

# CFU

LABORATORY SOLUTIONS

Functional Flexible Cost Effective Quality Design

## *iLAB*

casework  
tables  
benches  
worktops  
sinks

## ***iLAB***

### The next generation of laboratory furniture

Designed to facilitate heavy research equipment applications and more importantly, to be easily reconfigured to keep up as your equipment needs change to extend the life of your lab.

Designed with equipment in mind. A system truly designed to accommodate today's laboratory equipment and flexible enough for tomorrow.

Designed to distribute the services (gas, water and electricity) within the modules. A system which is self standing, and less dependant to the infrastructure of the facility.

We handle your project top to bottom. CFU will directly handle:

- Estimating
- Shop drawings
- Custom engineering (if applicable)
- Oversee the entire manufacturing process
- Project manage your installation

We have the ability to demonstrate 3D modeling in for you clearly understand how the furniture systems can work for your application. Instead of working on 2D plans, we provide 3D models of your lab for you to visualize every aspect of the environment.





## How iLAB can "Future Proof" your laboratory?

iLAB is a simple set of 10 parts that can be easily arranged to accommodate any configuration required to meet functional, technical and user requirements.

- Completely factory assembled plug and play
- Reduces MEP distribution and cost
- For both renovations and new construction
- Completely reusable
- Reduces initial capital and long term costs
- Components adjustable to meet institutional requirements



## Utilities

- iLAB is the only lab furniture system that can accommodate essentially unlimited plumbing and electrical requirements without customization
- Up to 14 gas services per service unit
- Up to 12 individual electrical circuits
- The ability to add services after initial installation in a matter of hours
- All pre installed services are UL and CSA certified.

## Freestanding system

The factory assembled components are installed on site with less than half the on site labor as traditional systems

- iLAB can be purchased and installed as a furniture system instead of as a fixed building installation
- Rearrangement or relocation can be accomplished with in-house staff over night or over the weekend.
- No building permits required to make most changes to the system



## Eliminates utilities within walls

- iLAB eliminates electrical and piped services within lab walls making lab renovations less costly and easier to accomplish.
- Our surface mounted umbilicals provide gas and communications in a factory assembled unit. Table mounted electrical raceways provide unlimited ability for dedicated power and specialty requirements.
- Changes to service requirements are easily accommodated without major demolition and downtime.







**ILAB is designed to easily split large areas and to use narrow spaces efficiently.**



**Due to this feature, it is very suitable for revision projects. Installation/Dismantling of the units is very simple, also add and remove operations can be done easily when needed.**

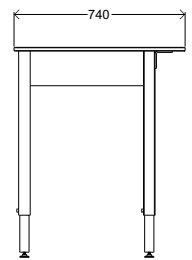
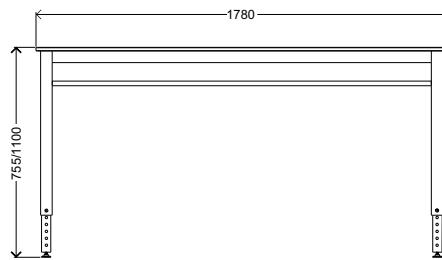
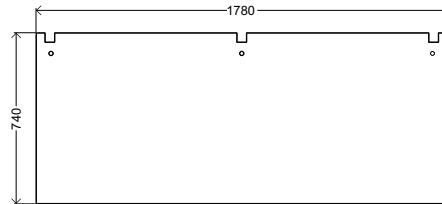
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# modular units



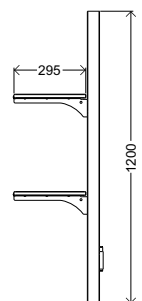
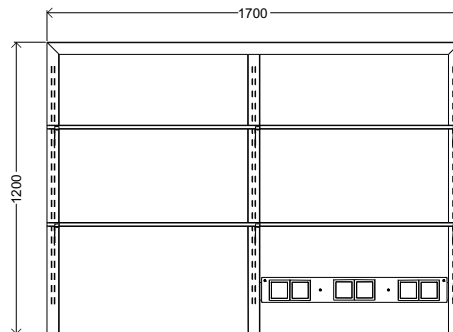
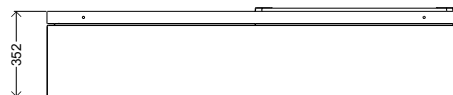
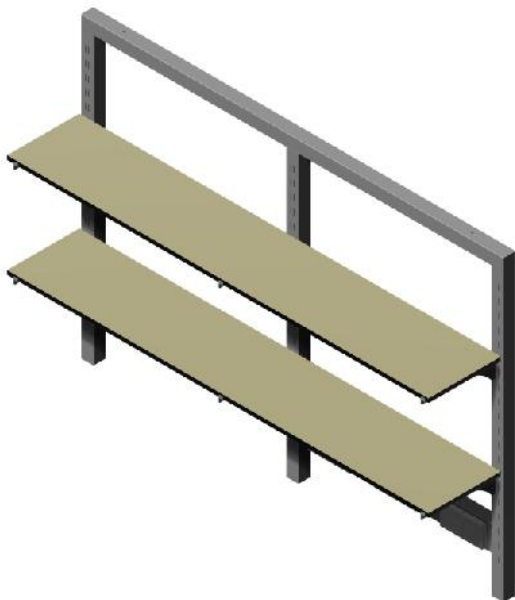


## Workbench



- Can both be used as tall bench or low bench.
- Height of the workbench can be adjusted between 755mm to 1100mm.
- 50\*50\*4mm welded steel tube frame with electrostatic powder coating.

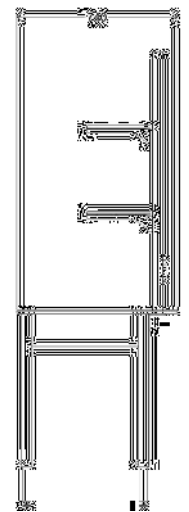
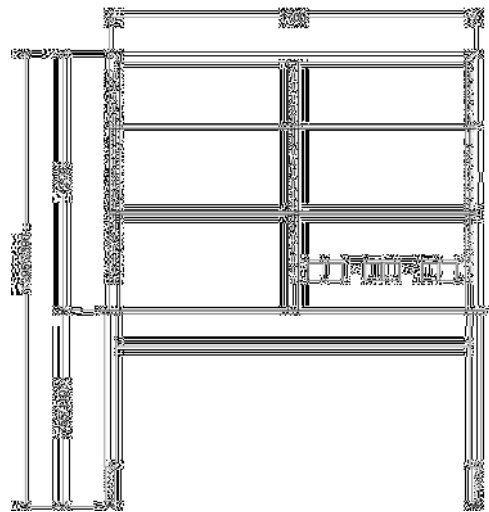
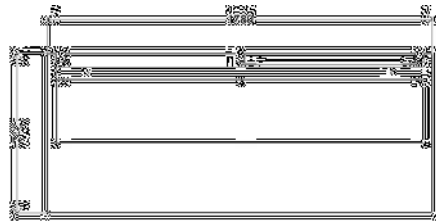
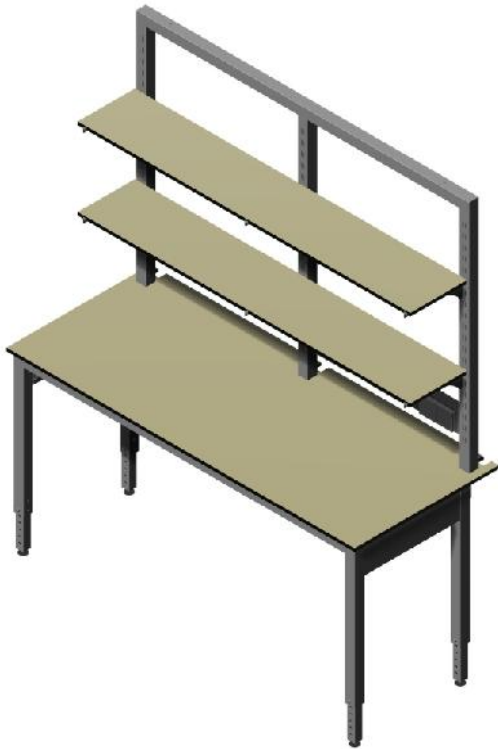
## Workbench Shelving



