

## Introduction

The UFAS specifications for sinks are comparable to those for lavatories. Similar to lavatories, sinks must be designed and installed to provide adequate space for people to approach, maneuver about the fixture, and operate the controls easily. Suitable design and installation involves several features including the provision of appropriate clear floor space adjacent to an accessible route, sufficient knee space, a basin of appropriate depth, usable controls, and provision of a protective covering under sinks when waste and hot water lines are exposed.

Although access to all sinks is not required, there are many occupancies which install sinks for public and employee use. Sinks can be found in office kitchenettes, laboratories, classrooms, nursery/day care facilities, health care settings, laundries, and dining halls. Universally usable facilities should provide access to all elements and features whenever possible.

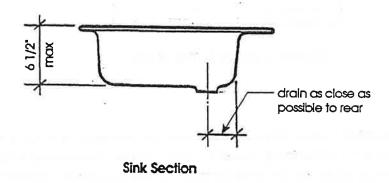
# Basic Design Considerations

Design and Installation Requirements for Sinks

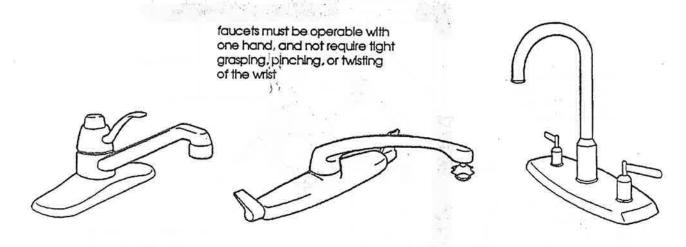
Mounting Height, Knee Space, Pipe Protection, and Clear Floor Space. UFAS requires that sinks be mounted with the counter surface or rim a maximum of 34 inches from the floor. Knee space that is at least 27 inches high, by 19 inches deep, and 30 inches wide must be provided under sinks. UFAS does not specify toe space as it does under lavs, although it is best if the drain and water supply pipes occupy as little of the knee space as possible.

The drain and water supply pipes should be insulated or a protection panel should be installed to prevent the wheelchair user's legs from coming into contact with hot or sharp objects. A clear floor space of 30 inches by 48 inches must be provided in front of the sink to allow for forward approach to the sink. A maximum of 19 inches of the required clear floor space may extend under the sink.

Depth of Sink. UFAS requires that the sink be no deeper than 6 1/2 inches. This requirement is designed to permit the installation of sinks which allow seated people to reach the bottom of the basin without difficulty. It is also helpful if the drain exits near the back of the basin to increase the available knee space under the sink.

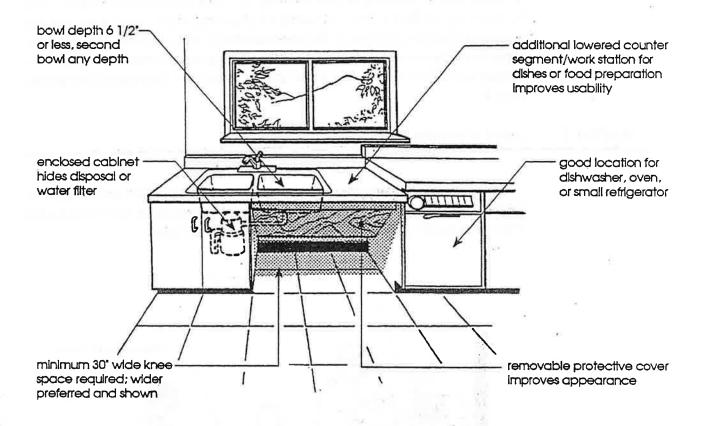


Faucets. UFAS requires that faucets comply with Section 4.27.4 Operation - Controls and Operating Mechanisms. Lever-operated, push-type, touch-type, or electronically controlled mechanisms are acceptable. At very large sinks it may be best if the controls are located to the side of the sink rather than the back to reduce the reach required. Spray hoses, frequently installed at sinks, are a very useful option.



