

7 Things you **MUST** know before buying a **NEW** heater for your home – The dirty little secrets no retailer, builder, plumber or electrician would ever tell you!

It's getting cold and your old heater just isn't cutting it anymore. Time to get some quotes for a new one, right? WRONG! It's time to sit down with a cuppa, and educate yourself. The more you know about heating (and cooling) the better decisions you can make for your home and family. There are so many specials right now "PRE-WINTER SALES" "Upgrade now and receive a 5 kW for the price of a 2.5kW...." Blah, blah blah.... They sound too good to refuse right? Plus, you were thinking about upgrading anyway, and why not support a local business when the times are tough? Well stick with me... In the following report I'm going to address some key points that most of us don't think about when our heating has broken and we need a new one fast! Hopefully your heating is not broken... but in Melbourne we have just experienced our first taste of winter while we are all stuck at home and maybe your old faithful just isn't doing the job, she use to.... Here are some vital facts you must know before you jump on google and get the next available tech to install your new heater!

1. There are many different types of heaters out there. Some offer whole home comfort, while others might be designed to warm a particular space. But.... you know this right, you can buy a space heater from a retailer, plug it in and off you go...instant heat! Or you could have a ducted heating system that with a touch a button warms your whole home. We all remember the commercial where the ducks sit in the floor and blow out warm air (insert cute rubber duckie here). But, have you considered the method in which your particular heater delivers this heat? There are basically only two types of heaters... Those that BLOW warm air, and those that deliver RADIANT HEAT to a space. They both warm your home...so why should you care?

If you or any member of your family suffer from allergies, asthma or are concerned about dust mites, allergens, VOC's and bacteria circulating in your home than you should care!

Hydronic heating is the only heating approved by the Asthma and Respiratory foundations in Aus. and NZ and is #1 around the world.... It's because it delivers radiant heat, no blowing air (treated or not treated) around your home. Hydronic heating is the Rolls Royce of heating. However, Hydronic heating is not for everyone and I'll explain why later...

In summary; RADIANT vs. BLOWING AIR is the first thing to consider when thinking about buying your next heater.... Below I have put into dot points some examples

RADIANT HEATERS	BLOWING CONDITIONED AIR
Hydronic heating	Ducted heating/cooling
Oil heaters	Split systems
LPG heaters	Electric element (Fan forced) space heaters
Wood fire (with NO fan)	Wood fire (some may have a fan attached)
Gas log fire (with NO fan)	Gas log fire (again, may have a fan attached)

2. Not all of the “same types” of heaters are created equal!

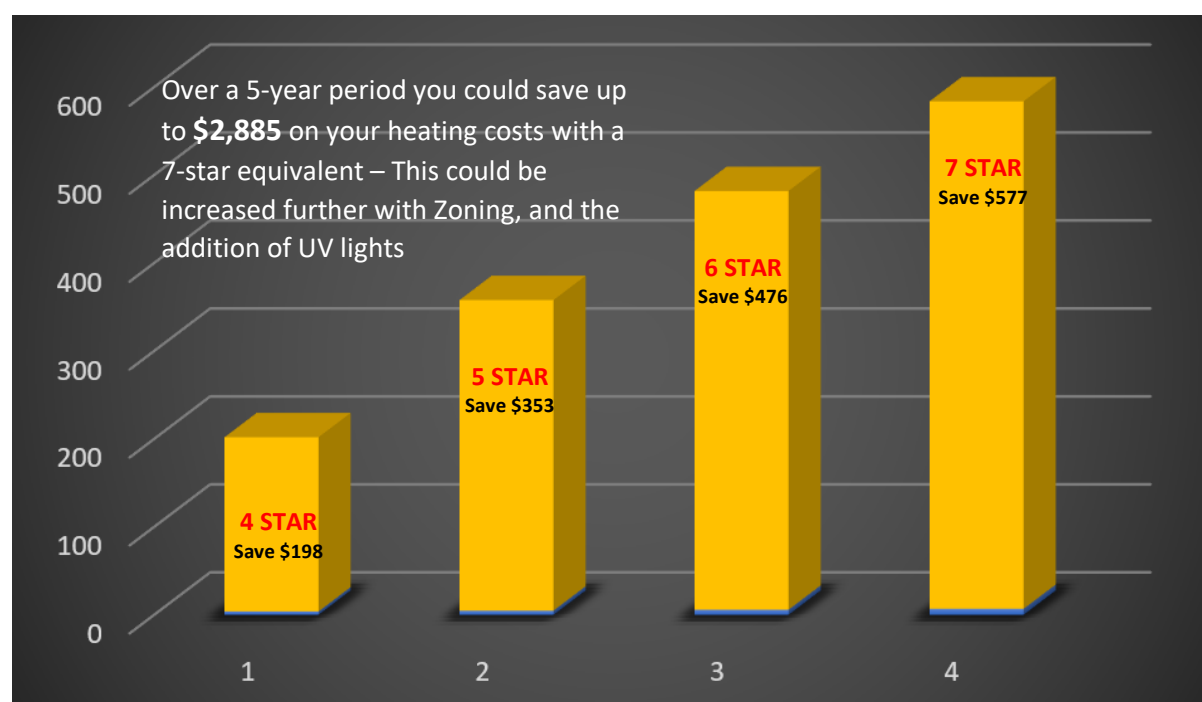
We’ve all heard of star ratings? *****Energy consumption, and efficiency...they are all terms that get tossed in the air when we are buying new equipment. Well if you are in it for the long haul, energy ratings **should matter!** They can save you big money if you are planning on living in your home for an extended period of time. If you are planning on selling, doing a quick flip, or want to get something into your rental cheaply and quickly that just works....Just skip to the next section, this isn’t for you.

