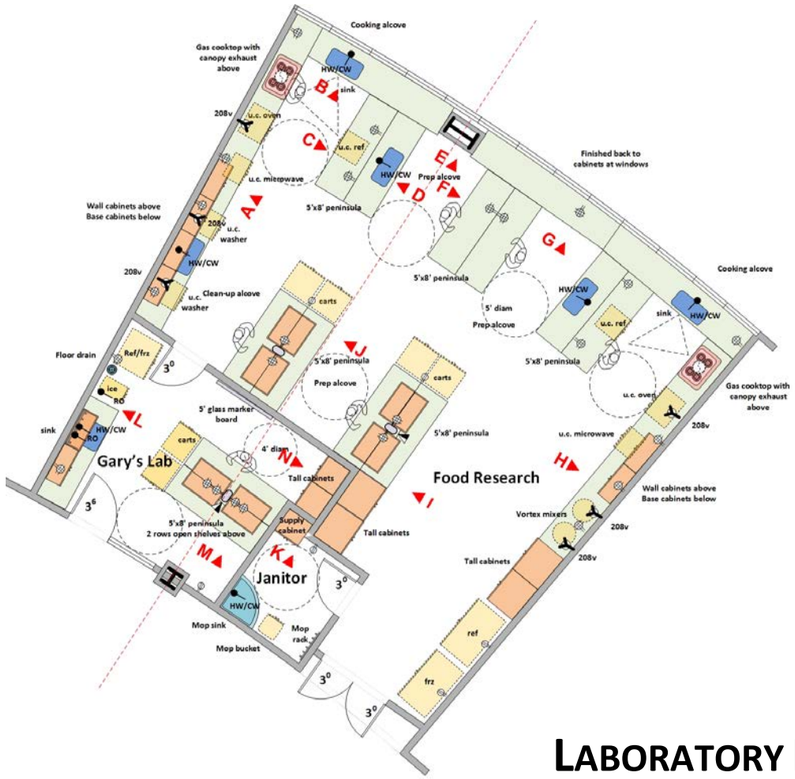
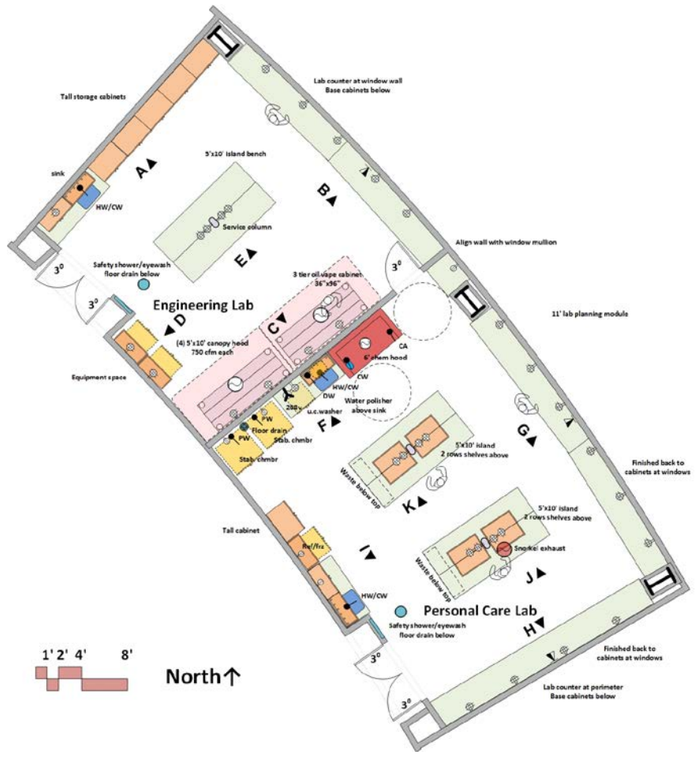




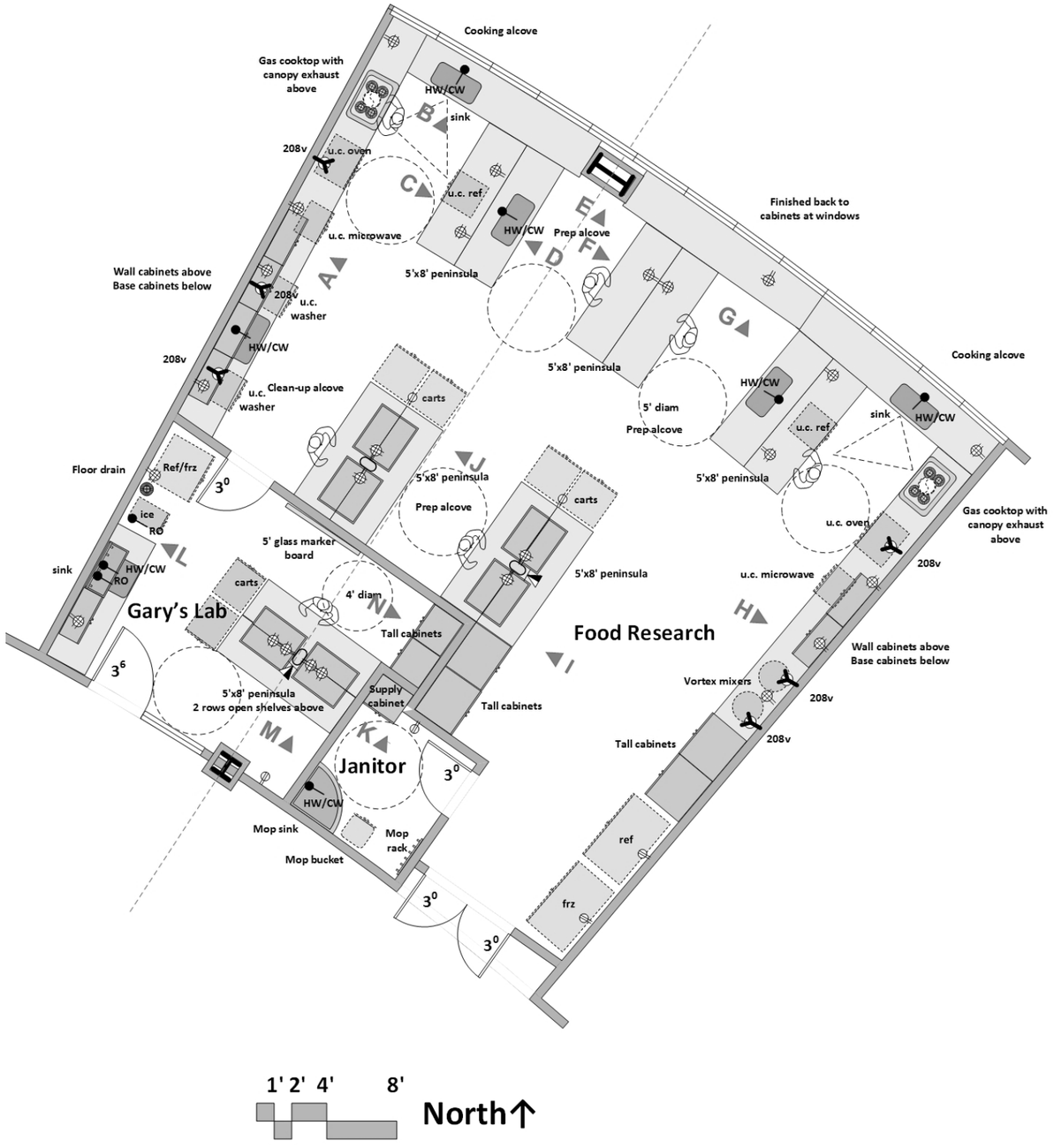
Laboratory Design
Young Living Essential Oils
Global Headquarters

Lehi, Utah

Design Development

Draft #5- 2018 Mar 30

Design for Science



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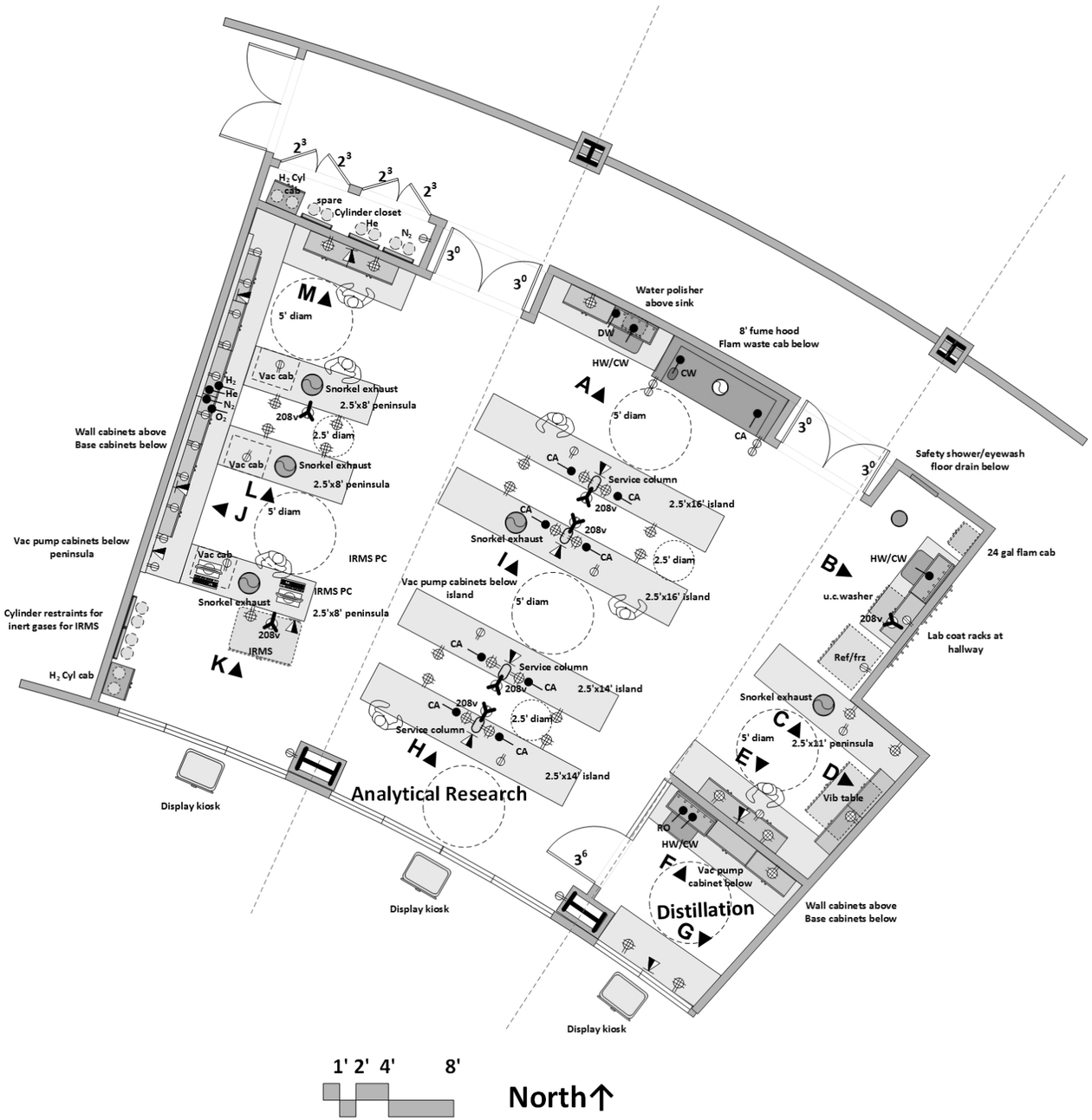


SUMMARY

This document provides the basis of design for the new analytical laboratories that will be in the new YLEO Global World Headquarters in Lehi, Utah. The laboratory design noted herein is based upon meetings held with YLEO science personnel on 2017 July 21, August 16, and September 08.

Additional comments received via to date via email have been incorporated into this document.

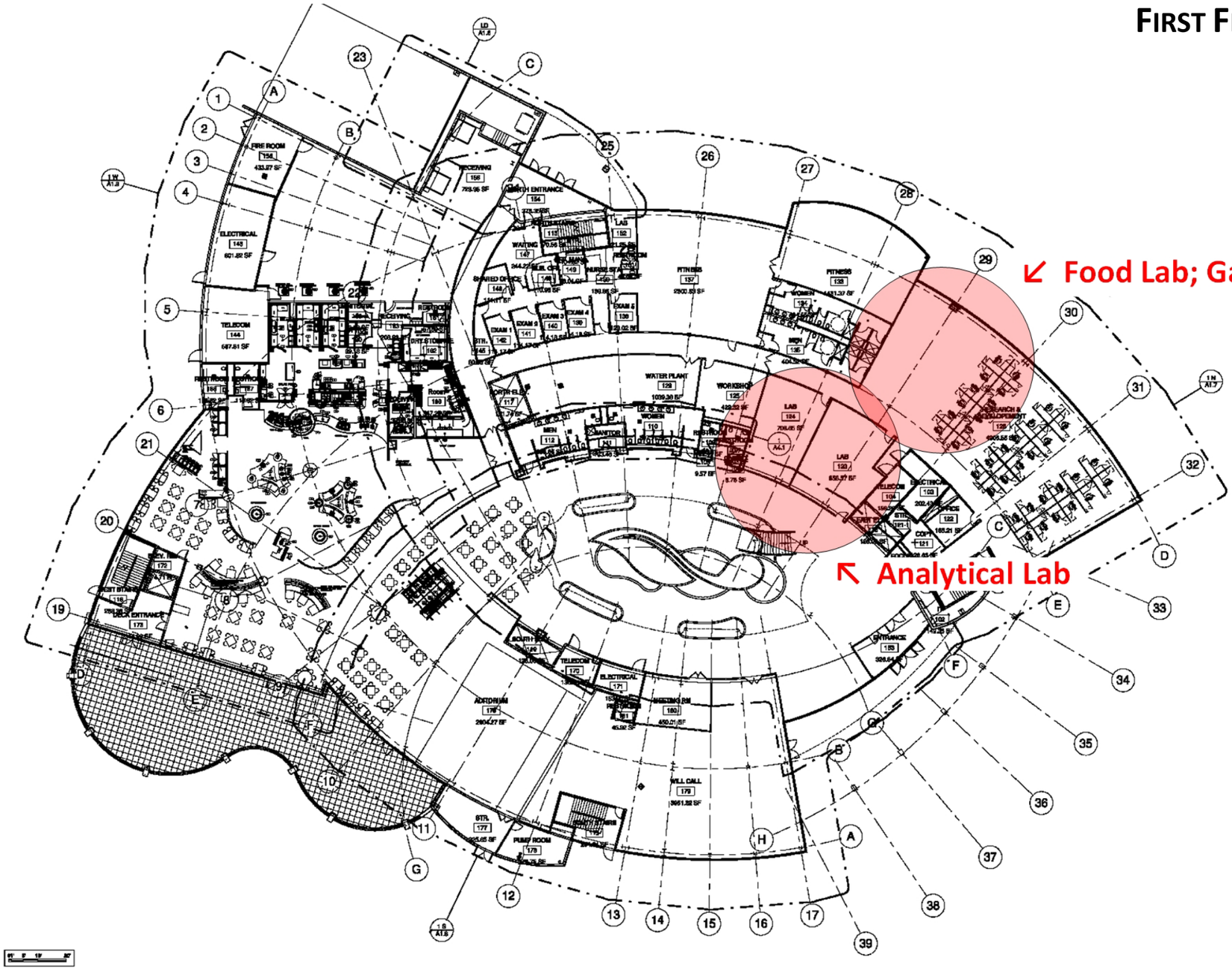
All electrical outlets and plumbing fittings have been noted.

All different lab elevations have been noted herein.

Typical interior lab elevations have been included.

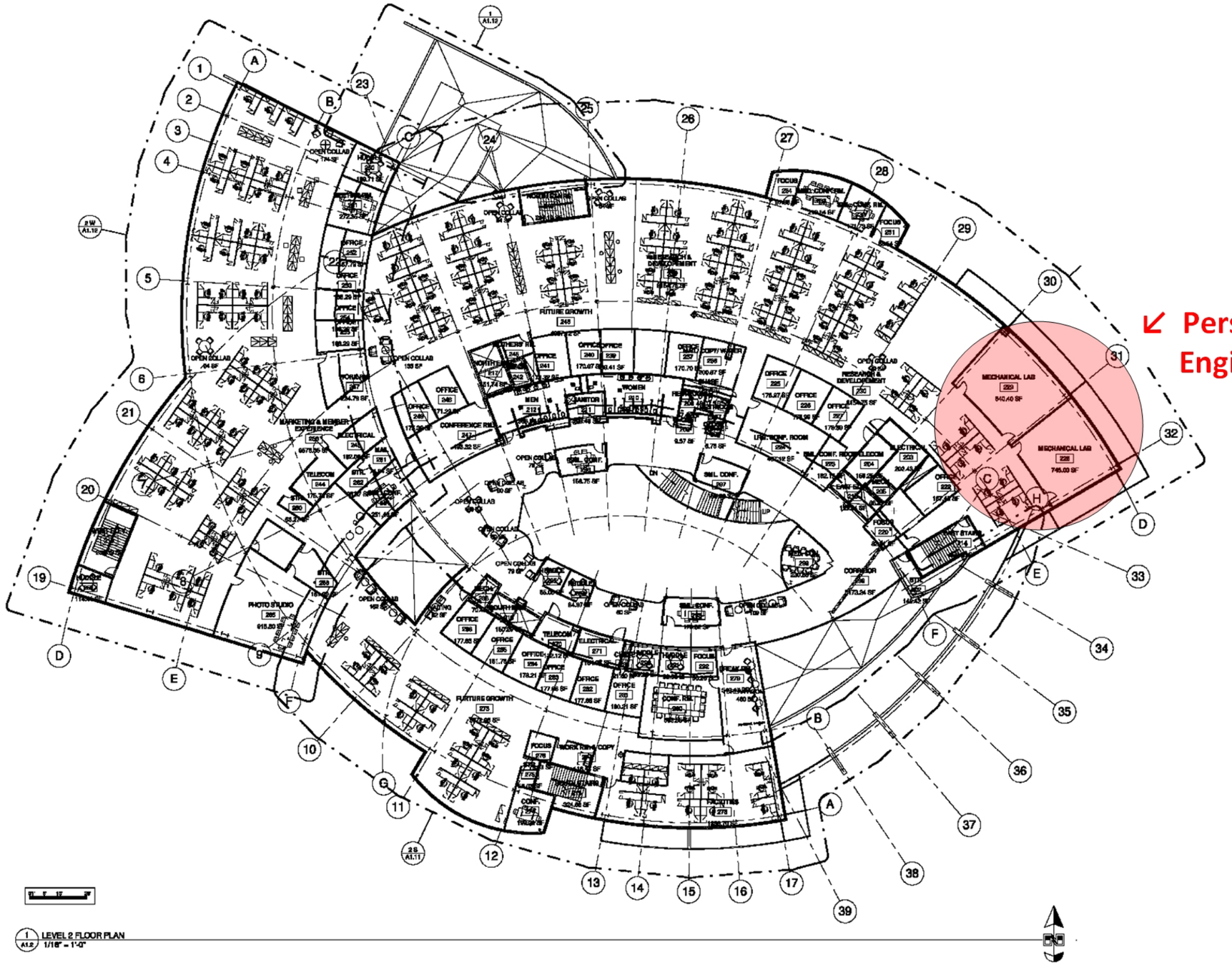
Glen Berry, AIA
Laboratory Planning Consultant

First Floor Labs



LEVEL 1 FLOOR PLAN
1/16" = 1'-0"

SECOND FLOOR LABS



↙ Personal Care Lab;
Engineering Lab

Symbol Legend

8' chemical fume hood
Variable Air Volume- VAV
1200 cfm

6' chemical fume hood
Variable Air Volume- VAV
800 cfm

Snorkel exhaust
Ceiling mount
3" diameter
Metal hood
75 cfm

5'x10' canopy hood
750 cfm

H_2 Cyl cab
Fire suppression
100 cfm exhaust
Run ¼" medical grade stainless piping from cabinet to H_2 valve

0_2 Cyl cab
Fire suppression
100 cfm exhaust
Run ¼" medical grade stainless piping from cabinet to O_2 valve

Inert gas manifold for He, N_2, and spare

H_2
Hydrogen gas valve

O_2
Oxygen gas valve

He
Helium gas valve

N_2
Nitrogen gas valve

CA
Compressed Air valve

HW/CW
Hot/Cold water faucet

CW
Cold water faucet

RO
Reverse Osmosis water valve or faucet

PW
Pure water valve

Floor drain
8" diameter

Fixed lab counter/kitchen counter

Tall cabinet
Size varies by location

Wall cabinet
36" wide x 15" deep x 36" high
All stainless steel for Food Lab

Open lab shelves at islands
36" wide x 15" deep x 2 rows high per side
All stainless steel for Food Lab

3 tier oil vape cabinet
36"x96"

Equipment space
Open floor for equipment below
Two rows shelves above

Stainless steel sink
Food Lab

Epoxy resin lab sink
Drying rack and shelf above

Safety shower/eyewash
floor drain below

Mop sink

Service column
Extruded Aluminum

u.c. oven
Undercounter oven
Food Lab

u.c. microwave
Undercounter microwave oven
Food Lab

Gas cooktop with canopy exhaust above

Mop rack

Lab coat racks at hallway

IRMS
Isotope Ratio Mass Spectrometer
Owner Furnished

Ref/frz
Refrigerator/Freezer
Owner Furnished

ref
Large refrigerator
Food Lab
Owner Furnished

frz
Large Freezer
Food Lab
Owner Furnished

u.c. washer
Undercounter washer
208v hardwire
Drain and vent

ice
Ice machine
RO water supply

u.c. ref
Undercounter refrigerator

Vib table
Vibration Table
Owner Furnished

24 gal flam cab
No vent

carts
Cart space
Owner Furnished

Stab. chmbr
Stability Chamber
Owner Furnished

Single compartment raceway
Extruded aluminum

Fourplex 115v Elec
2 per circuit at benchtop
1 per circuit at equipment space

Duplex 115v Elec
4 per circuit at benchtop
1 per circuit at equipment space

208v Elec

Phone/Data/Fibre Optic
Type and density determined by Owner

Analytical Laboratory

ARCHITECTURAL
Occupancy: B
Floor: sheet vinyl with integral base; Walls: gypsum board and enamel paint
Ceiling: 12' acoustic tile
Doors: $3^0/3^0x8^0$ pair at hallway; 3^6x8^0 at Distillation Room
Windows: at atrium
Daylight attenuation: at atrium windows as required by Owner
Acoustic Attenuation: NC 40 or less; Security: key or card reader access

STRUCTURAL
Vibration attenuation: 2,000 microinches per second or less
Isolate slab at lab perimeter to prevent transmission of vibration from adjacent elevator at east side and workshop at west side.

MECHANICAL
Hours of operation: 6 am to 10 pm
Temperature: 70 deg. F, +/- 2 deg. F; 100% exhaust- no recirculation of air
Fume hood exhaust on emergency power supply
(8) air changes per hour minimum occupied (air change rate may be higher due to equipment heat gain)
(12) air changes per hour for Distillation Room
(4) air changes per hour unoccupied
Pressure: negative to corridor; Distillation room negative to Analytical Lab
Humidity: Ambient
Equipment Heat Gain: 25 btuh/sf
1200 c.f.m. exhaust at fume hood (VAV); General lab exhaust at ceiling
Do no locate air diffusers above benchtop instruments

ELECTRICAL
110v fourplex and duplex outlets (maximum of four duplex per circuit)
208v/20amp outlets at each peninsula/island and Distillation Room
Stand-by power for equipment; Emer power for fume hood exhaust
Local UPS power in lab; Data & Wireless data
Lighting: indirect LED @ 600 LUX; Task lights below wall cabinets
Provide light switches at door

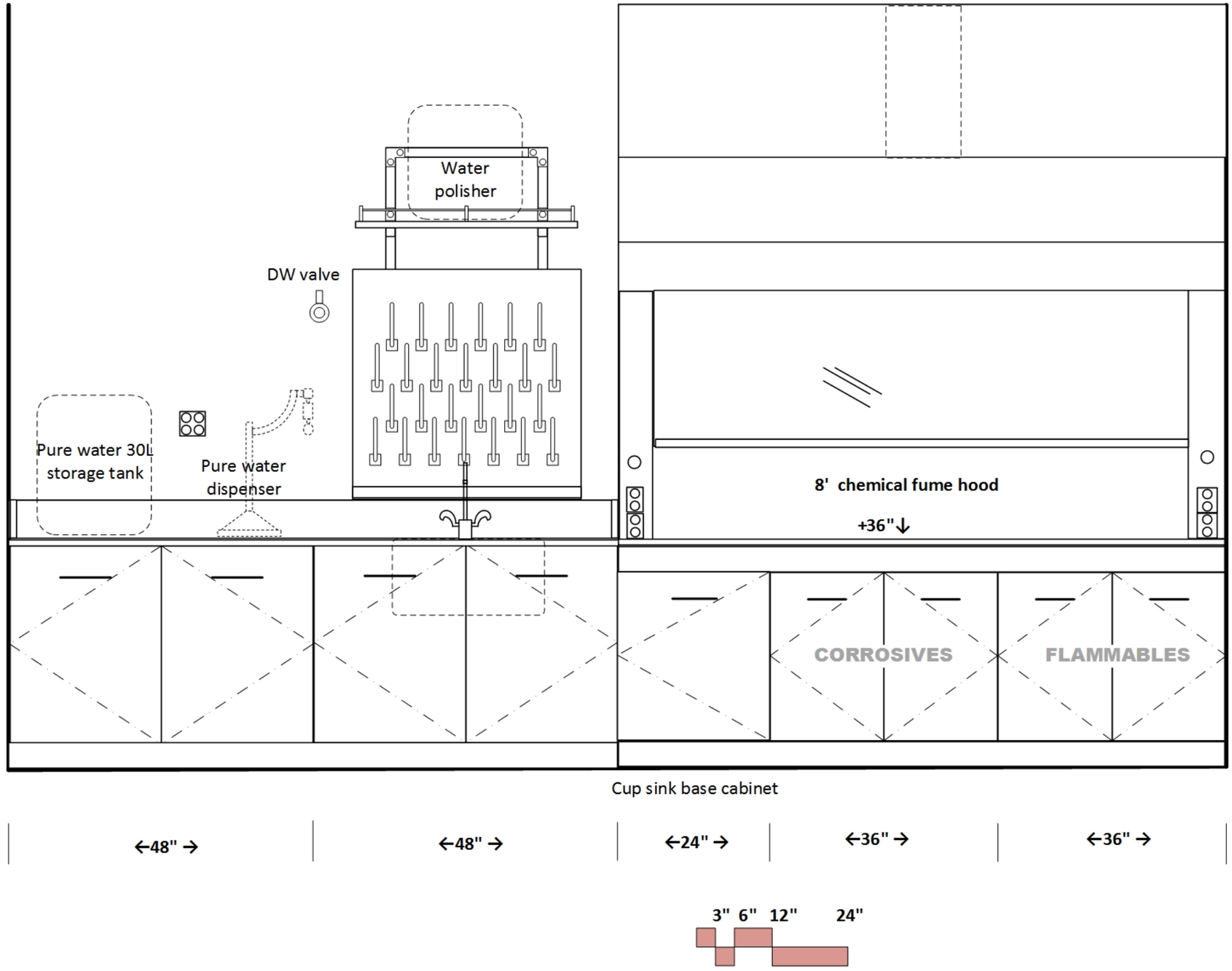
PLUMBING
Hot/Cold water (HW/CW) at sinks with vacuum breakers
Pure water point-of-use water polisher at sink
Domestic water feed at point-of-use water polisher
Disposal (1/2 hp) at each sink
Hydrogen, Oxygen, Helium, Nitrogen cylinder gases
All gas piping to be stainless steel 316L hospital grade
¼" diameter from cabinet/manifold to valve
Run piping behind casework at perimeter walls
Compressed Air at islands
Domestic water and drain at safety shower/eyewash

CONTRACTOR FURNISHED EQUIPMENT
Wood (bamboo) casework - base cabinets, wall cabinets, tall cabinets
Epoxy resin tops and sinks; Faucets & fittings
Chemical fume hood; Safety shower/eyewash; Fire Extinguisher
Cylinder restraints; Cylinder cabinet (Hydrogen gas)
Snorkel exhaust units
Point-of-use water polisher at sink; Undercounter washer

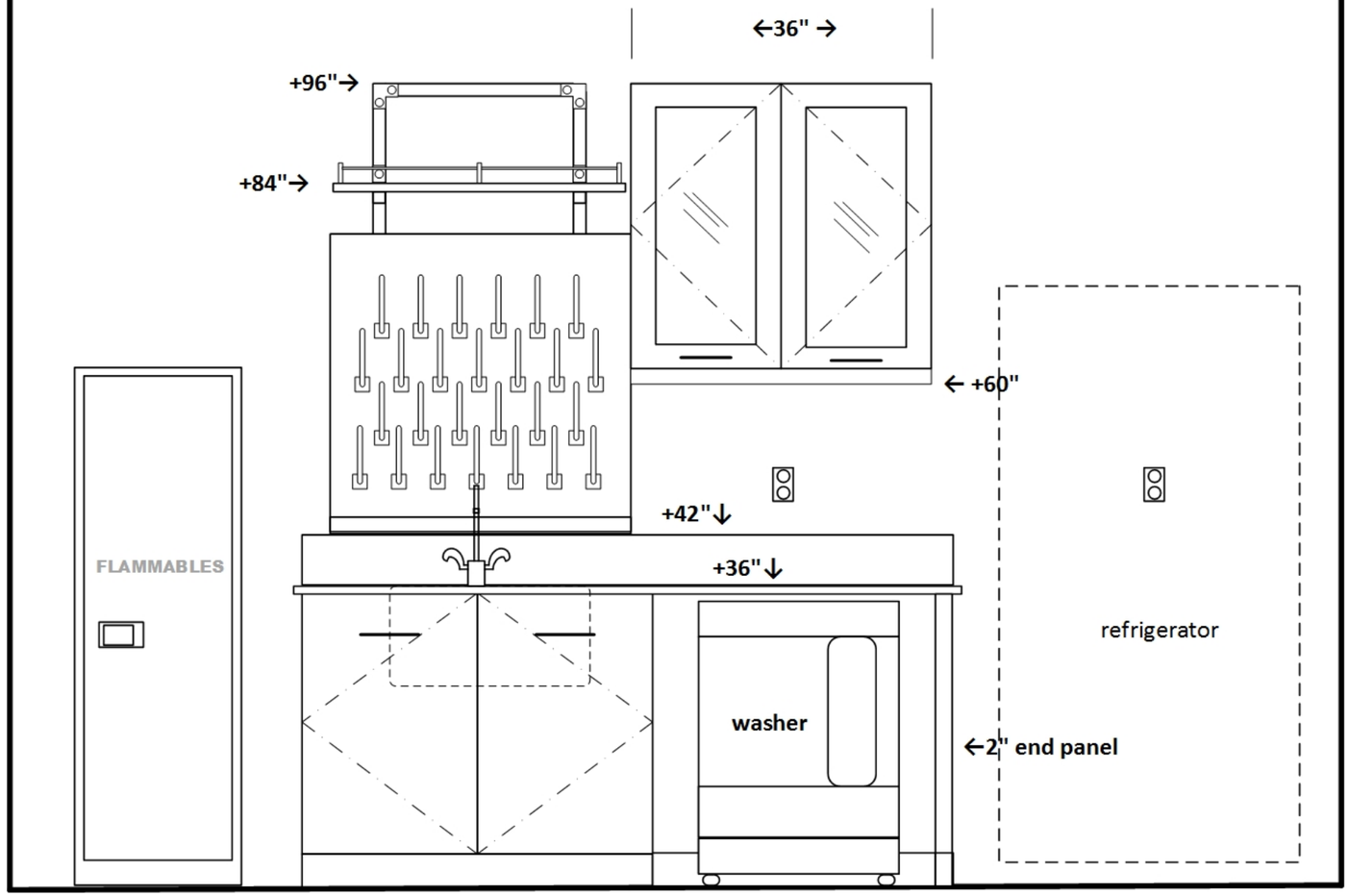
OWNER FURNISHED EQUIPMENT
Chairs; Benchtop analytical instruments
IRMS instruments; Vibration table

