

# KITCHEN EXTRACTOR HOODS 101

## THINGS YOU NEED TO KNOW WHEN PURCHASING

### AN EXTRACTOR HOOD

This is a free report and its intention is to give you the client as much information to make an informed decision when purchasing an extractor for your kitchen. Please feel free to make copies and forward it to your friends as to make their purchase a fun and informed one as well.

Thank you.

#### **PLANNING:**

It is important to consider planning early rather than later as the timing of your purchase is important. It is our experience that often the extractor is an afterthought and this can turn your purchase into a nightmare. First of all one should know if the extractor is to be hung on the wall (wall extractor) or from the ceiling (island extractor), this is very important as one needs to know the placement of the power point. Secondly a decision must be made as to the extraction method, recycled or ducted. This is the most important step as it will determine the extraction efficiency and also one would have to consider a dropped ceiling for the ducting pipe. If one decides not to duct and use the recycling route one has to consider the replacement cost of charcoal filters as these have to be replaced at regular intervals (6-8months). As you can see this is only the beginning of the extractor consideration, it is my intention to give you all the info to make your purchase fun and efficient.

#### **NEW BUILD:**

You have decided to build a double story home and the kitchen is on the ground floor. As your home has a concrete slab you may ask your architect to consider placing the ducting pipe in the slab, in our experience this is a very difficult option as the planning and exact placement of the extractor is crucial. Remember at this stage you don't have a kitchen design plan yet. Many architects will suggest a lowered or drop ceiling. The technical specification of the extractor unit will give you the ducting pipe diameter and that specification will assist you in determining the gap between the slab and the dropped ceiling. Generally a 200-300mm gap is sufficient.

If the extractor is to be placed hanging from the wall a hole in the wall is needed for the ducting pipe and the power point must be correctly positioned behind the chimney of the extractor hood. Many mistakes are made at this step. The power point must be placed relatively high as it could end up behind the extractor body and not behind the chimney, then last minute chasing and alterations are needed. We suggest a power point height of 2400mm off the floor in the centre of the chimney of the extractor hood.

#### **REVAMP:**

Planning is very important here and allot of what has been discussed goes for revamp projects to, ceiling, slab no slab, power point placement est. At this point it is good to look at ceiling heights as most domestic extractor units have a maximum length that the chimney can extend to and for efficiency one should only hang the unit to a maximum of 800mm of the worktop. Some suppliers do have chimney extensions but please make inquiries to how the pieces fit together before you purchase the unit. One can obviously consider a dropped or floating ceiling to overcome the problem. Standard ceiling height is 2700mm but many Tuscan style homes have ceilings in excess of 3000mm. There are many extractor units on the market we will show you in this report how to choose the best unit for your home.

In South Africa we have many brands to choose from and it is important to know which extractor in each brand is suitable for your application, room size, design est. By asking these simple questions you can make an informed decision.

#### **1. Size of the kitchen(room)**

This is probably the most important question as it will determine whether the extractor will do its function efficiently. You ignore this step and you will find yourself with a pretty expensive light fitting. The specification for domestic kitchen extraction is that the motor must be able to replace the air in the room 10

to 15 times in one hour. It has been determined that this factor is efficient to clear the room from smoke, residual gas and smells and so doing alleviate any health risk to yourself. Use the following calculation to determine the size of the motor to do this function.

Length of room in meters x width of room in meters x height of ceiling in meters = cubic meters of the room (LxWxH=m<sup>3</sup>)

Example: 3meter x 5meter x 2.7meter = 40.5m<sup>3</sup> now take this figure and multiply by 10 gives us 405m<sup>3</sup>/h motor we need to clean a 40.5 cubic meter room 10 times.

If this room is an open-plan kitchen then multiply the figure (40.5m<sup>3</sup>) by 15 and that will give us 607.5m<sup>3</sup>/h.