Australia has an energy rating scheme that helps you (the customer) choose energy efficient appliances. The more stars, the greater the efficiency = The greater the savings. What does it actually mean in numbers?

Every 1-star increase is roughly a 10% energy saving. Australian standard states a maximum 6 stars for ducted heaters. However, there are 7-star heaters out there! This means they are more efficient than the maximum! Unreal right? But how much \$ does that put in your pocket?

If you compare 4,5,6 & 7-star ducted heaters with a 3star model over one year you will see the following savings.

Table 1 -ENERGY SAVINGS OVER 12 MONTH PERIOD



(Please note we have not included BRAND or models purposely in this report, however the information included was accurate from our suppliers at the time of publishing. There are variables to consider like energy prices etc... however, it demonstrates the savings to be had when choosing units of higher star ratings).

In summary, if you are looking to stay in your home for an extended period. Don’t discard the star ratings. They will save you money and in some cases these savings pay for the equipment themselves over time. It should be a no brainer!

3. BRAND MATTERS! There are many trusted brands that we have come to know when it comes to Heating and Air conditioning equipment. Now I'm not going to name drop one single brand here but you **MUST KNOW BRAND MATTERS!** It might not be for the reasons you first think. You need to look at BRANDS in two ways. First MAJOR BRAND Vs. MAJOR BRAND. Secondly MAJOR BRAND Vs. Small/unknown – foreign brand.

When we look at Major brand vs. Major brand, we can be pretty confident that either way we go we are going to get a pretty good, reliable product. But what we need to look at here is will it suit the job I need to do? Is it in my budget? What type of "Premium" or free gift do I get with one vs. the other, and which is more important to me and my lifestyle. We can then look at warranties. More importantly, is the installer a "BRAND NAME" dealer...and can they help me with any warranty issue I may have in the future. This might not seem important, but if you're getting a new heater and you have issues down the track...trust me...its easier if you can go back to your installer and have the problem resolved instead of trying to find a local warranty agent, getting them out (another stranger in your home) getting them to assess the problem with little to no history of you or your equipment.

Then we have MAJOR BRAND vs. Small/unknowns. The big issue here is after care. MANY and I mean MANY of the smaller, generally cheaper units that are installed in our homes today have a common problem and that is parts. If something breaks down, (manufactures fault/installers fault/ or no fault of anybody) in many cases we can NOT get replacement parts. By "WE" I mean ANY refrigeration mechanic, plumber, electrician, HVAC company in Australia. This means, if a small thing was to fail...unless a part can be custom made ("YES" I said the word custom, so it's probably going to be expensive) then the whole unit will need to be replaced. That is going to now cost you twice as much as it would if you spent a little extra in the first place on one of the bigger brands. So, in summary BRAND MATTERS...Don't be a fool.