- Multiple shelves can be used on this unit.
- Easy height adjustment.
- Workbench shelving unit also has ad ons like plug sockets and table lights.
- 50\*50\*4mm welded steel tube frame with electrostatic powder coating on.

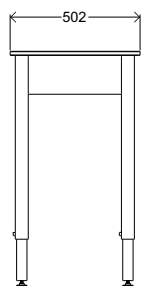
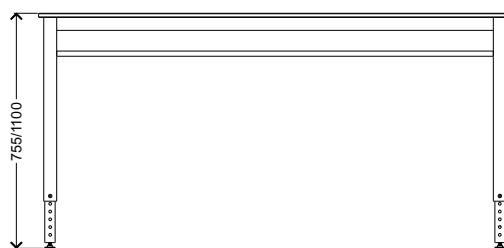
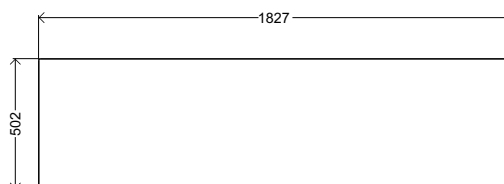


## Workbench With Shelving Unit



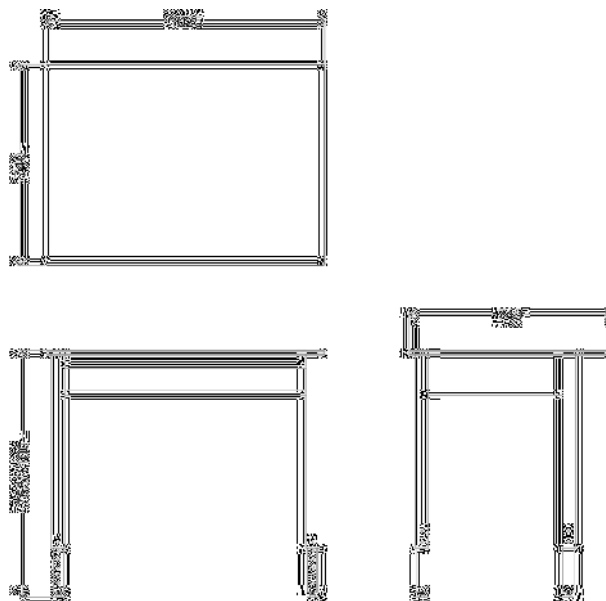
- Combination of shelving unit and workbench.
- Height adjustable shelves.
- Height of the workbench can be adjusted between 755mm to 1100mm.
- 50\*50\*4mm welded steel tube frame with electrostatic powder coating.

## Service Workbench



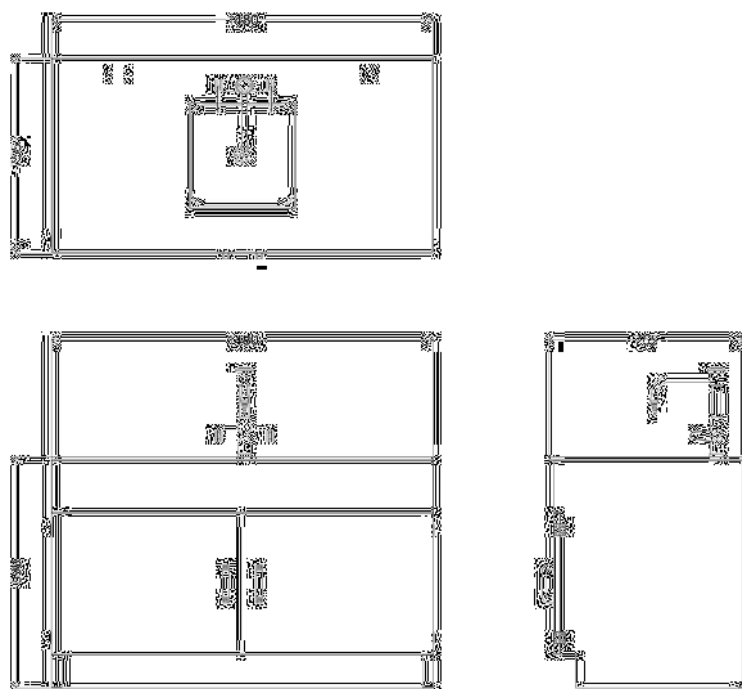
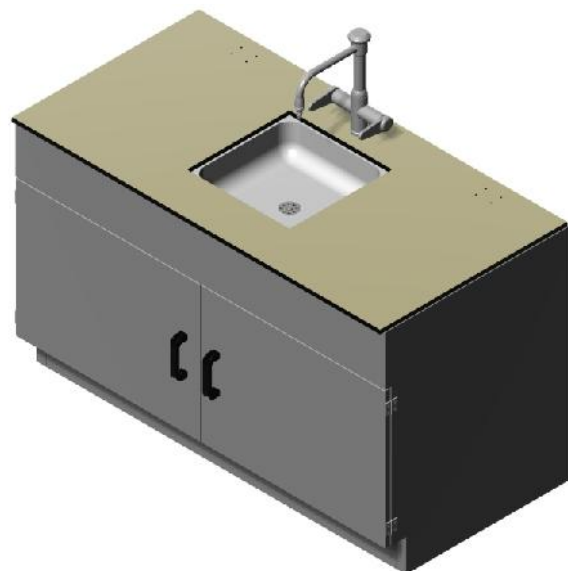
- Used with service unit to form islands.
- 50\*50\*4mm welded steel tube frame with electrostatic powder coating.

## Small Workbench



- Can both be used as tall bench or low bench.
- Height of the workbench can be adjusted between 755mm to 1100mm.
- 50\*50\*4mm welded steel tube frame with electrostatic powder coating.

