# Planning a Kitchen Work Area

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The information in this article applies to:



## ANSWER

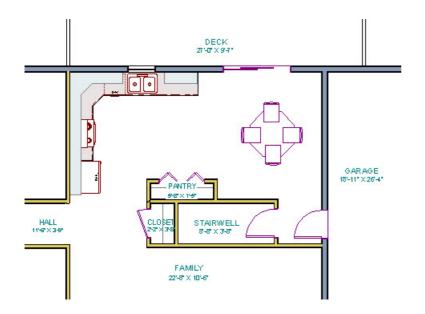
There are a number of things to consider when designing a kitchen with maximum functionality. One, of course, is adequate storage space, and another is making storage and appliances accessible to the people who will use them.

Once you determine how much space is available, how much storage you need and how you want to meet any accessibility requirements you may have, you can begin planning the locations of your work centers and appliances.

Many kitchen designers recognize three major work centers in a kitchen: the sink, the cooktop and the refrigerator. When positioning these three work centers, they typically recommend forming a triangle between them. The shape and size of this triangle, as well as its location relative to doors and other high-traffic areas, all influence how efficient a kitchen work space is.

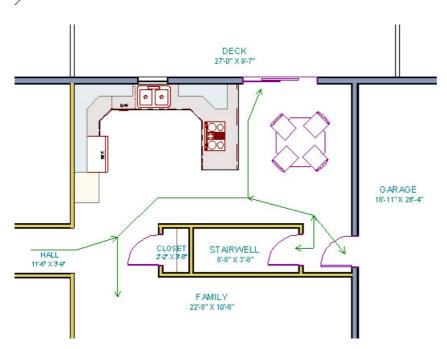
#### To determine the available space

1. Open the plan in which you would like to design a kitchen work area.



- 2. Even if you are interested in redesigning an existing kitchen and nothing else, it is a good idea to draw the rooms adjacent to the kitchen as they are so that you can clearly examine any traffic patterns that go through the kitchen.
- 3. Select **CAD> CAD> Draw Line With Arrow** from the menu, then click and drag to draw lines representing the major areas of traffic through the kitchen.

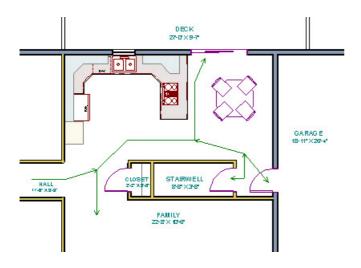
In Home Designer Essentials and Home Designer Interiors, instead select **CAD> Text> Text Line With Arrow** 



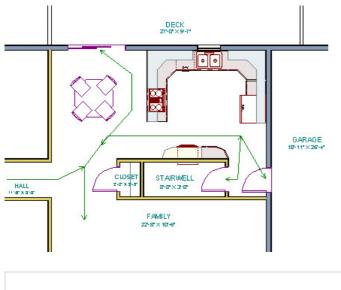
In this example, notice how several paths travel, not just through the kitchen, but right in front of two work centers - the refrigerator and the range.

- 4. As we plan a new layout for this kitchen, we should experiment with ways of keeping this traffic out of the kitchen work area either by redirecting it or by moving the kitchen work area.
  - One option is to remove the Pantry room, add a cabinet peninsula with a range, move the refrigerator

closer to the sink, and add a full height cabinet for additional storage.



• Another possibility is to move the entire kitchen, switching its position with that of the dining area, and adding a peninsula with range and a bank of cabinets to replace the Pantry.



When considering locations for your cooktop or range, bear in mind that building codes require ventilation - usually, ducted outside the building.

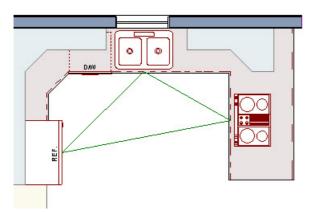
Once you have determined the space that you will use for the work area of your kitchen, you can plan the locations of the three work centers. There is no single "best" work triangle configuration: only a simple set of guidelines, which means that you can experiment with a variety of placements that all provide you with a functional and efficient kitchen.

