

Alpha System Service Carriers

- **Alpha System Service Enclosures**

Suspended sheet metal enclosure able to accommodate most laboratory plumbing, electrical, data, and localized exhaust requirements. May be pre-plumbed and pre-wired for easy single-point connection at jobsite.

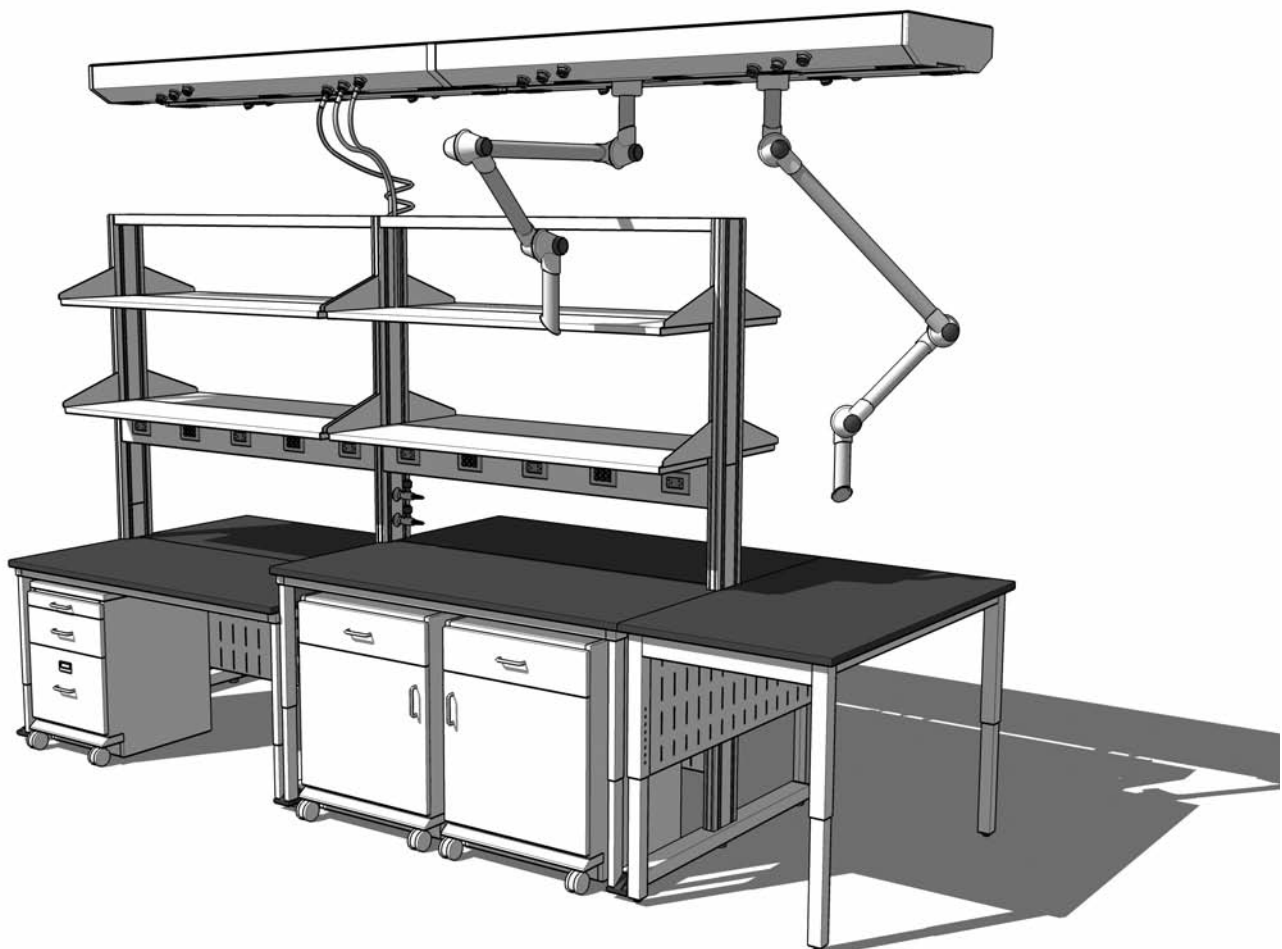
- **Alpha System Service Manifolds**

Modular design incorporates a unique extruded manifold for standard laboratory services which allows services to be added at any point for future expansion with minimum effort.