4. The retailers TRAP! So, you've walked by your appliance store, or you've searched online and you found that heater at a fraction of the cost that Mrs. Jones paid to have it installed in her home only a month ago. It's a brand name heater and the guy behind the counter (let's call him Joe) goes on to tell you about energy consumption, warranties blah blah blah....and he can give you 24-month interest free! Hell...He can even give you 36months interest free & BONUS he can arrange the installation! All too easy right? WRONG!

Joe isn't trained in HVAC. Joe isn't even an electrician. Heck, he's not even a plumber! He's a sales guy! And he just SOLD you! The problem with this is that he just sold you a heater that's totally undersized for your intended use. He didn't inspect your home, or even your floor plan, so he couldn't have carried out a heat loading report to determine the minimum size you needed for that space. Which also means that warranty he sold you... IS NO GOOD 😞 His installers are not agents and you don't know who to call when something goes wrong...but because the unit is undersized it's not fit for purpose it means your warranty is worth nothing! You're now paying off a heater for 36months that's not even working- Thanks Joe 😞 But I guess he was just doing his job. A costly mistake...The retailers TRAP, and another reason why you should always go to a professional to get the job done right in the first place.

5. The HVAC technician's checklist Now, this is some good stuff right here. If you're enquiring about a new heater and the guy/or gal who comes out simply measures the room. Looks around a bit and tells you they'll get back to you with this month's special and leaves... I want **RED flags** to start going up! Sure, they look the part, they have probably been doing this for years and might know what they are looking for...Maybe they don't like to talk a lot. When you get the quote everything will be explained in there?! The truth is...They don't need to speak much, but they need to **listen**. To you! What are your needs! You called up asking for a new heater I guess they know that...but WHAT DO YOU NEED?

Below is a checklist from a Top HVAC Specialist in Melbourne. It's used before they quote on a new heating system for any customer.

NEW SYSTEM CHECKLIST			
REMEMBER TO CHECK		Yes	No
1. Location	Is natural gas available?		
2. Design	Is it double story 'D' or single 'S'		
	Is it open plan?		
3. Access	Is there access under house		
	Is there roof access?		
	Outside access?		
	Other notes		
4. Age/Condition of home	Indication energy rating?		
	Tightness of home Good,Fair,Poor		
	Good ventilation?		
	Is the home insulated underfloor?		
	Is the home insulated in the roof?		
5. Current systems	Heating		
	Cooling		
6. Assessing customer needs	Would they like Radiant or Blowing heat? R or B		
	Do they live alone or growing family?		
	How do they use the home?		
	Will they need zoning?		
	Are they concerned about increasing energy bills?		
	Do they care for WIFI or programmable controller?		
	Future Cooling options discussed		
	Design considerations, and possible locations of unit		
7. Room sizing	Heat load calculations		
8. OTHER NOTES			

Now remember earlier I said Hydronic heating is the world's best heating? Well it is! However, you need to consider how you want to power it. Its cheapest on natural gas – actually around 35% cheaper to run than a ducted system. If this checklist revealed that natural gas is not in your area...Than hydronic heating would have to be on LPG or wood fired. Which means you need to

consider how much you pay for LPG in your area (and if its available). If you're considering a wood fired option, then you need to understand you will be splitting wood and must have this available.

6. Add ON's! I know what you might be thinking... "I don't want to be up sold. I just want my heater- and that's it! No extra bits and pieces just a heater that works for a fixed cost". I think that many technicians or HVAC specialist feel the same way. They don't like Add on's. But what if an add on today could save you \$1000's in the future? What if an add on was the difference between your 5-year-old child suffering with allergies and not suffering at all? I want to know about options, even if I don't decide to take them. That's my choice. With heaters I bet half of the people reading this don't even know about the following optional extras (that can be installed with/or adapted to most domestic heaters).

