

THE UNIVERSITY OF COLORADO
DENVER | ANSCHUTZ MEDICAL CAMPUS

GUIDELINES AND STANDARDS
FOR DESIGN AND CONSTRUCTION PROJECTS

PART 3
UNIVERSITY PROGRAM GUIDELINES

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3.1 University Program Guidelines:

A. Service Entrances

1. The use of campus buildings may change over time. In the design of service areas, allow for flexibility in general use of the buildings.
 - a. Locate the service entrance adjacent to storerooms, waste compactor, waste and recycling collection rooms and service elevator, as applicable.
 - b. Include parking spaces for service vehicles. Service driveway should accommodate one 30-foot tandem axle vehicle.
 - c. Include provisions for drainage and snow/ice removal. Provide weather protection where practicable.
2. The program for some facilities may require an elevated receiving bay or other receiving facility. In an effort to prevent personnel injuries, provide a 5000 lbs. capacity, weatherproof dock leveler. Unless the program requires an elevated receiving bay, provide for grade level loading and unloading.
3. In order to facilitate shipping and receiving, provide a six-foot by seven-foot service entrance door opening. Provide one active and one passive leaf with delayed action closure.

B. Service Elevators

1. Consider providing a service elevator in buildings two stories and higher, located adjacent to the service entrance, as applicable.
2. Consider providing elevator service to all floors in a building, including the roof, where mechanical rooms are located.
3. Service elevator interior and cab door opening dimensions: See Part 3.1 University Materials Management, W. Materials Handling Matrix below.
4. A "Door Hold" button shall be provided to facilitate loading and unloading.
5. In order to limit access of mechanical rooms to authorized personnel, elevators that open directly into mechanical rooms shall be equipped with a keyed switch, in the car station panel, designated for that landing.
6. Interior cab materials or protective coverings must be provided for the walls and floor, to minimize damage during the movement of any heavy equipment, carts, etc.
7. Consider requiring an analog telephone in every service elevator.

C. General Custodial Requirements

1. General
 - a. During each design phase, verify the custodial requirements with University Facilities Operation through the University Project Manager. The equipment and supplies for each building will depend on the interior finishes, program requirements and the size of the building.

- b. Provide a minimum of one custodial closet per floor. Locate the custodial closet so that the maximum distance between closets is approximately 250 feet and the area served by each does not exceed 15,000 gross square feet of floor area.

2. Custodial Equipment and Supplies

- a. The following is a list of the type, approximate size and quantity (to be determined by finishes and square footage) of equipment and supplies that will be stored in the buildings:
 - 1) Auto scrubber, minimum of three feet by five feet floor space, one per floor.
 - 2) Carpet extractor, minimum of three feet by three feet floor space, one per floor.
 - 3) 36-inch diameter trash barrel, one per custodial closet.
 - 4) Vacuum cleaner, minimum of three feet by three feet floor space, one per closet.
 - 5) 24 inch diameter floor buffer, one per floor and five, one- gallon pails of floor wax.
 - 6) Case of toilet paper, minimum of two feet by three feet floor space, one per closet.
 - 7) Case of paper towels, minimum of two feet by three feet floor space, one per closet.
 - 8) Cleaning materials such bleach, cleansers, mop heads.

3. Custodial Closets

- a. A minimum of 50 square feet in area, with not less than a six foot width, is necessary for all custodial closets.
- b. Include a 6" deep floor mounted slop sink, hot and cold water, hose faucet with four feet of hose, mop rack for 3 mops, GFI duplex outlets and 20 feet of heavy duty shelving for cleaning supplies. In order to minimize the damage from overflowing slop sinks, spilled cleaning chemicals and spilled equipment reservoirs, provide a floor drain adjacent to the slop sink. Provide a five foot long board six feet above finish floor with hooks or pegs at six inch intervals in order to hang brooms, dust mops (hung by the head with the handle down), vacuum cleaner hoses and dust pans.
- c. In order to accommodate the storage of custodial equipment; provide doors 42-inches wide that open out.
- d. Provide adequate ventilation to compensate for the hydrogen gas that is produced when the battery operated equipment is recharged.

4. Exterior Services Closet

- a. Where appropriate consider providing a closet for exterior services; 80 sq. ft., exterior entrance, grounded duplex outlet and power for sprinkler controller.

D. Waste Disposal

- 1. During each design phase, verify with University Facilities Support Services, through the University Project Manager, the requirements for the waste collection areas and the method of disposal, compaction, and hauling. These requirements will vary depending on the program needs and the size of the building.

2. If the volume of trash warrants, a stationary compactor should be located at the service entrance. This will reduce collection costs and keep the dock area clean and clear of trash.
3. If applicable, provide a room, located adjacent to the service entrance, for receiving, storing and disposing of wastes, including recycling. This room should be a minimum of 100 square feet.

E. Hazardous Wastes

1. Verify with University of Colorado Denver | Anschutz Medical Campus (University) Environmental Health and Safety Department (EHS), through the University Project Manager, the space requirements for the collection and control of hazardous wastes including, but not limited to, fluorescent light tubes, batteries, waste motor oil lubricants, solvents, paint, radioactive materials, medical waste, or laboratory chemicals. Hazardous wastes may be generated by either program or maintenance and operations procedures.

F. Recycling

1. Designate space throughout the building for “3 to 4” (2 recycling and 1-2 trash containers). The containers are a group of comingled separate waste containers (recycle cans and bottles, recycle newspaper, recycle office paper, trash). Each 3-4 container requires approximately 16 inches x 60 inches of floor space.
2. Provide space for a recycling / waste adjacent to each entrance within each classroom, laboratory, conference room, etc. For either open office designs, private offices or offices suites, provide dedicated space in a central location for one quad per every 10 to 15 people.

G. Public Toilet Rooms

1. Provide ceramic tile finishes on the floors and walls.
2. Toilet room ceilings shall be painted drywall, plaster, concrete or other approved moisture resistant material.
3. In order to facilitate maintenance, provide accessible isolation valves for each toilet group. In toilet room where there are 10 or more fixtures located back to back, provide a two-foot wide maintenance pipe chase with a man door.

H. Maintenance and Operation Room

1. Provide a minimum 100 sf Maintenance and Operation room for every 100,000 sf of Building space. Room should be suitable for work benches and tool storage, ladder storage and work space for a desk and computer.

I. Extra Stock Material Storage Room

1. Provide a minimum 100 sf Extra Stock Material Storage room for every 100,000 sf of Building space in which it resides. Room should be suitable for storage of Extra Stock Materials identified for that Building in Part 4, Section 01 78 46. Room should be located near Mechanical Room on the Ground Floor.