- **Alpha System Ceiling Panels**

Designed to integrate into a standard ceiling grid providing a low cost method of delivering plumbing, electrical, and data to today's laboratory bench.

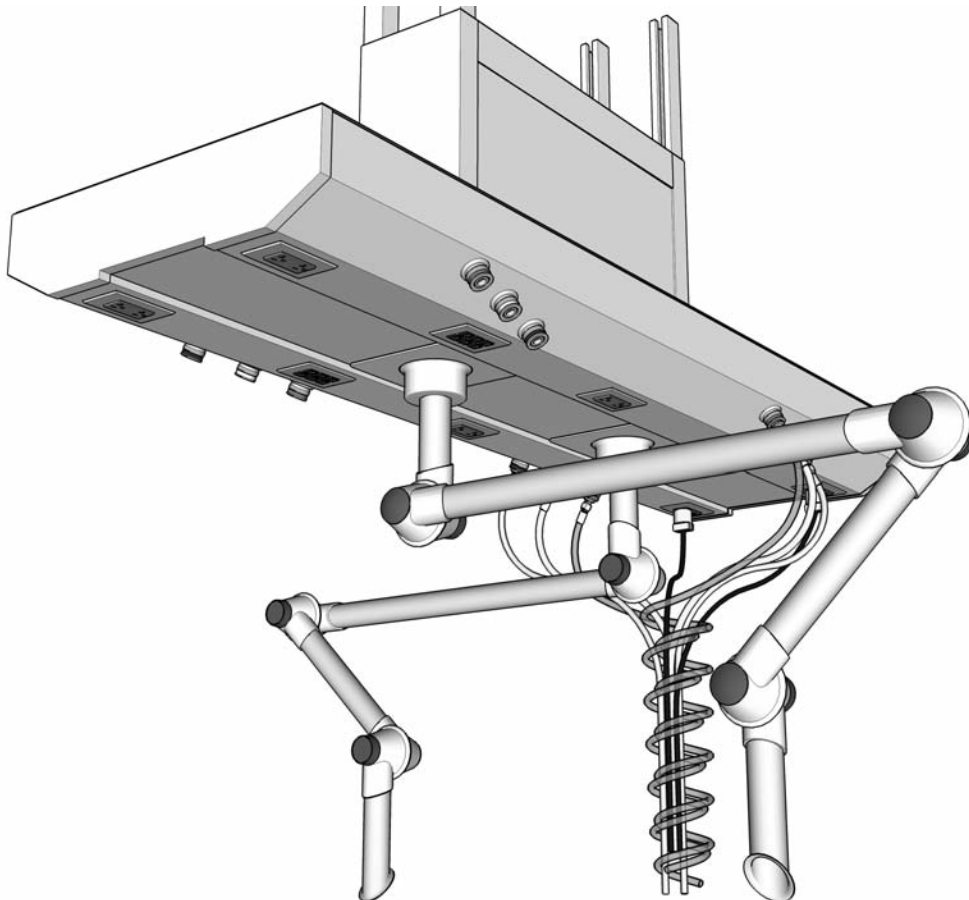
- Available in all standard powder finish colors
- Customized to meet your project requirements
- Available pre-plumbed and pre-wired for single point of connection
- Power components are UL listed, and UL listed pre-wiring is available
- Accommodates localized fume extraction devices
- Accommodates light fixtures
- Sections may be assembled in the field for continuous runs
- Mounts to standard strut components and hardware



Alpha System Service Enclosure

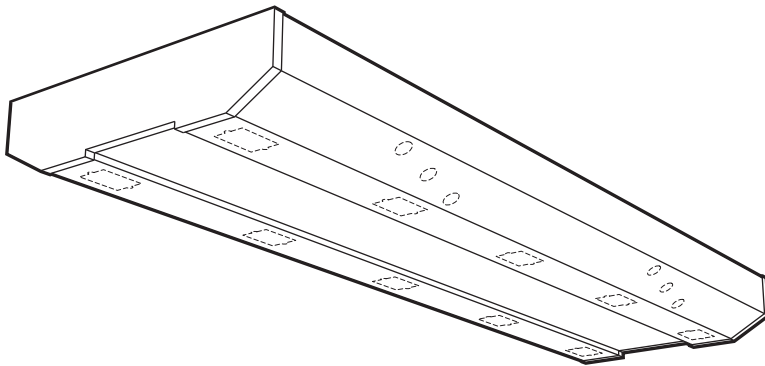
Features:

- Compact design able to integrate multiple plumbing, power, lighting, data, and localized exhaust elements
 - Available pre-plumbed and pre-wired for single point of connection
 - Power components are UL listed, and pre-wiring is available
 - Accommodates localized fume extraction devices
 - Accommodates light fixtures
 - Sections may be assembled in the field for continuous runs
 - Mounts to standard strut components and hardware
 - Available in all standard powder finish colors
 - Customized to meet your project requirements
- Accommodates all lab services including:
 - Common gases, air, vacuum, and water
 - High purity and special gases
 - Power and data
 - Lighting
 - Exhaust
 - Accepts multiple fitting options including:
 - Standard or fine control valves
 - Pressure gauges and regulators
 - Quick-connect valves
 - Quick-connect fittings and hoses
 - Communication and data outlets
 - Electrical service outlets
 - Shut-off valves



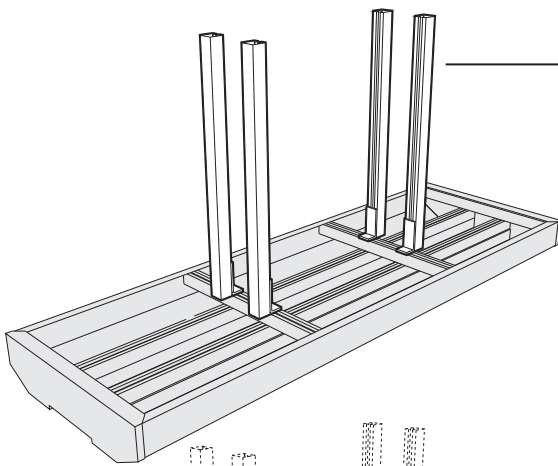
Alpha System Service Enclosure

Service Enclosure



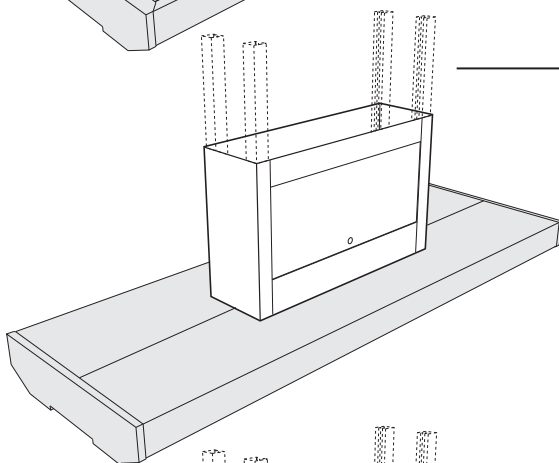
- Available in up to 96" lengths
- Sections may be joined together to make continuous runs
- Specify service and fixture cutouts and locations
- Sections may be pre-piped and pre-wired to a single point of connection
- Order support struts, piping enclosures, service fittings and electrical fixtures separately

Support Struts



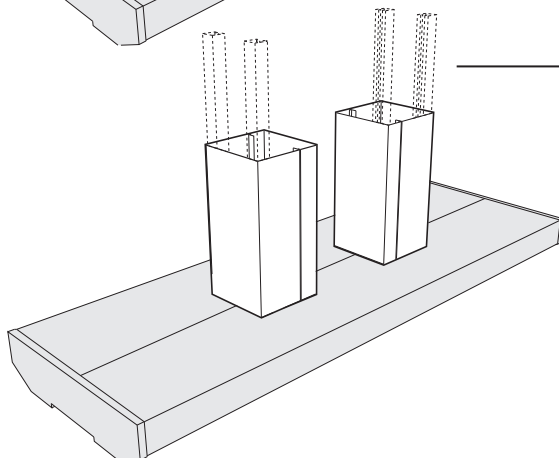
- Provided in pairs with attachment hardware
- Painted to match enclosure
- Available in lengths up to 10 feet
- May be used with Service Manifold as well as the Service Enclosure

24" Piping Enclosure



- Standard size 8" deep x 24" long in height specified.
- Custom lengths are available
- Painted to match enclosure
- Includes, tool free, access panel for ease of installation and maintenance
- Requires Supports Struts (order separately)