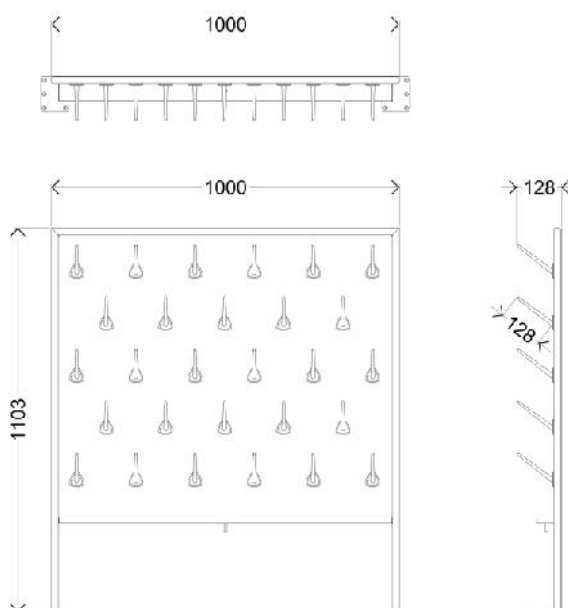
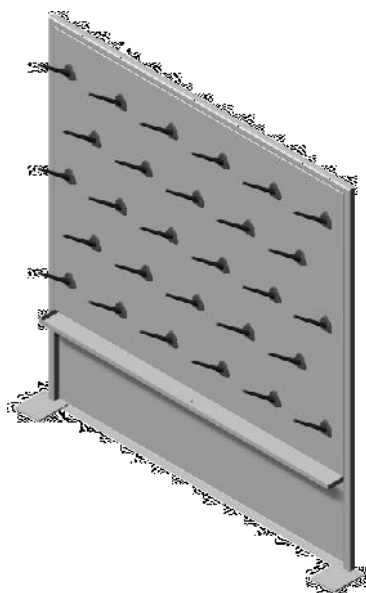
## Sink



- 40\*20\*3 welded steel tube frame, covered with 1mm steel sheet.
- All metal parts are electrostatic powder coated.
- Epoxy coated tap.
- Polypropylene sink.

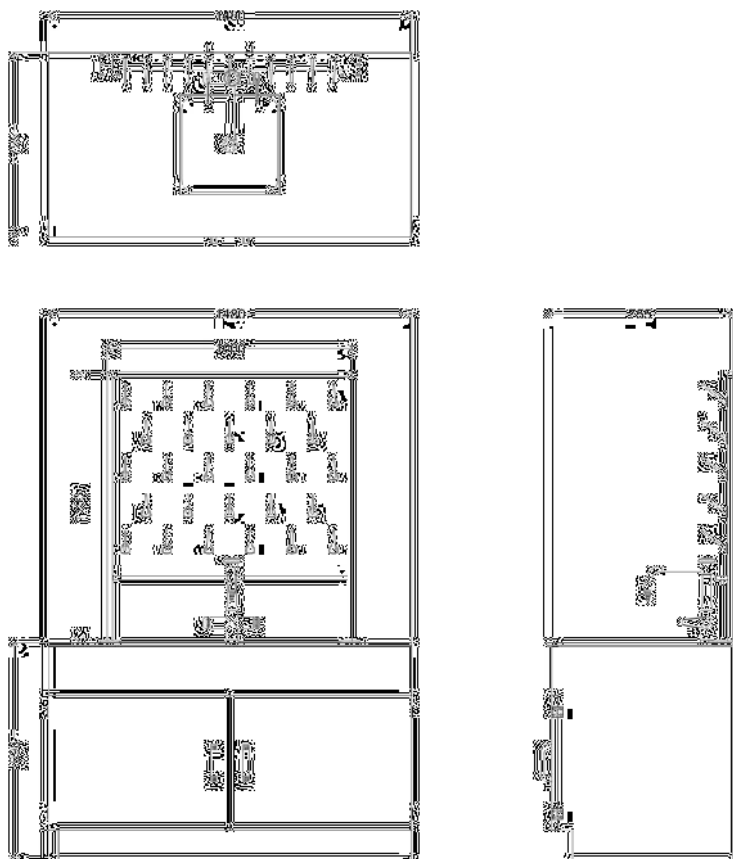
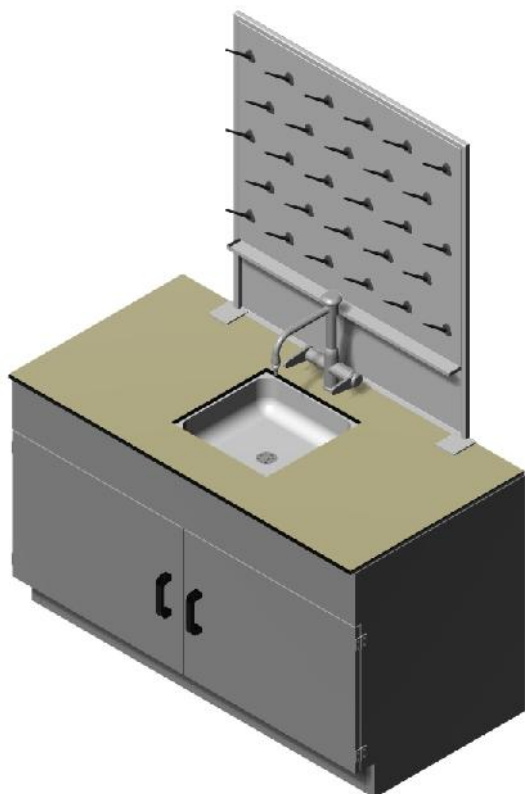


## Drying Rack



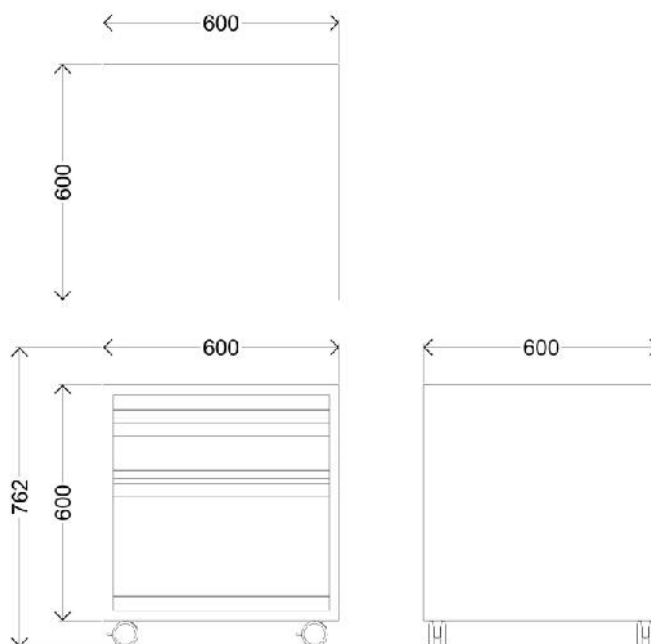
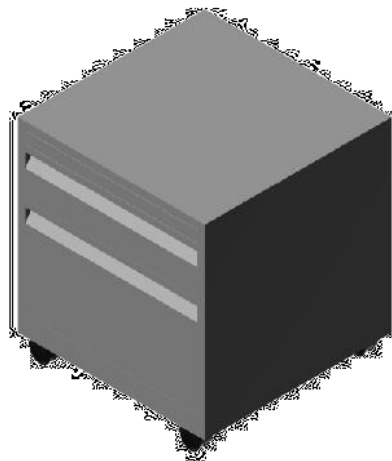
- Stainless steel frame and cover sheet.
- Polypropylene (PP) drying racks.

