



PLAN YOUR KITCHEN

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For many families today, the kitchen is once again becoming an important center of family living.

Are you one of these families? If you are, and you decide to build or remodel, some thorough planning will help provide kitchen space and facilities to suit your particular way of living.

PLAN YOUR KITCHEN/ *for family activities*

Basic food preparation and cleanup activities

Plan space for these in a fairly compact area.

Other activities Your family might want space in the kitchen for some, or all, of the following: eating, planning, visiting, keeping records, reading, studying, laundering, food preserving, children's play, etc. Plan space and storage so as many of these activities as as possible can be effectively performed without competing with each other for space.

PLAN YOUR KITCHEN/ *for comfort, convenience, and atmosphere*

To be the best possible place for your activities, your kitchen should be planned around several interacting factors such as light, ventilation, electric wiring, etc.

Light

Provide sufficient natural and artificial lighting. Supplement good general artificial lighting with special lighting fixtures at work centers.

Lighter colors used for room surfaces will reflect the most light. If you use darker shades for cabinets or appliances, you will need to add more light sources because the darker colors absorb more of the light. Consider "built-in" lighting such as lighted valances, cornices, or luminous ceilings if you are building or remodeling.

Ventilation

Windows and doors can provide cross ventilation. But, a good ventilating fan placed in wall, ceiling, or hood over the cooking unit and ducted to the outside, will change the air quickly, remove moisture, grease and cooking odors, and reduce excessive heat caused by cooking.

Wiring

For safety and convenience, plan enough special purpose electrical circuits for large equipment such as a range, dryer, dishwasher, etc. Also provide enough small appliance circuits to carry those appliances you will use at one time, such as toaster, coffee maker and frypan. Have plenty of outlets installed at convenient locations along the circuits.

Other

Consider maintenance care required when choosing surfaces for walls, floor, counter tops and cabinets. Consider the effects of surface materials and equipment on the noise level of the kitchen.

PLAN YOUR KITCHEN / with work centers for specific jobs

The three main centers for food preparation and cleanup activities are developed around the sink, range, and refrigerator.

Sink Center—

Work done— Vegetables and other foods are cleaned and dishes washed. Water is obtained for cooking and beverage use. Garbage is often disposed of here.

Equipment— Sink, dishwasher, garbage disposer, trash containers.

Counter work space— Allow 24 to 36 inches on the right for dirty dishes, vegetables to be cleaned, etc.—and 18 to 30 inches on the left for clean dishes, prepared relishes, etc.

Storage— Under and above these counters, provide storage for items used first at the sink—dishwashing supplies, vegetables not needing refrigeration, peelers and paring knives, and saucepans used with water from the sink, etc. An upper cupboard between the sink and dining centers is convenient for dish storage.

Range Center—

Work done— Food is cooked and served.

Equipment— One-piece range or built-in surface unit.

Counter space— At least 18 and preferably 24 inches for foods to be cooked, ingredients to add, serving dishes, etc. Space on either side of the range adds more convenience.

Storage— Provide storage for items used first at the range under and above the counters and under a built-in surface unit. These could include some saucepans, frypans, lids, cooking or serving tools, etc. Also keep here foods used first at the range such as noodles, instant potatoes, cooking cereals, seasonings and some shortening.

Mixing and Food Storage Center—

Work done— Foods are prepared for cooking, chilling, freezing, or for immediate eating.

Equipment— Since trips are often made to the sink, and sometimes to the refrigerator from this center, it should be convenient to both pieces of equipment.

Counter space— At least 36 inches is needed, more if much cooking or baking is done. If the refrigerator

is not next to this counter, allow at least 15 inches of counter space next to the latch side of the refrigerator.

Storage— Provide storage for all foods, cooking tools, and utensils used first here—baking tins, casseroles, packaged and canned foods, mixing and blending tools and equipment. If storage space is limited at this center, store only items used most often, and locate seldom-used baking pans and extra supplies of canned and packaged foods in another storage unit.

Other Centers—

Oven center— If a wall oven is located away from the surface burner unit, 15 to 18 inches of counter surface with a heat-proof surface should be provided beside it.

For other activities— Plan centers with sufficient space and storage facilities to meet the specific needs of other activities you wish to carry on in the kitchen, such as eating, business, laundry, etc. The number you include will depend on your pattern of family living and the size of the room.

PLAN YOUR KITCHEN / to save steps

Space Requirements

Food preparation and cleanup centers require a minimum of six feet of base cabinets (preferably 8 to 10 feet) to provide sufficient work counter and storage. Add to this your large appliances, (range, refrigerator, etc.) and you will find that you need 15 to 20 feet of wall space (without doors or other openings) for these cabinets and appliances. Add 4 feet to this total for each corner you turn. Plan additional space for other activity centers.

The Work Triangle

For efficiency, plan your sink, range or built-in surface unit, and refrigerator (with adjacent cabinets) as the points of a triangle. The three sides of this triangle should not total over 23 feet. A separate oven does not have to be included in this triangle since fewer trips are made to it than to the other centers. More trips are made to the sink than to any other center. Research indicates that the most common trip is from the range center to the sink.

The Kitchen Layout

Several different patterns for arranging kitchen work centers are possible. The pattern you choose will be influenced by the size and shape of the room, and by the location of doors and windows.