J. Mechanical and Electrical Equipment Rooms/Spaces/Locations

1. It is University's experience that mechanical and electrical equipment rooms are often not designed or constructed to accommodate preventative maintenance and repair activities. Some examples of unsatisfactory mechanical room design and construction are:
 - a. Accessing a piece of equipment requires maintenance personnel to crawl under or over ductwork.
 - b. Piping is run across the floors.
 - c. Where light fixtures are located above equipment, ductwork or piping, the only way to relamp or repair the fixture is to install temporary scaffolding or use a mechanical lift.
 - d. Equipment located above other pieces of equipment preventing access to the upper equipment.
 - e. Equipment located in such a way that maintenance personnel have to stand on other pieces of equipment or piping in order to conduct maintenance service.
 - f. Inadequate clearance around equipment, such a wall needs to be removed in order to access it for repair or replacement, or to change filters.
 - g. Access panels swing in the wrong direction, away from the open access instead of towards the passageway.
 - h. Valve stems, wheels, etc. either too close to or imbedded in walls.
2. It is critical that mechanical and electrical equipment rooms are designed and constructed with adequate access to and clearance around equipment so that routine preventative maintenance can be conducted.
3. Incorporate the following items into the design of mechanical and electrical equipment rooms:
 - a. Indicate on the construction drawing the necessary maintenance service areas adjacent to the equipment (1-1/2 times the length of the chiller tube is required to service the tube, etc).
 - b. Design the equipment rooms so that the necessary maintenance service areas adjacent to the equipment are free of other equipment.
 - c. The service door into the rooms shall be a minimum of six foot wide by seven-foot high opening, with one active and one passive leaf and a delayed action closure.
 - d. Equipment rooms should be on a level served by an elevator. Stairs to the equipment room floor are prohibited.
 - e. Provide a wall mounted service sink, with a hose attachment on the faucet, in all mechanical rooms.
 - f. Provide lifting eyes or a beam/trolley/chain fall lifting point (beam must be free of fireproofing, or insulation, to be utilized), if applicable, in order to facilitate the removal of chiller end caps, and the replacement of elevator hoist machines and elevator generators.
 - g. Provide floor drains at all pumps, chillers, and air handling units.
 - h. Pitch floors to the floor drains.
 - i. Provide emergency lighting so that maintenance and operations staff can exit safely during a power outage.
 - j. Consider the safety of maintenance personnel when locating equipment. Provide adequate lighting (consider painting mechanical rooms as a means to increase light levels), electrical outlets, ventilation, access routes, walkways, stairs, protective enclosures, barriers, etc.
 - k. Provide service platforms to equipment when applicable.
 - l. Wall mounted deep utility sink for servicing parts and materials.

4. Service platforms at heights of four feet or greater must have either guardrails per OSHA 29 CFR 1910.23 or safety belt anchor points located to minimize a free fall not greater than the distance to the floor or six feet whichever is smaller.
5. Provide section drawings through mechanical rooms and review with University Building Maintenance & Operation, through the University Project Manager, who shall make the final determination if the adequacy of maintenance accessibility is in question.
6. Locate light switches at the entrance to equipment rooms.
7. Include means to provide access for future equipment replacement (access panels, knock-out panels).
8. Provide a designated electrical circuit to accommodate a welder.
9. Equipment serving building is preferred to be in mechanical rooms and not in ancillary space such as above ceilings or in floor plenums, chases, etc.) where it is difficult to service, creates interruptions to activities in occupied spaces and can be unsafe to access to maintain.

K. Mechanical and Electrical Equipment Maintenance

1. Typical maintenance procedures includes weekly, monthly, quarterly, and annual preventative maintenance work on fire alarm systems, cooling towers, steam systems, lighting, chillers, roof top units, clean out of roof drains, roof repair, change filters, clean air handling units, lubricate bearings on motors, plumbing fixtures, etc.
2. University complies with Federal Law, the Occupational Safety and Health Act (OSHA), 29 CFR 1910 General Industry Standard for the preventative maintenance and repair work conducted by the Maintenance and Operations Staff in University buildings.

L. Equipment/ Maintenance Accessibility

1. Smoke detectors, lighting fixtures, heat detectors, sprinkler heads, VAV's, valves, fire dampers, temperature control sensors, etc. should not be located in areas and at elevations requiring scaffolding to maintain.
2. Provide panels for access to valves, cleanouts, dampers, controls and other mechanical and electrical components requiring servicing, adjustment or replacement wherever such items are concealed in ceilings or walls. Panel material and finish shall be resistant to damage or soil by normal anticipated use.
3. Mechanical and electrical equipment shall be designed and installed so that it is accessible for preventative maintenance and repair work.
4. Permanent access from non-public areas is required to all rooftops. Vertical ladders shall not be used for access to areas where equipment service is required and maintenance personnel need to carry toolboxes, etc. Elevators or stairs with handrails and landings are necessary in such cases. Accessing rooftops through windows in private program space shall be avoided. Locating equipment where access is in or through private program space shall also be avoided.

M. Trash Chutes are PROHIBITED

1. Trash is collected in containers and taken directly to collection rooms located adjacent to the service entrance.

N. Automatic Teller Machines (ATM’s)

1. Placement and installation of all ATM machines on the University Anschutz Medical Campus or Denver Campus where authorized by University shall be subject to the following guidelines:
 - a. Placement and installation of ATM machines must provide access for service and maintenance of the equipment. Coordinate placement, media, and media pathway requirements with IS. Vendors should not arbitrarily install equipment without prior coordination.
 - b. ATM’s must not protrude into the exit corridor. ATM machines must be recessed flush with the line of corridor walls, or in an alcove area.
 - c. ATM machines not located on “ground” floor may require special security equipment such as a security camera and/or alarm system.
 - d. ATM machines must be securely anchored.
 - e. ATM machines should be installed in “public” areas that are readily observed from other occupied spaces.
2. The following are not permitted:
 - a. Exterior ATM machines.
 - b. Stand-alone ATM machines or facilities.
 - c. ATM machines in isolated locations.
 - d. Exterior signage or advertising, including interior signage visible from exterior areas.

O. Building Design Service Life Expectancy

Design Life of Building	Inaccessible, or Structural Components	Components where replacement is expensive or is difficult (incl. below ground drainage)	Major, replaceable components	Services, installations and external works
75 years	75 years	50 years	25 years	ears

P. Live Load Design

1. Floors of office, classroom, laboratory, and similar general purpose facilities of flexible use shall be designed for a uniformly distributed live load of 100 pounds per square foot, including partition loads.
2. Floors of mechanical rooms shall be designed for the equipment provided, but not less than 150 psf. Underground structures shall be designed for the appropriate fill and vehicle loading. Pay particular attention to structures that could be subject to fire truck or other vehicular traffic.
3. The design development drawings should show the design live loads for all floors, roofs, and underground structures. Areas of heavier than standard design loading should be clearly delineated.

Q. Air Permit Regulations

1. Air permit regulations require that certain equipment such as emergency generators, engine-powered fire pumps, boilers, emissions from printing facilities, and air pollution control devices be permitted by the Colorado Department of Public Health and Environment (CDPHE). Application for such permits needs to be initiated seven months before the start of any construction activities. This process applies when modifying existing equipment as well as to installing new equipment. AE's shall notify the University Project Manager if a project will include this type of equipment.

