

Scientific Equipment & Furniture Association

SEFA 4 - 2020 Glossary of Terms



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Foreword

SEFA Profile

The Scientific Equipment and Furniture Association (SEFA) is an international trade association comprised of manufacturers of laboratory furniture, casework, fume hoods and members of the design and installation professions. The Association was founded to promote this rapidly expanding industry and improve the quality, safety and timely completion of laboratory facilities in accordance with customer requirements.

SEFA Standards

SEFA and its committees are active in the development and promotion of Standards having domestic and international applications. The Standards are developed by the association taking into account the work of other standard-writing organizations. Liaison is also maintained with government agencies in the development of their specifications.

SEFA's Standards are developed in and for the public interest. These practices are designed to promote a better understanding between designers, architects, manufacturers, purchasers, and end-users and to assist the purchaser in selecting and specifying the proper product to meet the user's particular needs. SEFA's Standards are periodically updated. The Standards are numbered to include an annual suffix which reflects the year that they were updated.

PLEASE NOTE ON NOVEMBER 7, 2025 AT SEFA'S ANNUAL CONFERENCE THE MEMBERSHIP UNANIMOUSLY APPROVED CHANGING THE NAME OF THIS DOCUMENT FROM "SEFA RECOMMENDED PRACTICES TO "SEFA STANDARD."

SEFA Glossary of Terms

SEFA has developed this Glossary of Terms for the purpose of promoting a greater understanding between designers, architects, manufacturers, purchasers and end users. The terms defined by SEFA are frequently used in contracts and other documents, which attempt to define the products to be furnished or the work involved. The Association has approved this Glossary in an effort to provide uniformity among those who use these terms. Where a specific Standard contains definitions which differ from those in the Glossary of Terms, then the definitions in the specific Standard should be used.

SEFA encourages all interested parties to submit additional terms or to suggest any changes to those terms already defined by the Association. The definitions should be used to help resolve any disputes that may arise or to incorporate the applicable terms in any contract or related documents.

SEFA Disclaimer

SEFA uses its best effort to promulgate Standards for the benefit of the public in light of available information and accepted industry practices. SEFA does not guarantee, certify, or assure the safety or performance of any products, components, or systems tested, installed, or operated in accordance with SEFA Standards or that any tests conducted under its Standards will be non-hazardous or free from risk. SEFA encourages the use of third party independent testing where appropriate.

Abrasion Resistance: A measure of the resistance of the surface to wearing from articles slid across it. Can be determined by loss in weight or thickness caused by an abrasive agent moved across the surface following a fixed schedule

Acceptance Levels: The acceptance level for each performance criteria is based on the cumulative experience of actual field testing and laboratory results of SEFA members. Acceptance levels describe the expected outcome of each test procedure.

Access Opening: The part of the fume hood through which work is performed; sash or face opening.

Accessory: A component which can, at the discretion of the user be readily added, removed, or replaced and which when removed, will not prevent the fitting from fulfilling its primary function.

Acid Storage Cabinets: Cabinets in which Acids are stored to avoid having large quantities of hazardous material in the laboratory work area. This reduces the risk of personnel injury or damage to the work area of the laboratory.

Aerator: Any of a number of types of devices designed to deliver a mixture of air and water, at a specific G.P.M. rate. (May not be allowed in certain applications or jurisdictions.)

Air Foil: Curved or angular member(s) at the fume hood entrance. A horizontal member across the lower part of the fume hood sash opening. Shaped to provide a smooth air flow into the fume chamber across the work surface.

Air Gap: The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture or other device and the flood level rim of the receptacle.

Air Volume: Quantity of air normally expressed in cubic feet per minute (cfm)

Angel Panel Mount: A type of mounting unit at a 30 degree or 45 degree angle to the table top.

Angle Stops: See angel valve

Angle Valve: A 90 degree valve, its inlet and outlet ports at 90 degrees with the operating stem at 180 degrees to the inlet port.

ANSI/ASHRAE 110–2016: A fume hood performance test developed and promulgated by the American Society of Heating, Refrigerating, and Air Conditioning Engineers and The American National Standards Institute.

ANSI/BIFMA: ANSI is the American National Standards Institute. Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer. BIFMA is the Business and Institutional Furniture Manufacturer's Association, an association of manufacturers of desk products and the like.