In our experience you would rather go to a slightly bigger motor say 750-800m<sup>3</sup>/h to have a little extra for when extra smoke needs to be cleared away. You then also run the motor at a lower speed on average which in turn will give your extractor a longer life and your extractor can do its function with less wind noise. As you might have noticed that this is a relatively small kitchen of 40.5m<sup>3</sup> and we need quite a bit of power already, that's why so many people say the extractor does not work, they buy the brand name but not taking the time to select the correct size motor, and Wahlha you have a glorified light fitting.

## **2. Grade of Stainless Steel**

There are essentially two grades used in the domestic extraction market. Grade 430(17/0) and grade 304(18/10).

Grade 430(17/0) has 17% chrome and 0% nickel in its content and is more susceptible to rust. Not recommended for coastal conditions. The steel colour is dull grey and is used in products with a smooth shiny finish.

Grade 304(18/10) has 18% chrome and 10% nickel in its content and is less susceptible to rust. Recommended for harsher coastal conditions. The steel has a gold nickel sheen to it and has a grain on the face of it and is used in the more expensive appliances. If you cannot distinguish between the colour of the two grades the magnet trick will help. Take any fridge magnet, if the magnet sticks to the steel it is the lower grade because of the lack of nickel (0%) in the content. The higher grade has 17% nickel and is non magnetic. Now you can teach a salesman or two about Stainless Steel.

While we are on the subject of Stainless Steel we need to discuss the thickness of the metal used in the domestic market. The thickness ranges from 0.7mm to 1.2mm, most extractors are made in 0.9mm which makes for a stiffer product and one will notice less warp in the metal surface, however some importers have gone the lower price route and use the thinner steel to reduce the cost. Touch and feel the weight of the unit when looking to purchase. The metal will bend easy and product will be lighter. Stainless Steel is sold by weight therefore it makes sense that the lighter the cheaper.

## **3. Design and shape**

You have now selected the motor size and you have made sure you have the right grade and thickness of stainless steel, you now have less range to consider as you have eliminated many.

The shape and design comes into play and when looking at your kitchen design the extractor should be part of the design to add to the aesthetics. The idea is that the extractor must not look out of place and to really complete the whole picture. Keep in mind that some claim that a motor fitted externally in the roof or outside under the eave is more silent. Our experience it is that the wind rush makes the noise and the motor without its fan blade is absolutely silent. It is true then that the more power the more noise but in tips and trick I will show you how to overcome this issue.

## **4. Ducted or recycled**

As discussed in this report the decision to duct or recycle is one to make at inception as the ducting pipes have to be hidden. I would now like to explain the reason for ducting versus recycling.

When we use the extractor in recycling mode it means that the machine is sucking the air through the grease filters first and then through the activated charcoal filter or filters. The charcoal in the cartridge is charged or activated to attract particles and absorb it in to the charcoal thus eliminating the smell. The down side is that the charcoal filters will get saturated over time depending on your cooking habit and they have to be replaced. The factory recommendation is around 6-8 months and this can become costly. As these filters get saturated the airflow decreases and the machine is less efficient. The lack of air flow can also reduce the lifespan of the motor as it depends on airflow for its cooling.

In some cases it is the only way to go but we find with good planning many could have been ducted. Ducting the machine eliminates all of the above, the motor can stay cooler and you don't have to concern yourself with replacing charcoal filters, wash the grease filters in the dishwasher every 6-8 weeks and that's it. Ducting also has the big advantage of displacing the air and creating a low pressure over the cooking area thus bringing nature into play where the high pressure will start to push the low pressure making for efficient extraction. It is important to try and not reduce the diameter of the ducting pipe and to match the size to the extractor motor outlet in so doing allowing for maximum airflow through the motor. Rule of thumb for ducting installation is the shortest distance least bends and biggest diameter and the outlet vent must also match the ducting pipe diameter.