R. Wastewater Regulations

1. **Sanitary Sewer**
Building wastewater effluent must meet local, state and federal codes and standards identified in Part 4, Section 01 41 00, Regulatory Requirements. Pre-treatment and related permitting may be necessary based upon specific equipment use and/or program activities. It is incumbent on the AE to determine whether pre-treatment of wastewater is required by the State or Publically Owned Treatment Works (POTW) or recommended based upon AE discussions with program representatives to discover the nature of chemicals and other materials that will be used in equipment processes or the manufacturer's information regarding anticipated equipment effluent. This pertains to any equipment that ties to or is part of the sanitary sewer system (e.g., boilers [condensate pH], acid neutralization tanks, chemically resistant plumbing/piping, solids separators or silt traps, grease traps, cage/dish washing equipment, tissue digesters, non-residential garbage disposals, amalgam separators, holding tanks, sumps, or any type of wastewater generating, holding, or treatment equipment). This can include processes or equipment that can systematically alter what is discharged to sanitary sewer (e.g., DI water system, water softener, etc.). If chemically resistant piping is specified (for equipment or system), ultimate effluent conditions should be explored for adherence to POTW and local municipality standards. This does not include solid waste (including liquids) that are generated as part of the laboratory processes and can be containerized – only wastewater discharged directly to sanitary sewer (typically plumbed to waste lines or those piped to discharge floor drains).
2. **Storm Water Sewer**
All systems that discharge to stormwater sewer require a permit. No building system shall be designed to discharge to stormwater sewers. Stormwater sewer systems must meet the conditions of the University MS4 permit.

S. Electrical System Isolation

1. The University is a continuously operating facility. Construction of new and maintenance of existing electrical utility systems, equipment and distribution requires adequate capability of isolation of equipment, systems, and branches of the distribution system. It is therefore imperative that the design and installation of new and modified utility systems include sufficient isolation capability. All work involving the central electrical utility systems whether upgrade or the system or tie-in to the central system must include provisions for system isolation.
2. An isolation plan shall be submitted to the University PM as part of the Schematic Design and Construction Document phases of the project. The University PM will be responsible for approval of the plan and coordination with the AE.

T. Site Data

1. University will engage a Registered Land Surveyor to prepare a topographic plan showing adjacent property lines, existing building lines, grades, pavements, trees, adjacent conditions, existing structures, and utilities for use in preparation of a construction site plan coordinated with existing conditions.
2. The AE shall review the topographic plan and report any inconsistencies or incomplete information to the University PM.
3. The AE shall define contract and construction limits and outside staging areas on the site construction site plan.

U. University Access Requirements

1. Projects shall be designed according to the Americans with Disabilities Act Accessibility Guidelines and codes referenced in Part 4.0, Section 01 41 00, Regulatory Requirements.
2. The AE shall address the needs of persons with disabilities, both in the building design and within the contract and construction limits. Indicate on the drawings, circulation patterns and disability parking which may be affected by the construction.
3. Areas adjacent to the construction project shall remain accessible to persons with disabilities. Conduct construction activities to control potential hazards to disabled persons.
4. Projects shall be designed according to the Americans with Disabilities Act Accessibility Guidelines. Use International Building Code requirements where they are more restrictive.

V. Existing Conditions

3. AE must field verify existing conditions, including capacities and review existing record documents in advance of building design on all renovation projects.

W. Landscape Plans:

1. Landscaping plans shall be reviewed with University Facilities Operations, no later than the Design Development phase.

X. Furniture:

1. Movable furniture and equipment will normally be purchased and install by University under a separate contract and should not be included in the AE specifications. Installation may be specified by the AE depending upon circumstances. AE should coordinate furniture layout and modular furniture layout with building utilities.
2. Room dividers and screens (movable wall partitions) will normally be purchased and installed as movable equipment, unless otherwise approved. The AE will be expected to coordinate with the client in this design and specification.

Y. Materials Management:**1. General**

- a. This section generally applies to material management guidelines for new projects. The AE must work with the University PM to determine materials management requirements on projects in existing buildings.

2. Materials Handling:

- a. Excellent service requires a pattern for smooth movement and coordination with vendors and the institution. University's role is to provide adequate receiving, vehicle circulation and parking at each building. This includes docks with levelers or lifts, ramps and parking designated for loading and unloading.
- b. Carriers also provide a valuable service in shipping packages, letters and samples. To facilitate the pick up process, secured space in buildings should allow for letter drop boxes for FedEx, UPS, and USPS Priority letters. Space for the temporary storage of packages, packaging supplies, and preparation of packages should be provided.

3. Receiving and Vehicular Circulation:

- a. All new lab and clinical buildings should have accessible dock space, with elevated receiving docks and dock levelers. All new administrative and educational buildings should have accessible dock space, with elevated receiving docks and dock levelers or scissors lifts. Vehicles used by outside vendors have varying bed heights, ranging from 30" to 50". The majority of straight trucks and truck trailer combinations have a bed height of 48" which is the recommended dock height for all buildings. For buildings with more than one dock, those with high receipt activity, such as lab and clinical buildings, each dock bay should have dock leveler, allowing a fast, efficient method to offload goods.
- b. Dock doors eight feet wide by ten feet high allow for the loading and unloading of larger sized items without the risk of damage to the operator, equipment or merchandise. The door should have some overhang or protection from the elements to prevent rain and snow entering the building during inclement weather. Each dock door should be equipped with a flexible lamp for lighting the interior of the truck, providing a safe work environment. The exterior of the dock should be well lighted for security.
- c. An area of twenty feet from the edge of the dock should be provided as a circulation and maneuvering space to allow access into the truck and the turning of pallet loads or carts with product. Docks must have a space separation between dock doors of ten feet for temporary staging and circulation. This circulation area must have adequate lighting.
- d. Provision for snow removal, snow melting and drains for the driveway leading to the dock and in the dock parking area needs to be included in any design.
- e. Adequate secured staging area should be provided at all buildings to hold materials until internal building delivery is accomplished. Building exceeding 100,000 gsf of building space should have 500 sq. ft. of storage area per 100,000 gsf of building space. This area provides a holding area of delivered and outgoing packages until distribution can be made.