Anti-Siphon Vacuum Breaker: A device or means to prevent back siphonage of water. (See Vacuum Breaker; check local codes for use and applications for vacuum breaker types).

Apparatus: A machine or group of machines and accessories.

Approved: Acceptable to the authority having jurisdiction.

Arithmetic Mean: A number obtained by dividing the sum of a set of quantities by the number of quantities in a set; average.

Aspirator: A device supplied with fluid under positive pressure which passes through an integral orifice or "construction" causing a partial vacuum. (Check local codes for use and applications for vacuum breaker types.)

ASTM: American Society for Testing and Materials.

Authority Having Jurisdiction: An organization, office or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, and installation, or a procedure.

Auxiliary Air: Supply or supplemental air delivered to a laboratory fume hood to reduce room air consumption.

Baffle: Panel located across the rear wall of the fume hood chamber interior and directs the air flow through the fume chamber.

Ball Type Valve: Valve used for the purpose of controlling gases or water. The seal is achieved by the use of a spherical “ball” which is positioned between two (2) gasket type devices which are within body housing and prevent bypass of fluids or vapors.

Base Cabinets: A base cabinet is a storage device consisting of two ends, a back, and a face. The face may be open, to access the storage area, or may be outfitted with one or more drawers and/or door(s). The base cabinet may or may not include a top. A base cabinet is always mounted on the floor and normally supports a surface. The top surface is normally no more than 42” (1,066.8mm) off the floor surface.

Blower: Air moving device, sometimes called a fan, consisting of a motor, impeller and housing.

Broom Clean: A condition in an interior area in which surface debris has been removed by dry methods.

BS 7258: A fume hood containment test developed by the British Standard Association, used in most commonwealth countries.

Built-In Fitting: A fitting, the body of which is concealed behind the finished wall.

Bypass: Compensating opening in a fume hood that functions to maintain face velocity as the sash is raised or lowered.

Cabinet Depth (Deep): Given a front, bottom, two sides, and a top, the cabinet depth is a measure of the side of the cabinet, in its normal upright position, from the back to the front.

Cabinet Height: Given a front, bottom, two sides, and a top, the cabinet height of the side of the cabinet in its normal upright position, from the bottom to the top, excluding any additional surface.

Cabinet Width: Given a front, bottom, two sides, and a top, the cabinet width is a measure of the

front of the cabinet in its normal upright position from one side to the other.

California Type Hood: A rectangular enclosure used to house distillation apparatus that can provide visibility from all sides with horizontal sliding access doors along the length of the assembly.

Canopy Hood: Ventilating enclosure suspended above work area to exhaust heat, vapor or odors. This device is not a laboratory fume hood, rather is defined as a laboratory exhaust device.

Capture Velocity: Speed of air flowing past the face opening through a fume chamber / laboratory exhaust device at a speed necessary to capture generated fume vapors and/ or particulates and directed to the exhaust outlet. Measured in feet per minute (fpm) or meter per second (mps).

Casework: Base and wall cabinets, display fixtures, and storage shelves. The generic term for both “boxes” and special desks, reception counters, nurses stations and the like. Generally includes the tops and work surfaces.

Celcon®: An acetyl copolymer used for distilled water. Celcon® is a high strength, crystalline, thermoplastic resin that contains properties to resist chemicals most commonly used in laboratories, and producing low leachate levels.

Centerset Fitting: An exposed combination supply fitting for assembly through the top or deck of a fixture.

Chase (Plumbing Area): Space located behind the back of the base cabinet or in a vertical enclosure used to house plumbing or electric lines.

Char Resistance: The ability of a top to withstand surface deterioration due to elevated temperatures.

Check Valve: A valve that permits flow in one direction, but that closes automatically to retard or obstruct the flow of fluid in a reverse direction.

Cold Rolled Steel: Sometimes referred to as Cold Drawn. Cold Drawn is the process of cold forming steel parts wherein plastic flow occurs over a curved axis.

Cold Water: For test purposes, water at a temperature of 40 degrees F. to 70 degrees F. (5 degrees C. to 21 degrees C.)

Composition Core: A core material using particleboard.