## 5. **Installation**

At this stage you have the extractor at home and this baby needs to be hung. I say baby because the unit has to be hung with the greatest of care. This is where scratches and dents happen and it can totally spoil the overall look. It is advisable to ask your supplier for an accredited installer or phone the importer for help. Now we look at the surface on which the extractor unit will be hung. There are a few pitfalls you should be aware of.

**Wall no tiles or cladding:** If extractor is to be hung on a wall with no tiles the machine can be hung flush and simple. Follow installation instruction in the box.

**Wall with tiles:** is a little more tricky. If extractor is hung on wall and you tile below then it is also straight forward but please DO NOT tile around extractor for this reason, if something goes wrong with the unit and it has to go back for repair you will sit with an extra cost of replacing tiles.

**Wall with granite:** when there is granite or acrylic cladding on the wall the extractor will be mounted on top as if on plain wall, drilling is a little harder but if your installer is experienced he will have the correct drill-bits to drill even porcelain. Please note that because of the thickness of granite (30mm) if granite or any other thick cladding is used as a splash back under between the extractor and the worktop you have to make sure the granite does not interfere with the light fittings on the extractor. Many extractors have their lights in the front now. Please take note of power point placement.

**Glass on wall:** this makes for a stunning alternative wall cladding method but it comes with extra planning. For one the bracket holes have to be predrilled into the walls, which means the extractor is basically pre fitted and then removed to allow the glass guy to make a template to suite. The holes are drilled in the glass at the glass guy's factory and the glass is then hardened and installed. The extractor is then fitted on top. Remember also the power point has to be correctly placed before template is made.

**Splash-back:** the splash-back is a panel placed between the extractor and the cooking surface to prevent food splashes on the wall. Various materials can be used for this purpose from Tiles to Glass. This panel is a maximum of 800mm tall and depending on width of extractor 600, 700 or 900. In some ranges you get extractors up to 1800mm wide. Again look out for thickness of material used not to interfere with light fittings.

## TIPS and TRICKS

Your extractor is now perfect and it looks great, here are some tips and tricks to make life easy.

When we start cooking first we have a tendency to see how well our extractor works sort of bragging rights and we throw every thing at it. Sometimes we are disappointed, remember in the report we spoke of room size, well sometimes the room is just too big and you won't find a perfect extractor to suite. The trick here is to start the extractor when you prepare your food and not when you start cooking. You will overcome the weight of the air (inertia) and start to create the low pressure, soon the high pressure will come into play and you probably would not need to go to a higher speed for your whole cooking time.

Next after you finished there is still cleaning up. To make cleaning easy and to get rid of fingerprints you can use a little baby oil or better still some Q20. This product is an oil remover and is non static and will make cleaning a breeze. Just spray some on and wipe excess off with a piece of paper towel. Please note if your extractor has a non fingerprint coating then refer to the product manual for cleaning instruction as Q20 may remove the coating.

Stubborn stains and particles is easy to remove with some talcum powder (baby powder) and will normally sort out any problems. Do be careful to use any abrasive products and if you must, use a product like scotch bright but go with the grain to minimise scratching.

Remember it is an electrical-mechanical product. It is recommended to use a surge protector and to clean the filters often. It is perfectly safe to wash grease filters in your dishwasher. Do not forget to replace

charcoal filters every 6-8month if your extractor is in recycle mode this will maintain a efficient system for years.

TO SUMMARISE

PLAN: start sooner than later, ducting, electrical power point placement.

CALCULATE: room size L x W x Hx10 or 15 equals motor size

GRADE OF S/S: 430(17/0) or 304(18/10)

DESIGN: pick a unit best suited to the design of kitchen

DUCTED Vs RECYCLED: decide at planning stage

DUCTING: make sure ducting diameter matches motor outlet

INSTALLATION: watch thickness of splash back not to interfere with extractor lighting

We hope you use the information for a more informed decision and that it will make your extractor purchase less complicated and fun.

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