8" Piping Enclosure

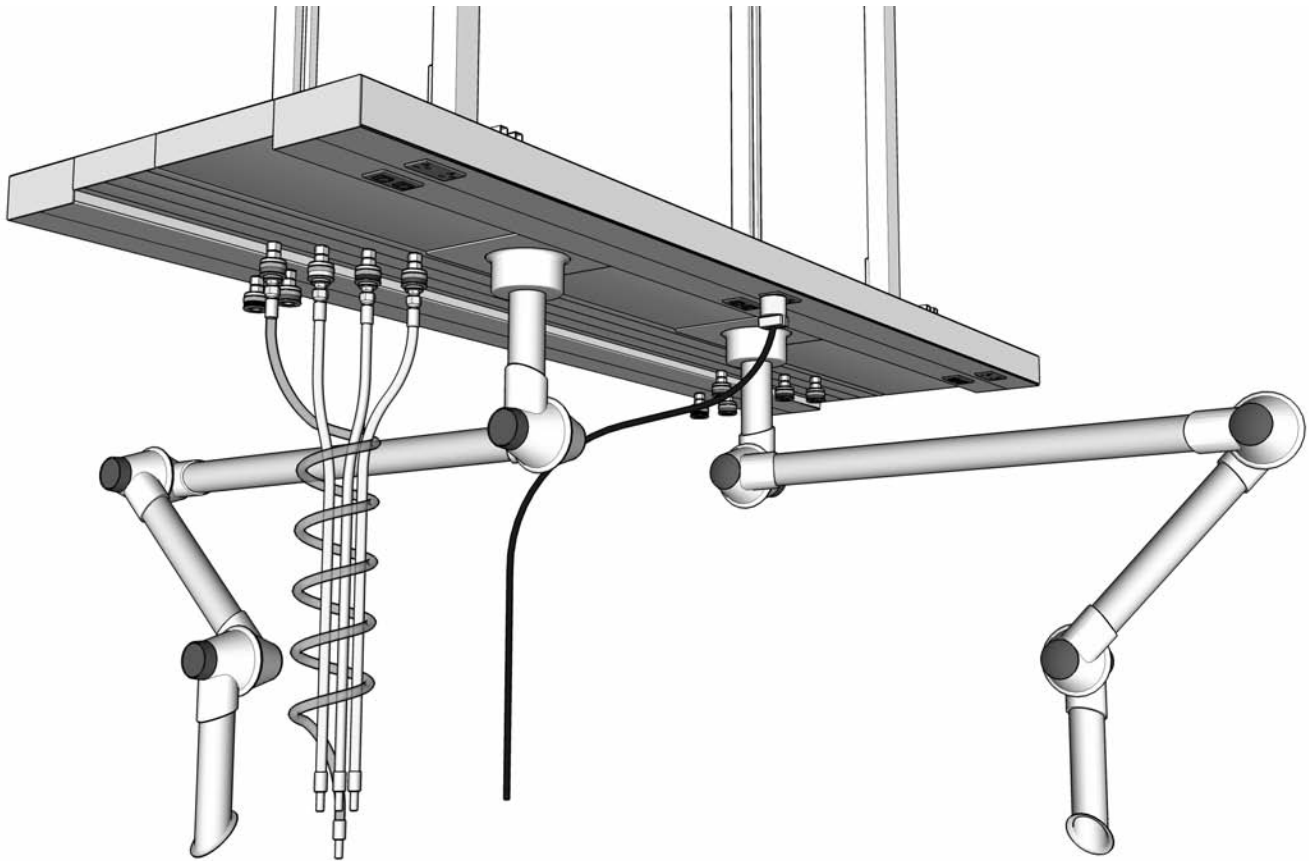


- Standard size 8" deep x 24" long in height specified.
- Custom lengths are available
- Painted to match enclosure
- Includes, tool free, access panel for ease of installation and maintenance
- Requires Supports Struts (order separately)