Acceptable Faucet Designs

Types of Sinks. Double and triple sinks can be installed with knee space under only one sink, and the other sink(s) enclosed in a cabinet. This technique is useful when disposals or water filters are installed at the sink. The second/third sink may be deeper than the minimum 6 1/2 inches required by UFAS.



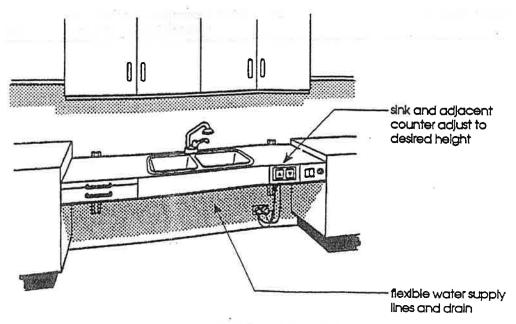
Double Sink with Single Knee Space

Utility sinks, because of the nature of their design, are not accessible. These sinks are typically 15 inches or more deep, eliminating the possibility of providing appropriate knee space. In addition, utility sinks are usually located in mechanical or utility rooms, spaces which are exempt from the UFAS requirements. However, it is possible to provide minimal access to these fixtures by providing a clear floor space parallel to the sink to permit a side reach.

#### Install Sink in Adjustable Counter

Solution 3

Several manufacturers produce sinks which can be adjusted to suit the height preferences of various individuals. These sinks have flexible drains and water supply lines which facilitate or permit adjustment up or down, either manually with a crank, or automatically with the assist of an electric motor. This option is more expensive but may be useful in settings with many users and limited space.



Manufactured Adjustable Sink and Counter



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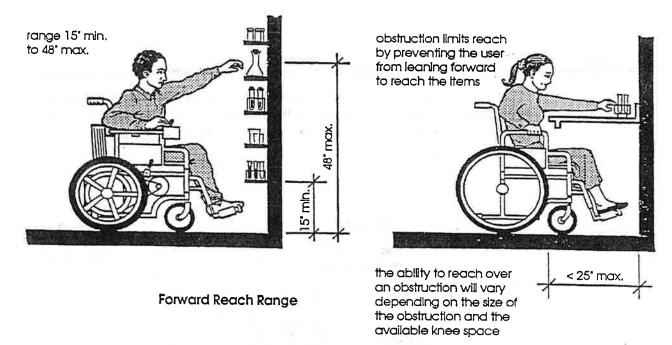
Storage is an important part of most types of buildings. Whether in the home, an office, a store, or in an educational, medical, factory or industrial setting, well-designed functional storage improves both the aesthetic quality of the environment and the productivity of the occupants. Space designers and product manufacturers are constantly improving the usability of storage units and devices for use in a variety of settings. Most of these new storage options are modular and/or adjustable and can be configured to suit a variety of individual needs.

When storage facilities are furnished in an accessible space, UFAS requires that at least one of each type storage unit including cabinets, shelves, closets, and drawers be accessible. The accessible storage must be within the reach ranges specified by UFAS but additional storage may be provided outside these dimensions. Storage facilities which are not frequented by either the public or employees are not required to be accessible. In facilities scheduled for alteration, storage facilities in accessible spaces and other basic building elements should be considered high priority items.