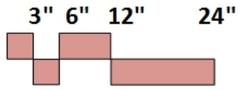
ANALYTICAL LABORATORY

Elevation A

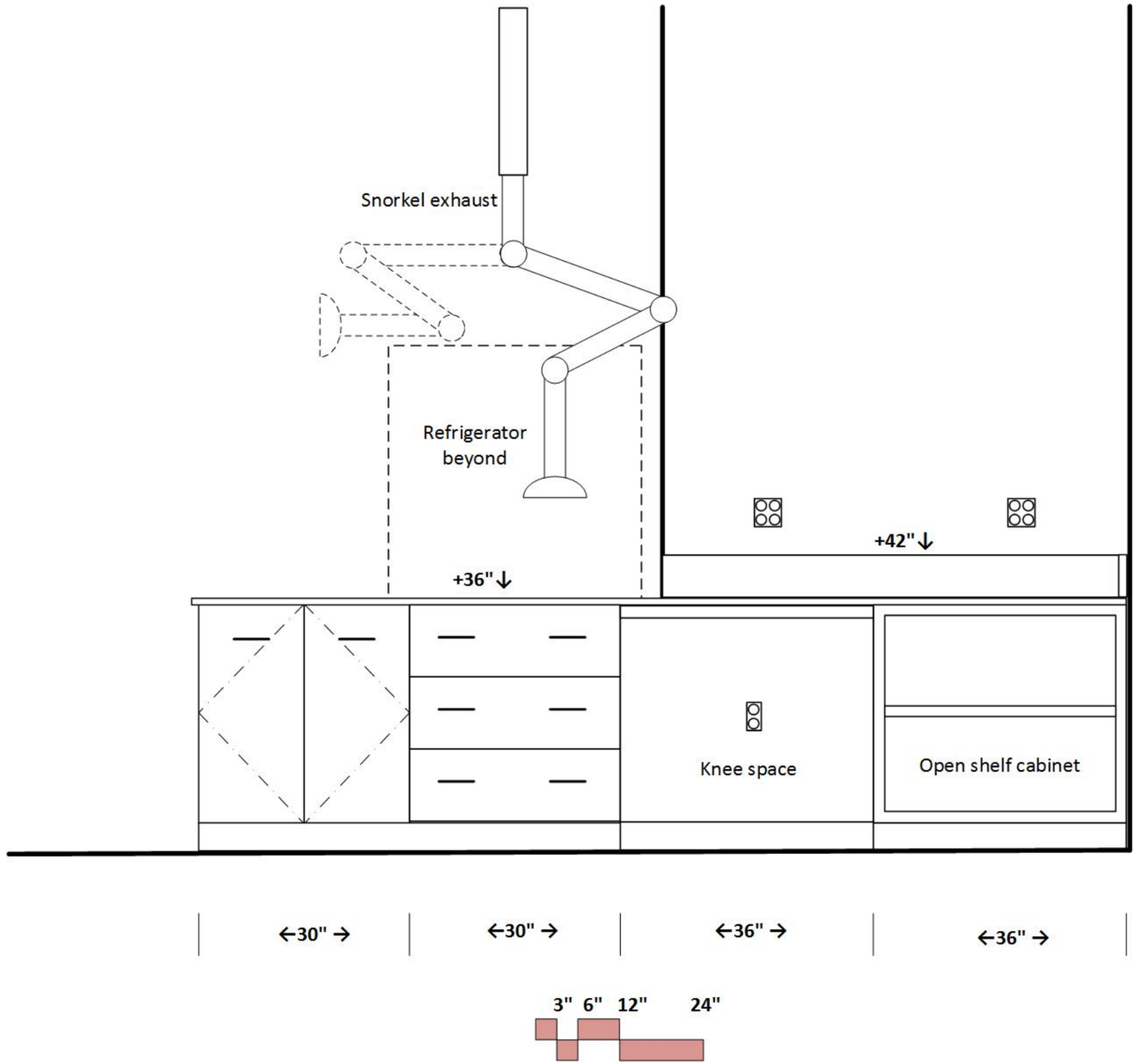


ANALYTICAL LABORATORY
Elevation B

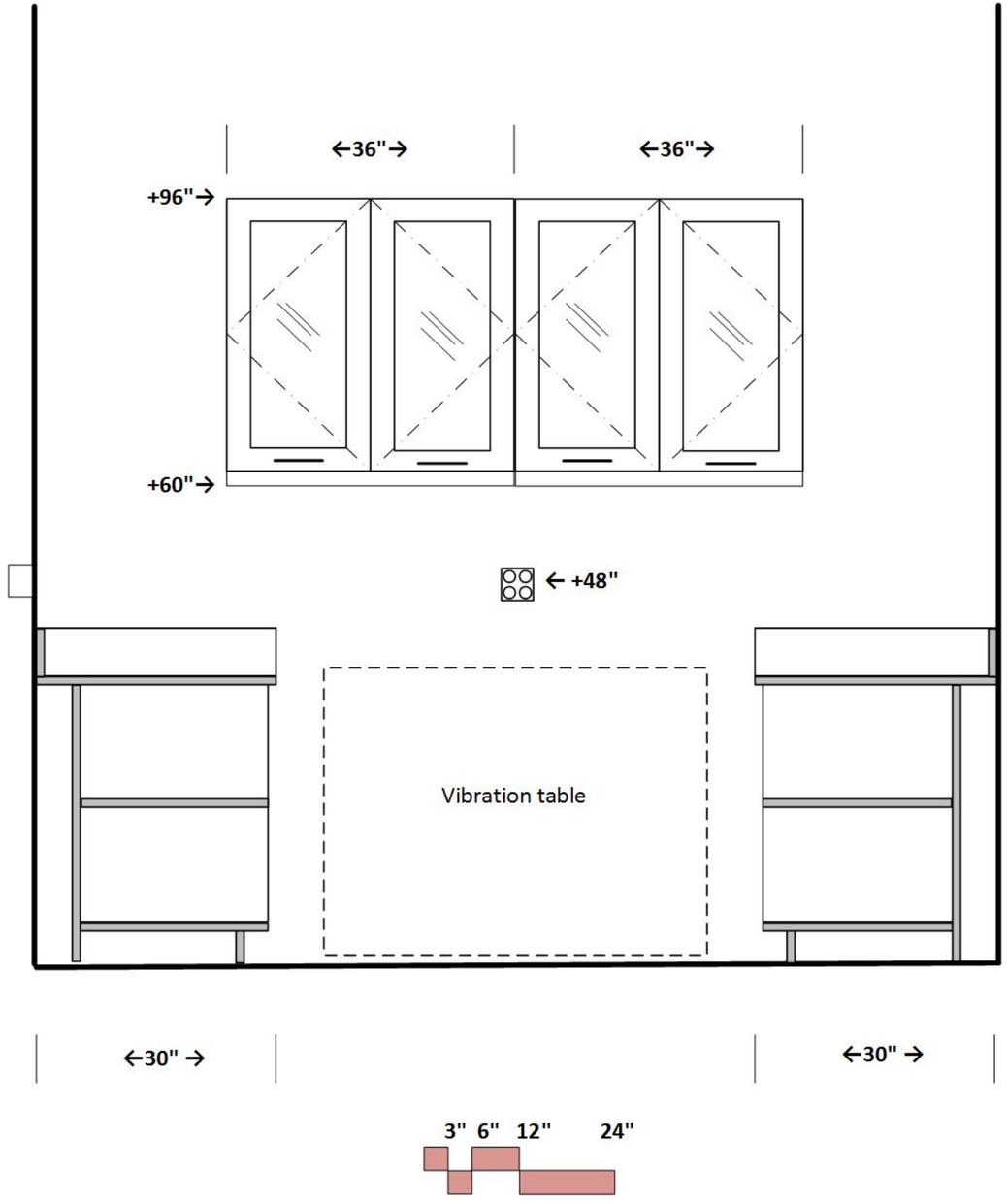


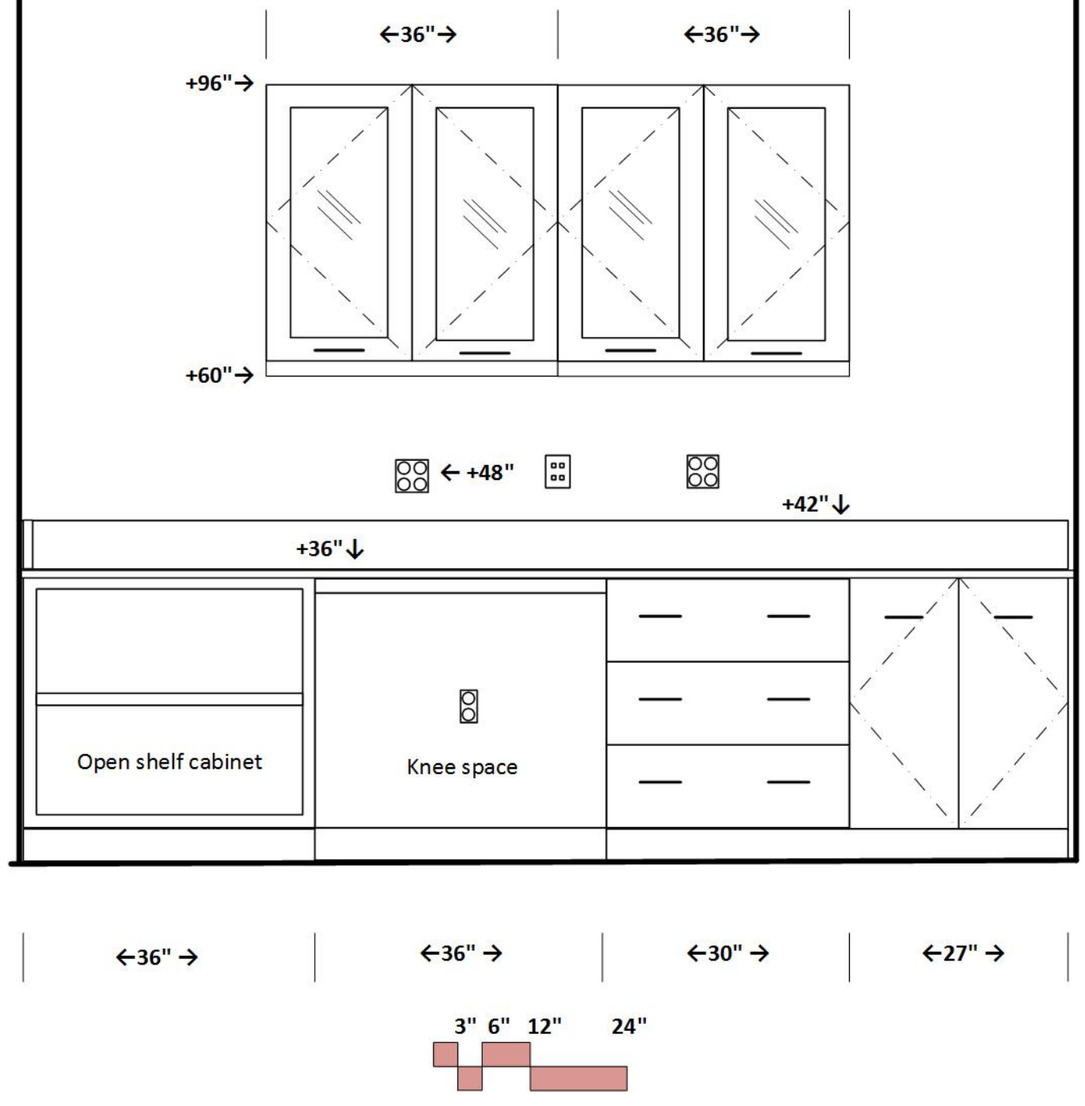


ANALYTICAL LABORATORY
Elevation C

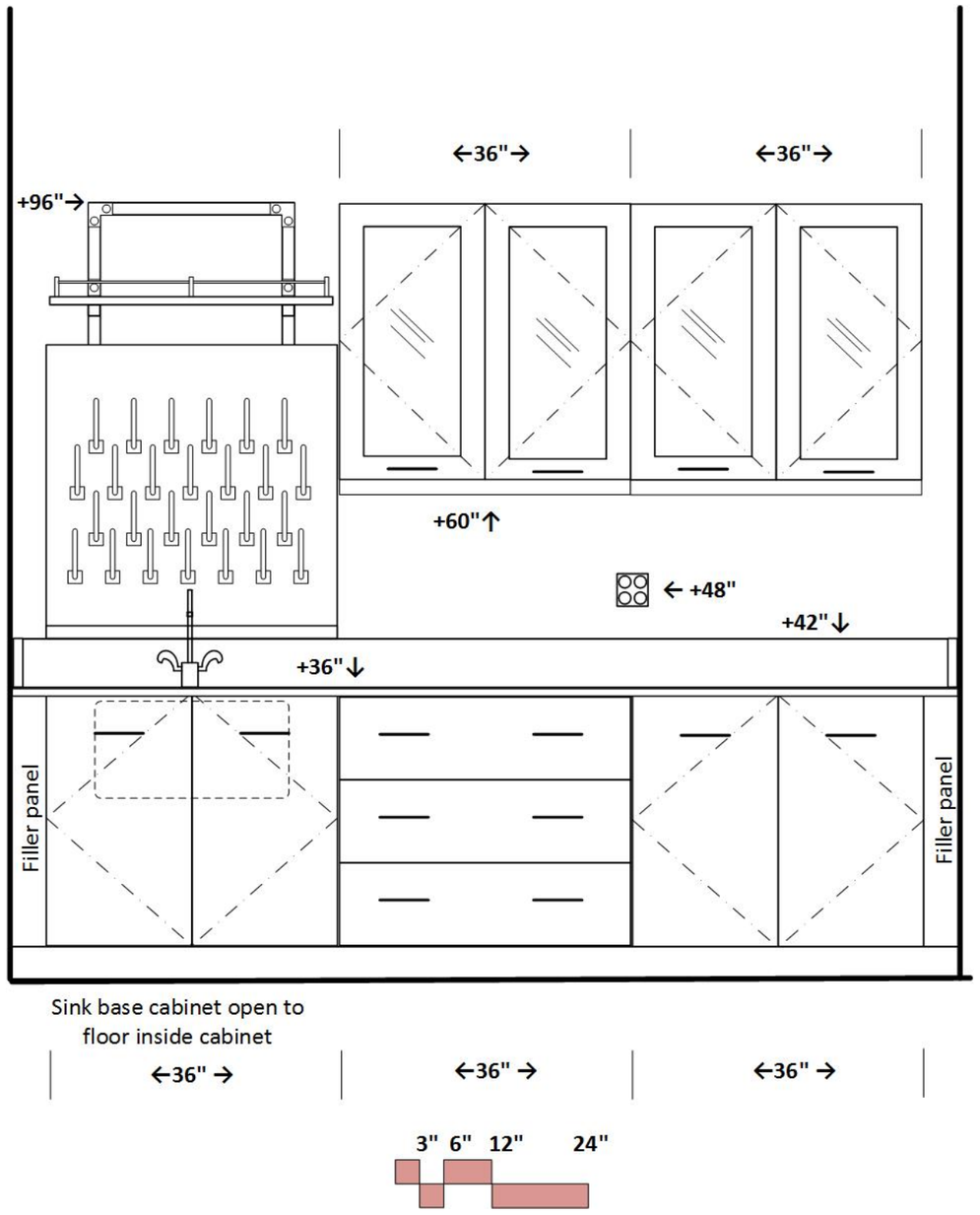


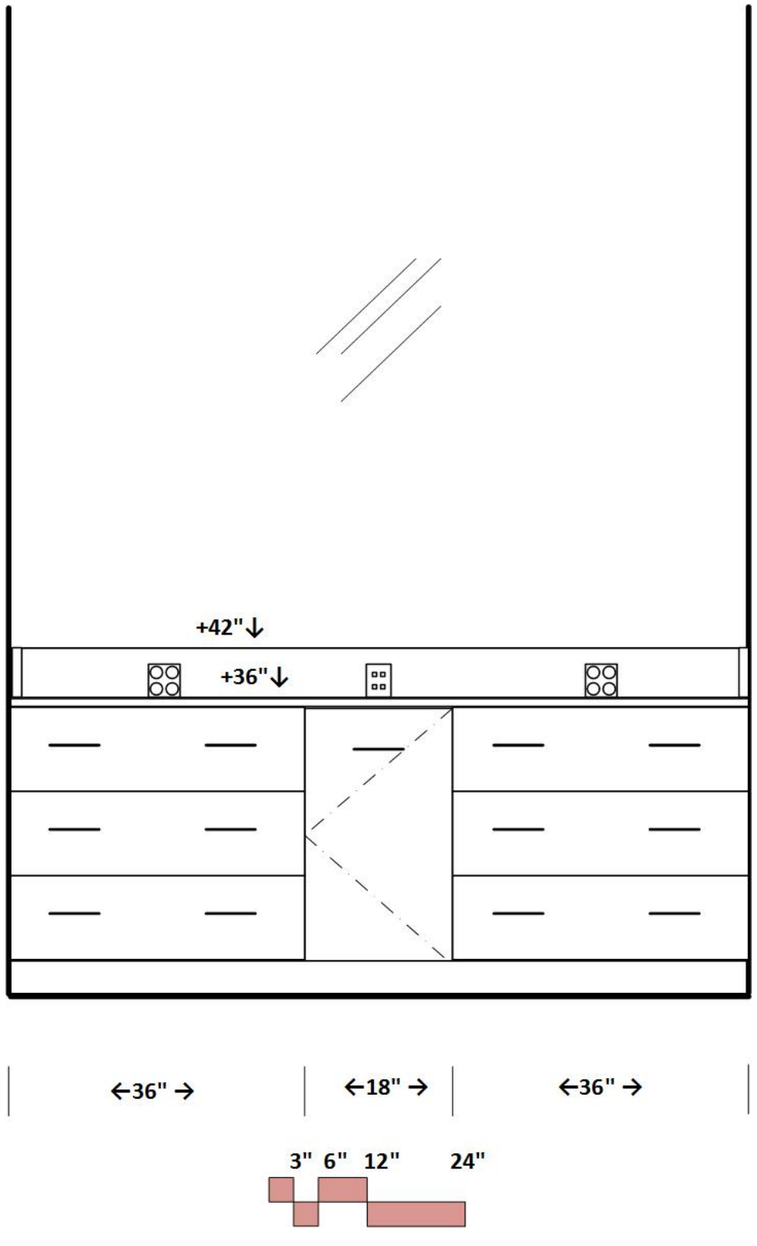
ANALYTICAL LABORATORY
Elevation D

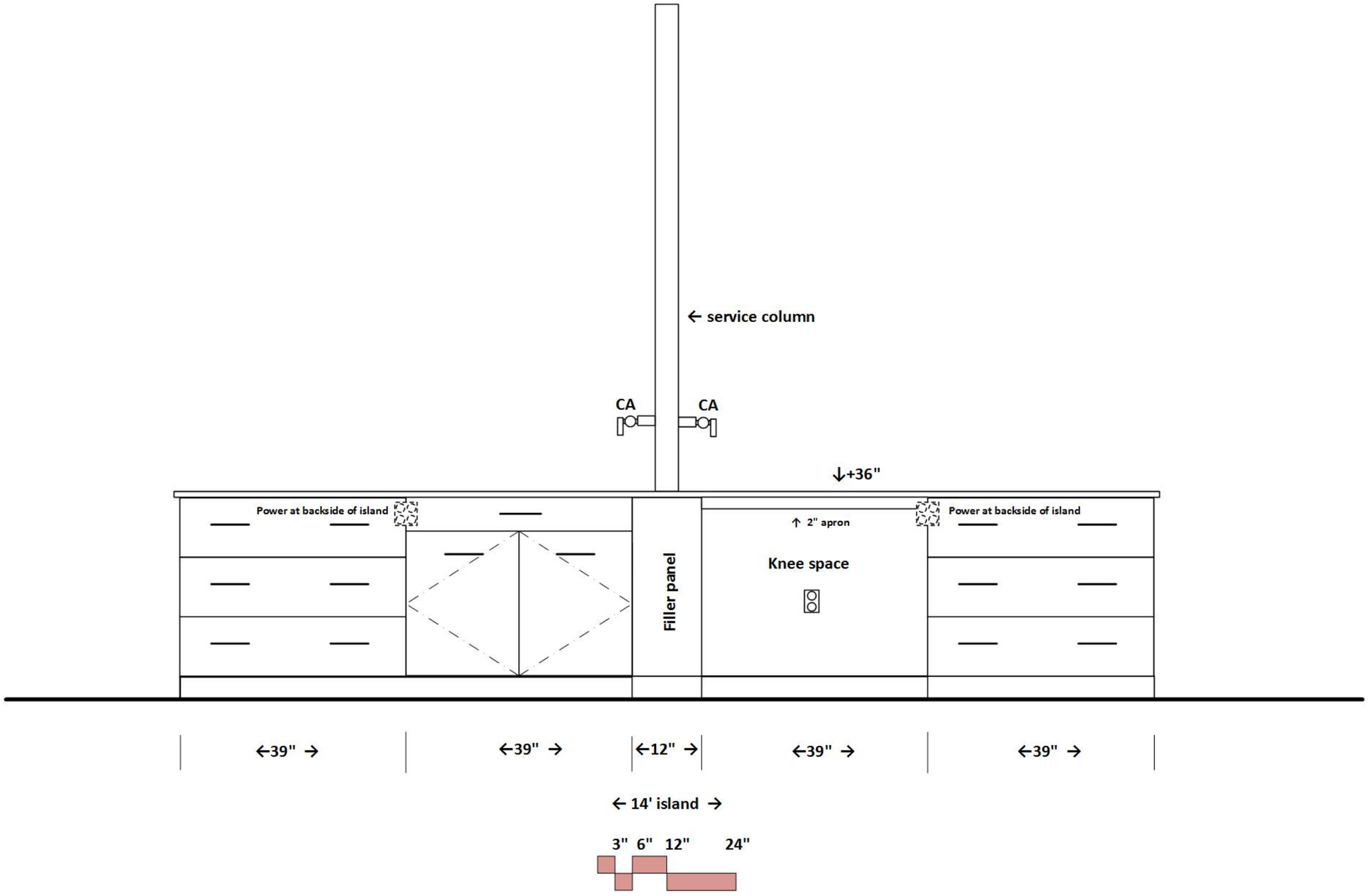


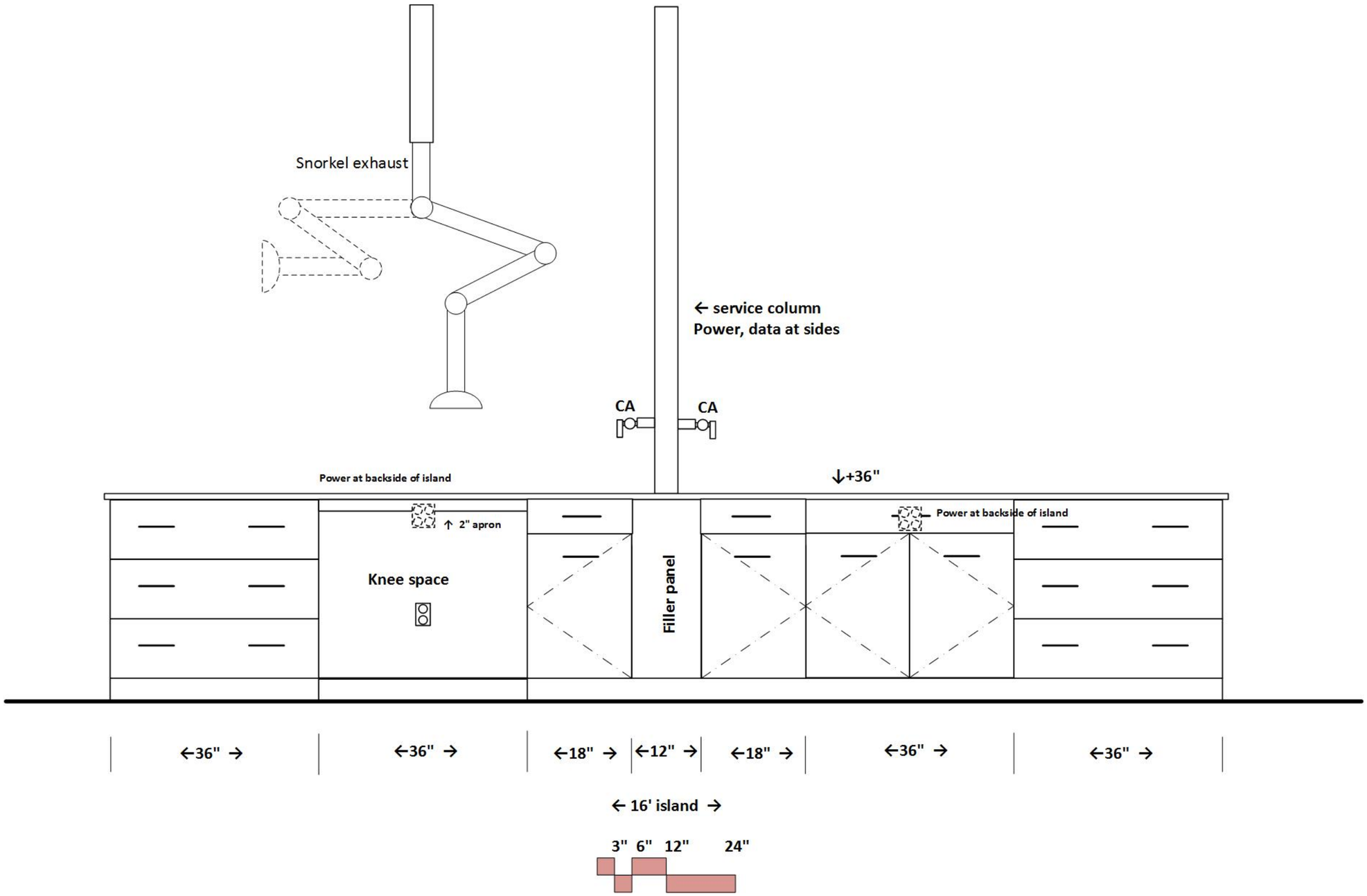

←36"→
←36"→
+96"→
+60"→
← +48"
+42"↓
+36"↓
Open shelf cabinet
Knee space
←36" →
←36" →
←30" →
←27" →
3"
6"
12"
24"

ANALYTICAL LABORATORY
Elevation F

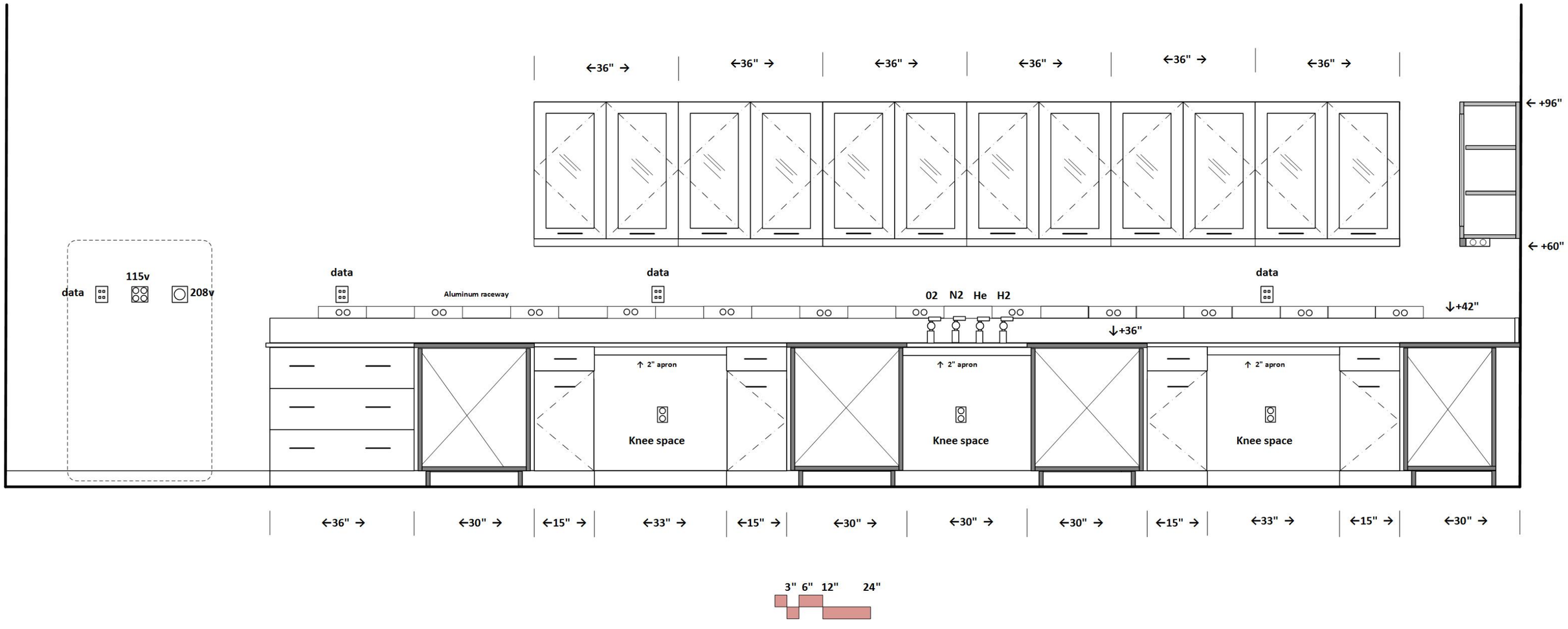



+42"↓
+36"↓
←36" →
←18" →
←36" →
3"
6"
12"
24"

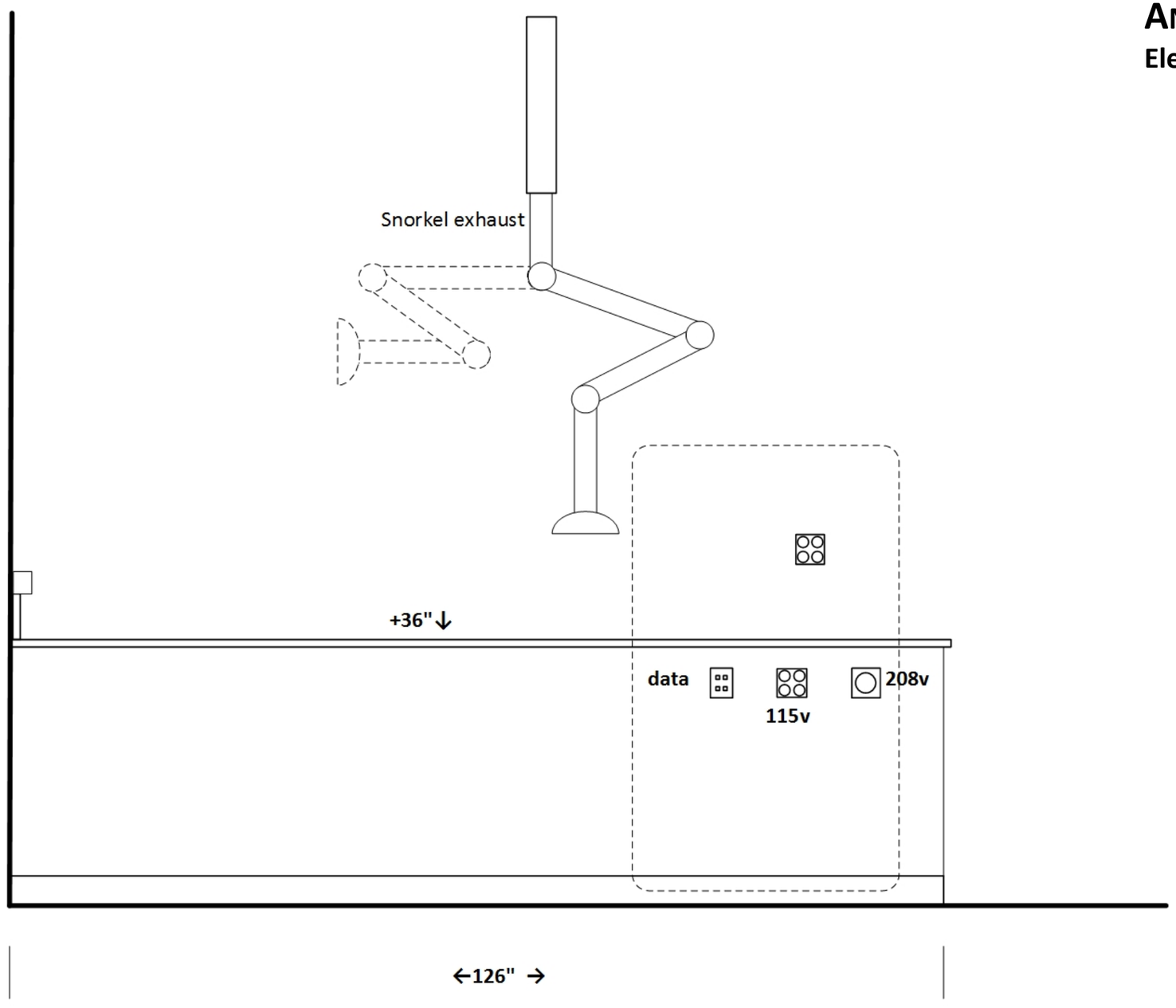

← service column
CA
CA
↓+36"
Power at backside of island
↑ 2" apron
Knee space
Filler panel
Power at backside of island
←39" →
←39" →
←12" →
←39" →
←39" →
← 14' island →
3" 6" 12" 24"

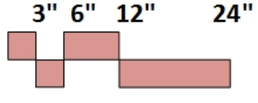

Snorkel exhaust
← service column
Power, data at sides
CA
CA
Power at backside of island
↓+36"
↑ 2" apron
Power at backside of island
Knee space
Filler panel
←36" →
←36" →
←18" →
←12" →
←18" →
←36" →
←36" →
← 16' island →
3" 6" 12" 24"

ANALYTICAL LABORATORY
Elevation J

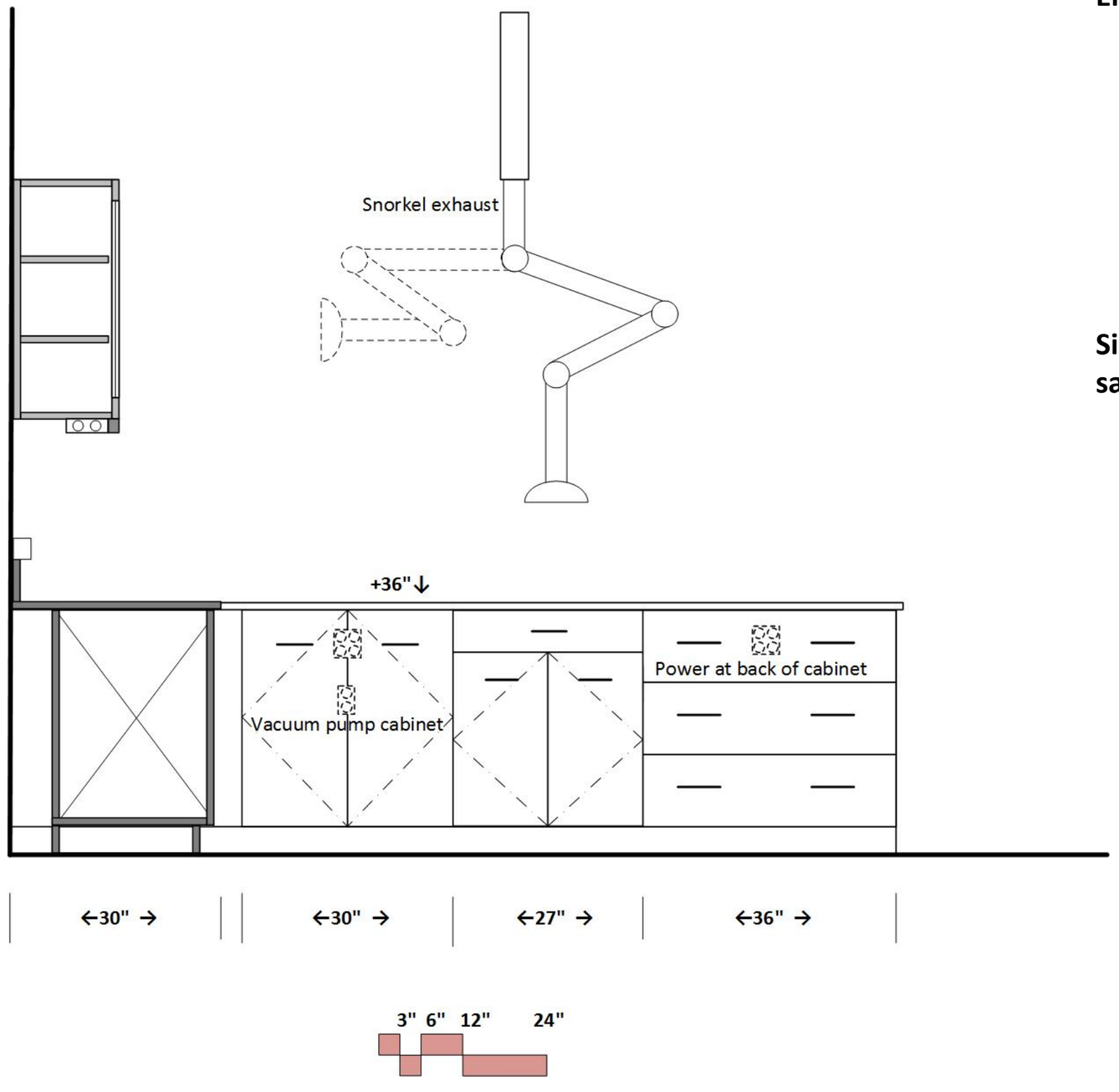


ANALYTICAL LABORATORY
Elevation K



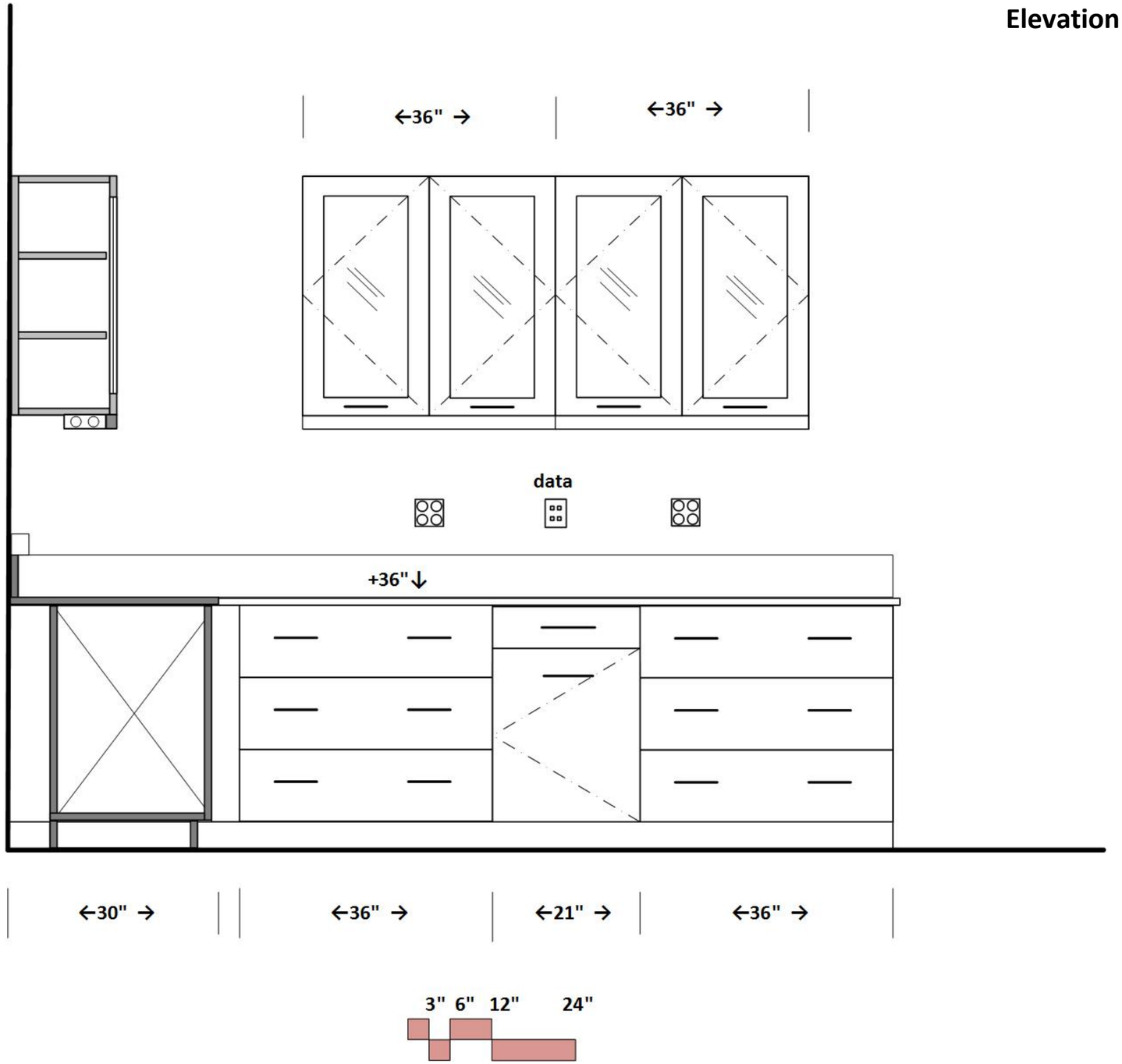


ANALYTICAL LABORATORY
Elevation L



Similar for other peninsula bench with same configuration

ANALYTICAL LABORATORY
Elevation M



FOOD LABORATORY
(Including Gary's Lab)

ARCHITECTURAL
Occupancy: B
Floor: Epoxy resin with integral base in Food Lab
Sheet vinyl with integral base in Gary's Lab
Walls: gypsum board and enamel paint
Ceiling: 10' acoustic tile
Doors: $3^0/3^0x8^0$ pair at hallway at Food Lab
3^6x8^0 at Gary's Lab
Windows: at atrium
Daylight attenuation: at atrium windows as required by Owner
Acoustic Attenuation: NC 40 or less
Security: key or card reader access

STRUCTURAL
Vibration attenuation: 2,000 microinches per second or less

MECHANICAL
Hours of operation: 6 am to 10 pm
Temperature: 72 deg. F, +/- 2 deg. F
100% exhaust- no recirculation of air
(6) air changes per hour minimum occupied (air change rate may be higher due to equipment heat gain)
(4) air changes per hour unoccupied
Pressure: negative to corridor
Humidity: Ambient
Equipment Heat Gain: 25 btuh/sf
General lab exhaust at ceiling

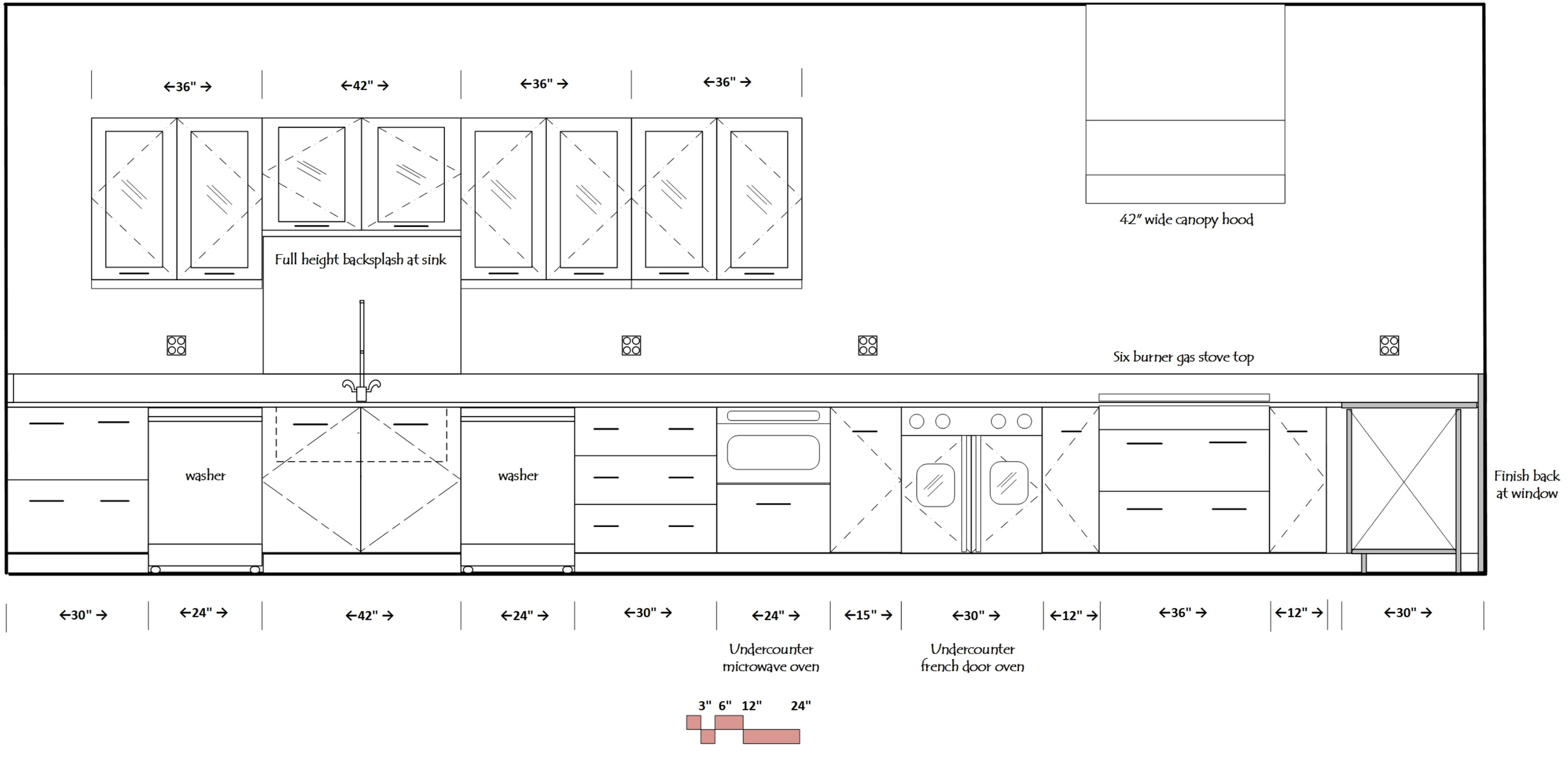
ELECTRICAL
110v fourplex and duplex outlets (maximum of four duplex per circuit)
208v/20 Amp power
Stand-by power for equipment (freezer/ref)
UPS power
Data & Wireless data
Lighting: indirect LED @ 600 LUX
Task lights below wall cabinets
Provide light switches at door

PLUMBING
Hot/Cold water (HW/CW) at sinks with vacuum breakers
Pure water point-of-use water polisher at sink in Gary's Lab
Flloor drain in Gary's Lab

