Environment**

<b>General</b>	Indoor use only
<b>Operating Temperature</b>	+2°C to +40°C
<b>Transit/Storage Temperature</b>	-25°C to +55°C (+70°C for short exposure)
<b>Humidity</b>	80% max. for temperatures <31°C 50% max. for temperatures 31°C to 40°C <i>(Non-condensing environment)</i>
<b>Altitude</b>	up to 2000m (6,500 feet)
<b>Pollution degree</b>	2
<b>Over voltage category</b>	II

**Part Numbers**

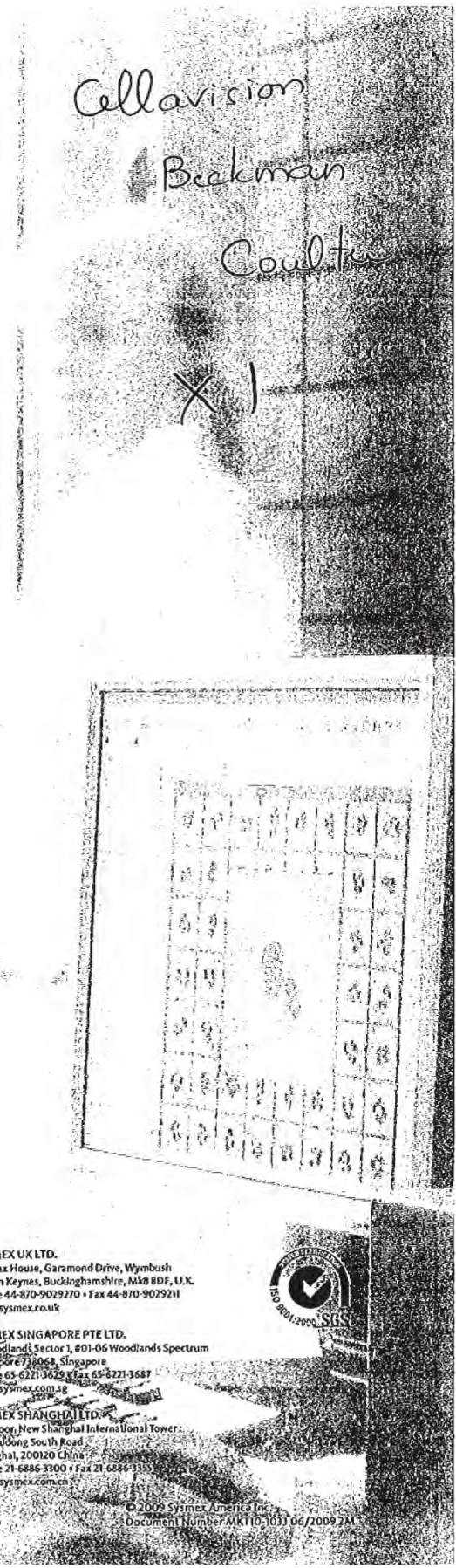
<b>Shandon Cytospin 4</b>	A78300001	<i>(with starter kit)</i>
	A78300002	<i>(without starter kit)</i>

*Note Starter kit comprises:*  
*Shandon EZ Double Cytofunnels with double Cytoslides*  
*Shandon EZ Single Cytofunnel (White Filter Card) with single Cytoslides*  
*Shandon EZ Megafunnels with slides. ▲*

*Note Both versions of Shandon Cytospin 4 come with a sealed head. ▲*

## Instrument Specifications

System Components	PC with Windows XP Slide Scanning Unit CellaVision® DM Software (U.S. Patent No. 6268611 and 6341180)
Electrical Specifications All System Components	Voltage Input: (115 VAC for US) Current Input: (8A for US)
Size (W x D x H)	530 x 600 x 630 mm 20.9 x 23.6 x 24.8 Inches
Slide Handling	Continuous feed, walk away; up to 96 slides (8 magazines x 12 slides / magazine) Requires barcode labeled slides with clipped/round corners
Oil Dispensing	Automatic
Archiving of Results and Images	Supported media: CD-R/CD-RW and LAN
Storage Capacity	Primary storage: On local hard drive 20 GB Secondary storage: Unlimited when transferred to external storage media via LAN
Printer Support	Laser/inkjet printers supported by Windows XP Communications Bi-directional LIS support, ASTM Ethernet 10/100 Mbps E-mail
Archiving Settings by Database	Each Database established may have its own specific archive settings Creating a new database now allocates optimal 20 GB DB Query updated to address: - Body Fluids - Extracts the serial number of the analyzer on which the slide was scanned Enabled for SNCS™ monitoring
Accessories	Barcode labeled slide magazines Immersion oil QC barcode labels



## CellaVision Cut Sheet EQ-308 Rapid Response Area- Center

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# LABORATORY AND BIOLOGICAL REFRIGERATORS AND FREEZERS

## GENERAL-PURPOSE LABORATORY REFRIGERATORS

- Ideal for a wide range of life science, clinical and industrial applications.
- Four upright models (capacities from 16.9 to 55 cu. ft.) feature galvanized steel interior and exterior with textured beige enamel exterior finish and white enamel interior finish. Stainless steel optional.
- Adjustable stainless steel wire shelves.
- 5.4 cu. ft. capacity undercounter and 6.6 cu. ft. capacity wall-mounted models available in standard and pass-through designs.

## CYLINDRICAL REFRIGERATORS

- With rotating shelves and triple-pane, cloud-proof glass doors.

## PHARMACY AND BIOLOGICAL REFRIGERATORS

- Ideal for biotechnical and pharmaceutical cold storage applications.
- Four upright models (capacities from 16.9 to 55 cu. ft.) with galvanized steel interior and exterior. Stainless steel optional.
- Adjustable stainless steel drawers.

## CHROMATOGRAPHY REFRIGERATORS

- Ideal for gel permeation for cancer and DNA separations as well as for reverse-phase chromatography.
- Two upright models (capacities of 24.8 and 55.0 cu. ft.).
- Two vapor-proof covered access portholes.
- Interior multiple-outlet power receptacles with external switches for interior lights and power.

## FLAMMABLE MATERIAL STORAGE REFRIGERATORS AND FREEZERS (FMS)

- Features coldwall cooling system to provide an interior safe from explosion due to sparking of interior finishes and fixtures.
- Three upright models (capacities from 16.9 to 55 cu. ft.), one undercounter model (5.4 cu. ft.) and five wall-mounted models (1.5 and 3.2 cu. ft.) including two pass-through designs and one freezer.

## EXPLOSION-PROOF REFRIGERATORS

- All controls and wiring fully sealed outside cabinet in U.L. listed conduit or cast aluminum housing.
- Two upright refrigerators (capacities 11.8 and 21.0 cu. ft.) and one undercounter refrigerator (4.9 cu. ft.) available.
- Built to meet all specifications of U.L. and the National Fire Underwriters Code.

## DUAL-TEMP LAB/BIO REFRIGERATORS/FREEZERS

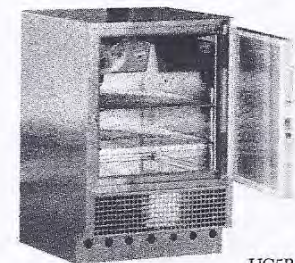
- Convenience of two separate cooling compartments in choice of two space-saving units (11.0 and 30.5 cu. ft. capacity refrigerators; 4.7 cu. ft. freezer for each).
- Stainless steel interior standard.
- Features adjustable stainless steel drawers and wire shelves.

## LABORATORY FREEZERS

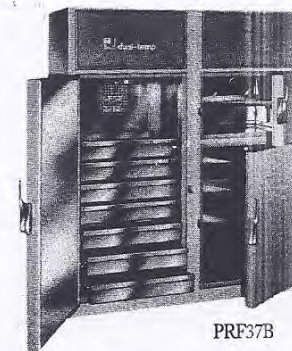
- Four upright models (capacities from 16.9 to 55.0 cu. ft.), two 4.6 cu. ft. capacity undercounter models (including FMS unit) and one 3.2 cu. ft. capacity wall-mounted model. All feature stainless steel interior construction.



CR25B



UC5B



PRF37B

Model No.	Style	Capacity cu. ft./ltr.	Dimensions WxDxH in./cm	Amperage/Breaker 115V, 60Hz. 220V, 50/60Hz.	Condensing Unit	BTU/Hr.	Refrigerant	Drawers (Shelves)	Shipping Weight lbs./kg
<b>GENERAL-PURPOSE LABORATORY REFRIGERATORS (+4°C)</b>									
LR17B	Upright Single door	16.9 cu. ft. 479 ltr.	29" x 30" x 73.6" 74 x 76 x 195	6.5/15.0	3.3/15.0	1/3 HP	2400	134a	(4) 570 lbs. 258 kgs.
LR25B	Upright Single door	24.8 cu. ft. 702 ltr.	29" x 36" x 82.6" 74 x 91 x 203	10.0/15.0	5.0/15.0	1/3 HP	2400	134a	(5) 670 lbs. 304 kgs.
LR37B	Upright Double door	37.4 cu. ft. 1060 ltr.	59" x 30" x 73.6" 150 x 76 x 195	10.0/15.0	5.0/15.0	1/2 HP	3800	134a	(8) 860 lbs. 390 kgs.
LR55B	Upright Double door	55.0 cu. ft. 1558 ltr.	59" x 36" x 82.6" 150 x 91 x 203	10.0/15.0	5.0/15.0	1/2 HP	3800	134a	(10) 1015 lbs. 460 kgs.
UC5B	Undercounter Single door	5.4 cu. ft. 152 ltr.	24" x 24" x 34.5" 61 x 61 x 87	4.3/15.0	2.1/15.0	1/6 HP	900	134a	(2) 210 lbs. 95 kgs.
UC5BD	Undercounter Pass-Through	5.4 cu. ft. 152 ltr.	24" x 24" x 34.5" 61 x 61 x 87	4.3/15.0	2.1/15.0	1/6 HP	900	134a	(2) 220 lbs. 100 kgs.
WM7B	Wall-mounted Double door	6.6 cu. ft. 186 ltr.	54" x 13" x 30" 137 x 33 x 76	4.7/15.0	2.3/15.0	1/6 HP	900	134a	(4) 314 lbs. 142 kgs.
WM7BD	Wall-mounted Pass-Through	6.6 cu. ft. 186 ltr.	54" x 13" x 30" 137 x 33 x 76	4.7/15.0	2.3/15.0	1/6 HP	900	134a	(4) 326 lbs. 148 kgs.

NEED MORE INFORMATION? Call Jewett's Direct Link Service. Toll-Free at 1-800-879-7767

**Refrigerator Cut Sheet**  
**EQ-309; EQ-310; EQ-311**  
**Jewett LR55B**  
**Rapid Response Area- Center**  
**Double wide**  
**Belongs to Accessioning**

# LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

**Refrigerator Cut Sheet**  
**EQ-312**  
**Helmer HLR 256**  
**Rapid Response Area- Center**  
**Double wide**  
**Belongs to Accessioning**

## LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

## LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
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Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

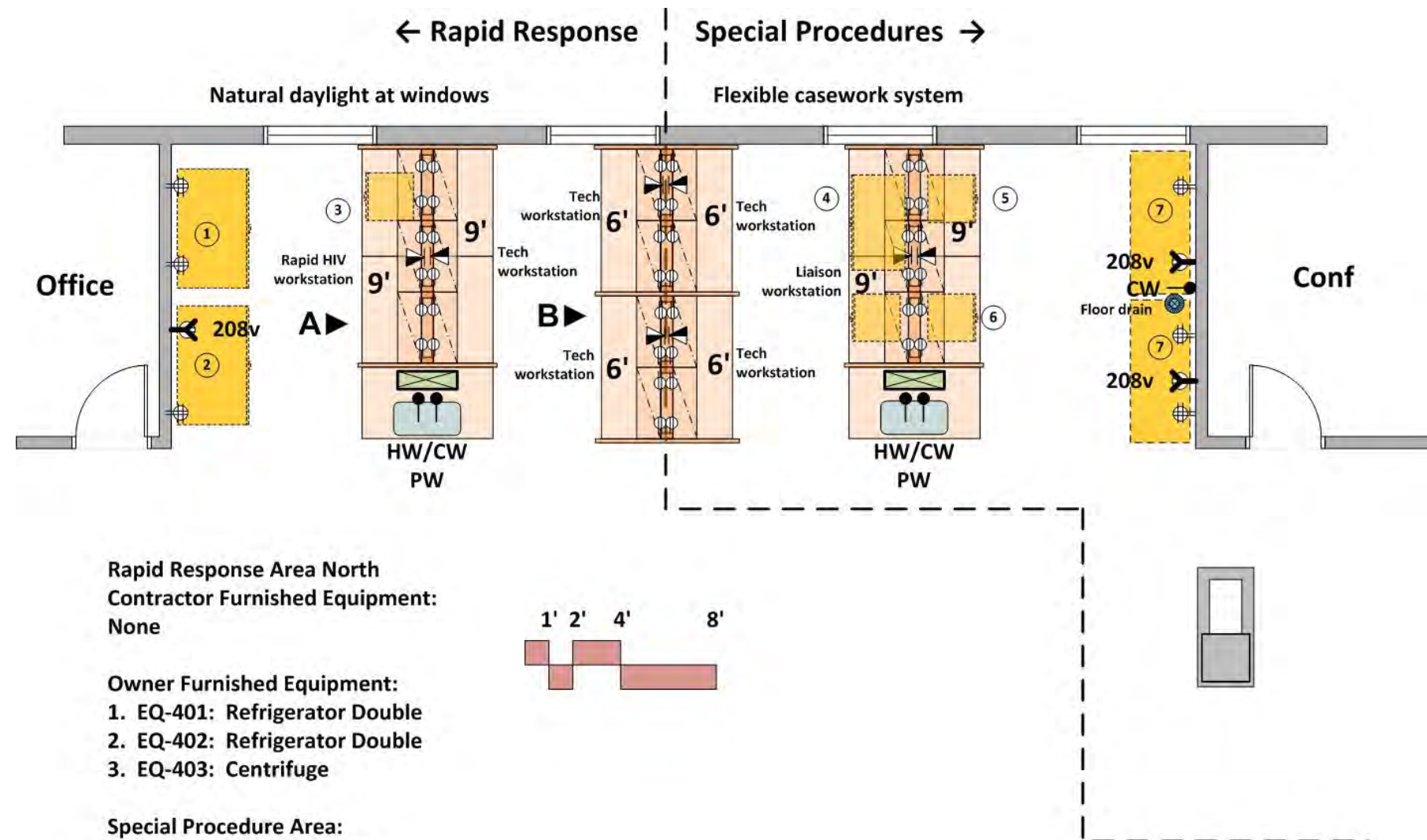
Specifications subject to change  
 Certified to UL and CSA standards by Entela  
 Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

# Rapid Response Area- North

## Room #P210



**Rapid Response Area North**  
**Contractor Furnished Equipment:**  
 None

**Owner Furnished Equipment:**  
 1. EQ-401: Refrigerator Double  
 2. EQ-402: Refrigerator Double  
 3. EQ-403: Centrifuge

**Special Procedure Area:**  
 4. EQ-404: Liaison system  
 5. EQ-405: Benchtop Centrifuge #1  
 6. EQ-406: Benchtop Centrifuge #2  
 7. EQ-407: Abbott 1000 System (x2)

### ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3'0"x8'0" pairs at entry  
 Acoustic Attenuation: NC 45 or less

### MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 Pressure: Negative  
 6 air changes per hour minimum  
 Heat gain: 50 btuh/sf

### ELECTRICAL

110v duplex and fourplex outlets (maximum of (2) fourplex per circuit)  
 Standby power at all outlets  
 208v30a1ph  
 Dedicated circuits at floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

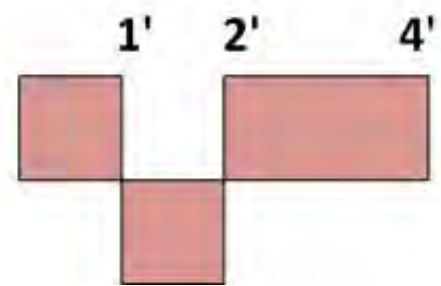
### PLUMBING

Hot/Cold water (HW/CW) at sinks with hands free controls  
 Pure water (PW) at sinks  
 Cold water at EQ-407  
 Floor drain at EQ-407

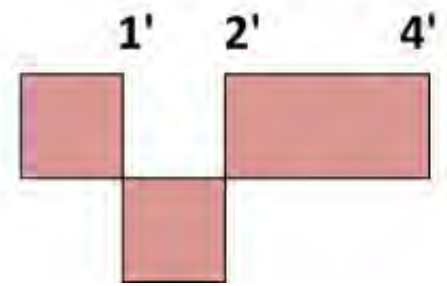
### CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 Phenolic resin tops

**Rapid Response Area- North**  
**Room #P210**  
**Elevation A**



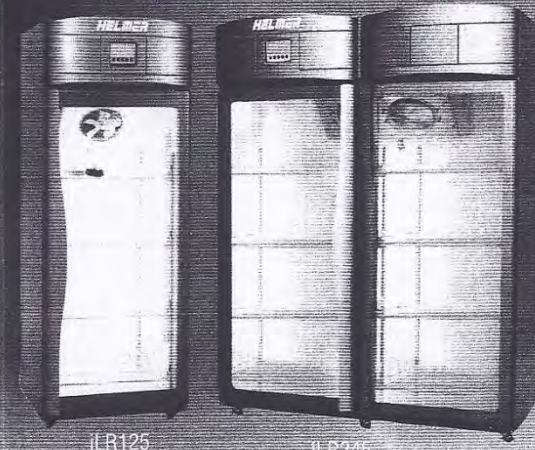
**Rapid Response Area- North**  
**Room #P210**  
**Elevation B**



# Equipment Schedule

Rapid Response Area North- Room #P210												
Room/Area: #P210												
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>												
None identified to date												
<b>Owner Furnished Equipment</b>												
EQ-401	Refrigerator Helmer HLR 256 Double wide	E-241-A	59.25"	38.5"	78.75"	754 lb.	F	125v20a1ph standby power				Owner Furnished Owner Installed
EQ-402	Refrigerator Jewett LR55B Double wide	E-241	59"	36"	82.6"	1015 lb.	F	115v20a1ph standby power				Owner Furnished Owner Installed
EQ-403	Benchtop Centrifuge	W-231-V	11"	10"	7"	~25 lb.	B	115v20a1ph data standby power				Owner Furnished Owner Installed
EQ-404	Liaison System includes computer and monitor	W-231-V	84"	26"	25"	260 lb.	B	115v20a1ph data standby power				Owner Furnished Owner Installed
EQ-405	Benchtop Centrifuge #1	W-231-V	~18"	~18"	~12"	~25 lb.	B	115v20a1ph data standby power				Owner Furnished Owner Installed
EQ-406	Benchtop Centrifuge #2	W-231-V	~18"	~18"	~12"	~25 lb.	B	115v20a1ph data standby power				Owner Furnished Owner Installed
EQ-407	Abbott 1000 (x2)	New	59"	30"	49"	636 lb.	F	115v20a1ph 208v30a1ph data standby power	cold water floor drain			Owner Furnished Owner Installed

## LABORATORY REFRIGERATORS



iLR125

iLR245



HLR120

- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
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Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
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Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\* External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

## Refrigerator Cut Sheet

### EQ-401

### Rapid Response Area- North

### Double wide

# LABORATORY AND BIOLOGICAL REFRIGERATORS AND FREEZERS

## GENERAL-PURPOSE LABORATORY REFRIGERATORS

- Ideal for a wide range of life science, clinical and industrial applications.
- Four upright models (capacities from 16.9 to 55 cu. ft.) feature galvanized steel interior and exterior with textured beige enamel exterior finish and white enamel interior finish. Stainless steel optional.
- Adjustable stainless steel wire shelves.
- 5.4 cu. ft. capacity undercounter and 6.6 cu. ft. capacity wall-mounted models available in standard and pass-through designs.

## CYLINDRICAL REFRIGERATORS

- With rotating shelves and triple-pane, cloud-proof glass doors.

## PHARMACY AND BIOLOGICAL REFRIGERATORS

- Ideal for biotechnical and pharmaceutical cold storage applications.
- Four upright models (capacities from 16.9 to 55 cu. ft.) with galvanized steel interior and exterior. Stainless steel optional.
- Adjustable stainless steel drawers.

## CHROMATOGRAPHY REFRIGERATORS

- Ideal for gel permeation for cancer and DNA separations as well as for reverse-phase chromatography.
- Two upright models (capacities of 24.8 and 55.0 cu. ft.).
- Two vapor-proof covered access portholes.
- Interior multiple-outlet power receptacles with external switches for interior lights and power.

## FLAMMABLE MATERIAL STORAGE REFRIGERATORS AND FREEZERS (FMS)

- Features coldwall cooling system to provide an interior safe from explosion due to sparking of interior finishes and fixtures.
- Three upright models (capacities from 16.9 to 55 cu. ft.), one undercounter model (5.4 cu. ft.) and five wall-mounted models (1.5 and 3.2 cu. ft.) including two pass-through designs and one freezer.

## EXPLOSION-PROOF REFRIGERATORS

- All controls and wiring fully sealed outside cabinet in U.L. listed conduit or cast aluminum housing.
- Two upright refrigerators (capacities 11.8 and 21.0 cu. ft.) and one undercounter refrigerator (4.9 cu. ft.) available.
- Built to meet all specifications of U.L. and the National Fire Underwriters Code.

## DUAL-TEMP LAB/BIO REFRIGERATORS/FREEZERS

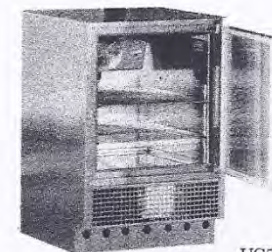
- Convenience of two separate cooling compartments in choice of two space-saving units (11.0 and 30.5 cu. ft. capacity refrigerators; 4.7 cu. ft. freezer for each).
- Stainless steel interior standard.
- Features adjustable stainless steel drawers and wire shelves.

## LABORATORY FREEZERS

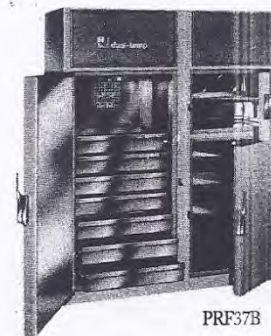
- Four upright models (capacities from 16.9 to 55.0 cu. ft.), two 4.6 cu. ft. capacity undercounter models (including FMS unit) and one 3.2 cu. ft. capacity wall-mounted model. All feature stainless steel interior construction.



CR25B



UC5B



PRF37B

Model No.	Style	Capacity cu. ft./ltr.	Dimensions WxDxH in/cm	Amperage/Breaker		Condensing Unit	BTU/Hr.	Refrigerant	Drawers (Shelves)	Shipping Weight lbs/kg
				115V, 60Hz.	220V, 50/60Hz.					
GENERAL-PURPOSE LABORATORY REFRIGERATORS (+4°C)										
LR17B	Upright Single door	16.9 cu. ft. 479 ltr.	29" x 30" x 73.6" 74 x 76 x 195	6.5/15.0	3.3/15.0	1/3 HP	2400	134a	(4)	570 lbs. 258 kgs.
LR25B	Upright Single door	24.8 cu. ft. 702 ltr.	29" x 36" x 82.6" 74 x 91 x 203	10.0/15.0	5.0/15.0	1/3 HP	2400	134a	(5)	670 lbs. 304 kgs.
LR37B	Upright Double door	37.4 cu. ft. 1060 ltr.	59" x 30" x 73.6" 150 x 76 x 195	10.0/15.0	5.0/15.0	1/2 HP	3800	134a	(8)	860 lbs. 390 kgs.
LR55B	Upright Double door	55.0 cu. ft. 1558 ltr.	59" x 36" x 82.6" 150 x 91 x 203	10.0/15.0	5.0/15.0	1/2 HP	3800	134a	(10)	1015 lbs. 460 kgs.
UC5B	Undercounter Single door	5.4 cu. ft. 152 ltr.	24" x 24" x 34.5" 61 x 61 x 87	4.3/15.0	2.1/15.0	1/6 HP	900	134a	(2)	210 lbs. 95 kgs.
UC5BD	Undercounter Pass-Through	5.4 cu. ft. 152 ltr.	24" x 24" x 34.5" 61 x 61 x 87	4.3/15.0	2.1/15.0	1/6 HP	900	134a	(2)	220 lbs. 100 kgs.
WM7B	Wall-mounted Double door	6.6 cu. ft. 186 ltr.	54" x 13" x 30" 137 x 33 x 76	4.7/15.0	2.3/15.0	1/6 HP	900	134a	(4)	314 lbs. 142 kgs.
WM7BD	Wall-mounted Pass-Through	6.6 cu. ft. 186 ltr.	54" x 13" x 30" 137 x 33 x 76	4.7/15.0	2.3/15.0	1/6 HP	900	134a	(4)	326 lbs. 148 kgs.

NEED MORE INFORMATION? Call Jewett's Direct Link Service. Toll-Free at 1-800-879-7767

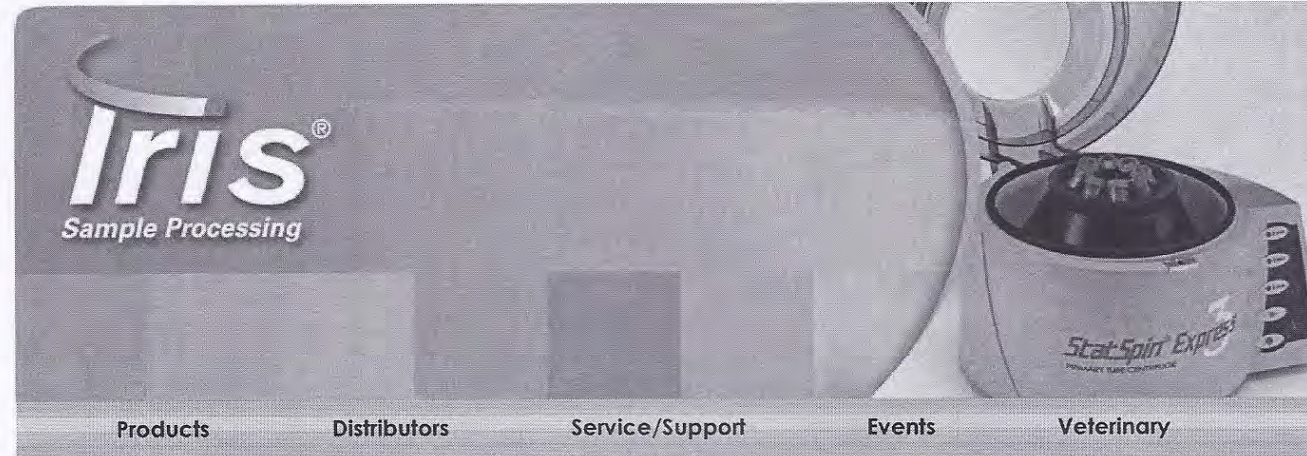
# Refrigerator Cut Sheet

## EQ-402

### Rapid Response Area- North

### Double wide





Products Distributors Service/Support Events Veterinary

## StatSpin® Express 3 X 4

### Primary Tube Centrifuge.

The StatSpin Express 3 provides faster turnaround time and greater productivity for your laboratory. Place it next to any of your STAT analyzers and serum or plasma is ready in just minutes.



With only three (3) settings, it is simple to use. Just select the 2, 3 or 5-minute button and press start. No fumbling with the settings or the need to readjust the speed. The unit beeps when it is done spinning. For safety, the lid remains locked until the rotor comes to a complete stop.

Samples can be processed as they arrive in the lab. Now you can process as many as eight (8) samples at once for high throughput. The StatSpin Express 3 holds tubes from 1.5 - 10mL in size.

The StatSpin Express 3 is powerful. The rugged brushless motor is maintenance free. The Express 3 comes with a 2-year warranty.

### Features:

- ▶ **Fast:** Rapid acceleration to optimal "g" forces produces sample separation in as little as 2 minutes!
- ▶ **Compact:** Small, round footprint takes up little bench space and fits well in small corners.
- ▶ **Quiet:** Won't disturb nearby workers.
- ▶ **Safe:** Cover interlock system, chamber gasket and proven mechanical containment for operator safety. UL listed (US/Canada), CE marked.
- ▶ **Simple to operate:** Load tubes, select time and press start!
- ▶ **Easy to maintain:** 10% bleach-compatible surfaces and polypropylene rotor make cleaning easy. Disposable bowl liners available for added efficiency.

[Click here for Express 3 animation \(2.9Mb\)](#)

3 - Accessory Area  
1 - BD Affirm Rapid HIV Bench

### Documentation and Literature

- ▶ Datasheet
- ▶ Parts
- ▶ Tube insert guide
- ▶ Blood Bank Study
- ▶ Case Studies [1](#) [2](#) [3](#) [4](#)
- ▶ Lean Articles : [1](#) [2](#) [3](#) [4](#)
- ▶ BD Vacutainer Tubes Study
- ▶ Operator manual: [Choose Language](#)

[Request more info](#)

### Specifications

Spin Select	2 min:120 seconds@7,200rpm/4,440xg 3 min:180 seconds@7,200rpm/4,440xg 5 min:300 seconds@5,600rpm/2,685xg
Cycle Time	2, 3 and 5 minutes
Accel Time	25 seconds or less
Decel Time	30 seconds or less
Tube Sizes	1.5 to 10mL blood tubes
Regulatory	UL, cUL and CE marked
Warranty	2 Years
Power	100 to 240V, 50/60Hz, 3.0 amp.
Dimensions	7.0" H x 11" W x 10.0" D (8.75lbs)

Specification subject to change without prior notice. StatSpin is a registered trademark of Iris Sample Processing, Inc.