## Sink With Drying Racks



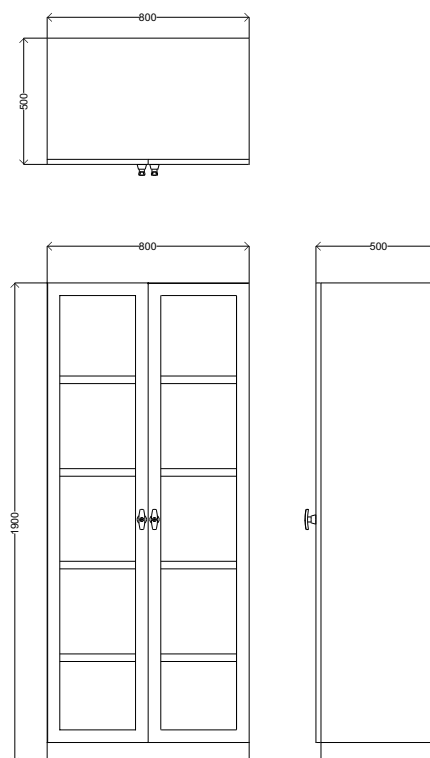
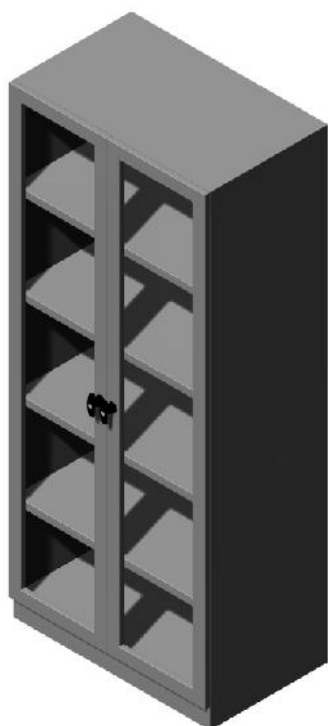
- Combination of sink unit and drying racks.

## Under Bench Cabinets



- Mobile under bench drawers.
- Electrostatic powder coated.
- Durable and smooth drawer rail mechanism.
- 4 chaster wheels.

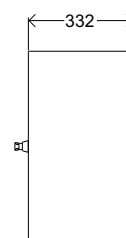
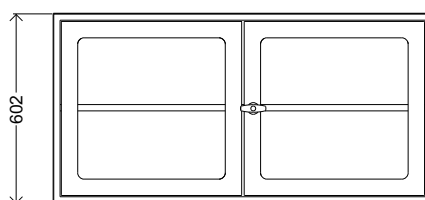
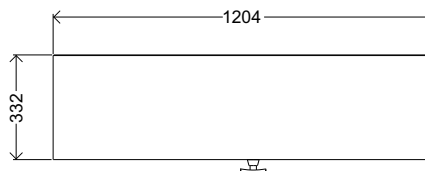
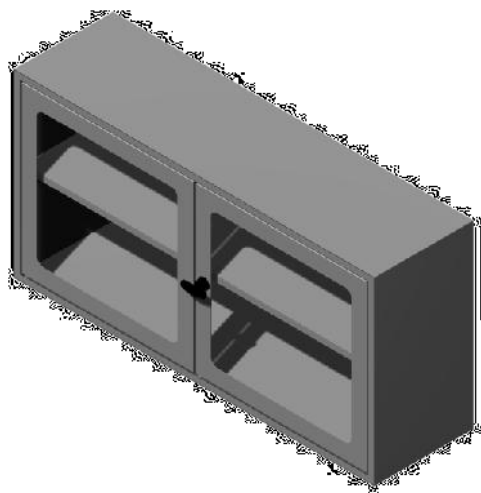
## Tall Cabinets (glass door)



- Electrostatic powder coated.
- Glass doors.
- Height adjustable shelves.

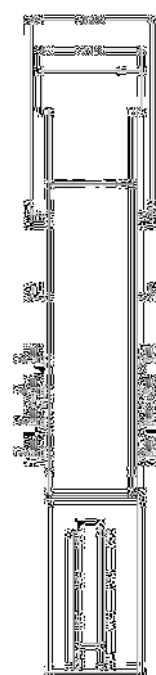
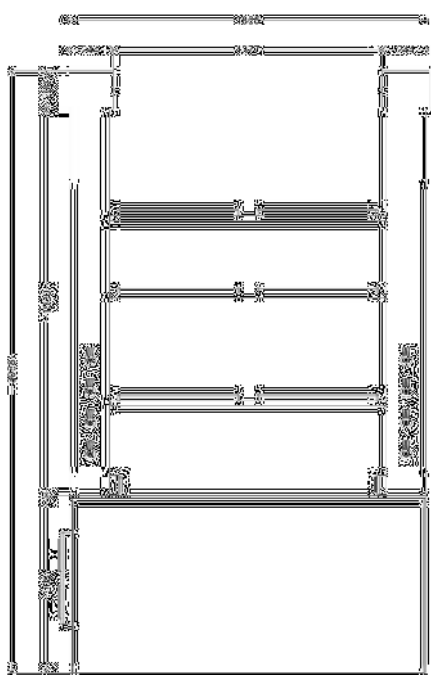
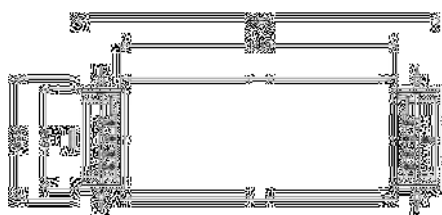
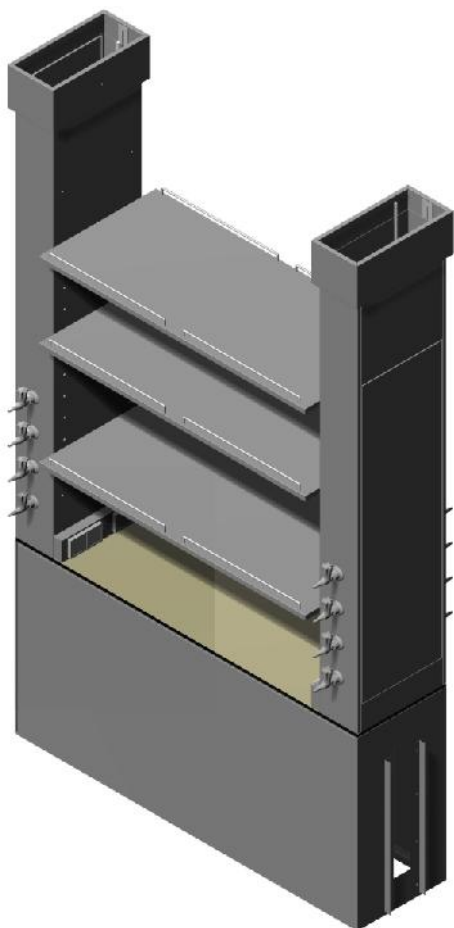


## Wall Cabinets



- Electrostatic powder coated.
- Glass doors.
- Height adjustable shelves.

## Service Unit



- Please find detailed information about the service unit in the following pages.

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# service unit





## Wall Cabinets

With help of service units located in island benches, gas, electricity and water distribution can easily be made without changing the original building installation. Since service unit connects to the gas, electricity and water through the suspended ceiling, there is no need to make structural changes in laboratory.