- f. Adequate secured staging area should be provided at all buildings to hold materials handling equipment used in the facility. Typical equipment consists of manual pallet jack(s), flat bed cart(s), 2 wheel dollies, delivery carts, compressed gas dolly and drum dolly. A power pallet jack is required for buildings in which excessively heavy equipment is used (i.e., large ultra cold freezers) and for the movement of compressed gas cylinders and pallet loaded deliveries to one location.
- g. All new buildings will provide adequate turning space for access by vehicles expected to service the building type, with room for safe backing of vehicle and circulation around the vehicle while parked.
- h. In addition to providing each building with an adequate height dock, with levelers or lifts as appropriate, a ramp to the dock should be provided. Ramping allows for vendors to utilize the vendor parking area, unload and deliver without occupying the dock. In buildings where the use of an electric vehicle is used to move radioactive and chemical wastes, the ramp should be eight feet in width. These ramps should also be ADA compliant.
- i. Research buildings utilize compressed gas, both high and low pressure release. Cylinders are delivered on a daily basis to a holding area on the dock. Space to store a two-day supply of new cylinders plus empty cylinders must be provided. Storage for cylinders in preparation for extended weekends and special projects by labs must be allowed for. All cylinder must be caged or chained. Special provisions must be made if the cylinders contain flammable or hazardous materials. Both categories of gases require storage away from other gases. All storage areas must meet NFPA standards for gas storage.
- j. Buildings serving one specific purpose should be evaluated for materials handling based on the specific use. Specialized storage may be needed.
- k. Include freeze protected eye wash/ emergency shower station per dock.

4. Trash Removal:

- a. Refuse bins or trash compactors must be sized appropriately for each building, and must be accessible for crews working in the evening. Since work in this area often occurs at night, the area should be well lighted for safety.
- b. Access to the area must be kept free of snow and ice.
- c. Exterior locations must provide a way to reenter the building without compromising the security of the building.
- d. The area should be screened from public view.
- e. Recycle bins should be provided, with one recycle bin per each type of material being recycled on each floor.

5. Internal Building Delivery:

- a. Delivery routes must be planned within buildings creating minimal disruption of daily activities. Delivery routes should not be in public corridors. Routes must be logical and include direct access to service elevators. Since the majority of

deliveries are by wheeled transport, the delivery routes should be of a durable surface that handles traffic and spills, and should avoid carpet and ceramic tiles.

- b. Service elevators should be sized to handle the receipt of crated equipment and pallet jacks, pallet lifts and furniture dollies to move the equipment. Hoods, refrigerators and ultra cold freezers are example of these items. Service elevators must be able to handle a lifting capacity of the combined weight of equipment, lifting equipment and passengers with a 25% safety margin. Service elevators should be activated by ID access per each command.
- c. Delivery routes need to be sized to accommodate the items being transported within the area. Where electric lifts are required, such as in the delivery of compressed gas, or where large equipment (hoods, ultra cold freezers, etc.) will be replaced, hall width, door sizes and turning radii of combined lift and equipment, must be provided, along with a safety factor to prevent damage to the building.
- d. Chemical showers and eye wash stations need to be recessed so as not to interfere with delivery routes.

6. Delivery Vehicle Types:

- a. Multiple vehicle types are used as delivery vehicles to service all buildings.
- b. Carriers such as FedEx and UPS utilize a package van with 36" bed height.
- c. Electric delivery vehicles are used by University Mailing Services, and by Facilities Operation to service a variety of needs on the campus.
- d. Lab and clinical buildings require access by over the road vehicles for direct delivery of large items. Typically, these items are crated, and have special storage and handling needs, as were described in other areas. These vehicles require concrete landing strips to handle the weight of trailers at the driving wheels and landing gear and prevent damage to the pavement.

7. Management and Disposal of Hazardous Materials:

Areas where hazardous materials are managed and stored must meet specific criteria depending on the nature of the material and the associated hazards or handling logistics. Each area (lab or clinic) within the building where hazardous materials are generated must meet specific requirements for storage (waste or inventory) depending on the nature of the material (flammable, corrosive, radioactive, biohazardous). Separate **central** collection/storage areas may be required for each of four types of waste: 1) Radioactive, 2) RCRA Hazardous Waste, 3) Infectious Medical Waste (biohazardous) and 4) building related wastes (i.e., spent lighting, unwanted computers, paints, batteries, etc). The specific needs will be driven by the program waste generation rates, building management logistics, and/or the building location. University EHS, Space and Asset Management (SAM), or Facilities Management (Building Maintenance and Operations and/or University Custodial Services) should be consulted. Central receiving areas (loading dock of buildings with laboratories, animal housing, engineering or industrial arts shops) also have specific storage and safety requirements.

Safety showers and eyewashes are required in any areas where hazardous materials are handled (with exception of areas only storing solids or instrument/sealed materials such as the building related wastes).

a. Radioactive Material:

- 1) Radioactive materials generated in the labs may be collected by University EHS and moved to a collection point in each building. To manage and collect radioactive materials efficiently, space must be available to consolidate wastes, store testing and spill response materials and package wastes for movement to the EHS processing facility.
- 2) Areas where hazardous materials are managed and stored must have surfaces that are durable, chemically resistant and easily decontaminated.
- 3) Safety showers and eyewashes are required in any areas where corrosive materials are handled.
- 4) Radioactive materials are heavily used in research and often must be obtained and used quickly. Space for processing radioactive packages in buildings where radioactive materials are used facilitates quick delivery.
- 5) Regulatory release limits for iodine is extremely low. If researchers plan to use iodine, a procedure room equipped with a pre-filter, charcoal and HEPA filters is recommended. Backup power and redundant ventilation is needed for the iodination suite.

b. Chemicals:

- 1) Buildings where chemicals are used (e.g., research buildings, academic buildings with laboratories, academic buildings or support buildings where industrial arts or industrial trades work will be performed, or facility support buildings such as heating plants) will have central chemical receiving areas and potentially centralized chemical waste consolidation areas.
- 2) Chemicals that are no longer needed by these operations (e.g., labs) must be disposed of according to federal and state guidelines. To collect hazardous chemicals efficiently, space may be required to consolidate loads for movement to the EHS waste processing facility.
- 3) Areas where chemicals are received or temporarily held prior to transportation, chemical waste processing areas, chemical storage or stock rooms, shipping and receiving/loading docks of buildings where research chemicals are delivered, etc. require the installation of emergency showers/eyewashes, adequate area for spill response materials, and must not contain indoor floor drains.
- 4) Buildings that generate significant quantities of flammable or combustible waste must have appropriate cabinets for storage of flammables within staging areas.
- 6) Areas where hazardous materials are processed and stored must have surfaces that are durable, chemically resistant and easily decontaminated. These areas must be designed to

maintain negative pressure and 100 percent exhaust air (no return air). A separate exhaust fan may be required if connection to laboratory hazardous exhaust ductwork is not feasible.