CONTRACTOR FURNISHED EQUIPMENT
All stainless steel casework/furnishings for Food Lab
Ovens, stovetops, dishwashers, u.c. ref's, microwaves
Wood (bamboo) casework - base cabinets, wall cabinets,
tall cabinets for Gary's Lab
Epoxy resin tops and sinks for Gary's Lab
Faucets & fittings; Ice machine in Gary's Lab
Fire Extinguisher

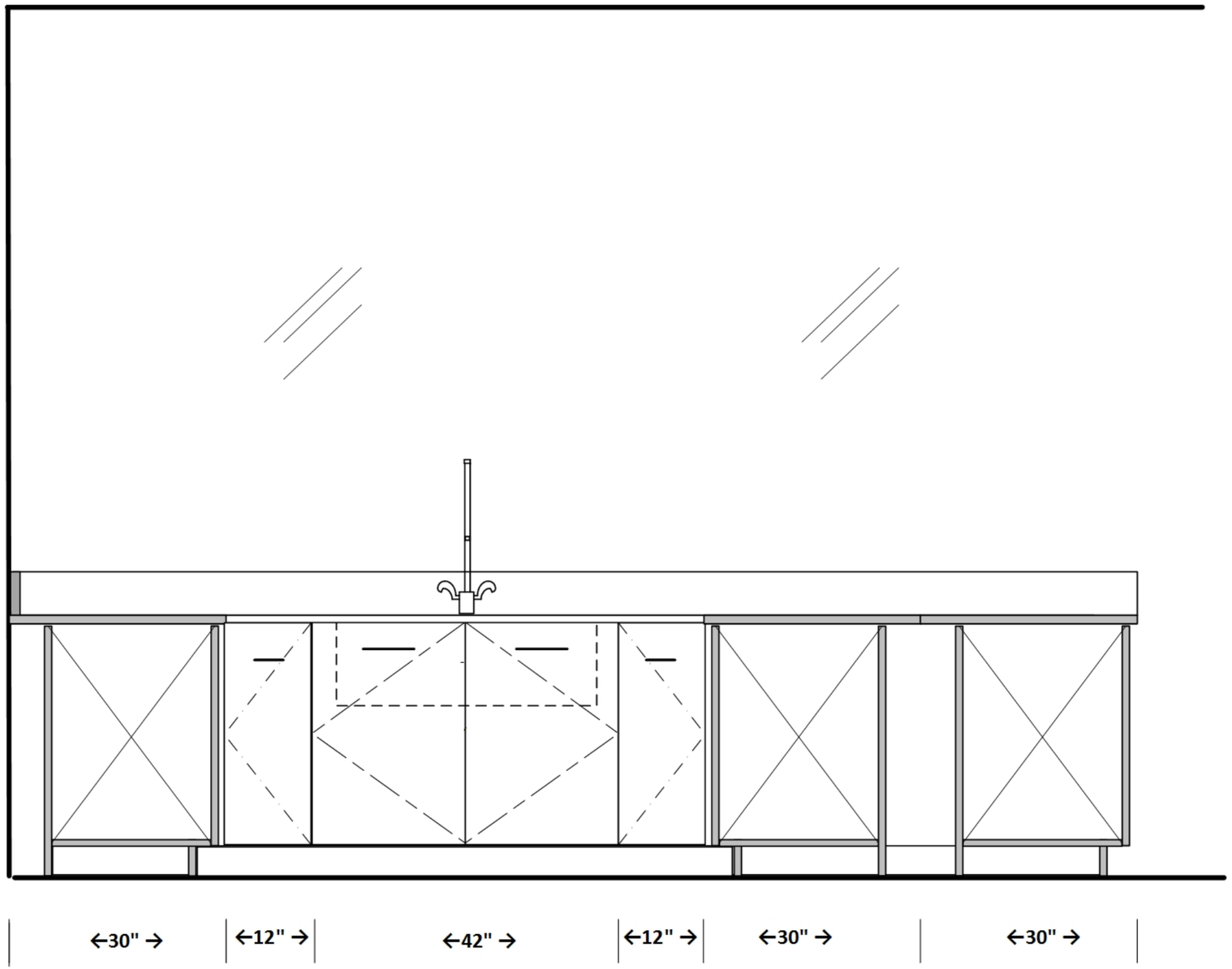
OWNER FURNISHED EQUIPMENT
Chairs
Vortex mixers
Refrigerator
Freezer
Benchtop instruments