Alpha System Modular Service Manifold

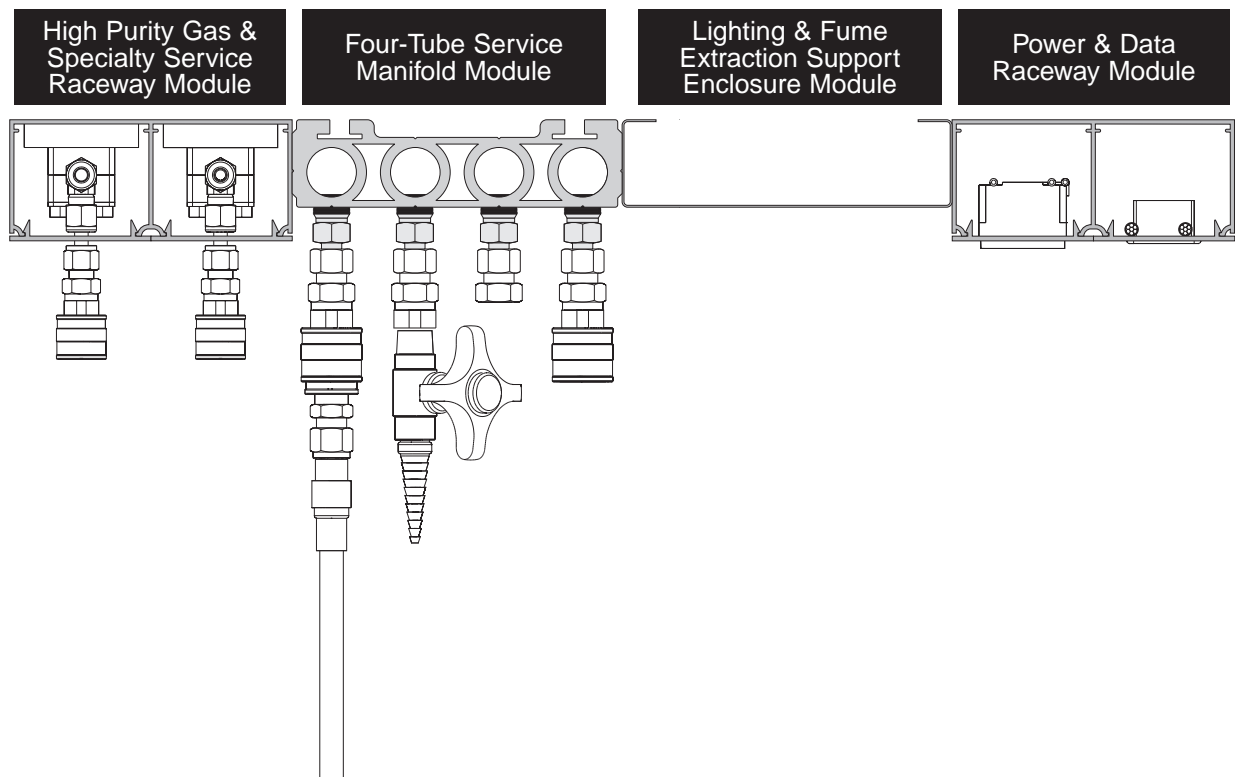
Features:

- Sleek compact design provides easy access to all services
 - Available pre-plumbed and tested ready for installation
 - Power components are UL listed, and pre-wiring is available
 - Accommodates localized fume extraction devices
 - Accommodates light fixtures
 - Modules interconnect for flexibility and expansion
 - Mounts overhead or on the wall, horizontally or vertically
 - Mounts to standard strut components and hardware
 - Pre-tapped and capped to allow simple addition of outlets and ports
 - Available in our standard powder finish colors
 - Customized to meet your project requirements
- Accommodates all lab services including:
 - Common gases, air, vacuum, and water
 - High purity and special gases
 - Power and data
 - Lighting
 - Exhaust
 - Accepts multiple fitting options including:
 - Standard or fine control valves
 - Pressure gauges and regulators
 - Quick-connect valves
 - Quick-connect fittings and hoses
 - Communication and data outlets
 - Electrical service outlets
 - Shut-off valves



Alpha System Modular Service Manifold

Planning & Design Information — Modular Service Manifold



Designing Your Modular Service Manifold System

The following points should be used as guidelines in designing your Service Manifold.

Contact local plumbing, electrical, or mechanical contractor or engineer to be sure of meeting all local codes and regulations.