- 7) Safety showers and eyewashes are required in any areas where liquid chemicals are stored or handled (if this is in *close proximity* to a loading dock with similar requirement, one shower may serve both areas). A sink in processing areas is desirable where feasible. If a sink is provided, a sink eyewash will be installed.
- 8) Areas where flammable liquids will be consolidated or bulked must have spark-free fixtures.

c. Biological Materials and Regulated Medical Waste

- 1) Biological materials that are no longer needed by the labs must be disposed of according to federal and state guidelines. Regulated and biomedical waste is collected from the laboratories, vivaria, clinical and patient care areas by University Environmental Health and Safety Department (EHS). Regulated medical waste is collected and disposed of under contract. The pickups will generally not be more than once per day, so the storage space for the waste must accommodate one-day's waste with a comfortable buffer for days of greater waste generation. A hand-washing sink must be available to encourage hand washing after handling waste containers.

d. Flammable Materials and Specialized Storage:

- 1) The use of flammable liquids in buildings has important implications and limitations under fire codes that must be considered in design. This may include delineation of zones where limits on the amount of flammable liquids are controlled, depending on the construction type (i.e., non-H occupancy)
- 2) Buildings that generate significant quantities of flammable or combustible waste (the majority of the waste generated in research) must have appropriate cabinets for storage.

e. Emergency Response Room:

- 1) University benefits greatly from the ability of Environmental Health and Safety Department (EHS) to evaluate spills and respond to minor spills of hazardous materials. In buildings where significant quantities of hazardous materials are used, EHS needs space to accommodate spill control equipment and materials on site to facilitate quick and effective response.

f. Safety Showers/ Eyewashes

- 1) When located outside the building envelope, Safety Showers/ Eyewashes must be freeze protected. They must incorporate 2-

position solenoid valves inside the building, downstream of the tempering valve, with a button at the Safety Shower/ Eyewash which opens the valve when needed.

7. Mailing Services:

- a. Each individual building will have a mail station with mail stops for the occupants of that buildings, and receptacles for outbound internal and external mail. These mail stations will not be staffed and will be serviced for mail delivery and pickup once per day.
- b. United States Postal Service (USPS) drop boxes for letter and Priority Express mail will be provided in individual buildings if the volume is sufficient to meet USPS requirements

Materials Handling Matrix:

Building Type	Lab Buildings	Administrative Office and Education Buildings	Special Use Buildings
Feature:			
Dock Lift	48” height docks with levelers having an operating range of 12” (to 58” max height from ground); one per 100,000 sq. ft of building. One scissors lift with a lifting capacity of a minimum 10,000 lbs. if more than one dock door is built.	48” height docks with ground to dock scissors lift, lifting capacity of a minimum of 8000 lbs. *An alternate option of using a grade to 54” above grad scissor lift dock in lieu of a 48” dock. This alternate must be reviewed and approved by materials management prior to its use and will require adjustments to the dock door and dock circulation requirements below. Materials Management will need to work closely with the design team if the alternate is used.	Specialized buildings are building that serve one specific purpose, and have unique characteristics based on their use. Examples of such buildings are warehouse, hazardous materials handling facilities, motor pool, garages., and Central Utility Plant. These facilities should be handled on a case by case basis for materials handling.
Dock Doors	Power operated overhead doors with manual override. Minimum height: 10’. Minimum width 8’ Dock door covered for weather protection.	Power operated overhead doors with manual override. Minimum height: 10’. Minimum width 8’ Dock door covered for weather protection.	
Dock Circulation Area/Clearance Space	Minimum 20’ depth of clear area from dock edge into building. Minimum 10’ clearance on either side of dock door both internal and external of building.	Minimum 20’ depth of clear area from dock edge into building. Minimum 10’ clearance on either side of dock door both internal and external of building.	
Dock Security and Access	Doors locked 24/7 with card-controlled access for building occupants/ vendors. Service Elevators must have card control access.	Door unlocked from 7AM-4:30 PM Monday-Friday for vendor access. Doors locked after these hours with card-controlled access for building occupants.	
Dock Lighting	Flexible arm for viewing into truck: adequate internal lighting; external security lighting	Flexible arm for viewing into truck: adequate internal lighting; external security lighting	

Building Type	Lab Buildings	Administrative Office and Education Buildings	Special Use Buildings
Feature:			
Delivery and Courier Parking	Minimum of two spaces, 14' width, per building. For building over 100,000 sq. ft., add one additional parking space per 100,000 sq. ft.	Minimum of two spaces, 14' width, per building. For building over 100,000 sq. ft., add one additional parking space per 100,000 sq. ft.	
Parking for delivery vehicles	Deliveries will not be permitted in any locations other than the service docks or assigned delivery areas of the buildings. Signs will be installed that indicate where deliveries are permitted.	Deliveries will not be permitted in any locations other than the service docks or assigned delivery areas of the buildings. Signs will be installed that indicate where deliveries are permitted.	Deliveries will not be permitted in any locations other than the service docks or assigned delivery areas of the buildings. Signs will be installed that indicate where deliveries are permitted.
Ramps	Ramps to the dock area from an area adjacent to the delivery parking area. Width of 8'. Ramp should be ADA compliant.	Ramps to the dock area from an area adjacent to the delivery parking area. Width of 8'. Ramp should be ADA compliant.	
Service Elevators	Minimum: Door Width: 6' Door Height: 7' Cab depth: 10' Cab width: 6'9" Cab height: 10' Load Capacity: 8000 lbs. (5000 lbs will be considered upon analysis of expected loads). Service elevators must have card control access.	Minimum: Door Width: 6' Door Height: 7' Cab depth: 10' Cab width: 6'9" Cab height: 10' Load Capacity: 8000 lbs. (5000 lbs will be considered upon analysis of expected loads) . Service elevators must have card control access.	
Turning Radius inside of Buildings	Adequate turning radius outside of service elevators to accommodate an 8 ft piece of equipment. Consideration must also be given to accessibility to rooms containing large scale equipment.	Adequate turning radius outside of service elevators to accommodate an 8 ft piece of equipment. Consideration must also be given to accessibility to rooms containing large scale equipment.	
Internal Storage and Staging Area	Dock: Minimum of 250 sq. ft. per building for buildings under 100,000 gsf; 500 sq. ft. per 100,000 gsf of building space. Secured cage area to hold materials until delivery to room is accomplished. Secured area for dock equipment.	Dock: Minimum of 250 sq. ft. per building for buildings under 100,000 gsf; 500 sq. ft. per 100,000 gsf of building space. Secured cage area to hold materials until delivery to room is accomplished. Secured area for dock equipment.	

Building Type	Lab Buildings	Administrative Office and Education Buildings	Special Use Buildings
Feature:			
Gas Cylinder Storage	Dock: Temporary secured (caged) storage for delivered tanks and holding empty tanks for vendor pickup. Internal to floors: Must meet NFPA standards for gas storage. Must have physically separated locations for incompatible gases and empty or full containers.		
Specialized Storage	Any specialized storage must be addressed in the design stage of the building.	Any specialized storage must be addressed in the design stage of the building.	
Materials Handling Equipment used in Building	Manual pallet jack, flat bed cart, 2 wheel dollies, delivery carts, compressed gas dolly, drum dolly. Power pallet jack for buildings in which excessively heavy equipment is used (i.e., large ultracold freezers).	Manual pallet jack, 2 wheel dollies, delivery carts.	
Floor Covering	No carpet or ceramic tile in major distribution paths.	No carpet or ceramic tile in major distribution paths	
Door Width	Minimum door width of 36" in rooms and access corridors where large equipment is installed (i.e. ultra-cold freezers, ventilation hoods)		
Hall Width	Minimum width of 8 feet along major corridors to accommodate pallet jacks for large equipment. Chemical showers need to be recessed so as to not interfere with materials flow.		
Trash Removal	Storage for trash collection cart: 48"Lx30"Wx 40"H Recycle receptacle per material on each floor.	Storage for trash collection cart: 48"Lx30"Wx 40"H Recycle receptacle per material on each floor.	
Biohazard Area	Adequate storage for infectious waste generated in bldg., 100 sq. ft. will usually be enough. Overhead coiling door, 80 foot candle lighting, door locked by combination key punch, walls epoxy painted, floor sheet vinyl with integral base, temperature control to room temp, Proximate hand washing sink.	For Education Buildings Only: Adequate storage for infectious waste generated in building. Proximate hand washing sink. 100 sq. ft. will usually be enough. Not needed if no infectious waste generated.	Adequate storage for infectious waste generated in HSD processing bldg., 100 sq. ft. Proximate hand washing sink.