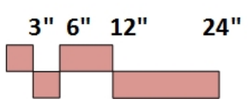
FOOD LABORATORY
Elevation A



FOOD LABORATORY

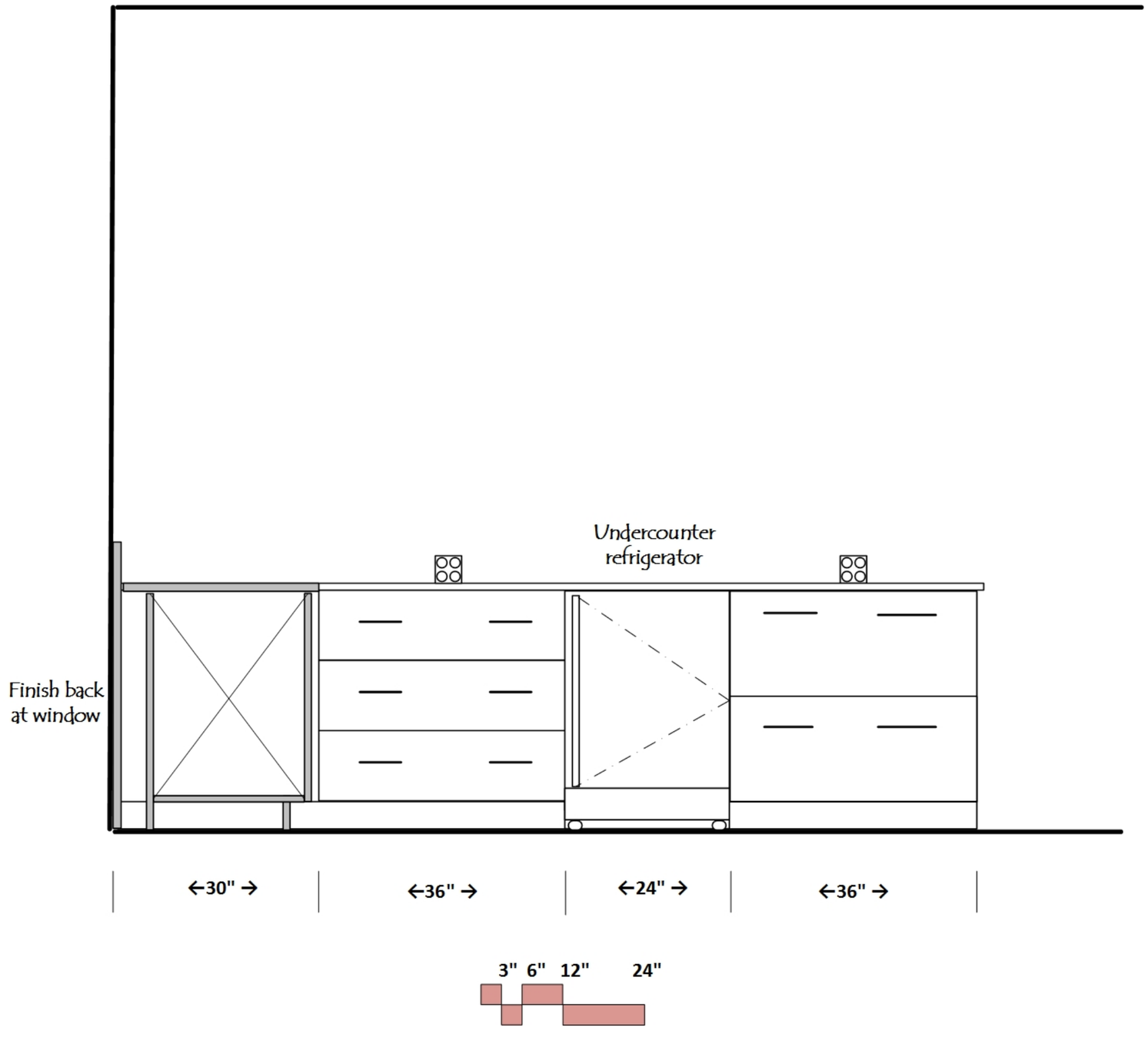
Elevation B





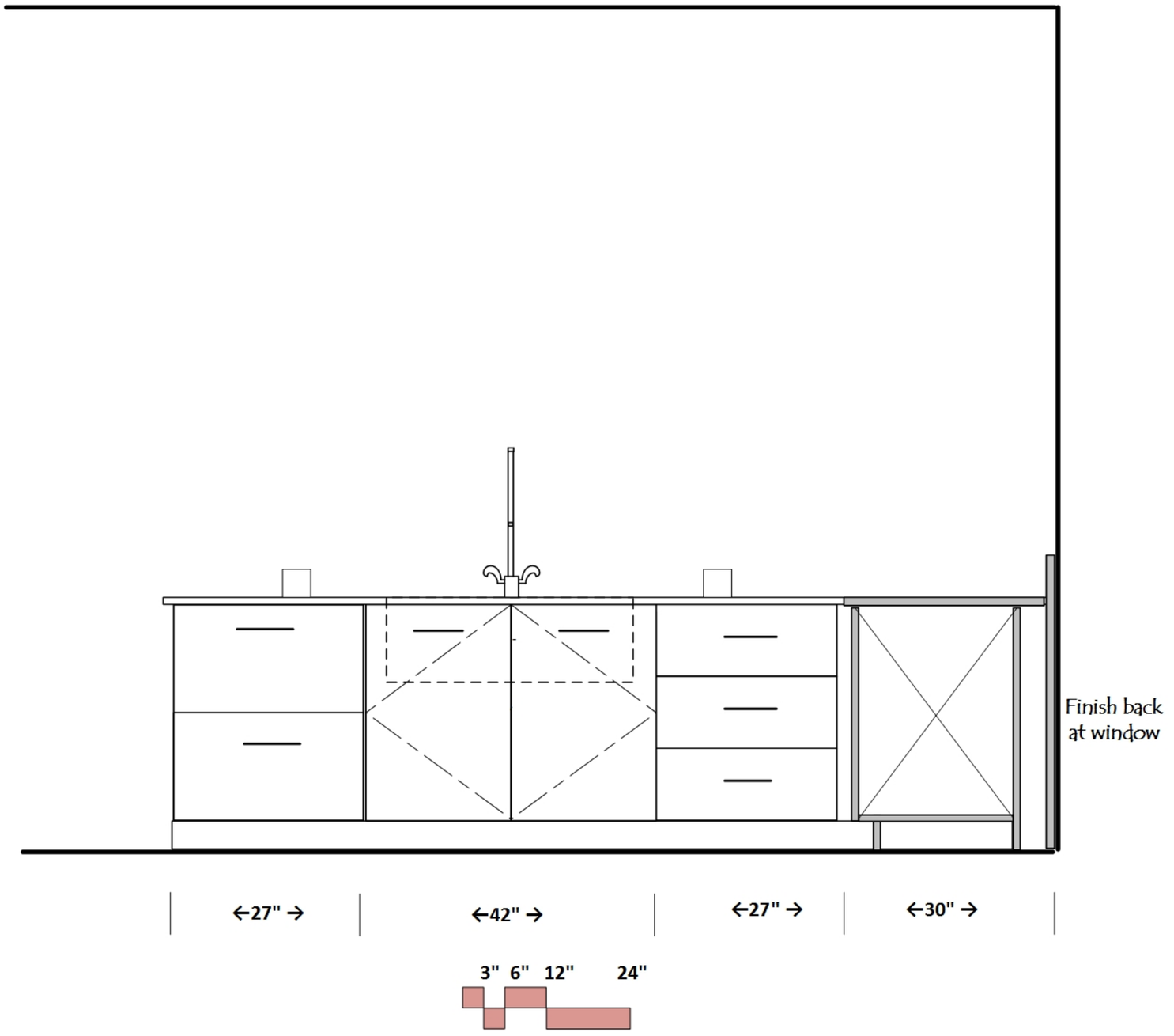
FOOD LABORATORY

Elevation C



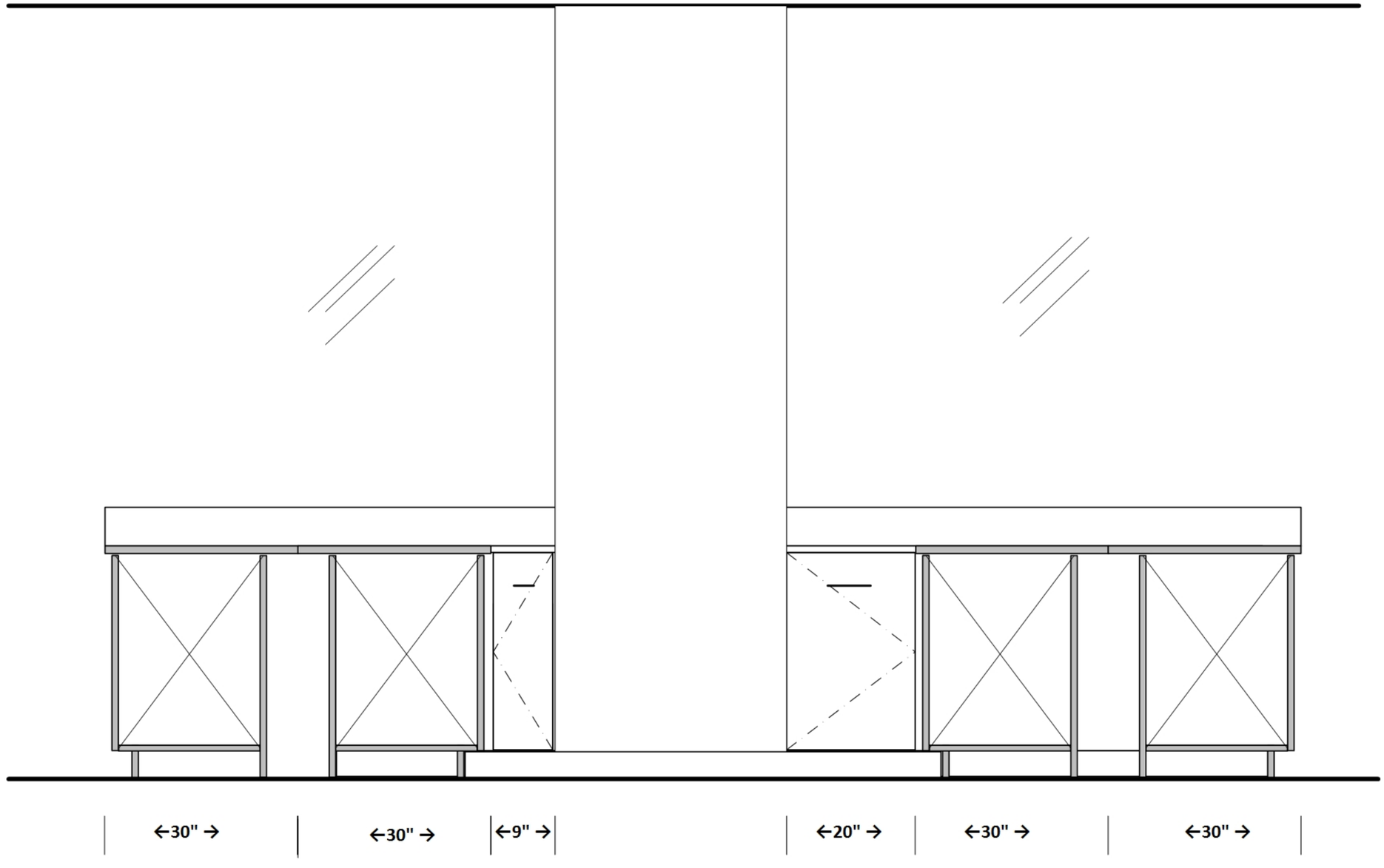
FOOD LABORATORY

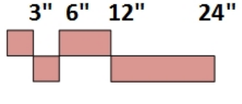
Elevation D



FOOD LABORATORY

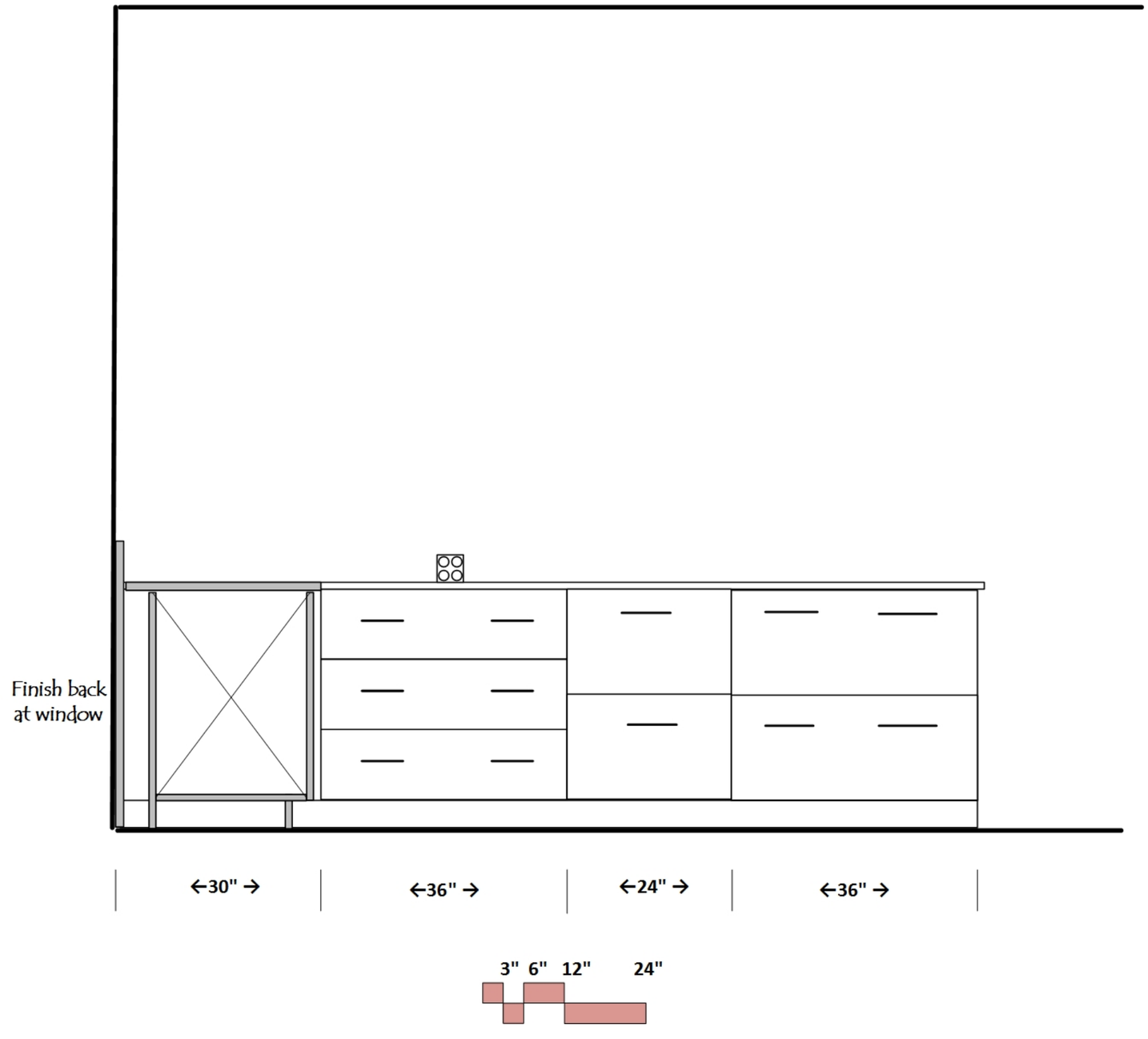
Elevation E





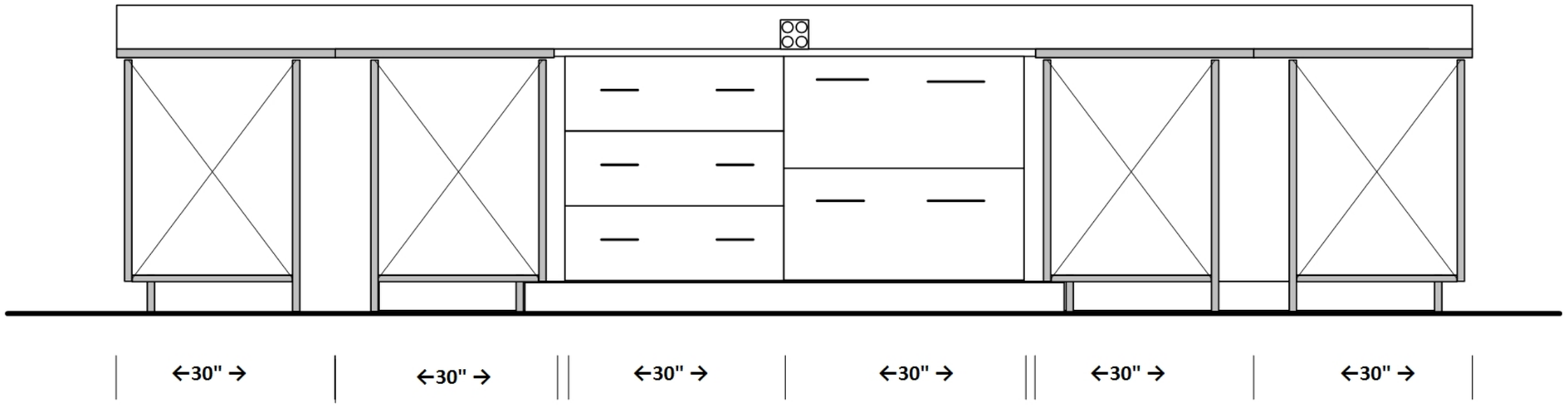
FOOD LABORATORY

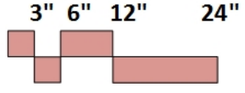
Elevation F



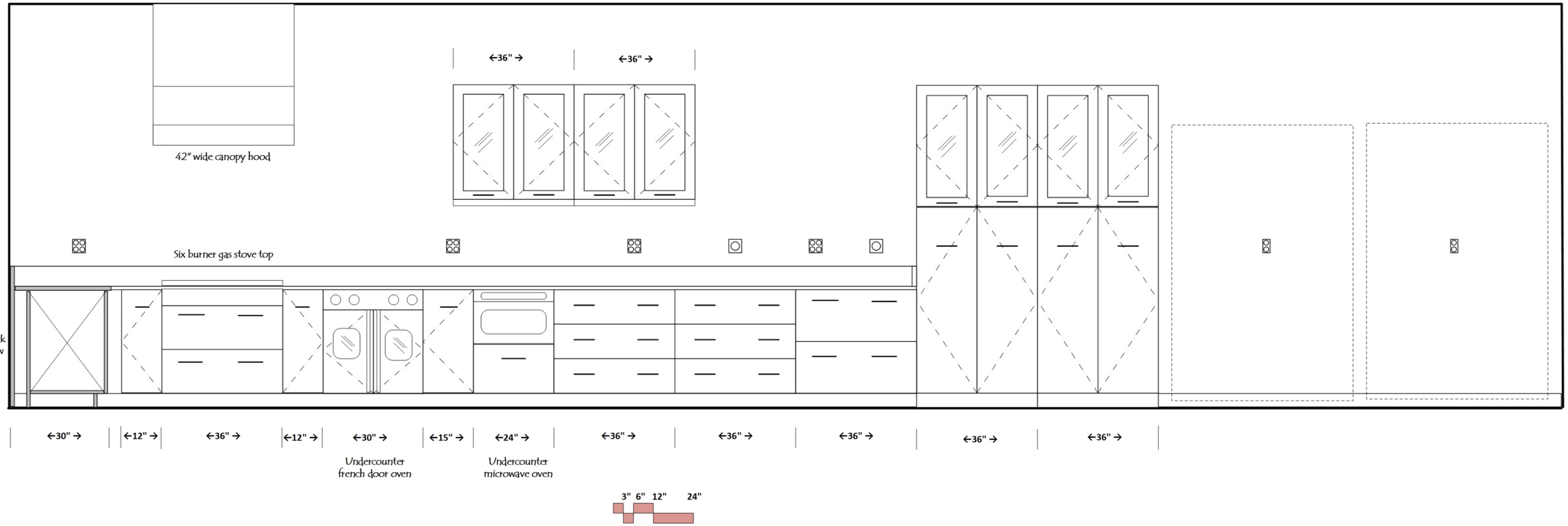
FOOD LABORATORY

Elevation G

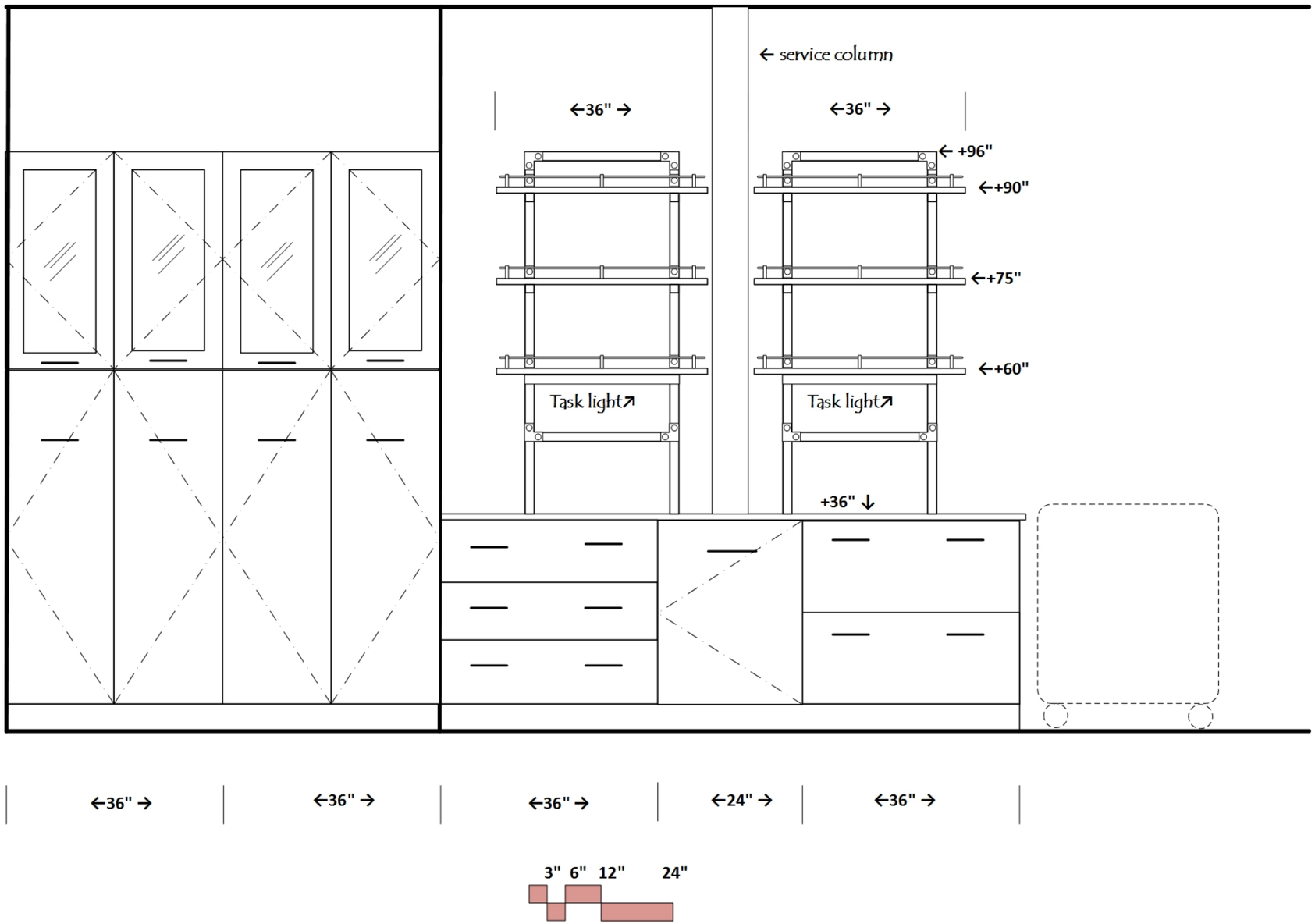




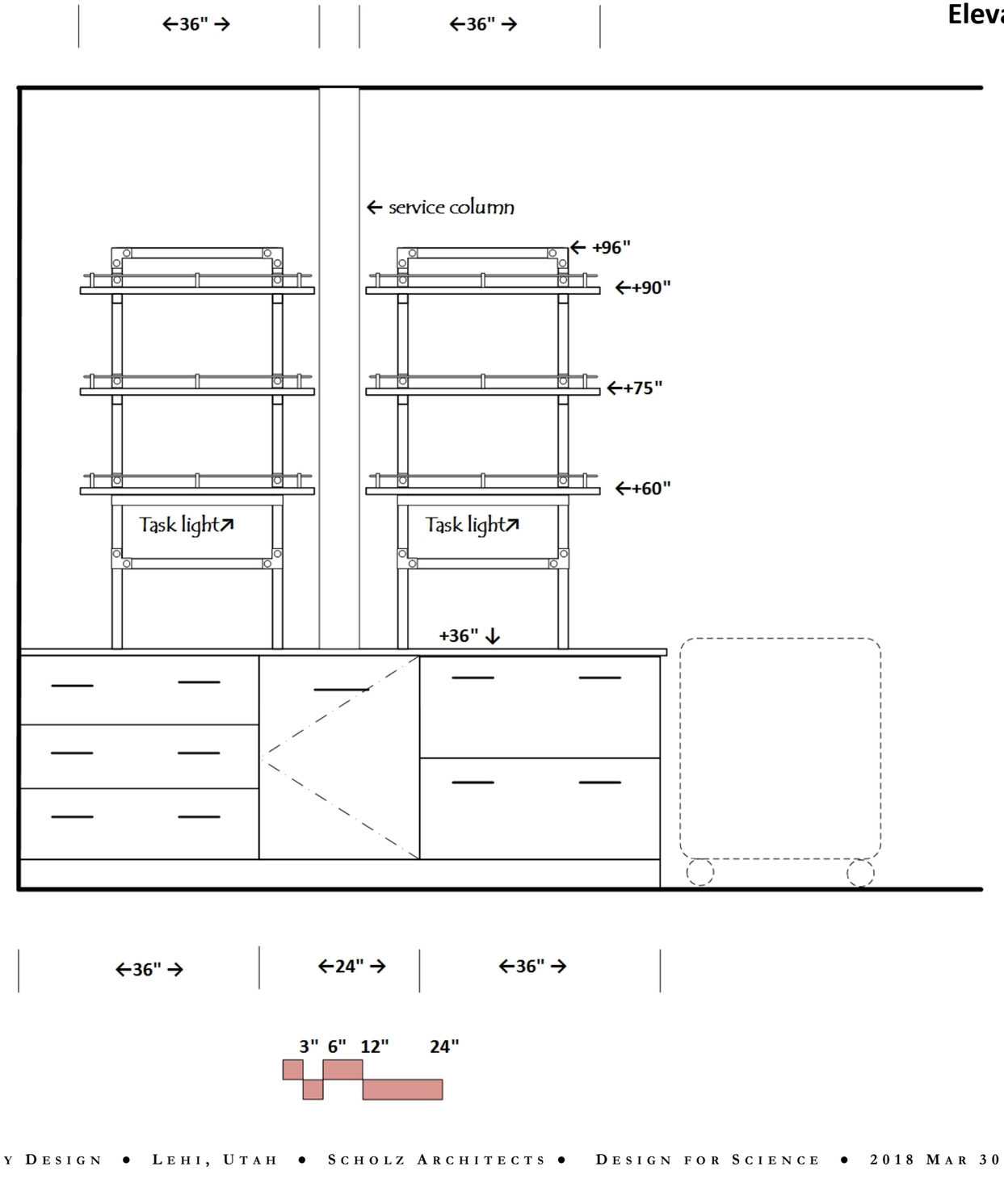
FOOD LABORATORY
Elevation H



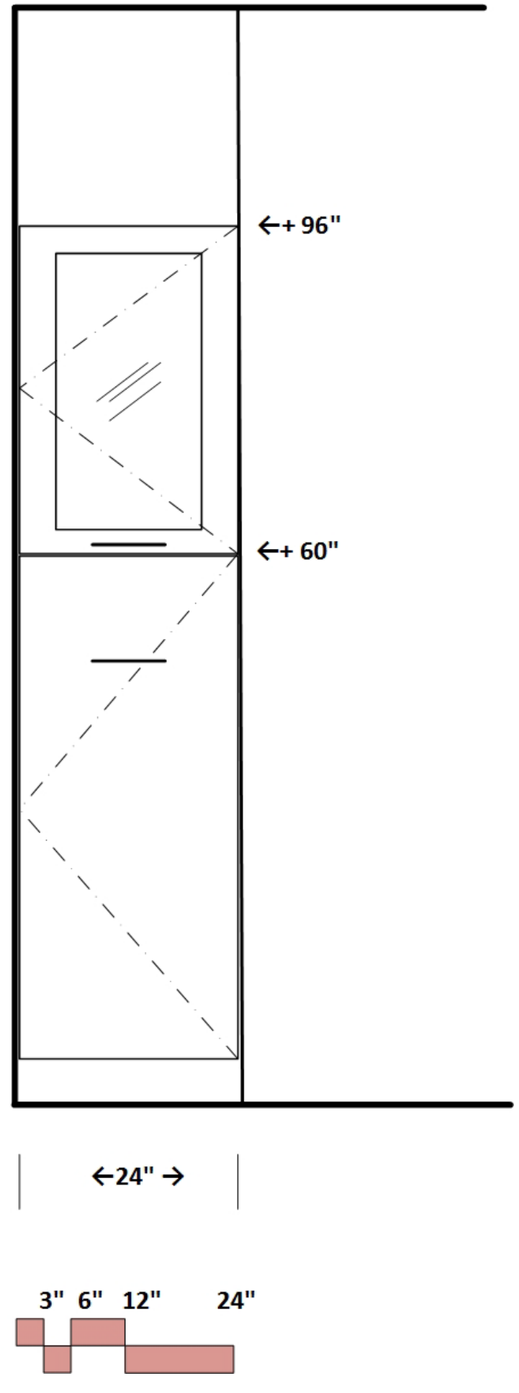
FOOD LABORATORY
Elevation I



FOOD LABORATORY
Elevation J

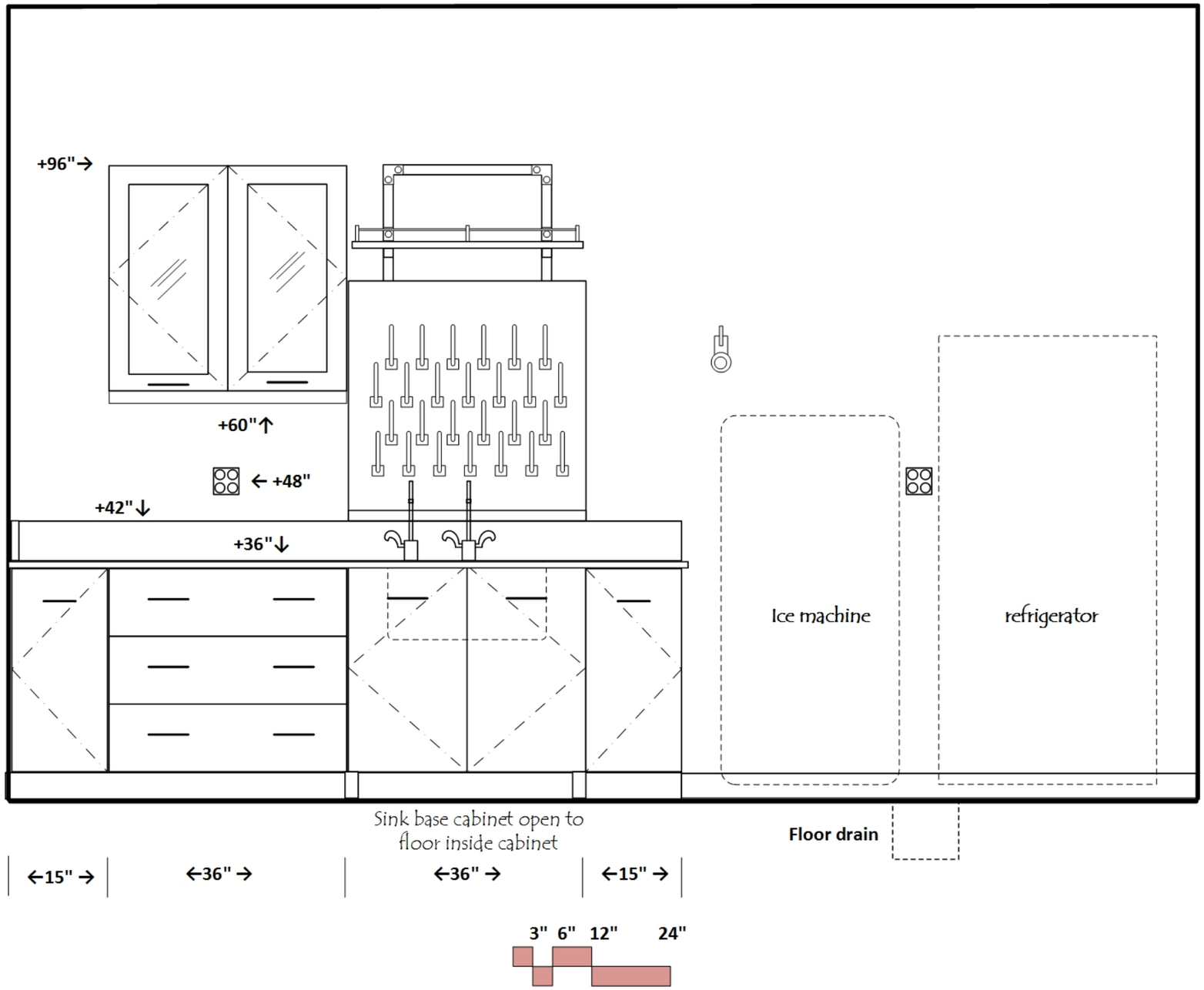


JANITOR
Elevation K

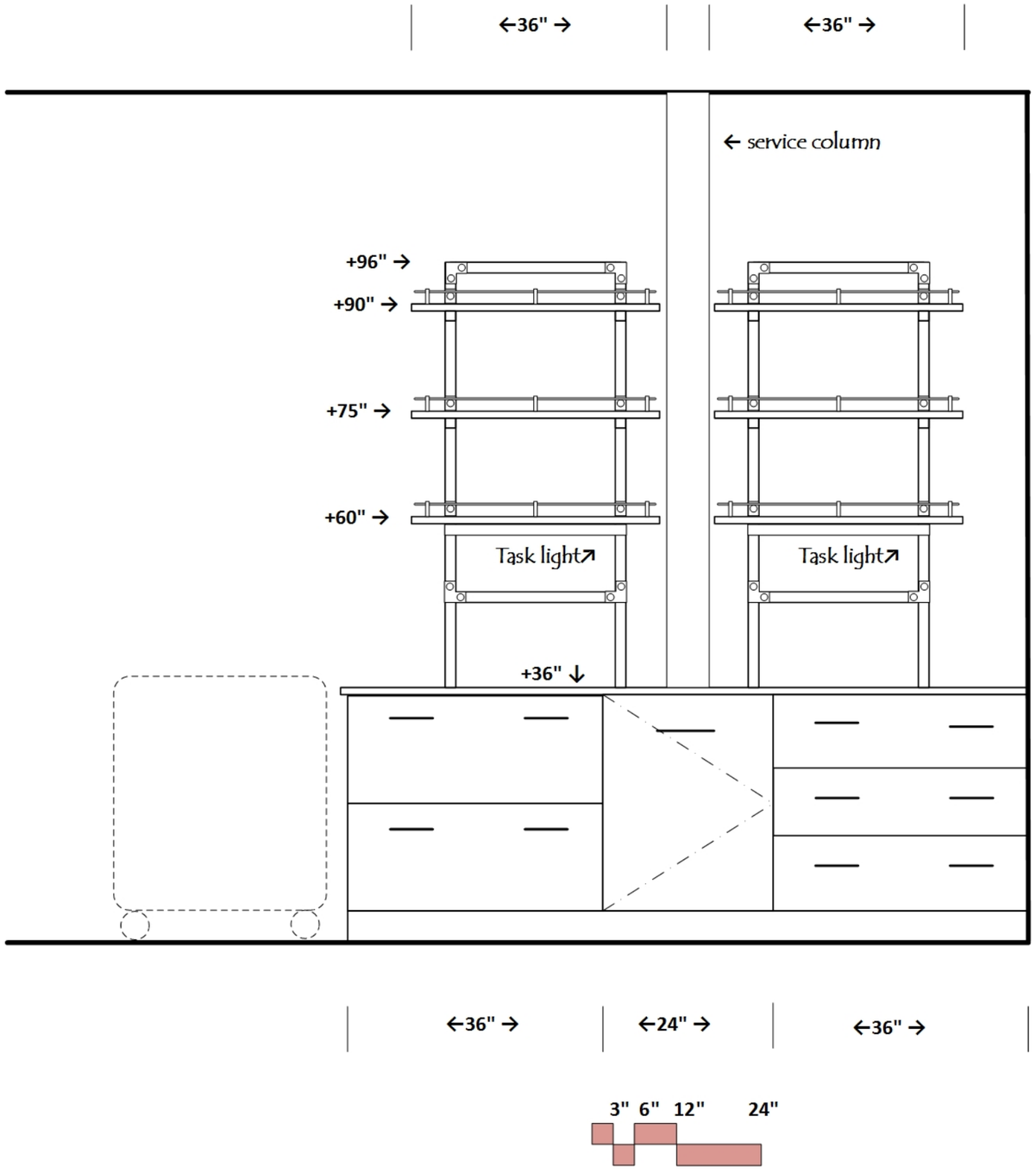


GARY'S LAB

Elevation L

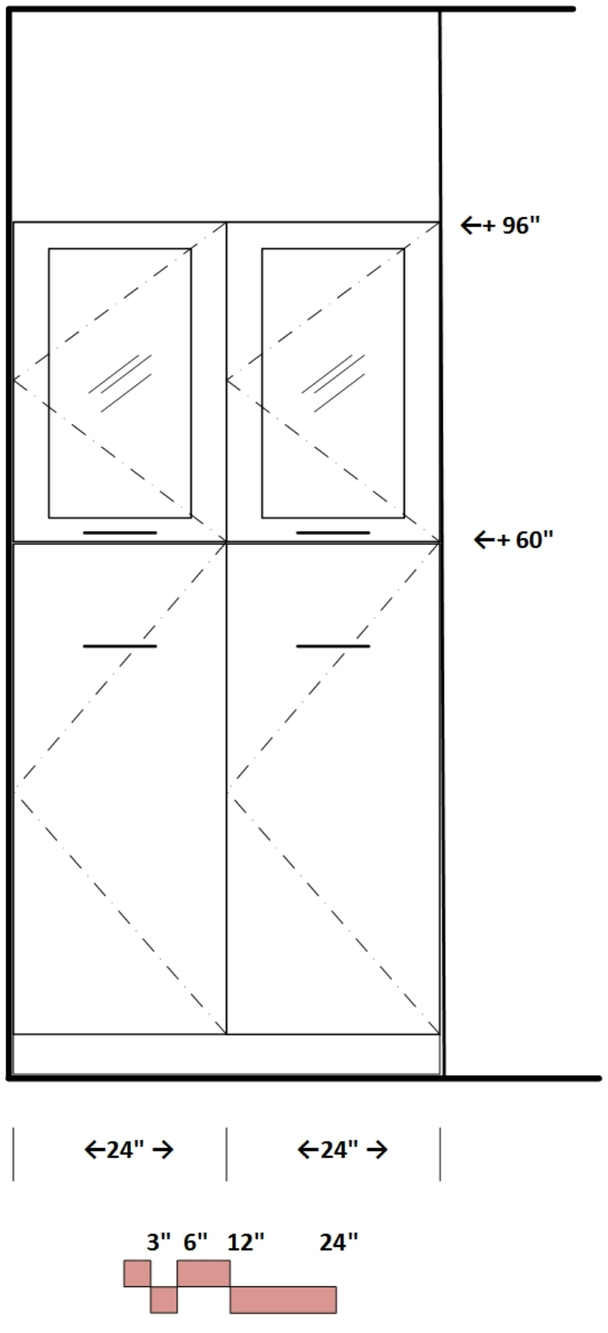


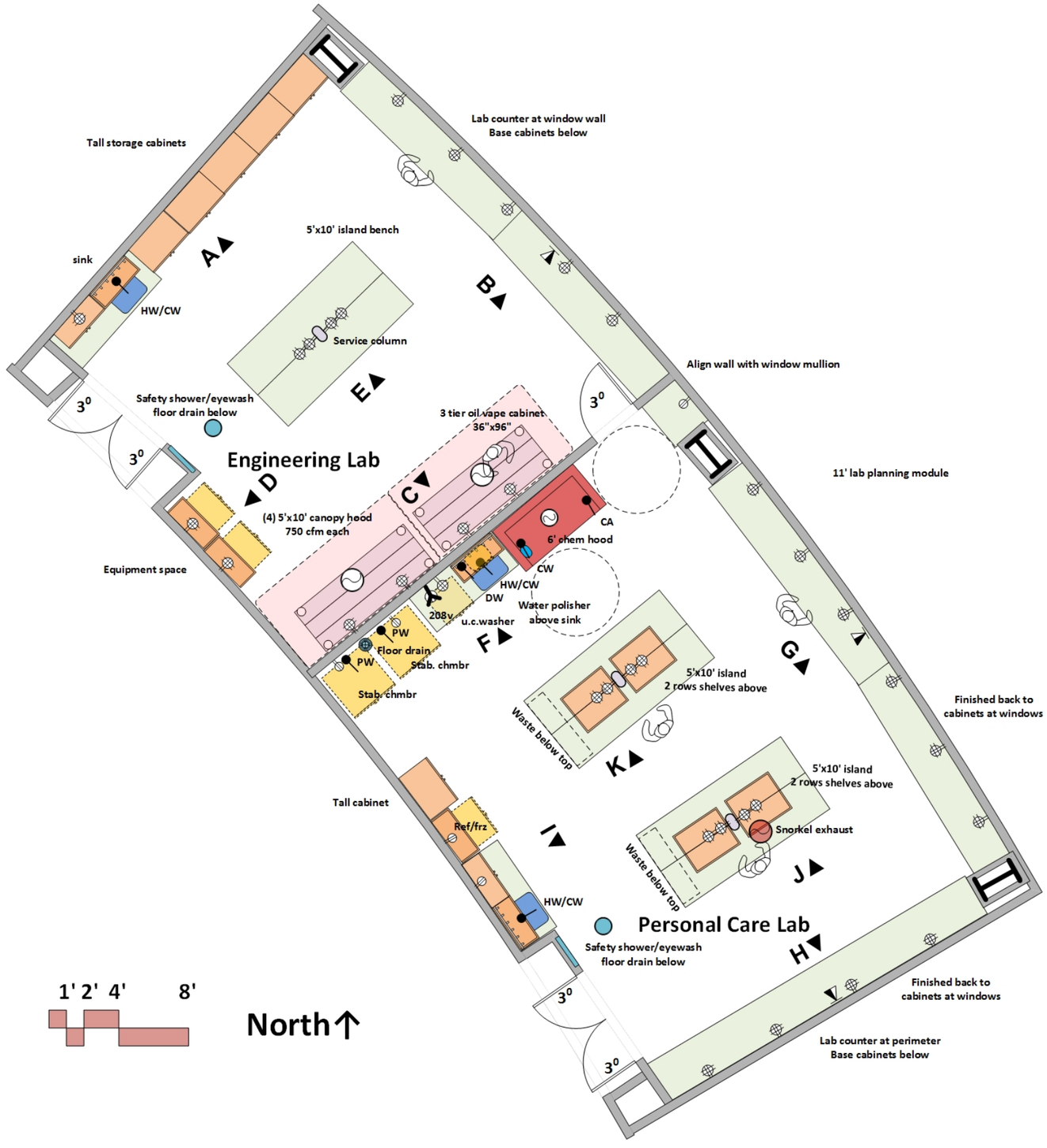
GARY'S LAB
Elevation M



GARY'S LAB

Elevation N





Engineering Laboratory
Personal Care Laboratory

ARCHITECTURAL
Occupancy: B
Floor: sheet vinyl with integral base
Walls: gypsum board and enamel paint
Ceiling: 10' acoustic tile
Doors: $3^0/3^0x8^0$ pair at hallway; 3^6x8^0 between labs
Windows: at exterior
Daylight attenuation: at exterior windows
Acoustic Attenuation: NC 40 or less
Security: key or card reader access

STRUCTURAL
Vibration attenuation: 2,000 microinches per second or less

MECHANICAL
Hours of operation: 6 am to 10 pm
Temperature: 72 deg. F, +/- 2 deg. F
100% exhaust- no recirculation of air
Fume hood exhaust on emergency power supply
(8) air changes per hour minimum occupied (air change rate may be higher due to equipment heat gain) for Personal Care Lab
(12) air changes per hour minimum occupied for Engineering Lab
(4) air changes per hour unoccupied
Pressure: negative to corridor
Humidity: Ambient
Equipment Heat Gain: 25 btuh/sf
800 c.f.m. exhaust at fume hood (VAV)
General lab exhaust at ceiling

ELECTRICAL
110v fourplex and duplex outlets (maximum of four duplex per circuit)
208v/20amp outlets
Stand-by power for equipment
Emer power for fume hood exhaust
UPS power
Data & Wireless data
Lighting: indirect LED @ 600 LUX; Task lights below wall cabinets
Provide light switches at door

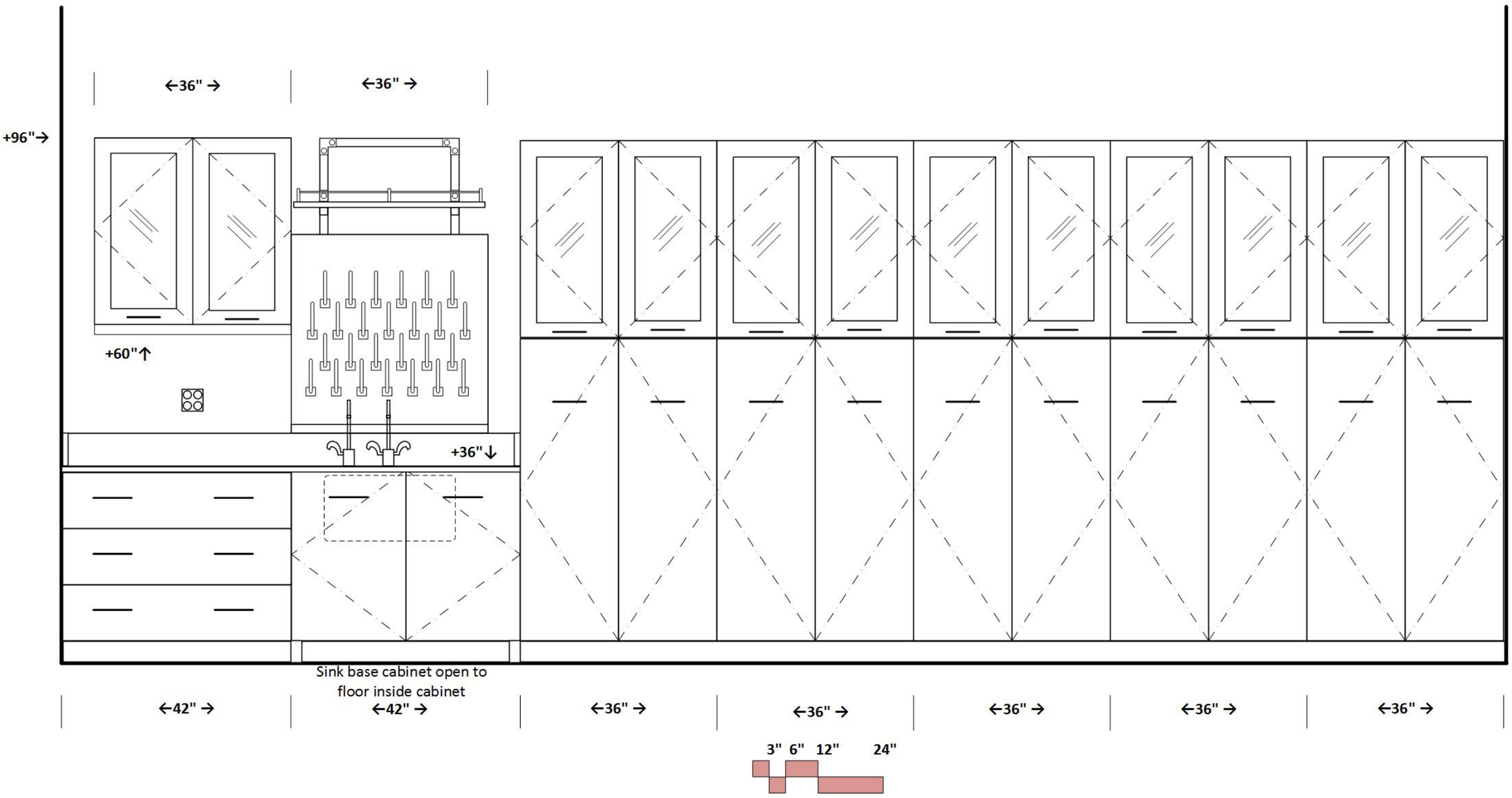
PLUMBING
Hot/Cold water (HW/CW) at sinks with vacuum breakers
Pure water point-of-use water polisher at sink in Personal Care Lab
Domestic water and drain at safety shower/eyewash

CONTRACTOR FURNISHED EQUIPMENT
Wood (bamboo) casework - base cabinets, wall cabinets, tall cabinets
Epoxy resin tops and sinks; Faucets & fittings
Chemical fume hood
Canopy exhaust hoods in Engineering Lab
Safety shower/eyewash
Fire Extinguisher
Snorkel exhaust units