Combination Faucet: A supply fitting with more than one supply inlet delivering a mixture of hot and cold water through a single spout.

Combination Hood: A fume hood assembly containing a bench hood section and a walk-in section.

Combination Sash: A fume hood sash with a framed member that moves, vertically housing two or more horizontal sliding transparent viewing panels.

Combination Unit: A base unit of the type that has both doors(s) and drawer(s)

Combination Fitting or Faucet: A supply fitting with more than one supply inlet delivering a mixture of hot and cold water through a single spout. May also be referred to as a "mixing faucet."

Concealed Fittings: A fitting with body mounted beneath or behind the fixture or table top.

Corrosion Resistant Finishes: Corrosion resistant finishes are organic coated finishes applied to all exposed surfaces of laboratory products such as service fitting, either colored or clear. The finish can be epoxy, epoxy/polyester hybrid, or polyester.

Counter Mounted Cabinet: A counter mounted cabinet is a wall cabinet [usually with a height of approximately 48" (1,219.2mm)] and is typically mounted on the work surface or shelf, as in a reagent shelf)

Countertop: Work surface resting on a base cabinet normally 36" (91.4cm) high for standing,

34" (86.4cm) for ADA or 30" (76.2cm) for seated height.

Critical Level: The level at which polluted water, entering through an outlet from the supply fitting, will flow back to the supply lines by gravity and/or any negative pressure in the supply line when the water control valve is wide or fully open.

Cross Drafts: Air draft that flows parallel to or across the face opening of the fume hood.

Cupboard (Door Unit): The portion of the cabinet with no drawer(s) and may be enclosed by door(s).

Customer: Can be any one or combination of these listed: Architect, Buyers, Contractors, Engineers, End Users, Specifying Engineers, Purchasers, Construction Managers or Owners.

Damper: Device installed in a duct to control air flow volume.

Delivered and Installed: The Laboratory Furniture and Equipment Contractor shall be responsible for coordinating the shipment and shall file freight damage claims as necessary. Materials may be shipped FOB origin factory or FOB destination, please refer to proposal or contract for details.

Demonstration Hood: A vented enclosure used for student demonstrations that has visibility on at least two sides, used primarily in schools. This device is not a laboratory fume hood, but is considered to be a laboratory exhaust device.

Density: The weight of one cubic inch of finished material (or gr per cc).

Dilution Tank: Tank basins in which highly concentrated wastes are mixed with wastes from other laboratory areas to produce diluted solutions.

Distillation Hoods: A laboratory fume hood that provides a work surface approximately 18 inches (45.7 cm) (0.457 m) above the room floor, to accommodate tall apparatus.

Double Ledge Faucet: Single shank water faucet which supplies hot and cold water to a sink or other location where required.

Double Panel Flange: Similar to single panel flange but with two outlets.

Drain Line: The pipe or tubing used to connect the sink tail piece or trap to the building / plumbing waste line.

Drawer: A sliding storage box or receptacle opened by pulling out and closed by pushing in.

Dual Entry Hood: A bench type fume hood that has two sash openings, usually on opposite sides.

Duct: Round, square, oval or rectangular tube used to enclose moving air.

Duct Velocity: Speed of air moving in a duct, usually expressed in feet per minute (fpm) or meters per seconds (mps)

Elbow: A fitting that forms an angular bend.

Electrical Service Fixture: Outlet or other electrical device directly attached to the laboratory furniture and equipment.

Emergency Spray Unit: A flexible hose type device used for flushing the face or clothing of person who accidentally comes into contact with acid or similar dangerous substances.

Exhaust Collar: Connection point between duct and fume hood through which all exhaust air passes.

Exposed Fitting: A fitting where the body is mounted on or above the finished surface.

Face: Front access or sash opening of laboratory fume hood. Face opening measured in width and height. See sash or access opening.

Face Velocity: Average speed of air flowing perpendicular to the face opening and into the fume chamber of the fume hood and expressed in feet per minute (fpm), measured at the plane of the face or sash opening.

Fan: Air moving device, usually called a blower, consisting of a motor, impeller and housing.

Faucet: A valve device designed to control and/or guide the flow of water.

Filler Panel: A panel used to close an open area between a unit and a wall or between two units.