Plumbing Service Options:

- All plumbing lines are cleaned, tested and capped unless otherwise specified.
- Specify manifold and raceway requirements based on services required.
- Service Manifolds are available in four standard lengths – 4 ft, 6 ft, 8 ft, and 10 ft.
- Sections can be joined together for longer and angled runs.
- Manifold tubes are available in 4 tube or individual tubes that can be nested to form multi-tube assemblies.
- Typical manifolds are furnished with two service groups for four and six foot Service Manifolds, and three service groups for eight and ten foot Service Manifolds. Special configurations are available.
- All adapter tubes are capped unless ordered pre-plumbed.

Electrical Service Options:

- Pre-wiring of power channels allows single point connections to the building.
- Power channels are UL listed when factory pre-wired.
- Power outlets furnished on 12" or 18" centers unless otherwise specified.
- Define NEMA configurations.
- Define type and quantity of circuits and terminations.

Data Channel Options:

- Specify data outlet types required. Wiring is by others.

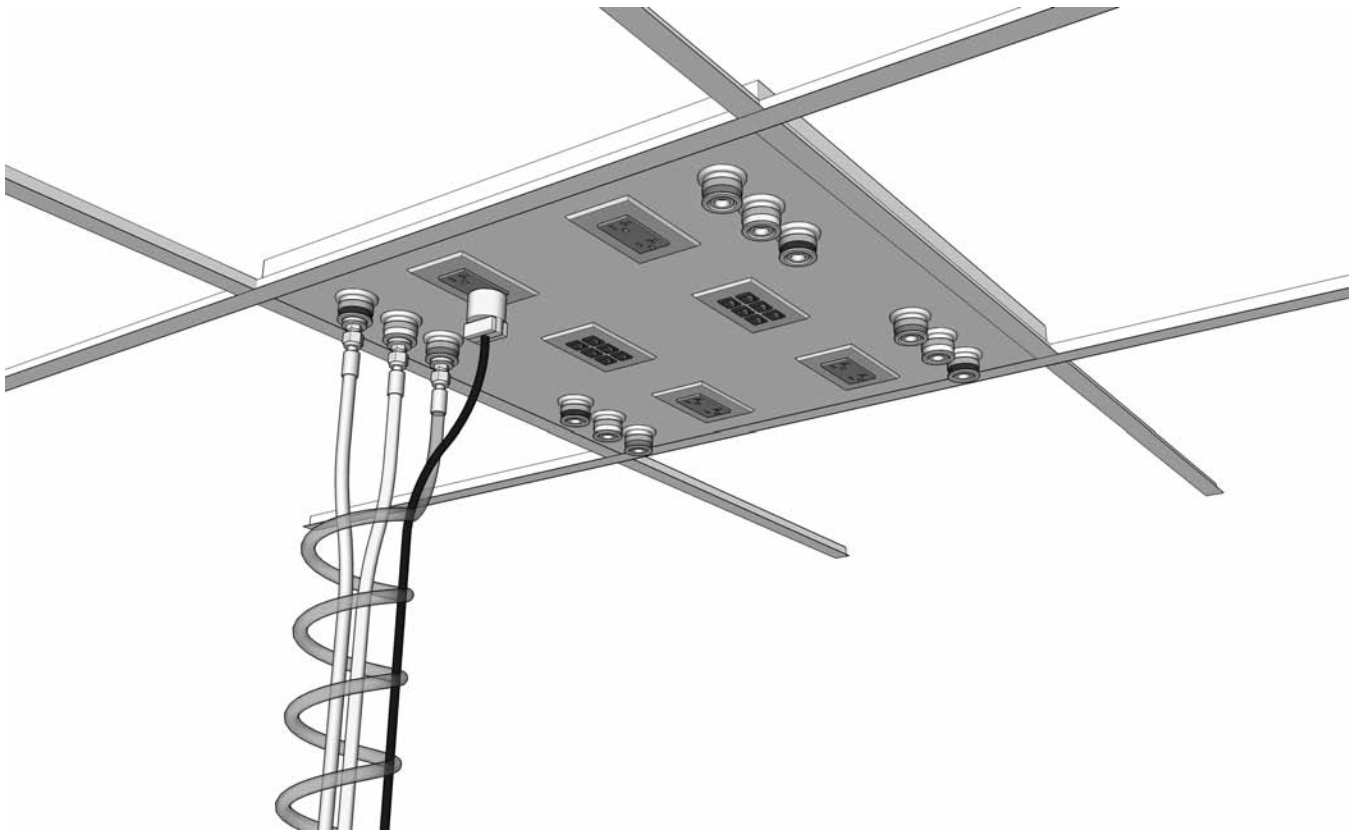
Light and Fume Extraction Support Enclosure Options:

- Contact factory for lighting options.
- Contact factory for Fume Extraction options and airflow requirements.
- Custom sized Support Enclosures are available.