### Ordering Information

- SSX3 StatSpin Express 3 Centrifuge Includes 8-place rotor (RTX8), removable chamber liner, eight (8) 10mL inserts, eight (8) 5mL inserts and power cord.
- DL02 Disposable bowl liners for SSX3 3/pk.
- RTX8 Replacement Express 3 Rotor

# Centrifuge Cut Sheet

## EQ-403

### Rapid Response Area- North

# Liaison System Cut Sheet

EQ-404

Rapid Response Area- North

Belongs to Special Procedure

## 1.3 Technical Data

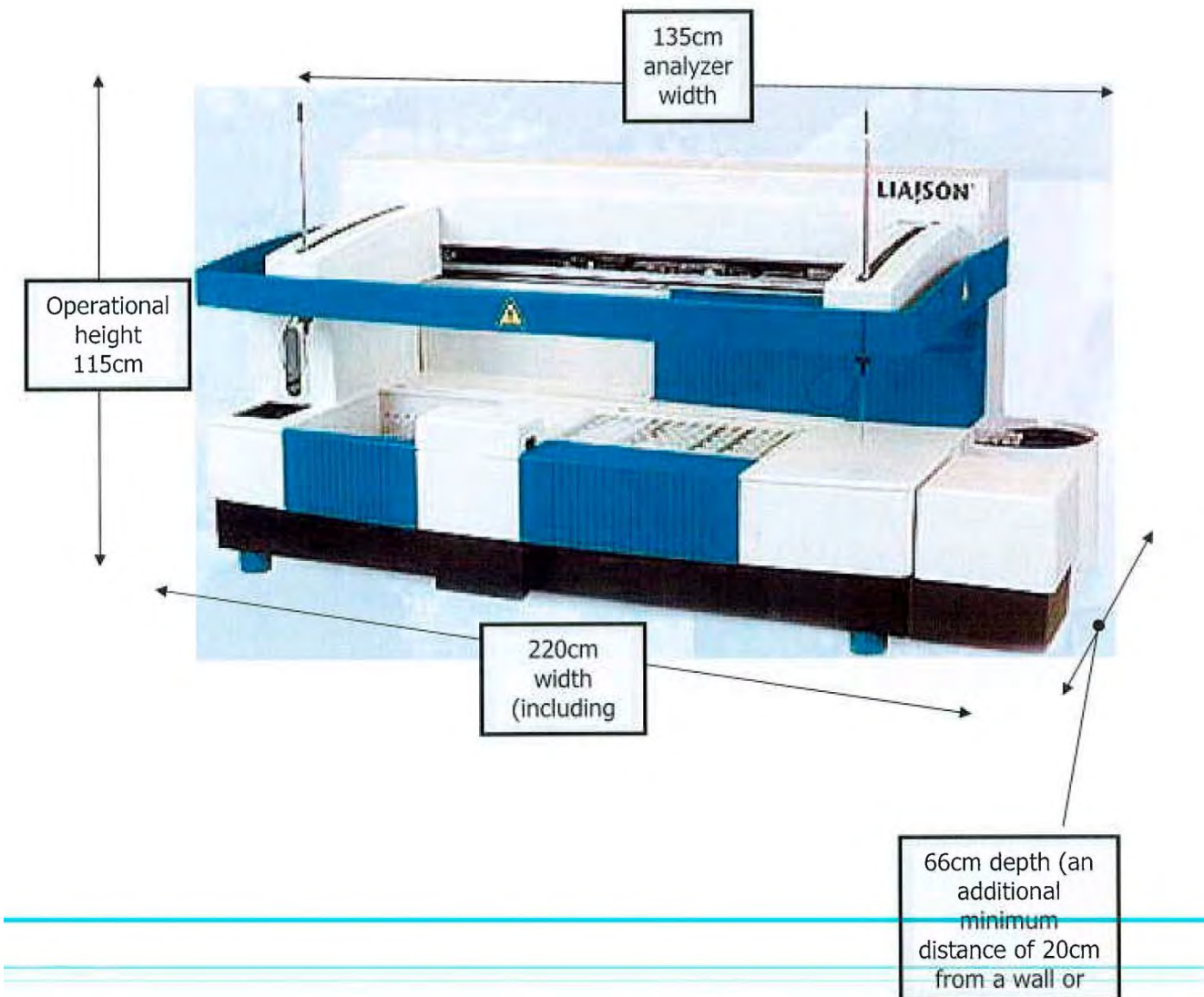
### 1.3.1 System Specifications

Analyzer Dimensions	
Width	135 cm
Depth	66 cm
Height	63 cm
Operational height	115 cm
Weight	95 kg
PC	
Width	40cm
Depth	38 cm
Height	10 cm
Weight	8 kg
Monitor	
Width	38 cm
Depth	40 cm
Height	38 cm
Weight	15 kg
Electrical requirements	
Voltage range	88-132 V
	187-264 V
Frequency	50/60 Hz
Power consumption	
LIAISON	500VA
PC system	200VA
Monitor	70W
Printer	25W
BTU (analyzer)	1360
BTU (PC)	1092
Designed to meet European CE requirements	

Humidity	
Operation	10-85% RH
Storage	10-85% RH
Maximum sound	61 dB
Temperature	
Operation	15-33°C
Storage	5-45°C
Data processing	
Processor	Pentium 133 or higher
RAM	64 MB or higher
Hard disk	2 GB or higher
Floppy disk	1,44 MB
Operating system	Windows 2000
Communication	4 serial ports 1 parallel port 2 USB ports
Keyboard	standard 101 keys
Monitor (Touch Screen)	15 " color SVGA/TFT
Printer	Inkjet, 4 spm, A-4
Centronics parallel	
Mouse	IBM PS-2 compatible
Barcode reader	
Laser scanner-Class 2	Activated codes
	2/5 Interleave
	Code 39
	Code 128 / EAN 128
	Coda bar
Communication port	
	RS 232 C

### 1.3.2 Required Operational Area





ARCHITECT®

i1000SR®

**Abbott 1000 Cut Sheet**  
**EQ-406; EQ-407**  
**Rapid Response Area- North**  
**Belongs to Special Procedure**

**Product Specifications**

<b>Physical Dimensions</b> (H x W x D)	49" x 59" x 30" (124.5 x 149.86 x 76.2 cm)	
<b>Weight</b>	636 lb/288 kg	
<b>Power Requirements</b>	110-120 volts with 20 amp dedicated circuit breaker or 200-240 volts with 10 amp dedicated circuit breaker Maximum power consumption	1760 VA-2KVA
<b>Environmental</b>	Heat output Operating temperature Noise specifications NCCLS Type II water	2113 BTU/hr average 59-86°F (15-30°C) 55 db Required for reconstituting buffer
<b>Waste</b>	Liquid Output	Floor drain or onboard liquid waste container 1.5 liters/hour maximum
<b>Consumables</b>	Onboard buffer capacity Onboard RV storage Onboard liquid waste capacity Onboard solid waste (RV) capacity Trigger/pre-trigger	12 liter capacity Up to 300 RVs 10 liters 1,000 RVs 3,000 and 9,000 tests
<b>Throughput</b>	Up to 100 tests per hour (1-Step STAT Assays) <i>in development</i>	
<b>Capacity</b>	Sample load-up Reagent	65 sample capacity with up to 35 STAT positions 25, 100 test kits (2,500 tests)
<b>Stability</b>	Onboard reagent	30 days (tracked in hours)
<b>Methods</b>	CHEMIFLEX®	
<b>Sample Types</b>	Serum, plasma, urine	
<b>Sample Tubes</b>	Height: 72-102 mm, Diameter: 8.25-16.1 mm	
<b>Pediatric Sample Cup</b>	Yes (50 µL dead volume)	
<b>Sample Volume</b>	10-150 µL, average: 50 µL	
<b>Automatic Dilution</b>	Yes	
<b>Sample-to-sample Carryover</b>	<0.1 parts per million	
<b>Reagent Type</b>	All liquid ready-to-use	
<b>Sample Clot and Bubble Detection</b>	Yes	
<b>Reagent Pressure Monitoring</b>	Yes	
<b>Remote System Diagnostics</b>	Yes, AbbottLink®	

\*In development  
 ARCHITECT, i1000sr, AbbottLink and CHEMIFLEX are registered trademarks of Abbott Laboratories.  
 c4100 and c4000 are trademarks of Abbott Laboratories.

www.abbottdiagnostics.com  
 1-800-323-9100



# Special Procedures Area Room #P211



**Contractor Furnished Equipment:**

- 1. EQ-501: Chemical Fume Hood #1
- 2. EQ-502: Chemical Fume Hood #2
- 3. EQ-503: Chemical Fume Hood #3

**Owner Furnished Equipment:**

- 4. EQ-504: Biological Safety Cabinet
- 5. EQ-505: Refrigerator #1 double
- 6. EQ-506: Refrigerator #2 double
- 7. EQ-507: Refrigerator #3 double
- 8. EQ-508: Refrigerator #4 single
- 9. EQ-509: Refrigerator #4 single
- 10. EQ-510: Freezer #1
- 11. EQ-511: Freezer #2
- 12. EQ-512: Freezer #3 (X2)
- 13. EQ-513: AFT 2000
- 14. EQ-514: TOSOH G8
- 15. EQ-515: Flow Cytometer
- 16. EQ-516: FOBT
- 17. EQ-517: Fluorescent microscope
- 18. EQ-518: Electrophoresis system
- 19. EQ-519: VIIA 7
- 20. EQ-520: benchtop computer X4
- 21. EQ-521: centrifuge

**ARCHITECTURAL**

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3'0"x8'0" pairs at entry  
 Acoustic Attenuation: NC 45 or less

**MECHANICAL**

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 Pressure: Negative  
 6 air changes per hour minimum  
 Heat gain: 50 btuh/sf

**ELECTRICAL**

110v duplex & fourplex outlets (maximum of (2) fourplex per circuit)  
 Standby power at all outlets  
 208v30a1ph  
 Dedicated circuits at floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

**PLUMBING**

Hot/Cold water (HW/CW) at sinks with foot controls  
 Pure water (PW) at sinks  
 Cold water, vacuum, air at fume hoods

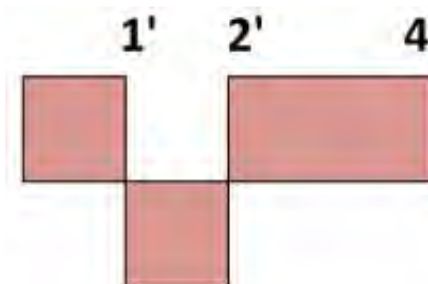
**CONTRACTOR FURNISHED CASEWORK**

Metal modular casework system  
 Phenolic resin tops  
 Epoxy resin sinks  
 Faucets

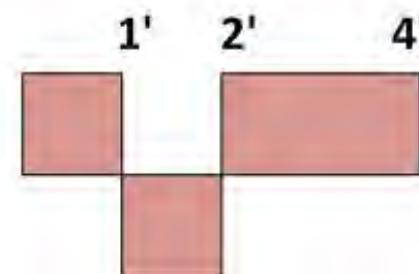
# Special Procedures Area

Room #P211

Elevation A



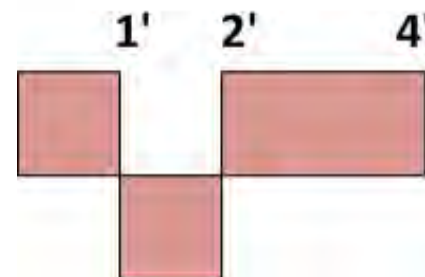
**Special Procedures Area**  
**Room #P211**  
**Elevation B**



# Special Procedures Area

Room #P211

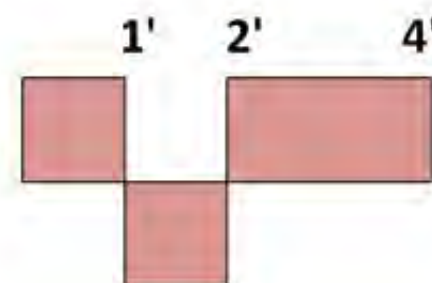
Elevation C



# Special Procedures Area

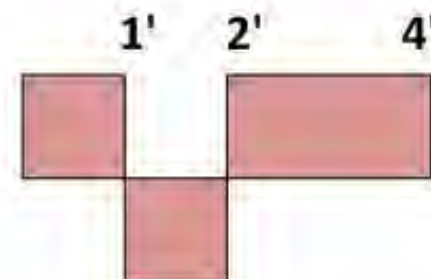
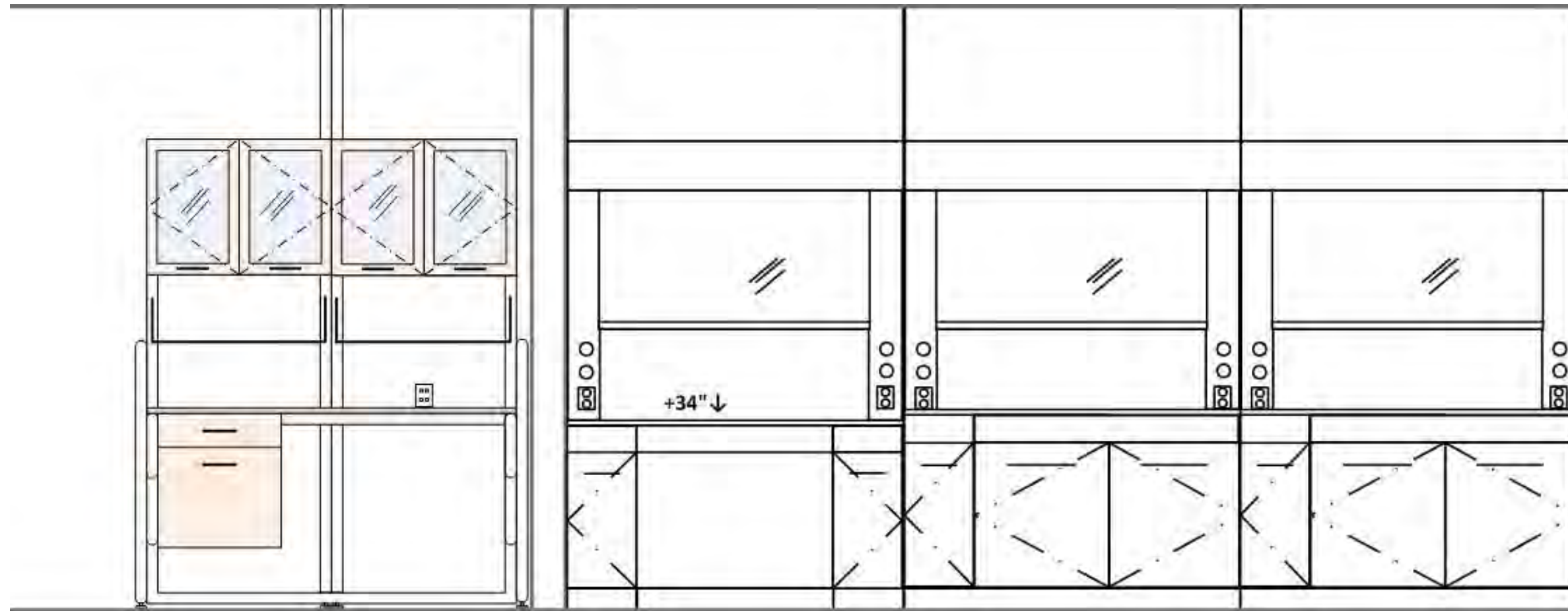
Room #P211

Elevation D





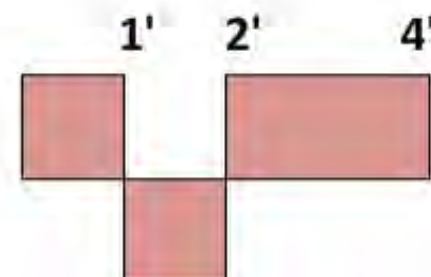
**Special Procedures Area**  
**Room #P211**  
**Elevation E**



# Special Procedures Area

Room #P211

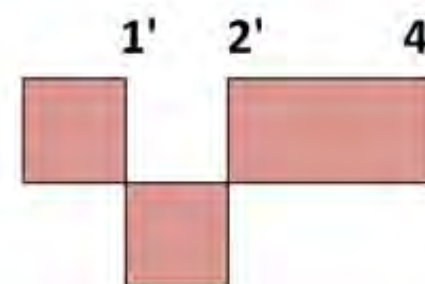
Elevation F



# Special Procedures Area

Room #P211

Elevation G



# Equipment Schedule

Room/Area: **Special Procedures Area- Room #P211**

Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>												
EQ-501	Chemical Fume Hood X3	New	5'	3'	7'	~400 lb.	F	115v20a1ph prewired standby power	Cold Water Drain Vacuum Air- 30 psi preplumbed	VAV 610 c.f.m.	flammable and corrosive cabinets below  (1) fume hood to be accessible	Contractor Furnished Contractor Installed
EQ-502												
EQ-503												
<b>Owner Furnished Equipment</b>												
EQ-504	Biological Safety Cabinet Class II Type A No external exhaust	New	54"	31"	98" incl. stand	~300 lb.	F	115v20a1ph prewired standby power	Vacuum			Owner Furnished Owner Installed
EQ-505	Refrigerator X3 Helmer #256 Double wide	W-231-V	59.25"	32.5"	79.75"	800 lb.	F	115v20a1ph standby power				Owner Furnished Owner Installed
EQ-506												
EQ-507												
EQ-508	Refrigerator X2 Helmer #125	W-231-V	29.5"	32.5"	79.75"	510 lb.	F	115v20a1ph standby power			(1) ref to be explosion proof	Owner Furnished Owner Installed
EQ-509												
EQ-510	Freezer Helmer EQ-512 (x3)	W-231-V	30.75"	38.5"	80"	475 lb.	F	208v30a1ph standby power NEMA 6-15				Owner Furnished Owner Installed
EQ-511												
EQ-512												
EQ-513	AFT 2000	W-231-V	~36"	~24"	~18"	~100 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-514	TOSOH G8	W-231-V	44"	21"	19"	114 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-515	Flow cytometer	W-231-V	89.2"	29"	24"	490 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-516	FOBT OC Auto 80	W-231-V	12.6"	21"	16.6"	57.5 lbs.	B	115v20a1ph standby power data				Owner Furnished Owner Installed

# Equipment Schedule Continued

Special Procedures Area Continued- Room #P211												
Room/Area: #P211												
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Remarks	Responsibility
Owner Furnished Equipment												
EQ-517	Fluorescent Microscope	W-231-V	~36"	~24"	~18"	~100 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-518	Electrophoresis	W-231-V	22.6"	16.9"	16.2"	66.1 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-519	VIIA 7	W-231-V	~36"	~24"	~18"	~100 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-520	Benchtop Computer X4	W-231-V	~36"	~24"	~18"	~50 lb.	B	115v20a1ph standby power data				Owner Furnished Owner Installed
EQ-521	Benchtop Centrifuge	W-231-V	11"	10"	7"	~25 lb.	B	115v20a1ph data standby power				Owner Furnished Owner Installed

# Fume Hood Cut Sheet

## EQ-501; EQ-502; EQ-503

### Special Procedures Area

## Protector® XStream® Laboratory Hoods



Protector XStream Laboratory Hood 9840600 is shown with SpillStopper Work Surface 9849000, Protector Acid Storage Cabinet 9901100 and Protector Standard Storage Cabinet 9900100. Blower, ductwork, work surface and base cabinets must be ordered separately.

### All models feature:

- + Modified by-pass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep® airflow openings.
- Upper Dilution Air Supply.\*
- + Glacier white, dry powder epoxy-coated steel exterior.
- Chemical-resistant, fiberglass-reinforced, composite panel liner and pre-set Rear Downflow Dual Baffle System\* with flame spread less than 25 per ASTM E-84
- 3/16" thick tempered safety glass vertical-rising sash with epoxy-coated aluminum sash handle with large radius and perforations.\*

- Removable front and side panels and front and interior service access panels for access to plumbing and electrical wiring.
- + Pre-wired T8 fluorescent lighting, ADA-compliant light and blower switches for 115 volt, 60 Hz operation.
- + Sash stop located at 18" sash opening position.
- + Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on explosion-proof lighting and other sash configurations and for blower sizing assistance.

All models conform to the following regulations and standards:

- + SEFA 1-2002
- + NFPA 45-2000
- + ASTM E84-01
- + ASHRAE 110-95
- + ANSI Z9.5-1993
- + UL 3101-1/61010-1
- + CAN/CSA G22.2 No. 1010.1
- + UL 1805
- + CE Conformity Marking (230 volt models)†

Equipped models feature:

- + Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. **Inlet tubing is not provided.**
- + One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

All models require (not included):

- + **Remote Blower.** See back pocket.
- + **Ductwork.** See back pocket.
- + **Work Surface.** See pages 92-95.
- + **Base Cabinet or Stand.** See pages 96-106.

Optional accessories for on-site installation include:

- + **Service Fixture Kits.** See page 107.
- + **Electrical Duplex Kits.** See page 108.
- + **Guardian Jr. and Digital Airflow Monitor Kits.** See page 108.
- + **Distillation Grid Kits.** See page 110.
- + **Sash Stop Kits.** See page 108.
- + **Snuffer Fire Extinguishers.** See page 110.
- + **Ceiling Enclosure and Rear Finish Panel Kits.** See page 109.

\* U.S. Patent No. 6,461,233

† pending

Ⓢ Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.

■ Exclusive Feature

## Ordering Information

Protector® XStream® Laboratory Hoods

ASHRAE 110-95 tests show less than 0.05 ppm leak rate when tested at 4.0 fpm; at OSHA-approved 60, 80, and 100 fpm face velocity and sash positions of 18" and 28". To ensure performance at 60 fpm, Labconco engineers challenged the Protector XStream Hood at less

than ideal conditions such as 30 fpm cross drafts, modified ASHRAE test procedures and average face velocities lower than 60 fpm. Contact Labconco for a technical paper with complete ASHRAE test data.

### Total Exhaust CFM and Static Pressure @ 18" Sash Opening (60% open)

Nominal Width	100 fpm	s.p.	80 fpm	s.p.	60 fpm	s.p.	CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
4 feet	470	0.11"	380	0.07"	280	0.04"	190	\$780
5 feet	610	0.13"	490	0.08"	370	0.05"	240	\$960
6 feet	750	0.15"	600	0.10"	450	0.06"	300	\$1,200
8 feet	1060	0.12"	850	0.08"	640	0.04"	420	\$1,680

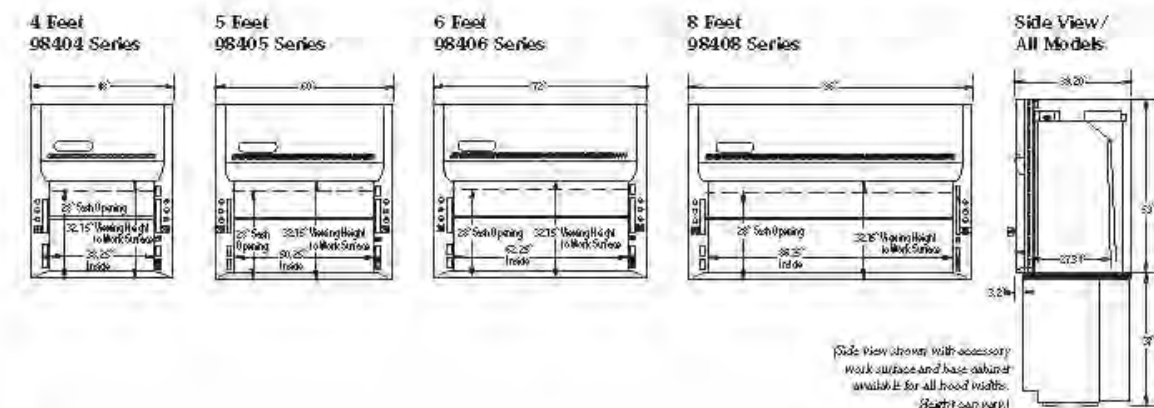
### Total Exhaust CFM and Static Pressure @ 28" Sash Opening (100% open)

Nominal Width	100 fpm	s.p.	80 fpm	s.p.	60 fpm	s.p.	CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
4 feet	730	0.25"	590	0.18"	440	0.08"	290	\$1,160
5 feet	960	0.30"	770	0.19"	580	0.11"	380	\$1,520
6 feet	1180	0.36"	940	0.23"	710	0.13"	470	\$1,880
8 feet	1660	0.28"	1330	0.18"	1000	0.10"	660	\$2,640

\*Based on average annual dollar per CFM usage of \$4.00; fume hood operating 24 hours a day and 5 days per week (6240 hours per year).

Catalog Number	Nominal Width	Electrical Requirements	Exterior Depth	Interior Working Depth	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Exhaust Collar(s)	Shipping Wt. lbs./kg
9840400	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	400/181
9840401	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	2	1	12.81" ID	400/181
9840402**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	400/181
9840403**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	2	None	12.81" ID	400/181
9840500	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	460/209
9840501	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	460/209
9840502**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	460/209
9840503**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	460/209
9840600	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	520/236
9840601	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	520/236
9840602**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	520/236
9840603**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	520/236
9840800	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	700/318
9840801	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	2	1	(2) 12.81" ID	700/318
9840802**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	700/318
9840803**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	2	None	(2) 12.81" ID	700/318

\*\*International electrical configuration

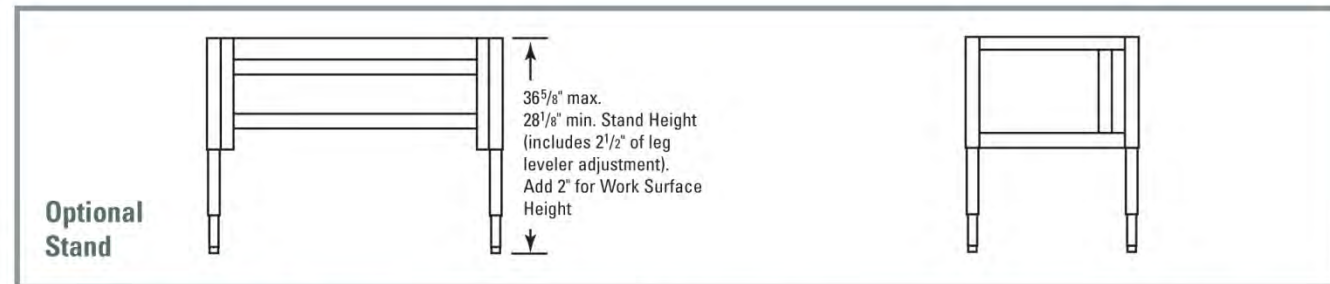
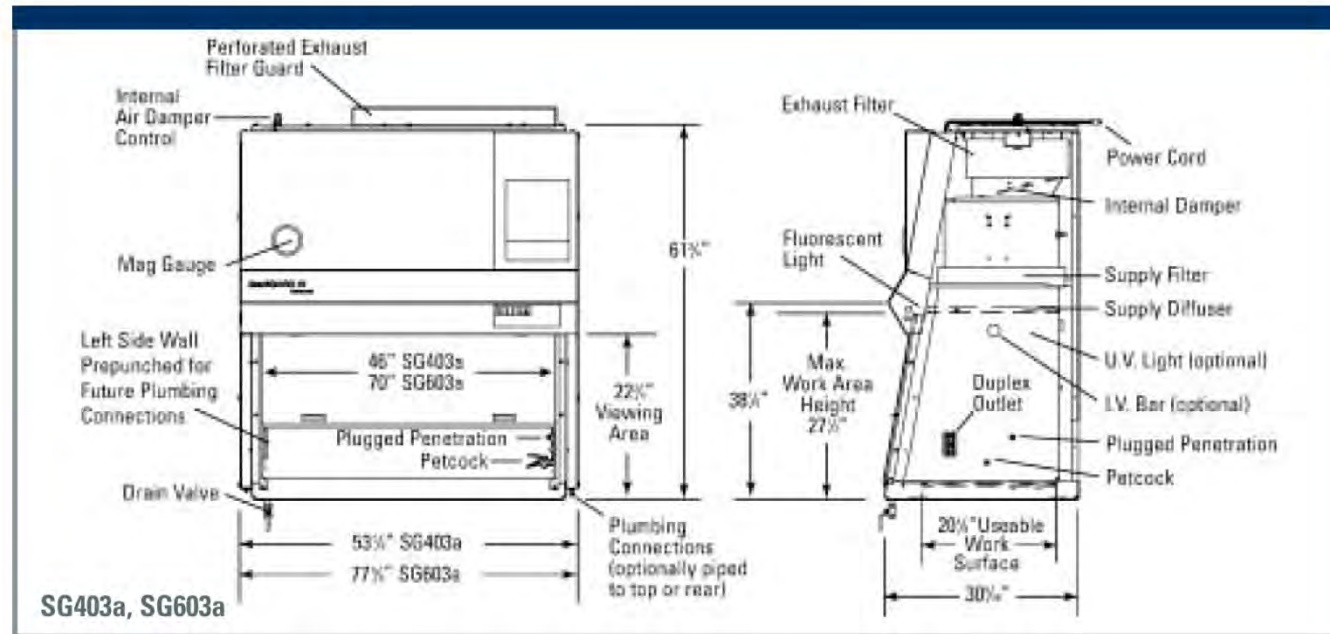


Side View shown with accessory work surface and base cabinet available for all hood models. Height can vary.

# Biological Safety Cabinet Cut Sheet

## EQ-504; Special Procedures Area

SterilGARD® III Advance®



**SterilGARD® III Advance®**  
**Model Number: SG403a, 4'**  
**SG603a, 6'**

**NSF Classification:**  
**Class II, Type A2**  
**Cabinet Type: Bench**  
**(Stand Optional)**

**Site Preparation**  
**Electrical System**

- 115V-1 Phase, 60 Hz.
- One 16' power cord with 20-amp plug, NEMA 5-20P.

- Unit is UL Listed as certified for electrical, fire and personal safety.
- Two ground-fault interrupt protected interior duplex receptacles at 5.0 (SG403a), 4.0 (SG603a) total amps, controlled by a self-resetting circuit breaker.

**Exhaust Requirement\* SG403a**

- For an 8" opening: 269 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

- For a 10" opening: 335 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

**SG603a**

- For an 8" opening: 408 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.
- For a 10" opening: 510 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

**Amperage Chart**

Model	Blower Motor	Lighting Ballast	Duplex Receptacle	Total
SG403a	1625 RPM, 6.6 amps	0.8 amps	5.0 amps	12.4 amps
SG603a	1625 RPM, 9.9 amps	0.8 amps	4.0 amps	14.7 amps

\*The above exhausting requirements are basic, should the user wish to build their own connections. HEC and CEC are as noted in the chart on page 11.

**Exhaust Options**

The SterilGARD® III Advance® is designed for Type A2 installations. For added convenience, the cabinet design includes several innovative features which offer flexibility.

Both supply and exhaust HEPA filters can be inserted and removed from the front of the cabinet, allowing filter replacement without removing exhaust connections.

**Canopy Exhaust Connection (CEC)**

Laboratories which share common exhaust systems typically experience changes in airflow which can compromise cabinet operation. Such problems include (a) too much room air being drawn through the cabinet, causing potential product contamination, or (b) too little air drawn through the cabinet, compromising personnel protection. Located between the cabinet exhaust HEPA filter and the building exhaust system, the canopy exhaust air gap maintains Type A2 cabinet performance over a range of exhaust flow rates (see chart). Type A2 cabinet performance is also maintained in the event of total building exhaust failure. The SterilGARD® III Advance® canopy exhaust connection (CEC) incorporates the following features:

- Designed for quick, efficient installation to protect cabinet from performance degradation caused by in-house exhaust system fluctuation.

- Unique combination design consists of an Exhaust Transition (ET) which creates the desired air gap in the overall connection.
- Exhaust connection collar is 10" diameter on the CEC403a (for the 4' cabinet) and 10" diameter on the CEC603a (for the 6' cabinet).

**Exhaust Requirements**

Cabinet Models	Exhaust Connection	Sash Height	Exhaust Flow Rate (CFM)	Pressure Loss Range	Duct Diameter
<b>Canopy Exhaust Connection</b>					
SG403a	CEC403a	8"	322-672	0.02-0.20"wc	10"
		10"	400-750	0.03-0.22"wc	
SG603a	CEC603a	8"	490-840	0.04-0.31"wc	10"
		10"	612-965	0.06-0.33"wc	
<b>Exhaust Transition (Hard Connection)*</b>					
SG403a	ET403a	8"	269	0.1"wc	10"
		10"	335	0.1"wc	
SG603a	ET603a	8"	408	0.2"wc	10"
		10"	510	0.3"wc	

\*Cabinets previously classified as Class II, Type A/B3 are now classified as Class II, Type A2. These cabinets may be exhausted to the room (previous Type A classification) or connected to a facility exhaust system (previous Type B3 classification) via a "canopy" connection (previously referred to as "thimble"). NSF 49 (2002) specifies the "canopy" connection only because vented exhaust through a "hard" connection, though technically possible, may not meet NSF criteria. Consult The Baker Company or your laboratory safety officer for details.

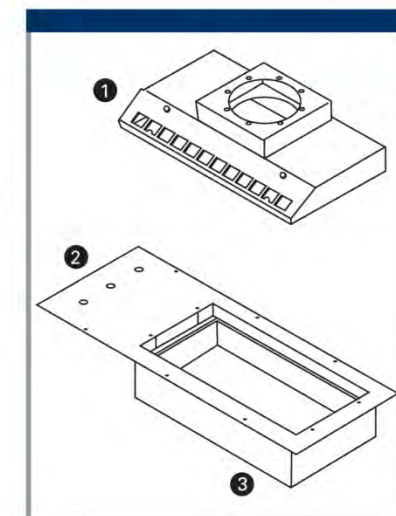
**Exhaust Transition (ET) for Hard Connection**

The exhaust transition (ET) provides a hard connection, or airtight mating of the cabinet to the exhaust duct, in which flow rates for cabinet intake, cabinet exhaust and building exhaust are all equal. The ET403a and ET603a are designed for the 4' and 6' cabinets, respectively. The exhaust transition incorporates the following features:

- Rectangular base is easily installed on top of the cabinet over the exhaust filter, requiring only 4 or 5 bolts.
- Design enables filter leak checking through a convenient access panel.
- Exhaust connection collar is 10" diameter.

**Filtration System**

- Exhaust and supply filters zero-probed HEPA, both 99.99% efficient on all particles 0.3 micrometers by DOP test.