OWNER FURNISHED EQUIPMENT
Chairs
Benchtop analytical instruments

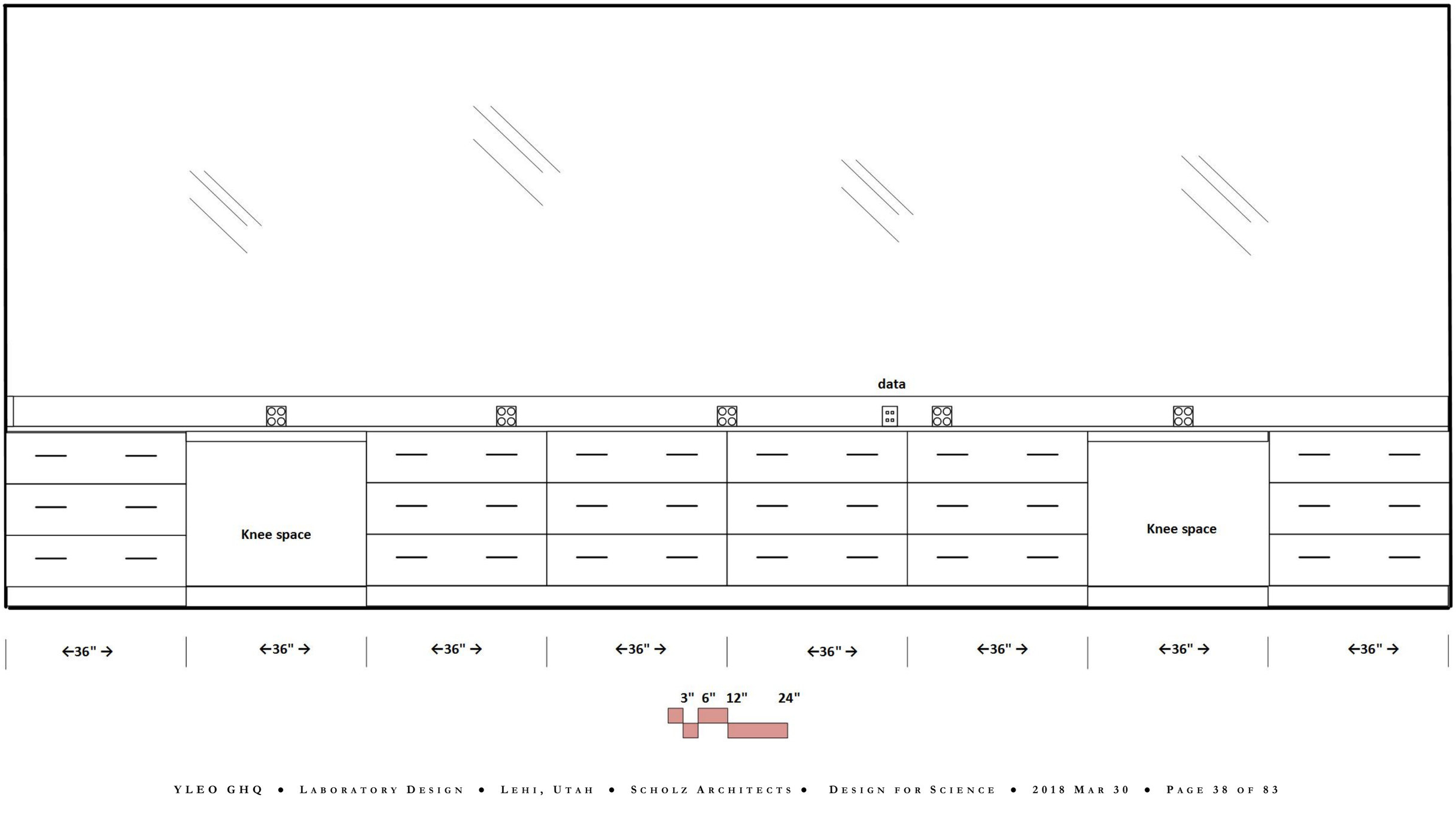
ENGINEERING LAB

Elevation A



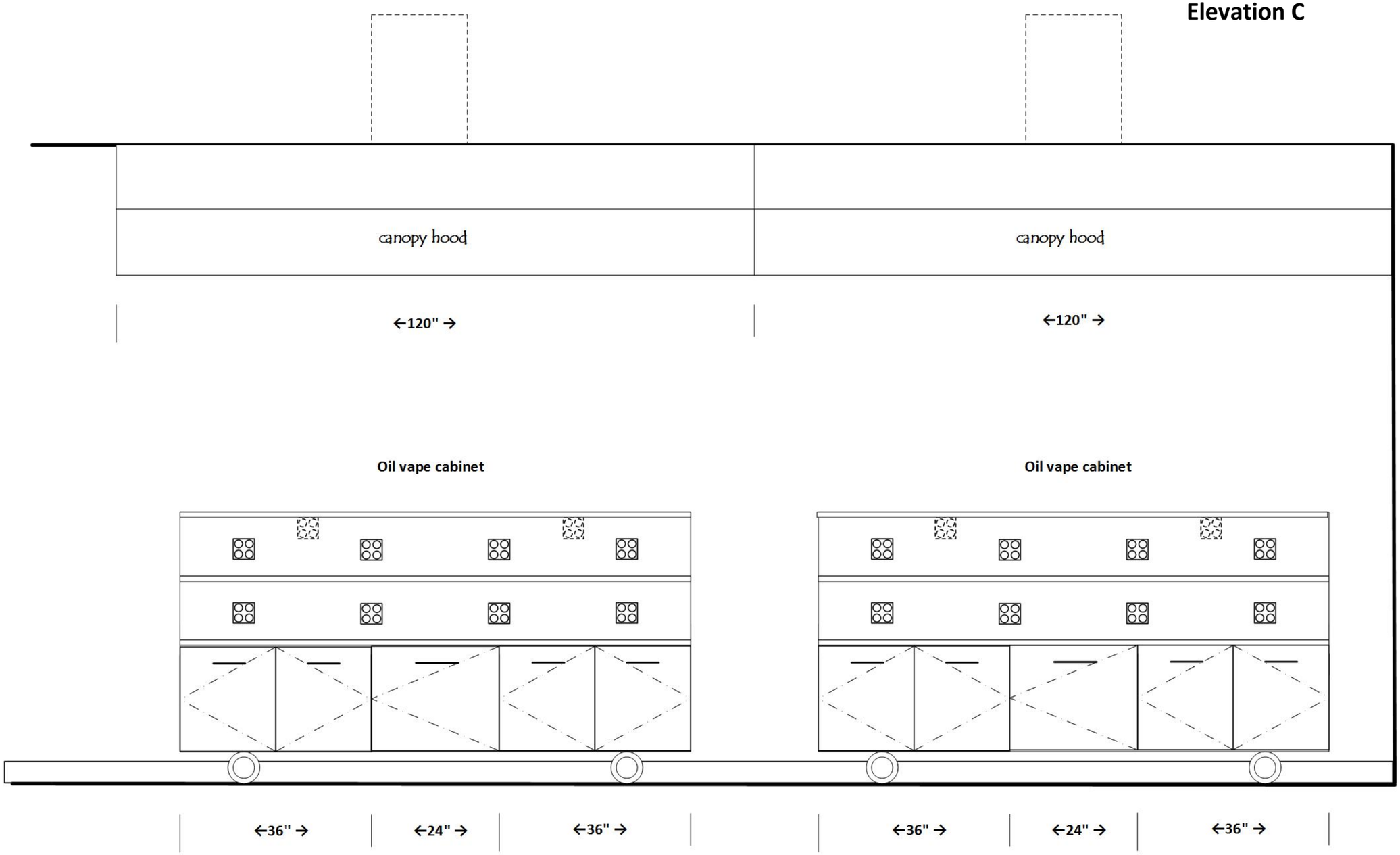
ENGINEERING LAB

Elevation B

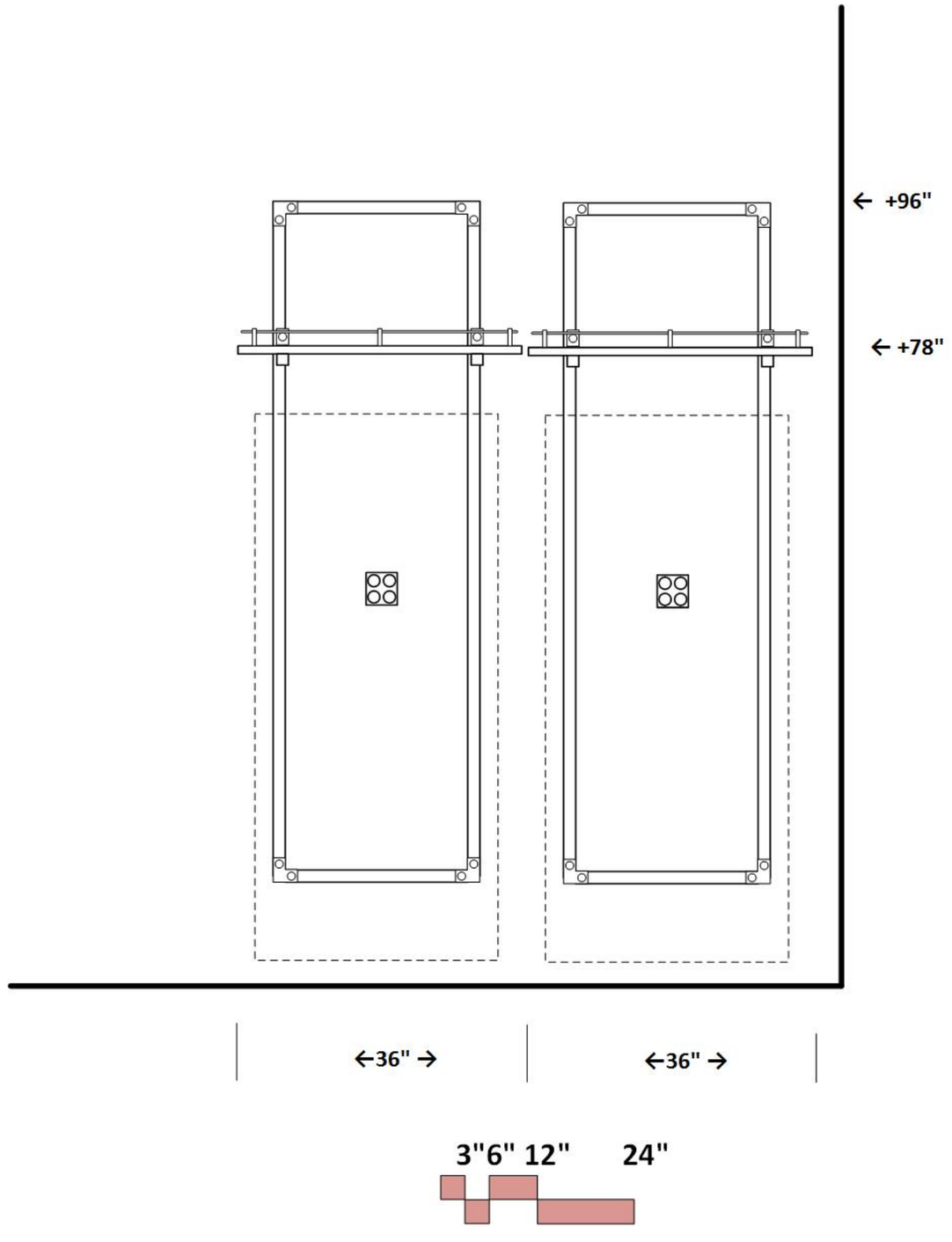


ENGINEERING LAB

Elevation C

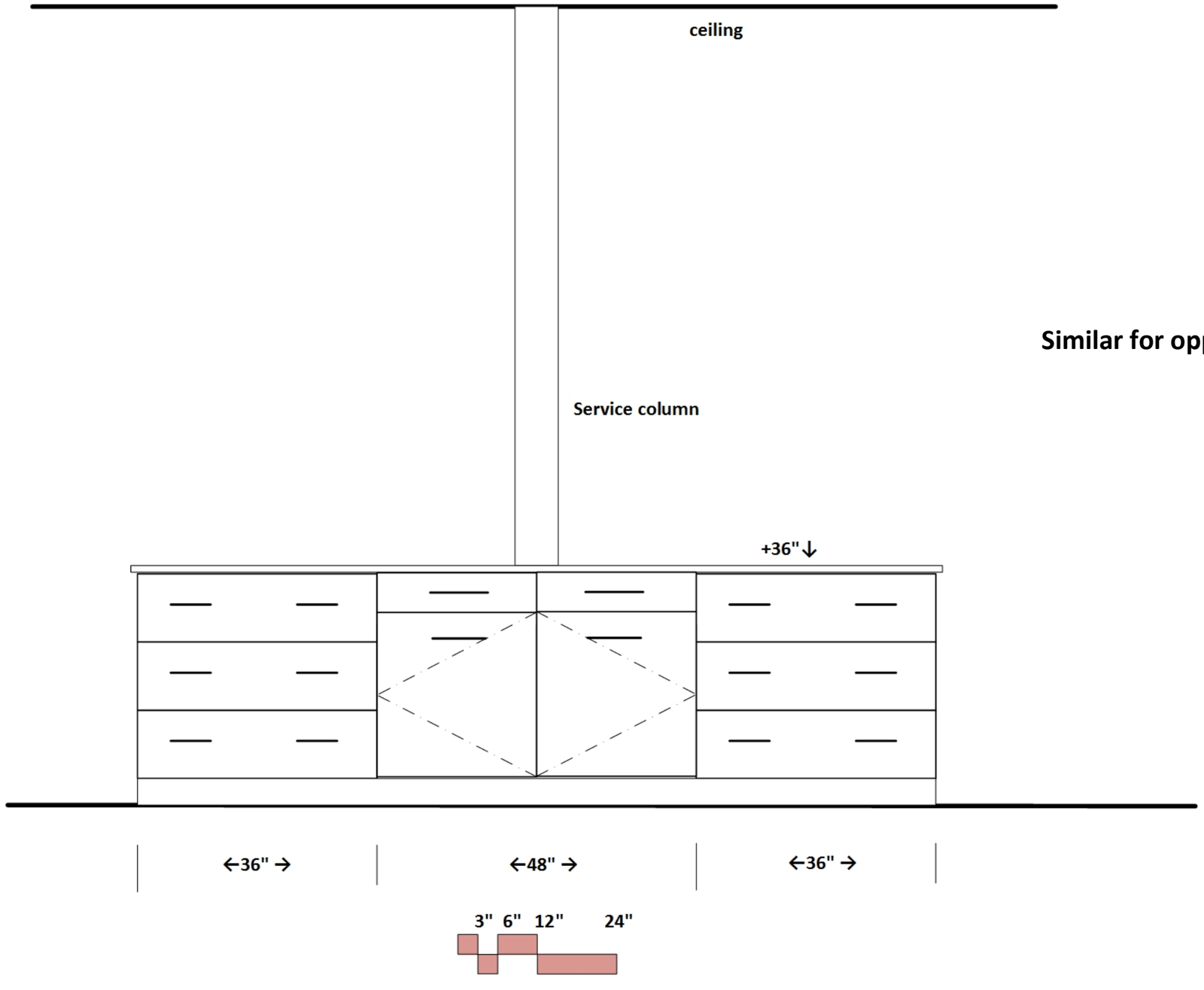


ENGINEERING LAB
Elevation D



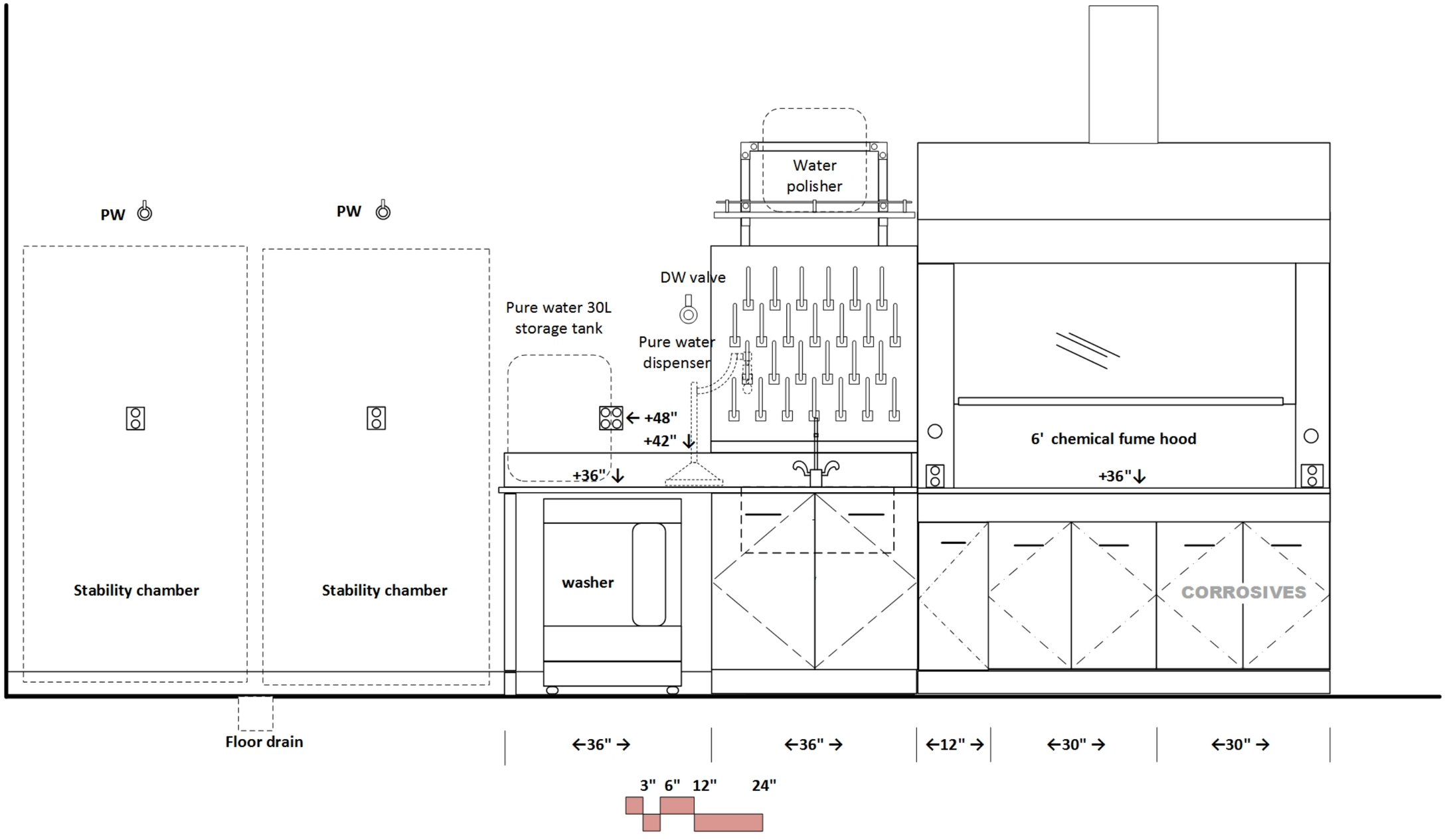
ENGINEERING LAB

Elevation E

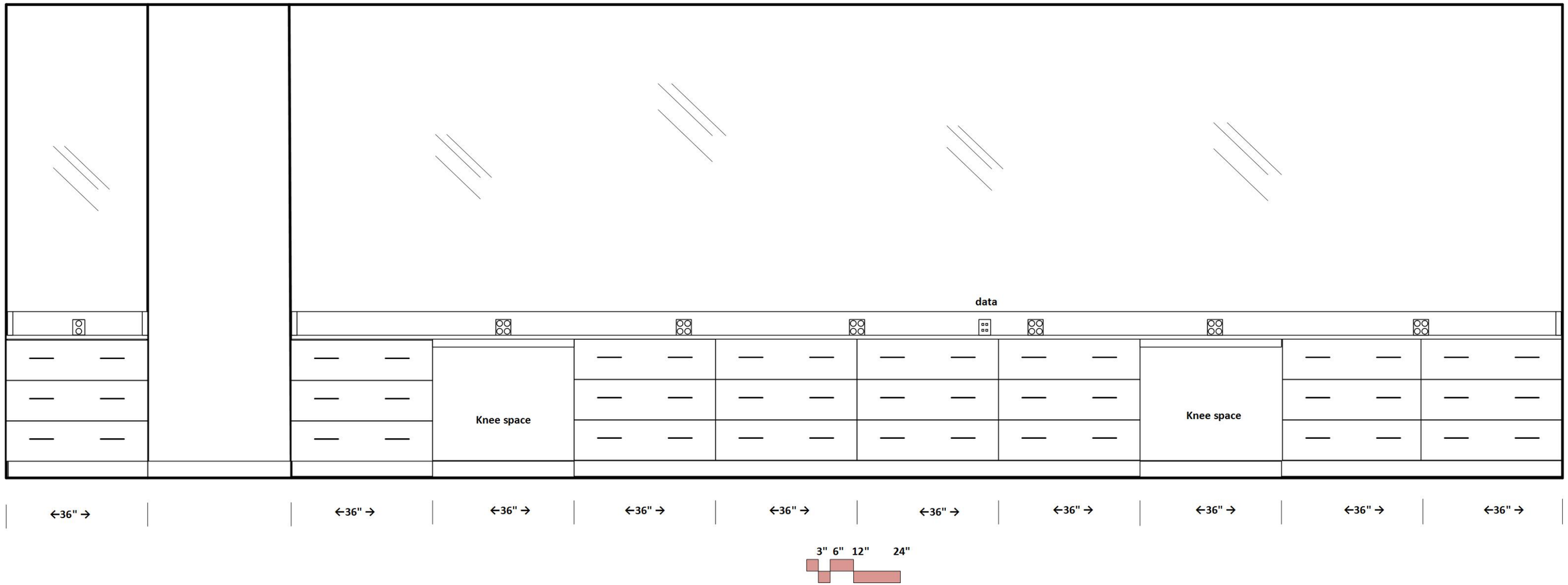


Similar for opposite side

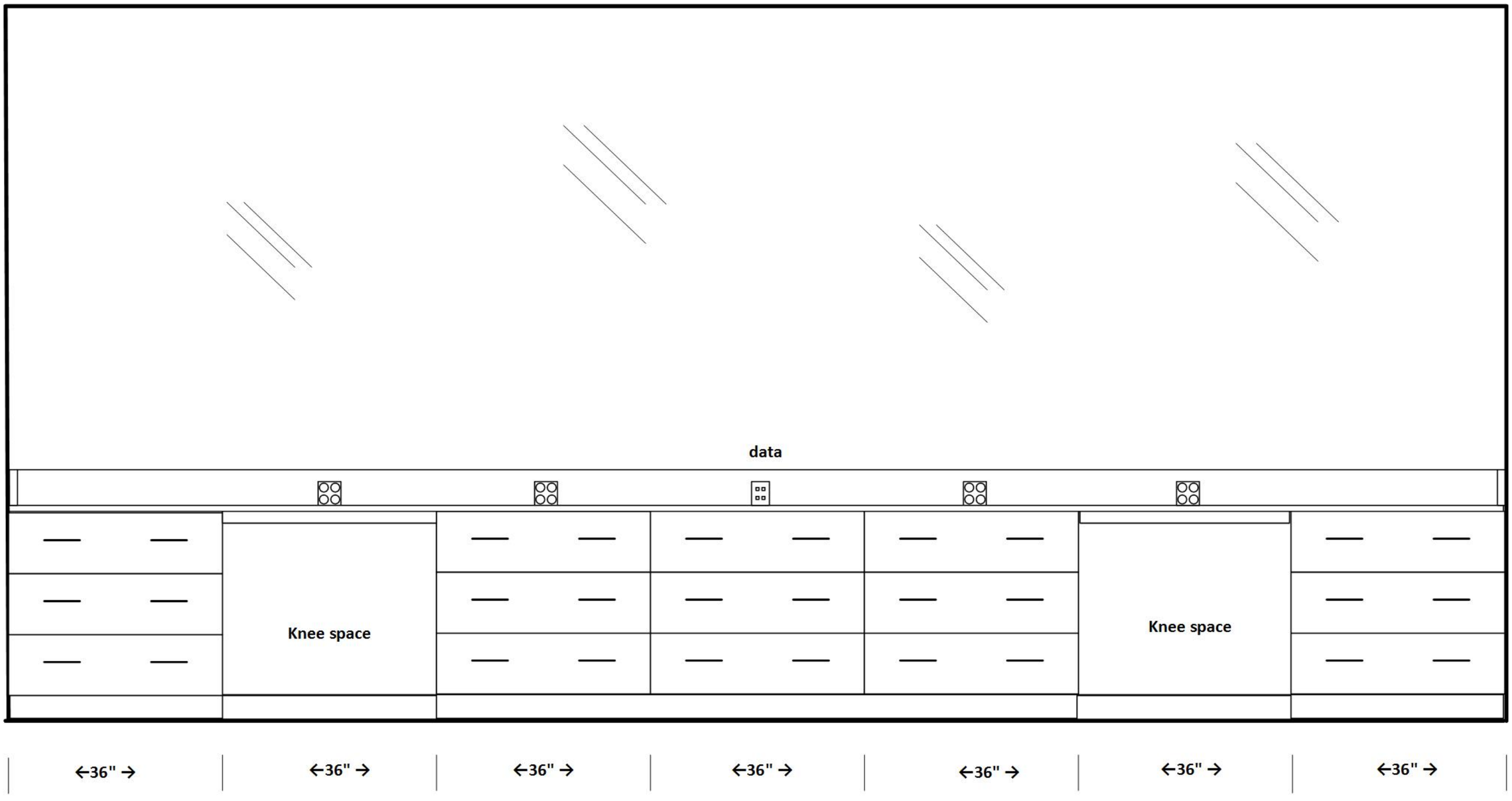
Personal Care Lab
Elevation F

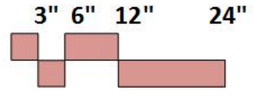


Personal Care Lab
Elevation G

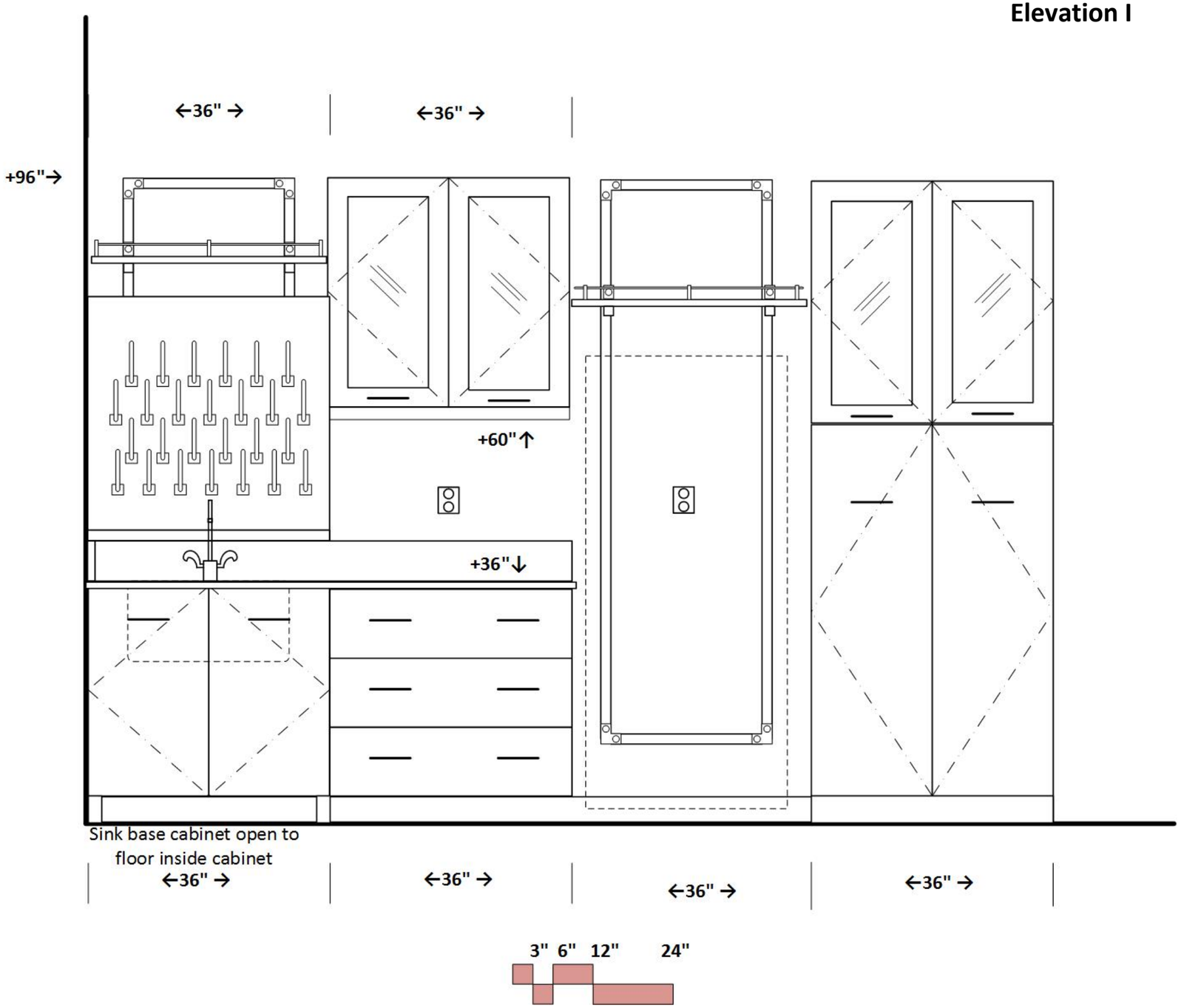


Personal Care Lab
Elevation H

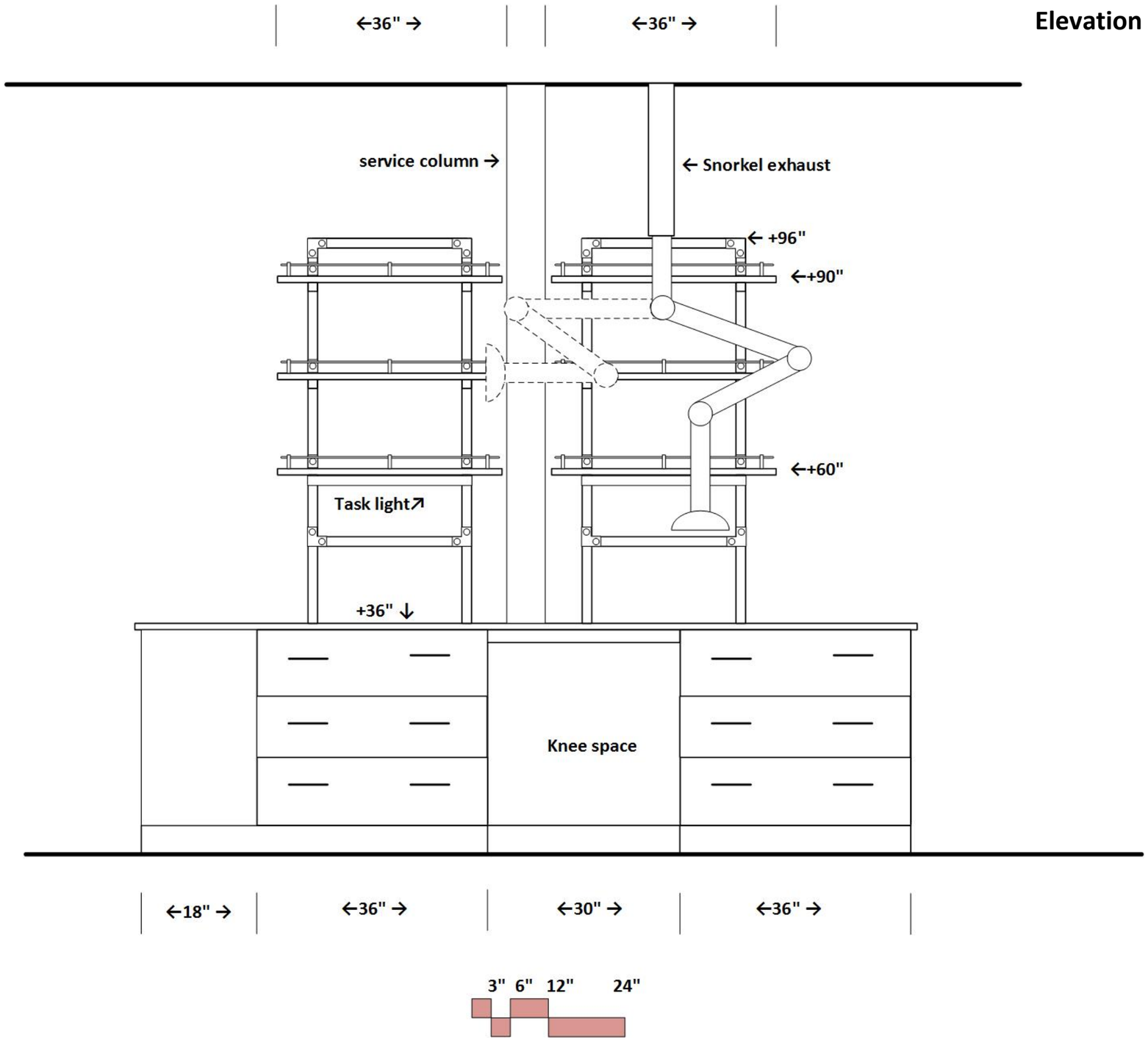




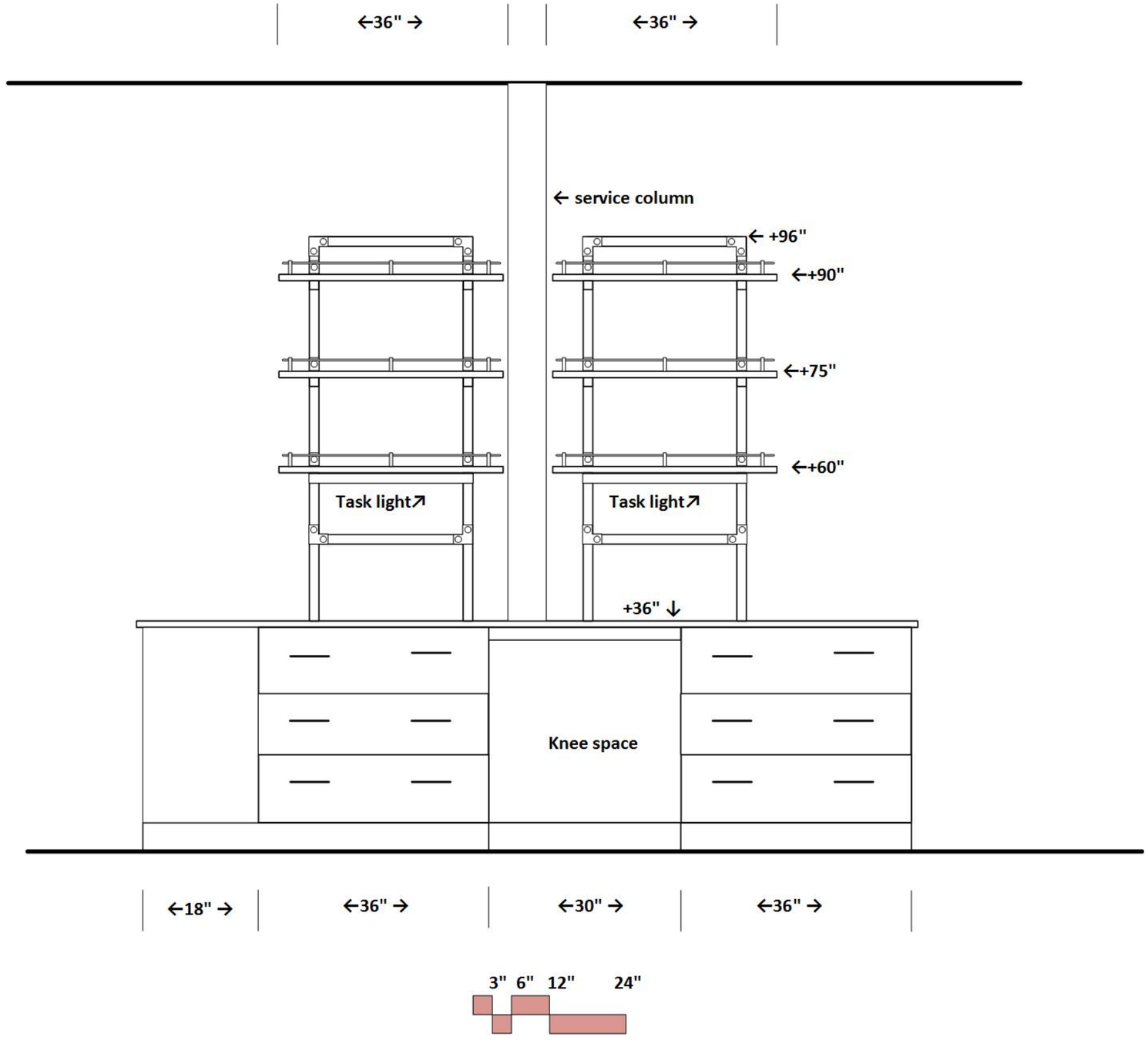
Personal Care Lab
Elevation I



Personal Care Lab
Elevation J

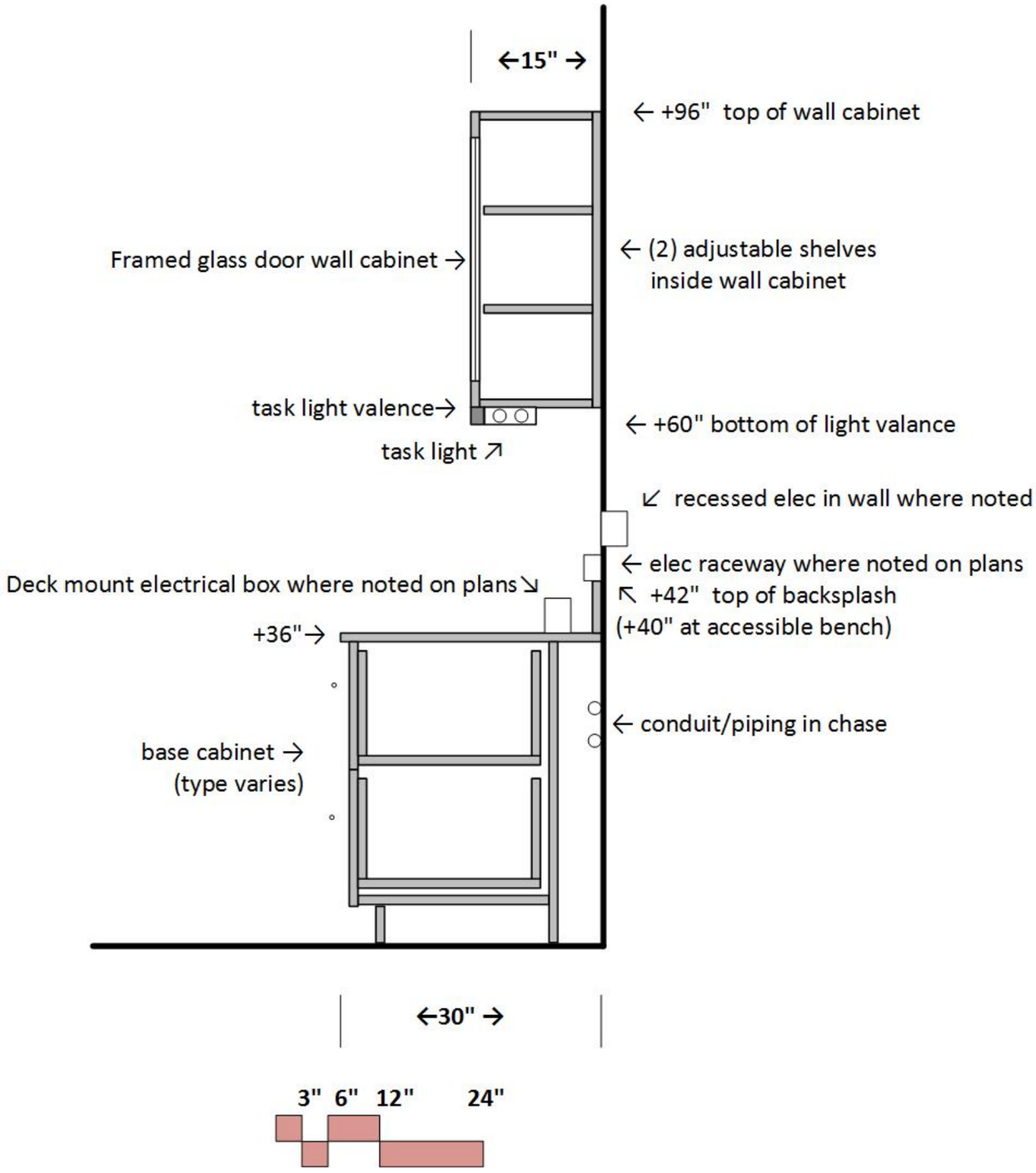


Personal Care Lab
Elevation K



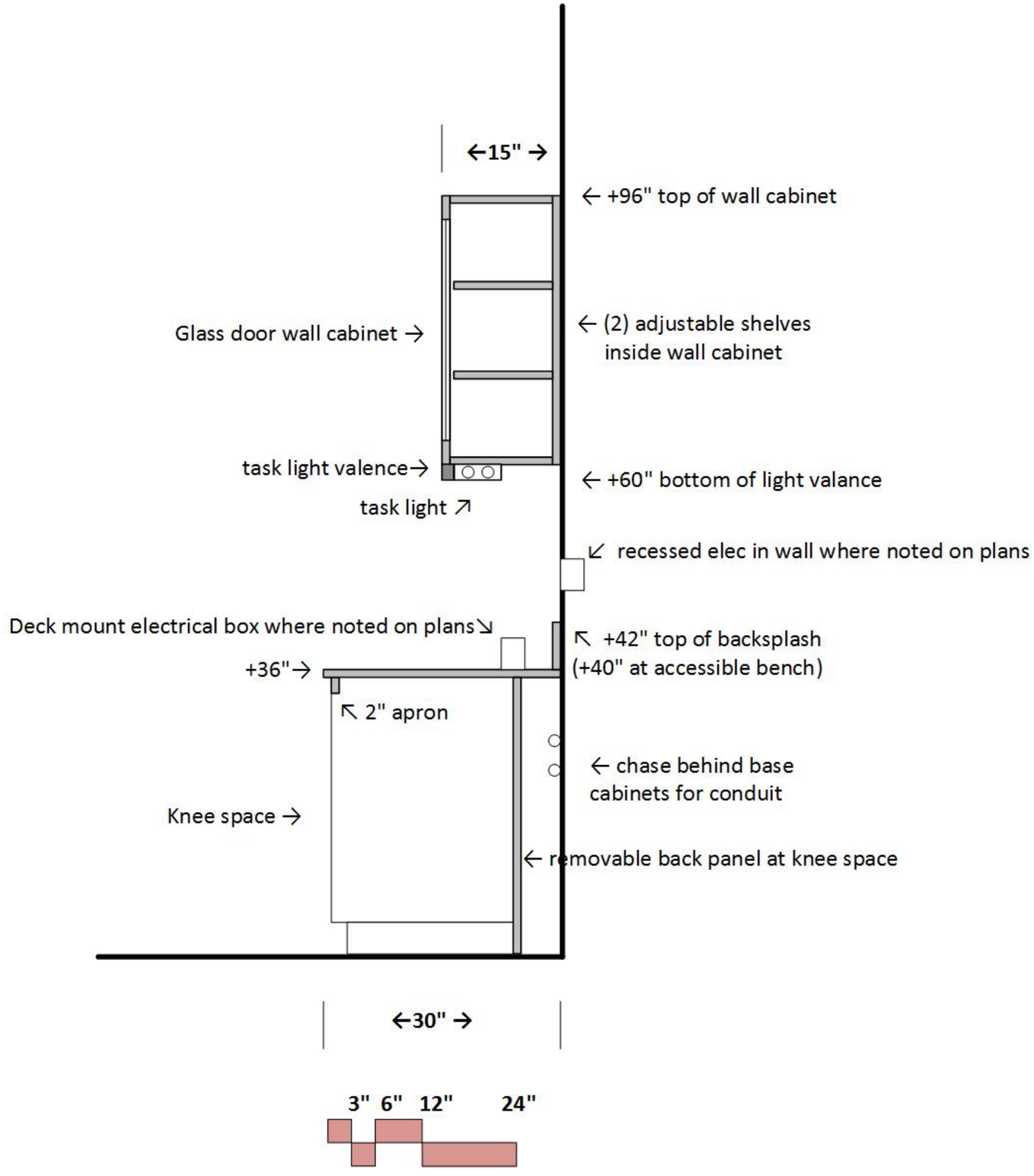
SECTION DETAILS

SECTION DETAIL 01
Wall Bench/Wall Cabinet



SECTION DETAIL 02

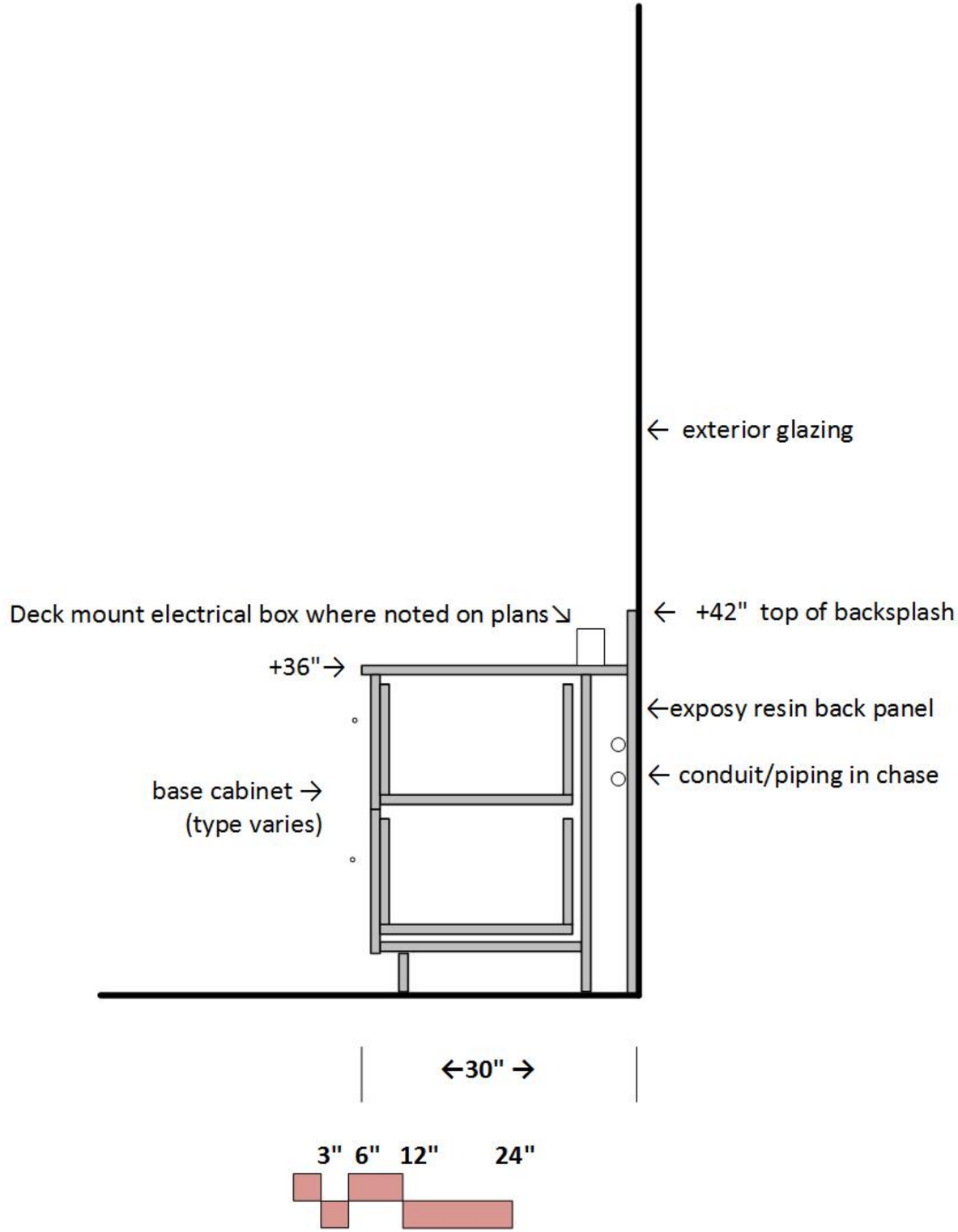
Knee Space/Wall Cabinet



SECTION DETAIL 03

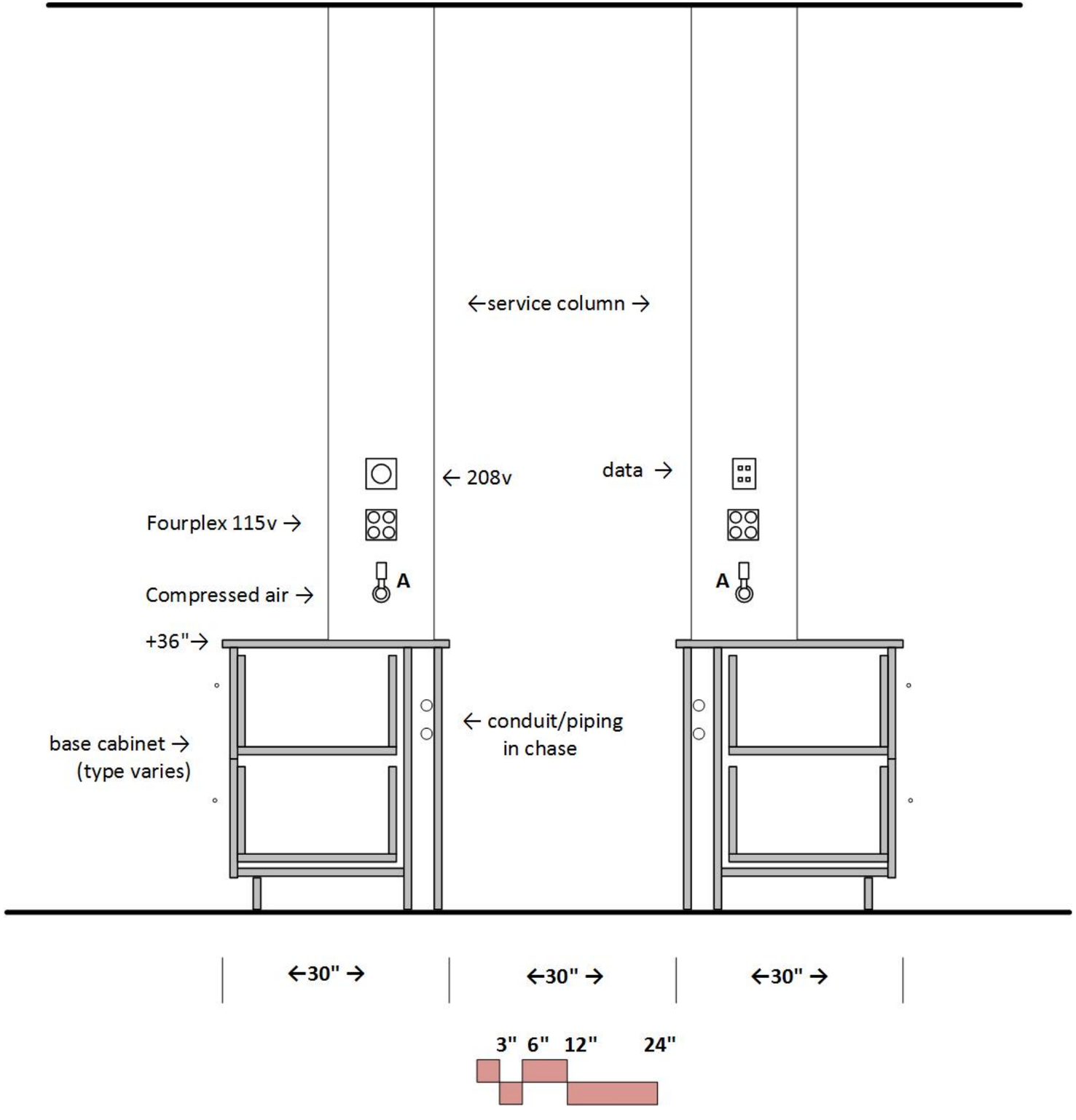
Wall Bench/Window

All stainless steel construction in Food Lab.



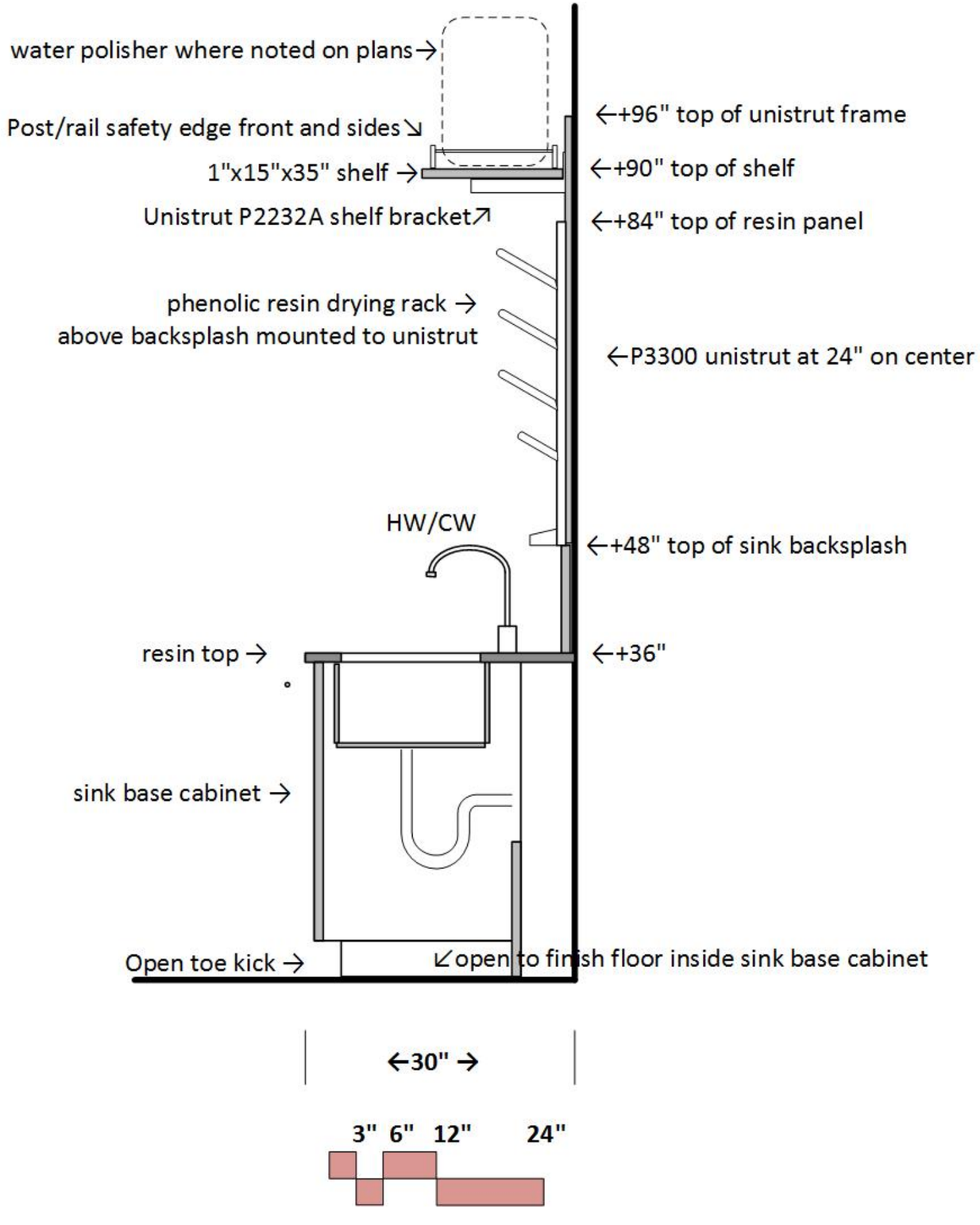
SECTION DETAIL 04

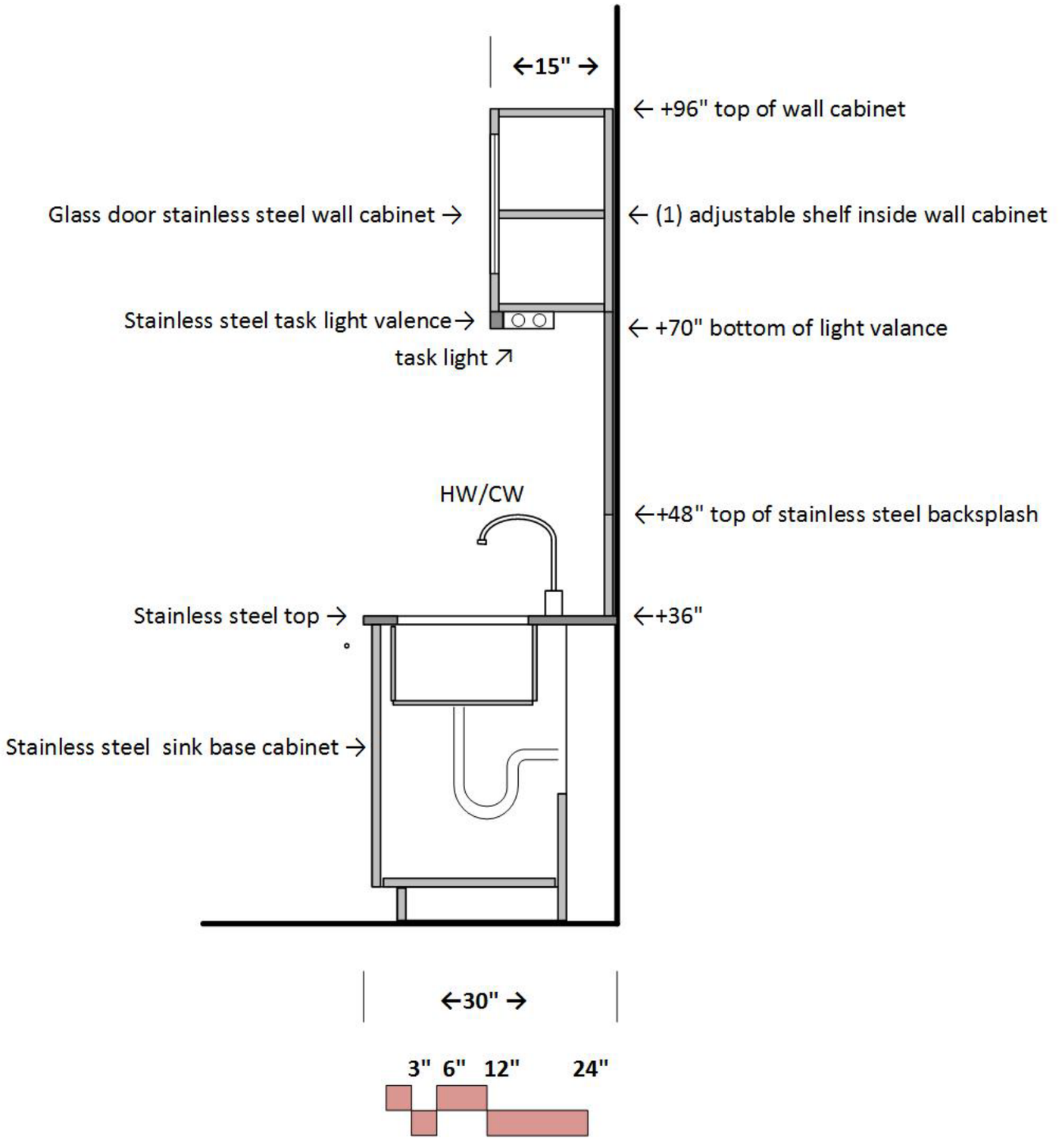
Island Bench/Service Column



SECTION DETAIL 05

Sink Bench/Shelf





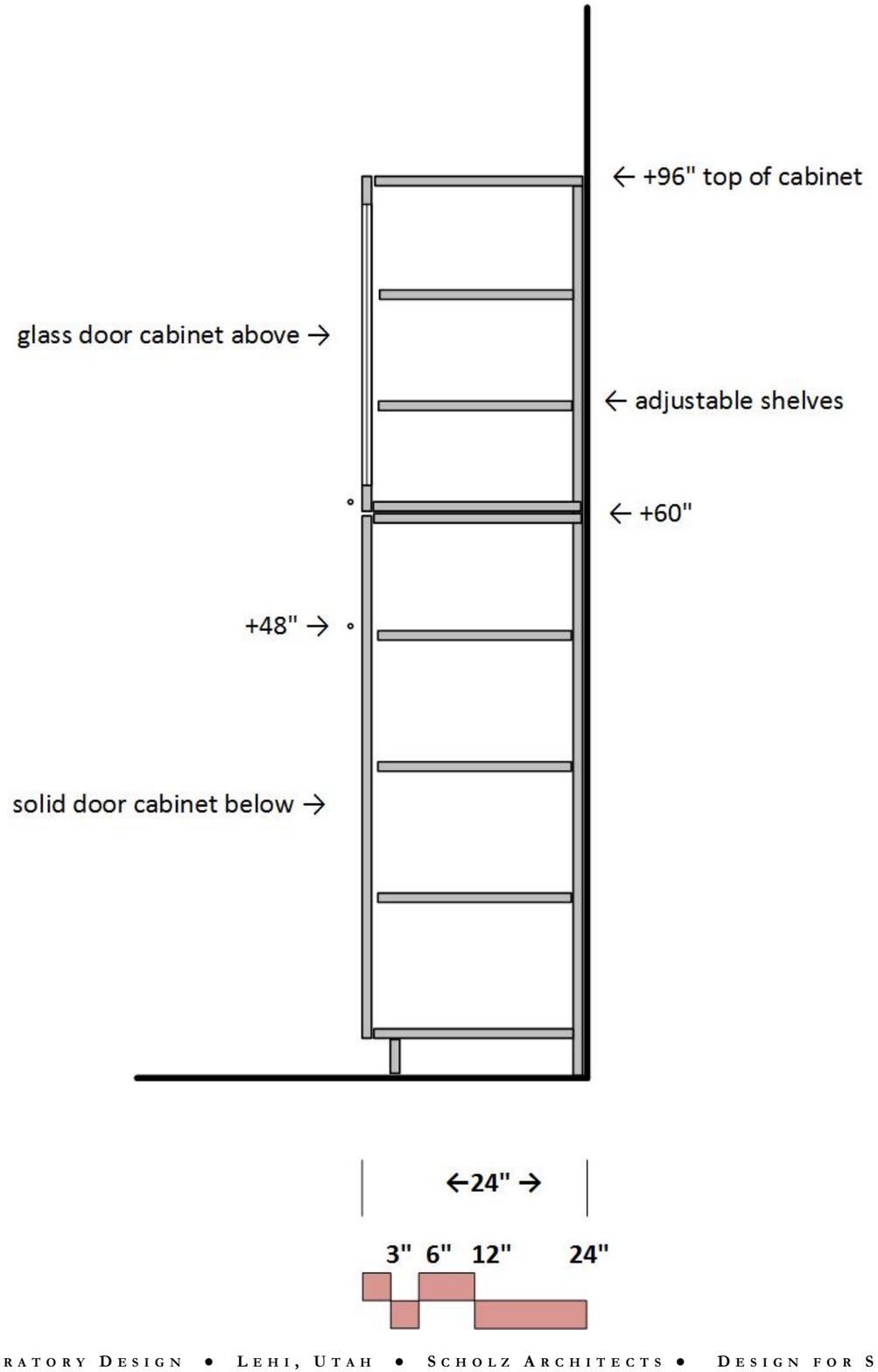
SECTION DETAIL 06

Sink Bench/Wall Cabinet

All stainless steel construction in Food Lab.

