



THE IMPORTANCE OF A PROPERLY CONSTRUCTED CUPBOARD FOR A DURABLE QUALITY KITCHEN

The kitchen is one of your most expensive investments in your home and it is important to know what to look for when purchasing your new kitchen. Most new kitchens look great when completed, but it is what you can't see that is vital for the durability and proper functioning of your kitchen. As a layman, by doing some homework, there are many items you can check yourself or with your kitchen company to ensure you get the right product for the right price.

One of the biggest failings we have is to try and buy cheap but still expect the best quality. If one item is cheaper than another but they appear the same there is a reason. These cost cutting measures are often found in the hidden places which the customer does not see.

The three main components of the kitchen cupboard are: The cupboard or carcass, the door, and the hardware.

The cupboard is the foundation and basis of the whole kitchen. So, what should you look for in a quality carcass construction?

- The quality of the material used in the construction. Are the materials SABS approved?
- The design and construction method used in the cupboard
- In high humidity areas is the construction the same as in dryer areas
- The accuracy of the manufactured cupboard.
- The type of construction method used.

Most cupboards are made from melamine faced particle board or "chipboard". Always ensure that a quality particle board is supplied. There are 2 major manufacturers of particle board in South Africa, and both are of good quality. Unfortunately there are now many inferior types of particle board entering the South Africa market.

There are simple testing methods to determine a good quality particle board. Particle board or chipboard is made up from pine and eucalyptus chips in a mainly 60/40 split. These have been placed under very high pressure to create a dense product. Poor quality particle board uses other "filler" materials and is made with less pressure placed on the material. Most local kitchen manufacturers use 16mm board whereas the imported kitchens use mainly 18mm.

The kitchen cupboard is a piece of furniture and a strong cupboard uses the principles of box construction which has been tried and tested over many years in the furniture industry.

A properly constructed cupboard is made up of:

- 2 sides or (styles) with inset grooves at least 10mm from the edge at the back for the backing board.
- A full size base also with a groove for the backing board.
- A full size top or, 2 rails of at least 100mm wide with an inset groove at the back for the backing board.
- The backing board is at least 3.2mm thick and will fit inside the grooves within the frame to assist in and keeping the cupboard square.
- The backing board should be at least 10mm in from the back to allow airflow behind the cupboard and not touch the wall.

- The sides or (styles) and rails which touch the wall at the back should be edged to assist in preventing any moisture or damp coming into contact with the cupboard

If you live in a high humidity area it is important to keep any moisture out of the cupboards as water is the biggest enemy of particle board and causes it to swell like a sponge. Ensure all exposed particle board is covered and sides are edged properly, even those sections hidden away from sight. Try to use a water resistant particle board if your budget allows. Wooden veneered panels must be treated and sealed properly. It is important to remember that it can take a brick building at the coast up to 4 years to dry out from the water in the brickwork and cement. This moisture seeps out in raw areas like the unpainted areas behind your kitchen cupboards. This, in turn, can penetrate your cupboards if they are not sealed properly.

The accuracy of: the measurements; correct and consistent sizes of cupboards; clean cutting of panels without chips; 'squareness' of the units; quality of products used; attention to detail; and the cleanliness of the factory, will give you an indication of the quality of the machinery and the skills of the company you are dealing with.

There are 5 main methods of carcass construction and assembly.

- **Screwing panels together** and nailing a backing board on the back – The simplest method is to join the different components by using screws, or even worse nails, and not having a backing board; or just nailing the backing board to the back of the cupboards. This is the cheapest type of cupboard construction and simply will not last. This type of cupboard is assembled with minimal machinery.
- Using **dowels and glue** to join panels with a slot at the back to slide a backing board in. With the correct machinery and doweling jigs this method can give you a very strong and accurate cupboard. The backing board, once slotted in, aids in pulling the cupboard square and assists in its strength. This method requires more expensive machinery in a proper factory setting.
- Using **lamellos or "biscuits"** to join and glue panels together. This is similar to joining and

gluing with dowels but instead of a dowel a lamello or biscuit is used to join the panels. This is a very strong method of assembling a carcass.

- Assembling cupboards by using **'Knock down' fittings**. This is a popular method as the cupboard is transported to site in a dismantled form and assembled and screwed together on site. The panels have fittings inserted in them available from various kitchen hardware suppliers to facilitate easy assembly. Again, proper specialised machinery is needed to prepare the panels for the fittings. The downside is that not assembled properly the cupboard can be unstable. There are also many various knock down fittings on the market in different price and quality brackets. By ensuring the fittings your kitchen company is using are coming from a reputable company with a guarantee, you can be confident that your cupboards are strong and durable.
- Assembling by a **combination of dowels and knock down fittings**. This method combines the ease of transport and assembly of a knock down unit with the added benefit of dowels which should be glued in giving the accuracy and 'squareness' of a good cupboard.

In conclusion, to ensure that the cupboards made for your kitchen are going to last a long time it is important to do some homework and understand what you are getting for the money. Be aware of what construction methods are used for your cupboards and don't be afraid to ask the questions. When comparing quotes ensure you are getting the same quality of carcassing in each quote.

Know what the out of sight parts of the cupboards consist of to protect yourself from any nasty surprises.

Written by Andre Hacquebord
– KSA installer's course lecturer

With thanks to the following KSA members:

