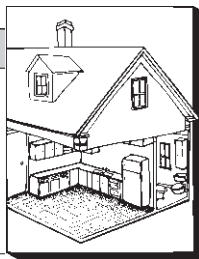


Home and the Restaurant Range

by Lynn Comeskey



For those clients who take their cooking seriously and for those who wish to appear to take their cooking seriously, restaurant ranges are very hot—literally and figuratively.

Commercial ranges and cooktops have grown in popularity with increased interest in gourmet cooking over the last five to ten years. Until recently, consumer-model ranges did not have the high-BTU burners that would bring a huge stock pot to a boil quickly, or oversized ovens, broilers, and spacious burner placement required for some professional cookware. As consumers began visiting restaurant supply houses to make purchases, they found these commercial appliances readily available (at \$1,500 to \$5,000), and prevailed upon architects, designers and contractors to specify and install them.

Installers Beware

But commercial ranges are not like residential appliances in a lot of other ways. Commercial ranges are cast-iron behemoths with no insulation and no engineering for consumer safety; why should they? But ignorance of these differences has caused a potentially huge problem: A shocking number of commercial ranges and cooktops—one estimate is 20,000 in California alone—have been installed in residences as if they were consumer appliances. These installations are critically unsafe and illegal.

Longtime southern California kitchen designer, teacher, and lecturer, Bill Peterson, has taken an extraordinary personal interest in this issue in the past few years, making designers, architects, builders, real estate brokers, local building inspectors, regional code bodies, and consumer and trade shelter publications aware of these unwitting, but wholesale violations of the code. He has some frightening stories about scorched ceilings above commercial ranges and cooktops, and end panels charred black where ranges have been installed flush against the cabinets.

The major question here is one of proper clearances to combustible surfaces. But there really isn't a question at all—the code remains unchanged when it comes to what constitutes proper clearances. Unfortunately, awareness and enforcement of these conditions have been very lax.

New Alternatives

But recognition is now spreading rapidly. Some communities—including one we work in frequently—have decided not to allow commercial ranges in homes, period. However, there are alternatives. Wolf and Viking, two major players in this field, are new manufacturing commercial ranges for residential installations (see photo). These units are heavily insulated, allowing them to be installed next to cabinets, and keeping over door faces from getting dangerously hot to the touch. They are also fitted with child-safe valves, and electronic ignition pilots. (California's State

Energy Commission hands out fines of \$2,500 to supply houses that sell ranges or cooktops with three or more standing pilot lights for residential use). Although the safety features have raised the price by nearly 50 percent, these units now mean that you can deliver the advantages of a commercial range to a client without the risks inherent in the "restaurant" model.

By The Book

But for the record—and for those of us who have installed commercial ranges in the past and are feeling a little anxious right now—here are the requirements that *must* be met to satisfy codes and safe building practices.

Here in the west, installation requirements for commercial stoves are covered by the Uniform Mechanical Code, published by the International Conference of Building Officials (ICBO). They divide commercial appliances into two categories: *listed*, and (as you might have guessed), *unlisted*.

A listed appliance is one that has been submitted to the American Gas



The Viking range shown above is one of a new generation of "professional" stoves designed for the residential market. It is not subject to the 6- to 10-inch horizontal clearance from cabinets that is required—but too frequently ignored—for uninsulated commercial stoves.

Association (AGA) along with a set of stipulated installation clearances. The AGA then tests the appliance under these conditions and issues an approval following strict guidelines. (These are contained in the National Fuel Gas Code, a cooperative effort of the AGA and the National Fire Protection Association.) The UMC accepts these clearances, and allows no exceptions to them, no matter how much you try to limit the combustibility of surrounding surfaces.

The AGA-approved clearances are stated in the installation instructions for each appliance and listed on a plate affixed to the unit. Clearances for listed appliances range from 6 to 10 inches horizontally and 30 to 36 inches vertically.

Unlisted appliances are a slightly different case. These include "one-off" appliances and specialty cooking

equipment like commercial woks: There are no unlisted ranges. Unlisted appliances are assigned clearances according to their type in UMC section 504, table 5A. Generally, back and rear clearances to combustible surfaces are 6 inches and the overhead clearance is 30 inches.

But these clearances can then be reduced somewhat by the use of "heat-shielding assemblies." The amount of reduction is detailed in table 5B according to the type of noncombustible barrier you use. One common mistake in the west is to use table 5B to reduce clearances mandated for *listed* appliances. However BOCA and SBCC codes do allow some reduction with AGA clearances.

Making Sure

Even with reductions, you aren't going to end up with less than three inches of airspace between the appliance and the base cabinets and countertops. (This design problem was too often solved in the past by pretending that commercial ranges were zero-clearance units.) A colleague of mine had stainless steel fillers made to cover this "crumb crack." They were installed between the range and adjacent cabinets both at the front of the cabinet/range and at the counter top. However, these reduce the flow of air around the stove and might not be acceptable to an inspector given the new awareness of this issue. It's a judgement call.

But even if you are sure of your clearances and have planned appropriately, I would suggest checking with your local building department in a very specific way so you don't end up with an installation that is delayed or even red tagged because of past problems recently discovered.

There's one further twist if you work in a state as consumer conscious as my home state of California: New real estate disclosure laws require that both broker and seller have a responsibility to reveal all the information they have—including any illegal installations—about the condition of a house. It is likely that a lot of newly remodeled kitchens will have to be torn apart and redone in order for these home sales to be completed. And that could make this a topic that causes a lot of wincing for some time to come. ■

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