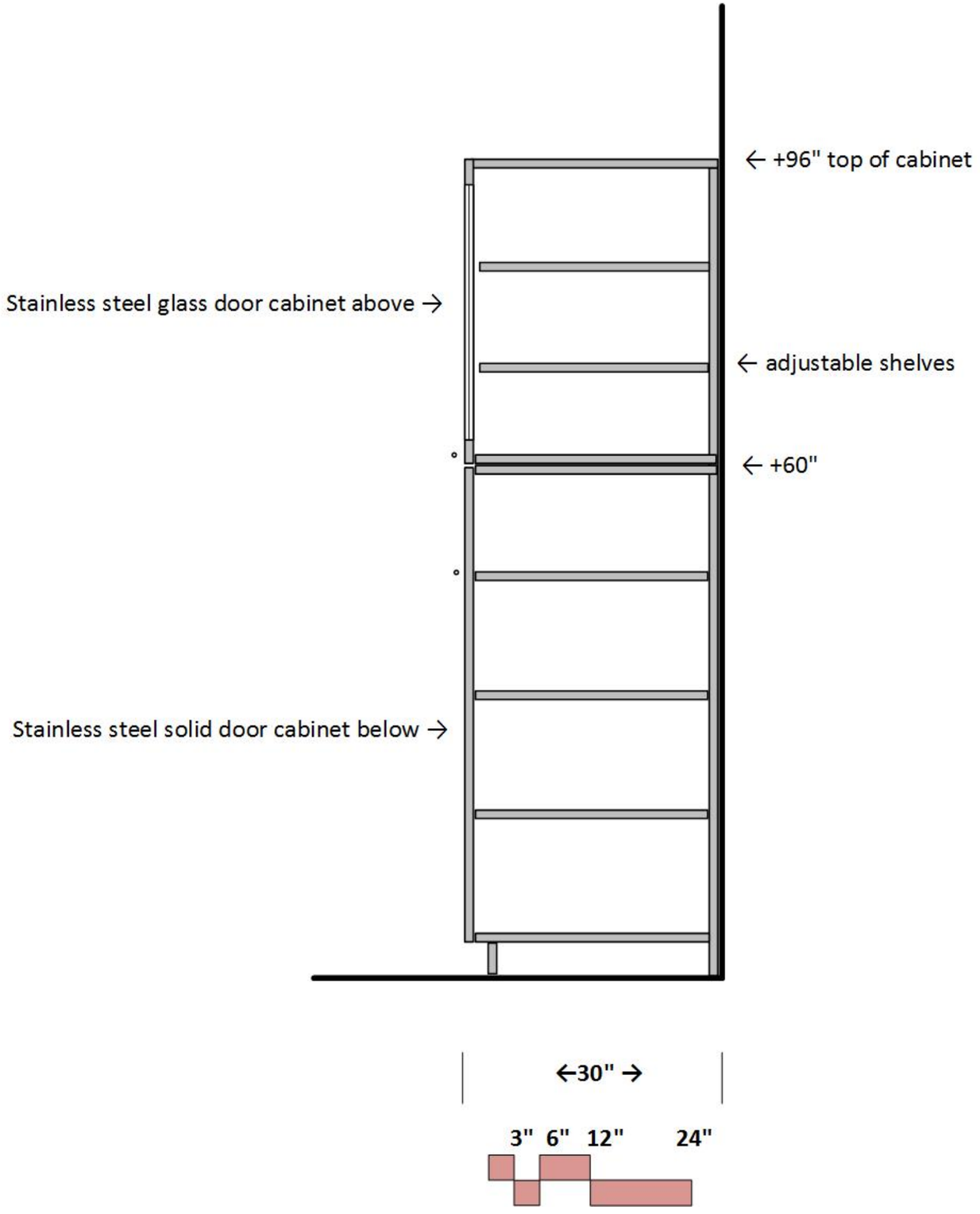
SECTION DETAIL 07

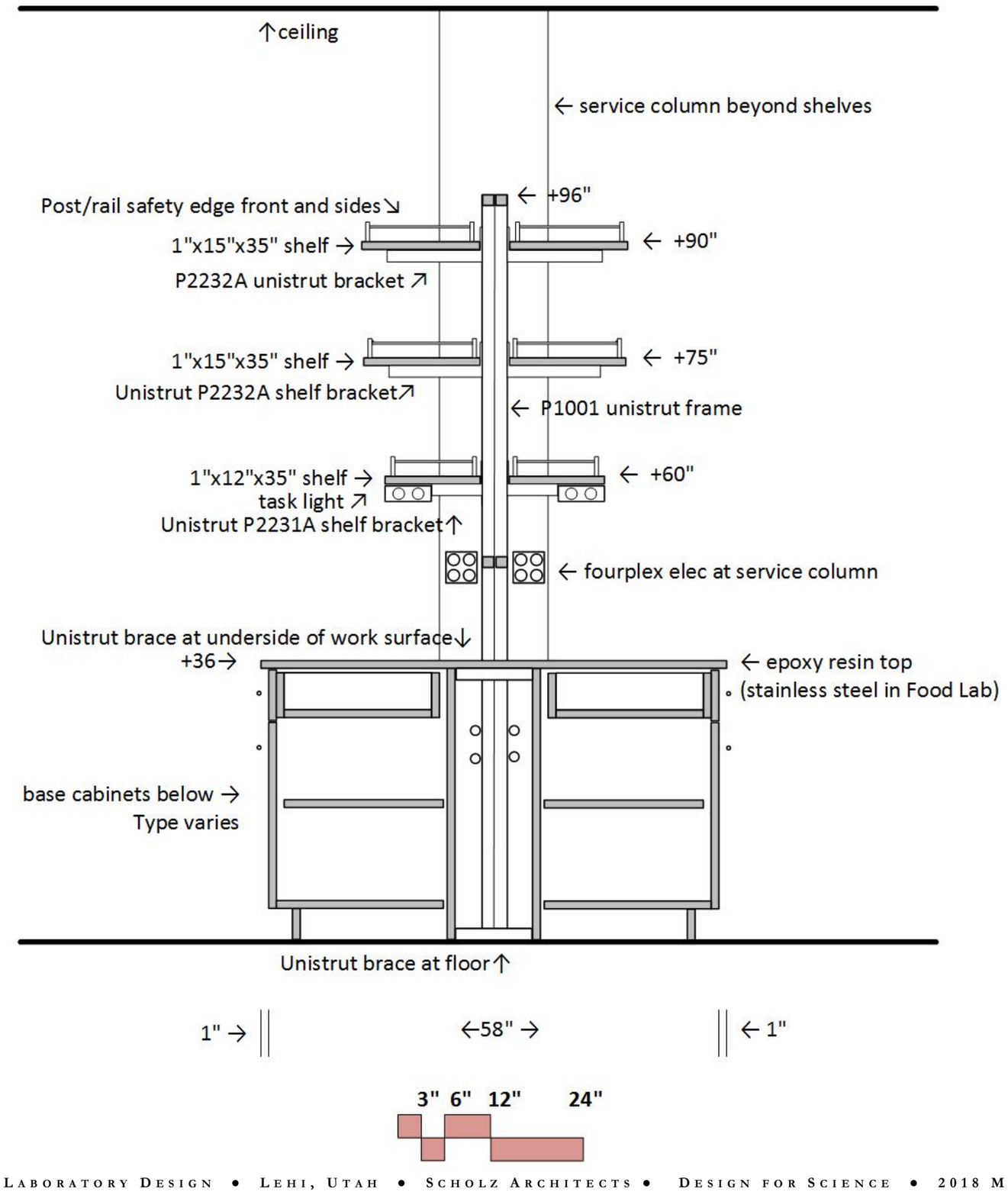
Tall Cabinet



SECTION DETAIL 08

Tall Cabinet Stainless Steel





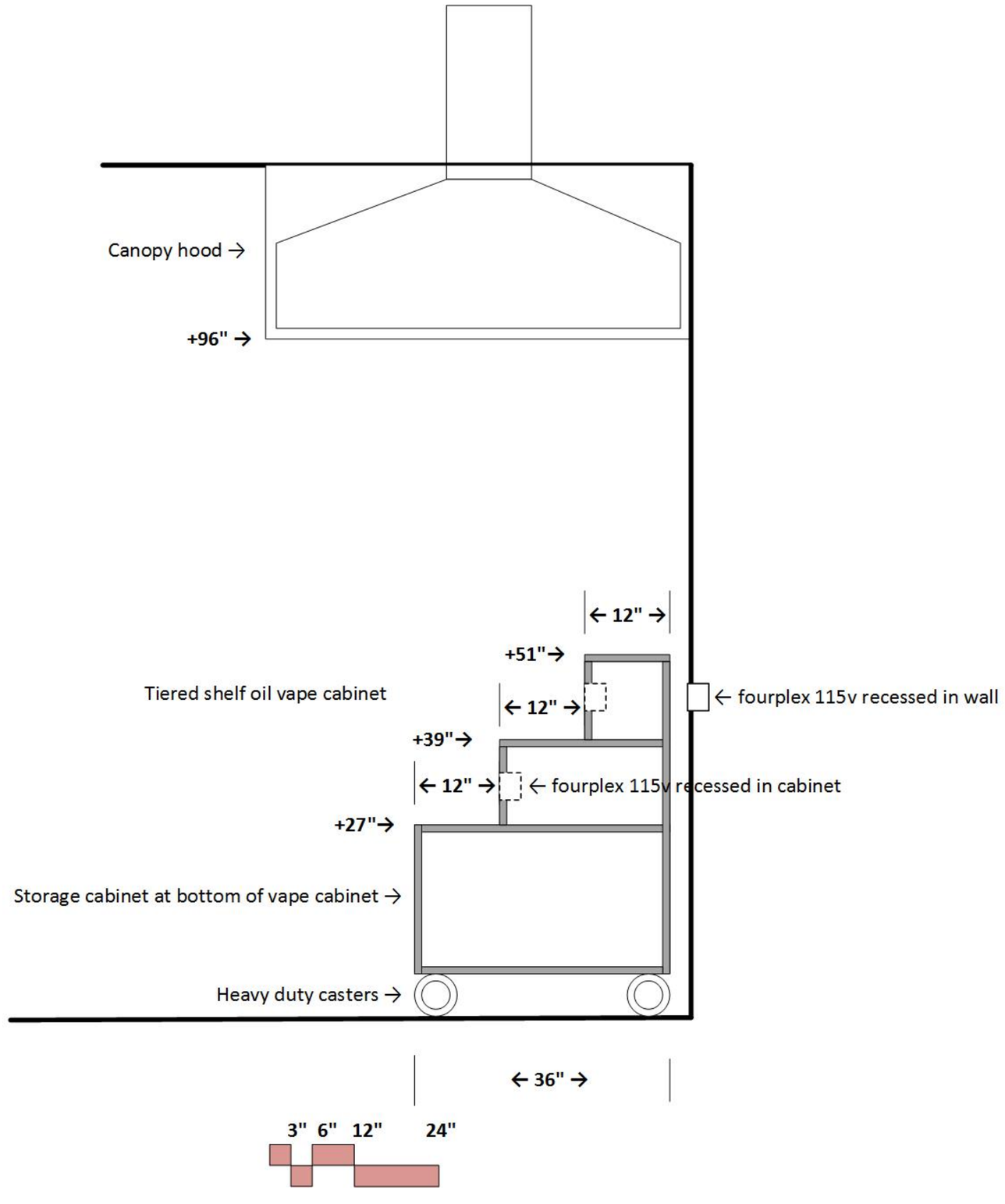
SECTION DETAIL 09

Island/Peninsula Bench/Service Column

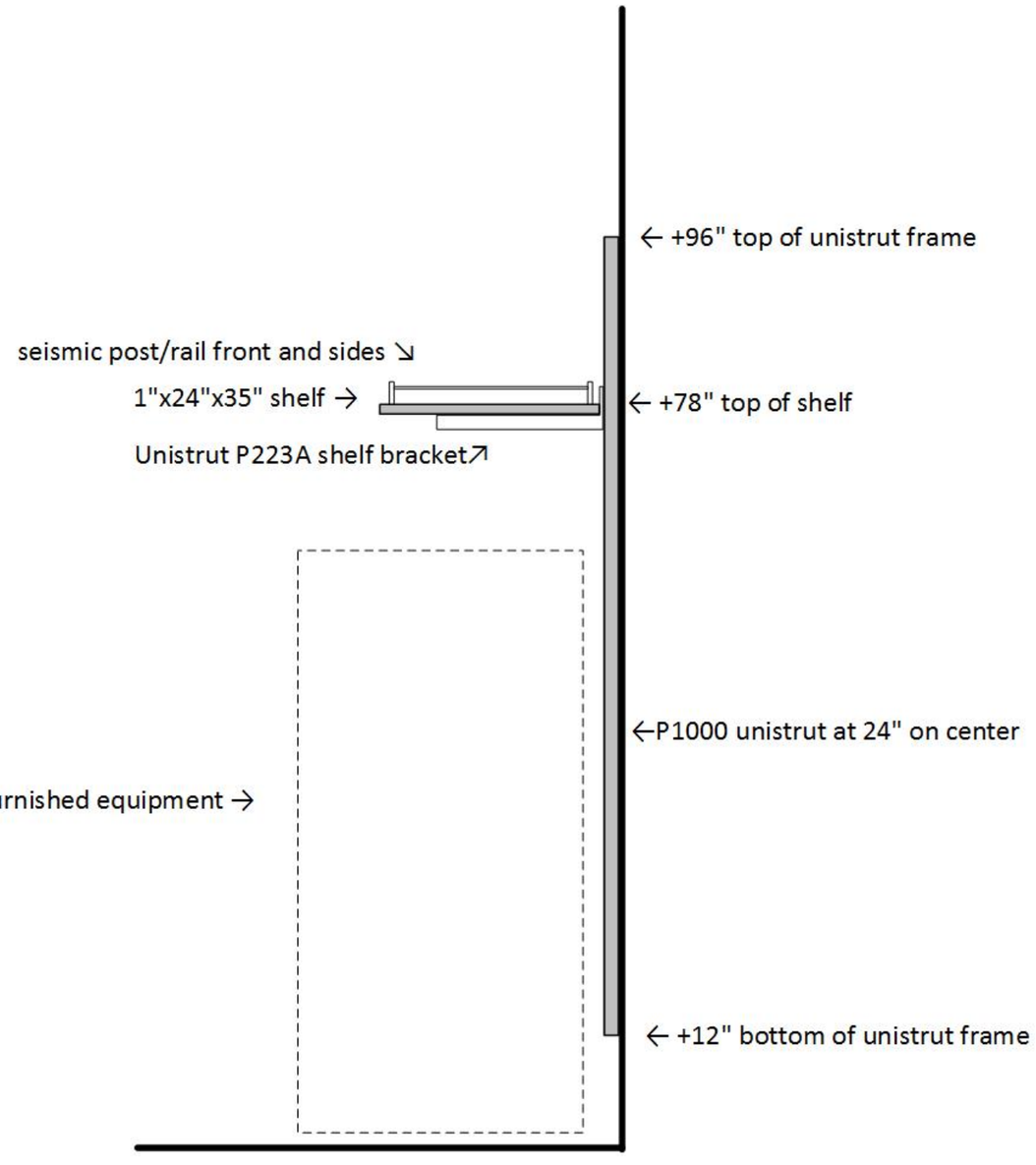
All stainless steel construction in Food Lab.

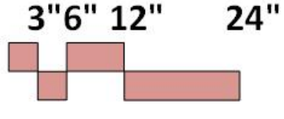
SECTION DETAIL 10

Oil Vape Cabinet/Canopy Hood



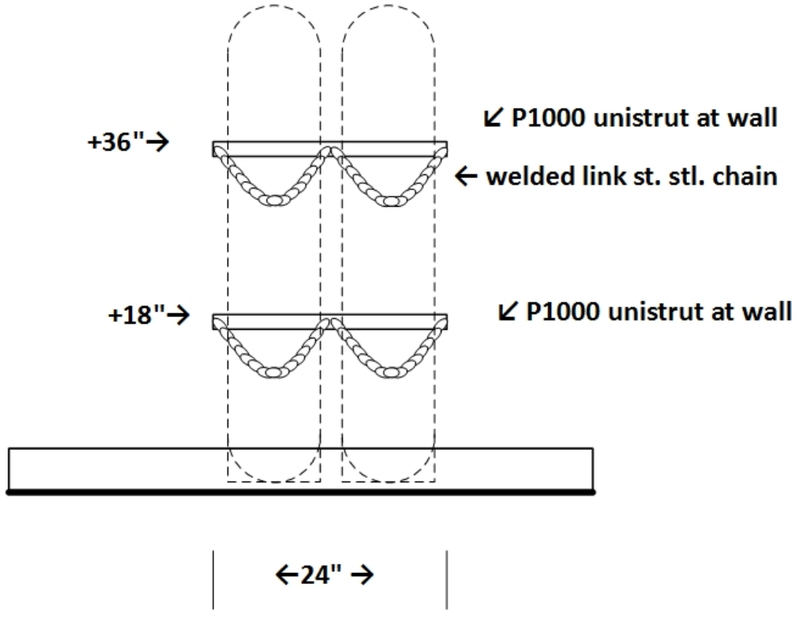
SECTION DETAIL 11
Equipment Space/Shelf



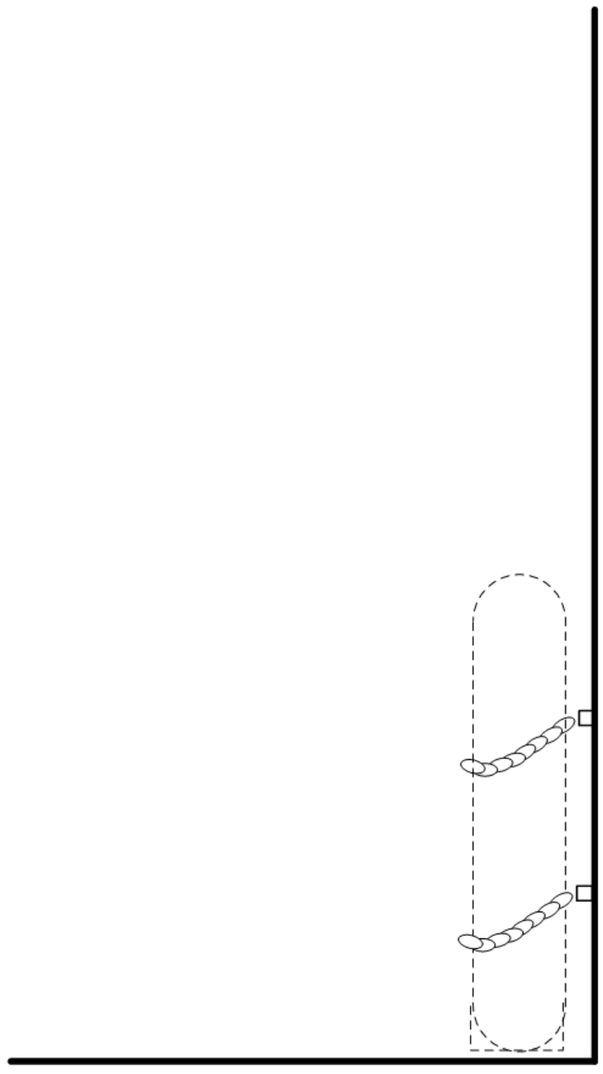


SECTION DETAIL 12

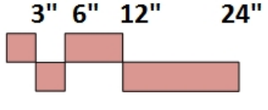
Cylinder Restraint



Elevation



Section



EQUIPMENT CUT SHEETS

CHEMICAL FUME HOOD CUT SHEET

8’ fume Hood: 1200 cfm VAV
6’ Fume Hood: 800 CFM VAV

Protector® XStream™ Laboratory Hoods

Protector XStream Laboratory Hood 9840600 is shown with SpillStopper Work Surface 9849800, 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 C22.2 No. 1010.1
- UL 1805
- CE Conformity Marking (230 volt models)†

Fixtured 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 lpm; 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	0.12`	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`	530	0.13`	440	0.08`	290	$1160
5 feet	960	0.30`	770	0.19`	580	0.11`	380	$1520
6 feet	1180	0.36`	940	0.23`	710	0.13`	470	$1880
8 feet	1660	0.28`	1330	0.18`	1000	0.10`	660	$2640

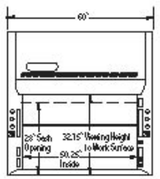
**Based on average annual dollars per CFM usage of $4.00; fume hood operating 24 hours a day and 5 days per week (6240 hours per year).*

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

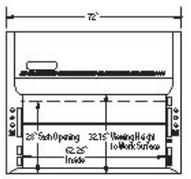
***International electrical configuration*

4 Feet
98404 Series

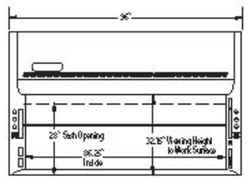
5 Feet
98405 Series



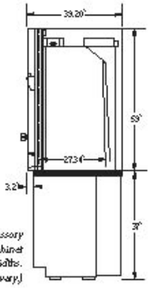
6 Feet
98406 Series



8 Feet
98408 Series



Side View/
All Models

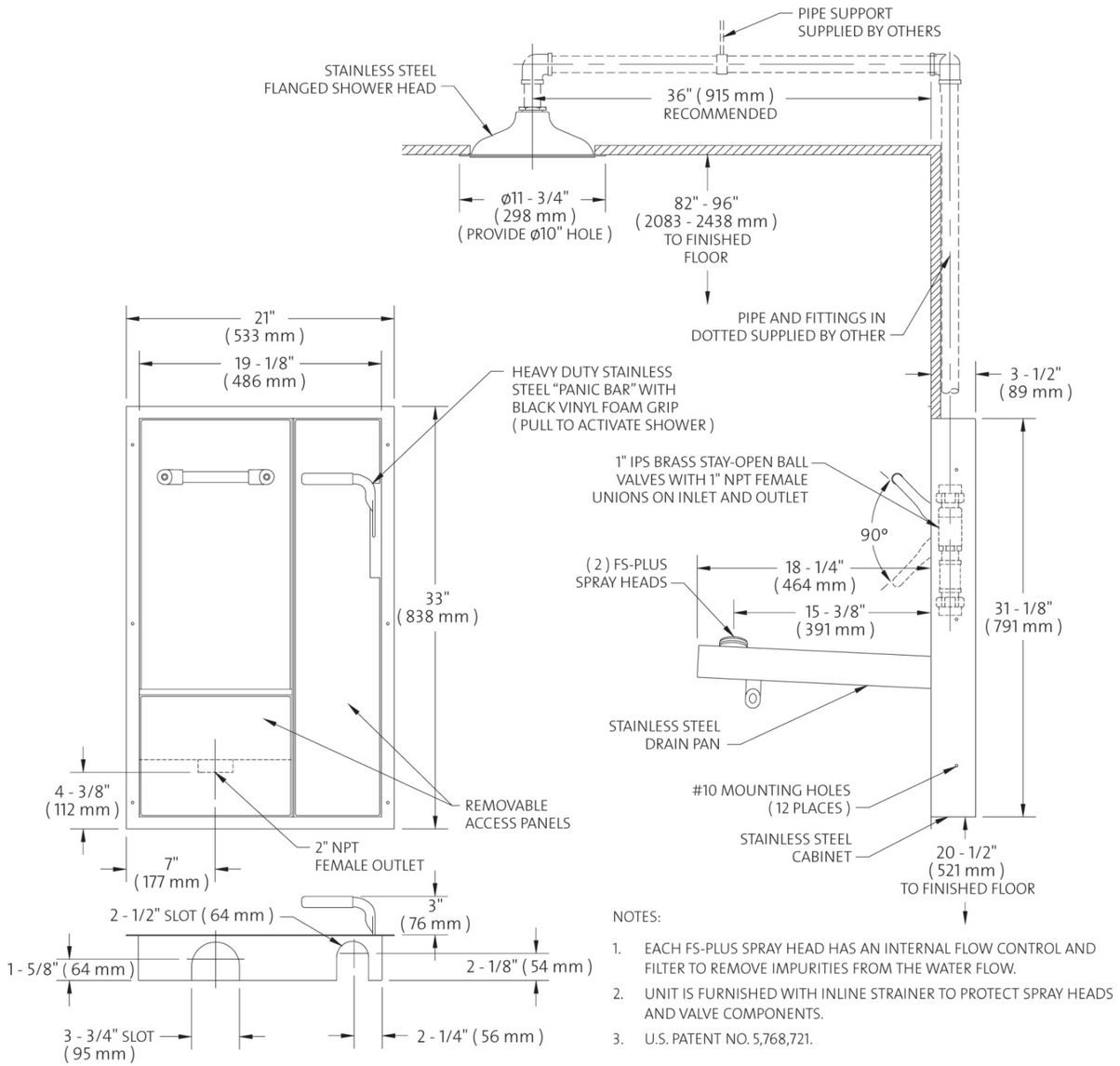


(Side view shown with accessory work surface and base cabinet available for all hood widths. Height can vary.)

WaterSaver

Reccessed Laboratory Units

- **SSBF2160** Recessed Safety Station with Drain Pan, Stainless Steel Shower Head
- **SSBF2162** Recessed Safety Station with Drain Pan and Daylight Drain, Stainless Steel Shower Head



NOTES:

1. EACH FS-PLUS SPRAY HEAD HAS AN INTERNAL FLOW CONTROL AND FILTER TO REMOVE IMPURITIES FROM THE WATER FLOW.
2. UNIT IS FURNISHED WITH INLINE STRAINER TO PROTECT SPRAY HEADS AND VALVE COMPONENTS.
3. U.S. PATENT NO. 5,768,721.

SSBF2160
Provide hard drain connection in wall for eyewash unit.
Provide floor drain for shower.

CANOPY HOOD CUT SHEET

Engineering Lab

Actual size will vary.
Requires exhaust per Div. 23.

Canopy Hoods

Canopy Hood 4799000. Blower and ductwork must be ordered separately.

Nominal Width	Catalog Number	Shipping Weight lbs./kg
4 Feet	**4799000**	65/29
6 Feet	**7099000**	100/45

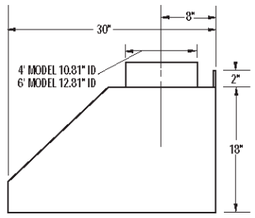
4' Canopy Hood 4799000

CFM at Static Pressure - Inches H_2O						
.12"	.19"	.22"	.36"	.39"	.73"	2.45"
325	450	488	650	675	975	1950

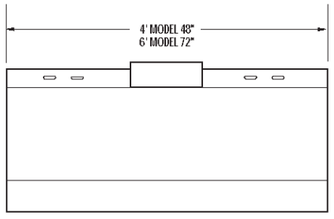
6' Canopy Hood 7099000

CFM at Static Pressure - Inches H_2O						
.17"	.24"	.31"	.45"	.49"	.89"	2.5"
425	550	638	825	850	1275	2550

Dimensional Data



SIDE



FRONT

*Contact Labconco at **800-821-5525** or **816-333-8811** for blower sizing assistance.*

The Canopy Hood is specifically designed to vent non-toxic materials such as heat, steam and odors from large or bulky apparatus such as ovens, steam baths and autoclaves. The hood may be installed on a wall or suspended from the ceiling for peninsular and corner locations. **For most efficient performance, the hood should be installed no more than 12" above the equipment to be ventilated.** Coupled with a blower and ductwork, the Canopy Hood can operate at a wide range of exhaust rates.

Features:

- Glacier white, epoxy-coated steel construction
- Integral baffle
- Fully assembled, complete with mounting hardware for installation on wall or suspended from ceiling. **Threaded rod is required.**

Both models require (not included):

- ***Ductwork.*** Contact Labconco for recommendations
- ***Remote blower.*** Contact Labconco for recommendations.

5 SERIES WALL HOODS – 18" HIGH

Viking Professional 5 Series – VWH

APPEARANCE AND DESIGN

- Backlit LED knobs extend and illuminate to control lighting level and fan speed, then fully retract when not in use
- Seamless design provides a refined finish to your kitchen
- Tough-box ventilator housing protects blower and quietly removes smoke and odor
- Quietest hood and ventilator combination in the industry
- Multi-speed ventilator control knob allows precise adjustment to desired fan speed
- Maintenance-free ventilators never need to be cleaned with the commercial-type hood filters doing the dirty work
- Cook with peace of mind as the built-in heat sensor activates the ventilator to full power if cooking temperatures reach uncomfortable levels
- Ventilators must be purchased separately and are available in internal, external, and in-line models (See Ventilation guide for compatibility) Must use Viking ventilator kits with Viking hoods

BRIGHT LED LIGHTING

- Dimmable lighting controls provide custom illumination for enhanced surface cooking visibility
- Long-life LED light bulbs are energy efficient and easily replaceable
- Heat lamps conveniently keep food warm until ready to serve (not available on Island Hoods)

EASY CLEANUP

- Commercial-type baffle filters efficiently remove heat and grease vapors from the air
- Stainless steel dishwasher-safe filters are easily removed for quick cleaning
- Low-profile filter system reduces interior hood space, leaving less surface to clean
- Removable trough collects liquefied grease for convenient disposal

INTERIOR, EXTERIOR, OR IN-LINE VENTILATORS

- Wall and island hoods
  - Interior-power ventilator kits – 300 CFM (VINV300), 600 CFM (VINV600), or 1,200 CFM (VINV1200)
  - Exterior-power ventilator kits – 900 CFM (DEV900), 1,200 CFM (DEV1200), or 1,500 CFM (DEV1500)
  - In-line-power ventilator kits – 900 CFM (DIL900) or 1,200 CFM (DIL1200)
  - See specification chart for compatibility
- One ventilator, one duct run for any size hood/ventilator

MODEL NUMBERS

- VWH53048 – 30"W. Wall Hood
- VWH53648 – 36"W. Wall Hood
- VWH54248 – 42"W. Wall Hood
- VWH54848 – 48"W. Wall Hood
- VWH56048 – 60"W. Wall Hood

ACCESSORIES

- DCW30SS – Wall Hood Duct Cover for 30" Hood
- DCW36SS – Wall Hood Duct Cover for 36" Hood
- DCW42SS – Wall Hood Duct Cover for 42" Hood
- DCW48SS – Wall Hood Duct Cover for 48" Hood
- DCW60SS – Wall Hood Duct Cover for 60" Hood
- WGP30SS – Wall Hood Warming Shelf Panels for 30" Hood
- WGP36SS – Wall Hood Warming Shelf Panels for 36" Hood
- WGP48SS – Wall Hood Warming Shelf Panels for 48" Hood
- BKS30SS – Wall Hood Backsplash for 30" Hood
- BKS36SS – Wall Hood Backsplash for 36" Hood
- BKS48SS – Wall Hood Backsplash for 48" Hood
- BKS60SS – Wall Hood Backsplash for 60" Hood

COLOR FINISHES

- Available in seven exclusive color finishes
- Stainless Steel (SS), Black (BK), White (WH), Apple Red (AR), Burgundy (BU), Cobalt Blue (CB), Graphite Gray (GG)

WARRANTY

- 2-year full – complete product
- 90-day full – cosmetic parts such as glass, painted items and decorative items
- 5-year limited – ventilator motors

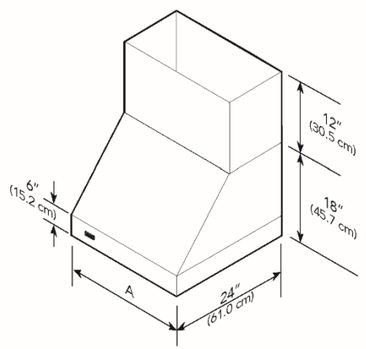
5 SERIES WALL HOODS – 18" HIGH

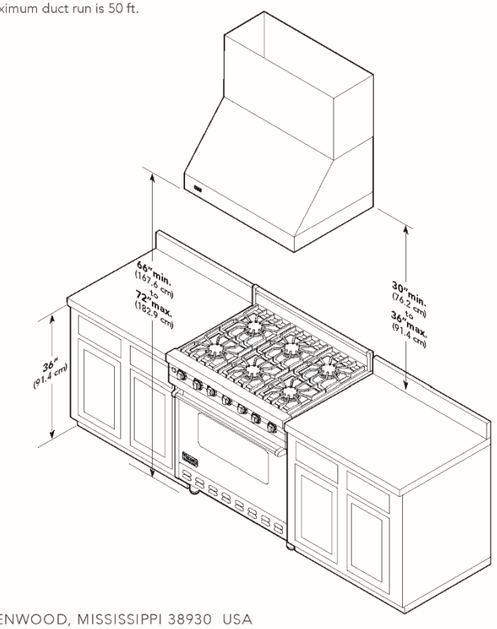
Viking Professional 5 Series – VWH

18" WALL HOODS					
DESCRIPTION	VWH53048	VWH53648	VWH54248	VWH54848	VWH56048
Overall/Duct Cover Width	29-7/8" (75.9 cm)	35-7/8" (91.1 cm)	41-7/8" (106.4 cm)	47-7/8" (121.6 cm)	59-7/8" (152.1 cm)
Overall Depth	24" (61.0 cm)				
Overall Height	18" (45.7 cm)				
Duct Cover Depth	12" (30.5 cm)				
Duct Cover Height	12" (30.5 cm)				
Heat Lamps	1	1	1	1	1
Interior Ventilator Kits	VINV300/600/1200	VINV300/600/1200	VINV600/1200	VINV1200*	VINV1200*
Exterior Ventilator Kits	DEV900/1200*	DEV900/1200*	DEV900/1200*	DEV1200*/1500**	DEV1200*/1500**
In-Line Ventilator Kits	DIL1200	DIL1200	DIL1200	DIL1200	DIL1200
Interior Duct Size	7"/10" (17.8/25.4 cm)			10" (25.4 cm)	
Exterior Duct Size	10" (24.5 cm)				
Interior—Maximum Amps	4.2/5.2/8.2		5.2/8.2	10.8	
Exterior—Maximum Amps	8.0/5.3			7.8/8.5	
In-Line—Maximum Amps	5.3/7.2			9.6	10.0

Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.
** Disregard when using recirculating kits. 460 CFM blower is shipped with hood. Maximum duct run is 50 ft.

	A (Hood width)
30"W.	29-7/8" (76.2 cm)
36"W.	35-7/8" (91.1 cm)
42"W.	41-7/8" (106.4 cm)
48"W.	47-7/8" (121.6 cm)
60"W.	59-7/8" (152.1 cm)





VIKING RANGE, LLC 111 FRONT STREET GREENWOOD, MISSISSIPPI 38930 USA

For detailed product information, model numbers, or to request a quote call 1-888-845-4641 or visit vikingrange.com

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FLAMMABLE CABINET CUT SHEET
Analytical Lab

Do not vent flammable cabinet.

Flammable Liquid Safety Storage Cabinet, 24 Gal. Yellow, One Door, Manual Close (Space Saver)

View Gallery

Model Number:
1923

UPC Code:
048441333943

Description:
Eagle's 24 Gallon, Manual-Closing, Space Saver Safety Cabinet is constructed of 18-gauge steel. The sides, top, bottom, and doors are double-walled with a 1 1/2" air space between walls. Includes two vents, each have 2" threaded fittings and fire baffle and cap. Standard Flammable Liquid Safety Cabinets come in yellow high gloss powder finish with red warning, plus grounding attachment, 3-point latch system, and 2" raised, leakproof door sill. Each shelf is adjustable, supported by 4 brackets, and can support 350 pounds. (All Eagle metal cabinets meet NFPA Code 30 and OSHA requirements).

Capacity:
24 gal. (90.9 L)

Color:
Yellow

Door Style:
Manual Close

Inside Dimensions:
20"W x 15"D x 62"H (50.8 x 38.1 x 157.5 cm)

Lock:
True

Number of Shelves:
3

Shelf Depth:
14 3/4" (37.5 cm)

Shelf Model Number:
1919

Uniform Fire Code:
False

Dimensions

Width:
23" (58.5 cm)

Depth:
18" (45.8 cm)

Height:
65" (165.1 cm)

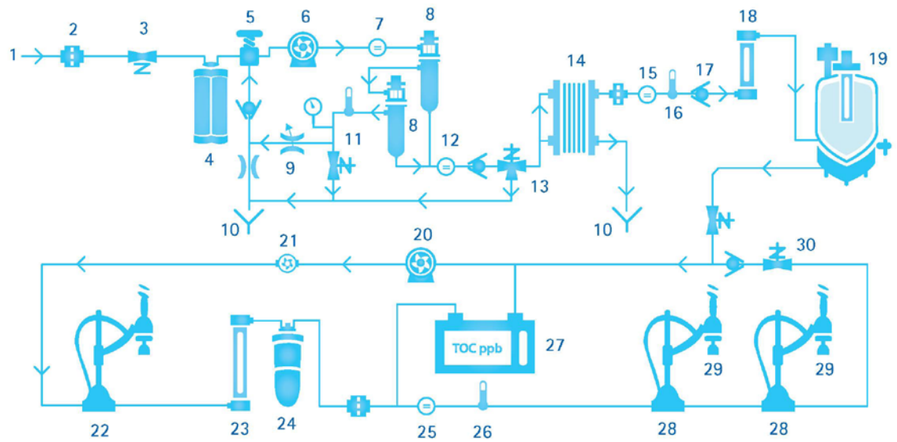
Weight:
224 lbs.

Approvals:

Compliance:

Milli-Q® Integral water purification pathway

The Milli-Q® Integral system uses regular tap water as feed, and produces pure and ultrapure water delivered by independent POD dispensers.



1. Tap water feed
2. Strainer
3. Inlet solenoid valve
4. Progard® pretreatment pack
5. Pressure regulator
6. Booster pump
7. Feed water conductivity cell
8. RO cartridge with sanitization port
9. RO reject recycling
10. Drain
11. RO reject solenoid valve
12. Permeate conductivity cell
13. 3-way solenoid valve
14. Elix® electrodeionization module
15. Elix® resistivity cell
16. Thermistor
17. Check valve
18. 254 nm UV lamp
19. PE Reservoir, ASM and Vent filter
20. Delivery pump
21. Flow meter
22. E-POD® dispenser and final polisher
23. 185/254 nm UV lamp
24. Quantum® cartridge
25. Milli-Q® product water resistivity cell
26. Thermistor
27. Milli-Q® water TOC monitor
28. Q-POD® dispenser
29. Final polisher Application Pak
30. Recirculation solenoid & check valve

For scientists who work with a variety of applications requiring both pure (Type 2) and ultrapure (Type 1) water, the **Milli-Q® Integral water purification system** provides the perfect solution. The system's comprehensive and optimized sequence of water purification and monitoring technologies allows both pure and ultrapure water to be produced directly from potable tap water – in a single unit. Milli-Q® Integral system users gain in convenience and also save on capital expense and lab space.

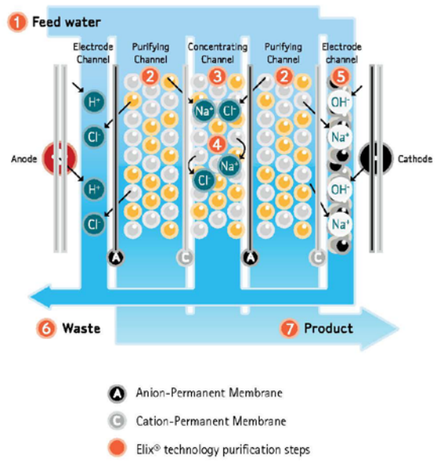
Pure and ultrapure water from tap – in a single unit

The Milli-Q® Integral system is a compact solution that combines the production of Type 2 (pure) water and Type 1 (ultrapure) water in a single unit – eliminating the need for a pretreatment stage upstream of the ultrapure water system.