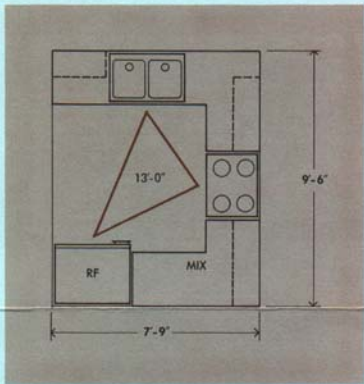
When planning a new kitchen or doing major remodeling, the basic arrangement should determine the location of doors and windows. Consider the location of the kitchen in relation to other activity areas of the home, and traffic patterns, both between the kitchen and these areas and within the kitchen itself. If possible, route "through traffic" past, not through the middle of, the food preparation area.

Three possible patterns for work center arrangements are shown on this page—the "U", the "L", and "two-wall."

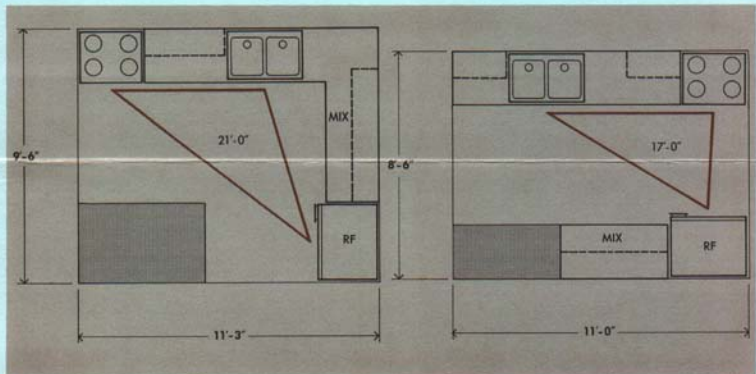
Other arrangements— If it is not possible to work out a desirable pattern because doors and windows that cannot be changed are breaking up too much wall space, try to have each work center as complete as possible wherever space is available.

In a large room used for several activities, an island or peninsula may be built out into the room to divide it and make the food preparation area more compact.

Clearance space— In any layout in which cabinets and appliances are arranged across from each other (U, Two-Wall, Island), be sure to allow a minimum of four and preferably five feet in between in order to move about, open doors and drawers, etc.



The U shape— This arrangement on three walls provides a compact work triangle in a room that is not too wide (from nine to eleven feet is a good width.) Usually the sink is placed on the end wall. The open end of the "U" is available for other activities. If too compact a "U" arrangement may not allow enough room for family members to take part in food preparation activities.



The L shape— In a very large room the food preparation centers may be placed on adjoining walls to make a corner arrangement. The other walls may be used for dining or other activities.

The two-wall shape— When the room is long and narrow (less than nine feet wide), centers are most conveniently arranged along the two sidewalls across from each other.

Different levels for different jobs

Find your most comfortable height for working at the sink, for preparing and mixing food, and for cooking and serving. As far as possible, arrange your work levels to those jobs. If your cabinets can only be purchased in the standard 36-inch height, try to provide one other working level (perhaps a table or built-in bar).

- When using short-handled tools, you should be able to stand straight but relaxed, and place the palm of your hand (without arm stretching) on the work surface — as when cutting on a board or rolling a piecrust. The sink bottom should be this same level for comfortable dishwashing.
- When using long-handled tools (stirring in a bowl or pan) the working surface should permit your hands to be lower than your elbows, without raising your shoulders.

Sit-Down Working Space

- The best sitting arrangement allows you to sit down in a chair with feet placed flat on the floor.
- Adequate knee-room under the working counter should allow the counter to just clear your lap.
- A sit-down work counter can be provided by leaving some counter space without shelves under it, or by building a pull-out lapboard in the storage cabinets under the work counter.

Be sure the articles you store can be placed within sight, reach and grasp.

Easy and Comfortable Reach:

Storage should allow easy and comfortable reach, considering your build and height. The easiest reach is within the area from shoulder-height to just below hip-level.

1. Plan storage to fit the articles to be stored in it.
 2. Store most-used articles in places easiest to reach.
 3. When you have room, store heavy articles in the area easiest to reach; store light-weight articles in the high and low areas. Make the top shelf no higher than six feet from the floor.
 4. Use vertical files or partitions to divide storage space in high and low areas and in deep drawers.
 5. Use pull-out shelves and similar devices in deep storage cabinets.
- Use revolving shelves for hard-to-reach storage.

Easy Selection of Articles:

1. Plan shelf-depth to allow for "one-row" storage of unlike items.
2. Plan to stack only like articles together.
3. Use wall panel, pegboards, magnetic racks and special hanging devices for often-used kitchen tools.
4. Use partitions in those drawers where flat silver, cutlery, and small equipment are stored.

MORE INFORMATION

Other Michigan State University bulletins that might help you:

- E-365, *Improving Kitchen Storage*
- CE-29, *Electricity in the Home*
- CE-16, *Care of Metals and Other Kitchenware*
- E-393, *Choosing and Using Ranges*
- E-390, *Choosing and Using Refrigerators*
- E-388, *Choosing and Using Dishwashers*

Contact your county or area Cooperative Extension Service office for these bulletins or other ideas and programs that may help you plan your kitchen to work for you and your family.

ACKNOWLEDGMENT—This bulletin is a revision of Extension Folder F-217, "Plan Your Kitchen to Take It Easy," by Ruth C. Kettunen, Extension Specialist in Home Management, emeritus.