**SterilGARD® III Advance®**

- 1 CEC Exhaust transition
- 2 Top of cabinet
- 3 Exhaust HEPA filter

# LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models.  
Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

## Refrigerator Cut Sheet

EQ-505; EQ-506; EQ-507  
HLR 256  
Special Procedures Area  
Double wide

### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 78.75" x 32.5" 75cm x 201cm x 83cm	29.5" x 78.75" x 38.5" 75cm x 201cm x 98cm	59.25" x 78.75" x 32.5" 151cm x 201cm x 83cm	59.25" x 78.75" x 38.5" 151cm x 201cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray



# LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

## LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

## LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 78.75" x 32.5" 75cm x 201cm x 83cm	29.5" x 78.75" x 38.5" 75cm x 201cm x 98cm	59.25" x 78.75" x 32.5" 151cm x 201cm x 83cm	59.25" x 78.75" x 38.5" 151cm x 201cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

# Refrigerator Cut Sheet


EQ-508; EQ-509

HLR 125

Rapid Response Area Center; Model 125

**FREEZERS  
LABORATORY - HORIZON SERIES™  
MODEL HLF125**

**SPECIFICATIONS**

Temperature Range	-15°C to -30°C
Interior Dimensions (w x h x d)	24.75" x 58.25" x 30.25"
Exterior Dimensions (w x h x d)	29.5" x 80" x 35.5"
Overall Exterior Dimensions (w x h x d) Includes door handle, electrical panel, and evaporation tray	30.75" x 80" x 38.5"
Interior Volume	25.2 cu ft / 714 liters
Door	Solid galvanized steel with bacteria-resistant powder coating
Interior Configuration	4 Epoxy Coated Wire Shelves
Electrical	208 / 230V 60Hz 6 FLA NEMA 6-15 Plug 
Net Weight	475 lb
Clearance Requirements	Minimum of 8" above and 3" behind freezer for ventilation
Certified to applicable UL and CSA standards by a NRTL	

**FEATURES**

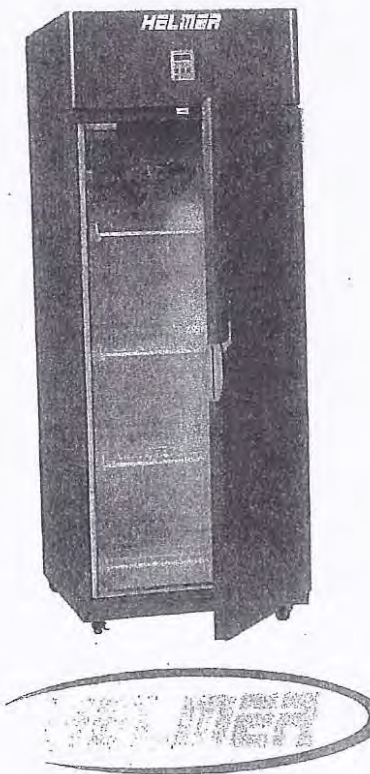
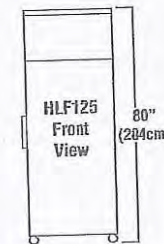
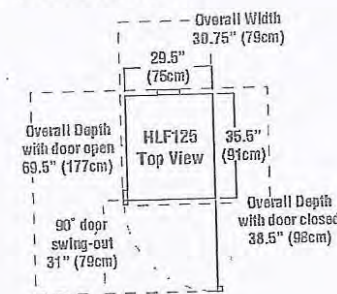
- Microprocessor-based temperature controller with:
  - Programmable operating temperature
  - Programmable high temperature alarm with visual and audible indicators
  - LED display of chamber temperature
- Bacteria-resistant powder coated interior and exterior
- Dual, swivel locking casters
- Key lock

**WARRANTY**

- 3 Years Compressor
- 2 Years Parts
- 1 Year Labor



**FOOTPRINT**



**Freezer Cut Sheet  
EQ-510; EQ-511; EQ-512  
Special Procedures Area**

# AFT 2000 Cut Sheet

EQ-513

Special Procedures Area

pending

## SPECIFICATIONS

Analytes	HbA1c (SA1c), HbF, HbA1 (Total A1)
Principle	Ion-exchange high performance liquid chromatography Visible two-wavelength absorption
Sample requirement	Whole blood or diluted blood (Preserved with EDTA)
Sampling volume	Whole blood: 4 µL Diluted blood: 80 µL
Throughput	1.6 minutes per sample
Data storage	On-board memory: up to 800 samples

### Main unit

Sampling	Cap-piercing of primary sample tubes Automatic dilution by Hemolysis and Wash solution in the dilution port
Whole blood	
Column oven	Thermomodule in aluminum block
Column connection	Finger-tight type
Detector unit	LED colorimetric detector

### Sample loading units

Sample loading capacity	G8-90SL: 90 samples plus one STAT sample G8-290SL: 290 samples plus one STAT sample
-------------------------	--

Sample holding 10 samples/rack

Sample vial 12-15 mm x 75-100 mm primary tubes and Tosoh vials

Barcode specifications NW-7, CODE39, ITF, CODE128, JAN, COOP 2 of 5, Industrial 2 of 5

### System control/Data processing

Display & Input	Liquid crystal display touch panel
Output	Thermal printer (roll paper), SmartMedia or LIS
Communication	RS-232C standard serial (bi-directional)
Operating temperature	15 - 30 °C
Power requirement	AC 100 - 240 V, 50/60 Hz, 180 VA

Dimensions/Weight

**90SL model:**  
W 21" (530 mm) x D 20" (515 mm) x H 19" (482 mm)  
75 lbs (34.0 kg)  
**290SL model:**  
W 44" (1120 mm) x D 21" (530 mm) x H 19" (482 mm)  
114 lbs (51.5 kg)

## PART NUMBERS/DESCRIPTION

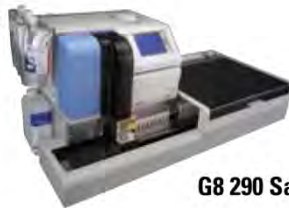
021560	HLC-723G8 (Main Unit)
021561	G8-90SL (90 Sample Loader)
021562	G8-290SL (290 Sample Loader)
021955	TSKgel G8 Variant HSi (Analysis Column)

021956	G8 Variant Elution Buffer HSi No. 1 (S)
021957	G8 Variant Elution Buffer HSi No. 2 (S)
021858	G8 Variant Elution Buffer HSi No. 3 (S)
018431US	HSi Hemolysis & Wash Solution (L)

018767	Hemoglobin A1c Calibrator Set
992133	Hemoglobin A1c Control



**G8 90 Sample Loader**



**G8 290 Sample Loader**

### Analysis Column



### Elution Buffers (Variant Analysis Mode) and Hemolysis & Wash Solutions



### HbA1c Calibrator Set

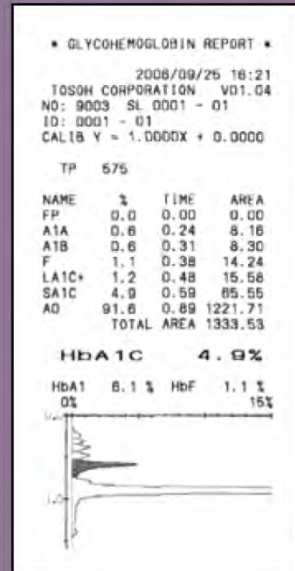


### HbA1c Control

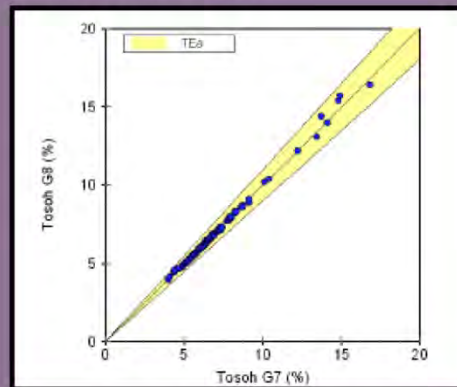


## PERFORMANCE DATA

### SAMPLE CHROMATOGRAM



### SA1c% CORRELATION



### REPRODUCIBILITY

#### INTRA-ASSAY PRECISION

	Number of Replicates	Mean (%HbA1c)	Standard Deviation	Coefficient of Variation (%)
Whole blood (Low)	20	5.07	0.05	0.93
Whole blood (Medium)	20	7.39	0.03	0.42
Whole Blood (High)	20	13.54	0.06	0.44

#### INTER-ASSAY PRECISION

	Number of Replicates	Mean (%HbA1c)	Standard Deviation	Coefficient of Variation (%)
Whole blood (Low)	20	5.01	0.03	0.61
Whole blood (Medium)	20	7.04	0.05	0.70
Whole blood (High)	20	12.18	0.04	0.36

# TOSOH G8 Cut Sheet

## EQ-514

### Special Procedures Area



TOSOH

**G8 HPLC ANALYZER**

HbA1c analysis in 1.6 minutes

Direct determination of stable HbA1c

Less than 2% CVs

Compact footprint - 21" w x 20" d x 19" h

Simple touch-screen operation

Automated daily maintenance

Flexible tube sizes



Tosoh Bioscience, Inc.  
6000 Shoreline Court, Suite 101  
South San Francisco, CA 94080  
Tel: (800) 248-6764  
Fax: (650) 615-0415  
www.tosohbioscience.us

## CYTOMICS FC 500

### FLOW CYTOMETRY SYSTEM

# Flow Cytometer Cut Sheet

## EQ-515

### Special Procedures Area

#### CYTOMICS FC 500 FLOW CYTOMETRY SYSTEM



#### SPECIFICATIONS

##### LASERS

- Uniphase Argon ion, 488nm, 20mW output
- Coherent Red Solid State Diode, 635nm, 25mW output

##### FLOW CELL

150 x 450 micron rectangular channel BioSense enhanced optics quartz mounted with vertical (upwards) flow path for superior hydrodynamic focusing

##### USER-INTERCHANGEABLE OPTICAL FILTERS

- Band Pass (BP): 525nm, 575nm, 620nm, 675nm, 755nm
- Dichroic Long Pass (DL): 488nm, 550nm, 600nm, 710nm
- Dichroic Short Pass (DS): 615nm, 645nm
- Long Pass (LP): 500nm
- Short Pass (SP): 620nm

##### DETECTORS

- Forward Scatter Detector – Solid state detector with Patented Fourier design providing integrated dual collection angle selection.
- Side Scatter Detector – High performance photodiode
- Fluorescent Detectors – High performance photomultipliers with spectral sensitivity from 185nm-900nm

##### FLOW RATES

Continuous pressure is applied to the sample tube based on user selected flow rates.

- Low, Medium and High

##### SENSITIVITY & RESOLUTION

- Resolves 0.5µm diameter particles from background noise, with maximum detection up to 40µm diameter particles
- < 600 MESF for FITC
- < 300 MESF for PE
- < 600 MESF for APC

\* When measured with Spherotech™ Rainbow Calibration particles and IsoFlow™ Sheath Fluid  
\*\* When measured with Linear Flow Beads from Molecular Probes

##### DETECTOR PARAMETERS/DATA ACQUISITION

Up to 16 parameters including Auxiliary, Prism, Time, and Ratio can be acquired simultaneously from a possible 24 available parameters

- Forward Scatter – linear, log, and peak
- Side Scatter – linear, log, and peak
- PMT1-PMT5- linear, log, and peak
- One Auxiliary (AUX) signal assignable to any linear or peak signal
- Time
- Ratio (derived parameter)
- PRISM (derived parameter)
- Four Decade logarithmic Digital Signal Processing (DSP) of linear FS, SS, FL1-FL5 data

##### THROUGHPUT AND ACQUISITION RATES

Throughput is linked to various items such as the number of events acquired, flow rate, sample concentration, target population, sampling mode and parameters acquired. Maximum acquisition rate is 3,300 events/sec.

##### SAMPLE HANDLING

Biohazard contained wash station rinses sample probe preventing carryover

- 12 x 75mm glass or plastic tubes
- Single tube sampling mode
- 32 tube Multi Carousel Loader (MCL)
- The MCL patented design vortexes each tube individually before sample acquisition
- The MCL uses a visible Class II laser reader operating at 670nm with a maximum power output of 1mW, for use with Interleaved 2-of-5, Code 39®, Codabar, Code 128 bar codes

##### CARRYOVER

Scatter and fluorescence carryover < 1% when the number of gated events is between 100 and 10,000

##### CXP SOFTWARE

- Unlimited histogram displays per sample
- One parameter histograms have 1,024 channel resolution
- Two parameter histograms graphical resolution: 64 x 64, 128 x 128, 256 x 256, 512 x 512 channel resolution
- 256 regions (contour, elliptical, linear, polygonal, quadrant, rectilinear) are available per protocol with up to 32 available for gating regions
- Up to 8 regions can be combined to make a gate
- Real time data analysis and gating
- Real time and listmode compensation using 20-bit data (220 channel resolution)
- Storage of both compensated and un-compensated data
- Stop counts available for all histograms
- Auto or User defined scaling
- Positive analysis for automatically setting regions on control tubes
- User definable statistics
- Single platform absolute counts using FlowCount™ fluorospheres
- Elliptical autogating with 5 selectable levels
- Contour autogating with 5 selectable levels
- ColorGate Precedence and Color Blend mode color event analysis
- AutoPrime event monitoring during sample acquisition
- Application Definition Wizard for rapid creation of Application Libraries
- Auto Set-Up Wizard for automatically adjusting voltages, gains, and color compensation settings
- Application Scheduler for simultaneous multiple application setup
- QuickSET direct visual histogram adjustment of cytometer voltages and gains

- QuickCOMP direct visual histogram adjustment of cytometer color compensation
- Minimal Event Counter for use with rare event collection
- Worklist function for specimen labeling, with positive specimen identification when using barcoding
- Multi-file analysis, including batch automator, listmode compensation, overlay analysis plot, surface and Tomogram displays
- Customizable FlowPage for reporting with automated pdf or printer output
- Full QC Application including Automated Levey Jenning Analysis and IQAP Reports
- Data management for automatic file archival
- FCS 3.0 file format
- Fully compatible with Microsoft Office as well as print directly to PDF files

##### OPTIONAL SOFTWARE

- CXP analysis software
- Multi-user analysis packages: 3-, 5- or 10-user/network-user packages
- tetraCXP Software

##### OPERATING SYSTEM

- Microsoft® Windows™ 2000

##### WORKSTATION

- Pentium™ Intel® 4 3.0 Ghz processor (minimum specification)
- System Bus 800 MHz
- 512MB RAM
- 40GB Hard Drive
- Dual Display Video Card
- 700MB RW CD-ROM (48/24/48X) minimum

COMPONENT	HEIGHT	WIDTH	DEPTH	WEIGHT
Computer	15.75 cm (6.2 in.)	53.34 cm (21 in.)	42.55 cm (16.75 in.)	18.14 kg (40 lb.)
Cytometer	61.0 cm (24 in.)	90 cm (35.5 in.)	73.7 cm (29 in.)	84.8 kg (187 lb.)
17" Monitor	37.3 cm (14.7 in.)	37.3 cm (14.7 in.)	20.5 cm (8.1 in.)	5.8 kg (13 lb.)
Power Supply (Universal)	58.4 cm (23 in.)	45.7 cm (18 in.)	71.1 cm (28 in.)	59.0 kg (130 lb.)
Power Supply (Voltage-specific)	50.8 cm (20 in.)	45.7 cm (18 in.)	66.0 cm (26 in.)	54.4 kg (120 lb.)

- On-board SCSI Controller
- 4 USB ports, 2 USB controllers
- Integrated Enhanced AC'97 Audio
- Integrated Gigabit Fast Ethernet (Intel 82547)

##### OPTIONAL HARDWARE ACCESSORIES

- Bar code gun
- Optics filter kit
- Color and black & white printers

##### MONITOR

- 17" flat screen display (1280 x 1024 maximum resolution)

##### INSTALLATION REQUIREMENTS

Environmental operating temperature 16°-32° C (60° - 90° F)

##### DIMENSIONS

Allow sufficient space for ventilation, and access for maintenance and service:

##### Cytometer

- 30.5 cm (12 in.) from the back
- 45.7 cm (18 in.) from the top
- 30.5 cm (12 in.) on both sides

##### Power Supply

- 12.7 cm (5 in.) from the back

##### UTILITY CONNECTIONS

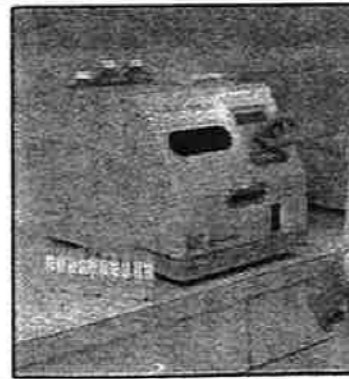
Four 50/60Hz lines:  
 - 100VAC, 25A  
 - 115VAC, 20A  
 - 220VAC, 15A  
 - 240VAC, 15A

# FOBT- OC Auto 80 Cut Sheet

EQ-516

Special Procedures Area

**OC-Auto Micro 80**



Measuring Principle	Latex agglutination immuno-turbidimetry
Measuring Method	One step rate method
Throughput	80 samples / hour
Sample Rack	10 samples - 1 rack of 10 samples
Reaction Cell	Disposable acrylic cuvettes (10 serial cells x 2 cuvette segments)
Sampling System	Drawn up by sampling probe (Level detection, auto clean)
Reagent Dispense	Drawn up by reagent probe (Level detection, auto clean)
Mixing System	Mixing by rapid and angled dispensing of reagent
Thermostatic System	37 °C Block Heater
Reagent Storage	25 °C Block Heater for one bottle
Light Source	L.E.D. (wavelength 660 nm)
Light Detector	Photodiode
Display/Data Input	20-character 4 line LCD, menu switch by jog dial and 4 keys
Memory Capacity	999 samples
Data Output	Built-in thermal printer, RS-232C (for LIS interfacing)
Barcode	Built-in sample barcode reader
Racks	Regular (sampling bottles) and Adaptor (sampling bottles and cups)
Drainage	To sink jug or sink
Dimension	Width 12.6" x Depth 21.0" x Height 16.6"
Weight	57.5 lbs.
Power Required	AC 100 - 240 V, 50/60 Hz 150 VA
Application	CE, UL, FDA clearance, CUL, Canadian Medical Device License
Maintenance	Minimal and easy to perform
Troubleshooting	Refer to Operator's Manual
Heat generation rate	129 kcal/h

# Fluorescent Microscope Cut Sheet

EQ-517

Special Procedures Area

pending

# MINICAP

THE NEW DIMENSION OF CAPILLARY ELECTROPHORESIS



MINICAP represents the latest evolution of SEBIA's innovative Capillary Electrophoresis technology. The MINICAP provides small to medium sized laboratories all of the benefits of Sebia's Capillary technology with the added advantage of a smaller instrument footprint.

Menu expansion includes both traditional and innovative assays such as serum and urine proteins, Immunotyping (automated IF testing), hemoglobinopathy, and Carbohydrate-Deficient Transferrin (chronic alcohol abuse marker).



Sebia's MINICAP, part of the family of Capillary Electrophoresis systems, offers both flexibility and increased levels of standardization for reporting of results in the clinical diagnostic laboratory.

All illustrations and specifications contained in this leaflet are based on the latest information available at the time of printing. SEBIA reserves the right to change this information at any time without prior notice.

## Electrophoresis Cut Sheet EQ-518 Special Procedures Area

### SAMPLER

- Initial loading of 28 tubes.
- Primary tubes: 16 x 100 mm, 17 x 100 mm (maximum), 8 mm microtubes.
- Throughput: around 22 samples/hour (protein electrophoresis).
- Sample tube identification with High Resolution barcode reader.
- Complete walk-away automation from start to finish.

### MIGRATION

- Electrophoresis in liquid flow.
- 2 silica capillaries.
- 2 simultaneous sample migrations (protein electrophoresis).
- Automatic loading of the disposable anodic segments.
- 2 reagents / 2 assays on board.
- Migrations at controlled temperature with a thermoelectric cooler (Peltier device).
- Highly reproducible results the two analyses and two capillaries.

### OPTICS

- Deuterium lamp
- Interferential filters 200 - 415 nm (direct protein and hemoglobin detection at their specific wavelength)
- Optical fibers for emission and reception.
- UV lenses.
- Photo - diode detector.

### PROGRAM

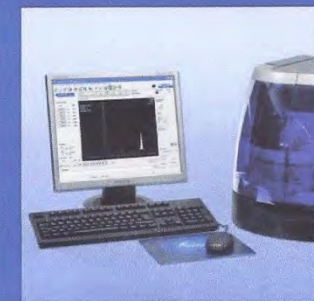
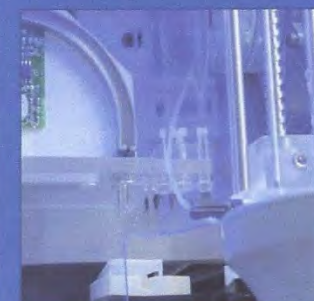
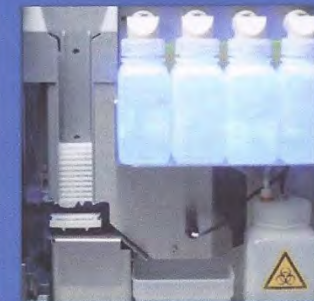
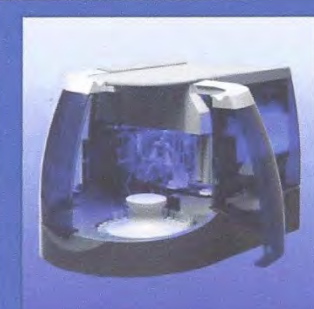
- Automatic delimiting of curves and identification of fractions minimizing operator editing.
- Reagent traceability.
- Comprehensive quality control program with statistical reduction of three Q.C. levels including Levey-Jennings charts.
- Customizable printing allowing compressed printouts of results and curves.
- Possibility to select the order in which results should be printed.
- Ability to import quantitative specific protein results providing one comprehensive chartable report.
- Curves and results stored on the hard drive.
- Intra-lab result database network.
- Inter-lab result transfer through e-mail or analog modem.

### GENERAL SPECIFICATIONS

- Dimensions : L 57,5 x H 41,1 x P 43,0.  
L 22.6 in X H 16.2 in X W 16.9 in.
- Weight : 30 kg / 66.1 lbs.

### CONNECTIONS

- Power source inlet: 90 to 264 V - 50/60 Hz +/- 5% - 300 VA.
- Connections through PC command.





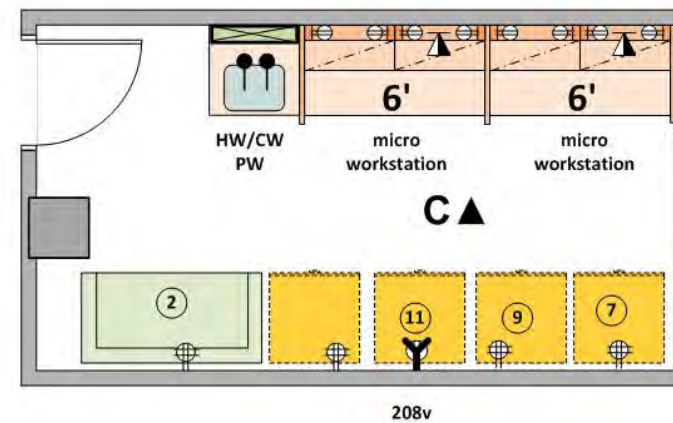
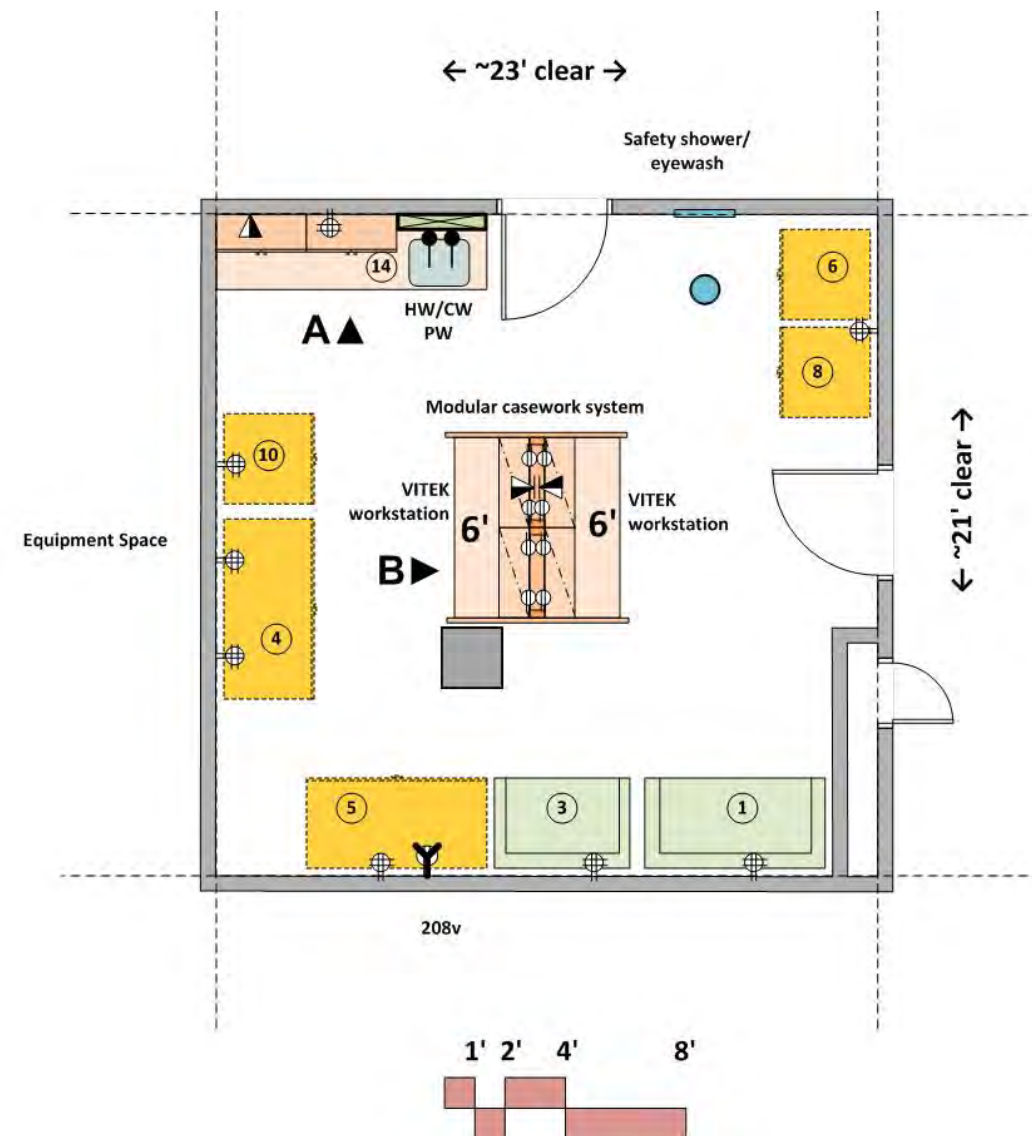
**VIIA 7 Cut Sheet**  
**EQ-519**  
**Special Procedures Area**

**pending**

# Microbiology Lab

Room # P220: 465 nsf

Room #P220A: 256 nsf



**Contractor Furnished Equipment:**  
None

**Owner Furnished Equipment:**

1. EQ-601: Biological Safety Cabinet #1- 6'
2. EQ-602: Biological Safety Cabinet #2- 6'
3. EQ-603: Biological Safety Cabinet #3- 4.5'
4. EQ-604: Refrigerator #1 double
5. EQ-605: Refrigerator #2 double
6. EQ-606: Refrigerator #3
7. EQ-607: Refrigerator #4
8. EQ-608: Incubator #1
9. EQ-609: Incubator #2
10. EQ-610: Blood Culture Machine)
11. EQ-611: New Incubator #3

## ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3<sup>6</sup>x8<sup>0</sup> with view window  
 Acoustic Attenuation: NC 40 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 6 air changes per hour minimum  
 Heat gain: 50 btuh/sf

## ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
 208v30a1ph  
 Dedicated circuits at floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

## PLUMBING

Hot/Cold water (HW/CW) at sinks  
 Pure water (PW) at sinks

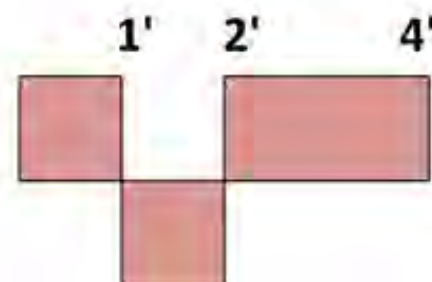
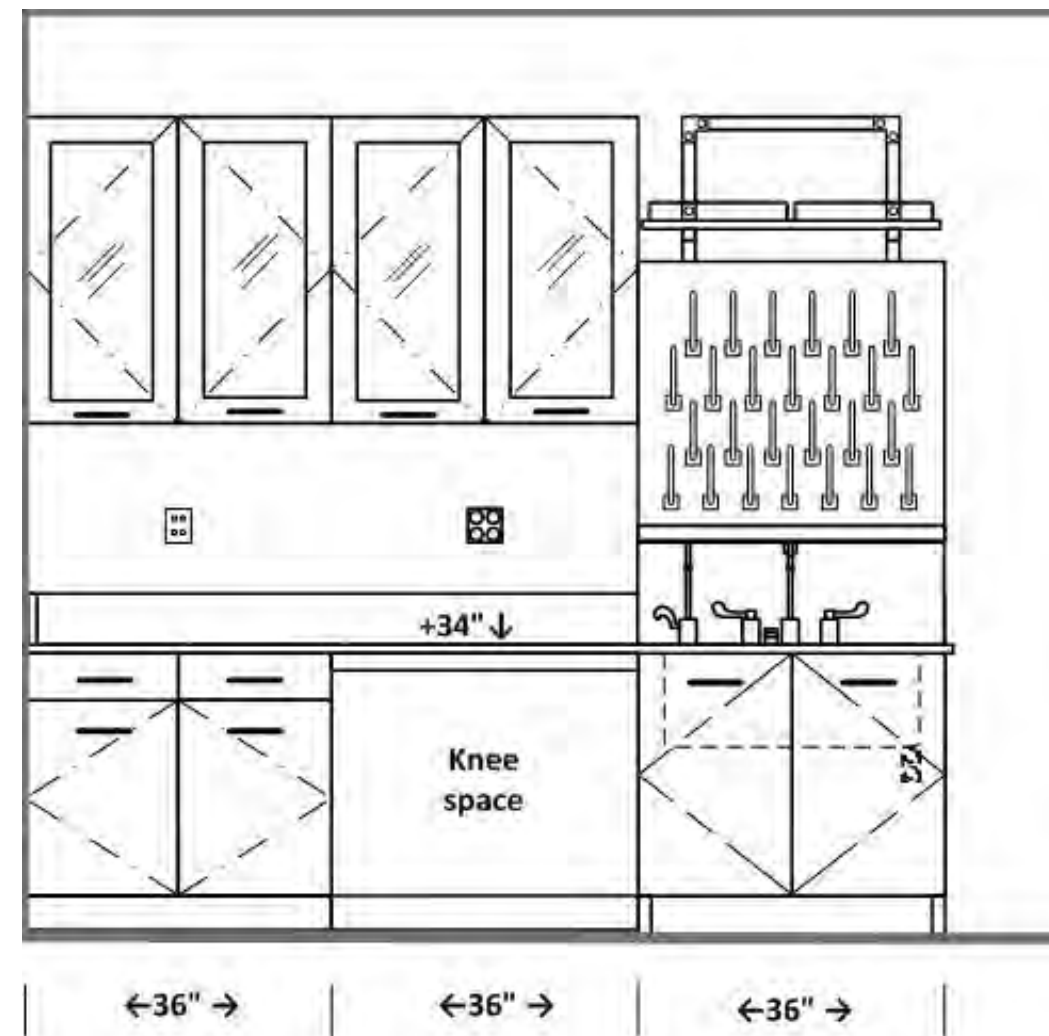
## CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 sinks  
 Faucets

# Microbiology Lab

Room # P220: 465 nsf

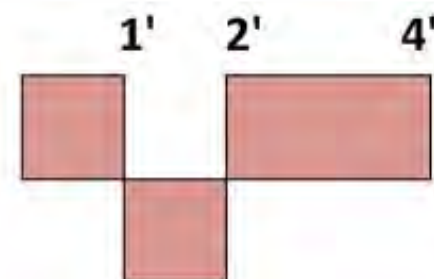
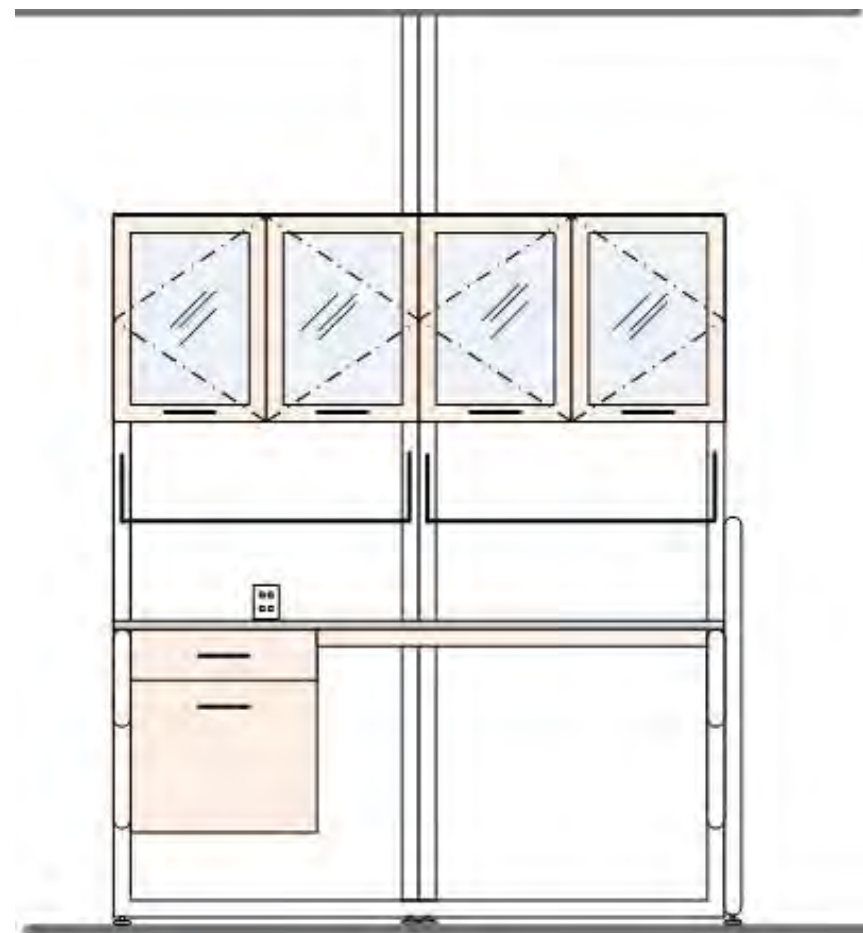
Elevation A