Dual POD (Point-of-Delivery) concept

The Milli-Q® Integral system's POD dispensers are designed to save space and increase convenience for users. Users can customize their lab installations by placing Q-POD® ultrapure water dispensers and E-POD® pure water dispensers exactly where they're needed. For additional convenience, the ergonomic POD units have been specially designed to accommodate the shape and height of the most commonly used laboratory glassware.

As many as three independent POD dispensers per system can be conveniently located at different places in the laboratory. The versatile POD dispensers can be adapted to a variety of laboratory applications with our range of point-of-use Application Paks, which remove specific contaminants just before water is dispensed.



Elix® electrodeionization (EDI) module

Lower running costs and water waste with exclusive Elix® technology

The Milli-Q® Integral system combines proven and superior Elix® electrodeionization (EDI) technology with the best-in-class Milli-Q® solution. Milli-Q® Integral system users benefit from pure and ultrapure water of consistently high quality – as well as lower running costs and water waste, thanks to EMD Millipore's patented Elix® technology.

Elix® EDI technology provides consistent production of superior quality pure water with no need for added softeners, chemical regeneration or the replacement of DI cartridges.

The Elix® module is built using electrodes and mixed bed ion-exchange resins separated by anion- or cation-permeable membranes. The ion-exchange resins are permanently self-regenerated in the Elix® EDI module via a weak electrical current, ensuring constant high water quality at a low operating cost. This low energy process rejects little water, allowing users to save on tap water and electricity consumption. No special maintenance or chemical regeneration that would deteriorate the resin beads is needed. This unique process has become the new standard for the production of Type 2 water, and is replacing both distillation and conventional deionization units in the laboratory.

Integrated Elix® technology provides Milli-Q® Integral users with consistently high water quality at optimal operating cost. Following prior purification by RO technology, water produced by the Elix® module has a resistivity level greater than 5 MΩ·cm @ 25 °C – a value that exceeds the resistivity of double distilled water. The pure water produced may be used for basic laboratory needs, such as buffer and reagent preparation, microbiology media preparation, histology, dissolution testing (with UV detection) and glassware rinsing.

ICE MACHINE CUT SHEET

Gary's Lab

ESSENTIAL ICE™

CU0415 - 50 lb Self-Contained Ice Machine

Self-Contained Under Counter Cuber with Storage

Features and Benefits

Reliability:
- 3 Year parts and labor warranty.
- Assembled in the USA.
- Corrosion resistant exterior.

Ease of Use:
- Slide back door allows easy access to ice in the bin.
- Intuitive control panel allows for quick and easy operation.
- Ice scoop included.

Compact Design:
- Only 15" wide, the ice maker can be placed in the tightest locations.
- Optional floor mount kit allows for installation under 34" ADA counter tops.

High Production:
- Produces up to 58 lb (26 kg) per day and stores 36 lb (16 kg), meeting the ice demands for many different applications.

Quality Ice:
- Unique evaporator produces crystal clear cubes.

Environmentally Friendly:
- Low energy consumption.
- Meets US Safe Drinking Act low lead requirements.
- Non-ozone depleting R-134A refrigerant.

24 Hour Volume Production

Air Cooled		
70°F/21°C 50°F/10°C	Air Water	90°F/32°C 70°F/21°C
58/26 lb/kg		38/17 lb/kg

Intuitive Controls

Clear Cube Evaporator Technology

Optional Kit for ADA Applications -Unit seals to the floor

Cube Ice

Large, slow-melting ice form, ideal for beverages.

Cube Dimensions
7/8" x 7/8" x 7/8"
(2.22 x 2.22 x 2.22 cm)

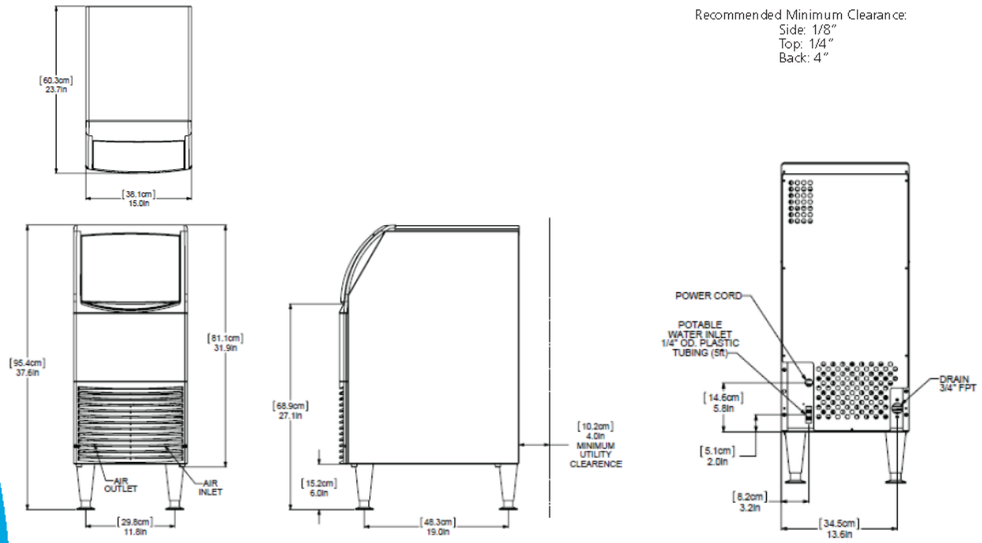
Certification

Warranty

- 3 years parts and labor on all components.
- Warranty valid in North, South & Central America for commercial installations.
- Contact factory for warranty in other regions.

CU0415 - 50 lb Self-Contained Ice Machine

CU0415 - 50 lb Self-Contained Ice Machine



Specifications

Model Number	Condenser Unit	Storage Capacity lb/kg	Basic Electrical Volts/Hz/Phase	Max. Fuse Size or HACR Circuit Breaker (amps)	Circuit Wires	Min. Circuit Ampacity	Energy Consumption kWh/100 lb (45.4 kg) 90°F(32°C)/70°F(21°C)	Potable Water Usage Gallons/100 lb (liters/45.4 kg) 90°F(32°C)/70°F(21°C)
CU0415MA-1	Air	36/16	115/60/1	15	2	Cord	12.0	41/155
*CUR0415MA-32	Air	36/16	220/60/1	15	2	Cord	12.0	41/155
CU0415MA-6	Air	36/16	220-240/50/1	15	2	Cord	12.0	41/155

*Configured for InMetro requirements

All Models

Dimensions (W x D x H):

Unit: 15" X 24" X 38" (38.1 x 61.0 x 96.5 cm)

Includes 6" (15.24 cm) adjustable legs

Shipping Carton: 16" x 27" x 37" (40.6 x 68.5 x 94 cm)

Shipping Weight: 102 lb / 46 kg

BTUs per hour: 1,500

Refrigerant: R-134A

Accessories

Model Number	Description
KUFM15	For ADA applications. Floor mount kit lowers overall height to 31.9"

Scotsman recommends all ice machines have water filtration. See Scotsman water filter specification sheet for details.

Operating Requirements

	Minimum	Maximum
Air Temperatures	50°F (10°C)	100°F (38°C)
Water Temperatures	40°F (4.4°C)	100°F (38°C)
Water Pressures	15 PSIG (1.4 bar)	80 PSIG (5.5 bar)
Electrical Voltage	-5%	+10%

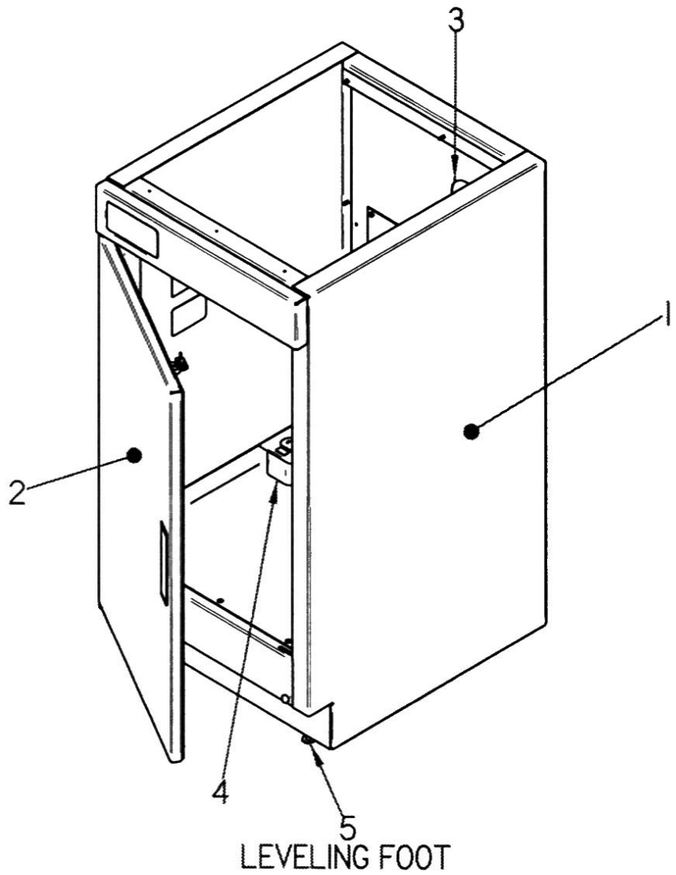
Specifications and design are subject to change without notice.

Scotsman

101 Corporate Woods Parkway, Vernon Hills, IL 60061
1-800-SCOTSMAN Fax: 847-913-9844 www.scotsman-ice.com customer.relations@scotsman-ice.com

VACUUM PUMP CABINET CUT SHEET

Analytical Lab



Requires vent per Div. 23.
Requires power per Div. 26.

V

Protector Vacuum Pump Storage Cabinets
Models 9907000, 9907100

1. **Cabinet** – Features 18 gauge steel exterior sidewalls. The cabinet shell has been epoxy coated to provide a durable chemical resistant surface.
2. **Door Assembly** – Cabinet features one manual closing, non-locking door. The door is of 18 gauge epoxy coated steel and features a strike and latch assembly to hold it in position once closed.
3. **Vent Connection**. Cabinet features two vent connections on the back wall of the cabinet. These vent openings have been left open and venting is left to the discretion of the customer.
4. **Electrical Connection** – Cabinet features 115V, 60 Hz electrical outlet to provide power for the vacuum pump.
5. **Leveling Feet** – Four individual leveling feet provide adjustability to level the cabinet per the requirements of your laboratory floor.

SINK CUT SHEET

Analytical Lab; Gary's Lab

Engineering Lab; Personal Care Lab

D59: 28" Long x 15" Wide x 11.8" Deep

DURCON INCORPORATED

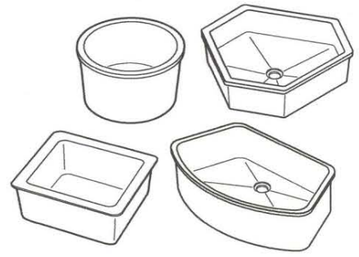
PRODUCT DIMENSIONS

DOMESTIC SIZES

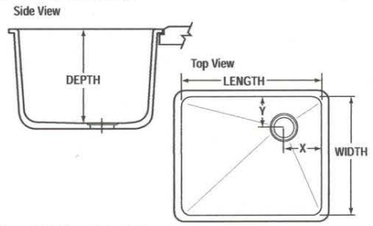
Standard DropIn® Sinks

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	

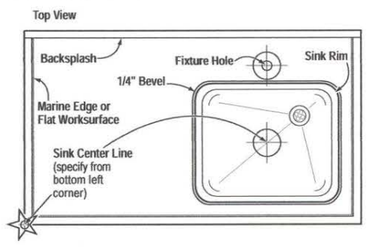
DropIn® Sink Styles



Dimensions Key



Installation Detail



Special Order DropIn® 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	
D200**	End	64	30.9	Hexagon	7.0	15.5	8.0
DRS10*	Center	14	10.0	Round	7.8	Center	
DHC20*	End	82	30.0	Hexagon	7.0	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:

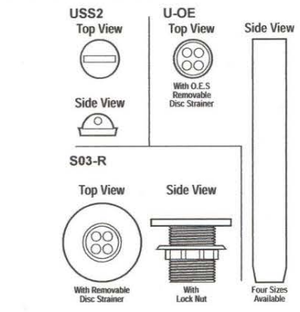
** Available only from Taylor, TX, plant (colors: Black Onyx, Gray, Graphite, Tan, Forest Green and Steel Blue).*

*** 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. Cutsheets available upon request.

Outlets & Accessories



WWW.DURCON.COM

206 Allison Drive • Taylor, TX 76574 • Phone: 512.595.8000 • Fax: 512.595.8400 • E-mail: sales@durcon.com

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Rev. 02/08

KOHLER®

Vault™

Top-mount Apron Front Kitchen Sink

K-3942-4

SINK CUT SHEET

Food Lab

Features

- 36-inch minimum base cabinet width.
- 18-gauge stainless steel.
- Top-mount.
- Large single bowl.
- Three faucet holes with one accessory hole to the right.
- With integral shortened self-trimming apron.
- SilentShield® sound-absorption technology offers quieter performance.
- 35-3/4" (908 mm) x 24-5/16" (618 mm)

Optional Accessories

K-6429 Utility Rack
K-6474 Sink Rack
K-8801 Sink Strainer

Components

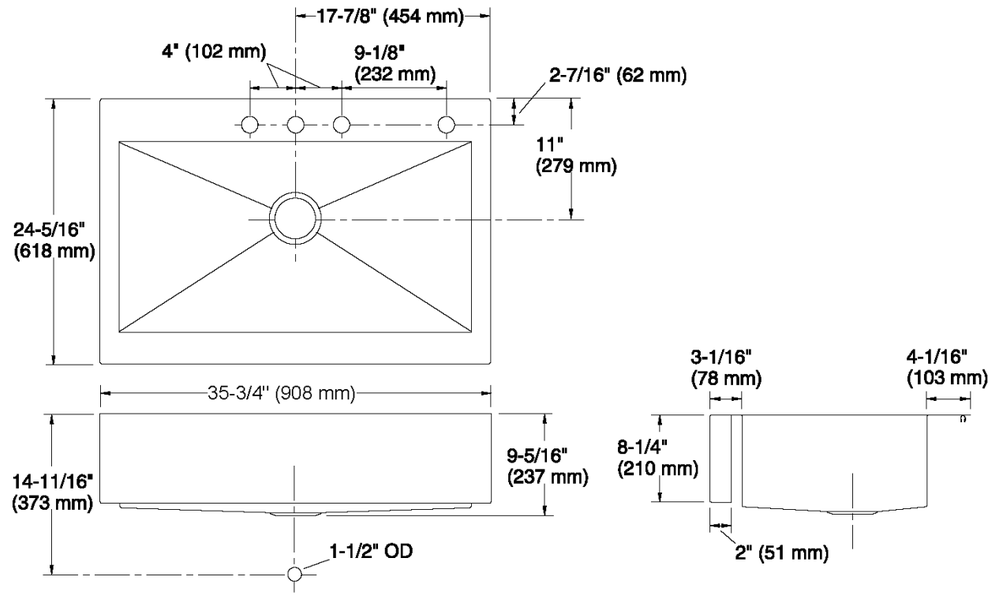
Product includes:
1130570 Hardware Kit, Self-Rimming
1173293 Hardware Kit, Side Clip

Codes/Standards

ASME A112.19.3/CSA B45.4

Lifetime Limited Warranty for KOHLER® Stainless Steel Sinks

See website for detailed warranty information.



Technical Information

All product dimensions are nominal.

Bowl configuration:	Single
Installation:	Top-mount
Min. base cabinet width:	36" (914 mm)
Bowl area (Only)	Length: 32-1/2" (826 mm) Width: 17-3/16" (437 mm) Bowl depth: 9" (229 mm)
Number of deck holes:	4
Faucet hole(s):	1-7/16" (37 mm)
Drain hole:	3-5/8" (92 mm)
Template:	1166717-7, required, included 1178341, required, included

Notes

Install this product according to the installation instructions.

USA/Canada: 1-800-4KOHLER (1-800-456-4537)
Kohler Co. reserves the right to make revisions without notice to product specifications.
For the most current Specification Sheet, go to www.kohler.com.
7-28-2017 05:16

THE BOLD LOOK OF KOHLER®

HOT/COLD WATER FAUCET CUT SHEET

Analytical Lab; Gary's Lab

Engineering Lab; Personal Care Lab

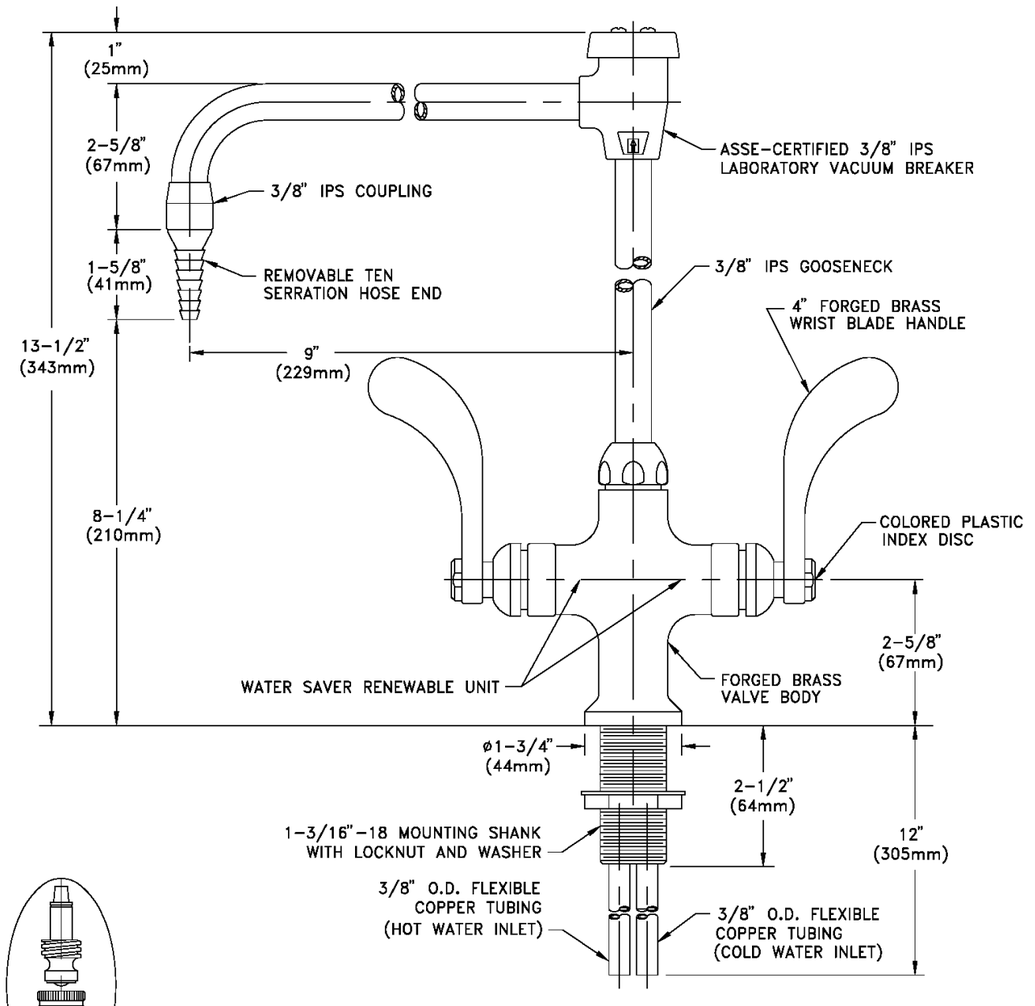
COLORTECH

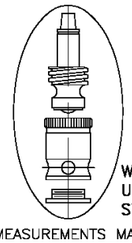
Laboratory Service Fixtures by WaterSaver Faucet Co.

701 West Erie Street Phone 312 666 5500
Chicago, Illinois 60610 Fax 312 666 8597

CT414-9VB-BH

LABORATORY MIXING FAUCET, DECK MOUNTED, 9" RIGID/SWING VACUUM BREAKER GOOSENECK, WRIST BLADE HANDLES





WATER SAVER RENEWABLE UNIT WITH REPLACEABLE STAINLESS STEEL SEAT

MEASUREMENTS MAY VARY ±1/4".

NOTES:

1. CSA CERTIFIED UNDER CAN/CSA B125.M89. COMPLIES WITH ANSI/ASME A112.18.1M.
2. FIXTURE IS FURNISHED WITH COLORTECH POWDER-COATED FINISH.

Drawing Number: _____

Revision Number: 031803-KJS

HOT/COLD WATER FAUCET SPRAY CUT SHEET

Food Lab

KOHLER. Faucets

Tournant™

Semi-Professional Kitchen Sink Faucet

K-77515

Features

- Semi-Professional style faucet with an easy to clean coated hose and removable coil.
- Unique three-function sprayhead allows you to tackle tasks such as cleaning, rinsing and filling with Sweep® Spray, BerrySoft® spray, and aerated stream.
- Sweep® spray creates a wide, forceful blade of water for superior cleaning.
- BerrySoft® is a light spray that gently washes fruits and vegetables.
- DockNetik®, a magnetic docking system that securely locks the sprayhead into place.
- Ceramic disc valves exceed industry longevity standards, ensuring durable performance for life.
- MasterClean™ sprayface features an easy-to-clean surface that withstands mineral buildup.
- High-arch gooseneck swing spout and 360-degree spout rotation offer superior clearance for filling pots and cleaning.
- Single lever handle is simple to use and makes adjusting water temperature easy.
- Temperature memory allows faucet to be turned on and off at the temperature set during prior usage.
- 1.5 gpm (gallons per minute) maximum flow rate at 60 psi.

Material

- Premium metal construction.
- KOHLER finishes resist corrosion and tarnishing.

Installation

- For single-hole installation. (3-hole escutcheon available, sold separately model number K-99272.)
- Flexible supply lines simplify installation.

ADA | **CSA B651**

Codes/Standards

ASME A112.18.1/CSA B125.1
NSF 61
NSF 372
All applicable US Federal and State material regulations
DOE - Energy Policy Act 1992
California Energy Commission (CEC)
ADA
ICC/ANSI A117.1
CSA B651

See website for detailed warranty information.

Available Color/Finishes

Color tiles intended for reference only.

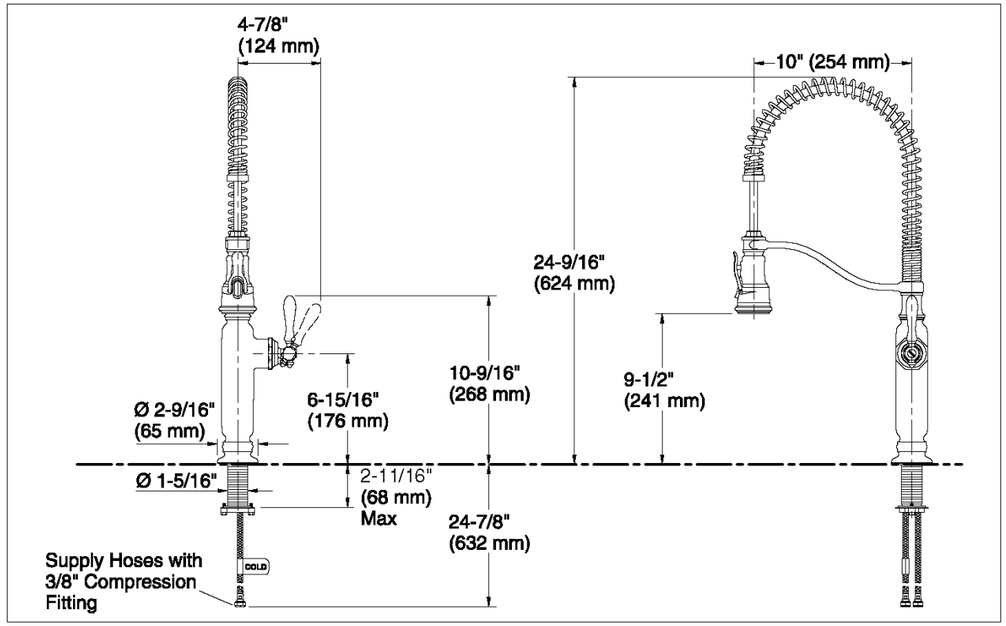
Color	Code	Description
	CP	Polished Chrome
	SN	Vibrant® Polished Nickel
	VS	Vibrant® Stainless

KOHLER. Faucets

Tournant™

Semi-Professional Kitchen Sink Faucet

K-77515



Technical Information

All product dimensions are nominal.

Valve body: Composite

Faucet:

Flow rate: 1.5 gal/min (5.7 l/min)

Pressure: 60 psi (4.1 bar)

Notes

Install this product according to the installation instructions.

ADA, CSA B651 compliant when installed to the specific requirements of these regulations.

USA/Canada: 1-800-4KOHLER (1-800-456-4537)
Kohler Co. reserves the right to make revisions without notice to product specifications.
For the most current Specification Sheet, go to www.kohler.com.
9-1-2017 03:06

THE BOLD LOOK OF KOHLER.

Gas Cylinder Cabinets
"Hard Hat" Series

Matheson's new "Hard Hat" cabinet is designed for outdoor use and installation. It is ideally suited for handling gas applications in refinery environments. The cabinet incorporates several structural features making it weatherproof and is constructed from stainless steel materials to withstand harsh weather effects. The "Hard Hat" cabinet is available is standard sizes to accommodate up to three cylinders.

- **Rain gutter** above cabinet door prevents rain from entering cabinet
- **Stainless steel** hinges and hardware
- **Rain hat** to cover stack
- **Special Zinc Chromate primer** to prevent rust and corrosion
- **Removable top panel** for service access
- **Automatic door closure** to ensure containment of leaks
- **Lockable access panel** and wire reinforced safety glass viewing window have steel frames and are fully gasketed
- **Non-protruding paddle type latch** prevents accidental opening and snagging. It slams and latches at three points and is fitted with a lock for security
- **Neoprene gaskets** fit snugly around door to ensure positive seal
- **Standard inlet air louver** or optional diffuser plate fitted with inlet filter (p/n VEN-0101-XX) lets air into the cabinet
- **Fire sprinkler head** for extra protection with a fuse rating of 155°F
- **Cylinder restraints** ensure all cylinders are held securely during storage and operation
- **Low profile, one-inch reinforced threshold** makes cylinder installation and removal easy

Specifications for Hard Hat Series
(Meet or exceed Article 80 UFC requirements)

Cabinet:	12 gauge cold rolled steel
Gaskets:	Neoprene with oil resistant adhesive
Window:	1/4" wire reinforced safety glass
Paint:	2-part polyurethane: interior and exterior – light gray
Cabinet Floor:	Zinc-plated steel
Doors:	1 and 2 cylinders cabinets – one door with left hand stainless steel hinges 3 cylinder cabinet – double door with off-center post
Integral Sprinkler:	Fuse rating of 155°F and flow capacity of 35 GPM @ 40 psi
Water Pipe Connection:	1/2" NPT Female

Model No.	Cabinet Type	Overall Height	Depth	Width	Exhaust Flow Required (SCFM)	Exhaust Stack Diameter	Shipping Weight lbs
1177-HH	1 Cylinder	79"	19"	18"	175	4"	300
1178-HH	2 Cylinder	79"	19"	26"	250	6"	380
1179-HH	3 Cylinder	79"	19"	40"	450	8"	540

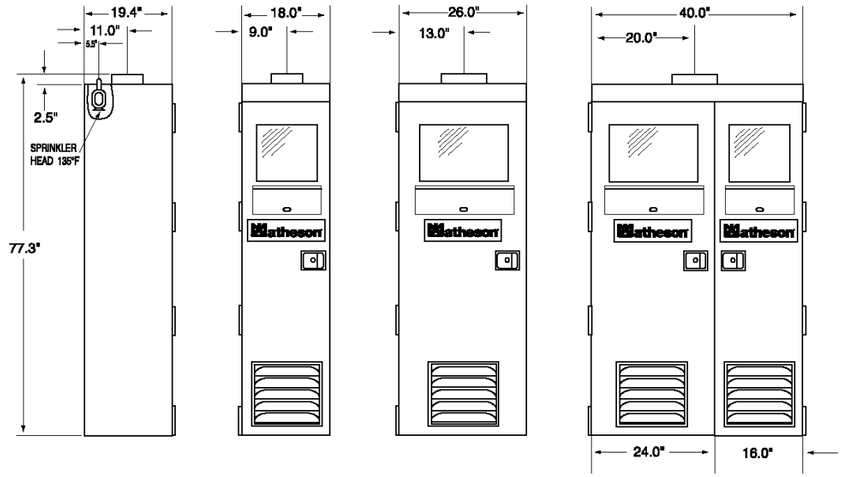
www.mathesontrigas.com

Gas Delivery Equipment

Gas Cabinet Cut Sheet
Analytical Lab

Model 1178-HH.
One cabinet for Hydrogen gas.
One cabinet for Oxygen gas.
Requires exhaust per Div. 23.
Requires fire sprinkler per Div. 22.

Gas Cabinet Dimensions and Options
Hard Hat Series



Gas Cabinet Options

- **Adjustable Cylinder Shelf (see table for part number) –** mounted on the U-Channel tracks. The shelf provides a convenient means of installing small cylinders. Perforations in the shelf allow cabinet air to sweep around the entire cylinder.
- **Fusible Link (see table for part numbers) –** installed in the center of the cabinet door. Offers immediate response in the event of a fire. Once the heat melts the fusible link, a guillotine damper blocks the inlet air supply.
- **Cylinder Scales –** recommended for use with all liquefied gases. Provides the weight of contents remaining in the cylinders. Manual and electronic cylinder scale models are available. (See pages 431 - 432)

Model No.	Description
1190-S	Adjustable cylinder shelf
1177F-6	Fusible link for Model 1177-HH
1178F-6	Fusible link for Model 1178-HH
1179F-6	Fusible link for Model 1179-HH
VEN-0101-XX	Optional diffuser plate with inlet air filter

Spectra Equipment Division

Automatic Changeover Regulator System

F7900 Series

F7900 Series

SPECTRA GASES 7900 and 7910 semi-automatic changeover system is designed to allow the user to replace expended gas cylinders while maintaining a continuous gas supply to the point of use.

Standard Features

- CHANGEOVER REGULATOR: Made of high quality materials and cleaned for high purity service. When adjusting the selection knob on the face of the system, the variable regulator pressure is changed from one side of the fixed pressure to the other. The low and high pressures are set at equal values on either side of the fixed regulator, resulting in a swapping of the source gases from on-line to standby whenever the control knob is rotated.
- LINE REGULATOR: It is installed on the outlet of the changeover regulator to provide the user with a constant delivery pressure. This regulator is adjustable by the user and delivery pressure is displayed via an outlet pressure gauge.
- RELIEF VALVE: It has been installed on the low-pressure side of the line regulator to protect downstream components from damage in the improbable event of a catastrophic regulator failure.
- FLEXIBLE HOSE ASSEMBLY: Source gas is supplied to the changeover system via high-pressure flexible hoses. These hoses are provided with the appropriate cylinder connection for the intended gas application.
- PRESSURE GAUGES: For low cylinder pressure. (Optional indicating pressure switches are available).

(continued)

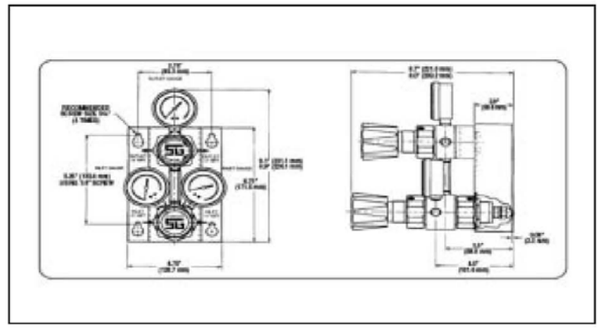
Spectra Gases, Inc. • Phillipsburg, NJ 08865
Telephone: 1.908.387.0300 • Toll Free (USA & Canada): 1.800.932.0624 • www.spectragases.com

Automatic Changeover Regulator System (continued)

F7900 Series

Features

- Outlet Valve(s)
- Inlet Valves
- Pressure Switches (optional)
- Purge capability
- Pigtail provided



Specifications

Regulators: All Single Stage
Series 7900 - Brass Regulators
Series 7910 - Stainless Steel Regulators
Overall Dimensions: 8 1/4" W x 8 3/4"D x 9"H
Shipping Weight: 8 lbs.
Inlet Connection: Specify
Outlet Connection: 1/4" compression
Regulator Inlet Gauges: 0-4000 psig
Max. Inlet Pressure: 3000 psig
Operating Temperature: -40°F to +165°F
Flow Coefficient: Cv = 0.06 (All Modules)

Materials of Construction:

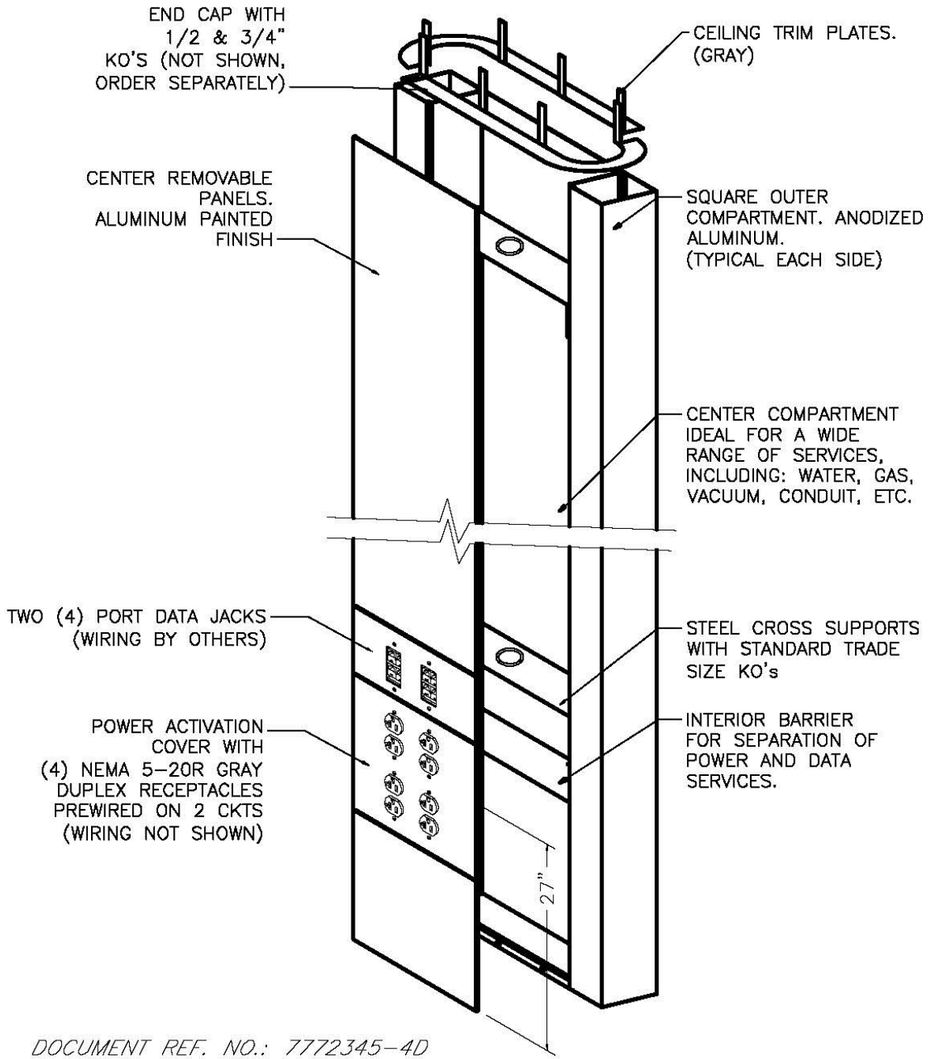
Body: Brass (7900), stainless steel (7910)
Bonnets: Nickel-plated brass
Diaphragms: Stainless Steel
Note: These regulators are oxygen cleaned to 3000 psig and have a leak integrity of less than 2 x 10-8 atm. cc/sec. Helium.

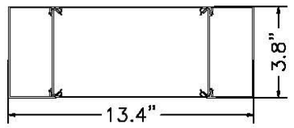
Spectra Gases, Inc. • Phillipsburg, NJ 08865
Telephone: 1.908.387.0300 • Toll Free (USA & Canada): 1.800.932.0624 • www.spectragases.com

Mono-Systems, Inc.
Mono-View
Architectural Chase System

HIGH CAPACITY AESTHETIC POLE SYSTEM (MONO-VIEW)

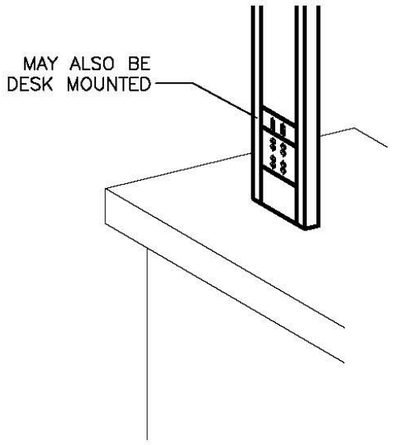
CATALOG #: VPL-7772345-4D





SECTION

STANDARD HEIGHT: 126"
NONSTANDARD HEIGHTS ARE AVAILABLE, CONTACT FACTORY.



MONO-SYSTEMS, INC.
UNIQUE CABLE DISTRIBUTION SOLUTIONS
4 INTERNATIONAL DRIVE
RYE BROOK, NEW YORK 10573
PHONE: (914)-934-2075
FAX: (914)-934-2190

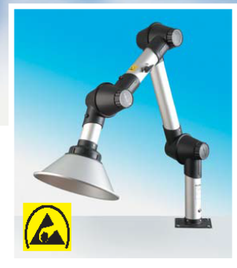
5/27/08 DOCUMENT REF. NO.: 7772345-4D

SNORKEL CUT SHEET

Analytical Lab

Personal Care Lab

LOCAL EXTRACTOR



TERFU

Local extractor with friction joint for worksites where great flexibility is important, in 2" and 3" diameter

TERFU is a local extractor with friction joints designed for use in worksites where great flexibility is required, e.g. laboratories and the electronics industry.

The friction joints with ball bearings make positioning convenient and simple.

The TERFU is a very flexible local extractor that stays in position when adjusted, due to the easily adjustable joints, 360° swivel, brackets and support springs.

All necessary adjustments of joints etc. can easily be made with one hand. The smooth aluminum tubes and easily dismantled plastic joints facilitate cleaning the inside of the suction tubes. Should it be necessary, the complete extractor can easily be dismantled.

The standard TERFU is supplied with an air tight damper and delivered with white plastic joints & anodised aluminum tubes, for table, ceiling or wall mounting.

TERFU Ø3" diameter is available with recyclable polypropylene (PP) tubes. For the PP-design, all metal components that will be in contact with the air flow are made of stainless steel.

TERFU is also available in ESD design with ESD approval according to EN 100015-1.

Movex also offers a range of fans, accessories and automatic control devices for our local extractors

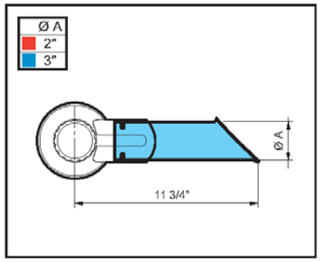
MOVEX®
EXTRACTORS

Pure advantage

TERFU hoods and accessories

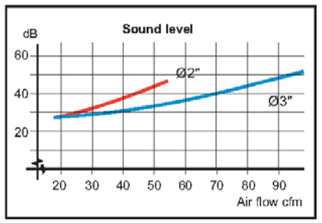
SUCTION NOZZLE

Used for work in highly corrosive environments. You can get close to the source of pollution without obscuring the vision of the workpiece.