- Each side of the triangle should be between 4 and 9 feet in length.
- The total perimeter of the triangle should add up to between 12 and 26 feet.
- The triangle should be clear of cabinetry, such as an island, and should not be crossed by traffic.

## To place the three work centers

1. Position your sink base, cooktop or range, and refrigerator where you think you would like them.

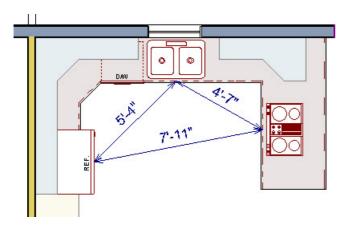
- A selection of kitchen sinks are available in the Library Browser at Architectural> Fixtures> Sinks. Kitchen sinks are drop-in and can be placed in base cabinets.
- Cooktops, ranges and refrigerators can be found in Architectural> Appliances. Some appliances are standalone, while others must be placed in a base or full height cabinet.
- 2. Select **CAD> CAD> Draw Line With Arrow** from the menu (or **CAD> Text> Text Line With Arrow**), then click and drag to draw lines between the center points at the fronts of the three work centers.



3. To find out the length of a line, select it and click the **Open Object** did button. Both the Length and Angle of the selected line are stated on the LINE panel of the **Line Specification** dialog.

In Home Designer Pro, you can specify that the length of each edge display in floor plan view by checking **Show Length** on the LINE **S**TYLE panel of the **Line Specification** dialog.

4. You can also measure the length of each line in floor plan view. Select **CAD> Dimension> Manual Dimension** from the menu, then click and drag to draw dimension lines along each edge of your triangle.

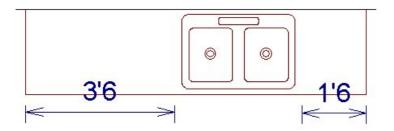


• If a dimension line locates with another object and adds an extra extension line, you can remove it by selecting the dimension line, then clicking on the edit handle at the end of the extension line and dragging it to the end of the dimension line.

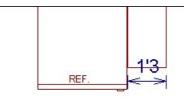
To make the placement of your work centers more useful, make sure there is adequate countertop space for food preparation, cleanup, and to serve as landing areas for the refrigerator, cooking surface and ovens (including the microwave).

### To plan preparation, cleanup and landing areas

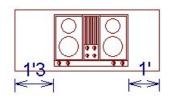
• At least 36" of continuous counter top right beside the sink is recommended as a work area, and at least 18" on the other side of the sink, as a preparation and cleanup landing area.



• At least 15" of counter top space on the handle side of the refrigerator should be available for a landing area.



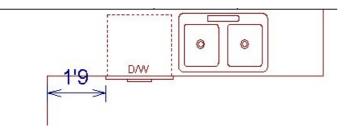
• Similarly, at least 15" should be available as landing areas for cooking surfaces and ovens. An additional 12" should be also available on the other side of the cooking surface.



While the three work centers are very important in a good kitchen design, other appliances and fixtures are often used, and proper placement can maximize their usefulness, as well.

#### To position other appliances and fixtures

• Dishwashers should be located within 36" of the sink, and at least 21" should separate the dishwasher's edge and the edge of any perpendicular cabinet or appliance.



• Many designers recommend two waste cans: one for trash, located near the sink, and one for recycling. If you opt for a trash compacter, locate it as you would a dishwasher: near the sink but not too close to perpendicular

## MORE INFORMATION

Recommendations for efficient kitchen design were first developed in the 1940's by the Small Homes Council of the <u>School of Architecture at the University of Illinois (http://www.arch.illinois.edu/)</u> and continue to influence kitchen design today. The <u>National Kitchen & Bath Association (http://www.nkba.org/)</u> has developed a list of Thirty-One Kitchen Design Rules based on the work done by the Small Homes Council that is regularly updated to reflect today's technology and lifestyles.

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