



# ERGONOMIC KITCHEN DESIGN

**Ergonomic is a buzz word we hear bandied about a lot when it comes to design. But what does it actually mean when applied to a kitchen? It means that the kitchen has been designed in a way as to maximise functionality and ease of use. An ergonomically designed kitchen will focus on optimising the time and energy of the user by cutting down time wasted moving from work station to work station, getting things out of cupboards and finding storage.**

The modern family spends more time in the kitchen. Surely then it is worth while ensuring that the space is not only aesthetically attractive but practical too. The layout of the kitchen should prove its worth in your day to day activities. Good work flow, proper storage and comfort of motion for those working in the kitchen should be key aspects of the design.



Before a designer can implement an ergonomic design plan for you they must consider the following:

- the dimensions of the space
- where are the available connections for water, waste and electricity
- what scale of storage space do you need – do you have a pantry or larder which can act as off-site storage?
- what is the size of the household – how many people will be in the space at one time?
- What are your habits – do you entertain a lot, do you eat out, do you shop monthly or weekly?

- What kind of lifestyle do you have – is the kitchen mainly for show or do you cook every night, is the kitchen a congregation point for friends and family?

Good workflow enhances convenience. A well laid out kitchen can save you time and energy. This is because everything has been stored where you need it and within easy reach. It is important to start with the proper counter top height. The distance between the user's elbows and the counter top should be 10-15cm. Although a standard counter top height is 900mm if you are taller or shorter than average don't hesitate to ask your designer to adjust the counter top height so that you, as the primary person working in the kitchen, can do so safely and comfortably.

Having enough free workspace for food preparation is also vital. Your designer should ensure you have at least 900mm of uninterrupted worktop area. For optimum efficiency this should be between the sink and the hob or stove. Having free space next to the hob / stove is vital for placing food that will go onto the stove or that has just come off the stove. The addition of a trivet to this section of work surface can also be advantageous as it will ensure you don't place hot pots onto the work surface damaging it. Tall units should preferably not break a run of open work surface and be at the end of a bank of cupboards. This enhances the sense of space and flow in the kitchen.

There are two ways to divide your kitchen space. The first is the work triangle. This states that for optimum efficiency the kitchen layout



should have 3 key points: **the stove or hob, the fridge and the sink**. By keeping these key areas in a triangle configuration in relation to one another you enhance your optimal work flow ensuring there is not a bottle neck point if more than one person is in the kitchen.

The other way to breakdown an ergonomic kitchen is to divide it into five zones. The zones are: **consumables, non-consumables, cleaning, preparation and cooking**. These zones should be arranged clockwise for right handed people and anti-clockwise for left handed people. Of particular importance here is the placement of the dishwasher which should be to the left of the sink for left handed people and to the right for right handed people.

When planning your storage your more regularly used items should be stored close at hand to the primary work space areas. While draws work out more expensive than cupboards to manufacture they offer better ergonomic storage solutions. By placing drawers of various depths under counter you increase the accessibility and ease of use of your storage. There are many storage solutions for drawers that compartmentalise the space helping you store things neatly. Things like pots and pans, plates and bowls, that usually go into a cupboard, can be stored more efficiently in a drawer with the right internal accessories.

Those seldom used items can be stored away from your work space area and in the higher eye level cupboards. To avoid ducking and diving and potential injury you should consider flip up doors for some of your eye level cupboards. The mechanisms are easy to use and open without disrupting the movement and access in the

kitchen. To maximise user friendly storage full investigation should be done into the storage solutions available. These can make awkward corner units fully accessible, put your pantry cupboard into order and offer sensible solutions on how to store your spices, cleaning materials and trays.

If you have opted for a built-in oven or microwave it is vital that they are installed at the right height. Their placement should be based on the user's height. The user should be able to open both units and see into the oven or microwave with ease. If either unit is too high it will not only place strain on the back and arms but you run the risk of spilling hot liquid on yourself when removing food.

Plug placement is also an important consideration. You want to be able to take stored equipment (like mixers and blenders) out and use them where they are stored without having to lug a heavy piece of equipment across the kitchen. The addition of a hidden pop up plug point in an island unit can also be very useful.

Finally, don't forget your lighting. No matter how well laid out your kitchen is it is impractical if you can't clearly see what you are doing. Lighting can be added for both practical and aesthetical reasons but ensure your key work preparation, cooking and sink areas are well lit so that you do not have to strain your eyes while working.

*With thanks to the following KSA members:*