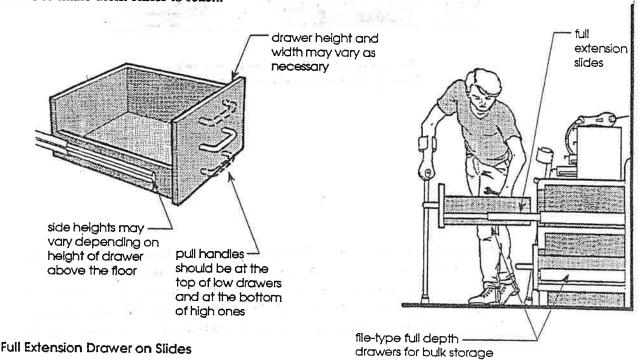
## Basic Design Consideration

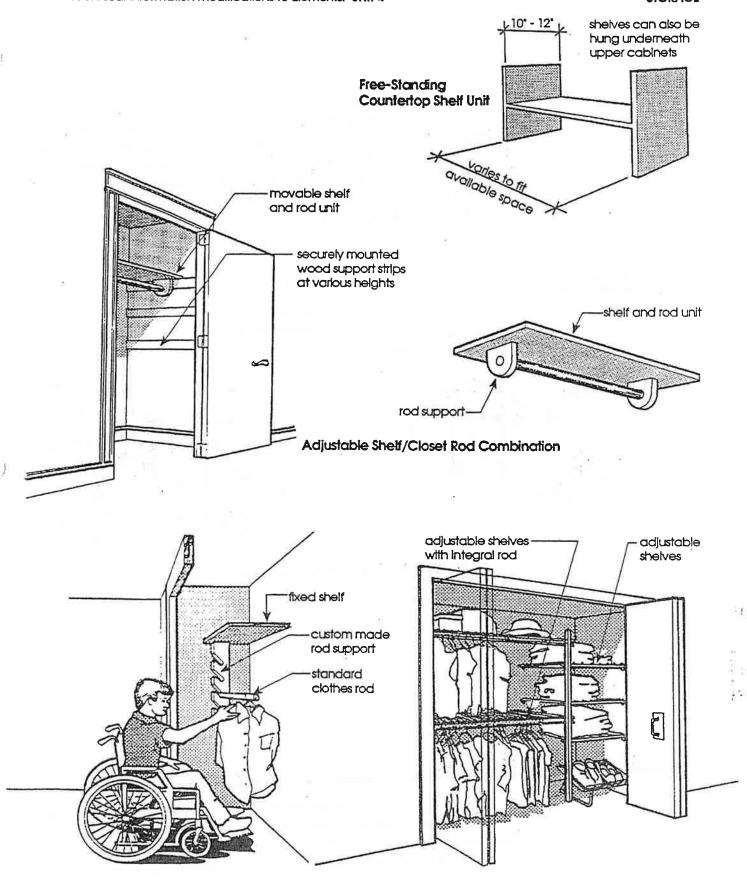
Accessible Storage Design

UFAS contains a few very basic requirements for accessible storage, which for the most part, are the same as the unwritten principles followed by any good space designer. UFAS requires that clear floor space, 30 inches by 48 inches, which allows either a forward or parallel approach, be provided at accessible storage units. The height of the storage shall be within the reach ranges specified in UFAS Sections 4.2.5 Forward Reach and 4.2.6 Side Reach, page 15. The actual range will depend upon the direction of approach and whether the person must stretch over an obstacle to reach the desired item. Clothes rods shall be a maximum of 54 inches from the floor. Hardware should be easy to use and must comply with UFAS Section 4.27.4 Operation - Controls and Operating Mechanisms, page 45. These requirements apply to all aspects of storage facilities including drawers, cabinets, shelves and closets and they are described below in further detail.