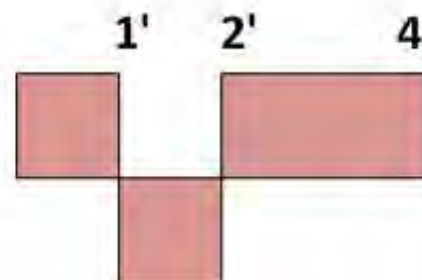
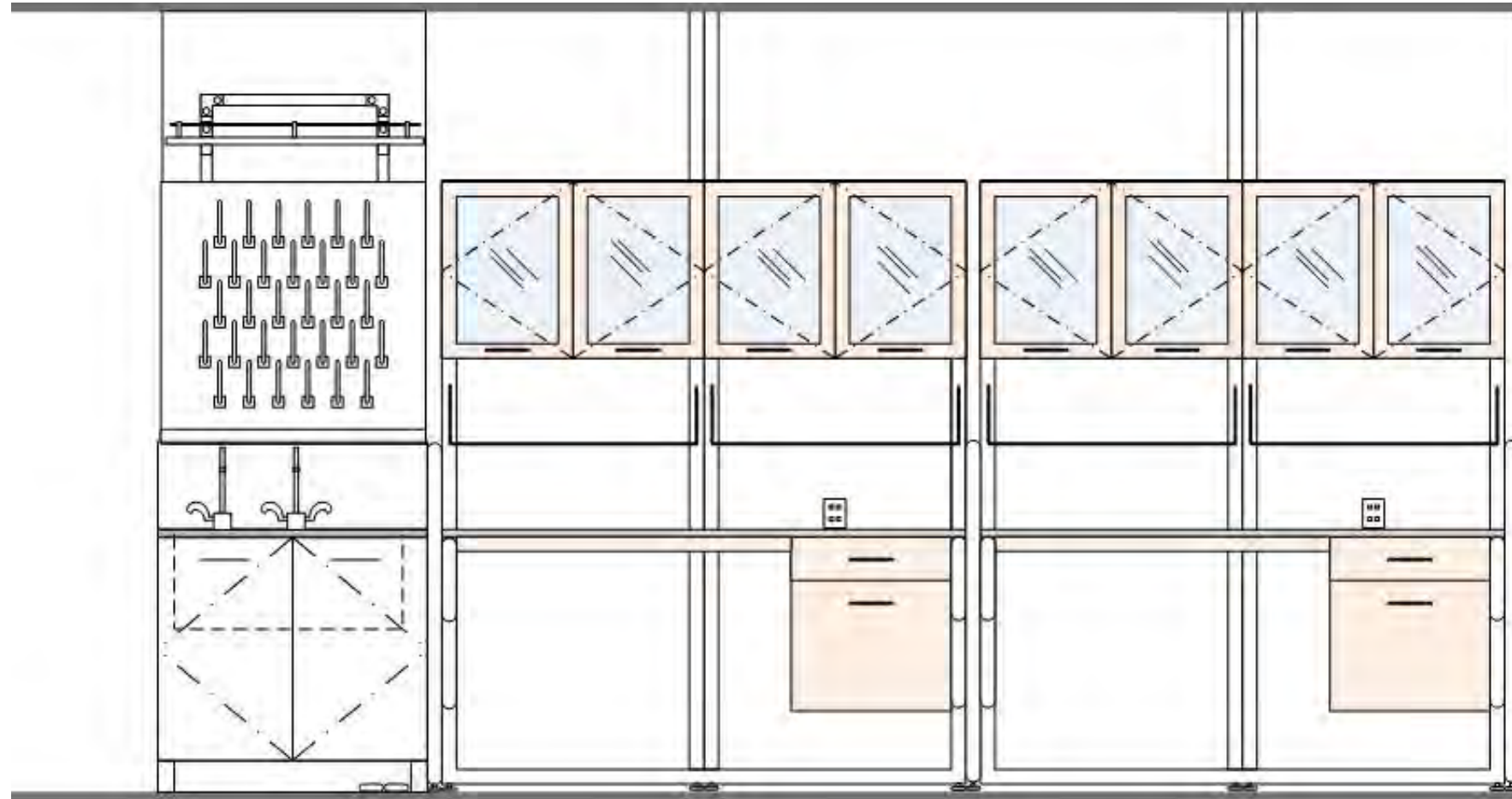
# Microbiology Lab

Room # P220: 465 nsf

Elevation B



**Microbiology Lab**  
Room #P220A: 256 nsf  
Elevation C



# Equipment Schedule

Room/Area: <b>Microbiology Labs- Room #220, 220A</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
None Identified to date													
<b>Owner Furnished Equipment</b>													
EQ-601	Biological Safety Cabinet		72"	30"	84"	805 lbs.	F	115v20a1ph	vacuum			No exhaust	Owner Furnished
EQ-602	Class II Type A2							standby power					Owner Installed
EQ-603	Biological Safety Cabinet		53"	30"	84"	80	F	115v20a1ph				No exhaust	Owner Furnished
	Class II Type A2							standby power					Owner Installed
EQ-604	Refrigerator (x2)		59"	36"	80"	790 lbs.	F	115v20a1ph					Owner Furnished
Eq-605	double wide							standby power					Owner Installed
EQ-606	Refrigerator (x2)		29.5"	32.5"	79.75"	510 lb.	F	115v20a1ph					Owner Furnished
EQ-607	Helmer #125							standby power					Owner Installed
								standby power					
EQ-608	Incubator (x2)		~24"	~24"	~12"	~50 lb.	F	115v20a1ph					Owner Furnished
EQ-609													Owner Installed
EQ-610	Blood Culture Machine		25"	34"	75"	994 lb.	F	115v20a1ph				locate near sink	Owner Furnished
													Owner Installed
EQ-611	Incubator	New	~24"	~24"	~12"	~50 lb.	F	115v20a1ph					Owner Furnished
													Owner Installed

# Biological Safety Cabinet Cut Sheet

## EQ-601; EQ-602; EQ-603; Microbiology

### Options and Accessories

For convenience, most options, accessories and modifications are factory installed and should be specified when ordering. Commonly requested options are listed below. For detailed information on accessories and modifications, contact The Baker Company.

- 10" viewscreen sash opening
- UV germicidal lamp
- Stainless steel IV bar
- Additional petcock (specify label and location)
- Plumb to top
- Plumb to rear
- Plastic storage bins
- Mass Airflow Monitor
- Padded armrest
- Ergonomic adjustable footrest
- Type A2 exhaust kit, canopy connection
- Type A2 exhaust kit, hard connection
- Reinforced work surface
- Seismic restraints
- Optional stand with telescoping legs
- Optional stand with casters
- Remote controlled petcocks

### To Order

For ordering information, terms and conditions of sale, contact The Baker Company or visit the Baker Web site at [www.bakerco.com](http://www.bakerco.com) for the name of your authorized Baker Company representative.

### Caution:

A Class II, Type A2 biological safety cabinet is suitable for work with agents in the absence of volatile toxic chemicals and volatile radionuclides. With proper ventilation to the outside, a Class II, Type A2 biological safety cabinet is suitable for work with agents assigned to biosafety levels 1, 2 or 3, treated with minute quantities of volatile toxic chemicals and trace amounts of radionuclides required as an adjunct to microbiological studies, that will not interfere with the work when recirculated in the downflow air (as stated in National Sanitation Foundation International Standard #49).

Note: The adequacy of this containment cabinet for the user's personal safety, as with any containment cabinet, should be determined by an industrial hygienist or safety officer. Site preparation information, architectural drawings, detailed dimensions and purchase specifications are available.



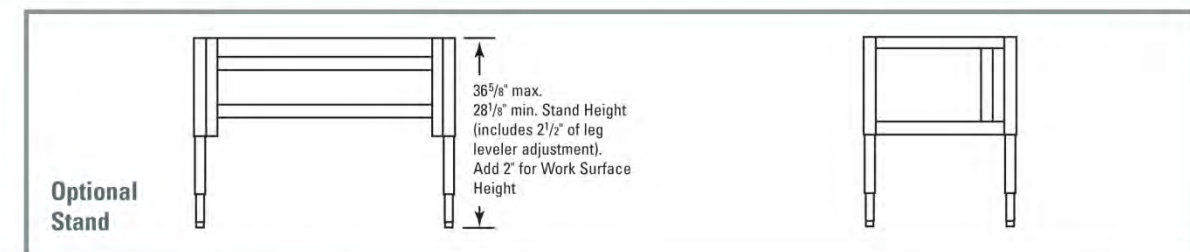
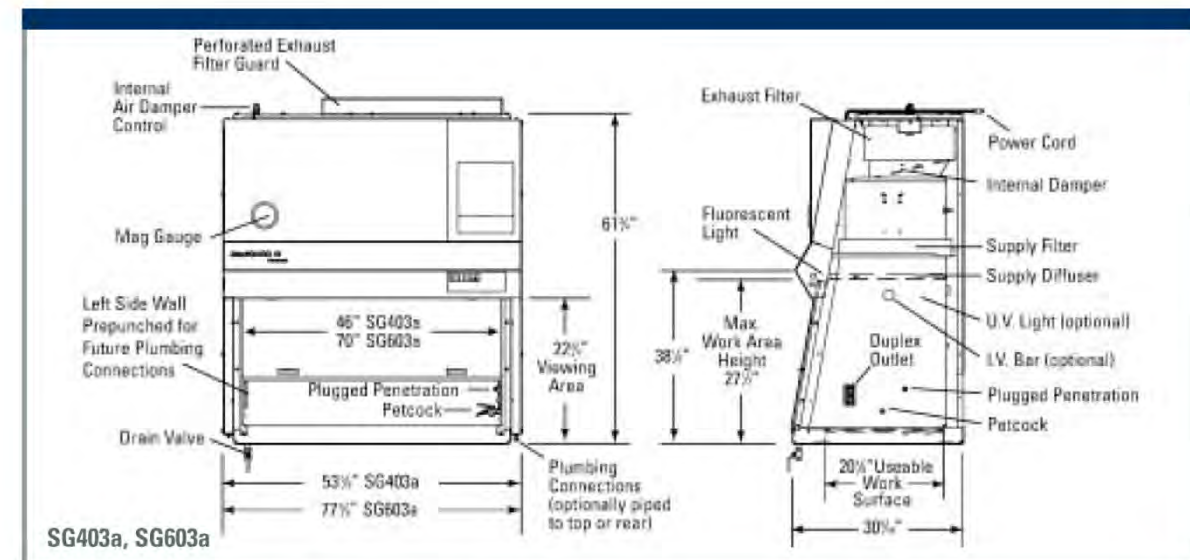
The SterilGARD® III Advance° is also available in a 3' Model SG303.\*\* For literature and information contact Baker.

### Summary Specification

#### SterilGARD® III Advance° Class II, Type A2 Biological Safety Cabinet, Vertical Flow

Model No.	Size	Opening MAX.	Electrical	Amps/ Breaker	BTU	Interior Dimensions <sup>1</sup>	Exterior Dimensions <sup>1</sup>	Net Weight*	Ship Weight
SG403a	4'	8"(19%)	115V, AC	12.4/20	2906	46"W x 20 1/8"F-B*** x 27 1/2"H	53 3/4"W x 30 3/8"F-B x 63 3/8"H	525 lbs	650 lbs
SG603a	6'	8"(19%)	115V, AC	14.7/20	4358	70"W x 20 1/8"F-B*** x 27 1/2"H	77 3/4"W x 30 3/8"F-B x 63 3/8"H	700 lbs	890 lbs

\*Net weight SG403a with the optional stand is 625 lbs., with a total shipping weight of 750 lbs. \*\*SG303 is not NSF or UL listed  
 \*Net weight SG603a with the optional stand is 810 lbs., with a total shipping weight of 1000 lbs. SG303 is ETL listed.  
<sup>1</sup>Inside cabinet is extended 2" deeper, creating 110 sq.in. (403a), 170 sq.in. (603a) additional work area. \*\*\*Useable work space dimensions.



### SterilGARD® III Advance° Model Number: SG403a, 4' SG603a, 6'

NSF Classification: Class II, Type A2 Cabinet Type: Bench (Stand Optional)

### Site Preparation Electrical System

- 115V-1 Phase, 60 Hz.
- One 16' power cord with 20-amp plug, NEMA 5-20P.

- Unit is UL Listed as certified for electrical, fire and personal safety.
- Two ground-fault interrupt protected interior duplex receptacles at 5.0 (SG403a), 4.0 (SG603a) total amps, controlled by a self-resetting circuit breaker.

### Exhaust Requirement\* SG403a

- For an 8" opening: 269 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

### SG603a

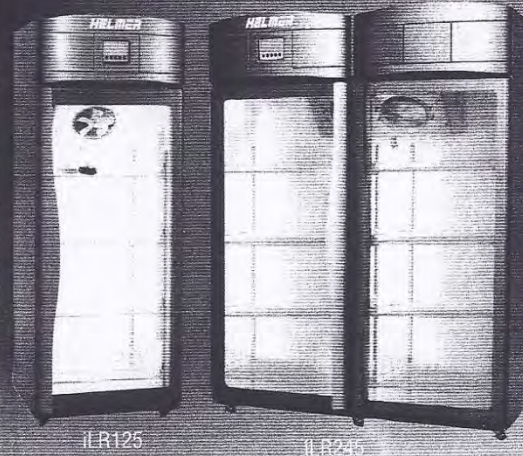
- For an 8" opening: 408 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.
- For a 10" opening: 510 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

### Amperage Chart

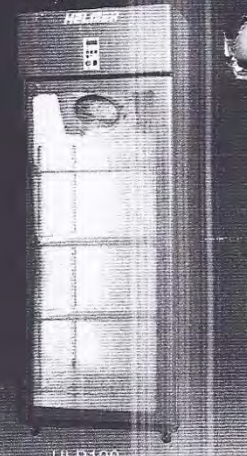
Model	Blower Motor	Lighting Ballast	Duplex Receptacle	Total
SG403a	1625 RPM, 6.6 amps	0.8 amps	5.0 amps	12.4 amps
SG603a	1625 RPM, 9.9 amps	0.8 amps	4.0 amps	14.7 amps

\*The above exhausting requirements are basic, should the user wish to build their own connections. HEC and CEC are as noted in the chart on page 11.

## LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)



### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
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Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

## Refrigerator Cut Sheet

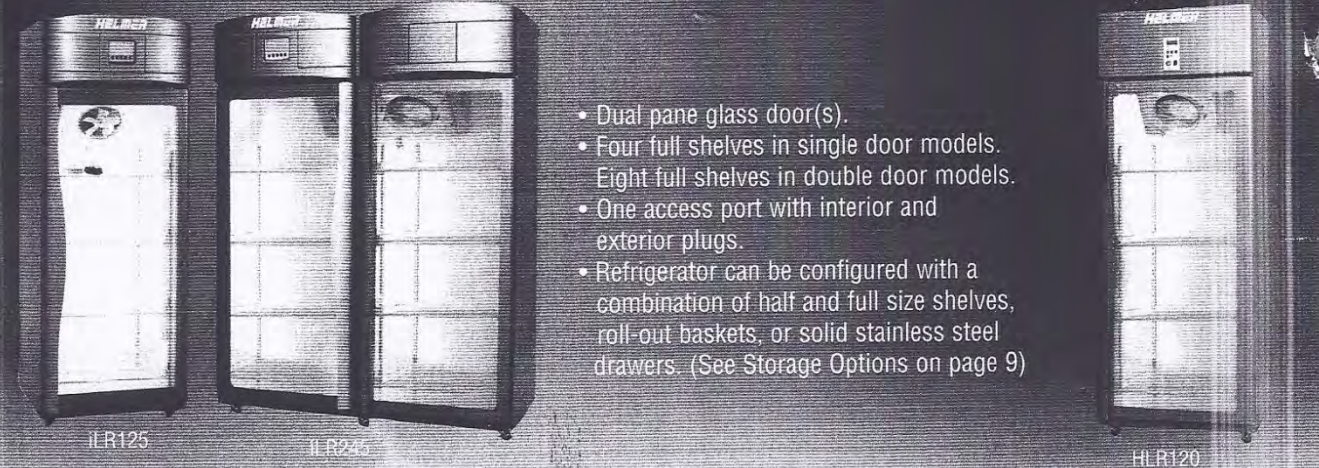
### EQ-604; EQ-605

### HLR 256 Double wide

### Microbiology



## LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
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Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

## Refrigerator Cut Sheet

EQ-606; EQ-607

HLR125

Microbiology

**Incubator Cut Sheet**  
EQ-608; EQ-609; EQ-611  
Microbiology

**Pending**

# Blood Culture Machine Cut Sheet

EQ-610

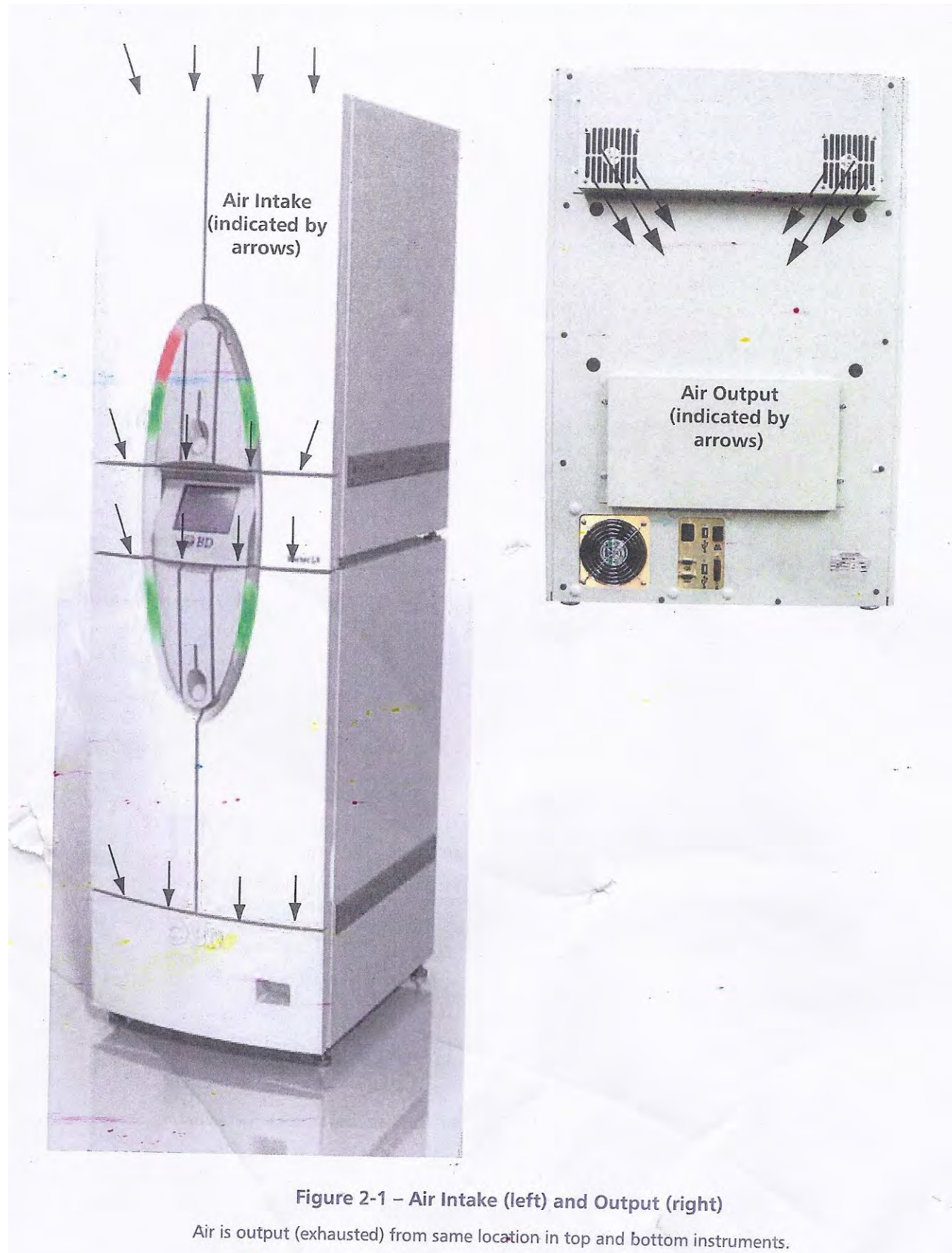
Microbiology

## 2.2 Instrument Specifications

Physical Dimensions	Single Instrument	Stack
Height	88.9 cm (35.0 in)	190.5 cm (75.0 in)
Width	63.5 cm (25 in)	63.5 cm (25 in)
Depth	86.4 cm (34 in)	86.4 cm (34 in)
Clearance (rear, left, right)	1.3 cm, 0 cm, 0 cm	1.3 cm, 0 cm, 0 cm
Clearance (front)	68.6 cm (27.0 in)	68.6 cm (27.0 in)
Weight (empty)	187.5 kg (413.4 lb)	384.8 kg (848.4 lb)
Weight (full)	220.4 kg (485.9 lb)	451 kg (994.2 lb)
Stand weight	63.5 kg (140 lb)	N/A
Counterweights (countertop, unanchored)	47.6 kg (105 lb)	N/A

Electrical Requirements	
Input Voltage	100 - 240 VAC $\pm$ 10%
Peak Current	8 amperes
Input Line Frequency	47-63 Hz
Power	800 W
Heat	450 btu/hr

Environmental Requirements	
Non-Operating Storage	
Temperature	-17.8° to 65° C (0° - 149° F)
Humidity	10% to 90% RH, non-condensing
Operating Conditions	
Temperature	18.0° to 30.0° C (64.4° - 84.2° F)



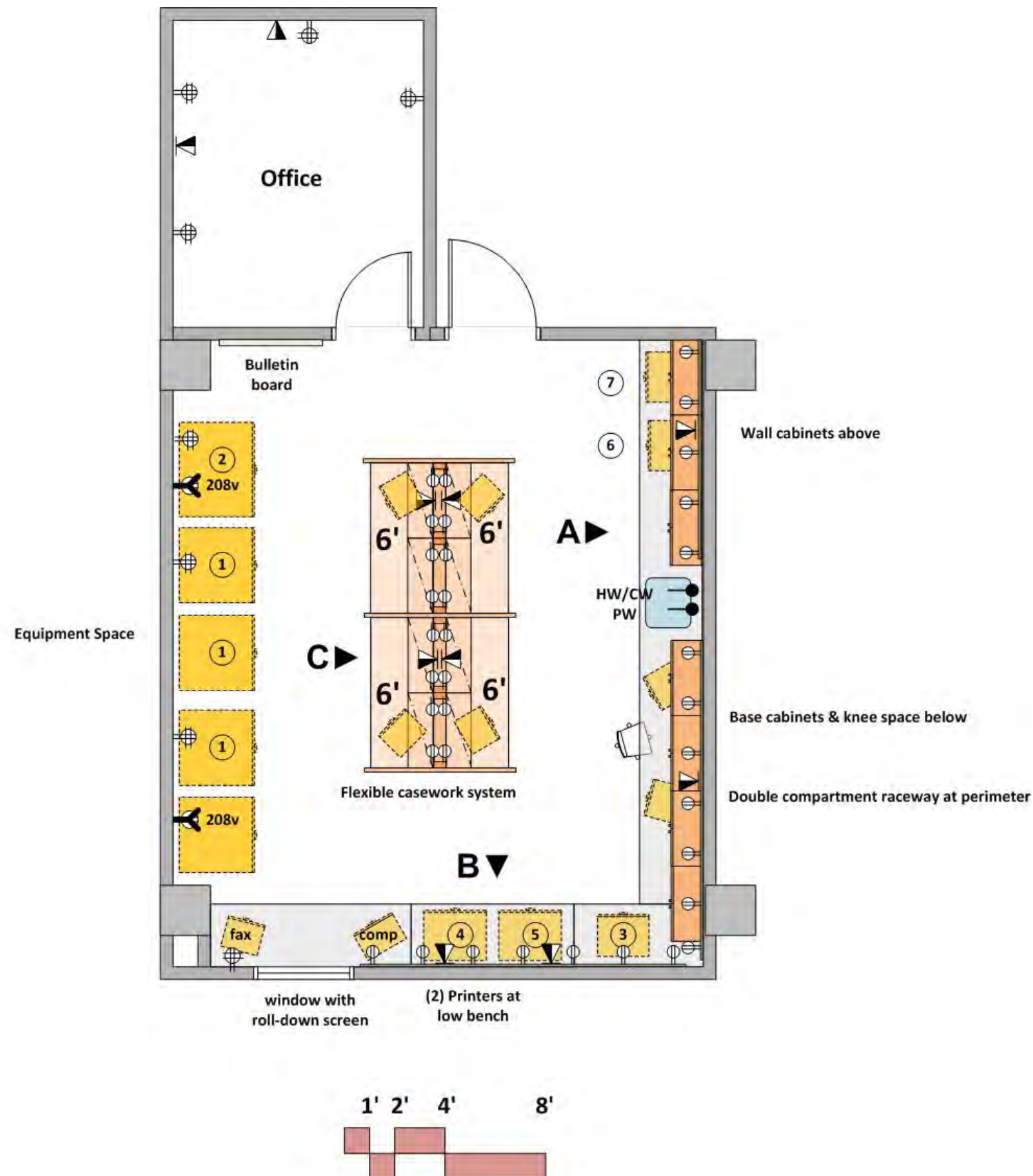
# Blood Bank

## Room #E-233A, 499 s.f.

**Contractor Furnished Equipment:**  
None

**Owner Furnished Equipment:**

1. EQ-701: Refrigerator (x3)
2. EQ-702: Freezer -20 deg C
3. EQ-703: Centrifuge
4. EQ-704: Printer #1
5. EQ-705: Printer #2
6. EQ-706: Incubator
7. EQ-707: Water bath



### ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3'x8' with view window  
 Acoustic Attenuation: NC 40 or less

### MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 6 air changes per hour

### ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex circuit)  
 208v30a1ph outlets  
 all power on standby  
 Dedicated circuits at floor equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

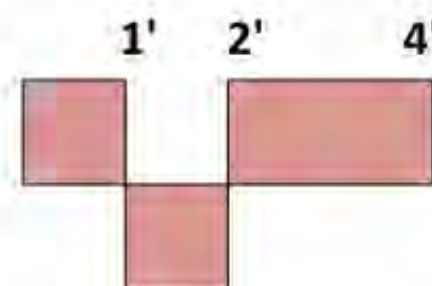
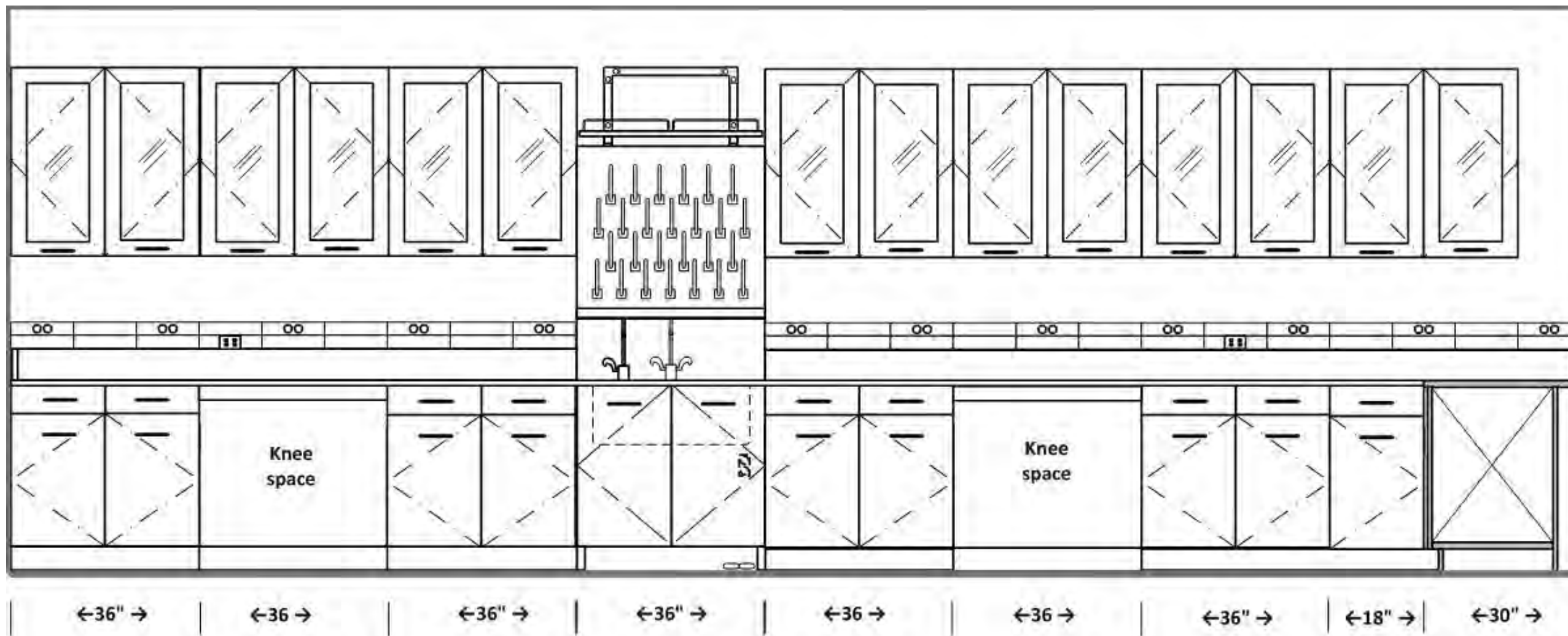
### PLUMBING

Hot/Cold water (HW/CW) at sinks  
 Pure water at sinks

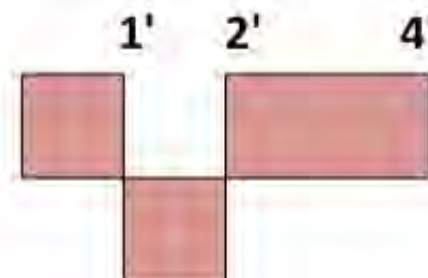
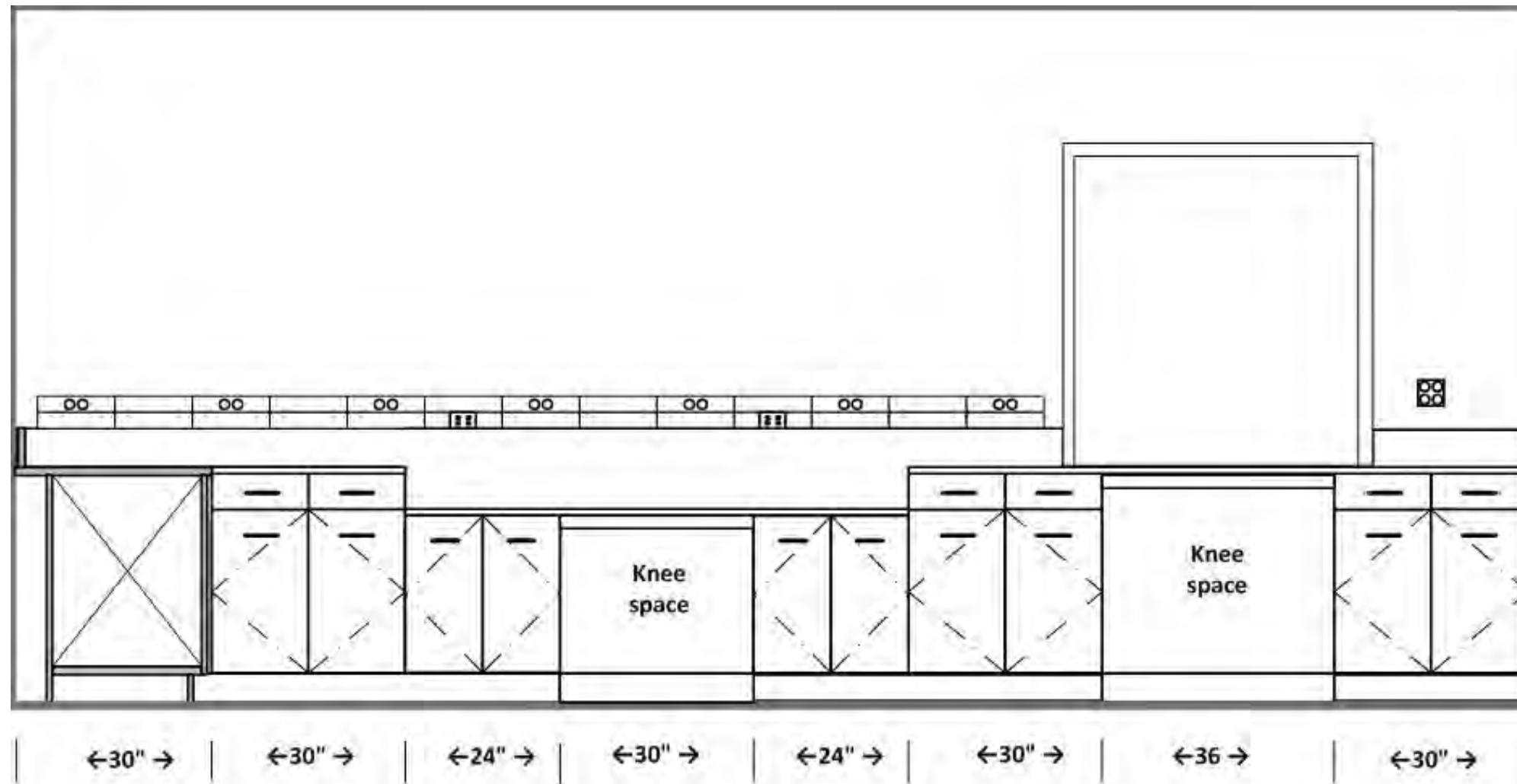
### CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 Epoxy resin sinks  
 Faucets

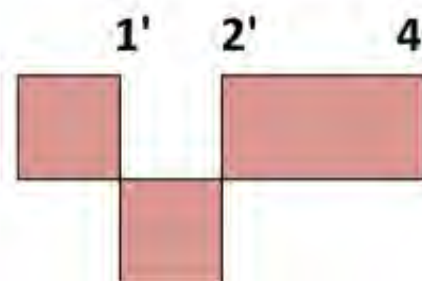
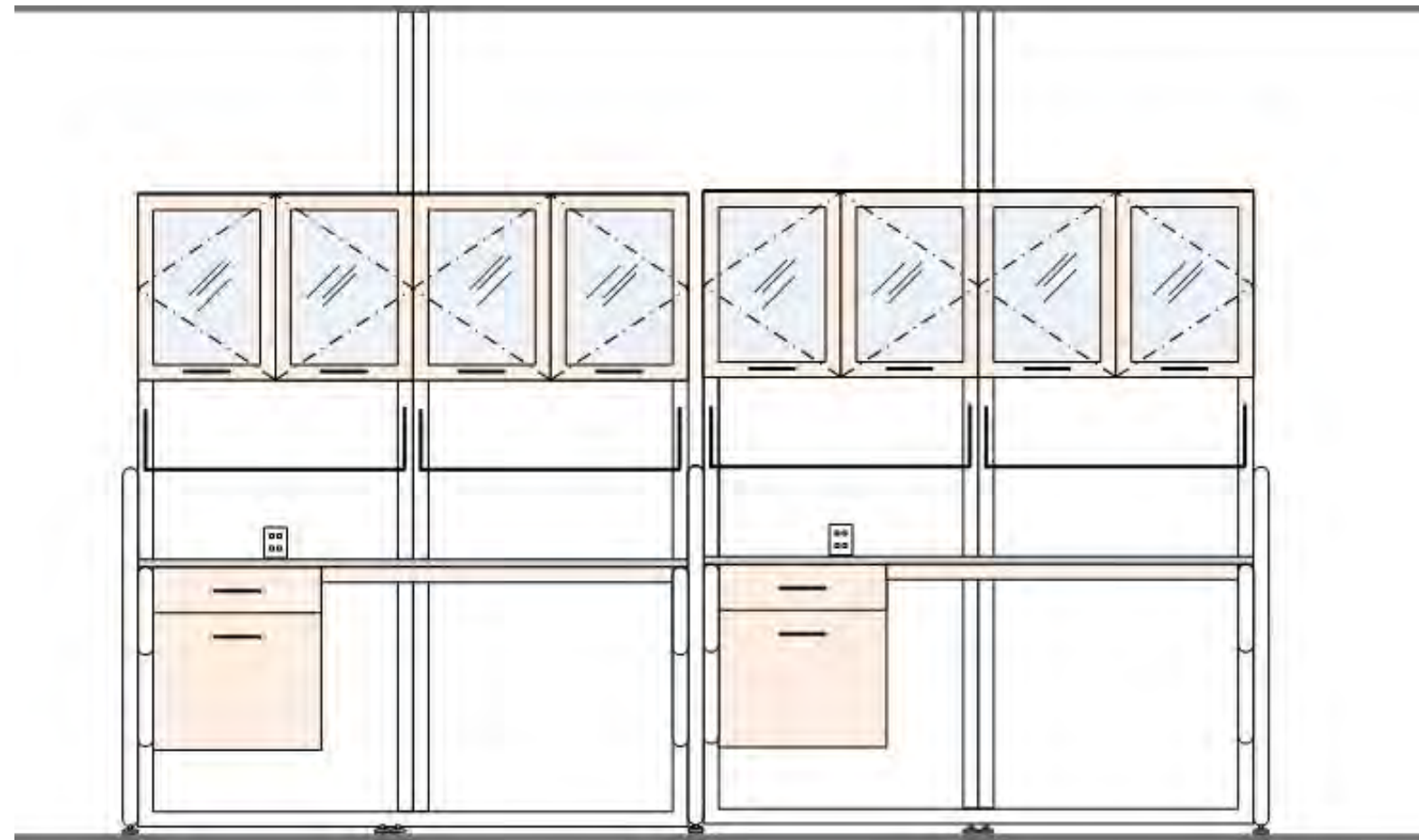
**Blood Bank**  
**Room #E-233A**  
**Elevation A**



**Blood Bank**  
**Room #E-233A**  
**Elevation B**



**Blood Bank**  
**Room #E-233A**  
**Elevation C**



# Equipment Schedule

Room/Area: <b>Blood Bank- Room #P225</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
None Identified to date													
<b>Owner Furnished Equipment</b>													
EQ-701	Refrigerator (x3) Helmer #125	E-241A	29.5"	32.5"	79.75"	510 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-702	Freezer -20 deg C		29.5"	38.5"	80"	475 lbs.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-703	Centrifuge		~24"	~24"	~12"	~50 lb.	B	115v20a1ph					Owner Furnished Owner Installed
EQ-704	Printer (x2)		~24"	~24"	~12"	~50 lb.	B	115v20a1ph data standby power					Owner Furnished Owner Installed
EQ-705													
EQ-707	Incubator		~24"	~24"	~12"	~50 lb.	B	115v20a1ph					Owner Furnished Owner Installed
EQ-708	Water bath		~24"	~24"	~12"	~50 lb.	B	115v20a1ph				locate near sink	Owner Furnished Owner Installed



# Refrigerator Cut Sheet

## EQ-701

### Blood Bank- Model 125



## Refrigerator Operation Manual

### i.Series™ and Horizon Series™

	i.Series	Horizon Series	International i.Series	International Horizon Series
Blood Bank	iB*	HB*	iHB*	HHB^
Laboratory	iLR*	HLR^		
Pharmacy	iPR*	HPR^	^ Version A	* Version B

Applies to refrigerator models 120, 125, 245, and 256. Model 111 is Ver. A.

Model 1B120  
S/N 987919

HELMER, INC. 14395 BERGEN BLVD., NOBLESVILLE, IN 46060 USA

PHONE (317) 773-9073 FAX (317) 773-9082

USA and CANADA (800) 743-5637

www.helmerinc.com

ISO 13485:2003 CERTIFIED



360078-1/I

Reference information 65

## 9.2 Alarm reference

If an alarm condition is met, an alarm activates. Some alarms are visual only, while others are visual and audible. Some alarms are sent through the remote alarm interface.

The following table indicates if an alarm for a particular model is audible (A), visual (V), or sent through the remote alarm interface (R). Messages for visual alarms, if applicable, appear in the table as well.

Alarm	Refrigerator models		
	iB, iHB, iLR, iPR	HB	HHB, HLR, HPR
Door Open	A, V ("Door Open"), R	A, V ("Door Open"), R	A, V, R
High temperature	A, V ("High Temp"), R	A, V ("High Temp"), R	A, V, R
Low temperature	A, V ("Low Temp"), R	A, V ("Low Temp"), R	A, V, R
Condenser temperature	A, V ("Condenser Over-Temp"), R		
Low battery	V ("Low Battery")		
No battery	A, V ("No Battery"), R		
AC power failure	A, V ("AC Power Failure"), R	A, V ("AC Power Failure"), R	A, V, R
Change chart paper	V ("Change Chart Paper")	V ("Change Chart Paper")	

## 9.3 Technical Specifications

### 9.3.1 Power

#### 9.3.1.1 Input voltage and frequency

The requirements for the input voltage and frequency vary depending on the destination of the refrigerator. The requirements for a particular refrigerator are specified on the Product Specification label. The voltage tolerance is ± 10% of the nominal voltage.

Options are as follows:

- ▶ 115 V 60 Hz
- ▶ 230 V 50 Hz
- ▶ 230 V 60 Hz

#### 9.3.1.2 Power consumption

The power consumption for a particular refrigerator is specified on the Product Specification label. Power consumption is measured in full load Amperes, and tolerance is +/- 10% of the nominal current.

Input voltage	Model variety				
	111	120	125	245	256
115 V	7.0 A	7.5 A	7.5 A	11.5 A	11.5 A
230 V	50 Hz: 3.5 A	4 A	4 A	6 A	6 A
	60 Hz: 3.0 A				

#### 9.3.1.3 Circuit breakers

Circuit breakers are used on 230 V models only. The ratings are as follows:

Input voltage	Model variety				
	111	120	125	245	256
230 V	6 A	6 A	6 A	7 A	7 A

66 Refrigerator Operation Manual

### 9.3.1.4 Load capacity for alarm contacts

The terminals on the remote alarm interface have the following maximum load capacity:

- ▶ iB, HB, iHB, iPR, and iLR models: 0.5 A at 125 V ac; 1 A at 24 V dc
- ▶ HHB, HLR, and HPR models: 10 A at 250 V ac; 10 A at 125 V ac; 5 A at 100 V dc

### 9.3.2 Weight

The weight may vary slightly depending on what options are installed. The weights provided are for the following configurations:

- ▶ iB, HB, iHB, HHB, iPR, and HPR 111 models: 5 drawers
- ▶ iB, HB, iHB, HHB, iPR, HPR 120 and 125 models: 6 drawers
- ▶ iB, HB, iHB, HHB, iPR, HPR 245 and 256 models: 12 drawers
- ▶ iLR and HLR 111 models: 4 shelves
- ▶ iLR and HLR 120 and 125 models: 4 full-size shelves
- ▶ iLR and HLR 245 and 256 models: 8 full-size shelves

Model family	Model variety				
	111	120	125	245	256
iB, HB, iHB, HHB, iPR, HPR	340 lb	510 lb	535 lb	800 lb	880 lb
	154 kg	231 kg	243 kg	363 kg	400 kg
iLR, HLR	320 lb	465 lb	476 lb	692 lb	754 lb
	145 kg	211 kg	216 kg	314 kg	342 kg

### 9.3.3 Size

All dimensions are for the overall exterior and include items that protrude from the main unit.


Model family	Dimension	Model variety				
		111	120	125	245	256
iB, iLR, iPR	Width	24.25 in	29.50 in	29.50 in	59.25 in	59.25 in
		62 cm	75 cm	75 cm	151 cm	151 cm
	Height	70.50 in	79.75 in	79.75 in	79.75 in	79.75 in
		179 cm	203 cm	203 cm	203 cm	203 cm
	Depth	28.25 in	32.50 in	38.50 in	32.50 in	38.50 in
		72 cm	83 cm	98 cm	83 cm	98 cm
HB, iHB, HHB, HLR, HPR	Width	24.25 in	29.50 in	29.50 in	59.25 in	59.25 in
		62 cm	75 cm	75 cm	151 cm	151 cm
	Height	70.50 in	78.75 in	78.75 in	78.75 in	78.75 in
		179 cm	201 cm	201 cm	201 cm	201 cm
	Depth	28.25 in	32.50 in	38.50 in	32.50 in	38.50 in
		72 cm	83 cm	98 cm	83 cm	98 cm

360078-1/I HELMER

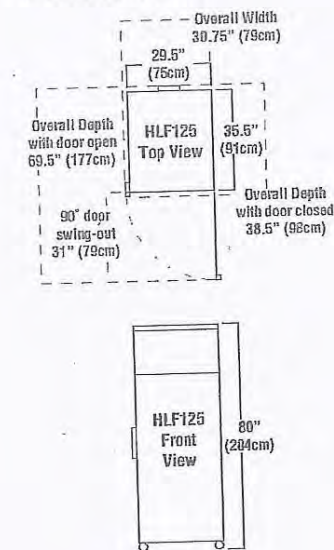
**FREEZERS  
LABORATORY - HORIZON SERIES™  
MODEL HLF125**

**Freezer Cut Sheet  
EQ-702  
Blood Bank**

**SPECIFICATIONS**

Temperature Range	-15°C to -30°C
Interior Dimensions (w x h x d)	24.75" x 58.25" x 30.25"
Exterior Dimensions (w x h x d)	29.5" x 80" x 35.5"
Overall Exterior Dimensions (w x h x d) Includes door handle, electrical panel, and evaporation tray	30.75" x 80" x 38.5"
Interior Volume	25.2 cu ft / 714 liters
Door	Solid galvanized steel with bacteria-resistant powder coating
Interior Configuration	4 Epoxy Coated Wire Shelves
Electrical	208 / 230V 60Hz 6 FLA NEMA 6-15 Plug 
Net Weight	475 lb
Clearance Requirements	Minimum of 8" above and 3" behind freezer for ventilation
Certified to applicable UL and CSA standards by a NRTL	

**FOOTPRINT**

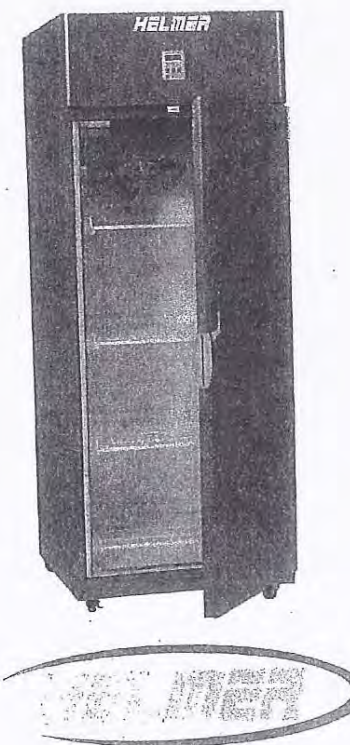


**FEATURES**

- Microprocessor-based temperature controller with:
  - Programmable operating temperature
  - Programmable high temperature alarm with visual and audible indicators
  - LED display of chamber temperature
- Bacteria-resistant powder coated interior and exterior
- Dual, swivel locking casters
- Key lock

**WARRANTY**

- 3 Years Compressor
- 2 Years Parts
- 1 Year Labor

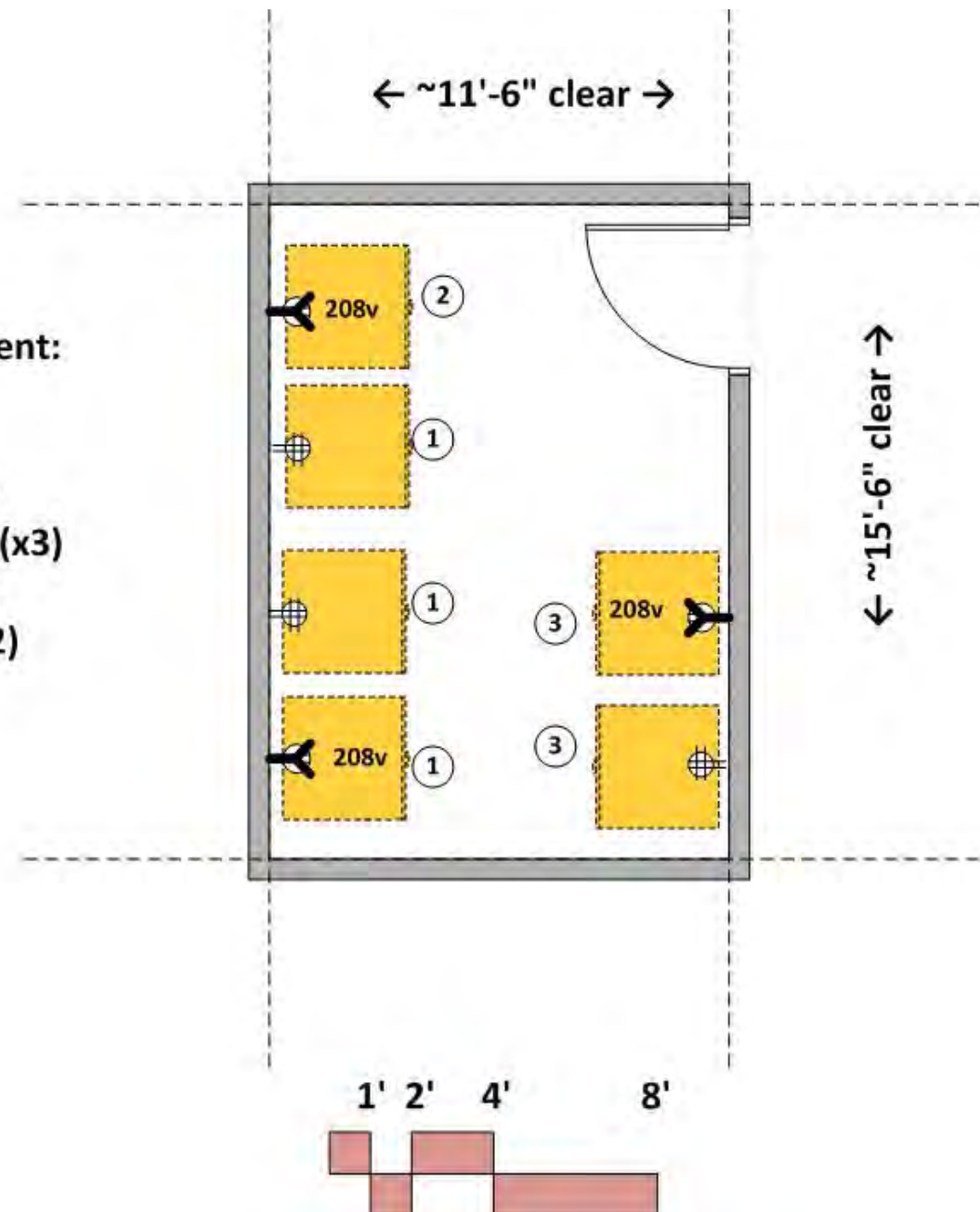


# Freezer Room

## ROOM #P251

**Contractor Furnished Equipment:**  
None

**Owner Furnished Equipment:**  
 1. EQ-801: Freezer -20 deg C (x3)  
 2. EQ-802: Freezer -80 deg C  
 3. EQ-803: Future Freezer (x2)



### ARCHITECTURAL

Occupancy: B  
 Floor: sealed concrete  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3<sup>6</sup>x8<sup>0</sup>  
 Acoustic Attenuation: NC 45 or less

### MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 6 air changes per hour  
 Heat gain: 75 btuh/sf

### ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
 208v30a1ph  
 All outlets on standby power  
 Dedicated circuits at floor equipment locations  
 Lighting: indirect fluorescent @ 50 f.c.

### PLUMBING

None

### CONTRACTOR FURNISHED CASEWORK

None


# Equipment Schedule

Room/Area: <b>Freezer Room #P251</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
None Identified to date													
<b>Owner Furnished Equipment</b>													
<b>EQ-801</b>	Freezer -20 deg C (x3) Accessioning		29.5"	38.5"	80"	475 lbs.	F	115v20a1ph standby power					Owner Furnished Owner Installed
<b>EQ-802</b>	Freezer -80 deg C Accessioning		29.5"	38.5"	80"	475 lbs.	F	208v60hz1ph standby power					Owner Furnished Owner Installed
<b>EQ-803</b>	Future Freezer -20 deg C Accessioning		29.5"	38.5"	80"	475 lbs.	F	115v20a1ph standby power					Owner Furnished Owner Installed

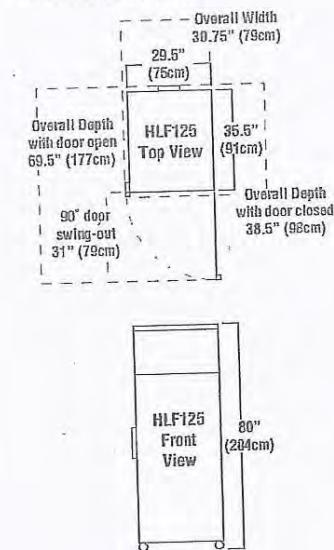
**FREEZERS  
LABORATORY - HORIZON SERIES™  
MODEL HLF125**

**Freezer Cut Sheet  
EQ-801; EQ-803; -20 deg C  
Freezer Room**

**SPECIFICATIONS**

Temperature Range	-15°C to -30°C
Interior Dimensions (w x h x d)	24.75" x 58.25" x 30.25"
Exterior Dimensions (w x h x d)	29.5" x 80" x 35.5"
Overall Exterior Dimensions (w x h x d) Includes door handle, electrical panel, and evaporation tray	30.75" x 80" x 38.5"
Interior Volume	25.2 cu ft / 714 liters
Door	Solid galvanized steel with bacteria-resistant powder coating
Interior Configuration	4 Epoxy Coated Wire Shelves
Electrical	208 / 230V 60Hz 6 FLA NEMA 6-15 Plug 
Net Weight	475 lb
Clearance Requirements	Minimum of 8" above and 3" behind freezer for ventilation
Certified to applicable UL and CSA standards by a NRTL	

**FOOTPRINT**

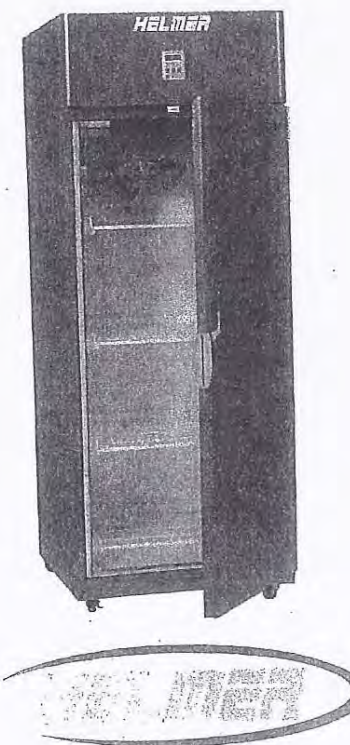


**FEATURES**

- Microprocessor-based temperature controller with:
  - Programmable operating temperature
  - Programmable high temperature alarm with visual and audible indicators
  - LED display of chamber temperature
- Bacteria-resistant powder coated interior and exterior
- Dual, swivel locking casters
- Key lock

**WARRANTY**

- 3 Years Compressor
- 2 Years Parts
- 1 Year Labor



# Freezer Cut Sheet

EQ-802; -80 deg C

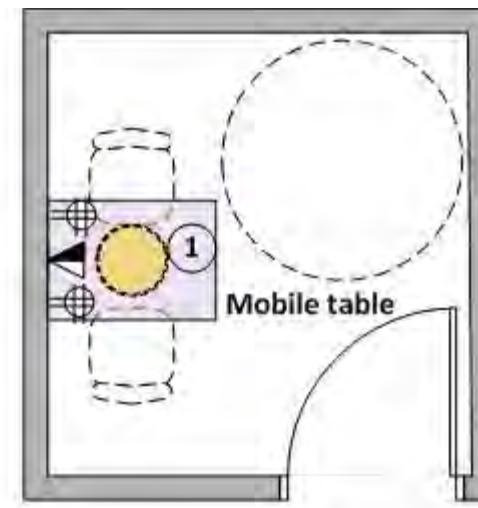
Freezer Room

# Microscopy

Room # P216

**Contractor Furnished Equipment:**  
None

**Owner Furnished Equipment:**  
1. EQ-901: Double microscope



## ARCHITECTURAL

Occupancy: B  
Floor: sheet rubber  
Walls: gypsum board and enamel paint  
Ceiling: 9' acoustic tile  
Doors: 3<sup>6</sup>x8<sup>0</sup>  
Acoustic Attenuation: NC 40 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
100% exhaust  
6 air changes per hour  
Heat gain: 25 btuh/sf

## ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
Data  
Lighting: indirect fluorescent @ 60 f.c.

## PLUMBING

None

## CONTRACTOR FURNISHED CASEWORK

Mobile table

# Equipment Schedule

Room/Area: <b>Microscopy Room #P216</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
None Identified to date													
<b>Owner Furnished Equipment</b>													
<b>EQ-901</b>	Microscope Double head		~36"	~24"	~18"	~25 lbs.	B	115v20a1ph data				locate on mobile table	Owner Furnished Owner Installed



# Autoclave/Pure Water

Room #P203, P204

253 nsf

## Contractor Furnished Equipment:

1. EQ-1001: Steam canopy
2. EQ-1002: Pure Water System

## Owner Furnished Equipment:

3. EQ-1003: Autoclave



## ARCHITECTURAL

Occupancy: B  
Floor: trowelled-on epoxy resin  
Walls: gypsum board and epoxy paint  
Ceiling: 9' mylar acoustic tile  
Doors: 3<sup>6</sup>x8<sup>0</sup> with view window  
Acoustic Attenuation: NC 40 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
100% exhaust  
6 air changes per hour  
Heat gain: 75 btuh/sf

## ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
Dedicated circuits at floor equipment locations  
208v60a3ph at autoclaves with quick disconnect  
Lighting: indirect fluorescent @ 60 f.c.

## PLUMBING

Relocate pure water system from existing location  
Redistribute pure water loop to labs  
Floor sink at autoclaves

## CONTRACTOR FURNISHED CASEWORK

None

# Equipment Schedule

Room/Area: <b>Autoclave/Pure Water- Room #P203, P204</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
EQ-1001	Steam Canopy	New	~10'-6"	~5'	~18"	~200 lbs.	Ceiling				600 c.f.m. exh. VAV	316L stainless steel	Contractor Furnished Contractor Installed
EQ-1002	Pure water system Millipore Type 2					varies	F	115v20a1ph standby power	drain piping to labs				Contractor Furnished Contractor Installed
<b>Owner Furnished Equipment</b>													
EQ-1003	Autoclave 26"x37.5"x36" chamber Amsco Century Vacuum	New	44"	48"	75.25"	3800 lb.	F	480v3ph 120v1ph Standby power	hot/cold water Drain Vacuum floor sink	exhaust canopy at ceiling		integral electric steam generator	Owner Furnished Contractor Installed

# Pure Water System Cut Sheet

EQ-1002

Autoclave/Pure Water Room

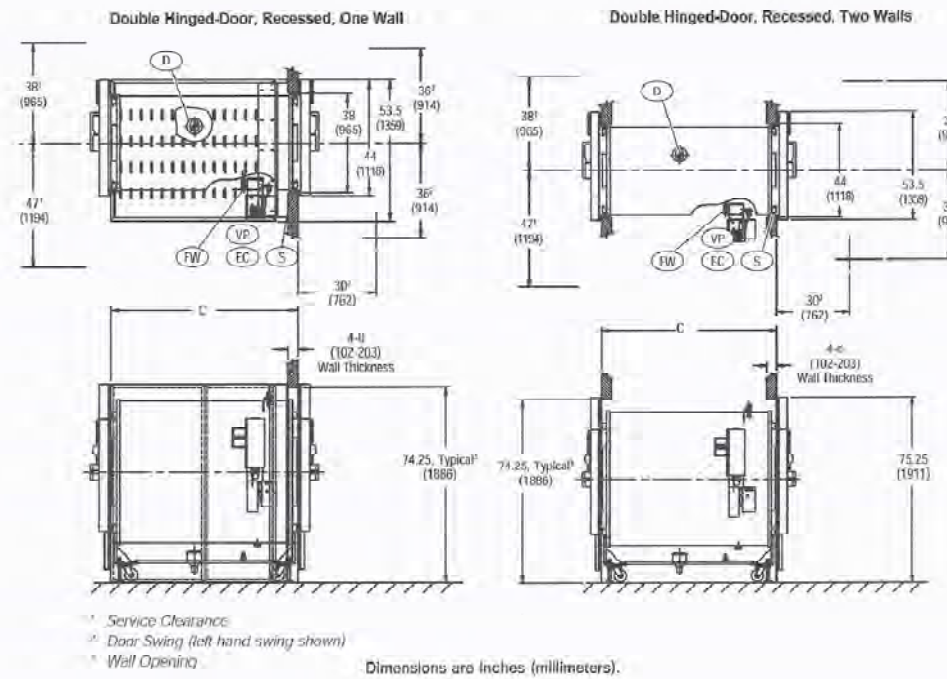
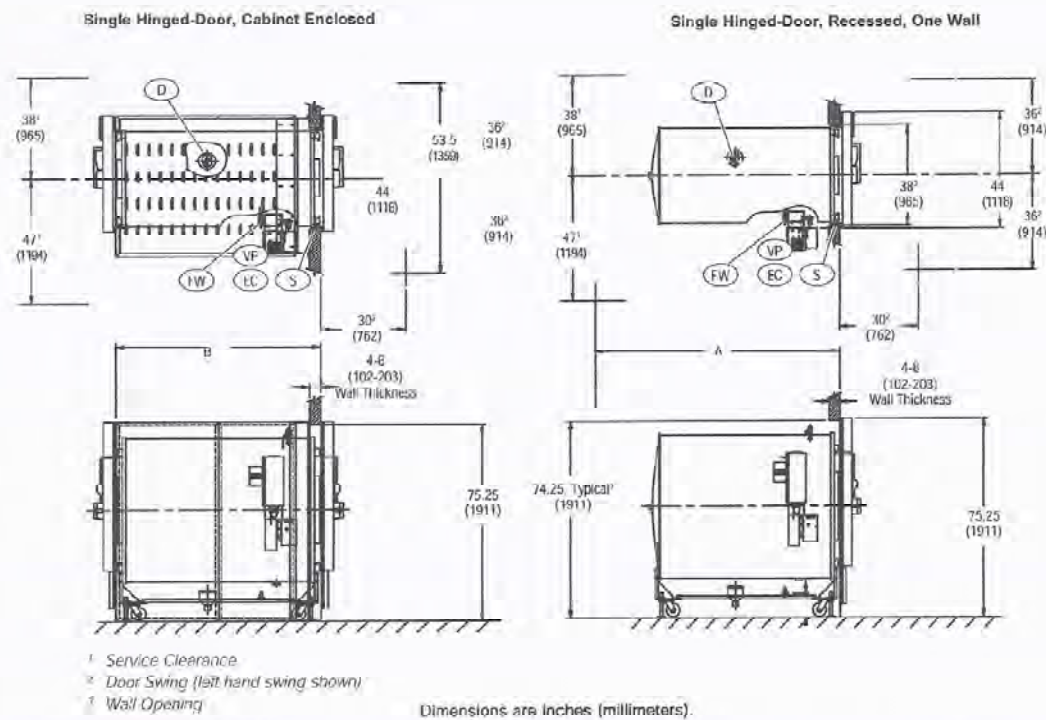
Pending

# Autoclave Cut Sheet

## EQ-1003

### Autoclave/Pure Water Room

#### Single Door Recessed One Wall



#### ENGINEERING DATA

<b>Drain:</b>	2" ODT drain terminal (floor drain capacity must handle peak water consumption)	
<b>Electric:</b>		
• USA:	Control:	120 volt, 1-phase, 60 Hz, 2 A.
	Vacuum Pump:	208/240 volt, 3-phase, 60 Hz, 6 A per phase, or 480 volt, 3-phase, 60 Hz, 3 A per phase.
• UK:	Control:	230 volt, 1-phase, 50 Hz, 1.5 A.
	Vacuum Pump:	400 volt, 3-phase, 50 Hz, 6 A per phase.
• International: (Outside UK)	Control:	230 volt, 1-phase, 50 Hz, 1.5 A.
	Vacuum Pump:	400 volt, 3-phase, 50 Hz, 4 A per phase.
<b>Steam:</b>	Pressure – 50 to 80 psig (3.45 to 5.52 bar, dynamic), condensate free, and 97 percent to 100 percent vapor quality Consumption – 185 lb/hr (84 kg/hour) Peak Flow – 335 lb/hr (152 kg/hour) Size – 1" NPT	
<b>Water:</b>	Pressure – 20 to 50 psig (1.38 to 3.45 bar), dynamic Consumption – 130 gal/hr (495 L/hr) Peak Flow – 15 gal/min (57 L/min) Size – 1" NPT	
<b>Operating Weight:</b>	26 x 37.5 x 36" (660 x 950 x 914 mm)	3800 lb (1720 kg)
	26 x 37.5 x 48" (660 x 950 x 1219 mm)	4200 lb (1900 kg)
	26 x 37.5 x 60" (660 x 950 x 1524 mm)	4700 lb (2125 kg)

#### WATER QUALITY RECOMMENDATIONS

Recommended Feed Water Quality for Sterilizers		
Condition	Nominal Conditions	Maximum Conditions
Temperature	40°-60°F (4°-16°C)	70°F (21°C)
Total Hardness as CaCO <sub>3</sub> *	50-120 mg/L	171 mg/L
Total Dissolved Solids	100-200 mg/L	500 mg/L
Total Alkalinity as CaCO <sub>3</sub>	70-120 mg/L	180 mg/L
pH	6.8-7.5	6.5-8.5
Total Silica	0.1 - 1.0 mg/L	2.5 mg/L

NOTE: Because of STERIS's continuing program of research and development, all specifications and descriptions are subject to change without notice. Some options may affect utility consumptions. Obtain certified drawings for design and installation.