Filter: Device to remove particles from air.

Fitting: See Service Fitting

Fixture: A sink or receptacle that receives water or water-borne waste and discharges into a drainage system. Note: The term fixture has long been used in the laboratory field to describe a service fitting. (See: Service Fitting.)

Flame Resistance: The ability of the material to withstand flame spread.

Flammable/Solvent storage cabinets: Cabinets in which heat ignitable materials are stored to resist exposure to ignition sources and restrict access to unauthorized personnel if lockable.

Flange-Faucet: A faucet flared out as in a flange shape so as to cover over edges of mounting holes or to provide a support.

Flood Level Rim: The flood level rim is the top edge of a receptacle over which water would overflow.

Foot Valve: A water control device operated by one's foot. (Also see: Pedal Valve.)

Free on Board Destination: F.O.B. destination, freight prepaid. The laboratory Furniture and Equipment Contractor shall pay freight costs. Customer accepts title and equipment at F.O.B point of the job site and laboratory supplier is responsible for filing and collecting freight claims.

Free on Board Origin: F.O.B. origin, freight prepaid and added to invoice. The laboratory Furniture and Equipment Contractor shall prepay freight cost and include it as a separate invoice item. Customer accepts title and equipment at F.O.B point loaded onboard transportation vehicle.

Customer is responsible for filing and collecting freight claims.

Free Standing: Requiring no support or fastening to other structures.

Front Load Valve: Valves usually installed in the walls of fume hoods for controlling gases or water, with the handle and cartridge having access from the face of the hood, without the need to remove the entire valve from the hood.

Fuel Gas: A gas used to supply heat.

Fume Chamber: The interior of the fume hood measured in width, depth, and height constructed of material suitable for intended use.

Fume Removal System: A fume hood exhaust engineered device to effectively move air and fumes consistently through laboratory exhaust device, duct and exhaust blower.

Note: Room air, make-up air, auxiliary air (if used) and pollution-abating devices (if used) are integral parts of a properly functioning system and should be considered when designing a fume removal system.

Furnish: Supply to contractors; not installed by Laboratory Furniture Equipment Manufacturer or local representative.

Gas Cock: A ground key or ball type shutoff valve used to control the flow of gas services, low pressure air or vacuum.

Glove Box: Total enclosure used to confine and contain hazardous materials with operator access by means of gloved portals or other limited openings; this device is not a laboratory lab exhaust device or fume hood.

Gooseneck: A piece of pipe or tubing the shape of which conforms to the letter "U", is part of a faucet or fixture, and whose function is to direct the flow of water and other laboratory services to a certain point. It may be of the rigid or swivel type.

Grounds/Blocking : Reinforcement within walls to provide adequate anchorage for wall-hung

or secured equipment. Specific material to be determined by the structural designer.

Ha Test: This is an abrasion resistance test in which an abrasive wheel with uniform predetermined weight is applied against the surface for a predetermined time to establish the depth of penetration.

Hand Tools: Tools, such as a screwdriver, key wrench, flat-jawed wrench, strap wrench and pliers, which are normally carried by tradesmen for installation and maintenance.

Hardness: A measure of resistance of the surface and body of the material to denting or scratching, determined by the diameter (or depth) of a spherical (or other) point pressed against the surface with known load or the width of a groove produced by a tool of known contour.

Hardware: Manufactured articles used in producing and installing cabinets. Such articles include items such as screws, pulls, hinges, and drawer slides.

Hazardous Storage Cabinets: General term for cabinets that control and restrict access to chemicals that might be harmful or dangerous to students or other personnel not qualified to have access. These chemicals may include but are not limited to Corrosives, Acids, Bases and other chemicals found in the Laboratory

Heat Resistance: The temperature that a top can withstand heat without deteriorating.

High Density Shielding: A barrier made of lead.

High Pressure Laminate: Laminated thermosetting decorative sheets for lamination to a selected core for panel, shelf and top constructions.

Hose Cock: A ground key, needle type or ball type shutoff valve used to control the flow of air, vacuum or gas services.

Imbalance: Condition in which ratio of quantities of supply air is greater or lesser than the exhaust air.

Impact Resistance: A measure of toughness that is determined by the energy absorbed in causing a fracture under an impact blow.