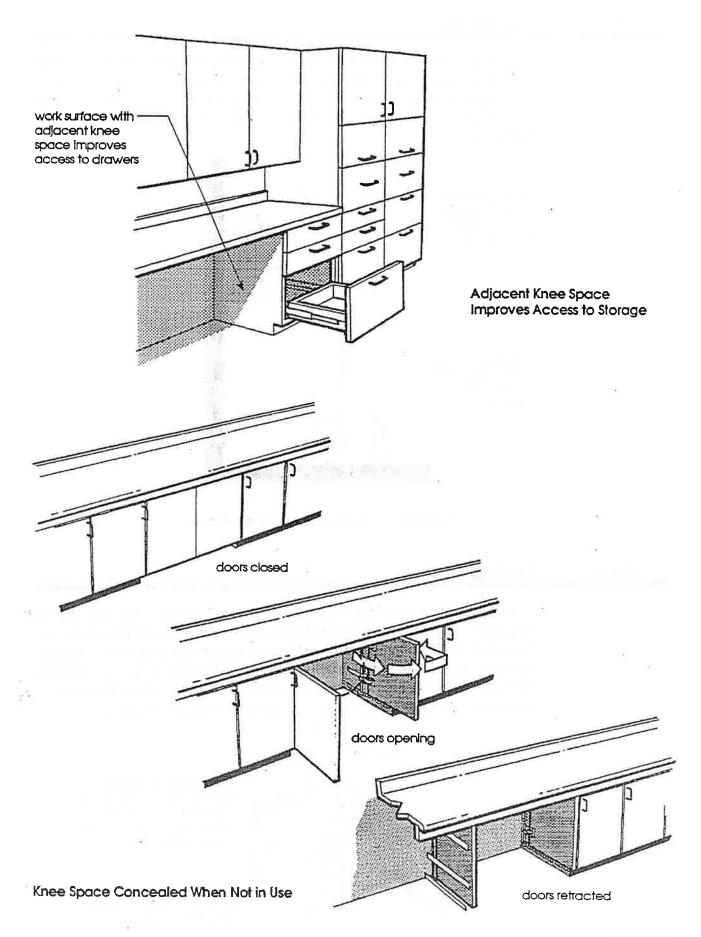
Drawers. Drawers on easy-glide full extension slides are best for everyone. These drawers open their full length to expose the entire contents of the drawer. Office filing cabinets have long included this type of hardware and now other storage units have incorporated these slides. High quality slides make opening and closing the drawer easy and built-in stops prevent the drawer from falling forward. Looptype handles are an excellent choice for hardware and should be mounted near the top edge of lower drawers and doors and near the bottom edge of upper drawers and doors to make them easier to reach.





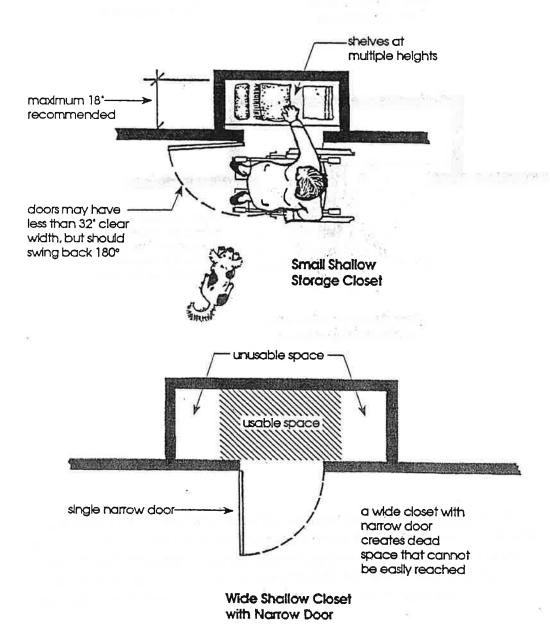
Adjustable Closet Rod with Fixed Shelf

Commercially Available Ventilated Storage Unit



Closets. The single term "closet" is used to define a variety of very different sized spaces which serve the similar purpose of storage. For the purpose of this manual, closets will be defined in terms of the type of door. Closet doors either permit the user to enter the closet through a passage door, or the contents are reached from outside of the closet.

Shallow storage or clothes hanging closets should be designed such that their contents can be reached from outside the closet. When passage is not required, the doorway may be less than the 32 inches otherwise required. Single hinged doors to shallow closets should swing back 180 degrees to allow a close side or front approach. Doors to larger shallow closets should open the entire width of the closet, if possible, to eliminate dead space in the corners. Hinged pairs of doors and bi-fold doors should swing out of the way to allow full access to the closet contents.



clearance is allocated. Storage space and door openings can be configured in a variety of ways. Common configurations are L-shaped, U-shaped, and parallel but other configurations are possible depending on the items to be stored.

