A Short FAQ on commercial ranges in homes (residential kitchens):

One of the biggest trends in appliances is the "professional look, meaning appliances made out of stainless steel. This trend was largely the result of Viking Corporation making the first "pro-style" ranges, meaning a range that looks like a commercial range but is designed for home installation.

Some people, including myself, have thought of going all out, and installing true "commercial" ranges in our homes, because they are less expensive and produce more heat than the "pro-style" range. However, there are issues with installing "commercial" ranges in homes. This FAQ will attempt to answer these issues.

To keep confusion to a minimum, I will refer to "commercial" ranges as the ones made for use in restaurants, and will refer to ranges made for home use as "pro-style".

True commercial ranges are made by companies like Garland, Vulcan, Wolf, DCS, Comstock-Castle, Royal, Montague, American Range, US Range, Jade, Imperial, Quest metal works, Southbend, Blodgett, and the like, while the "pro-style" ranges are the ones made for home use, by Viking, Wolf, Blue Star, DCS, Capital, Dacor, Heartland, Jade, GE Monogram, Thermador, Imperial, etc. Yes, some companies make both.

Here is a list of the advantages and disadvantages of these units in general.

Pros of commercial ranges:

- Less costly than home ranges.
- Higher output burners (generally 25k BTUs on restaurant grade, while the "heavy duty" models come in around 35k BTUs).
- Ovens usually hold full sheet pans (see note 1).
- Very durable.
- Generally no electronic gimmicks to break.

Cons of commercial ranges:

Insurance and warranty issues:

With many brands, the warranty is void in residential installations. Here is a
quote from one manufacturer: "The use or installation of our products in Noncommercial Applications renders all warranties, express or implied, null and
void." (the quote continues in this vein for nine additional paragraphs).

o Insurance issues: you may have problems with homeowners insurance, though probably not, if the range is installed exactly per specifications. Whatever you do, if the insurance company asks if you have commercial equipment installed, do NOT lie to them. Lying to them creates a "Material Misrepresentation" which will void your insurance and they can refuse ANY claim you make.

Installation and service issues:

- In homes with natural gas, the gas supply line is generally insufficient in size for a commercial range. Having too small a gas supply line seems to void the warranty of every unit I looked at.
- Generally require 6 inch or more clearance from combustible surfaces, with some ranges requiring up to 12 inch clearance. This generally means lining cabinets, walls, backsplash, etc. with tile, which lowers the savings. It also means gaps between the range and the adjoining cabinets.
- Less insulation around the ovens, which may cause problems in a home, especially with small children.
- You may have problems getting service (some commercial service companies do not carry liability insurance covering their service personnel in homes).
- Most are more than 24 inches deep, meaning they stick out from regular cabinets.
- Since most are deeper than 24 inches, custom hoods are generally required, again reducing the savings. And with the heat these things can produce, you need a good hood. And commercial hoods tend to be noisy compared to residential hoods, and often require makeup air, reducing the savings still more.
- o Most require multiple pilot lights (generally one per burner and one per oven) consuming a lot of fuel, and eliminating over a few years the rest of the up-front savings. A typical 36" commercial range has seven pilot lights running all the time, wasting a lot of gas and producing a lot of heat. A 48" range with double ovens has ten pilot lights!

Cooking and other issues:

- They generally don't simmer home size amounts well (i.e. they make too much heat) without a separate "flame tamer". Pros generally make larger quantities of stuff than people do at home, so the larger "simmer setting" is not a problem.
- No broilers in commercial ranges. Pros use a device called a "salamander" which is a broiler that is mounted at eye level, generally above the range. The advantage of this is that the cook can watch the food while doing other things, and it frees up the oven. Note that cooking things like steaks, hamburgers, etc. is NEVER (in my professional experience) done in a

salamander or broiler in a commercial kitchen. They don't get hot enough, and they don't put grill marks on the food. That's what the grill is for. Salamanders are sometimes called "cheese melters", which is more descriptive of their common function.

- No option for built-in grill or griddle on most units.
- Not the easiest to clean Pro kitchens have a dishwashing crew of very hard working people who get paid to clean things, most homes don't.
- Not the prettiest to look at. Most do not have stainless sides. Since they are usually deeper than most cabinets, this may not look good.
- Few, if any, are available as "dual fuel" models, most are all gas or all electric.
- No self cleaning units.

Pros of good quality "pro-style" residential ranges:

- Elimination of all the problems mentioned above. This means they have sufficient
 insulation for zero clearance installations, they simmer home sized amounts well,
 have no insurance issues, contain broilers, often have options for grills or griddles,
 many come in dual-fuel or gas ovens, many have self-cleaning ovens, are never
 deeper than 27 inches, etc. In other words, they are designed and engineered for
 residential use.
- Most have no pilot lights, resulting in lower operating costs, lower energy wastage, less pollution, and lower electric bills when running AC. Note that in a loss of power, most if not all will allow the burners to operate by using a match or lighter to light the burners, but may not allow the use of the oven.
- Some brands available in multiple colors, instead of just stainless steel.

Cons of good quality "pro-style" residential ranges:

- More expensive than commercial ranges.
- Not as much heat as commercial ranges. Most "pro-style" home units run around 12-15k BTUs, with some going up to 18-20k BTUs. This is sufficient for most people at home. Note that the "normal" home gas ranges typically top out at 9-12k BTU burners.
- Ovens may not hold full-size sheet pans (though some will check this carefully before purchase) (see note 1).
- Some have electronic widgets (timers, etc.) that can fail, causing repair problems down the road as the required electronic parts are discontinued because of changing technology.

Notes:

1 - A full-sized sheet pan has interior dimensions of 18 by 26 inches. A full-sized layer cake with two layers will feed 80-90 people. Half-sheet pans (also called jelly roll pans) are 13 by 18 inches, and a two layer half-sheet cake will feed 40-45 people. The reason that these pan sizes are important is that many recipes are sized to fit these pans.