Index Button: An indicator of the services being supplied by the fitting to which it is attached. Normally color coded.

Integral Vacuum Breakers: A vacuum breaker which is formed as a unit with the faucet gooseneck. (Check application for local codes.)

Job Site: Physical location or building site where laboratory furniture is to be installed.

Joinery: The junction of two pieces of material intended to be permanently connected.

Knee Space Panel: A panel used to close the area under an apron, to enclose the plumbing space, or to shield the knee space area.

Laboratory Furniture: Furniture designed, manufactured and tested for installation and used in a laboratory.

Laboratory Furniture and Equipment: The casework, fume hoods, work surfaces, sinks, fixtures, shelves, and associated hardware as detailed.

Laboratory work area – The main area of the laboratory used during experiments, testing or teaching.

Laminate: A product made by bonding together two or more layers (laminations) of material or materials.

Laminar Flow Cabinets: Name applied to clean bench or biological enclosures. This device is not a laboratory exhaust device.

Latch: A piece of hardware designed to hold a door or drawer closed.

Leveling Screws (Levelers): Threaded components designed to allow adjustment of the cabinet vertically as needed for leveling.

Liner: Interior lining used for side, back and top enclosure panels, exhaust plenum and baffle

system of a laboratory fume hood or chemical resistant cabinet.

Make-Up Air: Air needed to replace the air taken from the room by laboratory fume hood(s) and other air exhausting devices.

Manifold: A fitting or pipe with many outlets or connections relatively close together.

Manometer: Device used to measure air pressure differential, usually calibrated in inches of water.

May: When used indicates an alternate requirement or option.

Medium Density Fiberwood (MDF): Wood particles reduced to fibers in a moderate pressure steam vessel combined with a resin and bonded together under heat and pressure.

Mixing Valve: A valve or faucet designed to mix liquids by means of automatic or manual regulation.

Monel: An alloy of approximately 67% nickel, 28% copper and 5% other elements that is made by direct reduction from ore in which the constituent metals occur in these proportions.

Needle Hose Cock: A control device in which the opening, consisting of a small hole, is opened or closed by a needle or cone that is thrust into or is withdrawn from the hole. Normally used for fine control and/or high pressure gases.

Negative Air Pressure: Air pressure lower than ambient.

Neutralization Tank: Tanks that can be charged with marble or limestone chips with a high, (90%+), calcium carbonate content. As wastes are discharged into the unit, chips will react with the acid to form less corrosive materials.

Nipple: A short piece of threaded pipe.

Nominal Dimensions: Not all cabinet manufactures produce product to the identical dimensions. All dimensions given in this document are accurate to within five percent,

which is considered nominal.

Nozzle: The outlet from a faucet or hose so designed so that the issuing stream of water is thrown in a shape or size different from the diameter of the pipe.

Panel Flange: A type of mounting unit used where the back panel is constructed at a 90 degree angle to the table top.

Particleboard: A generic term for a panel manufactured from lignocellulosic material—commonly wood—essentially in the form of particles (as distinct from fibers) These materials are bonded together with synthetic resin or other suitable binder, under heat and pressure, by a process wherein the inter-particle bonds are created wholly by added binder.

Particulate Matter: Small, light-weight particles that will be airborne in low velocity air [approximately 50 fpm (.25 m/s)].

Pedal Valve: A device used to operate valves by means of the foot, may be either single or double, floor, ledge or wall mounted.

Pedestal: See Turret.

Permanent Damage: Destruction to material or joinery that would require repair in order to return to its original state.

Permanent Deformation: Deflection that has exceeded the limits of the product, thus changing the original shape of the product.

Permanent Deterioration: Erosion or corrosion of material such that the components will never return to the original shape of the material or product.

Permanent Failure: See “permanent damage”

Pipe Support: A rack of framework located in the service chase way used to support the service lines.

Pitot Tube: Device used to measure air pressure differential, usually calibrated in inches of water.

Plenum Chamber: Chamber used to equalize air flow.

Polyethylene: A plastic polymer of ethylene used chiefly for containers, fittings, sinks and interior fume hood liner.

Polypropylene: Material is a polyolefin which is generally high in chemical resistance. Material should conform to ASTM D-2146. This material is commonly used for acid waste piping as well as for deionized water.