Building Type	Lab Buildings	Administrative Office and Education Buildings	Special Use Buildings
Feature:			
Flammable Materials and Specialized Storage	<p>Adequate storage for hazardous materials used in building within locations where flammable materials are stored or used in large volumes. See comments under chemical storage and flammable materials.</p> <p>Flammable storage rooms must have adequate fire rating, and non-spark construction.</p>		
Hazardous Waste Storage Area	<p>Concrete or vinyl flooring, no floor drain, open shelves on one wall, accommodate 2-60 gallon flammable storage cabinets (30 gal.) stacked 2 high, space for 2 carts (3 ft.x4 ft.) staged in room. 3 ft.x2 ft. uneven leaf double door.</p> <p>Chemical resistant counter with large single basin sink 30"x18"x16" deep, back draft exhaust the length of the counter louvered to 12" above counter. Safety shower and eyewash within easy access (just outside of room, in loading dock, or in room (requires increase of total sq ft). Electrical outlets on counter and floor level, non sparking outlets and fixtures.</p>		
Radioactive materials processing room	<p>Space to process radioactive packages (100 sq. ft.), 3'x3' counter (48" high), open shelving on one wall, shelves must be at least 12" deep, smooth surface sheet vinyl with integral base, ID access proximity card readers. Proximate safety shower and eyewash.</p>		
Emergency Response Room	<p>Approx. 200 sq. ft., lockers, bench, 2 response carts, metal cabinets with supplies, one under counter refrigerator, phone. At least one shower facility in building.</p>		
Driving Routes	<p>Delivery and circulation corridors will be established for new and existing building as they are occupied.</p>	<p>Delivery and circulation corridors will be established for new and existing building as they are occupied.</p>	

Building Type	Lab Buildings	Administrative Office and Education Buildings	Special Use Buildings
Feature:			
Internal Delivery Routes	Delivery routes must be planned into buildings in order to allow for minimal disruption of daily activities. Routes must be logical and include direct access to service elevators.	Delivery routes must be planned into buildings in order to allow for minimal disruption of daily activities. Routes must be logical and include direct access to service elevators.	
Delivery Vehicles (used by University)	Straight truck with 24' box, 36' overall, 48" floor height, lift gate; Package van 24' overall, 36" floor height. Electric delivery van (Mail, Hazardous Materials, Facilities).	Straight truck with 24' box, 36' overall, 48" floor height, lift gate; Package van 24' overall, 36" floor height. Electric delivery van (Mail, Hazardous Materials, Facilities).	
Access to buildings by over the road vehicles	Provide access to building by over the road carriers (55' van plus 20' cab, 75' overall length); requires a minimum apron space of 155', based on counterclockwise travel. If approach is clockwise increase apron length by 20'. Concrete landing strips must be provided to handle the weight of the trailers at the driving wheels and/or landing gear.	Provide access to building by straight trucks, 36' overall length.	
Snow removal/ Drains	Need to be present.	Need to be present.	
Animal Related Issues	All issues related to animals will be under the direction of the Animal Resources Center.		
Mail Stations and Mail Handling	A Mail Station will be established in each building to provide a central location for the mail collection. The room will have adequate space for department mail stops, drop boxes for intercampus mail, a sorting table for staff use, and adequate circulation space for filling mail stations and picking up mail.	A Mail Station will be established in each building to provide a central location for the mail collection. The room will have adequate space for department mail stops, drop boxes for intercampus mail, a sorting table for staff use, and adequate circulation space for filling mail stations and picking up mail.	
Carrier Pickup UPS/ FedEx/ USPS	Letter drop boxes to be provided for ease of use by department for FedEx, UPS; etc. Staffing in building is to receive packages for shipment that cannot be left at drop boxes.	Letter drop boxes to be provided for ease of use by department for FedEx, UPS; etc.	

3.8 CU ANSCHUTZ Space Guidelines: Workplace

OVERVIEW

Optimizing current and future space on the CU Anschutz Medical Campus ensures that these important physical resources are utilized efficiently and effectively. Accordingly, the following **Workplace Space Guidelines (WSG)** were developed to assist the university community in establishing equitable, consistent, efficient, and flexible planning and design parameters, and to support sound management decisions regarding space allocations for both *new construction and renovations of existing facilities*. Existing facility space that is not consistent with the guidelines is grandfathered in until significant renovation are required. However, it is also recognized that due to the age and internal configuration of many existing facilities, future renovations consistent with the space guidelines may not be achievable.

The WSG are not a university policy, nor do they guarantee any faculty, administrator, student or staff a particular space type and size. Instead, the space recommendations outlined in this document are intended to guide the assignment, planning, and design of university workplaces. As such, the guidelines define space typologies and assignable area maximums.

All university space, whether owned or leased, is a resource held by the Chancellor that s/he or their designee apportions to vice chancellors and school/college deans to best meet campus-wide mission and strategic needs.

The Vice Chancellors, Provost, and Deans have the authority and responsibility to assign or re-assign existing apportioned unit space consistent with the original function/use of the

space and the guidelines. However, unit space no longer needed to house its original assigned function (i.e. unit relocation) reverts to the Chancellor for reassignment.

Internal unit space issues should be addressed within the unit. The Campus Space Committee, chaired by the Senior VC of Administration and Finance, is a resource available to all units and, if requested, can serve in an advisory and dispute resolution role. Unit space disputes not resolved internally should be reviewed and resolved by the Chancellor, under the advisement of the CU Anschutz Executive Space Committee, co-chaired by the Provost and Senior Vice Chancellor for Administration and Finance.

OBJECTIVES

It is the intent of the university to provide academic and administrative departments with quality work environments that support users and program operations, preserves the value of space, promotes wellbeing and sustainability, and reduces operation and maintenance costs. The design of workplaces should sustain and improve productivity, collaboration and communication. The space guidelines should be seen as a living document that is periodically updated to meet university needs and objectives. New facility construction and necessary renovations of existing facilities should address:

Spatial Equity: Across campus, all workspace is allocated, renovated or built in an equitable manner to meet functional needs of the users.