#### OVERALL INSTALLED LENGTH

Refer To Illustrations  
Dimensions are: inches (mm).

	Chamber Length		
	36 (914)	48 (1219)	60 (1524)
A	69 (1753)	81 (2057)	93 (2362)
B	58 (1473)	70 (1778)	82 (2082)
C	48 (1219)	60 (1524)	72 (1829)
D	59 (1499)	71 (1803)	83 (2108)
E	71.5 (1816)	83.5 (2121)	95.5 (2425)
F	53.25 (1352)	65.25 (1657)	77.25 (1962)

**Air Differential Seal (Double Door units only)** – provided on the non-operating end of the sterilizer, prevents passage of vermin from nonsterile area to the sterile area.

**Eighteen-Cycle Capability** – provides an additional 12 cycles to the control system memory, for a total of 18 cycles.

**3" Tri-Clamp Penetration** – permits insertion of temperature probes, such as thermocouples or resistive thermal devices (RTD), into the chamber. The assembly includes a stainless-steel threaded clamp, seal, and seat to accept a maximum of 12 customer-supplied probes.

**Integral Electric Steam Generator** – An optional 45 kW steam generator is available for this sterilizer. The generator is manufactured of carbon or stainless steel, and is positioned beneath the sterilizer. Additional floor space, either at the rear of the sterilizer (single door chamber), or at the side (double door chamber), is required. Additional utility requirements are also needed. Refer to the appropriate equipment drawings if an integral steam generator is required.

#### ACCESSORIES

**Seismic Tie-down Kit** – conforms to Title 24 California Code of Regulations, 1993 Amendment Section 2336(B).

**Material Handling Accessories** – include stainless-steel chamber tracks and stainless-steel loading cars with painted-steel carriages. Stainless-steel chamber rack and shelf are available for 36" (914mm) sterilizers. See separate product literature for details.

#### PREVENTIVE MAINTENANCE

A global network of skilled service specialists can provide periodic inspections, and adjustments to assure low-cost peak performance. STERIS representatives can provide information regarding Annual Maintenance Agreements.

#### NOTES

Refer to equipment drawing for full information.

1. The sterilizer is not supplied with a vacuum breaker or backflow preventer and, where required by local codes, installation of such a device in water line is by others.

2. Pipe sizes shown indicate terminal outlets only. Building service lines, provided by others, must supply the specified pressures and flow rates.

3. Disconnect switches (with OFF position lockout only, by others) should be installed in electric supply lines near the equipment.

4. Access to the recessing area from the control end of the sterilizer is recommended.

5. Clearances shown are minimal for installing and servicing the equipment.

6. Depending on the loading equipment used, additional clearance is required:

- If shelves are used, length of sterilizer plus 24" (610 mm) at each door
- If loading car and carriage will be used, twice the length of sterilizer at each door.

7. Floor drain should be provided within confines of sterilizer framework.

#### UTILITY REQUIREMENTS

**Drain (D)**  
2" ODT drain terminal (floor drain capacity must handle peak water consumption)

**ElectricControl (EC) Domestic**  
120 V, 1-phase, 60 Hz, 2 A

**ElectricControl (EC) International**  
230 V, 50 Hz, 1-phase, 1.5 A

**Electric Control, Vacuum Pump (VP) Domestic**  
480 V, 60 Hz, 3-phase, 3 A per phase, or 208/240 V, 60 Hz, 3-phase, 6 A per phase

**Electric Control, Vacuum Pump (VP) International**  
400 V, 50 Hz, 3-phase, 4 A per phase

**Steam (S)**  
Pressure – 50 to 80 psig (3.45 to 5.52 bar, dynamic), condensate free, and 97% to 100% vapor quality  
Consumption – 185 lbs/hr (84 kg/hour)  
Peak Flow – 335 lbs/hr (152 kg/hour)

Size – 1" NPT

**Sterilizer Feedwater (FW)**  
Pressure – 20 to 50 psig (1.38 to 3.45 bar), dynamic

Consumption – 130 gal/hr (495 L/hour)

Peak Flow – 15 gal/min (57 L/min)  
Size – 1" NPT

NOTE: Backflow prevention is by others; not supplied on unit.

... CHECK LOCAL CODES ...

# Histology/Cytology Lab

Room #P242

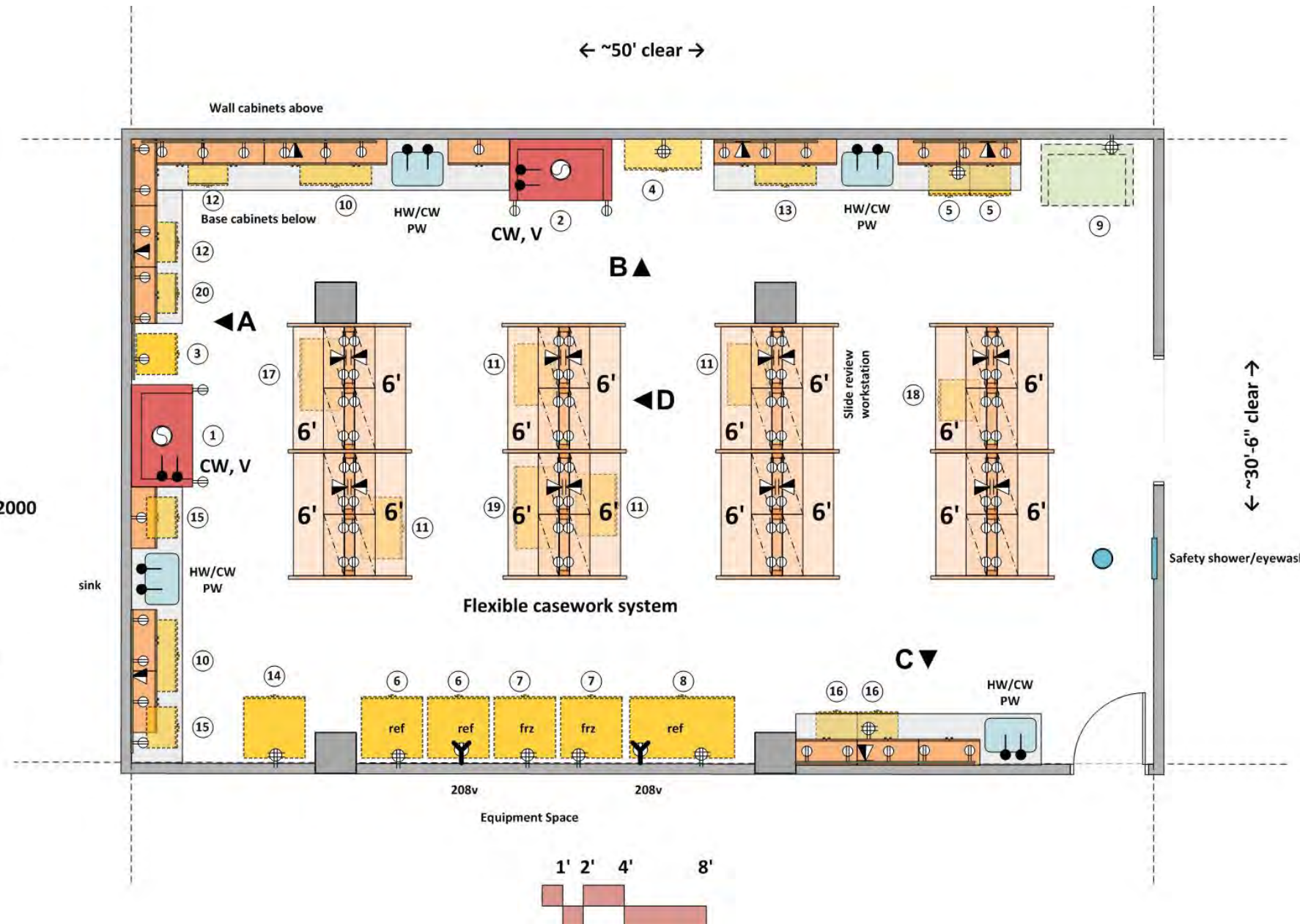
1,507 nsf

### Contractor Furnished Equipment:

1. EQ-1101: Chemical Fume Hood #1
2. EQ-1102: Chemical Fume Hood #2

### Owner Furnished Equipment:

3. EQ-1103: Oven
4. EQ-1104: Flammable Storage Cabinet
5. EQ-1105: undercounter ref (x2)
6. EQ-1106: Refrigerator (x2)
7. EQ-1107: Freezer (x2)
8. EQ-1108: Refrigerator Double
9. EQ-1109: Biological Safety Cabinet
10. EQ-1110: Stainer (x2) Tissue Tek DRS 2000
11. EQ-1111: Microtome (x4)
12. EQ-1112: Centrifuge (x2)
13. EQ-1113: Waterbath
14. EQ-1114: Benchmark XT
15. EQ-1115: Thin Prep 2000 (x2)
16. EQ-1116: undercounter freezer (x2)
17. EQ-1117: Tissue Tek TEC5
18. EQ-1118: Tissue Tek Glas
19. EQ-1119: Cassette labeler & printer
20. EQ-1120: Parafin bath



### ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' acoustic tile  
 Doors: 3<sup>6</sup>x8<sup>0</sup> with view window  
 Acoustic Attenuation: NC 40 or less

### MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 6 air changes per hour  
 Heat gain: 50 btuh/sf

### ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
 208v30a1ph  
 Dedicated circuits at equipment locations  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

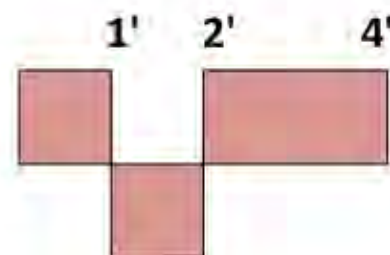
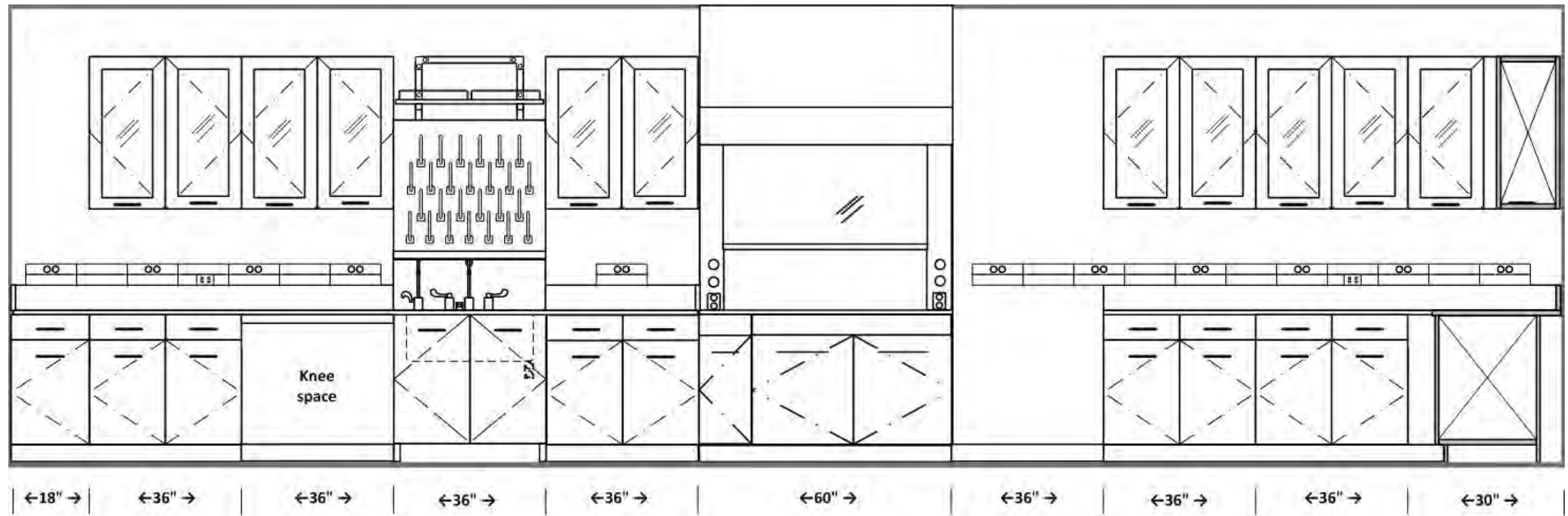
### PLUMBING

Hot/Cold water (HW/CW) at sinks  
 pure water at sinks

### CONTRACTOR FURNISHED CASEWORK

Metal modular casework system  
 Stainless steel sinks  
 Faucets

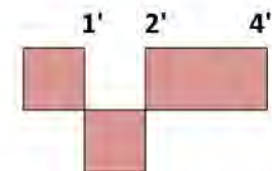
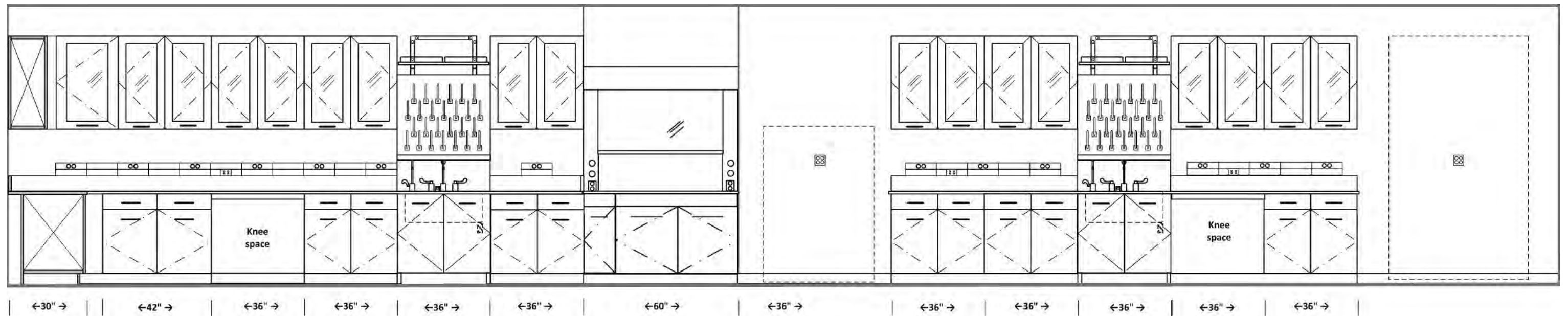
**Histology/Cytology Lab**  
**Room #P242**  
**Elevation A**



# Histology/Cytology Lab

Room #P242

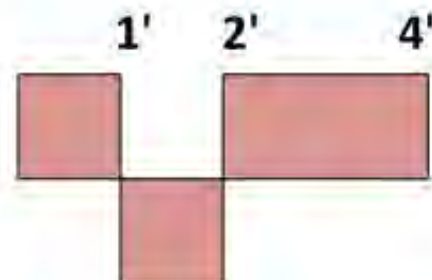
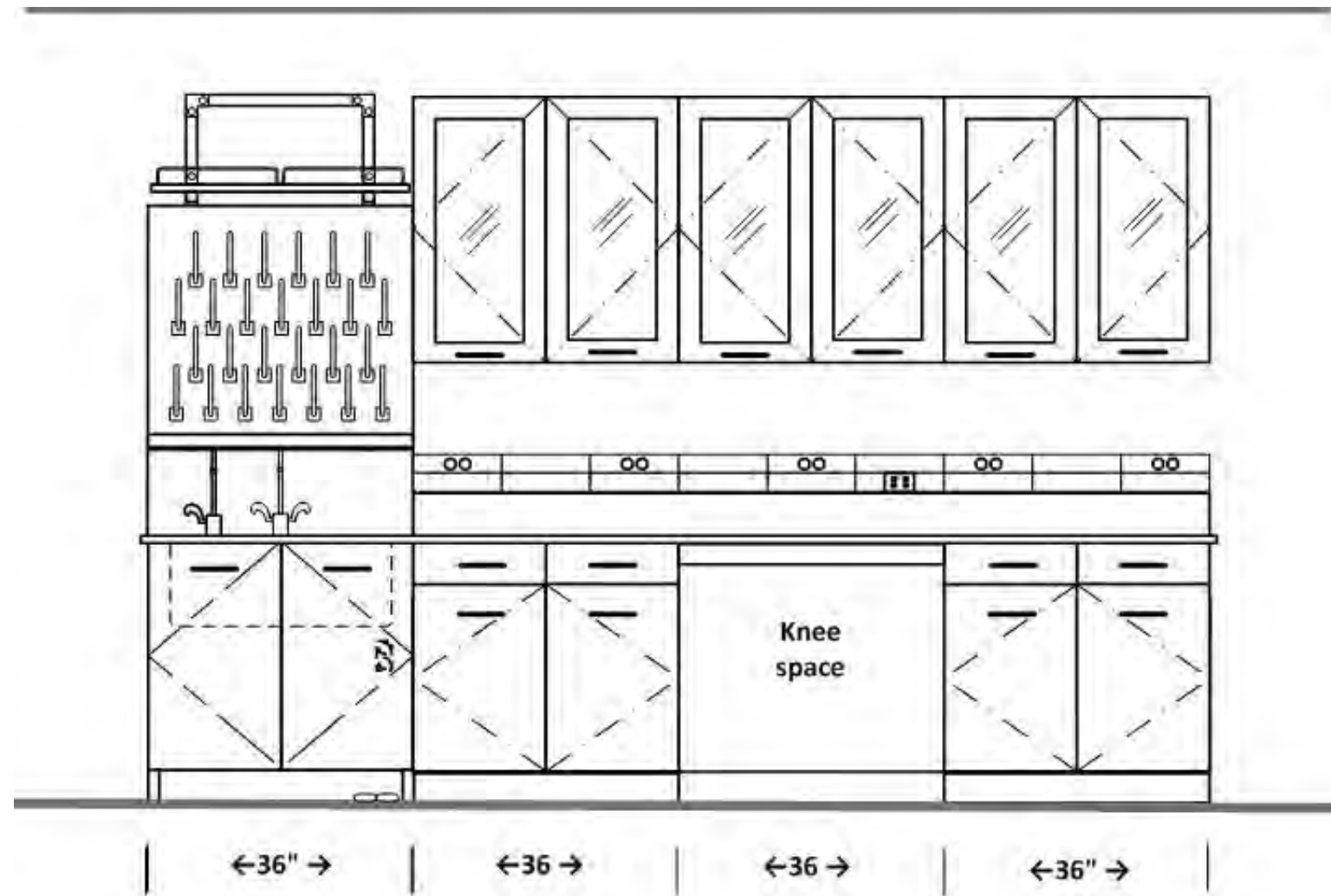
Elevation B



# Histology/Cytology Lab

Room #P242

Elevation C

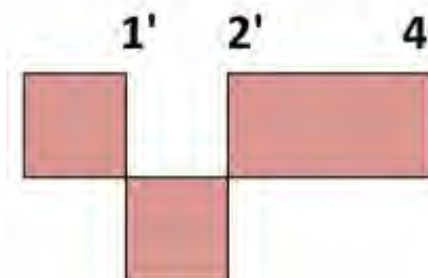
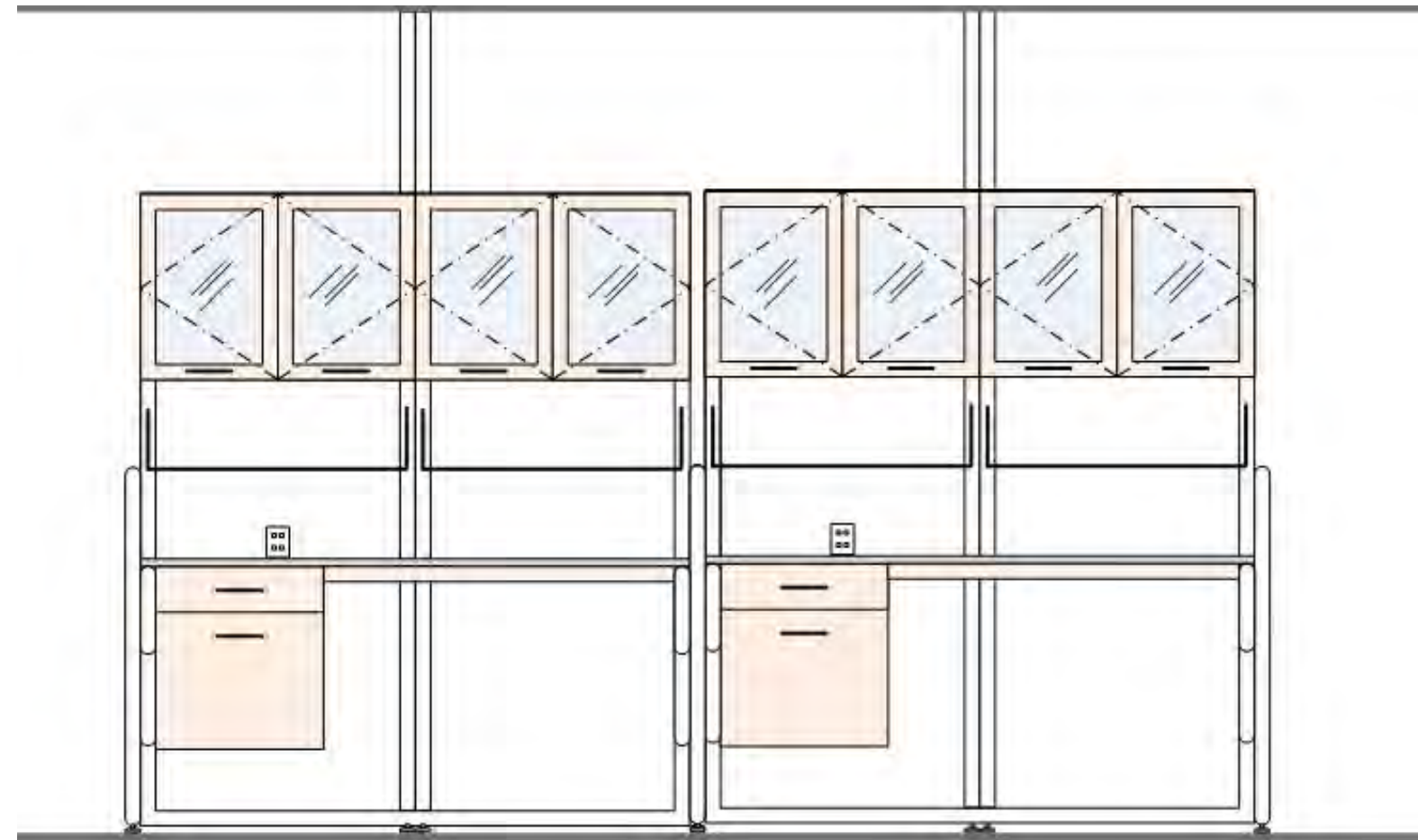




# Histology/Cytology Lab

Room #P242

Elevation D



# Equipment Schedule

Room/Area: **Histology/Cytology Lab- Room #P242**

Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
EQ-1101	Chemical Fume Hood		60"	39.2"	96"	460 lbs.	F	115v20a1ph prewired emer power	Cold Water Drain Vacuum Air- 30 psi preplumbed	600 c.f.m. exh. VAV		flammable and corrosive cabinets below	Contractor Furnished
EQ-1102													Contractor Installed
<b>Owner Furnished Equipment</b>													
EQ-1103	Oven		24"	24"	38"	~200 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1104	flammable storage cabinet		43"	18"	60"	~200 lb.	F						Owner Furnished Owner Installed
EQ-1105	undercounter refrigerator (x2)		~24"	~24"	~32"	~200 lbs.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1106	Refrigerator (x2) Helmer #125	E-241A	29.5"	32.5"	79.75"	510 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1107	Freezer (x2) -20 deg C		29.5"	38.5"	80"	475 lbs.	F	208v60hz1ph standby power					Owner Furnished Owner Installed
EQ-1108	Refrigerator double wide		59"	36"	80"	790 lbs.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1109	Biological Safety Cabinet Class II Type A2		53"	30"	84"	~300 lbs.	F	115v20a1ph standby power	vacuum			No exhaust	Owner Furnished Owner Installed
EQ-1110	Stainer (x2) Tissue Tek DRS 2000		45"	19"	26"	223 lb.	B	115v20a1ph standby power				locate near sink	Owner Furnished Owner Installed
EQ-1111	Microtome		~48"	~24"	~18"	~50 lbs.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1112	Centrifuge		~24"	~24"	~12"	~30 lbs.	B	115v20a1ph standby power					Owner Furnished Owner Installed

# Equipment Schedule

## Histology/Cytology Lab- Room #P242

Room/Area: **Continued**

Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Owner Furnished Equipment</b>													
EQ-1113	Waterbath		~24"	~24"	~12"	~30 lbs.	B	115v20a1ph standby power				locate near sink	Owner Furnished Owner Installed
EQ-1114	Benchmark XT		35"	26"	60.25"	385 lb.	F	120v20a1ph standby power					Owner Furnished Owner Installed
EQ-1115	Thin Prep 2000		24"	15"	19.5"	41 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1116	undercounter freezer (x2)		~24"	~24"	~32"	~200 lbs.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1117	Tissue Tek TEC5		35.6"	25.3"	37.7"	41 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1118	Tissue Tek Glas		20"	25"	25"	152 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1119	Cassette Labeler & Printer		~48"	~18"	~18"	~100 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1120	parafin bath		15"	15"	24"	~50 lb.	B	115v20a1ph standby power					Owner Furnished Owner Installed

# Chemical Fume Hood Cut Sheet

## EQ-1101; EQ-1102

### Histology/Cytology Lab

## Protector® XStream® Laboratory Hoods



Protector XStream Laboratory Hood 984060 is shown with SpillStopper Work Surface 984900, Protector Acid Storage Cabinet 9901100 and Protector Standard Storage Cabinet 9900100. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models conform to the following regulations and standards:

- SEFA 1-2002
- NFPA 45-2000
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-1993
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)†

Equipped models feature:

- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. **Inlet tubing is not provided.**
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

All models require (not included):

- **Remote Blower.** See back pocket.
- **Ductwork.** See back pocket.
- **Work Surface.** See pages 92-95.
- **Base Cabinet or Stand.** See pages 96-106.

Optional accessories for on-site installation include:

- **Service Fixture Kits.** See page 107.
- **Electrical Duplex Kits.** See page 108.
- **Guardian Jr. and Digital Airflow Monitor Kits.** See page 108.
- **Distillation Grid Kits.** See page 110.
- **Sash Stop Kits.** See page 108.
- **Snuffer Fire Extinguishers.** See page 110.
- **Ceiling Enclosure and Rear Finish Panel Kits.** See page 109.

† U.S. Patent No. 6,461,233  
† pending

‡ Heights of switches, electrical receptacles and service fixtures meet requirements of ADA.

■ Exclusive Feature

All models feature:

- Modified bypass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep® airflow openings.
- Upper Dilution Air Supply\*
  - Glacier white, dry powder epoxy-coated steel exterior.
- Chemical-resistant, fiberglass-reinforced, composite panel liner and pre-set Rear Downflow Dual Baffle System® with flame spread less than 25 per ASTM E-84
- 3/16" thick tempered safety glass vertical-rising sash with epoxy-coated aluminum sash handle with large radius and perforations.\*

- Removable front and side panels and front and interior service access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, ADA-compliant light and blower switches for 115 volt, 60 Hz operation.
- Sash stop located at 18" sash opening position.
- Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on explosion-proof lighting and other sash configurations and for blower sizing assistance.

## Ordering Information

Protector® XStream® Laboratory Hoods

ASHRAE 110-95 tests show less than 0.05 ppm leak rate when tested at 4.0 fpm; at OSHA-approved 60, 80, and 100 fpm face velocity and sash positions of 18" and 28". To ensure performance at 60 fpm, Labconco engineers challenged the Protector XStream Hood at less

than ideal conditions such as 30 fpm cross drafts, modified ASHRAE test procedures and average face velocities lower than 60 fpm. Contact Labconco for a technical paper with complete ASHRAE test data.

### Total Exhaust CFM and Static Pressure @ 18" Sash Opening (60% open)

Nominal Width	100 fpm	s.p.	80 fpm	s.p.	60 fpm	s.p.	CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
4 feet	470	0.11"	380	0.07"	280	0.04"	190	\$760
5 feet	610	0.13"	490	0.08"	370	0.05"	240	\$960
6 feet	750	0.15"	600	0.10"	450	0.06"	300	\$1200
8 feet	1060	0.22"	850	0.08"	640	0.04"	420	\$1680

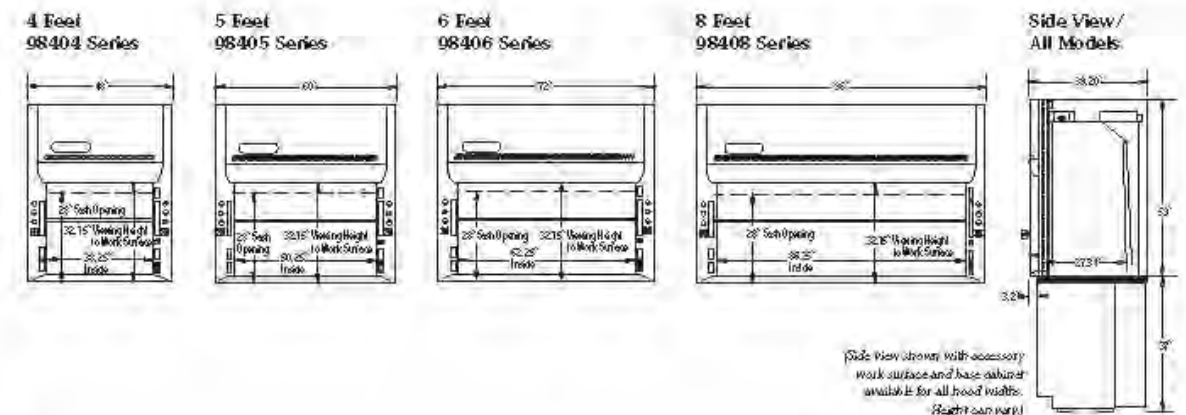
### Total Exhaust CFM and Static Pressure @ 28" Sash Opening (100% open)

Nominal Width	100 fpm	s.p.	80 fpm	s.p.	60 fpm	s.p.	CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
4 feet	730	0.25"	590	0.13"	440	0.08"	290	\$1160
5 feet	960	0.30"	770	0.19"	580	0.11"	380	\$1520
6 feet	1180	0.38"	940	0.23"	710	0.13"	470	\$1880
8 feet	1660	0.28"	1330	0.18"	1000	0.10"	660	\$2640

\*Based on average annual dollars per CFM usage of \$4.00, fume hood operating 24 hours a day and 5 days per week (6240 hours per year).