1. Programmable controllers – Who wants a new ducted heater installed but is still ok to get up in the morning and turn it on? Now who wants the same heater that turns itself on and off because it running on a program you set up for the whole winter!
2. WIFI – it's not for everyone but it is the way of the future. Who wants to be able to switch the heater on from wherever you are because you are coming home early...its -2 degrees outside and you don't want to come home to a cold house! I do!
3. Zoning – the kids are off to uni next year so you're not going to need to heat the whole west side of the house. You want to be able to control that right? Instead of heating the whole house and spending \$\$\$ on heating rooms that don't get used.
4. Cooling options – Many whole home solutions heat and cool. However, it's not always standard that the cooling option can simply be just "added on" later when you need it. If you don't discuss these options with your installer when they are doing your heating, they might undersize the duct work – which means when you want to add your cooling, you have to replace all you ducting too! This is not smart and means you're paying twice!
5. UV Lights – These are pretty cool, and I bet most people don't know that they can be installed in your heating and cooling system to improve your indoor air quality! UV lights kill 99% of bacteria, viruses and mould spores that either grow or pass through your air handling systems. If that was not enough, they also reduce bad odours, and increase the energy efficiency of your system saving you money on bills and maintenance. If you haven't heard of them before they will blow your mind! They can be installed in most domestic heating and cooling systems.
6. Filters – Return air filters are again, so important when it comes to improving indoor air quality of your home and keeping your loved ones safe. Most refrigerated systems have filters...but, not all filters are created equal. Different types of filters such as MERV and HEPA filters exist and both trap different size bacteria and allergens before they get blown throughout your home. Filters also need to be cleaned and replaced regularly to maintain their effectiveness.
7. Humidifiers – Understanding and monitoring your homes humidity is extremely important. By keeping your home at optimal humidity, you can avoid that "dry, chapped" feeling. You can also avoid mould and allergen problems in your home. In fact, dust mites die at humidity levels between 40 and 50 percent, so keeping your homes levels above 40 can really help allergy sufferers. Whole home humidifiers can be integrated into your HVAC system. Customers who have introduced whole-home humidification systems to their spaces report warm rooms in the winter, plus lower energy bills. That's because humidified air feels warmer without turning up the heat!

So, Add on's are really not that bad. It's better to know, and be better educated about our options than just closing our eyes and letting someone else make important decisions for us.

7. Lastly, but certainly not least...**NOT ALL INSTALLERS ARE CREATED EQUAL!**

Do you go with a bigger company, the local company, or your mates' brother in laws friend who can do it really cheap because he has no overheads and works out the back of his beaten-up van? There are many people out there happy to sell you a heating system. But again, not all installers are created equal. Generally, in life, we get what we pay for! Now I'm not telling you to go with the most expensive...but just to remember that. Things you need to understand are:

In Australia to become a qualified refrigeration mechanic takes over 4 years. A refrigeration mechanic is able to design, install, fault find, repair, replace and conduct preventative maintenance on MANY different brands and models. They have their ARCTIC licence, and are able to purchase and sell refrigerant.

Many Plumbers or Electricians have just completed a short course and have gained their splitty ticket – They can install yes. But remember....They have NOT completed 4 years study on heating and cooling – They DON'T have the design knowledge and they can NOT repair, fault find, or purchase or sell refrigerant.

Now the question big company or small company. Again, I can't answer that...but, I can suggest you go with a company or sole trader that can offer you the following;

- **They have a long workmanship warranty** (All general **plumbing** greater than \$750 in value attracts a six-year **warranty** on workmanship as per the **Victorian** Building Association Standard AS/NZS 3500.)
- **They have good guarantees** (They offer you VALUE)
- **They are Licensed and security screened** (It's important to trust the people you are letting into your home).
- **They are a branded company**
- **They have been in business for more than 10 years** (The reasoning behind this point is simple -FACT, one in three new small **businesses** in **Australia** fail in their **first year** of operation, two out of four by the end of the second **year**, and three out of four by the fifth **year**. So, there is a fair chance that the unbranded man in a van offering the cheapest price will not be around to help you with any problems that may arise 1-2 years down the track).
- **They have insurance covering them for damages and public liability** (essential, needs no explanation)
- **They provide warranty, or back up care** (hopefully you don't but in some cases, you need it)
- **They have good customer reviews** (Ok, its hard to please everyone because we all know in life some people are just NEVER happy...but if they are sitting at 2-3 stars with or lower you have to see a common theme there).

We hope that you are now more informed, and can make better choices for you, your family and your home. Don't run through life blindfolded.... educate yourself! If you want any further information on any of the above points, including more information on how ALPINE can help improve your Indoor Air Quality – We are happy to send you more information in PDF format.

Please send us an email at admin@alpinetradegroup.com.au or call us on 1300 252 225.