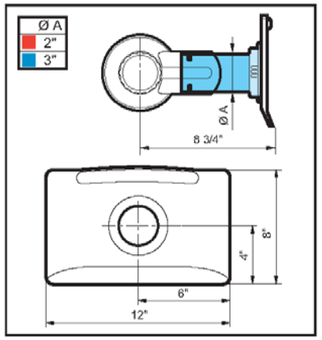
Part		
Standard	*ESD*	*PP*
S 300-50	ESD	PP
S 300-75	ESD	PP

Material
Standard... Aluminum
ESD ..... Aluminum
PP ..... Polypropylene
Temp. range ..... 5°F to 175°F
Weight ..... 4 and 5 oz



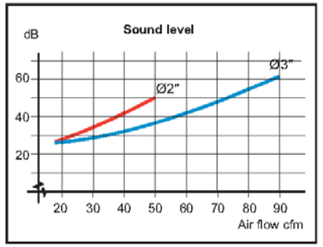
FLAT SCREEN HOOD

Designed to maximise the working radius without obscuring the vision of the workpiece. Offers the best extraction efficiency at table and bench work.



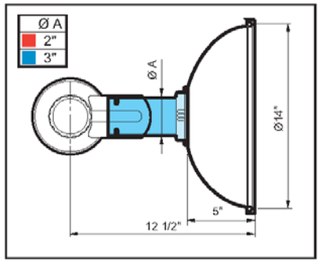
Part		
Standard	*ESD*	*PP*
PH 300-50	ESD	PP
PH 300-75	ESD	PP

Material
Standard... PMMA (HIP) transp
ESD ..... PEEL black
PP ..... Polypropylene, opaque
Temp. range ..... 5°F to 175°F
Weight ..... 11 and 13 oz



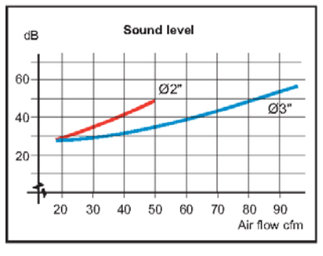
DOME HOOD

Used to get close to the source of pollution and screen off the sides, without obscuring the vision of the workpiece.



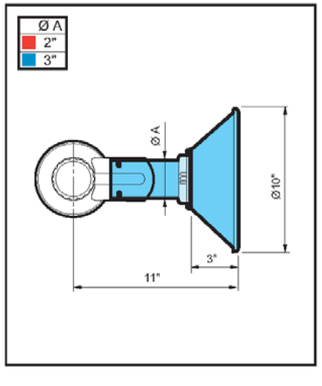
Part		
Standard	*ESD*	*PP*
K 350-50	ESD	PP
K 350-75	ESD	PP

Material
Standard... PMMA (HIP) transp
ESD ..... PEEL black
PP ..... Polypropylene, opaque
Temp. range ..... 5°F to 175°F
Weight ..... 14 and 16 oz



METAL HOOD

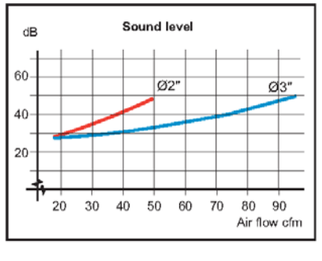
The aluminum hood is used for work in tough environments, to catch hot gases, dust concentrations etc. The hood may be equipped with a halogen light.



Part	
Standard	*ESD*
M 250-50	ESD
M 250-75	ESD
MB 250-50*	
MB 250-75*	

* with halogen light

Material
Standard ... Powder-coated aluminum
ESD ..... Aluminum
Temp. range..... 5°F to 175°F
Weight ..... 10 and 11 oz
Accessory..... Light rated at 50 W 12 VAC



WASHER CUT SHEET
Analytical Lab; Gary's Lab
Personal Care Lab

SteamScrubber® Laboratory Glassware Washers

SPECIFICATIONS & ORDERING INFORMATION

SteamScrubber Laboratory Glassware Washer 4400330 is shown with 48-Pin Insert 4591601, Petri Dish Insert 4589701, Bulk Tube Insert 4542100, Utensil Holder 4542500 and BOD Bottle Insert 4589201.

All models feature:

- Upper and lower standard open racks of Type 304 stainless steel
- LCD information center, Display button, Run/Cancel button, scroll buttons and selection buttons to program and monitor cycles
- Pump to recirculate 96 gal/min (363 liters) when operated on 115 Volts, 60 Hz and 230 Volts, 50 Hz and 112 gal/min (424 liters/min) on 230 Volts, 60 Hz
- Drain pump to evacuate over 7 gal/min (26 liters/min)
- Purified water pump to bring non-pressurized or pressurized purified water into the tank for up to six pure water rinses
- Steam generator that produces hot vapor before the WASH 2 cycle (RINSE ONLY and PLASTIC programs excluded)
- Aluminum-backed insulation and fiberglass blanket for thermal and sound insulation
- Operation at 58 decibels
- Manual-fill detergent dispenser for powder or liquid detergent
- Manual-fill rinse aid solution dispenser
- Forced air drying programmable up to 99 minutes and from 38-70°C (100-158° F)
- Seven factory-set cycle programs: RINSE ONLY, PLASTIC, GLASS, GLASS PLUS, SCIENCE, SCIENCE PLUS, and DRY ONLY. All 208/230 Volt models have three additional programs for a total of ten: INTENSE, INTENSE PLUS and EXTREME.
- Two user-set cycle programs
- Alarms with display for HOT GLASS, PLEASE WAIT, WATER LOW, WATER HIGH, OVERFLOW, LIQ DETER, RINSE AID DRAIN FAIL and LOW TEMP. Audible alarms self cancel after one minute.
- User-set delayed start (up to 8 hours)
- Type 304 stainless steel top, door, tank, upper, middle and lower wash arms. Freestanding models also have stainless steel exterior sides and top.
- One-piece, stainless steel, fine mesh particle drain filter
- Four leveling feet
- 3/8" Female NPT inlet fitting for hot tap water connection
- Factory-installed drain hose and band clamp
- Two year warranty on parts and labor
- Made in the U.S.A.
- IQ/OQ available. Visit www.labconco.com or call 800-821-5525.

All models conform to:

- UL 3101-1/61010-1
- CAN/CSA C22.2 No. 1010-1
- CE Conformity Marking (208/230 Volt models only)

All models require:

- Minimum inlet water temperature 49° C (120° F)
- Recommended inlet water temperature 60° C (140° F)
- Minimum purified water pressure 0 psi
- Water consumption per fill 3.4 gallons (13 liters)
- Hot tap water pressure at the washer 20-120 psi (138-827 KPa)
- Hot tap water flow rate 1.25 gallons (4.7 liters) per minute
- 3/8" OD copper tubing for connection to the water inlet valve
- Purified water with supply piping minimum 3/8" ID to permit at least 0.9 gallon (3.4 liters) per minute flow

Options include:

- Freestanding and undercounter styles
- Water temperature to 82° C (180° F) on 115 Volt models and 93° C (199° F) on 230 Volt models
- Clear tempered safety glass viewing window and 25-watt interior light that illuminates when door is latched

Optional accessories and companion products on pages 18 - 22 include:

- Base Stand
- Upper and Lower Spindle Racks
- Baskets and Inserts
- Freestanding-to-Mobile Conversion Kits
- Drain Water Cooling Kit
- LabSolutions Detergents and Rinse
- ScrubberMate Cart, Glassware Carts and Carboy Caddy
- WaterPro RO Stations and accessories

Catalog #	Style	Electrical Requirements	Maximum Internal Water Temperature	Viewing Window and Light	Overall Dimensions with Door Closed	Shipping Weight
4400320	Undercounter	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	No	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400321	Undercounter	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	No	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400330	Undercounter	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	Yes	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400331	Undercounter	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	Yes	24.1" w x 27.4" d x 34.1-36.1" h	206 lbs. (93 kg)
4400420	Freestanding	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	No	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)
4400421	Freestanding	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	No	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)
4400430	Freestanding	115 Volts, 60 Hz, 16 Amps	82° C (180° F)	Yes	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)
4400431	Freestanding	208/230 Volts, 50/60 Hz, 12 Amps	93° C (199° F)	Yes	24.2" w x 27.5" d x 34.2-36.2" h	235 lbs. (107 kg)

Exclusive Labconco feature

SteamScrubber® Laboratory Glassware Washers

FEATURES & BENEFITS

For washing and drying primarily beakers and other wide-mouth or specialized glassware.

Steam generator. Produces hot vapor to penetrate and soften dried contaminants for more effective cleaning.

Forced air drying system. Hot air is blown into the tank to dry glassware. No separate dryer or oven is needed.

Dual pumps, one for washing and one for draining, reduce the potential for cross contamination.

Powerful pump recirculates water at a high rate to dislodge dried contaminants for thorough cleaning. Water recirculates at 96 gal/min (363 liters/min) on 115 Volt, 60 Hz and 230 Volt, 50 Hz models and 112 gal/min (424 liters/min) on 230 Volt, 60 Hz models.

Versatile rack options. The standard open racks are interchangeable with optional upper and lower spindle racks. Additional racks are sold separately. See page 18.

User-set delayed start (up to 8 hours) may be programmed so that the washer operates during off-peak hours when electricity may be less expensive and more plentiful.

Up to 6 pure water rinses may be programmed. A built-in purified water pump draws from a storage tank or pressurized source for final rinses.

360° rotating upper, middle and lower wash arms distribute water and detergent.

Full two year warranty. Is provided against defects in materials and workmanship.

Attractive and durable Type 304 stainless steel door and tank. Free-standing models also have stainless steel sides and top.

INCLUDES Upper and lower stainless steel standard open racks. Accommodate a variety of accessory inserts holding the broadest range of glassware. Inserts are sold separately. See pages 18 and 19.

Detergent dispenser for powder or liquid detergent. Releases a manually premeasured amount ensuring clean labware.

Sanitizing high heat. Water temperature reaches 93° C (199° F) on 230 Volt models to sanitize glassware and for enhanced washing, rinsing and faster drying.

Quiet, energy-efficient operation at 58 decibels. Aluminum-backed, sound-deadening insulation and fiberglass blanket absorb noise and optimize internal tank temperature to conserve energy.

Rinse solution dispenser. Allows manual addition of mildly acidic rinse to alter pH and eliminate alkaline detergent carry-over. The dispenser holds approximately 170 milliliters, enough for 40 or more cycles.

Alarms sound and/or display on the LCD to alert the user to abnormal or unsafe events such as HOT GLASS and OVERFLOW.

Optional clear tempered safety glass viewing window with 25-watt interior light allows observation of the cycle in progress. Available standard on some models.

ETL-listed. Washers carry the ETL mark signifying they are certified to UL Standard 3101-1/61010-1 and CAN/CSA C22.2 No. 1010.1.

CE Mark. Washers conform to the CE (European Community) requirements for electrical safety and electromagnetic compatibility.

Made in U.S.A.

Exclusive Labconco feature

WASHER CUT SHEET
Food Lab

DISHWASHER
VDW302SS – 24"W. DISHWASHER W/ STAINLESS STEEL PANEL
VDW302WSSS – 24"W. DISHWASHER W/ WATER SOFTENER W/ STAINLESS STEEL PANEL

Multi-Level Washing
- Variable pressure wash adjusts water volume, pressure, and temperature according to load size and soil levels
- Multi-level washing with three spray arms ensures clean dishes
- Turbidity sensor monitors the soil level of the dishes for superior quality
- Triple filtration system removes the smallest particles for clean water circulation
- Flow-through water heater is concealed to provide a safer alternative to exposed heaters

Turbo Fan Dry
- Fan circulates air for efficient drying performance

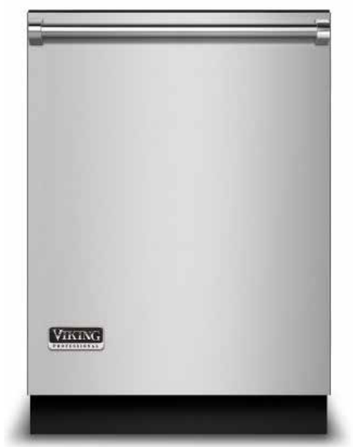
Quiet Clean™ Performance Package – 45 dB
- Three layers of insulation – bitumen, cotton, and full side walls create one of the quietest dishwashers on the market

Loading
- Industry-leading heavy gauge top and bottom dish baskets hold even the heaviest dishes
- Upper Smart Size™ Rack is designed to allow cleaning of cutlery while washing tall items simultaneously in upper rack
- Holds up to 14 international place settings along with silverware and cutlery
- Top rack is adjustable with or without dishes for versatile loading
- Adjustable stemware shelves can be used for holding ladles or other small utensils
- Foldable tines provide versatility for the loading of pots, pans, and uniquely sized items in top and bottom racks
- Bottom rack has six split, foldable tines with variable setting from flat to vertical
- Sliding cutlery basket can be moved horizontally to any position

Exclusive Smart Size™ Rack
- Smart Size™ Rack allows room for tall items in upper basket and can be used simultaneously with lower rack
- Removable basket fits most standard drawers
- Take your utensils straight from your dishwasher to your drawer

Built-In Water Softener (VDW302WS model)
- Reduces water hardness to a manageable level to prevent glasses and dishes from etching

Cycles/Options
- Cycles
  - **Pots/Pans Plus** – Extra-heavy soil level
  - **Pots/Pans** – Heavy soil level
  - **Auto** – determines the amount of water and temperature needed
  - **CombiClean** – washes delicate items in upper basket and heavier soiled items in lower basket
  - **Regular Wash** – Normal soil level
  - **Crystal/China** – Less water pressure for – lightly soiled or fine china
  - **Quick Wash** – 35 Minutes!
  - **Rinse/Hold** – Pre-rinse dishes clean
- Options
  - **Half Load** – Energy saving function for use with partial loads
  - **Auto Tablet** – Sensor detects rinse aid and automatically sets drying cycle duration
  - **Delay Start** – Allows delayed activation for up to 24 hours
  - **Sanitize Function** – Raises water temperature in final rinse to meet NSF requirements
  - **High Gloss** – Provides superior drying performance
  - **Intense Wash** – Helps wash heavily soiled dishes
- LCD screen with remaining time indicator
- Cycle run floor indicator light
- LED interior light
- Energy Star Qualified



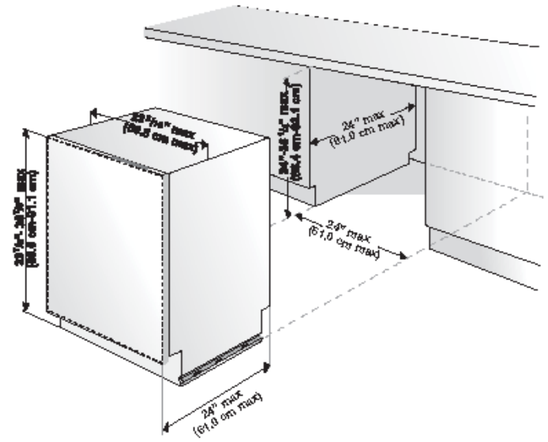
24" Wide Dishwasher

Finishes
- Available with wrapped Stainless Steel Door Panel installed

Warranty Highlights
- One-year full – complete product
- Ninety-day full – cosmetic parts such as glass, painted items, and decorative items
- Lifetime limited – tank and inner door
- Five-year limited – electronic controls, racks, motor/pump assemblies and water distribution system

24"W. 302 MODEL DISHWASHER	
DESCRIPTION	VDW302/VDW302WS
Overall Width	23-9/16" (59.8 cm)
Overall Height from Floor	33-7/8" (86.0 cm) minimum to 35 7/8" (91.1 cm) maximum
Overall Depth	To front of door panel: 22 3/16" (56.4 cm)
Cutout Width	24" (61.0 cm)
Cutout Height	34" (86.4 cm) minimum to 36" (91.4 cm) maximum
Cutout Depth	24" (61.0 cm)
Electrical Requirements	12.0 amps, 115V/60Hz; 4' (120cm) electrical cord with supplied with unit
Water-Heating Element Rating	1240 watts
Inlet Water Temperature	120°F (49°C) required
Drain Hose	6.4' (1.9m) drain hose provided
Drain Hose High Loop Required	Height from floor – 28" (71.0 cm)
Approximate Shipping Weight	97 lb. (44 kg)

Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.



VIKING RANGE, LLC 111 FRONT STREET GREENWOOD, MISSISSIPPI 38930 USA
For detailed product information, model numbers, or to request a quote call 1-888-845-4641 or visit vikingrange.com
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7 SERIES BUILT-IN FRENCH-DOOR OVENS

Viking Professional 7 Series – VSOF/VDOF

COMMERCIAL-TYPE COOKING POWER

- Extra-large 4.7 cu. ft. oven is the largest in the industry
- 11 high performance cooking modes for versatile performance include two-element bake, convection bake, TruConvec™ Convection Cook, convection roast, convection broil, hi broil, medium broil, low broil, convection dehydrate, convection defrost, and proof
- **PATENTED** Vari-Speed Dual Flow™ Convection System has the largest fan in the industry; the 8 1/2" two-speed fan works bi-directionally for maximum airflow and excellent cooking results
- Preheat Optional - No need to preheat oven when baking certain foods in Convection Bake mode
- Extra-Large Gourmet-Glo™ Glass Enclosed Infrared Broiler provides superior broiling performance and maximum coverage (upper oven of double)
- Large 10-pass broiler with heat reflector directs heat precisely into food for quicker results (lower oven of double)
- **EXCLUSIVE** Rapid Ready™ Preheat ensures super-fast preheating
- Concealed 10-pass dual bake element provides precise temperature control
- Each oven has six porcelain-coated rack positions and comes standard with three oven racks including two TruGlide™ Full Extension Racks in the single oven and upper oven of double and one TruGlide™ Full Extension Rack in the lower oven of double
- Three halogen lights in each oven offer excellent visibility
- Timed Bake function allows the oven to be set to begin cooking up to 24 hours later and shut off when cooking time is complete
- Meat probe feature in sounds the timer when desired temperature is reached (upper oven of double)

EASY OPERATION AND CLEANUP

- Open either french-door with just one hand and the companion door conveniently opens simultaneously
- Heavy-duty metal knobs are accented with **EXCLUSIVE** CoolLit™ LED Lights in signature Viking blue when unit is turned on
- Concealed 10-pass dual bake element in both oven cavities provides easy cleanup
- Steam clean in only 20 minutes - perfect for light to medium cleaning
- Full self-clean function in lower oven makes cleanup easy

MODEL NUMBERS

- VSOF730 – 30"W. 7 Series French-Door Single Oven
- VDOF730 – 30"W. 7 Series French-Door Double Oven

COLOR FINISHES

- Available in seven exclusive color finishes
- Stainless Steel (SS), Black (BK), White (WH), Apple Red (AR), Burgundy (BU), Cobalt Blue (CB), Graphite Gray (GG)

WARRANTY

- 2-year full - complete product
- 90-day full - cosmetic parts such as glass, painted items and decorative items
- 5-year limited - electric elements

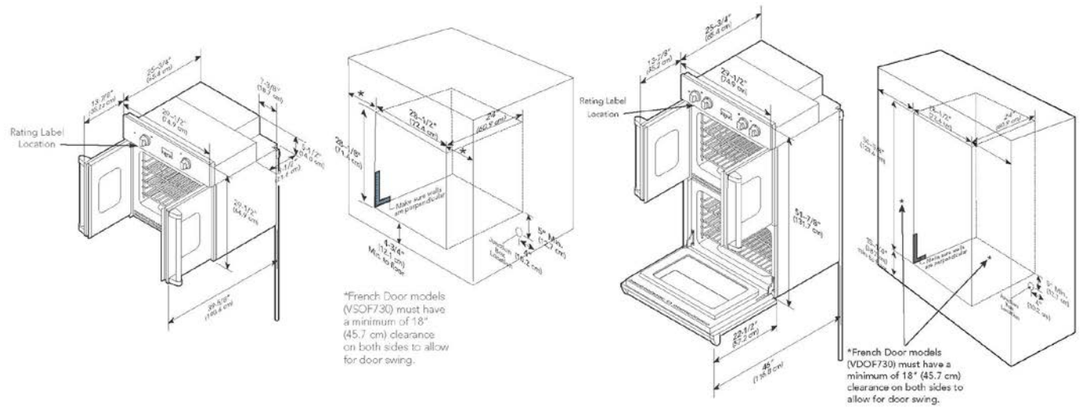
OVEN CUT SHEET

Food Lab

Model VSOF730.
Ovens are undercounter.

FRENCH-DOOR OVENS		
DESCRIPTION	VSOF730	VDOF730
Overall Width	29-1/2" (74.9 cm)	29-1/2" (74.9 cm)
Overall Height	29-1/2" (74.9 cm)	51-7/8" (131.7 cm)
Overall Depth	to edge of door— 25-3/4" (65.4 cm) with door open— 39-1/2" (100.3 cm)	to edge of door— 25-3/4" (65.4 cm) with door open— 39-1/2" (100.3 cm)
Cutout Width	28-1/2" (72.4 cm)	28-1/2" (72.4 cm)
Cutout Height	28-1/8" (71.4 cm)	50-5/8" (128.6 cm)
Cutout Depth	24" (60.9 cm)	24" (60.9 cm)
Electrical Requirements	4-wire ground, 240VAC, 30 amp electrical connection Unit is equipped with No. 10 ground wire in conduit Should be fused separately	4-wire ground, 240VAC, 50 amp electrical connection Unit is equipped with No. 10 ground wire in conduit Should be fused separately
Max. Amp Usage	24.0 amps—240 VAC, 60Hz 20.8 amps—208 VAC, 60Hz	40.0 amps— 240 VAC 34.7 amps— 208 VAC
Oven Interior Width-both ovens	25-5/16" (64.3 cm	25-5/16" (64.3 cm)
Oven Interior Height-both ovens	16-1/2" (41.9 cm)	16-1/2" (41.9 cm)
Oven Interior Depth	17-3/8" (44.1 cm) - AHAM** 19-1/2" (49.5 cm) - Overall	Upper Oven: 17-3/8" (44.1 cm) - AHAM** 19-1/2" (49.5 cm) - Overall Lower Oven: 16-13/16" (42.7 cm) - AHAM** 19-1/2" (49.5 cm) - Overall
Oven Volume Overall Measured to AHAM Standard**	4.3 cu. ft. 4.7 cu. ft.	Both Ovens: 4.7 cu. ft. Upper Oven: 4.2 cu. ft.; Lower Oven: 4.1 cu. ft.
Approximate Shipping Weight	261 lbs. (118 kg)	402 lbs. (182 kg)

Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.
** The AHAM Standard for measuring oven capacity subtracts the door plug and convection baffle dimension from the total oven volume.



VIKING RANGE, LLC 111 FRONT STREET GREENWOOD, MISSISSIPPI 38930 USA

BUILT-IN 5 SERIES GAS COOKTOPS

Viking Professional 5 Series – VGSU

COMMERCIAL-TYPE COOKING POWER

- Highest combined BTU rating in the industry, featuring sealed burners with brass burner rings in a wide variety of sizes
- Powerful 18,000 BTU burner delivers commercial power for high heat sautéing, rapid boiling and quick recovery
- Simmer settings on all burners allows low BTU output for heating delicate sauces
- **EXCLUSIVE** SureSpark™ Ignition System ensures automatic ignition/re-ignition should flame extinguish at any time while cooking

GAS 30"WIDE COOKTOP

- Left front – 18,000 BTU high
- Left rear – 12,000 BTU high
- Center – 12,000 BTU high
- Right front – 6,000 BTU high
- Right rear – 8,000 BTU high

GAS 36"WIDE COOKTOP

- Left front – 18,000 BTU high
- Left rear – 10,000 BTU high
- Center front – 12,000 BTU high
- Center rear – 12,000 BTU high
- Right front – 6,000 BTU high
- Right rear – 8,000 BTU high

EASY MAINTENANCE AND CLEANUP

- Updated commercial-type styling incorporates refined detailing
- Permanently sealed burners prevent spills from entering burner box
- Deep, seamless recessed burner pan retains liquid spills
- Durable laser-etched graphics withstand the rigors of regular cleaning
- Removable knobs, grates, and burner ports/caps make cleanup easy

SAFE-EASY OPERATION

- Child proof, push-to-turn metal knobs for safe use
- Automatic electric spark ignition means no standing pilot to re-light, waste energy or add extra heat to the kitchen
- **EXCLUSIVE** ScratchSafe™ Grate Design provides ultimate protection from scratches and ensures proper placement of the heavy-duty, porcelain-coated cast iron grate

MODEL NUMBERS

- VGSU5305BSS – 30"W. Gas Cooktop; five burners
- VGSU5366BSS – 36"W. Gas Cooktop; six burners

ACCESSORIES

- PGDVGC – Portable non-stick cast aluminum griddle fits securely onto grates for griddling or defrosting food
- WRGVGC – Porcelain-coated cast iron wok ring fits securely over grates to accommodate a traditional wok
- LPKVGC – LP/Propane Conversion Kit

COLOR FINISHES

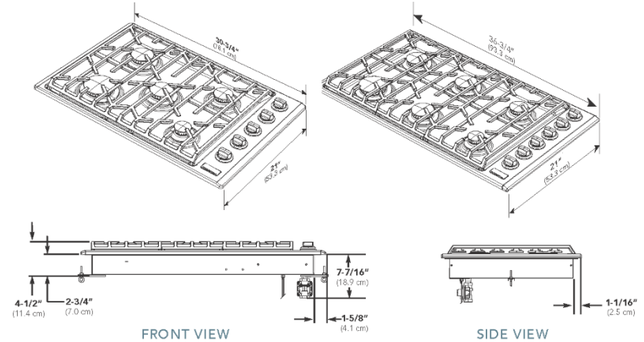
- Available in Stainless Steel (SS)

WARRANTY

- 2-year full - complete product
- 90-day full - cosmetic parts such as glass, painted items and decorative items
- 5-year limited - gas surface burners

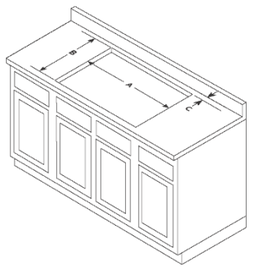
GAS COOKTOPS		
DESCRIPTION	VGSU5305B	VGSU5366B
Overall Width	30-3/4" (78.1 cm)	36-3/4" (93.3 cm)
Overall Height (from bottom to top of grate)	4-1/2" (11.4 cm)	
Overall Depth from rear	21" (53.3 cm)	
Cutout Width	27-3/4" (70.5 cm) minimum to 29-3/8" (74.6 cm) maximum	33-3/4" (85.7 cm) minimum to 35-3/8" (89.9 cm) maximum
Cutout Height	2-3/4" (7.0 cm)	
Cutout Depth	19-1/8" (48.6 cm) minimum to 20-1/8" (51.1 cm) maximum	
Gas Requirements	Shipped Natural or LP/Propane, field convert with conversion kit (sold separately); accepts standard residential 1/2" (1.3 cm) ID gas service line	
Electrical Requirements	120 V 60 Hz; 4 ft. (121.9 cm), 3-wire cord with grounded 3-prong plug attached to product	
Maximum Amp Usage	1.0 amps	
Surface Element Rating Left front Left rear Center front Center rear Right front Right rear	 18,000 Nat./16,500 LP (BTU) (5.4 Nat./4.9 LP (kw) 12,000 Nat./11,000 LP (BTU) (3.6 Nat./3.3 LP (kw) 12,000 Nat./11,000 LP (BTU) (3.6 Nat./3.3 LP (kw) N/A 6,000 Nat./6,000 LP (BTU) (1.8 Nat./1.8 LP (kw) 8,000 Nat./7,000 LP (BTU) (2.4 Nat./2.1 LP (kw)	 18,000 Nat./16,500 LP (BTU) (5.4 Nat./4.9 LP (kw) 10,000 Nat./9,000 LP (BTU) (3.0 Nat./2.7 LP (kw) 12,000 Nat./11,000 LP (BTU) (3.6 Nat./3.3 LP (kw) 12,000 Nat./11,000 LP (BTU) (3.6 Nat./3.3 LP (kw) 6,000 Nat./6,000 LP (BTU) (1.8 Nat./1.8 LP (kw) 8,000 Nat./7,000 LP (BTU) (2.4 Nat./2.1 LP (kw)
Approximate Shipping Weight	67 lb. (30.2 kg)	80 lb. (36.0 kg)

Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.



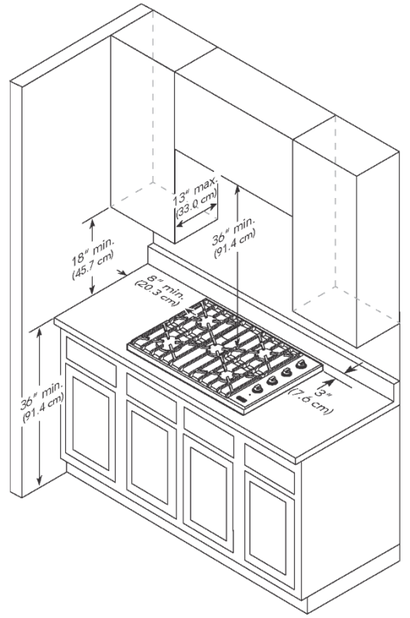
FRONT VIEW

SIDE VIEW



	30"W. Model	36"W. Model
A	27-3/4" (70.5 cm) min. to 29-3/8 (74.6 cm) max.	33-3/4" (85.7 cm) min. to 35-3/8 (89.9 cm) max.
B	19-1/8" (48.6 cm) min. to 20-1/8 (51.1 cm) max.	
C	3" (7.6 cm) min.	

Note: Based on 24" deep cabinet with 3/4" backsplash



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For detailed product information, model numbers, or to request a quote call 1-888-845-4641 or visit vikingrange.com

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UNDERCOUNTER DRAWERMICRO™ OVEN

Viking Professional – VMOD

PROFESSIONAL FEATURES

- Opens and closes with the touch of a button
- 11 variable power levels
- 12 sensor cook, reheat, and popcorn settings
- Six defrost auto settings
- Two reheat auto settings
- Add-A-Minute allows a minute of extra cooking time to be added with the touch of a button
- Keep warm feature allows food to be kept warm for up to 30 minutes
- Beverage center reheats coffee and tea to suitable drinking temperature
- Melt/soften/warm settings automatically select the correct time and power for each function
- Child Lock safety feature locks the control panel to prevent unwanted operation

FUNCTIONAL OVEN CAVITY

- 1.2 cubic ft. (28.3 liters) oven capacity
  - 17-5/16"W. x 7-1/8"H. x 16-9/16"D.
- 1,000 watts of output power
- Maximum functionality in minimal space
- Interior light

INSTALLATION OPTION

Flexible placement options below an island, peninsula, or standard cabinetry and can also be installed adjacent to built-in oven

MODEL NUMBERS

- VMOD5240SS – 24" Wide DrawerMicro Oven

COLOR FINISHES

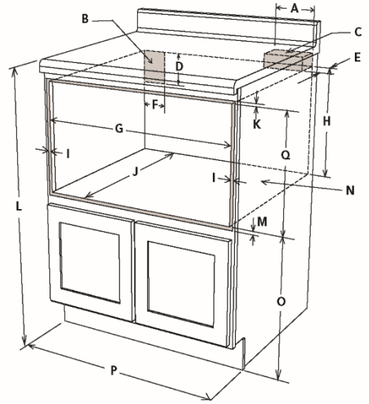
- Available in Stainless Steel (SS)

WARRANTY

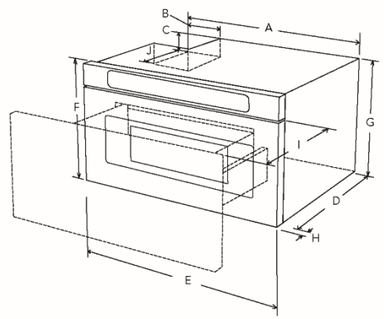
- 2-year full - complete product
- 90-day full - cosmetic parts such as glass, painted items and decorative items
- 5-year limited – magnetron tube

24"W. DRAWERMICRO™ OVEN	
DESCRIPTION	VMOD5240
Overall Width	23-7/8" (60.6 cm)
Overall Height from Bottom	15-7/8" (40.3 cm)
Overall Depth from Rear	23-1/64" (39.5 cm)
Cutout Width	22-1/8" (56.2 cm)
Cutout Height	15-9/16" (35.1 cm)
Cutout Depth	23-1/2" (59.7 cm)
Electrical Requirements	120VAC/60Hz
Maximum Amp Usage	1.67 kW, 14.5 amps
Oven Interior Dimensions	Width – 17-5/16" (43.9 cm) Height – 7-1/8" (18.1 cm) Depth – 16-9/16" (42.1 cm) Overall Size – 1.2 cu. ft.
Approximate Shipping Weight	86 lb. (39.0 kg)

Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.
Note: The clearance of the space between a built-in oven and the DrawerMicro must be a minimum of 2".



A. 6" (152.40 mm)
B. Suggested electrical outlet location*
C. Anti-Tip block
D. 5" (127 mm)
E. 3-1/2" (88.90 mm)
F. 4" (101.60 mm)
G. 22-1/8" (561.98 mm) opening
H. 14-13/16" (376.24 mm) to bottom of Anti-Tip block
I. Allow 7/8" (22.23 mm) overlap
J. 23-1/2" (596.90 mm) minimum depth
K. Allow 3/16" (4.76 mm) overlap
L. 36" (914.4 mm) countertop height
M. Allow 1/8" (3.17 mm) overlap
N. Floor must support 100 lb (45.4 kg)
O. 19" (482.60 mm) to top of floor
P. 24" (609.6 mm) cabinet minimum
Q. 15-9/16" (395.27 mm) opening



A. 21-5/8" (549.28 mm)
B. 4-11/16" (119.06 mm)
C. 1-3/4" (44.45 mm)
D. 21-7/8" (555.60 mm)
E. 23-7/8" (606.43 mm)
F. 15-7/8" (403.22 mm)
G. 14-19/32" (370.69 mm)
H. 1-9/64" (29 mm) door thickness
I. 15" (381 mm) auto drawer opening
J. 4" (101.6 mm)

VIKING RANGE, LLC 111 FRONT STREET GREENWOOD, MISSISSIPPI 38930 USA

For detailed product information, model numbers, or to request a quote call 1-888-845-4641 or visit vikingrange.com

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UNDERCOUNTER REFRIGERATOR

Viking Professional 5 Series – VRUI/VRUO

PROFESSIONAL FEATURES

- Storage Capacity
  - Stores up to 20 wine bottles total (7 flat)
  - Stores up to (162) 12-oz cans
- Dynamic Cooling Technology™ delivers rapid cool down and the industry's best temperature stability
- Slide out convertible shelf—beverage storage or wine rack configurations with stainless shelf front
- Integrated controls provide precise temperature management from 34°F to 42°F
- Two-stage, soft blue theatre-style LED lighting and sophisticated midnight black interior
- Smooth-glide clear utility bin provides maximum volume to effectively store large, bulky or loose items
- Thermal-efficient cabinet ensures optimum food preservation and energy efficiency while maximizing capacity
- Tinted, UV-resistant dual pane glass door protects wine from damaging ultra-violet light
- Audible and visual alarms signal when door is left ajar to protect food integrity
- Vacation/Sabbath mode conserves energy during times when the unit is not in use and complies with Star-K requirements
- Height adjustment up to 1" with leveling legs
- Storage Configuration
  - (1) full-width and roll out
  - (1) half-width cantilevered, fully adjustable black powder coated steel-framed glass shelf
  - (1) fixed black steel-framed glass shelf
  - (1) MaxStore™ Utility Bin

AGENCY-CERTIFIED OUTDOOR MODEL

- Insulated electrical terminals, sealed electrical contacts, and a water-resistant thermostat provide optimal performance in all weather elements
- Solid Stainless Steel door with door lock
- Stainless steel kickplate

MODEL NUMBERS

- VRUI5240G(R/L)SS – 24"W. Undercounter Refrigerator (indoor unit) – Glass door
- VRUO5240D(R/L)SS – 24"W. Undercounter Refrigerator (outdoor unit) – Solid door

DESIGN OPTIONS

- Order as right or left hinge

COLOR FINISHES

- Available in Stainless Steel (SS)

WARRANTY

- 2-year full covers complete unit
- 6-year full – sealed refrigeration system
- 90-day full – cosmetic parts such as glass, painted items, and decorative items
- 12-year limited – sealed refrigeration system

UNDERCOUNTER REFRIGERATOR

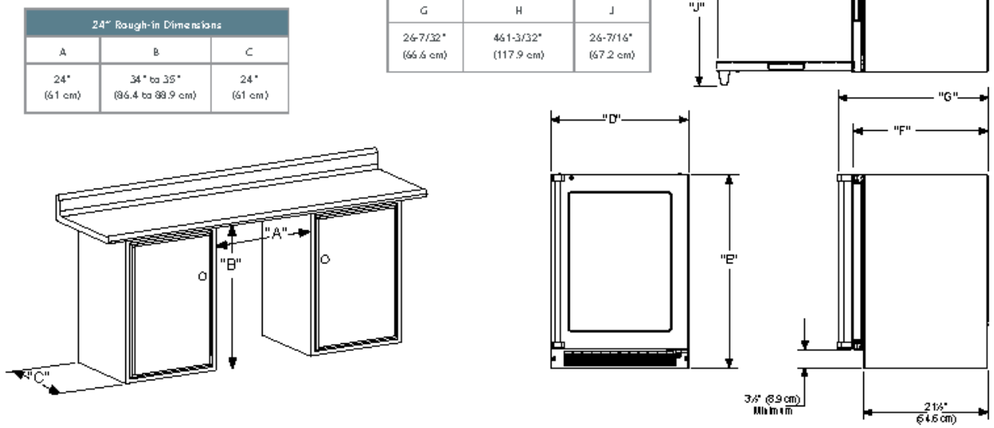
Viking Professional 5 Series – VRUI/VRUO

24"W. UNDERCOUNTER/FREESTANDING REFRIGERATOR	
DESCRIPTION	VRUI/VRUO 5240
Overall Width	23-7/8" (60.6 cm)
Overall Height	33-3/4" min – 34-3/4" max (85.7 cm min – 88.3 cm max)
Overall Depth from Rear	To front of door – 23-23/32" (60.2 cm) To handle– 26-7/32" (66.6 cm) With door at 90° – 46-13/32" (117.9 cm)
Electrical Requirements	120V / 60Hz / 15A (5 ft. power cord attached to product)
Maximum Amp Usage	3.0 amps
Maximum Storage Capacity	5.3 cu. ft.
Interior finish	Black
Approximate Shipping Weight	160 lb. (72.6 kg)

Please do not prepare installation from brochure data only. See installation instructions for important clearance/installation information.

Cabinet Dimensions		
D	E	F
23-7/8" (60.7 cm)	33-3/4" to 34-3/4" (85.7 to 88.3 cm)	23-23/32" (60.2 cm)
G	H	J
26-7/32" (66.6 cm)	46-3/32" (117.9 cm)	26-7/16" (67.2 cm)

24" Rough-in Dimensions		
A	B	C
24" (61 cm)	34" to 35" (86.4 to 88.9 cm)	24" (61 cm)



VIKING RANGE, LLC 111 FRONT STREET GREENWOOD, MISSISSIPPI 38930 USA

For detailed product information, model numbers, or to request a quote call 1-888-845-4641 or visit vikingrange.com

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