Polyvinyl Chloride (PVC): A water insoluble, thermoplastic resin derived by the polymerization of vinyl chloride used chiefly for containers, fittings and piping.

Polyvinylidene Fluoride (PVDF): Material is a strong and abrasion resistant fluoropolymer. It is chemically resistant to most acids, bases and organic solvents, and is the preferred material for piping and faucets for ultra-pure water. Pure PVDF is an opaque white resin that is resistant to UV radiation, and is superior for non-contaminating applications.

Positive Air Pressure: Air pressure higher than ambient.

Potable Water: Water which is satisfactory for drinking, culinary and domestic purpose, and meets the requirements of the Health Authority having jurisdiction.

Pressure Gauge: Instrument for measuring the pressure of fluids, gases or air.

Pressure Regulator: Any device by means of which pressure may be regulated.

Primary Outlet: The outlet from the fitting on the discharge side of the valve.

Proper Authorities: The party(ies) designated by contract to approve additions, changes, or deletions to contracts, plans or specifications.

Pulls: Articles used to grasp the door or drawer (see also hardware).

Quick Connect: A device used in place of the serrated tip where quick connect and disconnect requirements are needed for water, air and non-corrosive gases.

Rack Resistance: The ability of a desk product to resist stresses that tend to make the product distort and the drawers become misaligned.

Rail: A bar extending from one side of a cabinet to the other.

Reagent: A substance used because of its chemical or biological activity.

Reagent Rack: A shelf, or shelves, provided at the back of wall assembly, or down the middle of center tables, island or peninsulas to provide storage for reagent bottles, with provision made for the support of mechanical or electrical service lines and service fittings as needed.

Reasonably: When used indicates using fair, and sensible methods within accepted industry standards and guidelines.

Related Equipment - Items not generally manufactured by the Scientific Equipment and Furniture Supplier, (SEF supplier), but furnished and/or installed as part of the SEF supplier's contract. These may consist of but are not limited to: instrumentation, environmental rooms, refrigeration systems, laboratory apparatus, etc.

Remote Control Valves: Valves usually installed in the service chase area of fume hoods with the control handles normally on the face of the hood which regulates and controls the flow of the services to the outlets in the interior of the fume hood.

Removable Back: A panel located on the inside back of the base cabinet which is removable in order to gain access to the service chase area.

Renewable Seat: A seat in a valve which can be removed and replaced with a tool.

Replaceable Interior Unit: A cartridge type assembly containing all the working parts of a valve.

Room Air: That portion of the exhaust air taken from the room.

Rough-Ins: The location for the point of connection for plumbing, electrical, or mechanical services within the casework service tunnel/chase shall be located within fifteen feet (15') or as stated by local codes, whichever is less, of the final fixture location.

Rough-In Point: Individual or common supply of mechanical, electrical and heating, ventilating and air conditioning through wall, floor or ceiling, located within the equipment chase.

RTV Silicone Sealant: Silicone is an organic silicon compound highly resistant to heat, water, etc. Sealant hardens when exposed to air. RTV means, "room temperature vulcanizing" and will harden or cure without a heat gun or other heat source. Will form a permanent elastic watertight and weatherproof bond to many surfaces, such as glass, ceramic, metals, painted surfaces and plastics.

Sash: Moveable panel at the access opening of a laboratory fume hood.

Scientific Equipment and Furniture Supplier (SEF Supplier): Manufacturer, dealer, distributor or agents who provide laboratory furniture, equipment and fume hoods.

Shall: Where used, indicates a mandatory requirement.

Should: Where used indicates recommendation.

Sink Outlet: A flanged fitting that is recessed and sealed into the sink bottom to provide means of connecting sink to drainage system.

Scribe: A strip of matching material that is fitted to the wall on one edge and fastened to the casework on the other to make a tight enclosure to the structure next to it when casework abuts the walls, column, etc.

Scrubber, Fume: A device used to remove contaminants from fume hood exhaust.

Seat Disc: A disc or washer which when compressed against the seat makes a water tight joint.

Seat Faucet: The surface around or within the orifice in the faucet through which water or other liquid flows and against which the closing member, such as stem washer, is pressed or seated to terminate the flow.