Alpha System Ceiling Panel

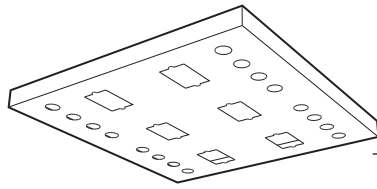
Features:

- Designed to integrate into common ceiling grids providing a low cost method of delivering plumbings, electrical, and data services to the lab bench
- Fits in standard 2' x 2' and 2' x 4' ceiling grids
- Power components are UL listed, and pre-wiring is available
- Available in our standard powder coat finish colors
- May be customized to meet your project requirements
- Accommodates multiple lab services including:
 - Common gases, air, vacuum, and water
 - High purity and special gases
 - Power and data
- Accepts multiple fitting options including:
 - Standard or fine control valves
 - Pressure gauges and regulators
 - Quick-connect valves
 - Quick-connect fittings and hoses
 - Communication and data outlets
 - Electrical service outlets



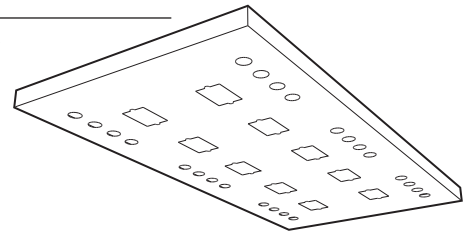
Alpha System Ceiling Panel

Typical Ceiling Panel Layouts



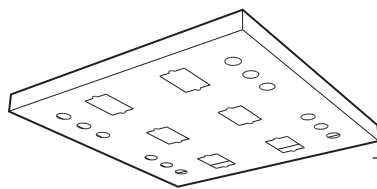
Six Station – 2' x 4' panel

Six groups of 4 service cutouts
Six duplex receptacle cutouts
Four data outlet cutouts



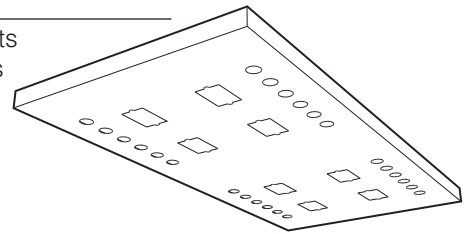
Four Station – 2' x 2' panel

Four groups of 4 service cutouts
Four duplex receptacle cutouts
Two data outlet cutouts



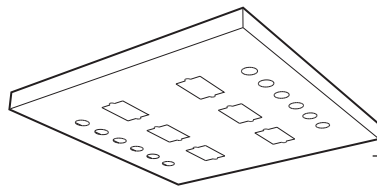
Four Station – 2' x 4' panel

Four groups of 6 service cutouts
Four duplex receptacle cutouts
Four data outlet cutouts



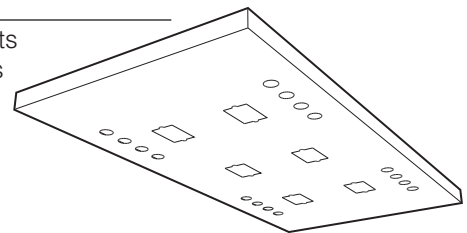
Four Station – 2' x 2' panel

Four groups of 3 service cutouts
Four duplex receptacle cutouts
Two data outlet cutouts



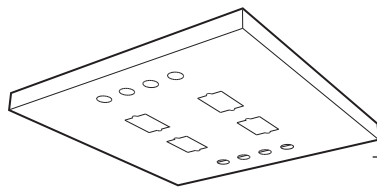
Four Station – 2' x 4' panel

Four groups of 4 service cutouts
Four duplex receptacle cutouts
Two data outlet cutouts



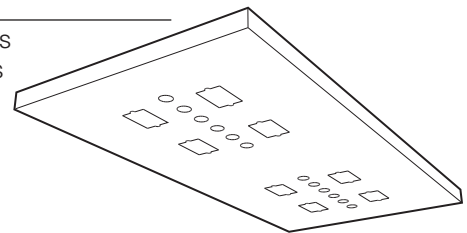
Two Station – 2' x 2' panel

Two groups of 6 service cutouts
Four duplex receptacle cutouts
Two data outlet cutouts



