



# Common Kitchen Design Errors

by Michael Poster

**P**icture yourself at the end of a flawless kitchen installation. Your client has been fawning over the custom cherry cabinets and the seamless solid-surface counters. All that stands between you and the signed check is the built-in refrigerator installation. You've uncrated the beast, and as you slide it into position, you unhappily discover that the soffit is 1/2 inch lower than the minimum called for in the installation manual.

As always, the consequences of this unhappy situation fall on the shoulders of the person in charge. Though problems are inevitable, many of these disasters can be avoided through careful planning and attention to detail. In this column I'll point out some potential blunders awaiting the unwary kitchen contractor.

## Inside Corners

Underestimating the needed clearances for all types of cabinets and appliances at inside corners is one of the most common mistakes made by newcomers to the trade. It's all too easy to forget that a drawer adjacent to an inside corner needs extra clearance to avoid the protruding dishwasher

door handle (see Figure 1). Even an unusually large cabinet handle design can keep an adjacent appliance door or drawer from opening. Heating units, passage doors, and decorative wall items can cause similar difficulties.

To add the necessary clearances, we increase the width of the cabinet stiles by 3 to 4 inches, leaving plenty of room for hardware and fingers. Stock cabinet manufacturers provide fillers (typically 3-inch flat stock in matching species and finish) that serve the same purpose.

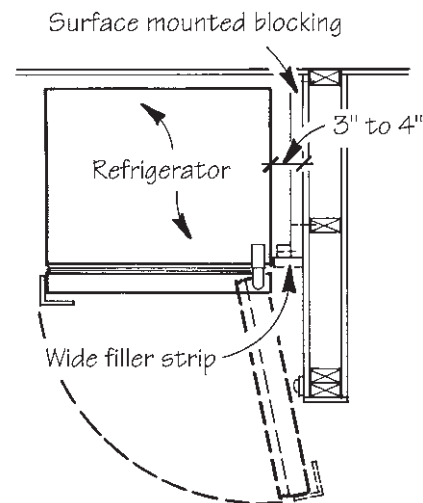
## Refrigerator Door Clearance

Occasionally, a kitchen design will place the refrigerator in a corner at the end of a run of cabinets. Even though most refrigerator doors will open when the hinged side is placed against a wall, it is better to leave a few inches clearance; this allows the door to open wide enough to be able to fully extend the unit's built-in drawers (Figure 2). We typically fasten a 3-to 4-inch stile to the wall that provides the necessary clearance.

## Deep Appliances

It is also important to consider the

## Refrigerator Door



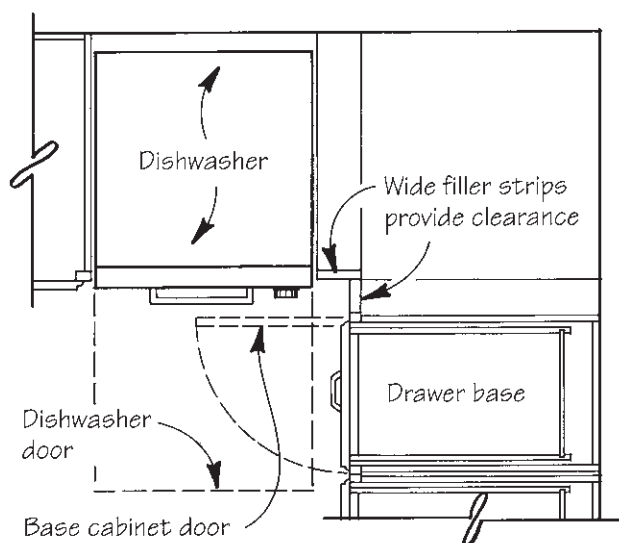
**Figure 2.** When the hinge side of a refrigerator is placed tight to a wall, the door may not open far enough to allow access to the compartment drawers. A filler strip supported on blocking is the solution.

position of other appliances, many of which are deeper than adjacent cabinets. Microwaves are best kept away from upper corner cabinets; if not, they may keep the angled wall cabinet door from opening properly (Figure 3). Ranges and dishwashers should be placed some distance from folding doors on lazy Susans, if possible. It is hard enough getting things in and out of these cabinets without having a range door in the way.