Healthfulness: Workspace located in a healthy environment with individual access to daylight, water and is free of harmful contaminants and excessive noise.

Efficiency: Workspace is allocated and planned to maximize utilization of facility resources.

Flexibility: Workspace planning incorporates flexibility to meet current needs and accommodate changing needs and functionality.

Technology Connectivity: Workspace allows easy communication between distributed co-workers while allowing simultaneous access to data.

All university OIP project directors and Facility project managers must refer to the guidelines when working with university units and external consultancies during the planning and design phases of all new building construction or renovations of university facilities.

SPACE PLANNING PROCESS

Any university unit proposing the development of new space or the physical modification of assigned existing space¹ must submit a completed *Services Request Form*, which is available in the Office of Institutional Planning (OIP) website². The service request will be reviewed for completeness of information and to ensure a funding source is identified. Once processed and approved by Senior VC Administration & Finance, OIP planners and architects will work with the requesting client group to develop initial space plan options to meet the needs of the proposed users while ensuring the concepts are consistent with campus guidelines and norms. During the space planning phase, any request to exceed space guidelines must be reviewed and approved by the CU Anschutz Executive Space Committee, or the Chancellor.

Space planning efforts (>\$2M) cannot progress into project design development and implementation phase until the space plan is approved by the unit head and campus

¹ Does not include decorative renovations such as patch and paint, new flooring, furniture and appliances, and IT/AV upgrades.

² <http://www.ucdenver.edu/about/departments/InstitutionalPlanning/servicesrequest/Pages/form.aspx>

leadership, and has available adequate funding. Lastly, projects >\$2M require CU Board of Regents approval of a program plan and spending authority.

OFFICE | WORKSTATION GUIDELINES

The following guidelines describe the space typology, size and occupant capacity for various work environments and ancillary spaces used by CU Anschutz Medical Campus and developed with the understanding of the following considerations:

- Workplace design on the guiding principles and the assignment of an office should be based, in general, on the functions of employees, rather than job title.
- Preserving flexibility over time may require the application of a modular planning approach. For example, co-locating offices of similar sizes and furniture configurations can be very useful for controlling costs and addressing future needs and changes in academic and other programs.
- Placement of enclosed offices in the building core rather than along the exterior of the buildings provides efficiencies in heating and cooling and maximizes light penetration for all building occupants, as well as compliments the flexibility noted above.
- Units and individuals are encouraged to eliminate excess paper by sorting, purging and archiving their documents. Promote conversion to electronic data collection and retention whenever possible to reduce space pressures on and increase the utility of existing workspace.

- Schools/Colleges and administrative units are encouraged to review workspace allocation and update rosters regularly to make sure that current utilization is appropriate and required reallocations are accommodated and documented. Whenever space uses and physical configuration changes occur the designated reviewer of each school/college, and administrative unit should contact the university's Office of Institutional Planning.

The guidelines address office, workspaces, and workplace related accessory areas that are consistent with standards at other institutions, and represent the current approach to defining and applying workplace space by the university. The guidelines may be refined or expanded upon at the recommendation of the chancellor, or their designee, to address changing institutional needs, and advances in workplace design.

Work Space Layouts

Preferred designs that improve workspace quality, employee productivity, building efficiency, and decrease short and long term costs are preferred. All workspace layouts should enhance user satisfaction and productivity by allowing natural light to be shared by more employees, increase visibility and view-lines, and promote teamwork and information sharing.

Numerous studies of active, open workplaces have found these environments to be the most effective spaces in bringing people together, removing barriers, and increasing collaboration, while also providing sufficient privacy for people to feel safe and not fear being overheard or interrupted. These workplaces positively affect the pattern of interactions and collaboration and increase informal communication.

However, studies have also shown that the open workplace layout does not guarantee overall increases in productivity, occupancy or NASF reductions, as designs must include a

variety of common spaces, such as huddle, breakout, meeting, and private communication and teleconferencing rooms that would normally occur in a private, enclosed office.

Space Allocation

The type of work an individual performs, the level of responsibility, and their time appointment (full-time vs. part-time, seasonal vs. year-round) should be the basis for determining whether to allocate a private office, a shared office, an open workstation, or a landing zone. The university provides only one assigned office or workspace per person—including assignments in leased space and affiliated hospitals—unless authorized by the campus chancellor, or their designee. The following provides general descriptions, sizes and utilization standards for various types of workspaces at CU Anschutz.

Executive Private Office

Executive private offices are for academic unit and administrative senior leadership with functions that require high levels of privacy (need for frequent confidential meetings and working with sensitive materials) and enough space to meet with 8 or more individuals. Typical assignments may include the chancellor, provost, vice chancellors, and deans.

Large Private Office

Large private offices are for academic unit and administrative leadership (1.0 FTE) with functions that require high levels of privacy and adequate space to meet with four to six individuals. The typical assignment may include department chairs, center and institute directors, and associate/assistant vice chancellors.

Private Office

Private offices are for faculty, as well as staff (1.0 FTE) that require high levels of privacy. The typical assignment may include faculty, division heads, department/office directors and academic administration.

Shared Office

Shared private offices are for staff and faculty below 0.5 FTE that require some level of privacy. The typical assignment may include adjunct faculty, emeritus faculty, visiting scholars, interns, graduate teaching/research assistants and professional staff managers.

Workstations

Workstations are recommended for all staff, students, and some faculty (1.0 FTE) whose functions do not require enclosed space and who can use breakout and conference rooms for discussions that require high levels of privacy. The typical assignment may include professional staff, academic professionals, and administrative assistant staff.

Shared Workstations

Shared open workstations are encouraged for all staff, students and faculty below 0.5 FTE whose functions typically do not require privacy. The typical assignment may include professional staff, support/clerical staff, student employees, and interns.

Landing Zone

Assigned landing zones are workstations, either enclosed or open, for administration and faculty who work on multiple campuses, and have an office at their primary campus, and require a dedicated workspace on other campuses.

Unassigned landing zones are small open workstations available to administration, faculty, students, staff, and guests visiting a unit who need a short-term workspace.

WORKPLACE ACCESSORY SPACES

Work environments include a variety of additional associated spaces that are essential to everyday workplace functions and creating a work environment that promotes collaboration, and health and wellbeing. The appropriate planning and design of these accessory spaces are especially valuable in open workplace environments.

Conference Rooms

Conference Rooms are meeting spaces planned for six to twenty-eight people, with an area range of approximately 20 – 30 NASF per person. The general meeting space contains a conference table; guest chairs; audio/visual equipment; screen/monitor(s); and white boards. Medium and Large conference rooms usually have a greater NASF per person to accommodate a storage credenza/food service area, and other conferencing needs as required. Smaller conference rooms rarely contain a storage credenza/food service area. However, all meeting rooms must be planned to accommodate ADA access throughout the space.

For the purpose of these guidelines, three conference room sizes are proposed:

- **Small Conference Room:** Six to nine people at a range of 20 NASF per person.
- **Medium Conference Room:** 10 – 17 people at a range of 20 - 26 NASF per person.
- **Large Conference Room:** 18+ people at a range of 20 - 26 NASF per person.