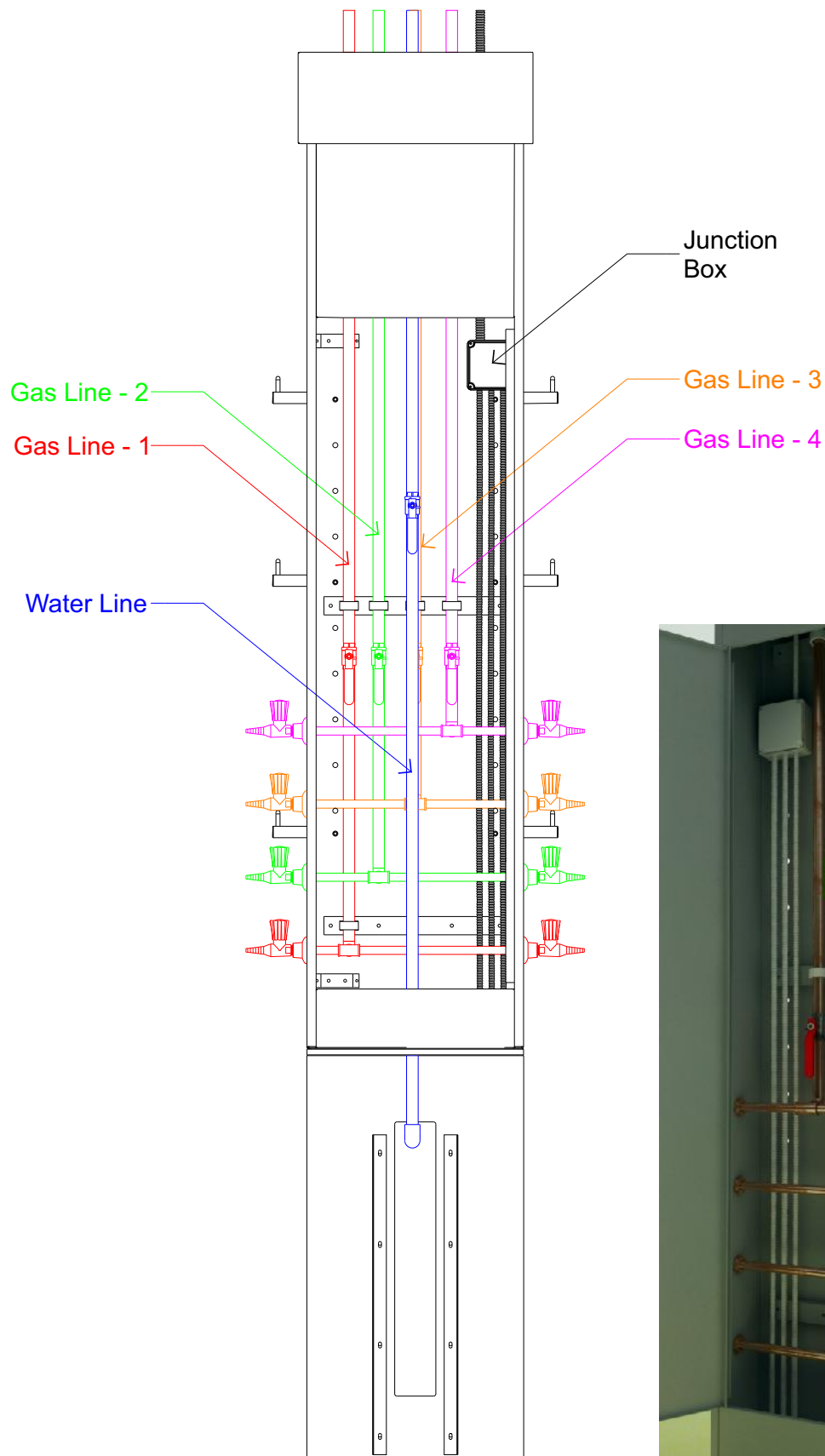
Another advantage of distributing the installation through the benches itself is to design large laboratory areas with thin panels and to design a laboratory space without being dependent on original building installation.

The gas, electricity and water installations in the service unit are prepared according to installation site requirements. This will reduce installation time and labor cost in the field.

The columns that connect service unit to the suspended ceiling are designed with height adjustment. This allows installation to a ceiling up to 230 cm height.



## Service Column



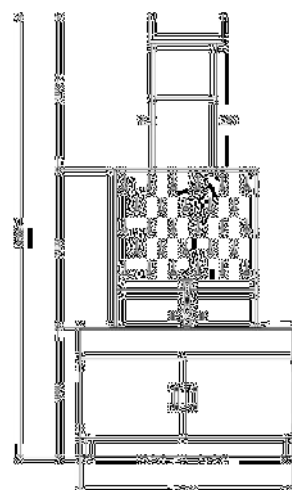
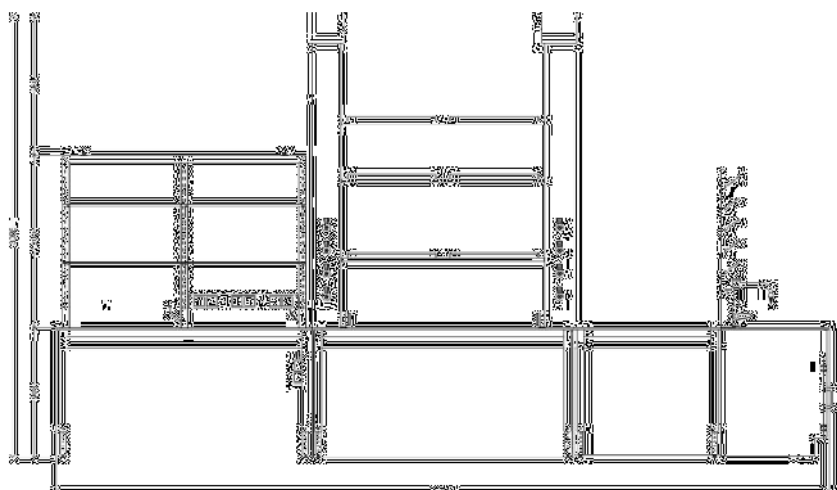
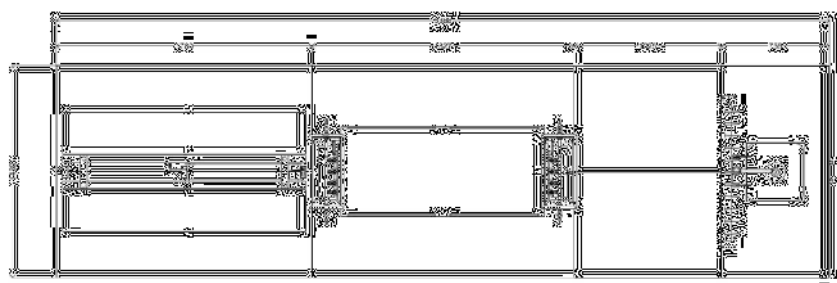
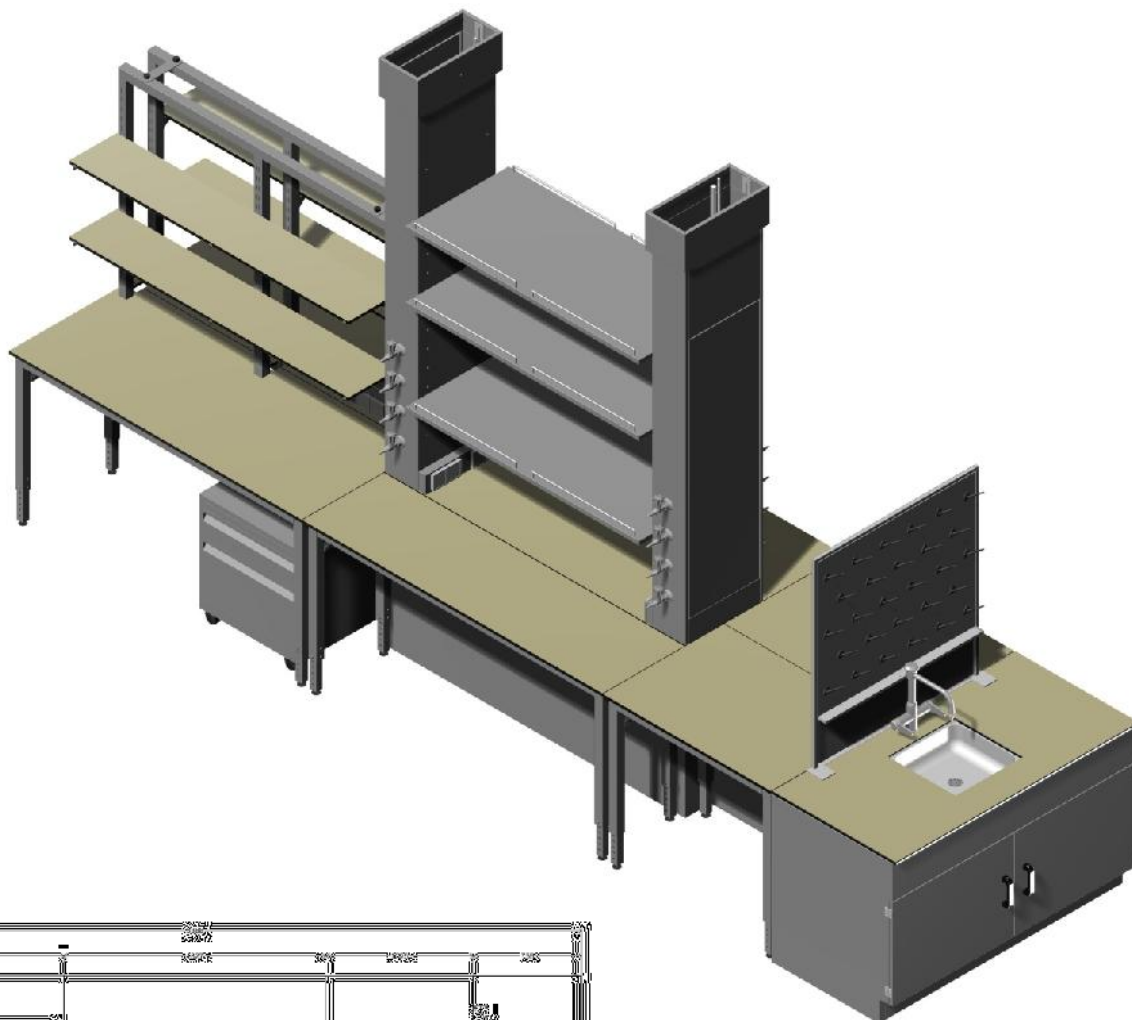
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islands