## Ranges and Fire Risk

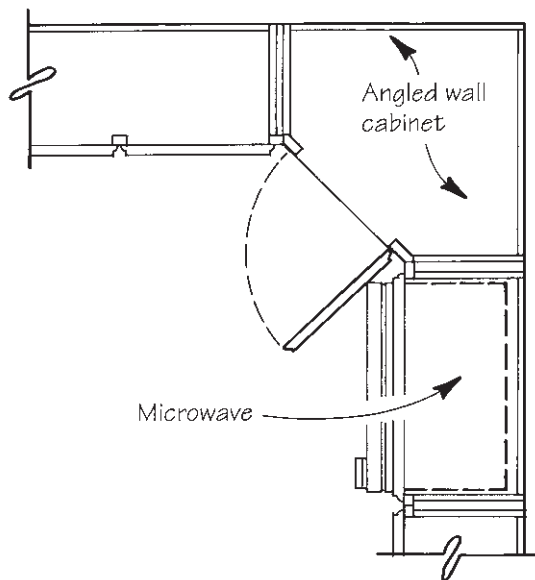
Pay particular attention to the minimum clearances required above and adjacent to ranges and cooktops, and keep in mind that these clearances can vary among manufacturers. If your design calls for an oversized cooktop under a standard 30-inch microwave or hood, be sure that the manufacturer has spacers that will keep the wall cabinets out of the "line of fire." Also, avoid placing cooking surfaces under windows, where curtains may find

## Corner Clearances



**Figure 1.** Provide clearance at inside corners where base cabinets meet; otherwise, there may not be enough room for appliance doors or cabinet drawers to open properly. The use of filler strips or extra-wide stiles will prevent baseboard heaters from interfering with cabinet door operation.

## Angled Wall Cabinets



**Figure 3.** A microwave placed too close to an angled wall cabinet will not permit the cabinet door to open properly. Keep microwaves at least one cabinet's distance from a corner cabinet.

their way over the burner.

The bottom line is that when it comes to dealing with appliances, *assume nothing*. Although there are some general standards for kitchen equipment, all manufacturers design and build their products differently. Careful review of the installation instructions will usually reveal any potential pitfalls presented by a particular appliance. We accumulate all the necessary manuals by fax, from the appliance maker, before starting the design process, and make sure our installer has access to this information.

### The All-Important Site Visit

Most difficulties can be avoided by a "preconstruction" site visit, which we schedule before starting cabinet construction. We do a walk-through with the general contractor and resolve problem areas before they turn into expensive errors. When the cabinet installation goes smoothly, *everyone* looks good. So whether you're the general contractor, the kitchen designer, or the cabinet installer, it pays to double-check the following items:

- **Room to move.** We try to design cabinets that will fit easily through doorways, up winding stairs, and into available elevator space. There is nothing worse for a cabinet designer than the lazy Susan cabinet that won't fit through the door.
- **Utility booby traps.** Existing and planned utilities such as plumbing,

heating, electrical, and exhaust ducting are carefully checked for possible conflicts with the cabinets. We often find that wiring for under-cabinet lighting is missing or positioned improperly, or that placement of toe space heaters has yet to be considered.

- **Vehicle parking.** This can be an important issue when the cabinets are delivered — especially during a period of bad weather.
- **Trim and flooring details.** Unusually wide door casings require increased cabinet setbacks, and unusually thick finished floors will affect soffit heights. These items need to be considered *before* ordering or building the cabinets.
- **Special prep work.** Framing supports fastened between the studs (called "cats" in our area) make it much easier to hang the wall cabinets. Without them, our installer has to search for every stud and may find that a particular cabinet cannot be well supported.

A methodical site inspection, comprehensive literature review, and adherence to a few basic principles will go a long way toward keeping the smile on the customer's face and the profits where they belong. ■

Michael Poster owns and operates Michael Poster Woodworking in Montrose, Pa.