Catalog Number	Nominal Width	Electrical Requirements	Exterior Depth	Interior Working Depth	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Exhaust Collar(s)	Shipping Wt. lbs./kg
9840400	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	400/181
9840401	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	2	1	12.81" ID	400/181
9840402**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	400/181
9840403**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	2	None	12.81" ID	400/181
9840500	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	460/209
9840501	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	460/209
9840502**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	460/209
9840503**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	460/209
9840600	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	520/236
9840601	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	520/236
9840602**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	520/236
9840603**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	520/236
9840800	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	700/318
9840801	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	2	1	(2) 12.81" ID	700/318
9840802**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	700/318
9840803**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	2	None	(2) 12.81" ID	700/318

\*\*International electrical configuration



Side view shown with optional work surface and base cabinet available for all hood widths. Heights can vary.

**Oven Cut Sheet**  
**EQ-1103**  
**Histology/Cytology Lab**

**Pending**

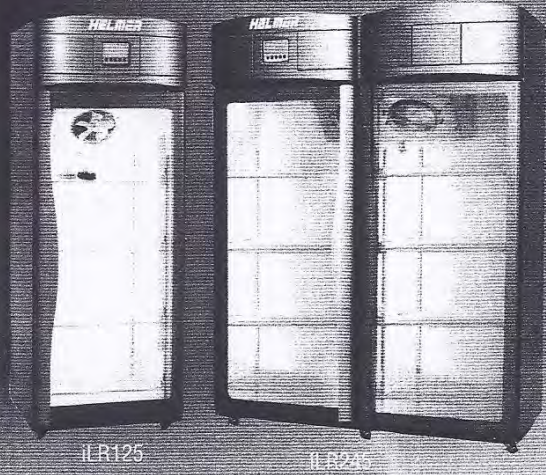
# Undercounter Ref. Cut Sheet

EQ-1105

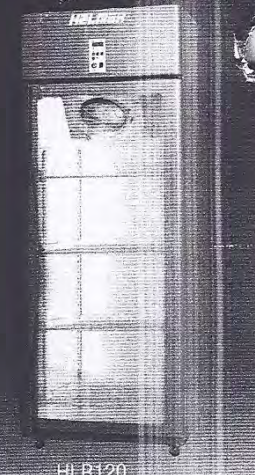
Histology/Cytology Lab

Pending

## LABORATORY REFRIGERATORS



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)



## Refrigerator Cut Sheet

EQ-1106; HLR 125

Histology/Cytology Lab- Model 125

### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 78.75" x 32.5" 75cm x 201cm x 83cm	29.5" x 78.75" x 38.5" 75cm x 201cm x 98cm	59.25" x 78.75" x 32.5" 151cm x 201cm x 83cm	59.25" x 78.75" x 38.5" 151cm x 201cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard




\*External transformers are not utilized

<sup>1</sup>Includes door handle, electrical panel, and evaporation tray

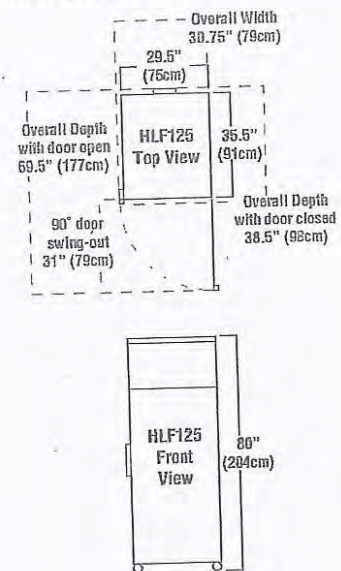
**FREEZERS  
LABORATORY - HORIZON SERIES™  
MODEL HLF125**

**Freezer Cut Sheet  
EQ-1107  
Histology/Cytology Lab**

**SPECIFICATIONS**

Temperature Range	-15°C to -30°C
Interior Dimensions (w x h x d)	24.75" x 58.25" x 30.25"
Exterior Dimensions (w x h x d)	29.5" x 80" x 35.5"
Overall Exterior Dimensions (w x h x d) Includes door handle, electrical panel, and evaporation tray	30.75" x 80" x 38.5"
Interior Volume	25.2 cu ft / 714 liters
Door	Solid galvanized steel with bacteria-resistant powder coating
Interior Configuration	4 Epoxy Coated Wire Shelves
Electrical	208 / 230V 60Hz 6 FLA NEMA 6-15 Plug 
Net Weight	475 lb
Clearance Requirements	Minimum of 8" above and 3" behind freezer for ventilation
Certified to applicable UL and CSA standards by a NRTL	

**FOOTPRINT**

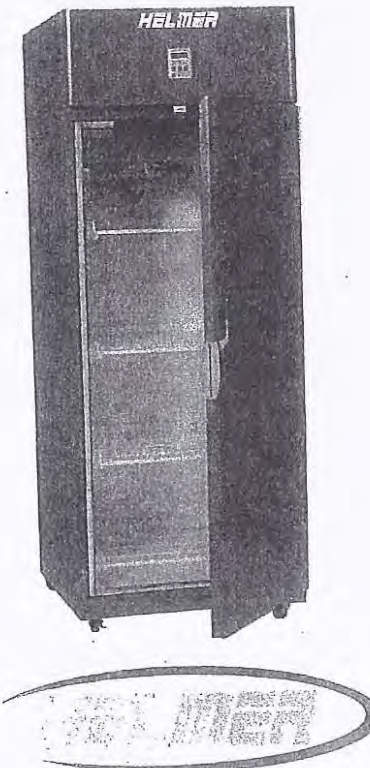


**FEATURES**

- Microprocessor-based temperature controller with:
  - Programmable operating temperature
  - Programmable high temperature alarm with visual and audible indicators
  - LED display of chamber temperature
- Bacteria-resistant powder coated interior and exterior
- Dual, swivel locking casters
- Key lock

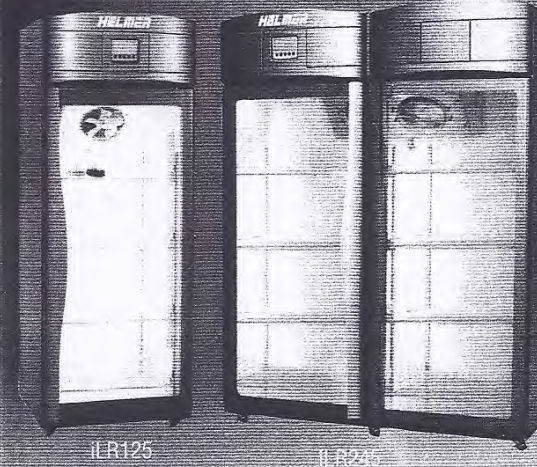
**WARRANTY**

- 3 Years Compressor
- 2 Years Parts
- 1 Year Labor



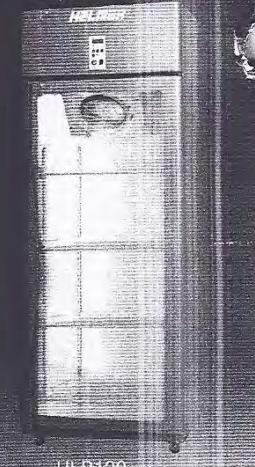


## LABORATORY REFRIGERATORS



iLR125

iLR245



HLR120

- Dual pane glass door(s).
- Four full shelves in single door models.  
Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

### LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

### LABORATORY REFRIGERATOR DIMENSIONS

i.Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 78.75" x 32.5" 75cm x 201cm x 83cm	29.5" x 78.75" x 38.5" 75cm x 201cm x 98cm	59.25" x 78.75" x 32.5" 151cm x 201cm x 83cm	59.25" x 78.75" x 38.5" 151cm x 201cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

## Refrigerator Cut Sheet

EQ-1108; HLR 256

Double wide

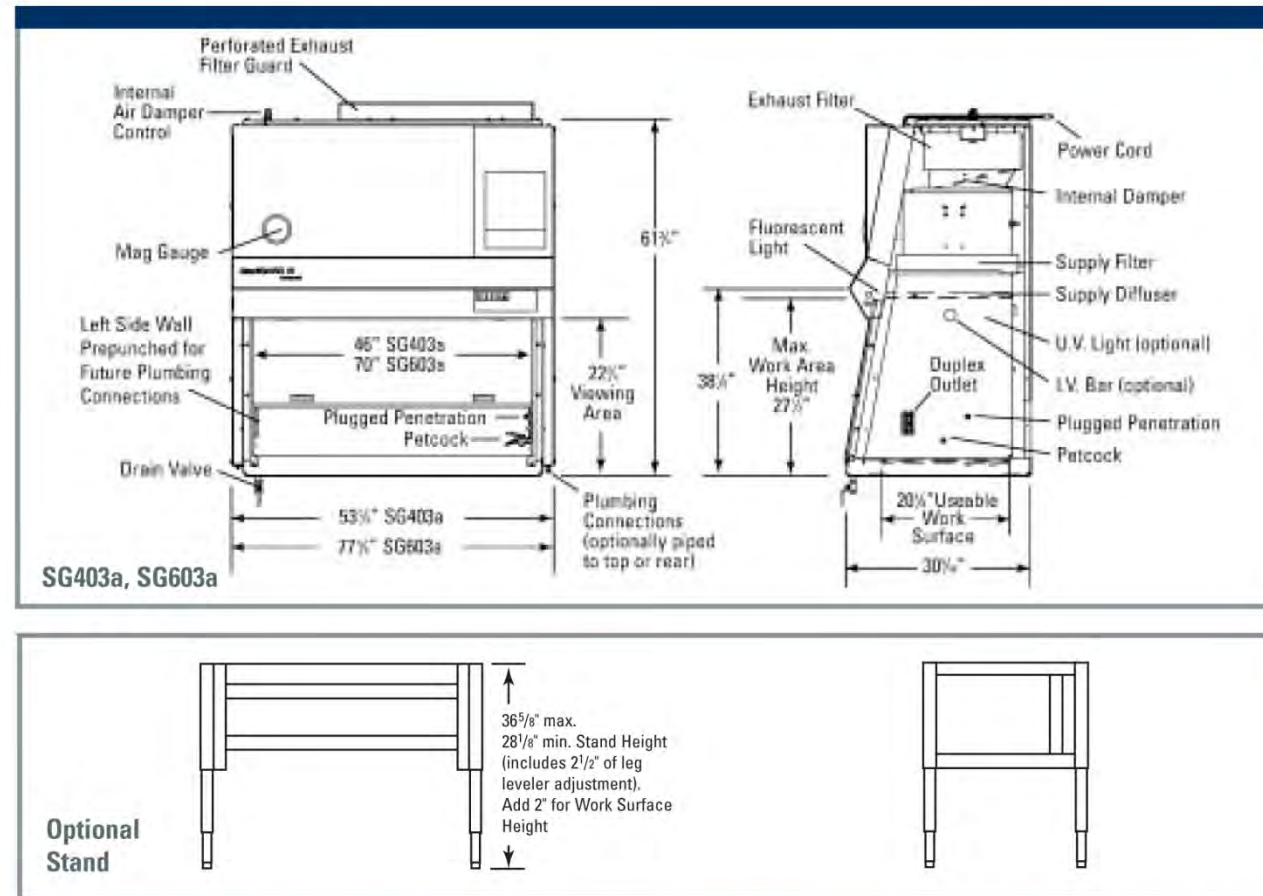
Histology/Cytology Lab

# Biological Safety Cabinet Cut Sheet

EQ-1109

Histology/Cytology Lab

Class II, Type A2, no external exhaust



**SterilGARD® III Advance®**  
**Model Number: SG403a, 4'**  
**SG603a, 6'**

**NSF Classification:**  
**Class II, Type A2**  
**Cabinet Type: Bench**  
**(Stand Optional)**

**Site Preparation**  
**Electrical System**

- 115V-1 Phase, 60 Hz.
- One 16' power cord with 20-amp plug, NEMA 5-20P.

- Unit is UL Listed as certified for electrical, fire and personal safety.
- Two ground-fault interrupt protected interior duplex receptacles at 5.0 (SG403a), 4.0 (SG603a) total amps, controlled by a self-resetting circuit breaker.

**Exhaust Requirement\*  
 SG403a**

- For an 8" opening: 269 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

- For a 10" opening: 335 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

**SG603a**

- For an 8" opening: 408 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.
- For a 10" opening: 510 CFM at .02" to .04" water column suction directly above the exhaust filter before any reductions, elbows or restrictions.

Amperage Chart				
Model	Blower Motor	Lighting Ballast	Duplex Receptacle	Total
SG403a	1625 RPM, 6.6 amps	0.8 amps	5.0 amps	12.4 amps
SG603a	1625 RPM, 9.9 amps	0.8 amps	4.0 amps	14.7 amps

\*The above exhausting requirements are basic, should the user wish to build their own connections. HEC and CEC are as noted in the chart on page 11.

# Stainer Cut Sheet

## EQ-1110

### Histology/Cytology Lab

## Specifications

### Power Required:

North America  
Model Number: 4929 115 VAC  $\pm$ 10%, 5.0 amps,  
60 Hz

Europe  
Model Number: 4930 220/240 VAC  $\pm$ 10%, 0.3 amps,  
50/60 Hz  
4931 220/240 VAC  $\pm$ 10%, 2.5 amps,  
50/60 Hz (with dryer)

### Dimensions:

Width– 115.0 cm (45 in.)  
Height– 66.0 cm (26 in.)  
Depth– 49.0 cm (19 in.)

### Weight:

101 kgs (223 lbs)

### Operating Conditions:

Temperature – 10° C to 40° C (50° F to 104° F)  
Relative Humidity – 30% to 85% (noncondensing)  
Atmospheric Pressure – 70 to 106 KPa  
(10.15 to 15.37 psi)

### Capacity/Fill Volumes:

Solution Reservoirs (total) – (26)  
Wash Reservoirs – (5)  
Dryer Stations – (1)  
Fill level/solution reservoirs – 620 - 650 mL

### Batch Operation:

Up to 40 glass slides in two baskets  
(2 baskets = 1 basket set)

### Continuous Operation:

Basket sets can be continually loaded on demand as the start station(s) are available for loading.

### Programs/Methods:

Up to 20 programs can be stored in memory  
Up to 50 steps can be programmed for each method

### Solution Names:

Up to 100 solution names can be stored in memory

### Staining Method Names:

Up to 50 staining method names can be stored in memory

### Facilities:

**Water Supply:** Tap water

**Water Pressure:**

Dynamic Pressure: 0.098 to 0.441 MPa  
(approx 1.0 to 4.5 kgf/ cm<sup>2</sup>)

Max. Static Pressure: 0.833 MPa  
(8.5 kgf/ cm<sup>2</sup>)

**Water Temperature:**

Less than 30°C (86° F) [not freezing]

**Drain Type:**

Method – Gravity drain

Capacity – More than 15 liters (3.96 gal)/minute

### Safety Standards:

Complies with: UL 3101-1, 1st ed.

CAN/CSA-C22.2 No. 1010.1-92

EN 61010-1:93- A1:92 + A2:95

European standards for CE Marking.

## 2.0 BENCHMARK XT COMPONENTS

BenchMark XT is a modular system, meaning that it has several subassemblies, each with a specific task. These subassemblies are identified and described in this section.

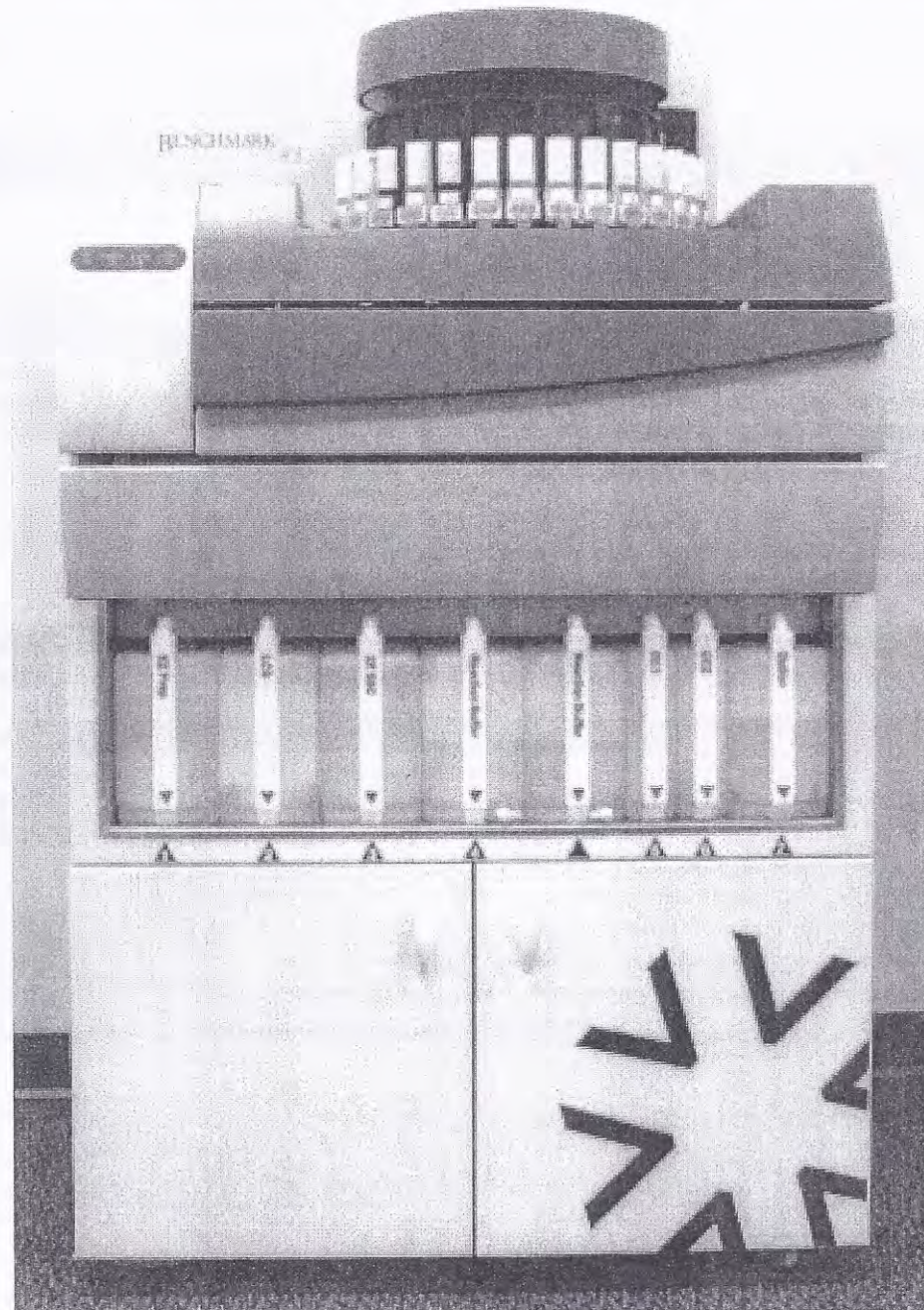


Figure 5. BenchMark XT

## 13.0 SPECIFICATIONS AND SETUP

Physical Characteristics:	Stainer Assembly		
Size (W x D x H):	35" x 26" x 60.25" (88.9 x 66.0 x 153.0 cm)		
Weight	385 lbs (175 kg)		
Clearances	Top 15" (38.1 cm) Sides 4" (10.2cm) Rear 6" (15.2 cm)		
Electrical Characteristics:	U.S. (SM 750-700)	Japan (SM 750-700)	Europe (SM 750-700)
Voltage	120 VAC ±10%	100 VAC ±10%	230 VAC ±10%
Current	6 Amps	6 Amps	4 Amps
Frequency	60 Hz.	50/60 Hz.	50 Hz.
Power Connection	Cord suited to country. For U.S., standard 3-prong grounded.		
Environmental Requirements:			
Heat Output	400 BTU/Hr idle, 1000 BTU/Hr running		
Room Temperature	20° C to 32° C (68° F to 90° F) {Note: The instrument may be unable to maintain proper reaction temperature if laboratory ambient temperature exceeds the specified temperature range.}		
Humidity	10% to 90%, non-condensing		
Location	Flat, level surface. No direct sunlight or drafts. Remove from sources of direct heat and moisture. Maximum altitude 6000' (1828m) above sea level. For indoor use only. Do not position the instrument so that it is difficult to remove the main plug from the power outlet.		
Temperature Control:			
ThermoPad	37° C to 100° C ± 2.0° C		
Temperature Range			
General Characteristics:			
Capability	IHC and ISH slide processing		
Slide Tray	1-30 slides with independent temperature control for each position.		
Reagent Carousel	35 reagent positions		
Slides	25 x 75 mm, 1 x 3 inches or 26 x 76 mm Superfrost Plus		
Modularity	1-8 BenchMark XT systems may be controlled from one PC system.		
Water Quality	NCCLS Type II water or equivalent (referred to as deionized water).		
Bulk Reagents	Up to seven different bulk reagents in 3- to 6-liter on-board containers.		
Configurations	Floor mounted using waste subassembly with 20-liter waste bottle.		
Certifications	CSA, CE (pending) and Y2K compliant.		

SECTION  
**B**

**THINPREP PROCESSOR SPECIFICATIONS**

	<b>ThinPrep Processor</b>	<b>Waste Bottle</b>
<b>Dimensions</b>	W = 18" / 46 cm	W = 6" / 15 cm
	H = 19.5" / 50 cm	H = 17" / 43 cm
	D = 15" / 38 cm	D = 6" / 15 cm
<b>Weight</b>	41 lbs (approx.)	
<b>Clearance</b>	Front = 0" / 0cm	Front = 1" / 3cm
	Rear = 3" / 8cm	Rear = 1" / 3cm
	Side(ea) = 3" / 8cm	Side(ea) = 1" / 3cm
	Top = 3" / 8cm	Top = 0" / 0cm
<b>Operating Temperature</b>	15 - 32°C	
	59 - 90°F	
<b>Operating Humidity</b>	20% - 90% RH	
	non-condensing	
<b>Electrical</b>	<b>Voltage</b> 100/120 VAC at 2 amps	
	220/240 VAC at 1 amp	
	<b>Frequency</b> 47- 63 Hz	
	<b>Power</b> Maximum 200 watts	

# Undercounter Freezer Cut Sheet

EQ-1116

Histology/Cytology Lab

Pending

**Tissue Tek TEC5 Cut Sheet**  
**EQ-1117**  
**Histology/Cytology Lab**

SPECIFICATIONS	EMBEDDING MODULE	CRYO MODULE
<b>Ambient Operating Temperature and Relative Humidity Range</b>	10° – 40° C  30% – 85% RH, (noncondensing)	10° – 40° C  30% – 85% RH (noncondensing)
<b>Dimensions/Weight</b>	Width 57.5 cm (22.6 in) Depth 64.2 cm (25.3 in) Height 37.7 cm (14.8 in)  Weight approx. 26 kgs (57 lbs)	Width 33.0 cm (13.0 in) Depth 61.7 cm (24.3 in) Height 37.7 cm (14.8 in)  Weight approx. 22 kgs (48 lbs)
<b>Power Required</b>	<b>Model No. 5238:</b> 100 VAC ±10% or less, @ 9.0 amps 50/60 Hz <b>Model Nos. 5100, 5235:</b> 115 VAC ±10% or less, @ 9.0 amps 60 Hz <b>Model Nos. 5229, 5232:</b> 220 – 240 VAC ±10% or less, @ 9.0 amps 50 Hz	100 VAC ±10% or less, @ 2.0 amps 50/60 Hz  115 VAC ±10% or less, @ 2.0 amps 60 Hz  220 – 240 VAC ±10% or less, @ 2.0 amps 50 Hz
<b>Chamber Capacity</b>	Paraffin Chamber: approx. 4 liters Left and Right Chambers: approx. 1.5 liters	(no chambers)
<b>Temperature Range Available</b>	Paraffin Chamber, Right and Left Chambers, Hot Plate: 50°C – 75°C Electric Forceps(optional):1 to 5	Cooling Plate: –10°C to 0°C
<b>Factory Set Temperature</b>	Paraffin Chamber, Left and Right Chambers, Hot Plate: 62°C Cold Spot: approx. 15°C at 25°C room temp. and 40% R.H. Electric Forceps(optional): 3	Cooling Plate: – 5°C
<b>Circuit Breaker/ON-OFF Switch</b>	15 amps	
<b>Memory Backup</b>	Long-life battery	
<b>Safety Standards</b>	Tested and listed by Intertek Testing Services (ITS) Complies with: UL 3101-1, 1st ed., IEC 1010-1 and CAN/CSA-C22.2 No. 1010.1-92	

# Tissue Tek Glas Cut Sheet

EQ-1118

Histology/Cytology Lab

## Specifications

### Power Supply Requirements

Model 6400 & 6409

Rated Voltage and Current:

AC 115V  $\pm$ 10%, (50/60Hz), 1.7 Amps

Grounding System: Class D or higher in rating

Model 6410

Rated Voltage and Current:

AC 220/230/240V  $\pm$ 10%, (50/60Hz), 0.85 Amps

### Circuit Breaker Rating

Model 6400: 5.0 Amps

### Safety Standards

Tested and listed by Intertek Testing Services (ITS)

Complies with: (UL-61010-A), CSA 22-2,

No. 1010.1-92

### Dimensions

Centimeters: 51(W) x 63(D) x 64(H)

Inches: 20(W) x 25(D) x 25(H)

### Instrument Weight

69 kg (152 lbs)

### Operating Conditions

Operational Temperature: 10°C to 40°C (50°F to 104°F)

Relative Humidity: 30-85% (non-condensing)

Atmospheric Pressure: 80kPa – 106kPa

Protect from direct sunlight

### Processing Speed

Maximum throughput: 400 slides/hour

60 slides/batch

### Acceptable Dimensions for Slides

Dimensions: 25 mm (W) x 75 mm (L) (1 x 3 inches)

Thickness: 0.95 – 1.05 mm

### Acceptable Dimensions for Coverglass

Dimensions: 24 x 40, 24 x 50, 24 x 55, 24 x 60

Thickness: 0.13 – 0.17 mm

### Compatible Solvent

Xylene

D-Limonene-based substitutes

Aliphatic-Hydrocarbon-based substitutes

### Compatible Mounting Medium

Xylene-based mounting medium

D-Limonene-based mounting medium

Aliphatic-Hydrocarbon-based mounting medium

**CAUTION: Do not use toluene or toluene-based chemicals, as these chemicals will damage the instrument.**



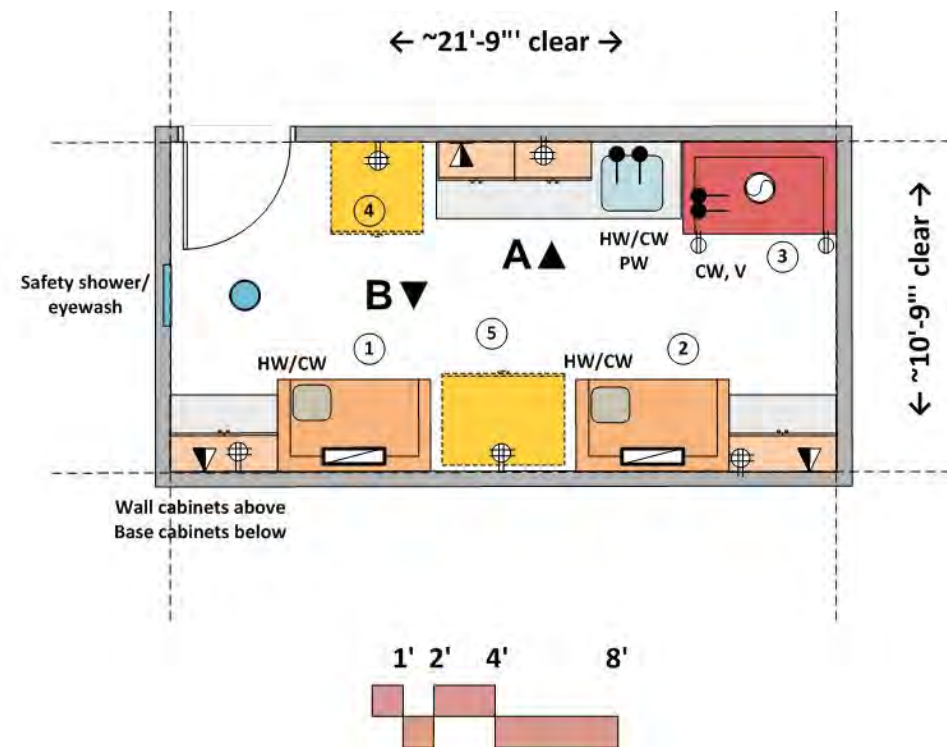
# Gross Pathology Lab

Room #P241

238 nsf

- Contractor Furnished Equipment:**
1. EQ-1201: Grossing Station #1
  2. EQ-1201: Grossing Station #2
  3. EQ-1203: Chemical Fume Hood

- Owner Furnished Equipment:**
4. EQ-1204: Refrigerator
  5. EQ-1205: Camera



## ARCHITECTURAL

Occupancy: B  
Floor: sheet rubber  
Walls: gypsum board and enamel paint  
Ceiling: 9' mylar acoustic tile  
Doors: 3<sup>6</sup>x8<sup>0</sup> with view window  
Acoustic Attenuation: NC 40 or less

## MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
100% exhaust  
6 air changes per hour  
Heat gain: 25 btuh/sf

## ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
Data  
Dedicated circuits at floor equipment spaces  
Lighting: indirect fluorescent @ 60 f.c.