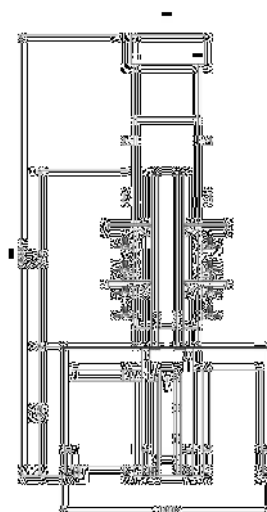
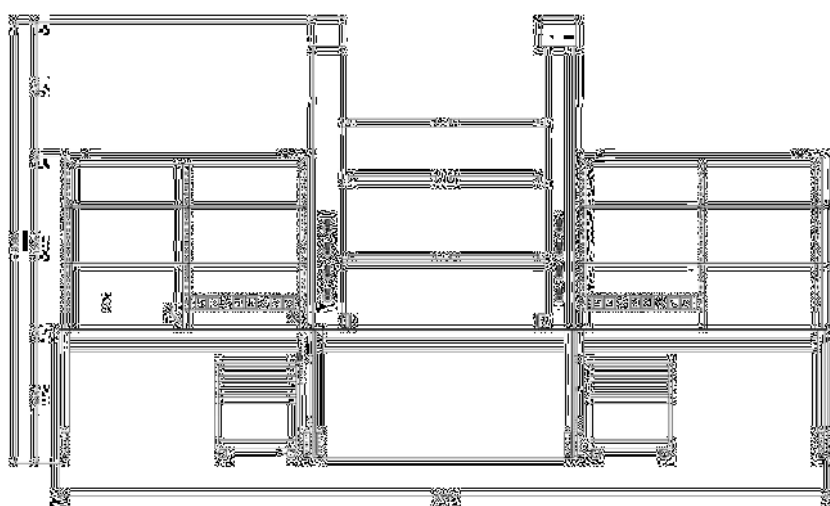
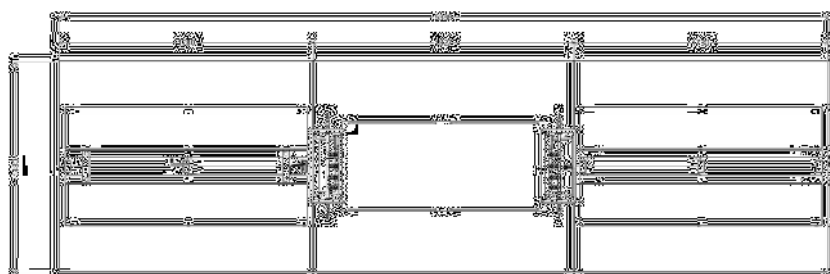
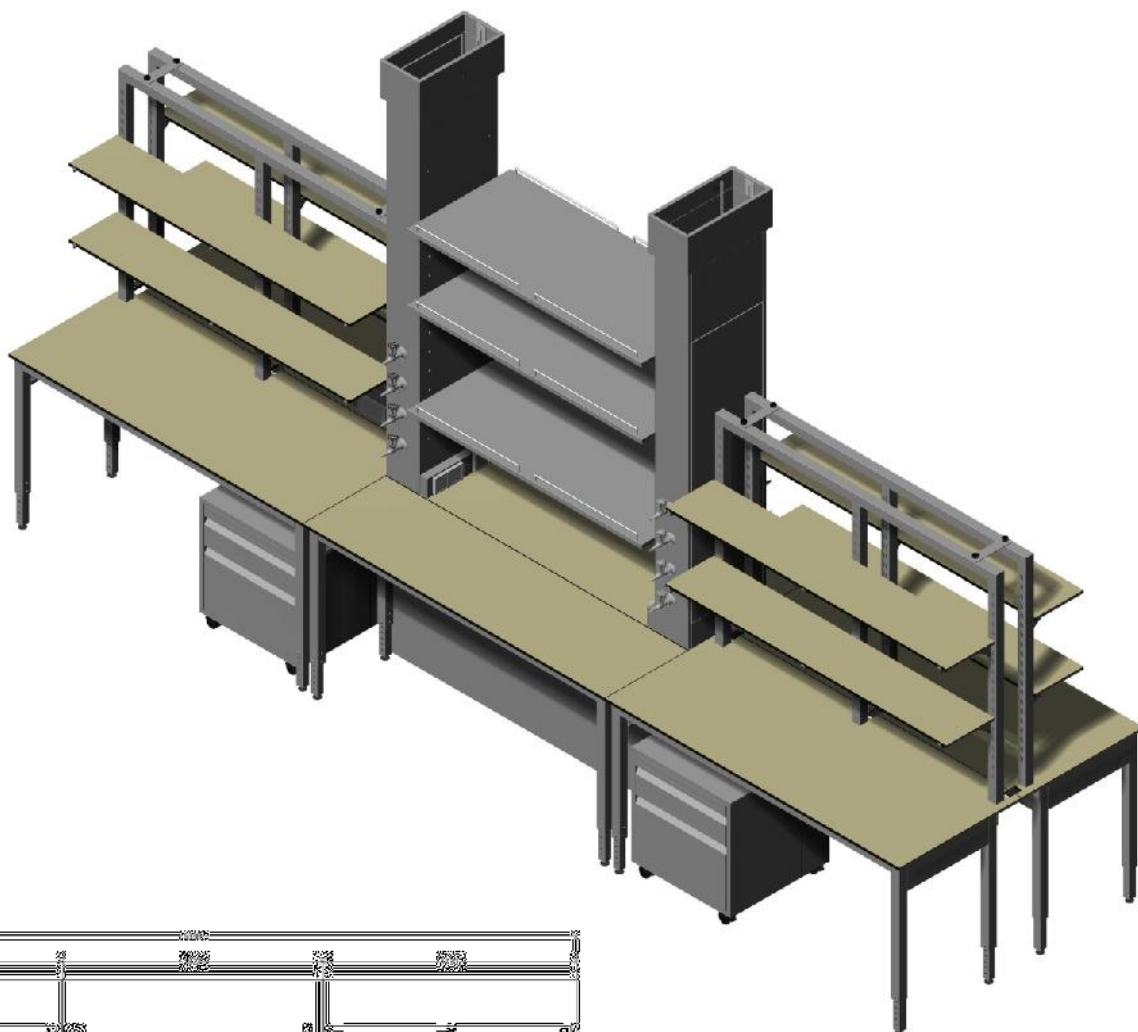