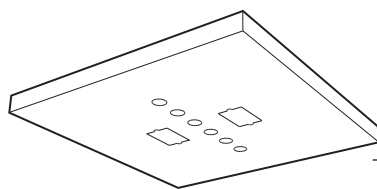
Two Station – 2' x 4' panel

Two groups of 6 service cutouts
Four duplex receptacle cutouts
Four data outlet cutouts



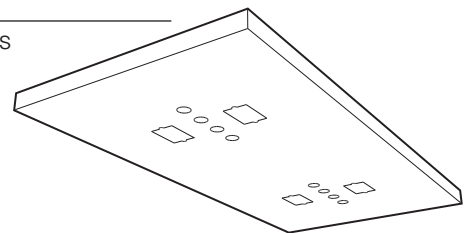
Two Station – 2' x 2' panel

Two groups of 4 service cutouts
Two duplex receptacle cutouts
Two data outlet cutouts



Two Station – 2' x 4' panel

Two groups of 4 service cutouts
Two duplex receptacle cutouts
Two data outlet cutouts



One Station – 2' x 2' panel

One group of 6 service cutouts
One duplex receptacle cutout
One data outlet cutout

Alpha System Service Carrier Accessories

Service Hoses & Electrical Cords



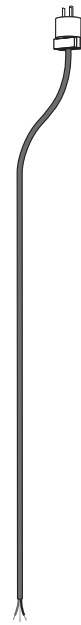
Coiled Polyurethane Hose – 3/8" IPS for non-burning gases. Male Quick-Connect fitting on one end and tube end or threaded nipple on other.



Braided Stainless Steel Hose – 3/8" IPS for natural gas and other burning gases. Male Quick-Connect fitting on one end and tube end or threaded nipple on other.

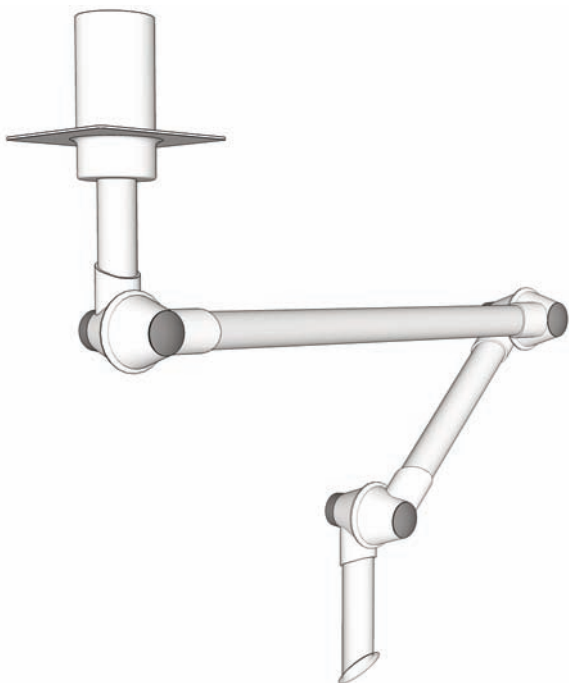


Reinforced Polyurethane Hose – 3/8" IPS for liquids and non-burning gases. Male Quick-Connect fitting on one end and tube end or threaded nipple on other.



3-Wire Power Cord
15 amp or 20 amp
120VAC with male plug
(specify NEMA configuration required)

Fume Extractor



Keyed Quick-Connect Fittings



Female Connector

Male Connector

Key Number and Color Code	Standard Service	Female Body Sleeve Dia.		Male Body Sleeve Dia.	
		in.	mm	in.	mm
K1 Black	Helium	1.13	28.7	0.99	25.1
K2 Orange	Air	1.16	29.5	1.02	25.8
K3 Green	Cold Water	1.19	30.2	1.05	26.6
K4 Yellow	Vacuum	1.22	31.0	1.08	27.4
K5 Blue	Gas	1.24	31.5	1.11	28.1
K6 White	—	1.28	32.5	1.14	28.9
K7 Purple	—	1.31	33.3	1.17	29.7
K8 Brown	Nitrogen	1.34	34.0	1.20	30.4