Secondary Outlet: Any outlet from the fitting other than primary outlet, on the discharge side of the valve through which water may be discharged.

Self-Closing Faucet: A faucet which closes automatically when the faucet handle is released.

Serrated Tip (Nozzle): An outlet straight or angled, of graduated serrations which will accommodate laboratory hoses used in experimentation.

Service: The supplying of utilities or commodities such as water, air, gas, vacuum, and steam as required in hospital or laboratory functions.

Service Fittings and Fixtures: Service fittings include oxygen, gas, air, vacuum, and steam cocks, turrets, hot, cold and distilled water faucets, remote controlled valves, filter pumps, vacuum breakers, eye washers, shower heads, steam cones and steam baths, sinks, cup sinks, traps and plaster traps. Service fixtures include electrical convenience outlet boxes, electrical pedestals, "C" type conduits, single or duplex A.C. or D.C. receptacles, switches, variable voltage units and fluorescent tubes.

Service Fixture: Item of laboratory plumbing mounted on or fastened to laboratory fume hood.

Service Line: Pipe or tubing used to convey the service, gas or liquid, from the building service line to the service fitting on the laboratory furniture or equipment.

Service Strip: A rack or framework used to support the service line.

Service Tunnel or Service Chase: Area in back of or between the backs of base cabinets, under the working surface or within vertical voids provided to allow room for several lines.

Service Turret: An enclosure that projects above the table top to provide room for the service line to be brought up through the table top or be connected to the service fittings that are mounted on the outside of the enclosure.

Service Umbilical: A fully enclosed chase containing service lines extending from the ceiling area above the laboratory bench into the service tunnel of the same laboratory bench.

Shall: Where used indicates a mandatory feature.

Significant Surface: A finished exposed surface which if marred would spoil the appearance of the fitting.

Single Control Mixing Valve: A fitting with a single control which shall serve to turn water on and off and to regulate volume and temperature flow.

Sink Outlet: A flanged fitting that is recessed and sealed into the sink bottom to provide means of connecting sink to drainage system.

Slot Velocity: Speed of air moving through slotted openings in lab exhaust devices such as fume hood baffle openings. different products.

Smoke Candle: Smoke producing device used to allow visual observation of air flow.

Spot Collector: A small, localized ventilation hood usually connected by a flexible duct to an exhaust fan. This device is not a laboratory fume hood and should be considered a lab exhaust device.

Stainless Steel: Iron based alloys containing more chromium than the 12% necessary to produce passivity (less reactive), but less than 30%.

Static Pressure: Air pressure in laboratory fume hood or duct, usually expressed in inches of water.

Static Pressure Loss: Measurement of resistance created when air moves through a duct or exhaust device usually expressed in inches of water.

Stops: Valves used for the purpose of controlling the flow of water and which are part of the distributive plumbing system except as otherwise determined.

Straight Stops: See Straight Valves.

Straight Valves: Straightway valves used for laboratory services such as gas, air, water and steam which have their inlet and outlet port at a position 180 degrees from each other.

Strength: Known variously as “modulus of rupture” or “flexural strength:” and is an ultimate or breaking strength. Generally measured by supporting a strip of material across two supports and applying a load between these supports. By computation the strength values can be used to determine the load-carrying ability of the product and may be used to compare strengths of different products.

Submersion: Immersed in water.

Superstructure: The portion of a laboratory fume hood that is supported by the work surface.

Supplemental Air: Supply or auxiliary air delivered to a laboratory fume hood to reduce room air consumption. (Refer to local codes for proper application.)

Supply Nipple & Lock Nut: The threaded connecting units used for deck or panel mounting of laboratory fittings.

Supply Stops: For the purpose of controlling the flow of water and which are a part of the distributive plumbing system immediately adjacent to, or a part of, and preceding a fitting.

Tables: An article of furniture having a flat, horizontal surface supported by one or more support members (legs), and a frame (apron).

Table Top Hood: A small, spot ventilation hood for mounting on table tops. Used primarily in educational laboratories. This device is not a laboratory fume hood but could be considered an exhaust device.

