

Kitchen Ergonomics

Five Steps to the Back Saving Bliss of Ergonomic Kitchen Design

By Alice Kelman

19 September 2008



Thermador's ergonomic kitchen uses lots of open shelving for easy access to oft-used items.



Bulthaup's System b3, a grid on which counters, cabinets and accessories can be hung at the optimal height for the user.

er·go·nom·ics: Design factors, as for the workplace, intended to maximize productivity by minimizing operator fatigue and discomfort.

Designing a kitchen around the way we use it may seem obvious, but it took the rise of modern design's credo of functionality first to bring the concept into America's homes. While we may lag about a decade behind style savvy Europe when it comes to modern design, American's are transforming their kitchens into modern, functional workhorses at breakneck speed.

At its heart, ergonomics is practical design; design focused toward getting the most out of the space that's being created. This appeals to our practical side, and helps loosen tight pocketbook strings. Who can resist the allure of an investment that will be well used and enjoyed? (Or one that, in earlier times, guaranteed a seller would recoup an average of 98.5% of the money spent?) And though ergonomics is a serious science, you don't have to study hard to implement some high impact, low body stress elements into your kitchen design.



A well organized cabinet from Bulthaup makes use of height to gain extreme storage space in an area short on depth.



Ergonomic design solutions from Italian manufacturer Effeti.



Red croc Gel Mats make this kitchen bright, modern and comfy underfoot.

Ergonomic Design Tips.

1). Counter Height:

For tall people stooping over to slice and dice, or shorter people unable to get the right leverage on their knives, counter height reigns as the most important ergonomic design choice in kitchens. Under cabinets come in standard heights, usually about 34-1/2", but people don't, so this doesn't work for most of us. Thankfully, it's easy to adjust even stock base cabinets upon installation.

The best counter height is found when with palms on the counter-top, your arms rest at a 45 degree angle. Designer Joel Robare thinks of it this way: "What height can you use a knife at that does not necessitate bending over in the slightest? Answer the question and you have found countertop perfection. You should be able to chop, rinse and cook without bending over. "

He even has a tip for people who are too tall for their existing counter heights -- have custom butcher block tops made. They come in varying sizes and heights from 1" to over 6" so, as Robare puts it, "bringing the work at hand into yours" is a snap.

For kitchens with cooks of different heights, consider designing islands or work stations of different heights. Not only will it keep chefs happy and at work, it breaks up the lines of the kitchen for a more visually interesting space.

2). Appliances:

"The person who invented the range oven never cooked a turkey," says Robare.

When designing a kitchen, invest in a wall oven and separate countertop range for the most ergonomic solution. At the very least, it makes it much easier to pull out hot, 25 pound turkey and place it on the counter.

As for microwaves, the over the range design won't work for everyone. Most manufacturers now have combo oven and micro wall units that you can have installed at the proper height for you.

3). Floor:

To keep a bounce in that step without putting in a new kitchen floor, many pro chefs turn to rubber mats. We found a more attractive variety in the GelPro Chef Mat. It comes in a range of fatigue-fighting sizes, colors and styles - from ostrich to basketweave, starting at \$100.

Serious chefs can also install rubber or cork flooring to cushion sore legs and feet.

4). Set up:

Triangles still rule kitchen design, with preferred set ups of the fridge, oven and sink forming this shape. The reason? Ergonomic of course. But while a triangle approach will work in most instances, it's not for everybody.

Thankfully, there are other ways to make sure your placement will work for you.

"Think twice, twist once... Think about what's adjacent when you locate your appliances," says Robare. "The dishwasher should be next to the sink and near the cabinet where you store your dishes."

For daily use items, placement matters just as much.

Jane Crump from Viking Range Corporation, suggests the "Point of first use" rule. Like so much in ergonomics, it just makes sense: Keep items stored near the places where they are first used.

Robare offers examples, "Hang your pot rack over your sink instead of the cook top or island – you will appreciate letting the pots drip here instead of across your granite counters. The coffee maker should be under the cabinet where your coffee mugs reside, and the refrigerator should always have a landing space next to it."

5). Extras:

As you can see, placement is everything. And just because every home improvement store touts the micro over the range look, doesn't mean it's the right way for you to go. The same is true for our most oft-used appliances and cupboards. Take the refrigerator and its sister freezer unit. Maybe a tall single unit works for some, but shorter people, or those in a wheelchair, can look for the right solution in separate, under counter drawer, fridge and freezer units.

Our tip for the best place to spend more and revel in ergonomic bliss? Cupboard organizers and pullouts. No one likes bending and hunting through stacks of pots and pans to find what we need. Investing in deep drawers with fully extended pullouts eliminates the hassle. Many inserts can be retrofitted into existing drawers too, and such space-saving, back-saving solutions are available in price points from IKEA to Bulthaup.

URL: <http://www.purecontemporary.com/FeatureArticle/article/143>