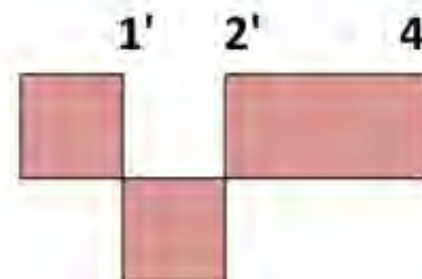
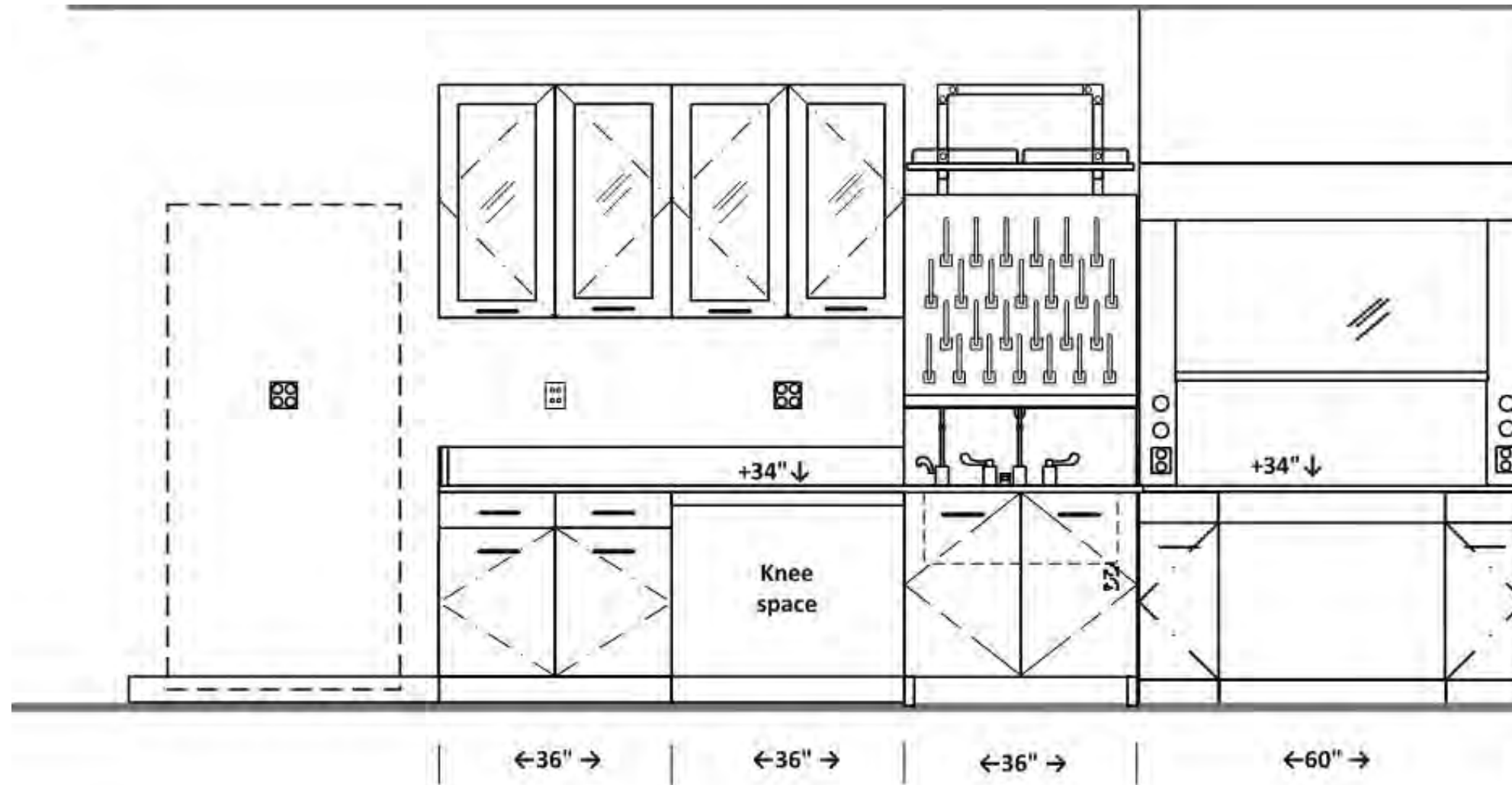
## PLUMBING

Hot/Cold water (HW/CW) at sinks  
pure water at sinks  
Hot/Cold water (HW/CW) at grossing stations

## CONTRACTOR FURNISHED CASEWORK

metal casework  
phenolic resin tops  
epoxy resin sinks  
Faucets

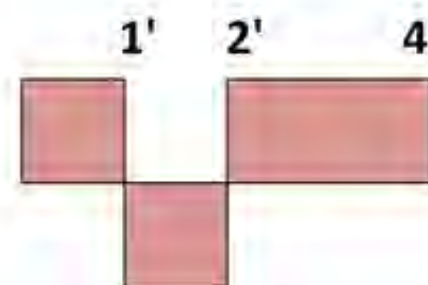
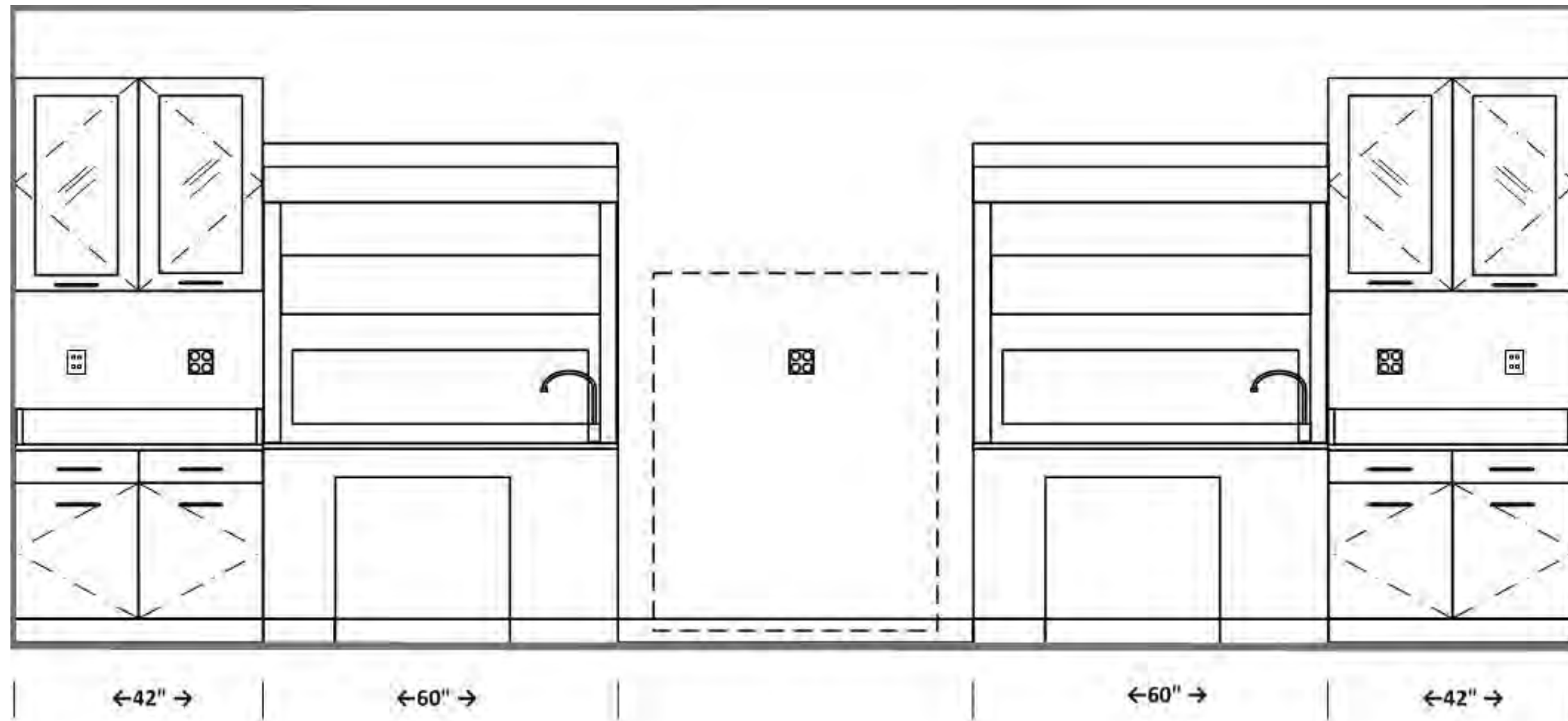
**Gross Pathology Lab**  
**Room #P241**  
**Elevation A**



# Gross Pathology Lab

Room #P241

Elevation B



# Equipment Schedule

Room/Area: <b>Gross Pathology- Room #P241</b>													
Equipment Number	Name/Model/Manufacturer	Existing Room Number	Width	Depth	Height	Weight	Floor (F) Benchtop (B) Wall (W)	Electrical	Plumbing	Mechanical	Structural Detail	Remarks	Responsibility
<b>Contractor Furnished Equipment</b>													
EQ-1201	Grossing Station #1	New	60"	30"	84"	~400 lbs.	F	115v20a1ph prewired emer power	Hot/Cold Water Drain Vacuum preplumbed	600 c.f.m. exh. VAV			Contractor Furnished Contractor Installed
EQ-1202	Grossing Station #2	New	60"	30"	84"	~400 lbs.	F	115v20a1ph prewired emer power	Hot/Cold Water Drain Vacuum preplumbed	600 c.f.m. exh. VAV			Contractor Furnished Contractor Installed
EQ-1203	Chemical Fume Hood	New	60"	39.2"	96"	460 lbs.	F	115v20a1ph prewired emer power	Cold Water Drain Vacuum Air- 30 psi preplumbed	600 c.f.m. exh. VAV		flammable and corrosive cabinets below	Contractor Furnished Contractor Installed
<b>Owner Furnished Equipment</b>													
EQ-1204	Refrigerator Helmer #125	E-241A	29.5"	32.5"	79.75"	510 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed
EQ-1204	Camera		~48"	~30"	~60"	~200 lb.	F	115v20a1ph standby power					Owner Furnished Owner Installed

# Grossing Station Cut Sheet

## EQ-1201; EQ-1202

### Gross Pathology Lab

411 North Aerojet Avenue  
 Azusa, CA 91702  
 www.mortechmfg.com  
 Tel (800) 410-0100  
 (626) 334-1471  
 Fax (626) 334-1704

PATHOLOGY GROSSING STATIONS

**MORTECH**  
 MANUFACTURING INC.



Model GL105 Elevating Pathology Gross Station is our elite unit. All required features for any grossing procedure comes standard. We carry a complete listing of optional accessories to fulfill anyone's personal needs.

#### Standard Design Features

- All stainless steel construction of the entire work area and all exterior closure panels.
- Height adjustment from 32 in./81 cm. to 44 in./111 cm. via electro hydraulic mechanism
- Exhaust duct for connection to building ventilation system with adjustable bellows
- Large integral sink with mixing faucet
- Foot operated faucet control for hot and cold water
- Spray hose assembly with hand control
- 1/2 hp commercial disposal
- Dissecting area rinse to provide a constant flow of water to work area
- Top mounted fluorescent light fixture
- Halogen light mounted on a flexible arm
- Formalin container with spigot
- Stainless C-fold paper towel holder
- Magnetic instrument holder
- Polyethylene dissection board (Photo Blue)
- GFCI waterproof electrical receptacles

\* All measurements in inches/centimeters



## MODEL GL105 ELEVATING PATHOLOGY WORKSTATION

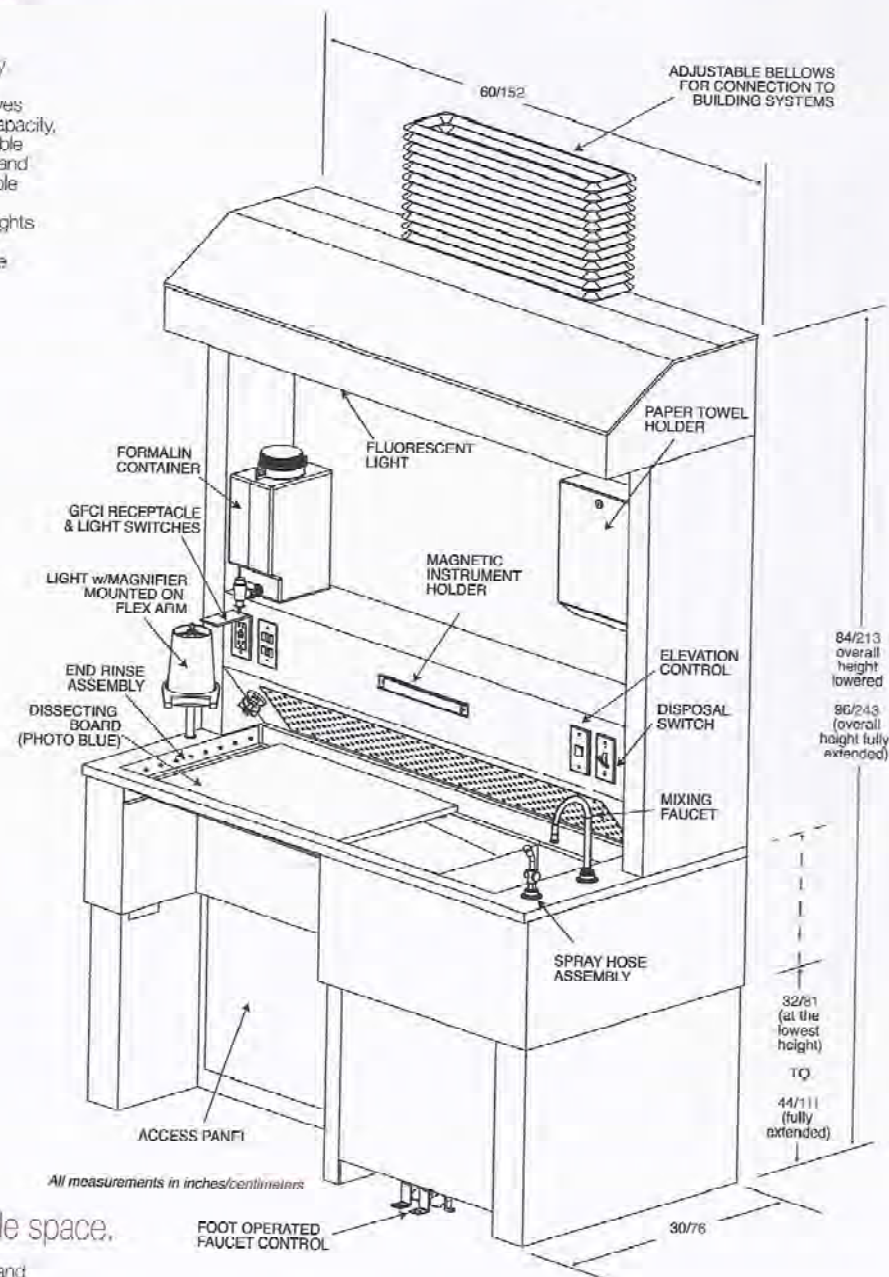
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 Tel (300) 410-0100 • (626) 334-1471 • Fax (626) 334-1704

7-04

## MODEL GL105 LAYOUT DRAWING & OPTIONAL FEATURES

### Optional Accessories

- Heavy-duty commercial disposal (3/4 hp, 1 hp, 2 hp)
- Self Contained Ventilation Assembly
- CO2 valves / oxygen valves / vacuum valves/compressed air valves
- Digital platform scale, 4 lbs./2 kg capacity, economy or premium grades available
- Computer monitor and keyboard stand premium or standard grades available
- CPU stand
- Flex arm halogen or incandescent lights
- Plexiglass splash shield
- Hands free controls for water feature and disposal
- Cassette holder
- Form holder
- Ventilated trash container
- Replacement filters Model GL 112
- Full plexiglass enclosure
- Camera mount facilities
- Video camera mount
- Removable measuring rule
- Dictation machine w/footswitch or voice operations
- Dictation equipment stand
- Microphone on flex arm
- Eyewash assembly
- Utility drawer
- Three side rinse
- Pull out writing platform
- Stainless steel shelving
- Formalin dispensing and/or collection system
- X-ray illuminators
- Glove box holder



Options based on available space.

When planning an order, please call us and we will assist you in determining which options to choose.

PATHOLOGY GROSSING STATIONS

7-05

# Fume Hood Cut Sheet

## EQ-1203

### Gross Pathology Lab

#### Protector® XStream® Laboratory Hoods



Protector XStream Laboratory Hood 9840600 is shown with SpillStopper Work Surface 9849000, Protector Acid Storage Cabinet 9901100 and Protector Standard Storage Cabinet 9900100. Blower, ductwork, work surface and base cabinets must be ordered separately.

All models conform to the following regulations and standards:

- SEFA 1-2002
- NFPA 45-2000
- ASTM E84-01
- ASHRAE 110-95
- ANSI Z9.5-1993
- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)†

Fixture models feature:

- Two pre-plumbed service fixtures with forged brass valves, lower right side with brass tubing for gas and lower left side with copper tubing for cold water. Components for converting either or both fixtures to air and vacuum are provided. **Inlet tubing is not provided.**
- One pre-wired 115 volt, 20 amp electrical duplex receptacle on lower right side.

All models require (not included):

- **Remote Blower.** See back pocket.
- **Ductwork.** See back pocket.
- **Work Surface.** See pages 92-95.
- **Base Cabinet or Stand.** See pages 96-106.

Optional accessories for on-site installation include:

- **Service Fixture Kits.** See page 107.
- **Electrical Duplex Kits.** See page 108.
- **Guardian Jr. and Digital Airflow Monitor Kits.** See page 108.
- **Distillation Grid Kits.** See page 110.
- **Sash Stop Kits.** See page 108.
- **Snuffer Fire Extinguishers.** See page 110.
- **Ceiling Enclosure and Rear Finish Panel Kits.** See page 109.

\* U.S. Patent No. 6,961,232

† pending

Ⓜ Heights of switches, electrical receptacle and service fixtures meet requirements of ADA.

Ⓜ Exclusive Fixture

- Removable front and side panels and front and interior service access panels for access to plumbing and electrical wiring.
- Pre-wired T8 fluorescent lighting, ADA-compliant light and blower switches for 115 volt, 60 Hz operation.
- Sash stop located at 18" sash opening position.
- Epoxy-coated stainless steel, 12.81" ID exhaust connection(s).

Contact Labconco at **800-821-5525** or **816-333-8811** for ordering information on explosion-proof lighting and other sash configurations and for blower sizing assistance.

All models feature:

- Modified by-pass airflow design.
- Ergonomic air foil with aerodynamic Clean-Sweep® airflow openings.
- Upper Dilution Air Supply\*.
- Glacier white, dry powder epoxy-coated steel exterior.
- Chemical-resistant, fiberglass-reinforced, composite panel liner and pre-set Rear Downflow Dual Baffle System\* with flame spread less than 25 per ASTM E-84
- 3/16" thick tempered safety glass vertical-rising sash with epoxy-coated aluminum sash handle with large radius and perforations.\*

#### Ordering Information

Protector® XStream® Laboratory Hoods

ASHRAE 110-95 tests show less than 0.05 ppm leak rate when tested at 4.0 fpm; at OSHA-approved 60, 80, and 100 fpm face velocity and sash positions of 18" and 28". To ensure performance at 60 fpm, Labconco engineers challenged the Protector XStream Hood at less

than ideal conditions such as 30 fpm cross drafts, modified ASHRAE test procedures and average face velocities lower than 60 fpm. Contact Labconco for a technical paper with complete ASHRAE test data.

#### Total Exhaust CFM and Static Pressure @ 18" Sash Opening (60% open)

Nominal Width	100 fpm		80 fpm		60 fpm		CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
	fpm	s.p.	fpm	s.p.	fpm	s.p.		
4 feet	470	0.11"	380	0.07"	280	0.04"	190	\$760
5 feet	610	0.13"	490	0.08"	370	0.05"	240	\$960
6 feet	750	0.15"	600	0.10"	450	0.06"	300	\$1200
8 feet	1060	0.12"	850	0.08"	640	0.04"	420	\$1680

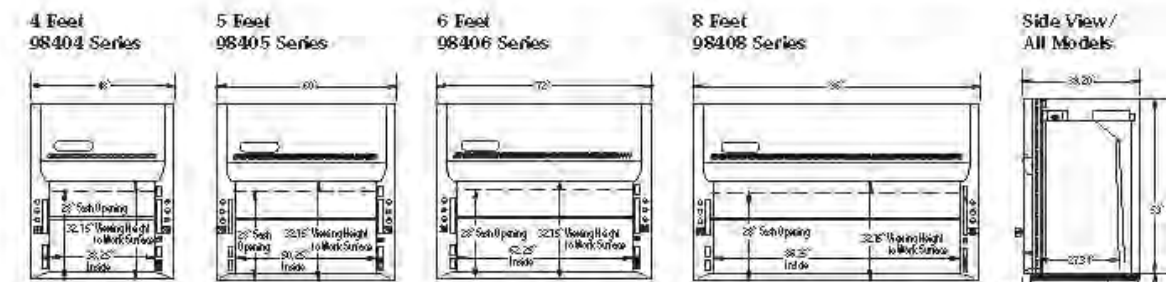
#### Total Exhaust CFM and Static Pressure @ 28" Sash Opening (100% open)

Nominal Width	100 fpm		80 fpm		60 fpm		CFM Savings at 60 fpm vs. 100 fpm	Total Average Annual Dollar Savings at 60 fpm vs. 100 fpm*
	fpm	s.p.	fpm	s.p.	fpm	s.p.		
4 feet	730	0.25"	590	0.13"	440	0.08"	290	\$1160
5 feet	960	0.30"	770	0.19"	580	0.11"	380	\$1520
6 feet	1180	0.38"	940	0.23"	710	0.13"	470	\$1880
8 feet	1660	0.28"	1330	0.18"	1000	0.10"	660	\$2640

\*Based on average annual dollar per CFM usage of \$4.00; fume hood operating 24 hours a day and 5 days per week (6240 hours per year).

Catalog Number	Nominal Width	Electrical Requirements	Exterior Depth	Interior Working Depth	Fluorescent Lamps	Service Fixtures	Electrical Duplex	Exhaust Collar(s)	Shipping Wt. lbs./kg
9840400	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	400/181
9840401	4 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 25 watt	2	1	12.81" ID	400/181
9840402**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	None	None	12.81" ID	400/181
9840403**	4 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 25 watt	2	None	12.81" ID	400/181
9840500	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	460/209
9840501	5 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	460/209
9840502**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	460/209
9840503**	5 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	460/209
9840600	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	520/236
9840601	6 feet	115 volts, 60 Hz	39.20"	27.3"	(2) 32 watt	2	1	12.81" ID	520/236
9840602**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	None	None	12.81" ID	520/236
9840603**	6 feet	230 volts, 50 Hz	39.20"	27.3"	(2) 32 watt	2	None	12.81" ID	520/236
9840800	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	700/318
9840801	8 feet	115 volts, 60 Hz	39.20"	27.3"	(4) 25 watt	2	1	(2) 12.81" ID	700/318
9840802**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	None	None	(2) 12.81" ID	700/318
9840803**	8 feet	230 volts, 50 Hz	39.20"	27.3"	(4) 25 watt	2	None	(2) 12.81" ID	700/318

\*\*International electrical configuration

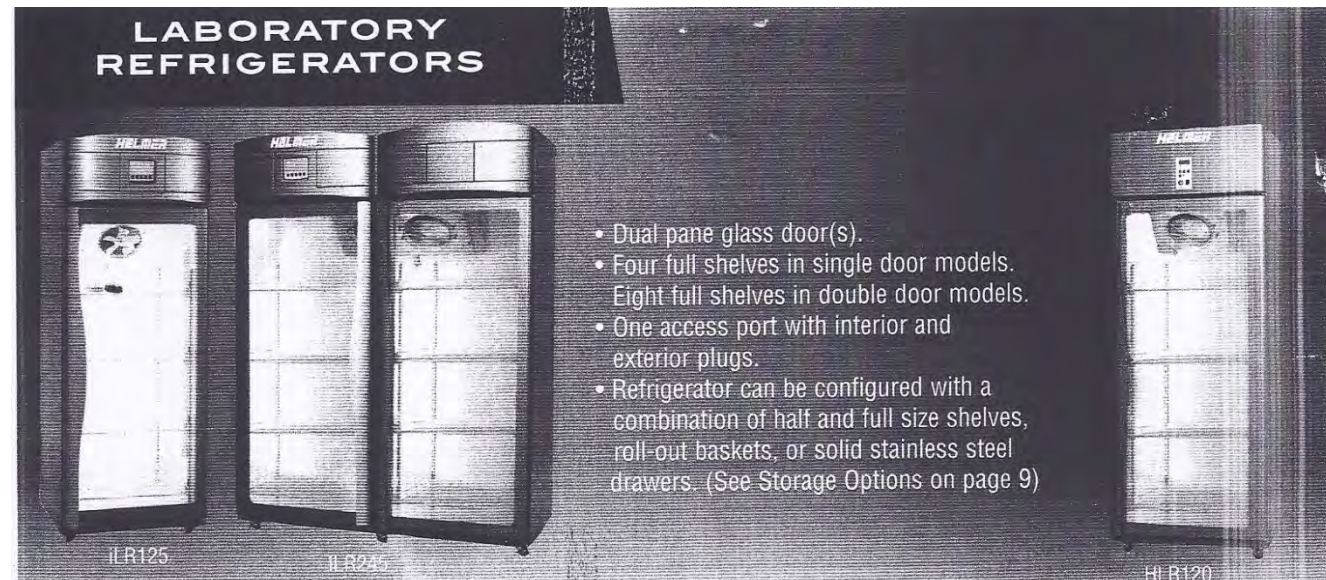


Side View shows with accessory work surface and base cabinet available for all hood widths. Height can vary.

# Refrigerator Cut Sheet

EQ-1204; HLR125

Gross Pathology Lab



- Dual pane glass door(s).
- Four full shelves in single door models. Eight full shelves in double door models.
- One access port with interior and exterior plugs.
- Refrigerator can be configured with a combination of half and full size shelves, roll-out baskets, or solid stainless steel drawers. (See Storage Options on page 9)

## LABORATORY REFRIGERATOR SPECIFICATIONS

Model	iLR120 / HLR120	iLR125 / HLR125	iLR245 / HLR245	iLR256 / HLR256
Doors	Single Dual-Pane Glass Door (Heated Glass Optional)		Double Dual-Pane Glass Doors (Heated Glass Optional)	
Interior Material	Bacteria-Resistant Powder Coated Galvannealed Steel			
Interior Volume	20.2 cu ft / 572 liter	25.2 cu ft / 714 liter	44.9 cu ft / 1271 liter	56 cu ft / 1586 liter
Casters	4 Dual, Swivel Locking		6 Dual, Swivel Locking	
Shelves	4 Full Size, Adjustable		8 Full Size, Adjustable	
Insulation	2" (5cm) Minimum Non-CFC Foamed Urethane			
Lights	Dual bulb, fluorescent			
Refrigeration	1/3 HP Air-Cooled, R134A Non-CFC		1/2 HP Air-Cooled, R134A Non-CFC	
Electrical*	115 Volt 60Hz 7.5 FLA 230 Volt 50Hz 4 FLA 230 Volt 60Hz 4 FLA		115 Volt 60Hz 11.5 FLA 230 Volt 50Hz 6 FLA 230 Volt 60Hz 6 FLA	

## LABORATORY REFRIGERATOR DIMENSIONS

i. Series	iLR120	iLR125	iLR245	iLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 79.75" x 29.5" 75cm x 203cm x 75cm	29.5" x 79.75" x 35.5" 75cm x 203cm x 91cm	59.25" x 79.75" x 29.5" 151cm x 203cm x 75cm	59.25" x 79.75" x 35.5" 151cm x 203cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 79.75" x 32.5" 75cm x 203cm x 83cm	29.5" x 79.75" x 38.5" 75cm x 203cm x 98cm	59.25" x 79.75" x 32.5" 151cm x 203cm x 83cm	59.25" x 79.75" x 38.5" 151cm x 203cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Horizon Series	HLR120	HLR125	HLR245	HLR256
Interior Dimensions (w x h x d)	24.75" x 58.25" x 24.25" 63cm x 148cm x 62cm	24.75" x 58.25" x 30.25" 63cm x 148cm x 77cm	55.0" x 58.25" x 24.25" 140cm x 148cm x 62cm	55.0" x 58.25" x 30.25" 140cm x 148cm x 77cm
Exterior Dimensions (w x h x d)	29.5" x 78.75" x 29.5" 75cm x 201cm x 75cm	29.5" x 78.75" x 35.5" 75cm x 201cm x 91cm	59.25" x 78.75" x 29.5" 151cm x 201cm x 75cm	59.25" x 78.75" x 35.5" 151cm x 201cm x 91cm
Overall Exterior Dimensions <sup>1</sup> (w x h x d)	29.5" x 78.75" x 32.5" 75cm x 201cm x 83cm	29.5" x 78.75" x 38.5" 75cm x 201cm x 98cm	59.25" x 78.75" x 32.5" 151cm x 201cm x 83cm	59.25" x 78.75" x 38.5" 151cm x 201cm x 98cm
Net Weight	465 lb / 211 kg	476 lb / 216 kg	692 lb / 314 kg	754 lb / 342 kg

Specifications subject to change  
Certified to UL and CSA standards by Entela  
Meets IEC 61010 Standard



\*External transformers are not utilized  
<sup>1</sup> Includes door handle, electrical panel, and evaporation tray

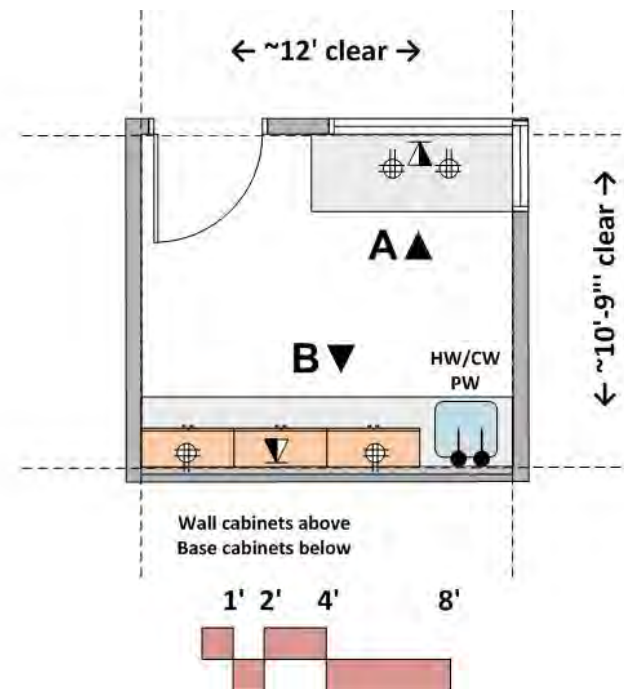
# Receiving

## Room #W-2310

129 nsf

**Contractor Furnished Equipment:**  
None

**Owner Furnished Equipment:**  
None identified to date



### ARCHITECTURAL

Occupancy: B  
 Floor: sheet rubber  
 Walls: gypsum board and enamel paint  
 Ceiling: 9' mylar acoustic tile  
 Doors: 3<sup>6</sup>x8<sup>0</sup> with view window  
 Acoustic Attenuation: NC 40 or less

### MECHANICAL

Temperature: 72 deg. F, +/- 2 deg. F  
 100% exhaust  
 6 air changes per hour  
 Heat gain: 25 btuh/sf

### ELECTRICAL

110v fourplex outlets (maximum of (2) fourplex per circuit)  
 Data  
 Lighting: indirect fluorescent @ 60 f.c.

### PLUMBING

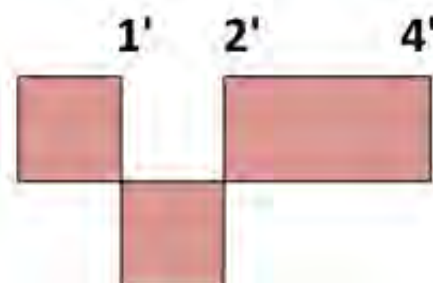
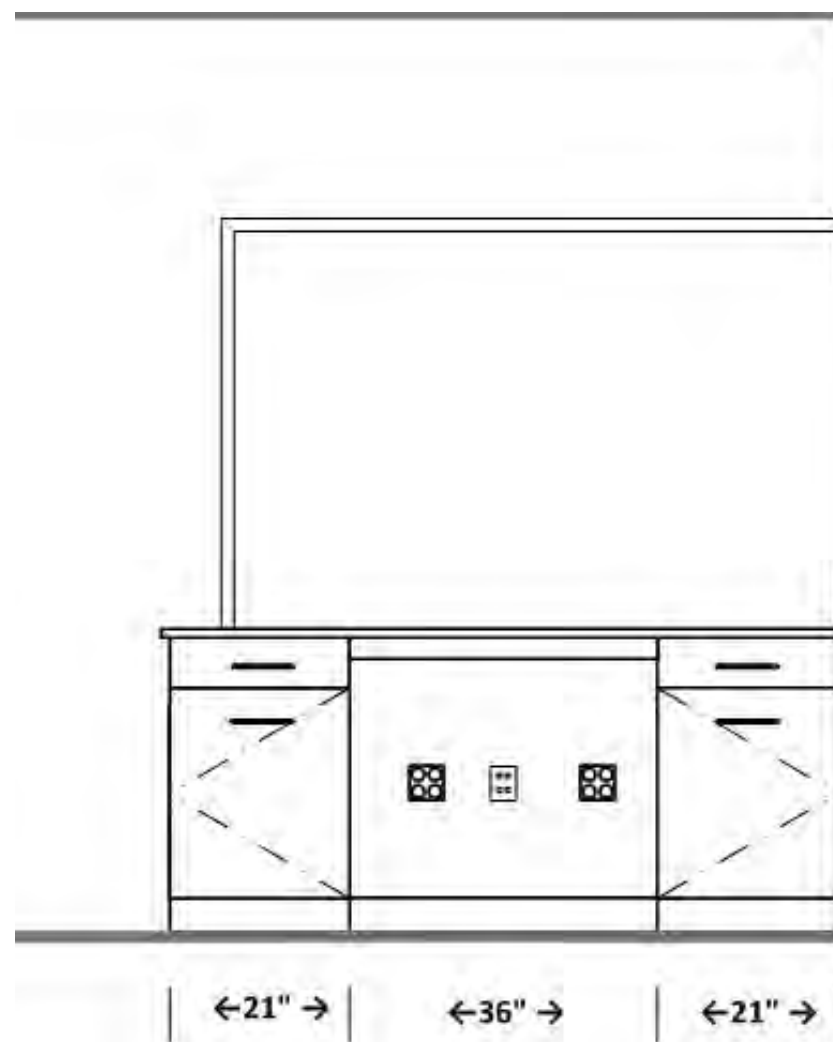
Hot/Cold water (HW/CW) at sinks  
 pure water at sinks  
 Hot/Cold water (HW/CW) at grossing stations

### CONTRACTOR FURNISHED CASEWORK

metal casework  
 phenolic resin tops  
 epoxy resin sinks  
 Faucets



**Receiving**  
**Room #W-2310**  
**Elevation A**



**Receiving**  
**Room #W-2310**  
**Elevation B**

