

FLEXIBLE-USE “WORK HORSES” IN KITCHEN

By Carol Lamkins, CMKBD, CID

Manufacturers have become aware that their primary market, Baby Boomers, is aware demanding plumbing fixtures and appliances that are universal in design. This large buying segment is looking for flexibility and ease-of-use for the special needs of ageing parents and friends. They are also thinking about their own physical condition and if their home will accommodate them in their later years.

The primary priority in remodeling is no longer creating larger spaces. The current focus is making existing space work. It is critical that professionals are sensitive to those needs by designing rooms that meet the current and future needs of those who use the space.

Plumbing fixtures and appliances are among the most expensive purchases in a kitchen remodel. The homeowner will live with their choices for many years. It is important to specify these “work horses” of the kitchen with universal features in mind. The following details provide guidelines for sound decisions.

In the clean-up area, the sink should be shallow, only 5" to 6 1/2" deep. This ultimately allows stool or wheelchair clearance if the sink base cabinet is open or a pocket door cabinetry converts down the line with removal the cabinet floor for accessibility. Finished flooring should always be continued under the sink base cabinet. A 36" to 39" wide cabinet, providing a minimum 30" of clear space when opened, is recommended for a wheelchair or a stool. Adding accessories such as a cutting board, colander, drainer, etc. increases the sink's versatility. See last month's article entitled “And You Thought a Sink was just a Sink” for a review of many available accessories.



Courtesy of Kohler - Assure sink (36" x 25-1/2")

Locate the sink's drain at the rear of the fixture, especially if a garbage disposal is used, to allow maximum storage in the sink base cabinet or if open, to keep the knee space clear. The drain should be offset from where the faucet mounts to avoid complicating the plumbing installation.

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The faucet should be a loop or single lever for easy operation. Ideally spout length should align over the drain. Consider right or left handedness if using a side-controlled faucet. A push button control on the pull-out head allows easy, one-touch switching from stream to spray.



Courtesy of Grohe Euro Plus II



Courtesy of Hans Grohe Allegra E Pull-Out Head Faucet

Specialty electro-mechanical cabinets are available that allow wheelchair or stool users knee space under the sink when cleaning-up. The adjustable-height sink raises and lowers at the push of a button, and is loaded with easy-access features.



Courtesy of GE

Another option is to use pocket doors under the sink with clear floor space in the cabinet interior. If the area under the sink is open, the drain pipe must be wrapped to prevent scalding should the knees make contact.

Recommended countertop clearances at the sink include 24” of width on one side and 18” on the other side. If the countertop varies in height from the sink, then 24” of countertop width is recommended on one side and 3” minimum must be allowed on the other side.

The reach zone for wheelchair users is 15” to 48” AFF with a front approach and 9” to 48” AFF with a side approach. Raising the

dishwasher 6” to 9” off the floor and locating the unit so it is accessible from either side increases the accessibility for those with back problems as well as those mobility-challenged needing improved access. The down side of this solution is that the raised

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countertop limits is use. Dishwasher drawers may provide a solution for accessibility. Keep in mind that the height of the drawers constricts placement of large dishware and cooking containers.

Controls and operating mechanisms must be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no more than 5 lbf.

Look for dishwashers with automatic soil content, water temperature, and cycle-selection sensors, flexible loading features such as fold-down tines, a lock-out switch to prevent accidental operation, an easy-to-read display, and electronic problem indicators.



Courtesy of GE



Courtesy of GE

Cooktops are a good choice for those with back issues or mobility impairments as they can be individually installed at varying heights with knee space underneath. If ovens or cooktops have knee spaces underneath then it is critical to insulate or otherwise protect the exposed surfaces to prevent burns, abrasions or electrical shock.

It is critical that controls are located on the top front or below the unit to eliminate reaching across hot burners. Also contrasting the colors of the controls, clocks and timers can assist those with visual impairments.

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Courtesy of GE Profile



Courtesy of GE Profile

Look for cooktops with staggered burners. Consider continuous grates on gas cooktops or flush elements on smooth ceramic cooktops that allow easy sliding of pots and pans.

Electro-mechanical, adjustable-height cabinetry also works for electric cooktops. Recommended countertop clearances at the cooktop or range include 15” of width on one side and 12” on the other side. These clearances must be the same height of the appliance as they allow for pot handles to safely extend over the countertop versus in a passageway. Swiveling cabinet doors under the cooktop in the side photo fold out of the way, providing valuable knee space.



Courtesy of GE



Courtesy of GE

For a range, look for a front slanted control panel with recessed control knobs that are easy to hold and to turn. Front positioning of knobs and control panel signal lights will make the range easier and safer for shorter people or those in wheelchairs. If possible, make the oven accessible from either side. Planning knee space adjacent to the range will increase the accessibility to the oven.

A self-cleaning oven may be important for elderly or disabled family members, and is a time-saver for all.

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Courtesy of American Range

Wall ovens are generally preferred because they can be installed with one rack at the level of an adjacent countertop, reducing the need to bend the back and improving accessibility. Side hinged or “French” doors are preferable. Look for a self-cleaning wall oven with easy-to-read graphics, an easy-grip handle, an oven lock-out switch, and generous interior lighting.



Courtesy of GE

A touch-control microwave or steam oven placed at counter height provides easy cooking access for people of various ages and physical abilities. Other features to look for include electronic sensors that correctly cook specific foods automatically, audio and visual “cooking complete” signals, and digital help displays that explain how to operate the appliance.

A convenient pull-out counter beneath a built-in single microwave, steam or wall oven allows for easy transfer of dishes. For a wheelchair user, you would want to lower or install the wall oven and microwave so they are approximately 31” from the floor.

A side-by-side configuration in a refrigerator is helpful for those who are shorter, taller, or seated. It provides full-height access to both fresh food and freezer compartments, as well as narrower doors. A side-by-side refrigerator must allow parallel approach by a person in a wheelchair with a maximum high side reach of 54 inches for operation. Some refrigerators with top-mount freezers have 100% of the fresh food space below 54 inches and 50% of the freezer space below 54 inches. One of the latest designs is

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the easy-access bottom freezer with the “French” door refrigerator section above. All three of these styles have advantages in accessibility.

The controls must be below 54 inches. Door handles must be operable with one hand and not require tight grasping, pinching or twisting of the wrist or more that 5 lbf. to activate.



Courtesy of KitchenAid



Courtesy of KitchenAid

Look for features that make the refrigerator more convenient and easy-to-use, like spill-proof shelves, gallon container storage in the door, slide-out shelves, and see-through food bins. A through-the-door ice and water dispenser is helpful, especially for children and shorter people, and cuts down on door openings to save energy.

The choices of plumbing fixtures and appliances are overwhelming. If the homeowner focuses on universal-use styles and features, the selection process of these kitchen “work horses” becomes more manageable. The choices need to integrate into the long term design solution and be flexible for all users.

RESOURCES:

American Range

General Electric

Grohe

Hans Grohe

KitchenAid

Kohler

“NKBA Kitchen and Bath Planning Guidelines”