Tall Cabinet (Full Height Unit): A tall cabinet is a storage device that consists of two ends, a back and a face. The face may be open to access the storage area or may be outfitted with one or more drawers and/or door(s). A tall cabinet is always mounted on the floor and is typically 84” (2,133.6mm) high.

Tail Piece: The connecting fitting used to connect the sink outlet to trap or drain line. Tail piece may be an integral part of the sink outlet or a separate piece.

Tank Nipple: See Supply Nipple.

Thermal Anemometer: A device for measuring fume hood velocity utilizing the principle of thermal cooling of a heated element as the detection element.

Thermal Shock: The ability of material to withstand sudden changes in temperature without cracking or spalling.

Threshold Limit Value-Time Weighted Average (TLV-TWA): The time-weighted average concentration for a normal 8-hour workday or 40-hour week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect.

Titanium Tetrachloride: Chemical that generates white fumes used in testing laboratory fume hoods.

Torsion: The state of being twisted.

Total Pressure: Algebraic sum of velocity pressure and static pressure.

Toxic Resistance: The ability of a top to withstand emission of a toxic substance, if any, during chemical process.

Transport Velocity: Minimum speed of air required to support and carry particles in an air stream.

Turret: Type of mounting which allows the use of (1)-(2)-(3)-(4) hose cocks, needle hose cocks or straight stops, where installation of same are required either on the table top, back, or panel.

Uniformly Distributed: The application of forces such that weight is evenly applied to the subject surface even as the surface deflects.

Unobstructed Entry: A cabinet is deemed to be unobstructed if access to the entire storage area is completely without obstacle.

Upright Position: A cabinet oriented in its intended position.

Vacuum Breaker: A device to prevent the creation of a vacuum by admitting air at atmospheric pressure, used to prevent back siphonage.

Valve: A device by which the flow may be started, stopped, or regulated by a moveable part which opens or obstructs the passage.

Valve Seat: The port or ports against or into which a disc or tapered stem is compressed or inserted to stop flow of fluid or gas.

Velocity Pressure: Pressure caused by moving air in a laboratory fume hood or duct, usually expressed in inches of water.

Vent: Ducting or piping system designed to remove or change the air in an enclosed space like storage cabinets.

Walk-In Hood: A floor-mounted, full-height fume hood, designed to accommodate tall apparatus and permit roll-in of instruments and equipment.

Wall Cabinet: A wall cabinet is a storage device consisting of two ends, a back, a top, bottom, and a face. The face may be open to access the storage areas or may be outfitted with one or more door(s). The wall cabinet usually does not include a drawer. A wall cabinet is always mounted on a vertical surface such as a wall, a divider, panel or some other vertical structure. A wall cabinet is usually less than 48" (1,219.2mm) high.

Water: The liquid that descends from the clouds as rain; forms streams, lakes and seas; issues from the ground in springs, and is a major constituent of all living matter, and when pure, consists of an oxide of hydrogen H₂O, in the proportion of two

atoms of hydrogen to one atom of oxygen. It is an odorless, tasteless, very slightly compressible liquid which appears bluish in thick layers. Freezes at 0 degrees C. and boils at 100 degrees C., and has a maximum density of 4 degrees C. and a high specific heat, contains very small equal concentrations of hydrogen ions, reacts neutrally and constitutes a poor conductor of electricity, a good ionizing agent.

Water Absorption: The percentage gain in weight of material immersed in water for a specified time. When the specific gravity of the product is known, water absorption can be used to determine the total void space. The absorption is neither a measure of the rate nor amount of chemical attack.

Water Outlet: A water outlet, as used in connection with the water distributing system, is the discharge opening for the water.

Weather Cap: Device used at the top of an exhaust stack to prevent rain from entering the stack end.

Work Space (Fume Hood): The part of the fume hood interior where apparatus is set up and fumes are generated. It is normally confined to a space extending from six inches (15.2 cm) (152mm) behind the plane of the sash(es) to the face of the baffle, and extending from the work surface to a place parallel with the top edge of the access opening.

Work Surface: The surface that a laboratory fume hood is located on and supported by a base cabinet. In the fume chamber the surface is recessed to contain spills.

Wrist Action Handle: A means of controlling a valve with the wrist or forearm.

Wye Fitting: Similar to double panel flange, but outlets are at 90 degrees or less.