



## **Noise Levels** – An information sheet from The Dens

Definitely our biggest complaint over the years is noise levels, the recent new trend of having glass door refrigeration is popular but a lot of people really do not know what they are buying, as it was never really an available product for home applications 10years ago.

Now that it is very popular you have to be wary of the location you are placing it and what noise levels it does run at. Everyone's perception of noise is different and so it makes it difficult to explain noise. A common metric is the 'Decibel Rating' known as Db, this gives a figure that can be compared to other appliances to help get an idea. The scale is very odd to understand as about 25Db is actually nearly silent, 36>43Db is a household fridge, yet only 55 is like a microwave. See chart we compiled using basic household items in 5 x different homes and taking the medium.

There are many variables that can alter the noise level of your fridge, we have talked about fans but the main compressor can also be the part that causes the grief. Depending on compressor type or size they can still run from 39>55Db, so even with quiet fans you may still have times of higher levels of noise during run times. Other variables are things like the room unit is located in, a 'hard' room with hard wood floors will reverberate noise much more than a soft cushiony type carpeted room. The cavity where the fridge sits also can cause more noise enhancement so little things like 'lining' the rear wall with foam or sitting fridge on rubber mat can also make a difference. Triple glazed and Solid Door units also keep inner noise inside better and units with plenty of space 'in front' of them can also be slightly less noise than if other things are close to them.

Alfresco fridges used outdoors work extremely hard and build up a lot of heat during normal cycling up/down in hotter ambient temperatures. What this means is that bigger fans are needed to expel the extra heat in a timely manner so the unit can run efficient while chilling, so in general alfresco units will be louder because of this reason. We can alter fan system in these too quieter, but quieter means slower RPM (Revs Per Minute) and less air movement making it take longer to get units down to temperature, hence more power consumption. So we can make units quieter and they are still ok but the trade-off is more energy consumption.

This same principle applies to commercial units which often have many door openings and high usage so quicker chilling function is better for units in harsh applications.

So anything is possible and we do plenty in this area to make units as quiet as possible and to offer options, there are just all these things to consider before you make such a high \$\$\$ purchase.

As you can see a hair dryer is 80Db, now that is loud, very loud, yet room noise is only 30Db, this is a room with nothing on or going, basically nothing.

Domestic fridges can range from 36 to 43 depending on brand and compressor and age, an older fridge often runs with a noise that you just get used to, but most are no more than 43Db.

We have a lot of units that we specially fit 12V quiet (Silent) fans to, these are from an Austrian company and run silent at 20-29Db, really making noise levels very low. We also have more commercial type quiet fans that run at 39Db compared to standard commercial fridge fans at 55Db. As you can see from chart the difference between 39 and 55 is huge.