The number and size of conference rooms provided within a given workplace will depend on the workspace typology—a predominantly private office or open workspace environment—and a demonstrated unit need by FTE. The following numbers serve as a framework for determining the number of conference rooms per FTE.

Predominantly Private Office Layout:

- **One (1) conference room per 20 FTE**

Predominately Open Workspace Environment:

- **One (1) conference room per 10 FTE**

The mix of conference room sizes is largely dependent on unit need, function, available area, and budget. However, many of the peer and aspirational research universities reviewed recommended the following mix: two-thirds (2/3) of conference spaces should be medium to large rooms, and one-third (1/3) small rooms. Alternately, some institutions allowed all conference rooms to be large, provided they were divisible into smaller rooms. The feasibility of doing this is dependent upon requirements for soundproofing, IT, and access. Many institutions also recommend including one large conference room per building floor.

[Huddle | Breakout | Solution Rooms](#)

Huddle, Breakout, and Solution rooms are an integral part of the open workplace environment. Solution rooms provide faculty and staff a quiet, informal area for private conversations, small group conference calls, quiet work, and focused teamwork. Solution rooms are not assigned or scheduled and are available to all employees at any time, when not already occupied. Solution rooms should contain a table and chairs, white board, and data jacks for phone and network connections. These rooms should accommodate three to five people with a range of 16-20 NASF per person. All solution rooms should be ADA accessible.

Phone Rooms

Phone Rooms are small enclosed spaces provided as a shared amenity in predominantly open workspace environments for staff and faculty who might need a private, quiet space for a telephone conversation. Phone rooms should accommodate one to two people at 16 – 20 NASF per seat. All phone rooms should be ADA accessible.

Community Spaces

Community spaces include kitchens, break rooms, and lounge areas, and they are a valuable asset in any workplace environment. Since the construction of small kitchens and break rooms for every department is an inefficient use of space and resources, the guidelines recommend the development of centralized community spaces that provides equity across departments and ensures all employees have access to a kitchen and break area. The size of community spaces varies based on floor area, FTEs, and budget.

SPACE PLANNING GUIDELINE SUMMARY

Range of Square Footage

The guidelines establish a recommended range of space sizes (square footage) by type to allow flexibility in space assignment decisions. For example, a unit may assign a small office to a full-time faculty who is more likely to spend time working in a clinic or research lab, than in their office. Conversely, an individual may be assigned a workspace at the upper end of the range to accommodate the frequent meetings with multiple people required of their job.

Space-per-Person

All workspace is sized to meet a recommended maximum space per person based on space type, job function and requirements, and the occupant position/title. For example, the recommended maximum space per person for an administrative unit director is 120 NASF, while a full-time staff person is 60 NASF. Private versus share office assignment is primarily driven by office utilization, including factors such as; clinical activity, research load and type, FTE, and in some cases faculty rank. It is generally accepted that Professors and Associate Professors will have a private office. Assistant Professors would typically have private offices unless activity patterns or college/school and campus space considerations deem otherwise. Instructors and Senior Instructors would be assigned shared space, but may have a single office contingent on space availability and activity patterns.

However, the guidelines define the maximum NASF an individual in a particular role or function should occupy, and do not guarantee that any employee or affiliate of the University will receive a specific workspace type, or amount of square feet.

CU ANSCHUTZ MEDICAL CAMPUS		
WORK SPACE GUIDELINES		
ROOM OCCUPANT by TYPE	RECOMMENDED SPACE TYPE	MAXIMUM RECOMMENDED NASF per PERSON*
POSITION		
EXECUTIVE		
Chancellor	Private Office	420
Provost, Vice Chancellors	Private Office	300
ACADEMIC UNITS		
Dean	Private Office	240
Associate or Assistant Dean	Private Office	150
Department Chairperson	Private Office	150
Faculty, Tenure Track, Research, Clinical Practice Series	Private Office	120
Unit Administrative Manager or Director	Shared Office or Private Office**	60-120
Faculty, Non-Tenure Track, (e.g. Lecturer III & IV)	Shared Office or Station*	60-90
Faculty, Visiting or Consulting	Shared Office or Station*	60
Faculty, Emeritus (Active)	Shared Office or Station*	60-90
Fellow, Lecturer I & II, Visiting Scholar	Shared Office or Station*	60
Technician, Associate, or Specialist (PRA)	Shared Office or Station*	60-90
Research Fellow	Shared Office or Station*	60
Staff, Professional (Full Time)	Shared Office or Station*	60-90
Staff, Professional (Part Time)	Shared Office or Station*	60
Staff, Administrative Support (Full Time)	Shared Office or Station*	60
Staff, Administrative Support (Part Time)	Shared Office or Station*	60
Graduate Student Instructor	Shared Office or Station*	30-60
Graduate Student Research Assistant	Shared Office or Station*	30-60
Temporary or Student Staff	Shared Office or Station*	30-60
ADMINISTRATIVE UNITS		
Associate or Assistant Vice Chancellor	Private Office	160-190
Director	Private Office	120
Associate or Assistant Directors	Shared Office or Private Office**	90-120
Managers	Shared Office or Station*	60-90
Staff, Professional (Full Time)	Shared Office or Station*	60-90
Staff, Professional (Part Time)	Shared Office or Station*	60
Staff, Administrative Support (Full Time)	Shared Office or Station*	60
Staff, Administrative Support (Part Time)	Shared Office or Station*	60
Temporary or Student Staff	Shared Office or Station*	30-60
** Space Type to be determined by Unit Leadership		

* Based on a 30' module

DEFINITIONS:

Net Assignable Square Feet (NASF): area of a building suitable for occupancy measured from the interior walls, including closets and small circulation corridors within assignable space. Excludes central corridors, bathrooms, and other non-assignable space.

Building: a roofed structure for the permanent or temporary shelter of persons, equipment, animals, plants, etc.

Facilities: any property, including buildings that are owned or controlled by CU Anschutz.

Office Facilities: are individual, multi-person or workstation spaces specifically assigned to academic, administrative, and service functions of the university.

Office: a space housing administrative, academic, staff, graduate and teaching assistants and students working at one or more desks or workstations. An office is assigned to one or more persons as a workstation or work area. It may be equipped with desks, chairs, tables, bookcases, filing cabinets, computer workstations, or other office equipment. NOTE: This does not include office service, conference room or conference services space.

Room: an interior building space defined by permanent walls, floor, ceiling, and doorway. Floor-to-ceiling height of an area may vary but cannot be less than 6' to qualify as a room.

Space Guidelines: distinct categories of space criteria detailed in the Office of Institutional Planning website:

<http://www.ucdenver.edu/about/departments/InstitutionalPlanning/Pages/AboutUs.aspx>

Unit: a unit is a subset of CU Anschutz, and it may be a school or college, office or other distinct operational activity/entity, such as a center or institute.