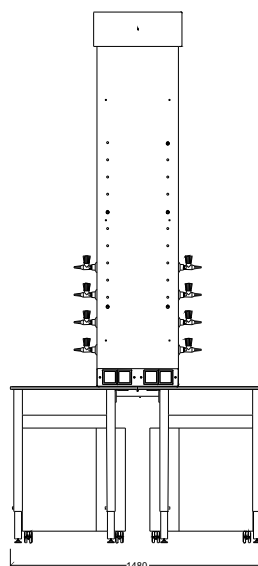
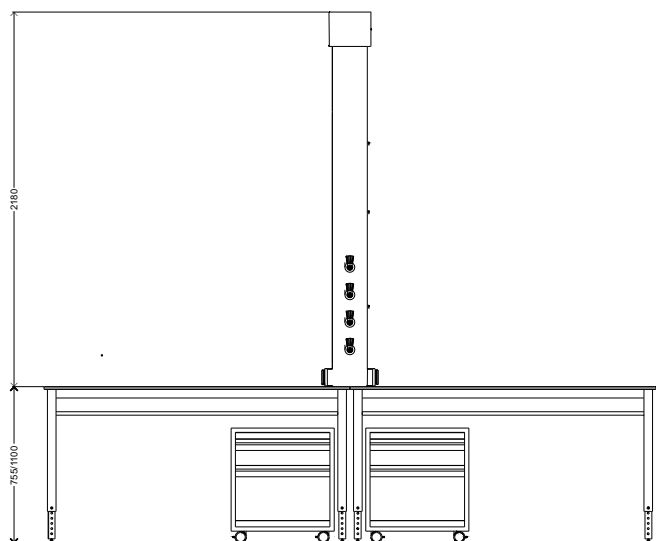
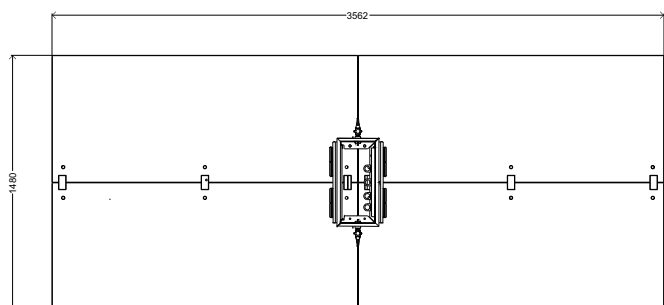
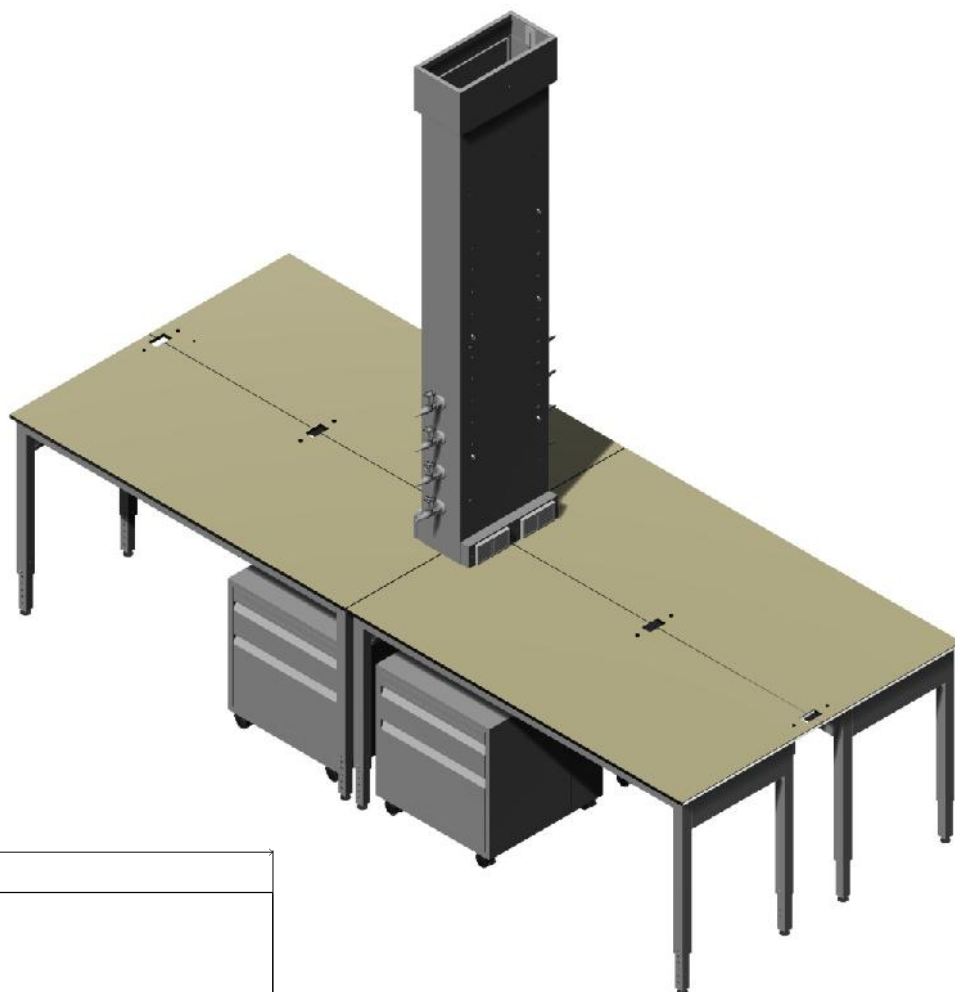
## Wet Island



## Dry Island



## Mono Column Island







**Workbench and shelf materials can be changed upon request.**



**Workbenches and shelves are produced by CNC machines from anti-UV and acid resistant compact laminate plates.**

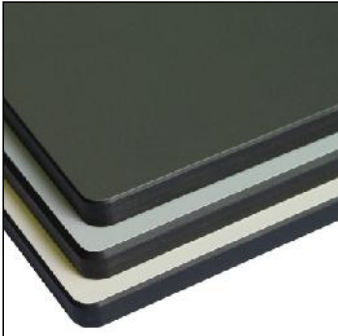
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# countertops





## Epoxy Resin Countertops



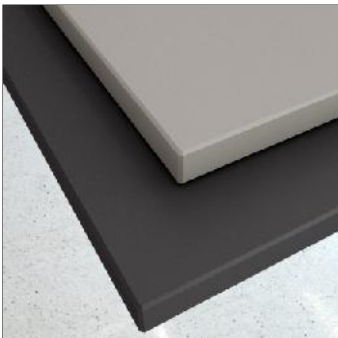
Thanks to their special surface, compact laminate panel show extra resistance against chemicals. It is not affected by cleaning materials, strong organic solvents, acids, bases and salts, its surface is produced to resist most aggressive chemicals for 24 hours. All these features make it easy to maintain and clean.

Commonly used in chemistry, biology, pharmaceutical, radiology, physics, cosmetics, botanical laboratories, hospitals, operating theaters, food industry laboratories and industrial kitchens.

Compact laminate countertops are resistant to following disinfecting and cleaning agents:

Aceton, Toluene, Dimethyl Sulphoxide, Tetrahydrofurane, Terpentine, Ethylalcohol, Ammonia, Caustic Soda, Potassium Hydroxide %10.

## Epoxy Resin Countertops



Epoxy resin countertops are consist of sheets cast from modified epoxy resin and non-asbestos inert fillers; compounded mixture cured and thermoset specifically from formulation to provide the exceptional physical and chemical resistance required in cutting-edge laboratory environments.

It is able to withstand common laboratory temperature, and it is not flammable, has no bubbles and does not break.

It has superior corrosion resistance to acid and base solvents commonly used in laboratory.

## Laminated MDF Countertops



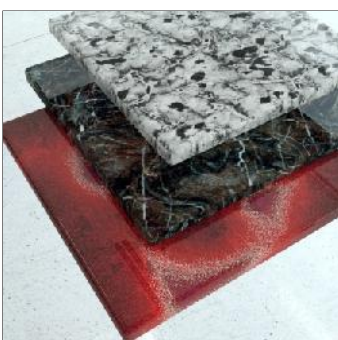
Industry standard laminated MDF boards are used, commonly for table tops instead of benches.

They show poor resistance against chemicals.

They are mostly used in supplementary products (in order to reduce the cost), such as, office tables or bases for laboratory appliances.

Laminated MDF have various texture and color options. Comes in 18mm and 30mm thickness.

## Natural Stone Countertops



Natural stone countertops are commonly used on precision scales benches. They can both be used as a whole stone countertop, or partial stone on a laminated countertop.

Regarding to their heavy weight, they are useful against vibration. Thats why they are mostly used below precision scales and measurement devices.

Natural stones have various texture and color options. Comes in various thickness, commonly used 30mm on countertops.



## Compact Laminate Panel Chemical Resistance

Test No	Chemical Substance	Test Method	Test Result	Test No	Chemical Substance	Test Method	Test Result
1	Acetate , Amyl	A	0	27	Methylene Blue 1%	B	1
2	Acetate , Ethyl	A	0	28	Methylene Chloride	A	0
3	Acetic Acid , 98%	B	0	29	Methyl Isobutyl Ketone	A	0
4	Acetone	A	0	30	Methyl Violet 2B 1%	B	1
5	Acid Dichromate , 5%	B	0	31	Mono Chlorobenzene	A	0
6	Alcohol , Butyl	A	0	32	Naphtalene	A	0
7	Alcohol , Ethyl	A	0	33	Nitric Acid , 30%	B	0
8	Alcohol , Methyl	A	0	34	Nitric Acid , 70%	B	0
9	Ammonium Hydroxide , 28%	B	1	35	Phenol , 90%	A	0
10	Benzene	A	0	36	Phosphoric Acid , 85%	B	0
11	Chloroform	A	0	37	Potassium Permanganate 5%	B	1
12	Chromic Acid , 60%	B	1	38	Silver Nitrate , Saturated	B	0
13	Dichloroacetic Acid	A	0	39	Sodium Hydroxide , 10%	B	0
14	Dimethylformamide	A	0	40	Sodium Hydroxide , 40%	B	0
15	Ferric ( III ) Chloride 10%	B	0	41	Sodium Hypochlorite 16%	B	0
16	Formaldehyde , 37%	A	0	42	Sodium Sulfide , Saturated	B	0
17	Formic Acid , 90%	B	0	43	Sulfuric Acid , 33%	B	1
18	Furfural	A	0	44	Sulfuric Acid , 77%	B	0
19	Gasoline	A	0	45	Sulfuric Acid , 96%	B	1
20	Hydrochloric Acid , 37%	B	0	46	Sulfuric Acid 77% and Nitric Acid 70% , Equal Parts	B	1
21	Hydrofluoric Acid , 37%	B	0				
22	Hydrofluoric Acid , 48%	B	0	47	TetraHydroFurane ( THF )	A	0
23	Hydrogen Peroxide , 3%	B	0	48	Toluene	A	0
24	Hydrogen Peroxide , 30%	B	0	49	Trichloroethylene	A	0
25	Iodine Tincture	B	2	50	Xylene	A	0
26	Methyl Ethyl Ketone	A	0	51	Zinc Chloride , Saturated	B	0

### Method A:

piece of cotton is saturated with chemical substance. Cotton piece is placed on the compact laminate panel and covered with glass. After 24 hours, compact laminate panel is cleaned.

### Method B:

5 drops of chemical substance is poured on the compact laminate panel and covered with glass. After 24 hours, compact laminate panel is cleaned.

Test Result	Explanation
0	No stain, no loss of gloss, no deformation on the surface
1	Slightly faded, little loss of glow, no deformation on the surface
2	Heavily faded or minor surface deformation
3	Bulging, scouring, corrosion or cleavage on the surface

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flexibility



## All you need in your laboratory, ILAB

ILAB laboratory furniture consist 10 different components. These components can be combined in different configurations for various needs and dimensions.

Our modular systems consist gas, water and electricity system connections and installations. This will assure cost efficiency and minimum installation time.

ILAB laboratory furniture systems are designed to easily split large areas and to use narrow spaces efficiently. Due to this feature, it is very suitable for revision projects. Installation/Dismantling of the units is very simple, also add and remove operations can be done easily when needed.

The materials used in CFU laboratory furniture systems are in accordance with international laboratory standards. All metal surfaces used are electrostatic, chrome or epoxy coated.

The benches and tables in the system are height adjustable and can be easily adjusted to user stand and sit positions. Shelf units are also adjustable in height as in the rest of the system. Shelf units can easily be removed from a tall bench, and the tall bench can easily be converted into a low bench. Thanks to this features, laboratory can easily be redesigned in time.







